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# Enhancing Workplace Performance Across Banking Distribution Networks: The Role of Self-Leadership and Intrinsic Motivation in Mitigating Procrastination Behavior

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## Abstract

**Purpose:** This research delves into the relationship between self-leadership and procrastination behavior in banking distribution networks. Based on the self-determination theory, the study explores how organizational commitment mediates the relationship between these variables. Moreover, the research considers the vital role that intrinsic motivation plays in enhancing and reinforcing these connections. **Research design and methodology:** Using data from 384 bank employees and partial least squares structural equation modeling, the research found evidence to support the theory. This methodological approach enabled the investigation to uncover the intricate links between self-leadership, procrastination behavior, organizational commitment, and intrinsic motivation. **Results:** The findings strongly support the hypotheses, indicating a negative association between self-leadership and procrastination behavior at the workplace; conversely, a positive correlation was found between self-leadership and organizational commitment. The discovery further strengthens the results that intrinsic motivation amplifies the positive relationship between self-leadership and organizational commitment. **Conclusions:** This research underscores the importance of cultivating a culture of self-leadership among banking distribution network employees. By doing so, procrastination can be substantially reduced, enhancing both productivity and overall performance. The study's insights are particularly valuable for organizational leaders in the banking sector, as they provide actionable pathways to foster a more committed, motivated, and efficient workforce.

**Keywords:** Self-Leadership, Organizational Commitment, Intrinsic Motivation, Procrastination Behavior, Banking Distribution Networks.

**JEL Classification Code:** M10, M12, M14, M19

## 1. Introduction

Procrastination behavior has emerged as a concern in the

modern era, garnering significant attention as a research topic worldwide (Svartdal et al., 2018). On average, employees waste approximately 1.5 to 3 hours each

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workday on personal activities, which may be attributed to potential procrastination, such as excessive socialization and internet usage. This results in substantial financial losses, with each employee incurring an annual average loss of \$8,875 to \$10,000 (D'Abate & Eddy, 2007; Paulsen, 2015). Alarming statistics indicate that organizations in the United States suffer an estimated average salary loss of \$759 billion annually due to workplace procrastination (Steel, 2011; Skowronski & Mirowska, 2013). Procrastination is putting off work-related tasks by engaging in non-work-related activities, either behaviorally or cognitively, without any intention of harming others (Metin et al., 2016). This behavior negatively impacts individuals' lives and has detrimental effects on organizational outcomes (Bolden & Fillauer, 2020). Consequently, it becomes essential to thoroughly examine the factors contributing to employee procrastination behavior at work, as it can provide both theoretical insights and practical solutions to mitigate this problem effectively. Previous studies have asserted that employees who frequently procrastinate experience severe psychological and physical health issues (Sirois & Pychyl, 2016), including frustration (Amabile & Kramer, 2011), burnout, and reduced life satisfaction (Sonnetag & Fritz, 2015), as well as depression and anxiety (Sirois, 2016). Furthermore, procrastination is linked to boredom and decreased engagement (Metin et al., 2016; Wan et al., 2014), ultimately leading to fatigue and psychological detachment (DeArmond et al., 2014).

Moreover, the consequences of procrastination extend beyond individuals and significantly impact organizations, as it reduces overall productivity and creates an uncompetitive work environment (Ozler & Polat, 2012). Addressing and understanding employee procrastination behavior is vital for fostering a more productive and healthier workplace. As for the dysfunctional facets of procrastination behavior, many studies have investigated personal and contextual factors that are important in triggering employees' procrastination (van Eerde, 2016). For example, some scholars have claimed that sleep quality is negatively associated with employees' next-day procrastination at the workplace (e.g., Kühnel et al., 2018). Similarly, non-work presenteeism (Wan et al., 2014), authenticity at work, job crafting (Metin et al., 2018), and supervisory styles have also been identified as antecedents of employee procrastination behavior (Göncü Köse & Metin, 2018; He et al., 2021). Previous studies have primarily focused on factors that stimulate employees' procrastination behavior. However, little attention has been paid to factors that can reduce employees' procrastination behavior.

In this study, we examine the role of self-leadership in reducing employee procrastination behavior. We suggest this relationship for the following reasons. First, self-leadership involves controlling one's behavior and

managing personal goals and objectives (Neck et al., 2017) and, therefore, is less likely to postpone their work activities. Second, individuals who possess self-leadership skills are more likely to exhibit positive behavior, as they tend to focus on mental constructs and ready for challenges (Müller & Niessen, 2019; Mayfield et al., 2021), which refrain them from engaging in negative behaviors such as procrastination (Wan et al., 2014). Neck et al. (2017) revealed that individuals with self-leadership skills embrace their task responsibilities and become more aware of their performance. When individuals feel accountable for the task outcomes, they are more likely to foster productive behavior in their organization (Kim & Beehr, 2020) and less likely to be involved in procrastination behavior. Further, the author suggests a theoretical framework based on self-determination theory (SDT) to explore the mediating role of organizational commitment in the relationship between self-leadership and employee procrastination behavior. Despite the unique advantages of self-leadership, the relationship with organizational commitment is very sparse (Stewart et al., 2011; Andressen et al., 2012; Pihl-Thingvad, 2014). SDT posits that when individuals' basic psychological needs (autonomy, competence, and relatedness) are fulfilled, they become more committed and motivated to exhibit positive behavior (Deci & Ryan, 2011).

By employing self-leading skills, they experience greater behavioral volition, which enhances their confidence and ability to deal with tasks effectively (Neck et al., 2017). Employees who feel a sense of prestige from their association with the organization develop a more positive attitude toward the organization (Bakker & Woerkm, 2017), which manifests as a more substantial organizational commitment. This sense of commitment subsequently discourages employees from engaging in procrastination behavior at work and allows them to increase their productivity (Paille et al., 2013). Based on SDT notions and self-leadership literature, we suggest that organizational commitment will mediate the relationship between self-leadership and employee procrastination behavior.

In addition to examining the mediating role of organizational commitment, we suggest that individuals' level of intrinsic motivation moderates the relationship between self-leadership and organizational commitment. Employees with high levels of intrinsic motivation tend to be sincerely interested in their work and are, therefore, more likely to engage in positive behaviors (Gagné & Deci, 2005; Dysvik et al., 2013). Moreover, intrinsic motivation has been identified as a critical determinant of behaviors that result in pleasure and satisfaction, underscoring its importance as a critical factor influencing employee behavior (Gagné, 2009). It empowers employees' ability to perform their work with a greater level of attention (Morkeviciute & Endriulaitiene, 2020). Intrinsic motivation

also drives employees to maintain strong relationships within their organization, pursue moral outcomes (Tu & Lu, 2016), and exhibit self-regulatory behavior. However, employees with higher levels of intrinsic motivation tend to derive greater pleasure from their work, experience a greater sense of freedom in achieving self-set goals, and express a strong interest in their work, thereby fostering a greater sense of commitment to the organization (Gagné & Deci, 2005) and result in decreasing procrastination behavior.

While previous research has predominantly focused on procrastination within academic contexts, there has been a lack of investigation into procrastination behavior within the organizational domain (Klingsieck, 2013; Metin et al., 2020). By delving into workplace procrastination behavior, we seek to extend the understanding of this behavior in real-world settings, specifically within the banking sector's distribution networks. By exploring these constructs independently and in concert, this study seeks to provide critical insights on optimizing performance in the banking sector's distribution channels, including branch networks, which is of paramount importance. Furthermore, the study aims to explore the role of self-leadership in influencing employee procrastination behavior tendencies. Self-leadership, encompassing various self-regulatory skills, may significantly impact employees' ability to manage tasks effectively and minimize procrastination behavior.

Moreover, by considering organizational commitment as a mediating variable, drawing upon self-determination theory, we endeavor to uncover the underlying mechanisms through which self-leadership affects procrastination behavior. As organizational commitment is crucial for employee engagement and performance, understanding its mediating role provides a comprehensive view of workplace procrastination behavior dynamics. By examining these interconnected variables, this research seeks to contribute novel insights to inform organizational practices and interventions, ultimately fostering a more productive and proactive work environment.

Further, it also aims to examine the moderating role of intrinsic motivation in the relationship between self-leadership and organizational commitment and, eventually, its impact on employee procrastination behavior. In the subsequent sections of this paper, we have presented the theoretical background, formulated hypotheses, described the research methodology, and presented the study findings. Further, we have discussed the theoretical and practical implications, especially for distribution managers, on how self-leadership can help them create a more productive and efficient workplace where employees are more motivated and committed to achieving their goals. We also discuss the results, the limitations of the study, and future avenues for research.

## 2. Theoretical Basis and Research Hypothesis

### 2.1. Self-leadership and Workplace Procrastination Behavior

According to Stewart et al. (2011, 2019), self-leadership refers to the ability to regulate one's behavior. Similarly, Bligh et al. (2006) reveal that employees with self-leadership skills tend to embrace their task responsibilities more effectively. Self-leader employees experience greater self-control and autonomy, leading to increased effort (Manz & Neck, 2004) and a reduced likelihood of self-regulatory failure. Furthermore, self-leaders can identify and replace undesirable behaviors with desirable ones, helping them achieve their self-set goals (Neck et al., 2019; Şahin & Gülşen, 2022).

Based on self-determination theory, individuals have an inherent drive to fulfill their basic needs (Gagné & Deci, 2005; Gagné & Deci, 2014). Once these psychological needs are met, individuals tend to display more positive behaviors than negative ones (Deci & Ryan, 2000; Grund & Fries, 2018;). The theory also posits that fulfilling basic needs increases an employee's confidence level (Legault, 2017) and reduces their intention to procrastinate (Lin, 2018). Therefore, self-leadership skills enable employees to concentrate on achieving their self-set goals and strive for goal perfection, which in turn helps them overcome dysfunctional behavior such as procrastination (Steel et al., 2018).

**H1:** Self-leadership is negatively related to workplace procrastination behavior.

### 2.2. Self-leadership and Organizational Commitment

Self-leader employees possess the ability to influence themselves and generate self-motivation and self-direction toward desirable behaviors (Bakker & Woerkom, 2017). Self-leaders are more focused on their self-set goals (Neck et al., 2019), which exhibits their commitment to the organization (Cranmer et al., 2019). According to self-determination theory, individuals have three fundamental psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2011; Ryan & Deci, 2017). The need for autonomy refers to individuals' desire to be their leader and experience volition without coercion; the need for competence reflects individuals' desire to handle and manage work-related tasks (Legault, 2017). Finally, the need for relatedness refers to the employees' sense of belonging and the intention to care about the task and organization (Molix & Nichols, 2013), which enhances their commitment. Self-leader employees are better equipped to manage challenging situations by establishing goals and

identifying mental processes with a strong sense of purpose (Neck et al., 2017). They are responsible for their behavior and effectively implement a spectrum of desired goals in fostering positive attitudes (Pihl-Thingvad, 2014). The fulfillment of basic psychological needs (Bakker & Woerkom, 2017; Fernet et al., 2020) motivates them to utilize their self-leading skills, thereby experiencing a sense of behavioral volition that ultimately leads to a positive attitude such as organizational commitment.

**H2:** Self-leadership is positively related to organizational commitment.

### **2.3. Organizational Commitment and Workplace Procrastination Behavior**

Committed employees enhanced their productivity within the organization and reduced intention to procrastinate assigned tasks (Paille et al., 2013). Meyer et al. (2004) assert that employees who are committed to their organization desire to maintain their membership and are less likely to engage in negative behaviors, such as procrastination. Highly committed employees readily accept their responsibilities and effectively perform their assigned tasks (Sharma & Kaur, 2019), which decreases the likelihood of engaging in procrastination behavior. Furthermore, organizational commitment has an inverse relationship with procrastination, such that employees with a higher level of organizational commitment exhibit a lower tendency to procrastinate (Nguyen et al., 2013). They also exhibit a greater willingness to work hard to achieve organizational goals, which helps to minimize procrastination behavior (Lin, 2018).

**H3:** Organizational commitment is negatively related to workplace procrastination behavior.

### **2.4. The Mediating Role of Organizational Commitment on the Relationship Between Self-leadership and Workplace Procrastination Behavior**

Self-leader employees readily accept responsibility for their actions (Manz & Sims, 2001) and display a heightened level of commitment to their assigned tasks, which motivates them to complete their tasks without any irrational delay. Higher commitment fosters effort toward achieving one's target goals and makes one less likely to think about undesirable behavior (Kim & Beehr, 2020). Furthermore, employees who possess strong self-regulation skills demonstrate higher levels of commitment toward their organization (Pihl-Thingvad, 2014; Pourkiani et al., 2016), thereby reducing the occurrence of negative behaviors. Self-

determination theory posits that individuals who fulfill their basic psychological needs are more committed to their organization and less likely to engage in negative behavior (Kim & Beehr, 2020). They can exercise self-control and self-regulation, negatively associated with procrastination behavior, and positively associated with desirable attitudes, such as organizational commitment (Van Eerde & Venus, 2018).

Employees who possess self-regulatory abilities are capable of influencing their behavior and are more cognizant of the consequences that may result from their actions, leading to more positive behaviors (Neck et al., 2019; Cho & Choi, 2016), and less procrastination (Van den Berg & Roosen, 2018). Employees with high levels of self-control have a decreased inclination to procrastinate at work (Nguyen et al., 2013). A high sense of self-control demonstrates a lower tendency to procrastinate at work (Nguyen et al., 2013). Self-leadership helps employees regulate themselves and encourages them to go beyond the call of duty, which exhibits a higher level of organizational commitment (Stewart et al., 2011, 2019) and effectively reduces procrastination behavior (Paille et al., 2013).

**H4:** Organizational commitment mediates the relationship between self-leadership and workplace procrastination behavior.

### **2.5. The Moderating Role of Intrinsic Motivation on the Relationship Between Self-leadership and Organizational Commitment**

Intrinsically motivated employees are more committed to their assigned duties (Nguyen et al., 2020); they find their work interesting and enjoyable and consider their participation a self-rewarded activity (Deci et al., 1989). They are inner-directed, more fascinated with their task, and engage in it as an end in itself (Deci et al., 1999). Employees with higher intrinsic motivation are likelier to be involved in their tasks and achieve higher goals than their counterparts (Gagné & Deci, 2005). According to self-determination theory, employees who are high in intrinsic motivation exhibit greater autonomy, persistence, and self-drive and positively impact work outcomes (Deci & Ryan, 2000), which, in turn, increase their organizational commitment (Gagné & Deci, 2005). Intrinsically motivated employees also possess self-regulatory abilities and work towards their self-set goals (Shu, 2015), which enables them to avoid procrastination behavior. As a result, they experience more freedom to achieve their self-set goals and feels more pleasure and interest in their task, which enhance their commitment towards the organization (Gagné & Deci, 2005) and refrain them from procrastinating their assigned activities (Steel, 2011) than their counterparts.

**H5:** Intrinsic motivation moderates the relationship between self-leadership and organizational commitment.

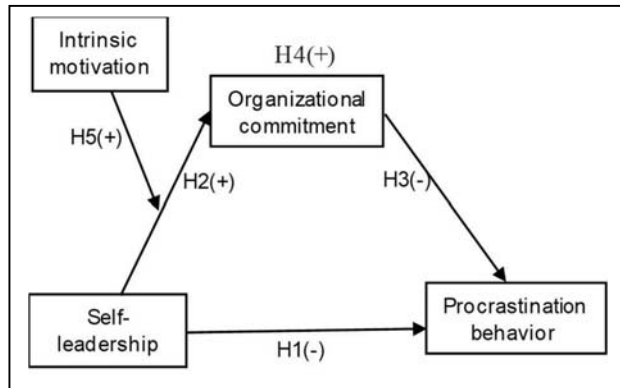


Figure 1: Research Model

### 3. Methodology

#### 3.1. Survey Sample and Data Collection

The sample consisted of full-time banking sector employees from Pakistan. The banking sector witnessed a disastrous delay in many important decisions (Holland, 2001; Steel, 2007). A study on 'Bank One' found that 63% of the bank health-related cost (US\$311.8 million) pertains to non-work-related activities (Hemp, 2004). Before final data collection, a consent form was sent to all participants, acknowledging their free will to participate in the study. Before distributing the complete questionnaire among the population, a pilot survey was conducted among thirty employees to confirm the functionality of the study questionnaire. Based on the response rate of thirty employees, content validity and surface validity were improved, and thus, the reliability and practicability of the evaluation findings were secured.

The study utilized online questionnaires to collect data from participants, which were distributed with a plain language statement outlining the purpose of the study, risks involved, and participant expectations. The online survey allowed the researcher to collect data from a large number of respondents in a short time frame while allowing participants to complete the survey at their convenience, which may have contributed to a high response rate (McDonald, 2003; Wilson & Laskey, 2003). The completed questionnaires were automatically saved in an Excel spreadsheet, simplifying the data organization process, and maintaining participant anonymity, which may have increased self-commitment and reduced the likelihood of missing data (Heerwegh, 2005).

A total of 650 questionnaires were distributed, and 384

valid questionnaires were returned, resulting in a response rate of 59.1%. This response rate is consistent with previous research (Van Eerde & Venus, 2018). Among these samples, males accounted for 79.4% and females accounted for 20.6%, with a mean age of 31.6 years (SD = 7.3, range 22-48 years), indicating that the majority of the respondents were young and likely knowledge workers.

#### 3.2. Measurement

All variables were measured through multiple-item scales using a five-point Likert scale, with higher scores demonstrating the higher values.

##### 3.2.1. Procrastination

We adopted the 12-item Procrastination at Work Scale (PAWS) developed by Metin et al. (2016), measuring employees' procrastination behavior at work. Sample statement include "When I work, even after I make a decision, I delay acting upon it."

##### 3.2.2. Self-leadership

We adapted the 9-item self-leadership using the Abbreviated Self-leadership Questionnaire (ASLQ) scale developed by Houghton et al. (2012). Sample statement include "I establish specific goals for my performance."

##### 3.2.3. Organizational Commitment

We adapted the 18-item organizational commitment questionnaire (OCQ) scale developed by Meyer et al. (1993). Sample statement include "I would be very happy to spend the rest of my career with this organization."

##### 3.2.4. Intrinsic Motivation

We adopted the 6-item intrinsic motivation scale previously validated by Dysvik and Kuvaas (2008) based on Kuvaas (2006) work. This scale is widely used in management studies (e.g., Dysvik & Kuvaas, 2011). Sample statement include "My job is very exciting."

##### 3.2.5. Control Variables

We used the conventional practice of using demographic variables, which included age, gender, experience, and education as control variables, as these variables showed a significant relationship with procrastination in previous studies (Mazzola & Disselhorst, 2019).

### 4. Results

The analysis was conducted using SmartPLS 3.3.9 software, employing Partial least squares structural equation

modeling (PLS-SEM), a robust technique for handling many indicators, constructs, and relationships (Hair et al., 2016). Following Ringle et al. (2020), the process was completed in two stages: first, the reliability and validity of the instruments were tested. Second, testing the proposed hypotheses through SEM analyses.

**4.1. Data Analysis and Results**

**4.1.1. Measurement Model**

The measurement model illustrates the relationships between latent constructs and indicators. It is also used to establish the constructs' reliability and validity. The minimum acceptable value for factor loading is 0.50 (Hair et al., 2010). The factor loading of all items surpassed the preferred 0.7 threshold (Vinzi et al., 2010). Hence, no items were eliminated from the analysis. Reliability was assessed using Cronbach's alpha, rho\_a, and composite reliability; all were above the recommended threshold of 0.700 (Wasko & Faraj, 2005). Convergent validity was measured through Average Variance Extracted (AVE), and it was acceptable, as the Average Variance Extracted (AVE) was higher than 0.50 (Ringle et al., 2018), confirming good convergent validity for all constructs (refer to Table 1).

Constructs	Items	Loading	Alpha	rho_A	CR	AVE
	OC16	0.726				
	OC17	0.733				
	OC18	0.718				
Procrastination Behavior (PB)	PB1	0.769	0.948	0.952	0.954	0.636
	PB2	0.852				
	PB3	0.897				
	PB4	0.749				
	PB5	0.758				
	PB6	0.752				
	PB7	0.811				
	PB8	0.838				
	PB9	0.756				
	PB10	0.828				
	PB11	0.739				
	PB12	0.806				
Intrinsic Motivation (IM)	IM1	0.819	0.910	0.914	0.931	0.691
	IM2	0.808				
	IM3	0.803				
	IM4	0.831				
	IM5	0.869				
	IM6	0.855				

Abbreviations: AVE, average variance extracted; CR, composite reliability.

**Table 1:** Reliability and Validity Analysis

Constructs	Items	Loading	Alpha	rho_A	CR	AVE
Self-Leadership (SL)	SL1	0.895	0.915	0.928	0.930	0.599
	SL2	0.804				
	SL3	0.718				
	SL4	0.740				
	SL5	0.702				
	SL6	0.704				
	SL7	0.765				
	SL8	0.707				
	SL9	0.897				
Organizational Commitment (OC)	OC1	0.934	0.955	0.957	0.960	0.573
	OC2	0.727				
	OC3	0.706				
	OC4	0.894				
	OC5	0.705				
	OC6	0.722				
	OC7	0.705				
	OC8	0.837				
	OC9	0.729				
	OC10	0.802				
	OC11	0.709				
	OC12	0.713				
	OC13	0.796				
	OC14	0.707				
	OC15	0.702				

Discriminant validity was assessed through the correlations among latent constructs using both the square root of Average Variance Extracted (Fornell & Larcker, 1981) and heterotrait-monotrait (HTMT) ratio of correlations procedure (Henseler et al., 2015), with the threshold value less than 0.85, discriminant validity was successfully established (refer to Tables 2 and 3).

**Table 2:** Discriminant Validity Using Fornell–Larcker Criterion

	IM	OC	PB	SL
IM	<i>0.831</i>			
OC	0.409	<i>0.757</i>		
PB	-0.209	-0.522	<i>0.798</i>	
SL	0.262	0.312	-0.292	<i>0.774</i>

Notes: Diagonal and italicized are the square roots of the AVE. Below the diagonal elements are the correlations between the construct's values. Abbreviations: IM, Intrinsic motivation; OC, Organizational commitment; PB, Procrastination behavior; SL, Self-leadership.

**Table 3:** Discriminant Validity Using HTMT Ratio

	IM	OC	PB	SL
IM				
OC	0.434			
PB	0.231	0.540		
SL	0.283	0.325	0.306	

**4.1.2. Structural Model and Hypotheses Testing**

The structural model analysis was conducted by evaluating significance levels and path coefficients, revealing the hypothesized paths in the research framework (Hair et al., 2011). It is evaluated based on the R<sup>2</sup>, Q<sup>2</sup>, and P values. The goodness of the research framework is determined by the R<sup>2</sup> value for the dependent variable, which determines the strength of each structural path (Peñalver et al., 2018). The R<sup>2</sup> value should be equal to or above 0.1 (Falk & Miller, 1992). The results (see Table 4) illustrate that both R<sup>2</sup> values are above 0.1, and predictive capability was established. Further, the predictive relevance of the endogenous constructs was assessed by Q<sup>2</sup> values. The Q<sup>2</sup> value greater than 0 shows the research model has predictive relevance. Table 4 results reveal significance in the prediction of the study constructs. Moreover, the model fit was assessed using a Standardized Root Mean Square Residual Value (SRMR). SRMR value was 0.056, below the

required value of 0.10, representing an acceptable model fit (Hair et al., 2016).

Research hypotheses were examined to validate the significance of the relationship among constructs. Hypothesis 1 (H1) posited a negative association between self-leadership and procrastination behavior, and the PLS-SEM results supported this, showing a negative association ( $\beta = -0.144$ ,  $t = 2.995$ ,  $p < 0.001$ ). Hypothesis 2 (H2), which anticipated a positive link between self-leadership and organizational commitment, was also confirmed by finding a significant positive effect ( $\beta = 0.189$ ,  $t = 4.199$ ,  $p < 0.001$ ). Hypothesis 3 (H3), predicting a negative correlation between organizational commitment and procrastination behavior, was supported by a significant negative relationship ( $\beta = -0.477$ ,  $t = 10.110$ ,  $p < 0.001$ ). The results were generated by using 5000 resamples of bootstrapping procedures and also generated 95% confidence intervals, as detailed in Table 4. A confidence interval that does not contain zero shows a significant relationship.

**Table 4:** Testing Direct Relationships

	Path coefficient	SD	t value (bootstrap)	P Values	BI 5.0%	BI 95.0%
H1: SL -> PB	-0.144	0.048	2.995	0.001	-0.222	-0.063
H2: SL -> OC	0.189	0.045	4.199	0.000	0.111	0.261
H3: OC -> PB	-0.477	0.047	10.110	0.000	-0.550	-0.393
	<b>R<sup>2</sup></b>	<b>Q<sup>2</sup></b>				
OC	0.270	0.146				
PB	0.291	0.179				

**4.1.3. Mediation Analysis**

A mediation analysis was carried out to assess the mediating effect of organizational commitment in the relationship between self-leadership and procrastination behavior. The results, as shown in Table 5, revealed that the total effect (H1) was negative and significant ( $\beta = -0.234$ ,  $t = 4.838$ ,  $p < 0.001$ ). When the organizational commitment (mediator) was introduced in the structural model, the

indirect effect between self-leadership and procrastination behavior was found to be negative and significant ( $\beta = -0.090$ ,  $t = 3.685$ ,  $p < 0.001$ ). Additionally, the direct effect between these variables was negative and significant ( $\beta = -0.144$ ,  $t = 2.995$ ,  $p < 0.001$ ), indicating that organizational commitment partially mediated the relationship between self-leadership and procrastination behavior, thereby supporting hypothesis 4.

**Table 5:** Mediation Analysis

Total Effect (SL -> PB)			Direct Effect (SL -> PB)			Indirect Effect (SL -> PB)				BI%		
Coefficient	T value	Sig	Coefficient	T value	Sig		Coefficient	SD	T value	Sig	5.0%	95.0%
-0.234	4.838	0.000	-0.144	2.995	0.001	H4: SL -> OC -> PB	-0.090	0.024	3.685	0.000	-0.131	-0.050

**4.1.4. Moderation Analysis**

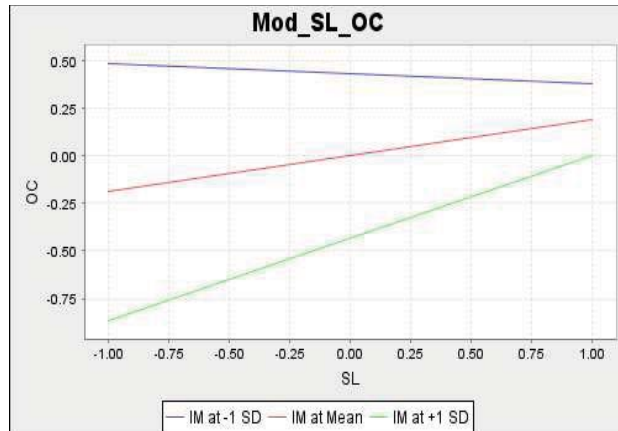
A moderation analysis was conducted to assess the role of intrinsic motivation in moderating the relationship between self-leadership and organizational commitment. As displayed in Table 6, the results indicated a significant moderating effect of intrinsic motivation on this relationship ( $\beta = 0.243$ ,  $t = 4.399$ ,  $p < 0.001$ ), thereby supporting

hypothesis 5. The findings reveal that higher intrinsic motivation enhances the positive impact of self-leadership on organizational commitment, as shown in a steeper and more positive figure. Additionally, slope analysis further supports the results and reveals that lower intrinsic motivation dampens the relationship between self-leadership and organizational commitment (refer to Figure 2).

**Table 6:** Moderation analysis

	$\beta$	SD	T value	Sig
Mod_SL_OC -> OC	0.243	0.055	4.399	0.000

Abbreviations: Mod, Moderation.



**Figure 2:** Moderation effect of intrinsic motivation between self-leadership and organizational commitment

## 5. Discussion

To conduct further research into procrastination behavior as a distinct behavioral pattern within employees' life domains (Hen & Goroshit, 2018; Klingsieck, 2013), particularly in the workplace context (Metin et al., 2016; van Eerde, 2016). More precisely, drawing upon the self-determination theory, this research examined the effects of self-leadership on procrastination behavior through the mediating role of organizational commitment and the moderating role of intrinsic motivation in the work domain.

The findings indicate that deficits in self-leading skills are the primary cause of procrastination behavior (Kühnel et al., 2016). In order to achieve the effectively desired goals, self-leadership necessitates the application of self-control and self-regulation (Andressen et al., 2012). Committed employees want to stay and maintain their membership with the organization (Nguyen et al., 2020), which motivates them to exert more effort for the organization and avoid non-work-related behavior (Kim & Beehr, 2020), such as procrastination behavior. Self-leadership negatively influences employees' procrastination behavior through organizational commitment. Based on the self-determination theory, fulfilling individuals' basic psychological needs enhances their intrinsic motivation, subsequently fostering positive behaviors and reducing negative behaviors like procrastination (Gagné & Deci, 2005). Prior studies have also proved that employees with higher intrinsic motivation could demonstrate less procrastination (Brownlow & Reasinger, 2000; Klingsieck,

2013). More specifically, and in support of other studies, our research findings align with previous studies regarding recognizing the importance of self-leadership, organizational commitment, and intrinsic motivation. However, our contribution lies in exploring these factors, specifically in the context of workplace procrastination behavior, providing a comprehensive understanding of how these variables interplay to impact employee behavior and performance in the banking distribution network. Our study builds upon previous research and expands the knowledge base in this underexplored domain, contributing to the overall understanding of procrastination behavior in organizational settings.

### 5.1. Theoretical Significance

The present study aims to achieve the three primary objectives. Firstly, while there has been considerable research on procrastination in the academic context, there is a notable lack of investigation into procrastination within organizational settings. Although Klingsieck (2013) and Metin et al. (2020) have acknowledged this gap, no study has explored the relationship between self-leadership and workplace procrastination behavior. Thus, this study seeks to contribute to the existing knowledge base by addressing the call for further research on procrastination in the work setting (Klingsieck, 2013; Van Eerde & Venus, 2018). Secondly, previous studies have primarily focused on examining the direct relationship between various predictors and procrastination without delving into the underlying theoretical mechanisms of this relationship. To address this gap, we analyzed the mediating role of organizational commitment in the association between self-leadership and procrastination behavior, drawing on self-determination theory. Thirdly, we aimed to identify and examine intrinsic motivation as an essential boundary condition that could moderate the relationship between self-leadership and employees' procrastination in the workplace. By investigating these objectives, we aim to shed light on the complexities of procrastination behavior in organizational settings and provide valuable insights for both theory and practice. In addition to these three objectives, our research, by integrating the SDT with organizational commitment, self-leadership, and procrastination behavior, offers an enriched understanding of how these concepts interrelate in a work setting, potentially expanding the applicability and nuances of SDT in organizational psychology. Our model is theoretically robust as it integrates well-established concepts of self-leadership, organizational commitment, intrinsic motivation, and procrastination behavior. It further fills a theoretical gap by illustrating the conditional interplay among these variables. Finally, through this research, self-leadership might be seen not just as an individual's



capability to lead oneself but also concerning how it affects organizational behaviors like procrastination, especially when intrinsic motivation comes into play.

## 5.2. Practical Significance

This research aims to unravel the intricate relationship between self-leadership, organizational commitment, intrinsic motivation, and employee procrastination behavior in the workplace. The practical significance of this research is multifaceted and holds important implications for organizations aiming to enhance employee productivity and reduce workplace procrastination behavior. Firstly, the study emphasizes the crucial role of self-leadership skills in curbing employee procrastination behavior. To capitalize on this finding, organizations can design and implement targeted training programs to equip employees with essential self-leadership techniques, such as effective goal setting, time management, and self-motivation strategies. Organizations can foster a proactive and productive work environment by empowering employees with the necessary tools to manage their tasks and responsibilities. Secondly, the research highlights the potential mediating role of organizational commitment in the relationship between self-leadership and workplace procrastination behavior. While organizational commitment is typically considered an exogenous variable, we adopted this approach based on the self-determination theory (SDT) theoretical framework and the gap highlighted in previous studies. SDT suggests that individuals' intrinsic motivation and autonomy can influence their commitment to the goals and values of the organization. Thus, we hypothesized that employees with higher levels of intrinsic motivation might experience strong self-leadership skills and autonomy, leading to higher levels of organizational commitment and, consequently, reduced workplace procrastination. Organizations should focus on cultivating a positive work culture that nurtures employees' commitment to the goals and values of the organization to mitigate procrastination tendencies. This can be achieved through transparent communication, recognition of employee efforts, and providing opportunities for personal and professional growth. Furthermore, the study emphasizes the significance of intrinsic motivation in strengthening the link between self-leadership and organizational commitment. To harness this motivating force, managers should identify and encourage activities that tap into employees' intrinsic motivation, such as offering autonomy in decision-making, assigning challenging tasks, and recognizing individual achievements.

By fostering intrinsic motivation, organizations can inspire a sense of ownership and enthusiasm in employees, reducing procrastination and improving overall performance. The rationale behind this model hinges on the

postulate that organizations that foster suitable working environments bolster the development of individual competencies and leadership among employees. This progressive culture nourishes self-leadership, which further enhances employees' commitment to their organization. Such an elevation in organizational commitment is posited to ultimately diminish the likelihood of employee procrastination behavior. In practical terms, distribution managers can incorporate self-leadership assessments and metrics into performance evaluations to gauge and recognize employees' self-leadership skills and commitment to the organization. This can serve as an incentive for proactive behavior and discourage procrastination behavior. Additionally, organizations may consider implementing flexible work arrangements to enable employees to manage their work schedules in ways that align with their natural productivity patterns, thus minimizing opportunities for procrastination behavior. Overall, the practical significance of this study lies in its provision of evidence-based strategies that can help organizations create a work environment supportive of self-leadership, intrinsic motivation, and organizational commitment. By applying these insights, organizations can foster a culture of productivity, reduce workplace procrastination, and optimize overall performance. On a practical note, this model contributes to managerial practices by pinpointing leverage points that could reduce employee procrastination behavior, enhancing productivity and overall organizational performance.

The empirical validation of this model was conducted using state-of-the-art statistical techniques to ensure the robustness and validity of the findings. By proving this model, organizations can be better equipped to cultivate self-leadership, heighten organizational commitment, stimulate intrinsic motivation, and mitigate procrastination behavior among employees. In doing so, this research serves as a guide for organizations striving to augment their effectiveness by understanding these critical psychological constructs.

## 5.3. Limitations and Future Research Directions

Although this research contributes to the existing literature and provides some acumens on workplace procrastination behavior, it is essential to acknowledge its limitations. First, the study variables were measured through employees' subjective evaluation. Participants' answers about variables may deviate from reality due to variables' sensitivity and particularity, and they may tend to defend their privacy. As an outcome, the effect values cannot be calculated precisely during the research process, which may challenge the reliability of the study conclusions. Future research should consider collecting data in pairs or using an experimental research design to enhance the robustness of

the results. Since the author used a cross-sectional research design to collect the data, it may increase the likelihood of common method bias. Future research could employ a longitudinal design to mitigate the effects of common method bias, collecting and analyzing data on employees' procrastination behavior over time.

Second, existing research focuses on self-leadership at an individual level; self-leaders have greater confidence in their ability to complete their self-set goals and tasks. However, it is essential to note that many other predictors of procrastination behavior remain unknown in the work context. Future studies can investigate additional predictors such as job characteristics (van Eerde, 2016), positive social interactions, and energizing events (Van Eerde & Venus, 2018) to understand this phenomenon better. Third, our study has identified organizational commitment as a mediator in the relationship between self-leadership and workplace procrastination behavior. However, future studies can improve this model by introducing other potential mediating variables to explain the cause-and-effect relationship better. Further, the author employs the self-determination theory to examine the mediating effect of self-leadership on procrastination behavior; future research can consider different theories to advance our understanding of the topic.

#### 5.4. Conclusion

In conclusion, this research illuminates the relationship between self-leadership and workplace procrastination behavior within the distribution channels of the banking sector, including branch networks. It contributes to the existing knowledge base in several essential ways. The study addresses a significant gap in the literature by investigating procrastination behavior within the organizational context, such as the banking sector. It emphasizes the relevance of understanding procrastination behavior beyond academic settings. The findings underscore the importance of self-leadership skills in reducing employee procrastination behavior, suggesting that organizations can benefit from implementing training programs that empower employees with essential self-leadership techniques. Moreover, the study underscores the mediating role of organizational commitment in the relationship between self-leadership and procrastination behavior, drawing from insights rooted in self-determination theory. This emphasizes the significance of fostering a positive work culture and nurturing employees' commitment to organizational goals to curtail procrastination tendencies effectively. Furthermore, the research emphasizes the moderating impact of intrinsic motivation, suggesting that recognizing and promoting activities that tap into employees' intrinsic motivation can

strengthen the relationship between self-leadership and organizational commitment, ultimately leading to reduced procrastination behavior.

These insights offer a new lens to optimize productivity and improve service delivery across diverse banking distribution networks. As a result, banking institutions can benefit from targeted strategies that cultivate self-leadership, bolster organizational commitment, and stimulate intrinsic motivation, thereby ensuring efficient and customer-centric distribution networks. Future research can apply this model to other distribution-focused sectors, contributing to a broader understanding of these dynamics.

#### References

- Amabile, T., & Kramer, S. (2011). *The progress principle: Using small wins to ignite joy, engagement, and creativity at work*, Harvard Business Press.
- Andressen, P., Konradt, U., & Neck, C. P. (2012). The relation between self-leadership and transformational leadership: Competing models and the moderating role of virtuality. *Journal of Leadership & Organizational Studies*, 19(1), 68-82.
- Bakker, A. B., & van Woerkom, M. (2017). Flow at work: A self-determination perspective. *Occupational Health Science*, 1(1-2), 47-65.
- Bligh, M. C., Pearce, C. L., & Kohles, J. C. (2006). The importance of self-and shared leadership in team based knowledge work: A meso-level model of leadership dynamics. *Journal of managerial Psychology*, 21(4), 296-318.
- Briones Peñalver, A. J., Bernal Conesa, J. A., & de Nieves Nieto, C. (2018). Analysis of corporate social responsibility in Spanish agribusiness and its influence on innovation and performance. *Corporate Social Responsibility and Environmental Management*, 25(2), 182-193.
- Brownlow, S., & Reasinger, R. D. (2000). Putting off until tomorrow what is better done today: Academic procrastination as a function of motivation toward college work. *Journal of social behavior and personality*, 15(5), 15.
- Bolden, J., & Fillauer, J. P. (2020). Tomorrow is the busiest day of the week: Executive functions mediate the relation between procrastination and attention problems. *Journal of American College Health*, 68(8), 854-863.
- Cranmer, G. A., Goldman, Z. W., & Houghton, J. D. (2019). I'll do it myself: Self-leadership, proactivity, and socialization. *Leadership & Organization Development Journal*, 40(6), 684-698.
- Cho, Y. M., & Choi, M. S. (2016). Effect of clinical nurses's basic psychological need, self-leadership and job stress on nursing performance. *Journal of Digital Convergence*, 14(8), 343-353.
- D'Abate, C. P., & Eddy, E. R. (2007). Engaging in personal business on the job: Extending the presenteeism construct. *Human Resource Development Quarterly*, 18(3), 361-383.
- DeArmond, S., Matthews, R. A., & Bunk, J. (2014). Workload and procrastination: The roles of psychological detachment and fatigue. *International Journal of Stress Management*, 21(2), 137-161.

- Deci, E. L., & Ryan, R. M. (2000). The what and why of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry, 11*(4), 227-268.
- Deci, E. L., & Ryan, R. M. (2011). *Self-determination theory*. Handbook of theories of social psychology, *1*(20), 416-433.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological bulletin, 125*(6), 627.
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of applied psychology, 74*(4), 580-590.
- Dysvik, A., & Kuvaas, B. (2008). The relationship between perceived training opportunities, work motivation and employee outcomes. *International Journal of Training and Development, 12*(3), 138-157.
- Dysvik, A., & Kuvaas, B. (2011). Intrinsic motivation as a moderator on the relationship between perceived job autonomy and work performance. *European journal of work and organizational psychology, 20*(3), 367-387.
- Dysvik, A., Kuvaas, B., & Gagne, M. (2013). An investigation of the unique, synergistic and balanced relationships between basic psychological needs and intrinsic motivation. *Journal of Applied Social Psychology, 43*(5), 1050-1064. <https://doi.org/10.1111/jasp.12068>.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.
- Fernet, C., Litalien, D., Morin, A. J., Austin, S., Gagné, M., Lavoie-Tremblay, M., & Forest, J. (2020). On the temporal stability of self-determined work motivation profiles: A latent transition analysis. *European Journal of Work and Organizational Psychology, 29*(1), 49-63.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior, 26*(4), 331-362.
- Gagné, M. (2009). A model of knowledge-sharing motivation. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 48*(4), 571-589.
- Gagné, M., & Deci, E. L. (2014). *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory. The History of Self-Determination Theory in Psychology and Management*. Doi:10.1093/oxfordhb/9780199794911.013.006
- Göncü Köse, A., & Metin, U. B. (2018). Linking leadership style and workplace procrastination: The role of organizational citizenship behavior and turnover intention. *Journal of prevention & intervention in the community, 46*(3), 245-262.
- Grund, A., & Fries, S. (2018). Understanding procrastination: A motivational approach. *Personality and Individual Differences, 121*, 120-130.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. Pearson Prentice Hall. New Jersey, USA.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. London: Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice, 19*(2), 139-152.
- He, Q., Wu, M., Wu, W., & Fu, J. (2021). The effect of abusive supervision on employees' work procrastination behavior. *Frontiers in Psychology, 12*, 113.
- Hen, M., & Goroshit, M. (2018). General and life-domain procrastination in highly educated adults in Israel. *Frontiers in psychology, 9*, 1173.
- Heerwegh, D. (2005). Effects of personal salutations in e-mail invitations to participate in a web survey. *Public Opinion Quarterly, 69*(4), 588-598.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135.
- Holland, T. (2001). The perils of procrastination. *Far Eastern Economic Review, 164*(39), 66-72.
- Houghton, J. D., Wu, J., Godwin, J. L., Neck, C. P., & Manz, C. C. (2012). Effective stress management: A model of emotional intelligence, self-leadership, and student stress coping. *Journal of Management Education, 36*(2), 220-238.
- Kim, M., & Beehr, T. A. (2020). Empowering leadership: leading people to be present through affective organizational commitment?. *The International Journal of Human Resource Management, 31*(16), 2017-2044.
- Klingsieck, K. B. (2013). Procrastination in different life-domains: Is procrastination domain specific?. *Current Psychology, 32*(2), 175-185.
- Kühnel, J., Bledow, R., & Feuerhahn, N. (2016). When do you procrastinate? Sleep quality and social sleep lag jointly predict self-regulatory failure at work. *Journal of Organizational Behavior, 37*(7), 983-1002.
- Kühnel, J., Sonnentag, S., Bledow, R., & Melchers, K. G. (2018). The relevance of sleep and circadian misalignment for procrastination among shift workers. *Journal of Occupational and Organizational Psychology, 91*(1), 110-133.
- Kuvaas, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and pay level. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 27*(3), 365-385.
- Legault, L. (2017). Self-determination theory. *Encyclopedia of Personality and Individual Differences, 1-9*.
- Lin, H. (2018). The Effect of Inclusive Leadership on Employees' Procrastination. *Psychology, 9*(04), 714.
- Manz, C. C., & Neck, C. P. (2004). Thought Self Leadership as a Framework for enhancing The Performance Appraisers. *Journal of Applied Behavioral Science, 31*-278.
- Manz, C. C., & Sims, H. P., Jr. (2001). *The new Super Leadership: Leading others to lead themselves*. San Francisco, CA: Berrett-Koehler.
- Mazzola, J. J., & Disselhorst, R. (2019). Should we be challenging employees?: A critical review and meta-analysis of the challenge-hindrane model of stress. *Journal of Organizational Behavior, 40*(8), 949-961.
- Mayfield, J., Mayfield, M., & Neck, C. P. (2021). Speaking to the self: How motivating language links with self-leadership.

- International Journal of Business Communication*, 58(1), 31-54.
- Müller, T., & Niessen, C. (2019). Self-leadership in the context of part-time teleworking. *Journal of organizational behavior*, 40(8), 883-898.
- McDonald, T. L. (2003). Review of environmental monitoring methods: Survey designs. *Environmental Monitoring and Assessment*, 85(3), 277-292.
- Metin, U. B., Peeters, M. C., & Taris, T. W. (2018). Correlates of procrastination and performance at work: The role of having good fit. *Journal of Prevention & Intervention in the Community*, 46(3), 228-244.
- Metin, U. B., Taris, T. W., & Peeters, M. C. (2016). Measuring procrastination at work and its associated workplace aspects. *Personality and Individual Differences*, 101, 254-263.
- Metin, U. B., Taris, T. W., Peeters, M. C., Korpinen, M., Smrke, U., Razum, J., & Gaioshko, D. (2020). Validation of the Procrastination at Work Scale: A seven-language study. *European Journal of Psychological Assessment*, 36(5), 767-776.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of applied psychology*, 78(4), 538.
- Meyer, J. P., Becker, T. E., & Vandenberghe, C. (2004). Employee commitment and motivation: A conceptual analysis and integrative model. *Journal of Applied Psychology*, 89(6), 991-1007.
- Molix, L. A., & Nichols, C. P. (2013). Satisfaction of basic psychological needs as a mediator of the relationship between community esteem and wellbeing. *International Journal of Wellbeing*, 3(1), 20-34.
- Morkevičiūtė, M., & Endriulaitienė, A. (2020). Explaining work motivation through perceived transformational leadership: what to expect in a sample of female employees?. *Gender in Management: An International Journal*, 35(6), 585-599.
- Neck, C. P., Manz, C. C., & Houghton, J. D. (2019). *Self-leadership: The definitive guide to personal excellence*. Sage Publications.
- Neck, C.P., Manz, C.C., & Houghton, J. D. (2017). *Self-Leadership: The Definitive Guide to Personal Excellence*. Sage, Thousand Oaks, CA.
- Nguyen, H. N., Le, Q. H., Tran, Q. B., Tran, T. H. M., Nguyen, T. H. Y., & Nguyen, T. T. Q. (2020). The impact of organizational commitment on employee motivation: A study in Vietnamese enterprises. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(6), 439-447.
- Nguyen, B., Steel, P., & Ferrari, J. R. (2013). Procrastination's impact in the workplace and the workplace's impact on procrastination. *International Journal of Selection and Assessment*, 21(4), 388-399.
- Ozler, D. E., & Polat, G. (2012). Cyberloafing phenomenon in organizations: Determinants and impacts. *International Journal of eBusiness and eGovernment Studies*, 4(2), 1-15.
- Paille, P., Grima, F., & Bernardeau, D. (2013). When subordinates feel supported by managers: investigating the relationships between support, trust, commitment and outcomes. *International Review of Administrative Sciences*, 79(4), 681-700.
- Paulsen, R. (2015). Non-work at work: Resistance or what?. *Organization*, 22(3), 351-367.
- Pihl-Thingvad, S. (2014). Is self-leadership the new silver bullet of leadership? An empirical test of the relationship between self-leadership and organizational commitment. *Management Revue*, 25(2), 103-124.
- Pourkiani, M., Seyedi, S. M., & Sarasia, H. S. (2016). The effect of self-awareness and self-regulation on organizational commitment employees of islamic azad university of mashhad with mediating role of job satisfaction. *Journal of Fundamental and Applied Sciences*, 8(2), 1886-1899.
- Prem, R., Scheel, T. E., Weigelt, O., Hoffmann, K., & Korunka, C. (2018). Procrastination in daily working life: A diary study on within-person processes that link work characteristics to workplace procrastination. *Frontiers in psychology*, 9, 1087.
- Ringle, Christian M.; Sarstedt, Marko; Mitchell, Rebecca; Gudergan, Siegfried P. (2018). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 1-27.
- Ringle, C.M., Sarstedt, M., Mitchell, R. & Gudergan, S.P. (2020). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617-1643.
- Ryan, RM, & Deci, EL (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.
- Şahin, E. E., & Gülşen, F. U. (2022). The mediating role of self-leadership in the relationship between basic psychological needs satisfaction, academic self-efficacy and career adaptability of Turkish undergraduates when life satisfaction is controlled. *Personality and Individual Differences*, 195, 111709.
- Sharma, M., & Kaur, D. (2019). Self-Regulatory Behaviour at Work: A Path to Organizational Commitment. *International Journal of Latest Transactions in Engineering and Science*, 6(4), 1-5.
- Shu, C. Y. (2015). The impact of intrinsic motivation on the effectiveness of leadership style towards on work engagement. *Contemporary Management Research*, 11(4).
- Sirois, F. M. (2016). Procrastination, stress, and chronic health conditions: A temporal perspective. In *procrastination, health, and well-being* (pp. 67-92). Academic Press.
- Sirois, F. M., & Pychyl, T. A. (Eds.). (2016). *Procrastination, health, and well-being*. Academic Press.
- Skowronski, M., & Mirowska, A. (2013). A manager's guide to workplace procrastination. *SAM Advanced Management Journal*, 78(3), 4.
- Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(S1), S72-S103.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65-94.
- Steel, P. (2011). *The procrastination equation: How to stop putting stuff off and start getting things done*. Allen & Unwin.
- Steel, P., Svartdal, F., Thundiyil, T., & Brothen, T. (2018). Examining procrastination across multiple goal stages: a longitudinal study of temporal motivation theory. *Frontiers in psychology*, 9, 327.
- Stewart, G. L., Courtright, S. H., & Manz, C. C. (2011). Self-

- leadership: A multilevel review. *Journal of Management*, 37(1), 185-222.
- Stewart, G. L., Courtright, S. H., & Manz, C. C. (2019). Self-leadership: A paradoxical core of organizational behavior. *Annual Review of Organizational Psychology and Organizational Behavior*, 6(1), 47-67.
- Svartdal, F., Klingsieck, K. B., Van Eerde, W., & Steel, P. (Eds.). (2018). New Perspectives on Procrastination [Special Issue]. *Frontiers in Psychology*, 9.
- Tu, Y., & Lu, X. (2016). Do ethical leaders give followers the confidence to go the extra mile? The moderating role of intrinsic motivation. *Journal of Business Ethics*, 135(1), 129-144.
- Van den Berg, J., & Roosen, S. (2018). Two faces of employee inactivity: Procrastination and recovery. *Journal of prevention & intervention in the community*, 46(3), 295-307.
- Van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and individual differences*, 35(6), 1401-1418.
- Van Eerde, W. (2016). Procrastination and well-being at work. In F. M. Sirois, & T. A. Pychyl (Eds.), *Procrastination, Health, and Well-Being* (pp. 233-253). Elsevier.
- Van Eerde, W., & Venus, M. (2018). A daily diary study on sleep quality and procrastination at work: The moderating role of trait self-control. *Frontiers in psychology*, 9, 2029.
- Vinzi, V. E., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of partial least squares* (Vol. 201, No. 0). Berlin: Springer.
- Wan, H. C., Downey, L. A., & Stough, C. (2014). Understanding non-work presenteeism: Relationships between emotional intelligence, boredom, procrastination and job stress. *Personality and Individual Differences*, 65, 86-90.
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1), 35-57.
- Wilson, A., & Laskey, N. (2003). Internet based marketing research: a serious alternative to traditional research methods?. *Marketing Intelligence & Planning*, 21(2), 79-84.