THE RELATIONSHIP BETWEEN INDIVIDUAL CHARACTERISTICS AND PRACTICES OF SELF-LEADERSHIP IN ACADEMIA

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Abstract. *The purpose of this study was to investigate the relationship between self-leadership behaviors and individual characteristics in academia. An online survey was conducted and 217 participants' responses were measured with the help of a questionnaire. Multiple regression was used to analyze individual characteristics of self-leaders. The findings indicate that individual characteristics do predict self-leadership. Personality traits variables conscientiousness and openness have a significant positive relationship with self-leadership practices. Surprisingly, this study found emotional stability has no significant relationship with self-leadership behavior. This study also employed a rigorous validation technique therefore, this study was able to address some of the methodological limitations of previous studies such as common method variance by examining the proposed relationships in a longitudinal setting.*

Introduction

Following the event, Great Recession the environment for business organizations has become volatile, and full of unpredictable events that challenged professionals to perform in a reality (Furtner, Rauthmann, & Sachse, 2015). Previous research supports self-leadership strategies are to be effective in enhancing performance of individual's in work, athletic, and educational settings (Ingvarson, 2009; Stashevsky, Burke, Carmeli, Meitar, & Weisberg, 2006). However, it is important to explain that for an organization to survive nowadays productivity, important to explain that for an organization to survive nowadays productivity, efficiency, and efficacy it has to build a specific leadership that can demonstrate intelligence, in all its aspects within the organization to persuade the others, and introduce the management appropriate

trends. However to ensure that they feel happy with their job to the evolution of organization (Dinh et al., 2014; Kör, 2016; Marques-Quinteiro, Vargas, Eifler, & Curral, 2019; Zehnder, Herz, & Bonardi, 2017).

Self-leadership practices offer many potential benefits, however it is surprising that self-leadership is an under-researched topic. Some research studied the relationship among self-leadership and personality (Bendell, Sullivan, & Marvel, 2019; Gagné & Deci, 2005; Neck & Manz, 2010), yet few rigorous studies have been conducted. According to (Stewart, Courtright, & Manz, 2019), little or less is known about the characteristics of individuals who are self-leaders. This is surprising given that some studies of self-leadership assume that personality traits are mostly responsible for self-leadership behavior (Prussia, Anderson, & Manz, 1998). Given this focus on personality, it is not surprising that attention has not been paid to non-personality characteristics, such as the attitudes of individuals. Furthermore, yet, from a managerial point of view, understanding how traits and the work context affect employees' self-leadership behavior, and not just outcomes can be immensely helpful. This is because an understanding of how individual factors influence self-leadership can help top-level management make more informed decisions when implementing human resources development programs in organizations.

Given the relatively scarce, and fragmented research on the links between individual factors, on the one hand, and with self-leadership, on the other, more rigorous studies must be conducted to fill the gap. Thus, this study goes beyond existing studies by investigating the effect of individual factors on the practice of self-leadership. More specifically, we argue that it is necessary to understand the degree to which individual differences (i.e., personality traits and attitudes) and situational factors (i.e., job autonomy, time pressure, the perceived stressfulness of the environment) are related to self-leadership.

Given the mounting interest in the effects of personality on individual behavior in the workplace, research on personality and other individual differences as predictors of self-leadership have been urged due to limited studies that have been done so far. Therefore, this study will examine the interactive effect of individual factors on self-leadership. Besides, to date, outside of Western populations very little self-leadership research has been conducted. However, across cultures and regions self-leadership application is likely to differ (Watanabe, Tareq, & Kanazawa, 2011). While there have been a few studies on self-leadership done in Confucian countries. However, no research has been done in the world's 6th most populous and multicultural country like Pakistan. It is therefore important that we study self-leadership in multicultural contexts because it will provide a foundation for understanding its generalizability potential.

Significance of the Study

(Neck & Milliman, 1994) argued that it is vital for individuals to know how to lead themselves before they lead or manage others. Therefore, they need first to make sure that they are themselves effective self-leaders so that they can set an example for the people they want to lead. This study provides a compelling background for a research study grounded in the discipline of human capital. It is vital to understand the contributing factors that influence the practice of self-leadership in academic settings because they occupy a prominent position in the knowledge production processes.

The findings of this study will increase our understanding not only of the characteristics of individuals with the propensity to practice self-leadership but also of the types of contexts or situations that may facilitate self-leadership behavior. Second, this study contributes to self-leadership theory and empirical knowledge by investigating the interaction between individual and situational factors that influence self-leadership behavior. Individuals who self-lead can initiate positive behavioral outcomes; thus, it is important to know if the individual's self-leadership would be different in every context and situation. Further, the self-leadership construct has been relatively slow to develop (Neck & Houghton 2006) due to the lack of a validated measurement scale. This study will fill a void in the literature since it is empirical as opposed to conceptual.

Theoretical Background and Hypotheses Development

Self-leadership concept originated from social cognitive theory (Bandura, 1989), which suggests that human behavior can be best explained by triadic model that includes cognitive influences, environmental influences, and behavior (Bandura, 1986). This theory describe human behavior as cognitive processes that are put into action by the effects of the environment (Neck & Houghton, 2006). One aspect which illustrates a unique human capability that people utilize to evaluate and alter their thought and behavior is self-reflection (Bandura, 1986). In line with this thought, the beliefs that individuals have about themselves and their abilities are essential elements of self-control (Neck & Manz, 2010). This is where the term self-efficacy, which refers to individuals' self-assessments of their capabilities, emerged. The importance of self- efficacy is in the way in which it affects direction and persistence of effort.

Self-determination theory (Deci & Ryan, 1985), which suggests individual motivation consists of extrinsic motivation and intrinsic motivation. Extrinsic motivation refers to external factors such as tangible rewards, whereas intrinsic motivation is developed internally within a person (Deci & Ryan, 1985)

proposed that humans are active participants who seek to achieve their needs and goals, which become internalized. Indeed, (Locke & Latham, 2004) argued that humans have the ability to make choices and act according to their interests and goals. However, having the ability to make choices and act according to one's interests and goals would not be of much help without efficacy (Gagné & Deci, 2005). This brings us back to social cognitive theory's emphasis on the importance of self-efficacy, which refers to the necessity of a person's self-assessment of their capabilities to perform a task (Manz & Sims Jr, 1980). In other words, having the will to do something with the ability to do it will be a reality with the wants and needs to do it. Having said that, self-determination theory has become an important part of self- leadership, in which natural rewards strategies represent a form of intrinsic motivation in self-regulation (Manz, 1986; Neck & Houghton, 2006). (Neck & Milliman, 1994) linked self-leadership with cognitive therapy by suggesting various strategies, such as challenging dysfunctional thoughts by using rational thoughts and beliefs. According to (Bandura, 1986), many of the problems that individuals encounter in today's world result from dysfunctional thought processes that often lead to depression. In response to this, constructive thought pattern strategies seek to eliminate such distorted beliefs (Neck & Manz, 2010).

Self-Leadership Strategies

The utilization of mental and behavior techniques can be further divided into three set of strategies namely: constructive, behavior, and natural reward strategies (Manz, 1986; Neck & Milliman, 1994; S. Williams, 1997). These strategies teach people to be conscious of their own behavior and thought to be more effective in their work-life. According to Neck and Manz (1996), effective designed behavior strategies aimed to enhance desirable positive behavior that results in successful outcomes, while in contrast, it reduces undesirable negative behavior that may result in unsuccessful outcomes (M. J. Mahoney, 1978; Neck, Neck, Manz, & Godwin, 1999). The behavior strategic approach focusses on identifying and replacing undesired behavior with more effective desirable behavior through self-setting goal process, self-correcting, self-observation, self-cueing, and self-reward (M. J. Mahoney, 1978; W. C. Mahoney & Hermodson, 1979; Manz & Sims Jr, 1980; Neck & Houghton, 2006).

Plenty of research work suggest that specific, realistic, and challenging goal setting impact significantly performance regarding task achievement. This process is consisting of certain goals adoption while accepting challenging goals can affect individual motivation to perform (Locke & Latham, 1990). While one can improve performance through self-assessment, with pre-defined goals or target (Manz & Sims Jr, 1980; Neck et al., 1999). While constructive

self-examination of unproductive behavior and reshape into a more positive desirable direction (Marques-Quinteiro & Curral, 2012).

The next step is to link self-reward to goal achievement. This self-reward varies with the level of goal achievement. While individuals need reward contingencies to energize direct necessary behavior towards better performance (M. J. Mahoney, 1978; W. C. Mahoney & Hermodson, 1979; Manz & Sims Jr, 1980). Similarly, to shape desirable behavior effectively self-feedback can also be used (Manz & Sims, 2001). However, more importantly, is the practice desire behavior which helps an individual in the correction if needed, which may avoid costly miscues. Winding up, behavior strategies encourage and motivate the desirable positive behavior by suppressing negative undesirable behavior which could lead to successful outcomes (Manz, 1992; Manz & Sims Jr, 1980; Neck et al., 1999).

Constructive focus strategies in contrast, to behavior aimed strategies, is the formation of positive constructive patterns of thought thinking in habitual ways that may impact improved performance (Neck & Houghton, 2006). Alves and Wood (2006), constructive positive thinking reduces dysfunctional beliefs, negative assumptions, while increase and build a positive self-image. To align cognition with positive behavior, individuals may apply constructive focus strategies at the time when they engage in visualizing performance (Neck & Manz, 1996). However, these strategies involve the habitual functional pattern of thinking to create and maintain constructive thought. The self-analysis process, may enable individuals to identify, comfort, and replace negative assumptions with more positive and rational ones (Manz, 1992; Marques, 2014).

Natural reward strategies increase intrinsic motivation, an essential key component for successful performance (Neck, Mitchell, Manz, & Thompson, 2004). However, task enjoyable features enhanced self-determination and could result in increased subjective competence experience (Alves & Wood, 2006). People primarily opt for two types of natural reward strategies, by adding more enjoyable or pleasant aspects of the activity or task, such that it becomes naturally rewarding it-self. This can be achieved by focusing and directing one's perception away from undesirable aspects to diverting it on the rewarding pleasant aspect of the task (Neck & Houghton, 2006; Neck et al., 2004). This could lead to enhanced competence, sense of purpose, and self-control (Deci & Ryan, 1985). While enjoyable feature building into an activity or task becomes itself gratifying by task intrinsically reward aspects (Neck & Houghton, 2006). Hence, previous research, for instance, Gomes, Curral, Caetano, and Quinteiro

(2015) shows for innovative behavior natural reward strategies are necessary, and experience pleasant experiences during goal-striving activities.

Hypothesized Model of the Study

The variables hypothesized to predict self-leadership are shown below. Figure 1 shows the model for this study, with three personality traits proposed as predictors of self-leadership.
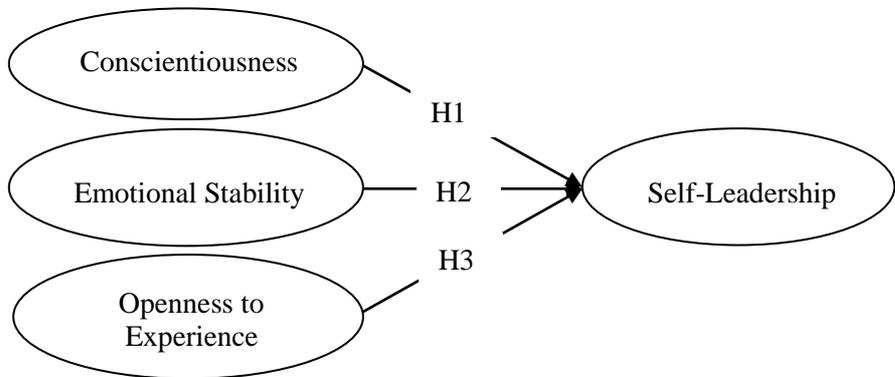
Figure 1   Personality Traits and Self-Leadership

Personality Traits

Personality is a stable pattern of characteristics and traits that shapes the behavior of individuals and differentiates people from one another (Matthews, Deary, & Whiteman, 2003). Personality is also likely to influence individuals' behavior, life and career choices, and job performance (Borghans, Duckworth, Heckman, & Ter Weel, 2008). There are two ways in which personality affects self-leadership. First, personality affects self-leadership by affecting the self-regulation or self-management process directly (Barlett & Anderson, 2012). Second, personality affects self-leadership through its effect on meta-learning or levels of meta-skill (Azucar, Marengo, & Settanni, 2018).

To date, there is limited research demonstrating that personality traits are important predictors influencing the practice of self-leadership. There are exceptions though. For example, (Williams & Collins, 1995) evidenced self-management and personality a significant positive relationship. The judging dimension, which corresponds with conscientiousness and sensing, which corresponds to openness to experience and was associated with self-management. As can be seen from this list of studies on self-leadership (and its predecessor, self-management) and personality traits, these studies have been cross- sectional in nature, with the exception of the study by Stewart, Carson, and Cardy (1996) which involved interventions.

Based on this previous research, it appears as though personality and self-leadership are likely to have positive effect. However, there is also a limitation on previous work in terms of theory due to the use of MBTI; which is not a robust theory. Therefore, for this study, the authors employed an already alidated personality model on which to develop hypotheses. The Big-Five model of Goldberg et al. (2006) has been chosen. Furthermore, the Big-Five model has been found in conceptual frameworks across different samples in various studies. Besides, previous studies shows the Big Five personality traits yielded strong relationships with motivation and performance (Mount, Barrick, Scullen, & Rounds, 2005).

Conscientiousness

Conscientiousness is defined as the tendency to be dependable (reliable, careful, and responsible), efficient (competent, organized, dutiful, purposeful, self-disciplined and thorough), and industrious (hardworking, goal-focused, achievement striving and persistent (Ilgen & Pulakos, 1999; Stewart et al., 1996; D. R. Williams & Collins, 1995). Self-leadership involves conscious observation of one's own behavior, the planning of goal setting, self-cueing, organization of one's time and environment, and consistent practice (Manz, 1986). These skills are consistent with who tend to be hardworking, achievement-oriented, and goal setting (Jensen-Campbell et al., 2002; Mount et al., 2005; Roberts, Lejuez, Krueger, Richards, & Hill, 2014; Robertson, Baron, Gibbons, MacIver, & Nyfield, 2000). Empirically, (Gerhardt, Rode, & Peterson, 2007) found that conscientiousness was related to self-management for a sample of 228 undergraduate students. In another separate study, (Bendell et al., 2019) observed conscientiousness was related to intrinsic motivation, which is one of the natural reward strategies of self-leadership. Similarly in another study conducted on a sample of systems engineers at a large information systems company at a Japanese automaker (Watanabe et al., 2011). Following this theoretical rationale, the following hypothesis is proposed.

Hypothesis 1: Conscientiousness will be positively related to self-leadership.

Emotional Stability

Emotional stability, often called neuroticism, has been described in the literature as an individual's degree of self-confidence, tolerance of stress, optimism, and self-consciousness (Hills & Argyle, 2001). Emotional stability enables an individual to remain steady under pressure and to handle negative feedback (Gerhardt et al., 2007; Hay & Ashman, 2003; Hills & Argyle, 2001) found that neuroticism was negatively related to goal-setting. Other than self-goal setting, I argue that emotional stability is also related to other self-

leadership strategies. (Watanabe et al., 2011) model suggested that anxiety, which is closely related to neuroticism, leads to poor self-regulation generally. In particular the high level of emotionality (Salgado, 2002) associated with low emotional stability, would impair rational decision making (Salgado, 2002) and the self-awareness strategy. Finally, neurotic individuals are also more likely to have irrational beliefs and assumptions about themselves (Gerhardt et al., 2007), which may cloud their judgment in assessing their ability accurately. Therefore, the following hypothesis is expected:

Hypothesis 2: Emotional stability will be positively related to self- leadership.

Openness to Experience

Openness to experience, or the intellectual dimension of the Big Five personality traits, is characterized by individuals who are curious, imaginative, artistic, creative, broad-minded, intelligent, and have a positive attitude toward learning. Previous research suggested that openness to experience may influence individuals' propensity to practice self-leadership due to their achievement orientation nature. This appears to be supported by the empirical evidence.(D. R. Williams & Collins, 1995) in their study a sample of 347 university students enrolled in educational psychology courses were invited to participate in the study during their class period. (Roberts et al., 2014) found a correlation between openness to experience and goal-setting motivation a construct which, while not exactly a self-leadership strategy is likely to be closely associated with behavioral self- leadership (Goldberg et al., 2006; Menzel et al., 2010; Terracciano, Löckenhoff, Zonderman, Ferrucci, & Costa Jr, 2008). Furthers, previous studies have suggested that individuals who are open to experience tend to be able to find meaningfulness and to experience feelings of competence (Azucar et al., 2018), which is associated with the competence aspect of the natural rewards strategy. For these reasons, the hypothesis 3 were developed:

Hypothesis 3: Openness to Experience will be positively related to self-leadership.

Research Design

This research thesis will examines the relationship between specific personality traits and self-leadership (as shown in Figure 1). More specifically, this study is designed to answer the question, "Who are the self-leaders?", and will test hypotheses 1a, 1b and 1c. The next step will be to investigate the person-situation interaction effects on self-leadership and summarize the results from both studies.

Participants and Procedure

The participants were students from university level in Pakistan. Surveys were administered via the internet to ease data collection, specifically, the costs, geographical coverage, and speed of delivery. Almost 66% of the students were male and many had worked previously (39.8% casual work; 30.6% part-time work; 20.4% full-time work) see Table 1. The ages of the participants range from 18 to 44 years old and the average years of employment was 5.69 (SD = 3.91).

Table 1 *Respondents' Profile*

Description	Frequency	Percent
Gender		
Male	142	65.4
Female	75	34.6
Education qualification		
14 years of schooling	146	67.3
16 years of schooling	71	32.7
Employment status		
Casual work	87	39.8
Part-time work	75	30.6
Full time work	55	20.4

Measures

A 5-point Likert scales ranging from 1 (never true) to 5 (very true) for the self-leadership scale and 1 (not at all accurate) to 5 (completely accurate) for personality traits. While conscientiousness and Openness to experience were assessed with five items from the International Personality Item Pool on a 5-point Likert-style response scale (Goldberg et al., 2006). Emotional stability was assessed at time one and time two with six items from the International Personality Item Pool (Goldberg et al., 2006). Self-leadership skills were assessed with 35 items from revised Self-Leadership Questionnaire (Houghton & Neck, 2002).

In this study model hypotheses suggested that conscientiousness (Hypothesis 1), emotional stability (Hypothesis 2), and openness to experience (Hypothesis 3) would be positively related to self-leadership. To ensure no violation of the assumptions such as, linearity, normality, multicollinearity and homoscedasticity preliminary analyses were conducted. Multivariate outliers can be detected by inspecting the Mahalanobis distances using multiple regression (Riani, Atkinson, & Cerioli, 2009). An investigation of multivariate outliers using Mahalanobis distance through the SPSS 24. Regression analysis was

undertaken, as outlined in (Tabachnick, Fidell, & Ullman, 2007) based on (Rucci et al., 2007) step- by-step procedure.

Table 1 shows four different statistics to determine that the distribution is normal by looking at both graphical methods and statistical tests. The skewness and kurtosis were within the ±1.0 range except for one variable. The other normality tests like Kolmogorov-Smirnov were statistically significant for a few variables. The other statistic used to assess normality was the comparison between the mean, the trimmed mean, and the median to see whether the extreme scores had a strong influence on the mean and the results are as shown in Table 2.

Table 2 *Normality of data*

Variables	Statistical Inferences		
Conscientiousness – meets normality assumption	Histogram – bell-shaped		
	Skewness = –.191		Kurtosis = –.262
	Kolmogorov-Smirnov = 0.000		
	Mean (19.16) ≈ Trimmed Mean (19.18) ≈ Median (20.00)		
Openness to Experience – meets normality assumption	Histogram – bell-shaped		
	Skewness = .149		Kurtosis = .458
	Kolmogorov-Smirnov = 0.004		
	Mean (16.83) = Trimmed Mean (16.83) ≈ Median (17.00)		
Emotional Stability – meets normality assumption	Histogram – bell-shaped		
	Skewness = .012		Kurtosis = – .068
	Kolmogorov-Smirnov = 0.097		
	Mean (18.87) ≈ Trimmed Mean (18.88) ≈ Median (19.00)		
Self-Leadership – meets normality assumption	Histogram – bell-shaped		
	Skewness = –.247		Kurtosis = –.275
	Kolmogorov-Smirnov = 0.057		
	Mean (129.33)≈Trimmed Mean (129.56)≈Median (131.00)		

Table 3 *Pearson Product-Moment Correlations between Variables*

Scale	1	2	3
1. Self-Leadership			
2. Emotional Stab	0.104		
3. Openness	.316**	.358**	
4. Conscientiousness	.315**	0.011	.231*

Correlation between the Variables

Multivariate analysis requires variables to be correlated with each other. With a correlation coefficient above .30 preferable. (Nakagawa, 2004) suggested that the value of r =.10 to .29 shows a small relationship strength between variables, the value of r = .30 to .49 shows medium strength of the relationship, and the value of r = .50 to 1.0 shows large strength (Taylor, 1990). This guideline applies for both negative and positive values (Brünger, 1992). The correlations between variables can be seen in Table 3. The positive correlations among conscientiousness, and openness to experience with self- leadership suggest support for hypotheses 1 and 3. In this case, both of the scales (conscientiousness and openness to experience) correlate substantially with self-leadership (.315 and .316 respectively). However, hypothesis 2 may not be supported which means emotional stability was uncorrelated with self-leadership.

The correlation between each of the independent variables should not be too high. Variables with a correlation of .70 or more should not be included in the same analysis. Multicollinearity is a problem when variables are very highly correlated, creating a situation of redundant information. From Table 2 it can be seen that the correlation between each of the independent variables is not too high; which is less than .70. In addition, according to, the commonly used cut-off points for determining the presence of multicollinearity are tolerance values of less than .10, or a VIF (Variation Inflation Factor) value of above 10. In this study, the tolerance value for emotional stability, openness to experience, and conscientiousness is not less than .10 (.867, .820, .941 respectively); indicating no multicollinearity problem. This is also supported by the VIF values, which are 1.15, 1.22, and 1.06 respectively; which is well below the cut-off of 10. Which are well within normal bounds, suggesting that multicollinearity is not present among the variables.

To check for any retention or mortality biases, we tested for differences between participants genders. A t-test showed no significant differences on self-leadership scores for participants genders (M = 3.698, SD = .418) and non-participants (M = 3.706, SD = .356); t (106) = .219, p = .83 (two-tailed). There was also no significant difference on conscientiousness between male (M = 3.888, SD = .672), and female participants (M = 3.750, SD = .657); t (106) = – 1.03, p = .31 (two-tailed), nor on openness to experience between male (M = 3.366, SD = .616) and female participants (M = 3.397, SD = .661); t (106) = .25, p = .80 (two-tailed). Finally, there was no significant difference between male (M = 3.191, SD = .811) and female participants (M = 3.064, SD = .677); t (106) = – .83, p = .41 (two-tailed) on emotional stability. To measure the

internal consistency of the variables, Cronbach alpha (α) was used. The alpha for the variables ranged from 0.88 to 0.80 (Table 4).

Table 4 *Means, Standard Deviations, and Scale Reliabilities*

Variables	M	SD	Cronbach's alpha	Number of items
Self-Leadership	3.7	0.4	0.87	35
Emotional Stability	3.2	0.8	0.8	6
Openness	3.4	0.6	0.88	4
Conscientiousness	3.8	0.7	0.83	4

Findings

Hypothesis of the study model suggested that hypothesis 1 (conscientiousness), hypotheses 2 (emotional stability), and hypotheses 3 (openness to experience) likely to be positively related to self-leadership. Personality traits were regressed on self- leadership at time one after controlling for the possible effect of demographic variables. Step 1 Age, years of education and gender, were entered, explaining 1% of the variance in self-leadership. After entry of conscientiousness, openness to experience, and emotional stability at Step 2, the total variance explained was 17.4%, $F (5, 100) = 3.08$, $p < .01$. An additional 15% of the variance in self-leadership (R squared change $= .15$, F change $(3, 100) = 5.62$, $p < .001$) explained by the personality factors. Only two personality traits were statistically significant - Conscientiousness (beta $= .32$, $p < .01$) and Openness to Experience (beta $= .26$, $p < .05$) see Table 5.

Table 5 *Hierarchical Regression*

Variables and Statistics	Model 1 (β)	Model 2 (β)
Gender	0.07	0.07
Age	-0.06	-0.08
Years of education	0.13	0.13
Emotional Stability		0.03
Openness to Experience		0.26*
Conscientiousness		0.32**
R²	0.01	0.17***
ΔR²	0.01	0.15***
F	0.47	3.08**

Finally, to increase the rigor of the research, time two variables were included. Hierarchical regression analysis was used. Controlling for time one levels of self-leadership and personality factors at time one, as well as years of education, gender and age. By including time one measures of self-leadership as well, it is possible to look at the effects of personality over and above the intervention. Essentially, by including time one measures of self-leadership in the first step, the effect of the intervention was controlled for, making it

possible to examine the effect of personality independent of the intervention. This is because although personality might affect self-leadership behaviors all else being equal, it might not overcome the more proximal effect of the intervention. Therefore, Model 1 included self-leadership at time one, personality factors at time one, as well as demographic variables such as years of employment, age and gender. Model 1 explained 39% of the variance in self-leadership, whereas the total variance explained by Model 1 as a whole was 60%, $F (9, 59) = 5.88$, $p < .001$. Personality traits explained an additional 20.3% of the variance in self- leadership, after controlling levels of self-leadership and personality antecedents at time one as well as gender and age; R squared change $= .20$, F change $(3, 59) = 6.70$, $p < .001$. In the final model, only self-leadership at time one (beta $= .55$, $p < .001$) and conscientiousness at time two (beta $= .36$, $p < .05$) were significant. Therefore, in this more rigorous test, Hypothesis 1 and 3 was supported but Hypotheses 2 was not.

Conclusion

The purpose of this study was to understand the personality factors related to the use of self- leadership behaviors. In this study, the proposed model was tested and results indicated that the proposed model was partially supported. In particular, conscientiousness was related to self-leadership both cross-sectionally and when controlling for previous self-leadership. Openness to experience was related to self-leadership in the cross-sectional analysis but was not significant after controlling for levels of self-leadership; whereas the relationship between emotional stability and self-leadership was not supported in analysis. The results suggest that conscientiousness is important in the development of self- leadership meta-skills possibly through self-directed self-regulation and practice of self- leadership. Openness to experience was only related to self-leadership at time one, but not at time two. Due to the intervention within this study, the reason for this could be that the participants have undergone changes to increase their skills through self- leadership training. This is because people who are open to experience would be interested to learn self-leadership strategies for the first time. Once they have mastered the skills, the effect of their training could be more than the effects of their own personality.

In addition, Stashevsky et al. (2006) suggested that a self- leadership training intervention may have an effect on subjects' and above the effects of personality. This maybe because openness to experience involves "creativity, sophistication, and curiosity" and desire for knowledge (Terracciano et al., 2008). However, emotional stability was not related to self-leadership. It could be that the hypothesized negative effects associated with low emotional

stability (e.g., rational decision making, response to feedback) were less relevant than the fact that the characteristics that are linked to it are not related to motivational goals (Barlett & Anderson, 2012). Therefore, it does not matter what the level of emotional stability one has because it would not affect one's self- leadership skills.

The current research is not without limitations. This study relied on self-reported data due to the psychological nature of the variables. Because of the fairly small sample size with relatively low power and potential sampling bias, another study can build upon the results of this study in future. Future research if exploring the benefits of training if provided before the start of the online session will help understand the relationship. The same training is used as a moderator will also help in elaborate the phenomena.

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