Exploring the Factor Model of the Work Locus of Control Measurement

By

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ABSTRACT

Studies have used Spector's (1988) Work Locus of Control Measurement; however, many studies have not fully analyzed the factor structure of the model. This study explored both the current three factor assessment and potential four-factor structure of the WLOC measurement. We determined if social networks (who do you know) could be a potential new factor by adding six new items as a new subscale. Furthermore, the study compared the best fit three-factor structure of the WLOC to the best fit two-factor structure of the Core Self-Evaluations Scale (CSES) to determine if there are any similarities between the factors being measured. Overall, the best fit model for the WLOC measurement is the three-factor: Action, Luck, and Beneficial Relationships. The subscale of new items for social networks failed to promote the supposed social aspect of the measurement. The factors being measured in the WLOC differ from those in the CSES.

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CHAPTER I: INTRODUCTION

Locus of control is based on the social learning theory of personality that can be applied to any aspect of life (Lopez-Garrido, 2020). The term was first coined by Julian Rotter (1954) to describe a person's perception regarding the source of and amount of control one has over their behaviors and the subsequential consequences (Lopez-Garrido, 2020). Locus of control can be either internal or external (Lopez-Garrido, 2020). External control is when a person perceives that control comes from sources outside of their actions and is more based on luck, fate, or chance (Rotter, 1966). Internal control is when a person perceives that control comes from their actions (Rotter, 1966). Based on collected previous studies, Rotter (1966) created a 29-item scale that measured a person's level of internal-external control. If a participant got a high score, he/she had a more external locus of control and, if a participant got a low score, he/she had a more internal locus of control (Rotter, 1966). This scale is still widely used (Lopez-Garrido, 2020). Overall, Rotter's (1966) scale's factor structure was unidimensional.

However, researchers who conducted studies to examine the dimensionality and reliability of Rotter's scale found that the one-factor model was not accurate for the scale. In one study, Mirels (1970) examined the unidimensionality of the scale. The author determined that there are two different factors, belief of mastery and belief of influence over political institutions, making the scale multidimensional (Mirels, 1970). This was further supported by Lange and Tiggemann (1981) who also determined that the scale is multidimensional with at least two independent factors.

In a meta-analysis, Spector (1982) examined the relationship between locus of control and other organizational variables and made suggestions on how Rotter's scale can be used in the workplace.

CHAPTER II: LITERATURE REVIEW

One-Factor Model

Having created some suggestions on how to change Rotter's scale, Spector (1988) developed a new locus of control scale that was organization/work domain specific. This scale is made up of 16 items (Spector, 1988). Studies have used this scale when examining work-related locus of control, however, there have not been many studies analyzing the scale and its factor model. Spector (1988) originally based the items on the supposed unidimensional (external-internal) factor model of Rotter's (1966) locus of control. Those who score high on the scale have an external locus of control (Spector, 1988). However, at the time, Spector had not conducted a factor analysis over the items to truly determine what and how many factors are in assessed by the items (Macan et al., 1996).

Two-Factor Model

Initially, the Work Locus of Control (WLOC) Measurement was created based on Rotter's Locus of Control scale who claimed the scale was unidimensional (Rotter, 1966). Thus, the Work Locus of Control Measurement was also thought to be a one-factor model (Spector, 1988). However, confirmatory factor analyses conducted later

determined this was not the case. Studies by both Spector (1992) and Daniels and Guppy (1992) performed exploratory factor analyses which resulted in a two-factor model.

Macan et al. (1996) further conducted another factor analysis on the dimensionality and validity of Spector's scale. From the study, it was determined that there are at least 2 factors: internal control (action) and external control (luck; Macan et al., 1996). These results showed that the scale was not unidimensional; however, there were mixed results for convergent and discriminant validity of the scale (Macan et al., 1996). A two-factor model was analyzed in the present study since some studies have determined there is a distinct difference between the external factor (luck) and internal factor (action).

Three-Factor Model

Moreover, Oliver et al. (2006) first conducted confirmatory factor analyses further validating the one- and two-factor model for the measure. However, based on those results, a following exploratory factor analysis was conducted which indicated a three-factor model to be a better fit (Oliver et al., 2006). This was further confirmed by a confirmatory factor analysis (Oliver et al., 2006). Subsequent regression analyses suggested that the independent Internal subscale needed to be revised and possibly separated into two further subscales (Oliver et al., 2006).

Lastly, a confirmatory factor analysis was conducted on a modified version of Spector's Work Locus of Control Measurement which only used 14 of the 16 original items from Laura Gillespie's (2010) graduate master's thesis (Backes & Guo, 2010). Only 14 of the 16 items had demonstrated reliability (Gillespie, 2010). The confirmatory factor analyses compared the one- and three-factor models to determine the best fit

(Backes & Guo, 2010). Backes's and Guo's (2010) results proposed using one internal factor and two external factors, as opposed to Oliver's (2006) three-factor model which proposed one external factor and two internal factors. This new external subscale factor was deemed to have a more social aspect (i.e., To make a lot of money you have to know the right people; Backes & Guo, 2010). Since these studies determined that a third factor would improve the fit, a three-factor model was analyzed in this study. The third factor was labeled Beneficial Relationships to reflect the belief that knowing someone with power can potentially help you in the workplace. To promote this social aspect more within the Work Locus of Control Measurement, a new proposed subscale with a total of six items was included in the present study.

Theoretical Framework of New Subscale

Social Network Analysis & Social Capital Theory

The proposed new subscale to the Work Locus of Control Measurement was to highlight a different social aspect to an individual's workplace that is congruent to Beneficial Relationships. The concept/factor of Beneficial Relationships is equivalent to an individual's social capital. Social capital is the sum of both the potential and actual resources in an individual's social network of relationships (Nahapiet & Ghosal, 1998). People utilize these resources to achieve goals within their life. Social capital is related to trust and can be seen as an individual's influence and power (Stone, 2018). The outcome of social capital is the return on investments made in networks (Stone, 2018). Social capital keeps networks bonded and can be converted into other forms of capital (Stone, 2018).

The new subscale focused on the networking portion of obtaining and enhancing an individual's social capital. Overall, networking is more about 'who you know' than 'what you know' leading to two ways to know people: active networking (e.g., LinkedIn and conferences) and chance encounters. Networks do impact career success as they provide individuals with the resources and opportunities one needs. Internal and external locus of control individuals may operate differently within their networks. Individuals with internal locus of control will be more active and optimally utilize their networks while individuals with external locus of control will focus more on fateful encounters and coincidental resources. Actively networking strengthens one's network and these beneficial relationships which in turn promotes the growth of one's social capital or resources available to use. Social networks and social capital play a role in work locus of control as it provides individuals with the resources and opportunities to change their workplace situations.

Borgatti and Halgin (2011) conducted a review over the term social network. They described a network as a set of people or actors and the specified ties or relationships associated with the people linking them together (Borgatti & Halgin, 2011). A network is built up pattern of ties creating a certain structure as ties are interconnected with other people indirectly (Borgatti & Halgin, 2011). In research, an individual's network is defined by choosing a set of people and the type of ties that corresponds (Borgatti & Halgin, 2011). A simple example is on LinkedIn. When an individual meets another person, the individual would decide to connect with them on LinkedIn. This agreement to connect becomes a tie between the two. The connections each individual

hold then indirectly becomes each other's connections. There are several theories about an individual's social network.

First, there is Granovetter's (1973) theory about the strength of weak ties (Borgatti & Halgin, 2011). Weak ties are the people that are less likely to be socially involved with each other, but there are potential relationships to be made (Stone, 2018). Based on earlier research, Granovetter (1973) developed the theory in relation to finding new job opportunities through an individual's weak ties (Stone, 2018). Granovetter argued that people are disadvantaged if they do not have weak tie networks as it affects their ability to gain new information and knowledge that is outside of their strong tie networks (Stone, 2018). The lack of information and knowledge can affect one's ability to learn about new job opportunities and innovation (Stone, 2018). In 2012, Granovetter furthered the theory to explain that there will be an overlap in social networks between two people as the tie becomes stronger (Stone, 2018). This means that as two people get closer their separate individual connections or relationships become more interconnected. One individual goes from being indirectly connected to more directly connected with the other connections in the other person's network. Not all weak ties will be useful to an individual (Stone, 2018).

Moreover, there is Burt's (1992) theory about structural holes within social capital concerning individualistic networks (Borgatti & Halgin, 2011). This theory was developed based on Granovetter's original theory (1973, 1983;Stone, 2018). Burt's (1992) theory furthered that weak tie relationships act as a bridge into other networks providing more access to new information, behaviors, and knowledge (Stone, 2018). When developing this theory, Burt conducted a study in determining how social networks

affect the outcome of an individual gaining a promotion (Borgatti & Halgin, 2011). Burt argued that the usefulness of the tie is based on its non-redundancy (Borgatti & Halgin, 2011). As the tie strengthens, it becomes more redundant with the bridge established and sustained over time (Borgatti & Halgin, 2011).

Equally important, an employee's locus of control in an organizational setting can be a predictor or mediator for many organizational outcomes including relationships with leaders and peers (Ng, 2006). Srivastava (2015) examined the effect of uncertain situations of threat and opportunity on an individual's choice to utilize their networks by looking at locus of control. The author conducted two studies and came to three conclusions (Srivastava, 2015). First, individuals were more willing to use their networks in situations of loss than gain (Srivastava, 2015). For instance, if an individual believes he/she is in a situation in which he/she will lose their job, the individual will use their network or connections to build more job security. Second, employees with an internal locus of control were more likely to use their network in situations where they had limited control while employees with an external locus of control were more likely to use their network in situations where they had control (Srivastava, 2015). For example, an individual with high internal locus of control will use their network to move up the corporate ladder when there seems to be no proper promotional process established. Lastly, within an individual's network, contact with low-ranking actors was more likely in situations of loss than gain (Srivastava, 2015). For instance, if an individual is about to lose his/her job, the individual is more likely to use people with less power within the company to secure their position.

Likewise, Stefanone et al. (2004) conducted a study to examine the relationship between locus of control and emergent individualistic social network characteristics in a computer-supported collaborative learning course. The study measured the actor's social network, density, brokerage, and reach, and the participant's locus of control (Stefanone et al., 2004). The authors confirmed that individual differences in locus of control do affect structural differences in individualistic network density and composition (Stefanone et al., 2004). The overall results showed that participants with internal locus of control had a lower social network circle leading to less non-redundant ties and increased reach when compared to external locus of control participants (Stefanone et al., 2004). Participants with internal locus of control were more likely to develop individualistic networks to access more social capital (Stefanone et al., 2004).

Additionally, Stefanone (2004) conducted three studies to examine the relationship between individual differences in personality variables and managing relationships to access social capital resources (Stefanone, 2004). The third study focused on the relationship between individual differences in locus of control and the formation of weak tie relationships (Stefanone, 2004). In the findings, there was an inverse relationship, such that as weak tie relationships increased, there was a decrease in strong tie relationships for both internal and external locus of control participants (Stefanone, 2004). Stefanone (2004) discovered that when looking at the strength of ties proposition, participants with internal locus of control had more prestigious weak ties than external locus of control participants.

Chance Encounters & Luck

With inactive networking, social capital or beneficial relationships develop from the result of luck. People can plan and be active, but events can still occur randomly. Demographics can indirectly affect one's social network and social capital. For example, someone could have been born into a high socioeconomic status family and went to a private school. This person would have more chances to network with other powerful people associated with their family, friends, and classmates leading to more social capital or advantageous relationships. These things are out of the control of the person and can affect how others view their locus of control.

Albert Bandura (1982) made the argument that chance encounters play an important role in shaping one's life. These chance encounters were a number of events that have their own causal determinants and are unintended meetings between people (Bandura, 1982). Interactions with others always involve degrees of fortuitiveness. The encounters can be fortuitous whether short term or long lasting (Bandura, 1982). Bandura (1982) stated that many of the most important determinants in one's life path came from the most trivial of circumstances. Likewise, a mismatch between individuals based on interests or attributes can lead to a fortuitous encounter being cut short through disinterest or rejection (Bandura, 1982). This was because one's personal attributes mediated the effects of the chance encounter as they met certain associates (Bandura, 1982). In psychology, no measures can fully predict the occurrence of fortuitous encounters in an individual's life (Bandura, 1982).

This current study separated the factor Beneficial Relationships into Networking and Fortuitous Connections to reflect actively building a social network and chance

encounters respectively. The four-factor model explored in this present study kept all factors, Action, Luck, Fortuitous Connections, and Networking, separated to determine if they were significantly distinct from each other. However, an alternative two-factor model was explored because of how similar Networking was to Action and how similar Fortuitous Connections was to Luck. Action was defined as the conscious decision to exert effort towards an aim/goal. Luck was defined as the universal force that promotes beneficial and random events to occur. Beneficial relationships was defined as the advantageous connections one has with a person who has more power/resources than himself or herself in the workplace. Networking was defined as the process of developing social connections with others to gain resources or control. Fortuitous Connections was defined as auspicious social connections with others to gain resources or control.

Four-Factor Model

Based on the above literature, a four-factor model was proposed for the current study. We used the original Work Locus of Control Measurement and added a new subscale of six items to enhance the social aspect of the scale. These new items sought to assess an individual's social network and networking. There were three items based on work/being active and three items based on luck. Currently with three factors, we explored if networking could have been a potential new factor to create a four-factor model.

Core Self-Evaluations Scale

Furthermore, from the confirmatory factor analyses, we compared the best fit model of the Work Locus of Control Measurement to the best fit for Core Self-Evaluations Scale (CSES) to determine if there are any similarities between the factors being measured. Packer (1985) proposed a psychological phenomenon called core evaluations which are the basic conclusions and bottom-line evaluations that are held subconsciously (Gardner & Pierce, 2009). The core evaluations are subconsciously held basic conclusions about three areas of an individual's life: reality, other people, and the self (Gardner & Pierce, 2009). Furthermore, Judge, Locke, and Durham studied the role of Parker's core evaluations construct in the organizational domain introducing the term core self-evaluations (Gardner & Pierce, 2009).

Core self-evaluations as a construct is a broad, latent, higher order trait indicated by self-esteem, generalized self-efficacy, neuroticism, and locus of control (Judge et al., 2003). Based on this construct, Judge et al. (2003) created a 12-item scale to measure the fundamental appraisal of one's capability and value as an individual. The scale measures the four factors indirectly (Judge et al., 2003). Judge et al. (2003) determined that their scale was reliable with acceptable levels of internal consistency and test-retest reliability. The scale also demonstrated convergent validity with the four core traits and was correlated with job satisfaction and job performance (Judge et al., 2003). When compared with locus of control, there was a moderate correlation between locus of control and core self-evaluations, however, it was the subscale that correlates the weakest in the scale (Judge et al., 2003).

By the same token, studies were conducted utilizing the CSES to determine the relationship between core-self evaluations and other organizational variables. In one study, Erez and Judge (2001) hypothesized that core self-evaluations were related to motivation and performance. They conducted 3 studies and determined that the core self-evaluations variable was related to task motivation and performance (Erez & Judge, 2001). It also proved that under one nomological network the construct was a more consistent predictor of job behaviors than individual traits (Erez & Judge, 2001). Based on an approach/avoidance theoretical framework, Judge et al. (1998) suggested that there are four processes of core self-evaluations that influence outcomes: emotional generalization, cognitions and appraisals, actions, and moderator between variables.

Moreover, a study by Cheung et al. (2015) explored the role core self-evaluations play in the relationship between developmental networks and career advancement. Cheung et al. (2015) found that developmental networks affect the career advancement of high CSE individuals while there is no effect seen for low CSE.

A confirmatory factor analysis was conducted on the original version of the Core Self-Evaluations Scale from Ashley Pearson's (2022) graduate master's thesis (Neil et al., 2022). The confirmatory factor analyses determined if the four-factor model or the higher structure order model was the best fit for the scale (Neil et al., 2022). The four factors were self-esteem, generalized self-efficacy, neuroticism, and locus of control. The four-factor model was determined not to be the best fit for the CSES with the covariance matrix being positive definite (Neil et al., 2022). Furthermore, the higher structure order model was not determined to be the best fit for the CSES with variances being negative (Neil et al., 2022). Following that, an exploratory factor analysis was conducted and

determined that the items loaded onto two different factors proposing a two-factor model (Neil et al., 2022). To test this model, a cross validation was conducted with a new sample of 261 participants. Using this new sample, a confirmatory factor analysis was conducted using the two-factor model and was determined to be a better fit model (Neil et al., 2022). Neil et al.'s (2022) results proposed the two factors to be negative affect and positive affect (Figure 1). For this study, the two-factor model for the CSES was compared to the Work Locus of Control Measurement three-factor structure using covariances.

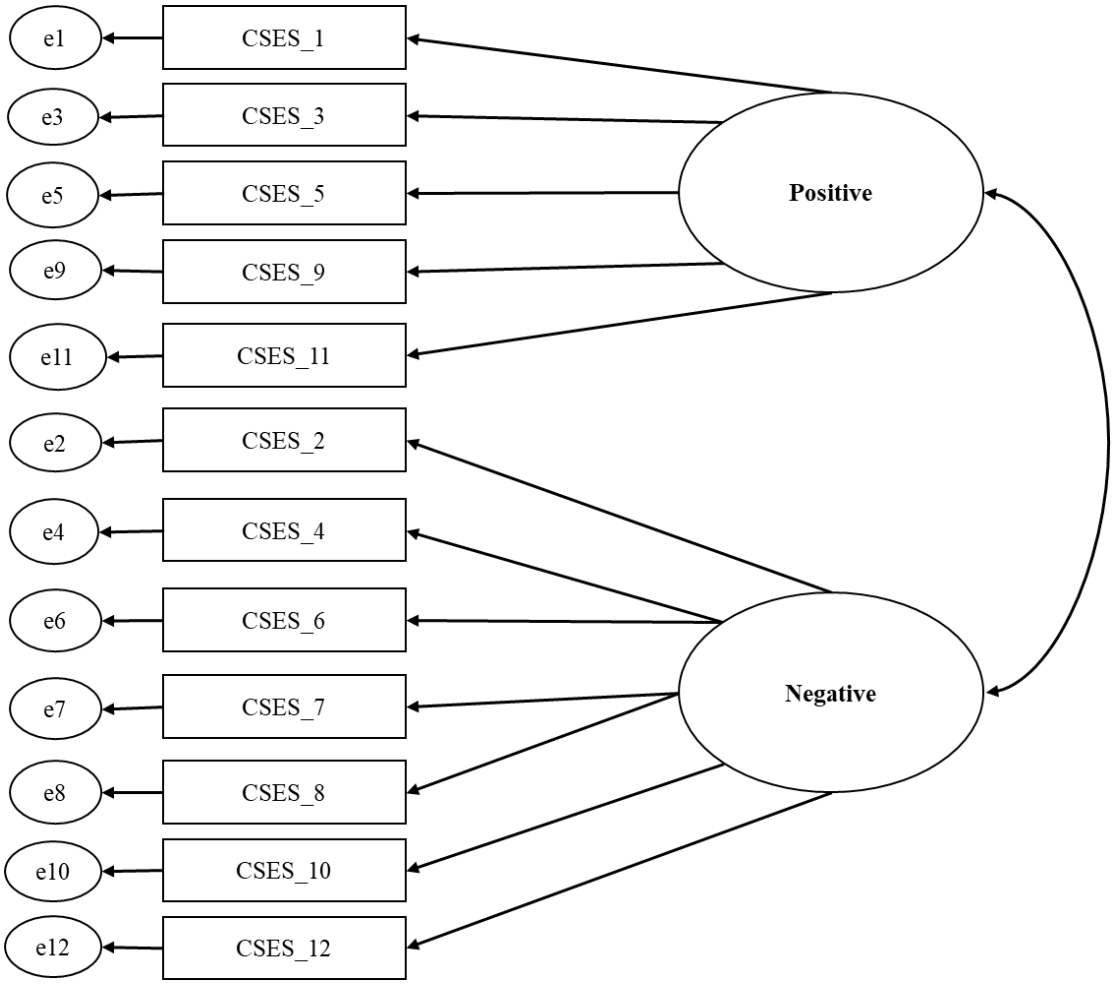

Figure 1. Two-Factor Model of the Core Self-Evaluations Scale

This study determined that CSE plays a similar role as locus of control in the workplace when considering an individual's network. Those who have a more positive affect are more likely to have an internal locus of control in the workplace.

Research Questions

For this study, participants were asked to complete the Work Locus of Control Measurement and a new subscale of six items about networking. Confirmatory factor analyses determined the best model for the Work Locus of Control Measurement and subscale of six items. A correlational analysis compared the best fit model of the Work Locus of Control Measurement with the best fit model of the Core Self-Evaluations Scale.

Research Question 1: What is the best fit model for the Work Locus of Control Measurement and new subscale with six items using the factors: Action, Luck, Fortuitous Connections, and Networking?

Research Question 2: Is the Work Locus of Control Measurement and new subscale of six items based on an alternative two-factor model combining Action and Networking and combining Luck and Fortuitous Connections?

Research Question 3: How does the best fit model for the Work Locus of Control Measurement and new subscale of six items compare with the factor model of the Core Self-Evaluations Scale?

CHAPTER III: METHODOLOGY

This study was part of a larger study that asked participants to complete the Spector's (1988) Work Locus of Control Measurement and new subscale of six items. Work locus of control was defined as the expectancy of people to attribute the outcomes in their workplace to either their own actions or their external environment. The factors explored in the measurement are Action, Luck, Beneficial Relationships, Networking, Fortuitous Connections. Action was defined as the conscious decision to exert effort towards an aim/goal. Luck was defined as the universal force that promotes beneficial and random events to occur. Beneficial relationships was defined as the advantageous connections one has with a person who has more power/resources than himself or herself in the workplace. Networking was defined as the process of developing social connections with others to gain resources or control. Fortuitous connections was defined as auspicious social connections with others to gain resources or control.

Participants

The participants (Pearson et. al, 2022) were recruited using Prolific Academic, an online research platform. This platform was used because it has been shown to have a more diverse participant pool which would produce higher quality data (Peer et al., 2017). Participation was voluntary, and only participants who have consented completed the survey. Participants were compensated $3.50/20 minutes upon successful completion.

In the present study, all participants needed to pass at least three of the six attention checks (e.g., Please answer "agree slightly" to show you are paying attention). There were a couple of responses that failed just one check, but no one failed more than

one of the six. In total, 307 participants passed with overall good data. The participants reported being at least 18 years old, reported speaking English fluently, reported having held at least one job under a supervisor, and reported having at least 1 year of work experience. Demographic information about the race, age, and sex of the participants were collected. Moreover, participants were asked about their career level (i.e., individual contributor, entry-level supervisor, middle manager, or executive), job classification (i.e., professional, technical, administrative, sales, customer service, etc.), length of time in current position, and employment status (e.g., full or part time).

Measures

Work Locus of Control Measurement. The original version of Spector's (1988) Work Locus of Control Measurement with six new items is designed to assess an individual's expectancy of their control over their workplace testing the new factor. The original measurement is a 16-item self-report measure (See Appendix A), but with the new items (See Appendix B), the measurement is now a 22-item self-report measure. Participants responded to each item or statement (e.g., Promotions are given to employees who perform well on the job; People who perform their jobs well generally get rewarded for it; Maintaining relationships in my field will help me achieve more goals) using a 6-point Likert style scale ranging from (1) disagree very much to (6) agree very much. The new subscale was developed using both the established items under the factor Beneficial Relationships and information about networking and social capital theory.

Core Self-Evaluations Scale. The original version of Judge et al.'s (2003) Core Self-Evaluations Scale was compared to the best fit factor model of the Work Locus of Control Measurement. This scale is a 12-item self-report measure designed to assess an individual's fundamental appraisals for self-esteem, generalized self-efficacy, neuroticism, and locus of control within the workplace (See Appendix C). Participants respond to each item or phase (e.g., I am confident I get the success I deserve in life; Sometimes I feel depressed; When I try, I generally succeed) using a 5-point Likert style scale ranging from (1) strongly disagree to (5) strongly agree.

Procedure

A pilot study was conducted using graduate students and faculty volunteers from a graduate level Industrial/Organizational Psychology program. It was used to correct any issues that would arise with the instructions and wording and to identify and address potential fatigue effects with the survey. The pilot study also determined what new items to add to the Work Locus of Control Measurement and which items to revise.

Participants were presented with a Qualtrics survey via the Prolific Academic platform. The participants would first complete the informed consent and qualifying questions. The Work Locus of Control Measurement, Core Self-Evaluations Scale, and other scales were presented close to the end of the survey.

CHAPTER IV: RESULTS

For this study, confirmatory factor analyses were conducted using SPSS Amos. From the sample of 307 participants, data were examined in relation to the Work Locus of Control Measurement. Five separate models were analyzed using this data. The first model proposed one factor that unidimensional for the construct work locus of control. The second model proposed two factors which were Action and Luck. The third model proposed three factors which were Action, Luck, and Beneficial Relationships. The fourth model proposed a four-factor structure with the factors: Action, Luck, Networking, and Fortuitous Connections. The factor, Beneficial Relationships, was separated into two, Networking and Fortuitous Connections. The fifth model proposed an alternative two-factor model that combined Action and Active Networking and combined Luck and Fortuitous Connections. With the Core Self-Evaluations Scale, a confirmatory factor analysis was conducted between the factors from the best fit model for the Work Locus of Control Measurement and the two-factor model for the Core Self-Evaluations Scale.

Data Screening

Prior to analyses of the proposed models, the data were cleaned. The main problem with the data was incomplete responses to the Work Locus of Control Measurement. Starting with an initial sample size of 307 participants, the sample size then dropped to 290 participants (17 removed) after removing those who did not complete the WLOC measurement in its entirety. One more participant was removed because they failed the attention check specific for the WLOC Measurement. The final sample size was 289 participants.

Confirmatory Factor Analyses

The SPSS software AMOS was used to perform a series of confirmatory factor analyses utilizing the data from 289 working professionals taking the survey on the Prolific Academic platform. CFA were conducted on all models to determine the best fit and to test if the subscale of new items effectively amplified the social aspect within the WLOC measurement. Maximum likelihood estimation was used because the data were normally distributed, and the model fit indices examined were Chi-square ($\chi 2$), Comparative fit index (CFI), and Root mean square error of approximation (RMSEA). All indices can be found in Table 1. From these fit indices, it was determined that the three-factor model was the best fit for the WLOC Measurement (Figure 2). The chi-square and degrees of freedom = 249.16(101), comparative fit index (CFI) = .93, and the RMSEA = .071 (Table 1). Since the best fit three-factor structure did not include the subscale of new items, we conducted a following three-factor EFA on the 16-item WLOC Measurement including the subscale of six new items. It was determined that the Fortuitous Connections items in the new subscale cross loaded weakening the fit. The fit indices also for both the four-factor model and alternative two-factor demonstrated that the subscale of new items did not promote the social aspect of the measurement effectively.

Table 1.

Confirmatory Factor Analyses Results

Models	*N*	X^2 *(df)*	*CFI*	*RMSEA*
One-Factor Model*	289	755.60 (104)	0.69	0.15
Two-Factor Model*	289	525.72 (105)	0.8	0.12
Three-Factor Model*	289	249.16 (101)	0.93	0.071
Four-Factor Model	289	847.12 (207)	0.76	0.10
Alternative Two-Factor Model	289	945.38 (210)	0.72	0.11

*Original 16-item WLOC Measurement was used

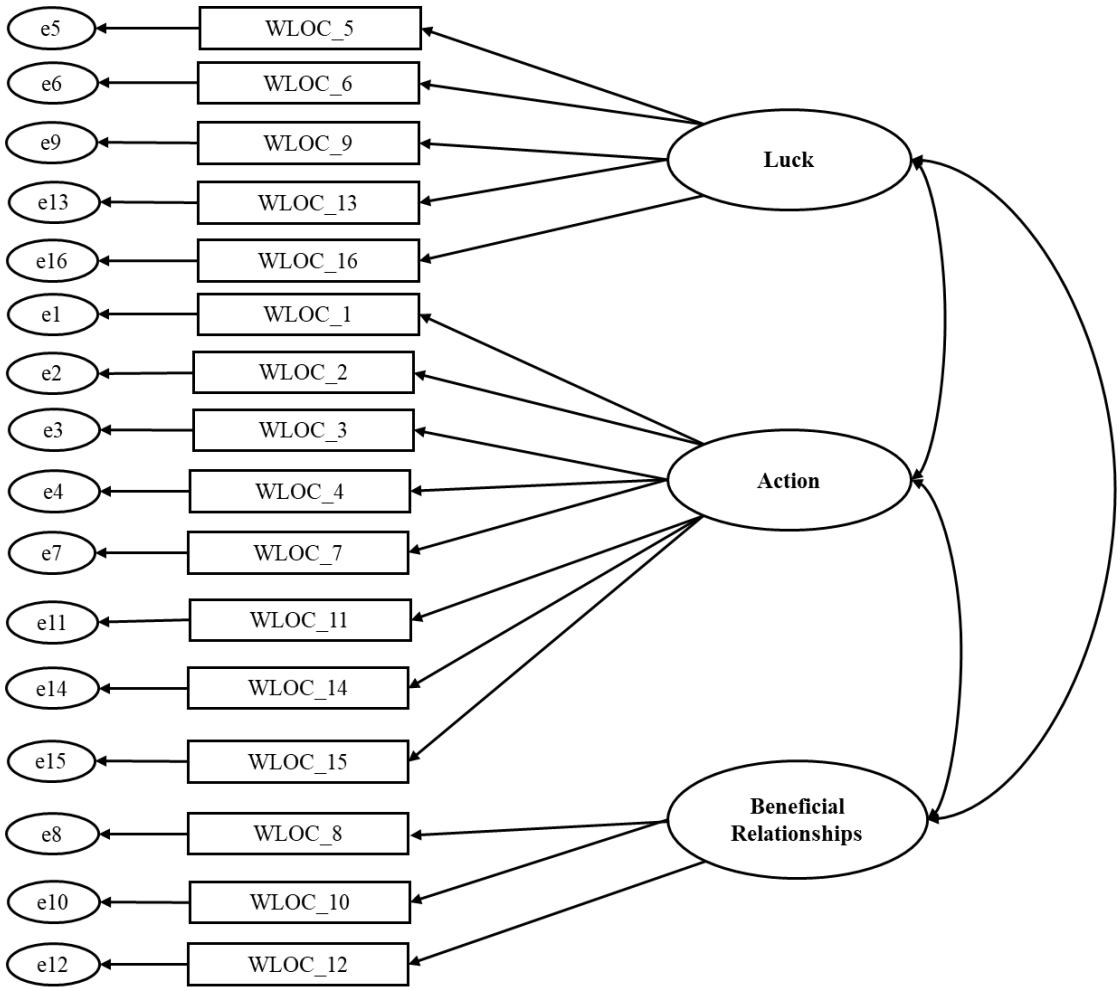

Figure 2. Three-Factor Model of the Work Locus of Control Measurement

Model Comparisons

Based on the confirmatory factor analyses results, the three-factor model of the WLOC measurement without the subscale of new items was used in the comparison with the two-factor fit for CSES. All factors were combined to create one model. The relationship between the factors were analyzed using confirmatory factor analysis. The covariances of the factors were used to compare the factors between the two models. From the covariance estimates, it was determined that the dimensions of the WLOC are significantly different from the dimensions measured in the CSES (Table 2). This promotes that the Core Self-Evaluations Scale measures a different construct than the Work Locus of Control Measurement.

Table 2.

Covariance Estimates Between CSES and WLOC Factors

	CSES Model	
Factors	*Positive*	*Negative*
WLOC Beneficial Relationships	.043	-.048
WLOC Luck	-.049	.068
WLOC Action	-.019	.072

*Indicate Significance

CHAPTER V: DISCUSSION

Implications

The study provided evidence that a three-factor model is the best representation of what is being measured within the WLOC Measurement. The results also showed that networking did not emerge as a separate factor. The study furthers the validation of the measurement and what factors make up the construct in the measurement. The comparison with the CSES solidifies that the factors in the WLOC Measurement differ from those being measured in the CSES. This further expands the measurement of those constructs. Lastly, the study furthered research into measurements and scales to better understand what and how constructs are being measured.

Limitations

Because this study was using existing data, the potential analyses were limited by the data collected. Limitations from the previous thesis were also present in this study because of the existing data set such as the order effects and respondent fatigue.

Future Research Direction

Because the current study focused on the model and factors of the Work Locus of Control Measurement, future research should examine other factors like self-esteem or extraversion. Future research should also replicate the study and re-examine the three-factor structure determining if it is the best interpretation of the measurement. Lastly, future research should explore the social aspect of the measurement especially with the modern use of social media platforms like LinkedIn.

Conclusion

Spector's (1988) Work Locus of Control Measurement was created to measure a person's locus of control within their workplace. This measurement was based on Rotter's (1966) scale measuring general locus of control. Based on previous studies, the various factor structures (i.e., one-factor, two-factor, three-factor) were analyzed to determine the best fit for the measurement. A new proposed four-factor and alternative two-factor structure were also included in the analyses. For the proposed four-factor and alternative two-factor structure, a new subscale of six items was included to promote the suspected social aspect discovered within the three-factor structure.

Existing data from a previous study utilizing the same WLOC Measurement were used for the analyses. The final sample size was 289 participants. The participants completed the Qualtrics survey on the Prolific Academic platform and were compensated for their participation.

Based on the confirmatory factor analyses conducted, the three-factor model was determined to be the best fit for the Work Locus of Control Measurement. The new subscale of items was determined to cause cross loading within the four-factor and alternative two-factor structure and were not effective in promoting the suspected social aspect of the measurement. With some further changes to the subscale of new items, a potential new factor could arise and further promote the social aspect of the measurement determined within the three-factor model. Lastly, the comparison with the Core Self-Evaluations Scale determined that the factors being measured differ between the two models.

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APPENDICES

Appendix A

IRB Approval Letter for Existing Data Set (Pearson et al., 2022)

10/7/22

Investigator(s): Ashley Pearson
Investigator(s) Email: ahp2m@mtmail.mtsu.edu

Protocol Title: Situational Leadership Theory: Do Followers Have a Preference?
Protocol Number: 23-2016

Dear Investigator(s),

The MTSU Institutional Review Board or its representative has reviewed the research proposal identified above and has determined that the study qualifies as exempt.

Approval is granted from the date of this letter for 300 participants, with an expiration date of 12/31/22.

Please note that any unanticipated harms to participants or adverse events must be reported to the Office of Compliance. Any change to the protocol must be submitted to the IRB before implementing this change.

You will need to submit an end-of-project form to the Office of Compliance upon completion of your research. Complete research means that you have finished collecting data.

According to MTSU Policy, a researcher is defined as anyone who works with data or has contact with participants. Anyone meeting this definition needs to be listed on the protocol and needs to complete the required training. **If you add researchers to an approved project, please forward an updated list of researchers to the Office of Compliance before they begin to work on the project.**

All research materials must be retained by the PI or faculty advisor (if the PI is a student) for at least three (3) years after study completion and then destroyed in a manner that maintains confidentiality and anonymity.

Sincerely,

Aleka Blackwell and William Langston
Chairs, Institutional Review Board
Middle Tennessee State University

Appendix B

Measure of Work Locus of Control

Adapted from: Spector, P. E. (1988)

The following questions concern your beliefs about jobs in general. They do not refer only to your present job. To what extent do you agree with each of the following statements jobs in general.

1	2	3	4	5	6
Disagree Very Much					Agree Very Much

1. A job is what you make of it.
2. On most jobs, people can pretty much accomplish whatever they set out to accomplish
3. If you know what you want out of a job, you can find a job that gives it to you
4. If employees are unhappy with a decision made by their boss, they should do something about it
5. Getting the job you want is mostly a matter of luck (r)
6. Making money is primarily a matter of good fortune (r)
7. Most people are capable of doing their jobs well if they make the effort
8. In order to get a really good job, you need to have family members or friends in high places (r)
9. Promotions are usually a matter of good fortune (r)

10. When it comes to landing a really good job, who you know is more important than what you know

11. Promotions are given to employees who perform well on the job

12. To make a lot of money you have to know the right people (r)

13. It takes a lot of luck to be an outstanding employee on most jobs (r)

14. People who perform their jobs well generally get rewarded

15. Most employees have more influence on their supervisors than they think they do

16. The main difference between people who make a lot of money and people who make a little money is luck (r)

*5, 6, 8, 9, 12, 13, 16 are reverse scored

Appendix C

Additional Work Locus of Control Measurement Items

New Items to be added to the end of the WLOC scale:

1	2	3	4	5	6
Disagree Very Much					Agree Very Much

Active Networking

1. The people you know will provide you with information about potential job opportunities.
2. Maintaining relationships in my field will help me achieve more goals.
3. Promotions can be gained using your network.

Fortuitous Connections

1. Hearing about potential job opportunities is a matter of good fortune.
2. Expanding my social connections has little effect on the number of job opportunities available to me.
3. I believe the right people will find me without trying to create new relationships.

Appendix D

Core Self-Evaluation Scale

Adapted from: Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003)

Below are several statements about you with which you may agree or disagree. Using the response scale below, indicate your agreement or disagreement with each item by placing the appropriate number on the line preceding that item.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

1. I am confident I get the success I deserve in life.
2. Sometimes I feel depressed. (r)
3. When I try, I generally succeed.
4. Sometimes when I fail, I feel worthless. (r)
5. I complete tasks successfully.
6. Sometimes, I do not feel in control of my work. (r)
7. Overall, I am satisfied with myself.
8. I am filled with doubts about my competence. (r)
9. I determine what will happen in my life.
10. I do not feel in control of my success in my career. (r)
11. I am capable of coping with most of my problems.
12. There are times when things look pretty bleak and hopeless to me. (r)

*****Items 2, 4, 6, 8, 10, 12 are reverse scored.