

## A HEXACO Personality Structure Analysis of Self-Leadership

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### Abstract

*The HEXACO-PI-R 60 item personality measure along with the Revised Self-Leadership Scale of 35 items was administered to 180 graduating seniors and master's students in a college of business. Following reliability analyses of both measures, multiple regression analyses were conducted using the 24 HEXACO facets as explanatory variables on the sub-scales of self-leadership. The results indicated the HEXACO facets explained a range of variance from six percent to 26% of the self-leadership strategies.*

### SELF LEADERSHIP

Self-leadership (SL) is a construct that had been defined as "...a set of strategies and skills through which individuals influence themselves toward higher levels of performance and effectiveness..." (Amundsen & Martinsen, 2015, p. 3) and "...a process through which people influence themselves to achieve the self-direction and self-motivation necessary to perform" (Houghton, Bonham, Neck, & Singh, 2004, p. 427). Additional clarification of SL was given by Pearce and Manz (2014): "Self-leadership also incorporates intrinsic motivation, self-influence skill development, and strategic-oriented cognitions" (p. 218). Across these definitions, SL is seen as a construct describing the ability and motivation of persons to achieve results with little or no external guidance. The interest of organizational researchers in this construct stems in part from the value of having employees who are able to lead themselves, whether as individuals or members of a work team (Quinteiro, Passos, & Cural, 2016). Additionally, in modern organizations leaders may not have all the knowledge and skills needed for all aspects of leadership (Houghton, Carnes, & Ellison, 2013).

SL theory advocates three categories of strategies to be used in the practice of SL: using natural rewards, constructive thoughts, and behavior focused approaches (Bailey, Barber, & Justice, 2016; Mahembe, Engelbrecht, & De Kock, 2013). These are considered to be self-influence strategies as there are behaviors that can be followed to develop acumen in each of the three.

Natural reward strategies are intended to increase intrinsic motivation via perceived improved competence, purpose, and self-determination (Long, Alifiah, Kowang, & Ching, 2015). The two methods of applying this strategy are to emphasize considering the rewarding aspects of a task, and/or to build more enjoyable features into a task. In essence, the first method attempts to make a task seem more enjoyable, while the second method calls for changing the task so that it actually is more pleasant to perform. This form of self-regulation is related to emotion regulation, and as noted by Furtner, Rauthmann, and Sachse (2015) "...self-leadership may be crucially driven by underlying emotion regulation mechanisms, thus positioning natural reward strategies at the heart of self-leadership..." (p. 107).



Constructive thought strategies, sometimes referred to as thought self-leadership, promote positive thinking while improving positive self-image and self-talk, and at the same time attenuating negative self-talk and dysfunctional beliefs. Houghton, Carnes, and Ellison (2013) listed examples of dysfunctional beliefs such as all-or-nothing thinking, a mental filter in that a person ruminates over a negative, and disqualifying or discounting the positive. As the cognitive emphasis strategy, constructive thought strategies require positive self-talk and visualizing successful performance. The effectiveness of positive self-talk has been found in a study of 301 salespeople to boost self-efficacy, which served as a mediator for improved sales performance (Panagopoulos & Ogilve, 2015).

The behavior-focused strategies are in place when the person using SL engages in self-observation, self-cueing, self-goal setting, self-reward, and constructive self-feedback. These approaches may begin with self-observation in that the person needs to become aware of why he or she is motivated to perform certain behaviors. This can be followed by self-goal setting along with a determination of how to achieve those goals, which when achieved causes person to self-reward.

## **CORRELATES OF SL**

Research interest in SL can be seen in the correlates that have been discerned. As examples, research reviewed by Houghton, et al. (2013) listed self-efficacy as the most common correlate, followed by psychological empowerment, creativity, commitment and independence, job satisfaction, and career success. In one such study of 407 supervisor-subordinate dyads in China and Hong Kong, Ho and Nesbit (2014) concluded: “As expected, self-leadership was positively and significantly related to the outcome variables of supervisor performance rating...objective work measure...and job satisfaction” (p. 401). Among 81 employed team members in Germany, Hauschildt and Konradt (2012) concluded SL correlated with both team and individual task proficiency. The ability of SL to have positive effects on teams as well as individuals was also found by Quinteiro et al. (2016) in a field study of 103 self-management teams (SMTs) which concluded “The findings from this study also suggest that team thought self-leadership positively predicts team performance and team viability in SMTs”(p. 120). These and other field studies with employees as participants attenuate concerns about the generalizability of student samples (Ward, 1993).

In a review of SL, Stewart, Courtright, & Manz (2011) noted “Self-leadership has been shown to result in greater career success for individuals...reduced stress and anxiety...increased self-efficacy...greater job satisfaction...reduced absenteeism...”(p.193). “Self-leading employees have more positive affect at work. They also tend to have higher productivity and more fulfilling careers” (p. 196). Positive effects for SL such as career success and productivity have been found across participant groups as diverse as team members, employee trainees, college students, and employees of a firm that had went bankrupt (Manz, Skaggs, Pearce, & Wassenaar, 2015).

While the correlates of SL serve to develop a nomological network, the Discriminant validity of SL as a separate construct from other motivation constructs such as need for achievement, self-regulation, and self-efficacy was discerned by Furtner et al. (2015). In an analysis of data from 374 professionals, confirmatory factor analyses caused the researchers to conclude “...self-leadership scales showed Discriminant validity to other scales and thus captured something distinct...self-leadership represents a distinct and unique construct” (pgs. 117-118).

## **SL AND PERSONALITY**

Despite the correlates of SL and their importance in organizational psychology, “Little is known about the characteristics or traits of people who are self-leaders” (Stewart et al., 2011, p. 202). This research deficiency was also noted by Furtner, Rauthmann, and Sachse (2011) who wrote self-leadership “...lacks integration within a nomological network. It is not clear how SL is associated with different personality traits...” (p. 369). The study of such traits in organizational psychology has been primarily via the Big Five factor model. This model postulates the majority of variance in personality can be captured in five personality factors. Three of these factors have been described by Houghton, Bonham, Neck, and Singh (2004) using adjectives: Extraversion by active, gregarious, and ambitious, Neuroticism by anxiety, impulsiveness, and hostility, and Conscientiousness by competence, self-discipline, and



achievement-oriented. The other two factors have been described in a similar manner by Long et al.,(2015): Agreeableness via trusting, affable, and sensitive, and Openness to experience by curious, creative, and original.

To date, few studies have been conducted to develop an understanding of the personality structure of people have high scores on SL measures. One such study of 357 undergraduates administered the 35 item RSLQ to measure self-leadership and measured personality via the 40 adjective unipolar mini-markers Big Five Instrument. The conclusions reached were "...self-leadership dimensions and personality traits are related yet distinct concepts. As anticipated, the traits of extraversion and conscientiousness were significantly related to all three self-leadership strategy dimensions...emotional stability was ...related only to the natural rewards strategies dimension...the general second-order factors for self-leadership and personality are statistically indistinguishable" (Houghton, Bonham, Neck, & Singh, 2004, p. 436).

A second study used the Interpersonal Adjectives Scales-Revised-Big Five of 124 adjectives to measure the Big Five personality factors along with a modified RSLQ consisting of 27 items (Furtner & Rauthmann, 2010). Participants were 168 mainly freshmen college students. Controlling for the age and sex of the participants, hierarchical regression analysis led to the conclusion "Thus, openness to Experiences and Conscientiousness seem to contribute the most to Self-leadership among the Big Five traits" (p. 345). Although these studies found relationships between some of the Big Five traits and SL, no study was found evaluating the facets of the HEXACO model in relation to SL.

## **HEXACO**

One putative reason for the paucity of studies of the personality structure of persons' SL is the Big Five personality factors may not capture all the personality dimensions needed to describe such persons. One model that has been increasingly used in personality research is the six dimensions of the HEXACO model, which consist of the Big Five plus a dimension labeled Honesty-Humility (Anglim & O'Connor, 2018). The value of this model over the Big Five model was stated by Ashton, Lee, & de Vries, (2014): "This six-dimensional space captures some important personality variance not represented within the five dimensional models while also allowing a better theoretical interpretation of personality variation" (p. 140). Additional clarification was offered by Barford, Zhao, and Smillie (2015): "The HEXACO model is most saliently distinguished from the B5 by its inclusion of the sixth factor, honesty-humility. This trait reflects the tendency to be trustworthy and fair when interacting with others, as well as modesty about one's own accomplishments" (p. 233). Scores on this dimension have been described: "...high levels of Honesty Humility stand for sincerity, fairness, greed-avoidance, and modesty whereas low levels imply dishonesty, unfairness, greed, and pretentiousness" (Hilbig, Thielmann, Wüthrich, & Zettler, 2015, p. 91). The Honesty-Humility dimension has been analyzed for its relationship to variables as varied as prosociality, happiness, and religiosity (Aghababaei, Mohammadtabar, & Saffarinia, 2014), empathy (Wakabayashi & Kawashima, 2015), fairness in distributing rewards (Hilbig, et al., 2015), the prediction of exercise behavior MacCann, Mullan, & Roberts, 2015), and leadership emergence (Ogunfowara & Bourdage, 2014).

Further specificity can be analyzed as the HEXACO model has four facets within each of the six dimensions. These consist within the honesty-humility dimension as sincerity, fairness, greed avoidance, and modesty. The emotionality dimension contains facets measuring fearfulness, anxiety, dependence, and sentimentality. Extraversion has facets labeled social self-esteem, social boldness, sociability, and liveliness. The facets of forgiveness, gentleness, flexibility, and patience are used to describe agreeableness, while conscientiousness has facets named organization, diligence, perfectionism, and prudence. The final personality dimension, openness to experience, is comprised of the facets aesthetic appreciation, inquisitiveness, creativity, and unconventionality. Although research has analyzed the relationship of the HEXACO dimensions with SL strategies (e.g. Bailey, Barber, & Justice, 2018), no study was found that analyzed the relationship of the HEXACO facets to the sub-scales of self-leadership.

Given the expansiveness of the HEXACO personality model, coupled with the organizationally relevant outcomes of self-leadership, the purpose of the current study was to analyze via the HEXACO facets the personalities of the people who have differing levels of self-leadership.



## Methodology

### Measures

**Self-Leadership:** Although alternative measures have been developed (e.g. Amundsen & Martinsen, 2015; Ho & Nesbit, 2014), the most commonly used measure of SL at the individual level is the 35 item scale of Houghton and Neck (2002) or items selected from the scale. This scale, referred to as the Revised Self-Leadership Questionnaire (RSLQ) has been used with all 35 items with 375 students in South Africa (Mahembe et al. 2013), via a subset of fourteen items in a study involving 72 Dutch maternity nurses (Breevart, Bakker, & Demerouti, 2014), six items in a study of 101 high profile business students (Steinbauer, Renn, Taylor, & Njoroge, 2014), 27 items with 168 participants being mostly first year psychology students (Furtner & Rauthmann, 2010) or 81 employees who worked on teams (Hauschildt & Konradt, 2012). As to psychometric properties of the RSLQ, in a study surveying 405 working adults in South Africa Nel and Van Zyl (2015) concluded via confirmatory factor analysis acceptable goodness of fit. For the present study, the 35 item RSLQ scale was used to maximize reliability and content validity.

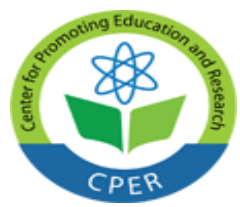
This scale contains the three dimensions of SL strategies titled natural reward, constructive thought patterns, and behavior-focused. As with the facets of the personality dimensions within the HEXACO model, sub-scales are contained within each of the dimensions. The sub-scales of the behavior-focused strategies are self-goal setting, self-reward, self-punishment, self-observation, and self-cueing. For constructive thought patterns, the sub-scales are self-talk, visualizing successful performance, and evaluating beliefs and assumptions. The natural reward strategies dimension has only the sub-scale of focusing thoughts on natural rewards (Houghton & Neck, 2002).

**HEXACO:** Personality was measured via the 60-item HEXACO Personality Inventory-Revised (Ashton & Lee, 2009). This inventory has been found to have adequate convergent validity and internal consistency reliability (Aghababaei et al., 2014). Additional research support for the use of the 60 item version is it has measurement invariance across cultures as reported by Houghton, Carnes, & Ellison (2013).

**Participants and Procedure:** A total of 180 students, either senior in a capstone course taught during their final semester or MBA students in AACSB accredited programs were given extra credit for completing the two surveys. Across the 54 women and 126 men, the age of the participants ranged from 20 to 54, with a mean of 24.71. The mean number of hours worked per week was 29.98, and the mean GPA was 3.21.

### Statistical Analyses

As could be expected from senior level business and MBA students, the highest means on the HEXACO dimensions were for conscientiousness (3.75) and extraversion (3.73), followed by honesty-humility (3.40), agreeableness (3.31), openness (3.14), and emotionality (2.94). For the sub-scales of the RSLQ, means in order from highest to lowest were self-observation (4.08), self-goal setting (4.03), natural rewards (3.90), self-talk (3.80), self-cueing (3.73), visualizing successful performance (3.71), evaluating beliefs/assumptions (3.66), self-punishment (3.63), and self-reward (3.59). These descriptive statistics, along with the means and standard deviations of the six factors and 24 facets of the HEXACO measure, are presented in Table 1.



**RSLQ Subscales: Descriptive Statistics**

	N	Mean	Std. Deviation
Self-Observation	180	4.0806	.65728
Self-Goal Setting	180	4.0333	.70449
Natural Rewards	180	3.9033	.58833
Self-Talk	180	3.8056	1.07905
Self-Cueing	180	3.7333	1.19636
Visualizing Successful Performance	180	3.7167	.75365
Beliefs-Assumptions	180	3.6639	.70973
Self-Punishment	180	3.6347	.83414
Self-Reward	180	3.5963	1.08713
Valid N (listwise)	180		

**HEXACO Facets: Descriptive Statistics**

	N	Mean	Std. Deviation
Social Self Esteem	180	4.0481	.63434
Diligence	180	4.0444	.68154
Liveliness	180	3.8000	.72196
Organization	180	3.7889	.87158
Fairness	180	3.7796	.83541
Patience	180	3.7056	.95979
Perfectionism	180	3.7000	.63919
Sociability	180	3.6167	.88295
Prudence	180	3.5759	.72879
Modesty	180	3.5167	.81347
Social Boldness	180	3.4463	.79895
Sincerity	180	3.4259	.75410
Unconventionality	180	3.3574	.75407
Anxiety	180	3.3361	.95108
Forgiveness	180	3.2861	.88284
Flexibility	180	3.1963	.75552
Gentleness	180	3.1870	.76966
Inquisitiveness	180	3.1500	1.03419
Sentimentality	180	3.1333	.80855
Creativity	180	3.1056	.94180
Aesthetic Appreciations	180	2.8639	1.00672
Fearfulness	180	2.7648	.87712
Greed Avoidance	180	2.6833	.89208
Dependence	180	2.5361	.88915
Valid N (listwise)	180		



**Reliability:** The HEXACO scale coefficient alpha measure of internal consistency was .76. The coefficient alpha measures across the six personality factors were .70 for honesty-humility, .75 for emotionality, .80 for extraversion, .77 for agreeableness, .74 for conscientiousness, and .76 for openness. The coefficient alpha for the RSLQ was .89, with the reliability of the RSLQ factors being .80 for visualizing successful performance, .82 for self-goal setting, .91 for self-talk, .92 for self-reward, .70 for beliefs-assumptions, .73 for self-punishment, .70 for self-observation, .86 for self-cueing, and .67 for natural rewards. With the exception of the factor of natural rewards, each of the RSLQ subscales had adequate internal consistency for research purposes.

**Multiple Regressions:** As the current study is exploratory research, forward stepwise regression was used (Hopkins & Ferguson, 2014). With entry set to .05, the 24 HEXACO facets were regressed on the nine SL subscales.

## Results:

The regression of the HEXACO facets on the subscales of the RSLQ indicated personality facets explained significant variance in self-leadership dimensions. For natural reward strategies, 22% of the variance in natural rewards was explained by the Social Self-Esteem, Creativity, Sentimentality, Modesty, Dependence facets, while within the self-leadership dimension of constructive thought pattern strategies, explained variance ranged from 26% for visualizing successful performance via the facets Creativity, Diligence, Modesty, while the facets Social Boldness, Anxiety, Dependence, Aesthetic Appreciations, Organization explained 21% of the variance for beliefs-assumptions, and facets Anxiety, Forgiveness, Patience, Diligence explained 14% of the variance for self-talk. The explained variance within the behavior-focus strategies was 31% for self-goal setting due to the facets Diligence, Modesty, Social Boldness, Forgiveness, facets Sentimentality, Modesty explained 6% of the variance for self-reward, 15% for self-punishment Anxiety, Organization, 30% for self-observation Perfectionism, Diligence, Fairness, Inquisitiveness, Greed Avoidance, and 21% for self-cueing Organization, Sentimentality, Social Boldness, Inquisitiveness, Greed Avoidance.

## Discussion

The facets of the HEXACO model regressed on the subscales of the RSLQ indicate detailed descriptions of the personality of persons evaluating themselves on the subscales of the RSLQ. For example, for the self-leadership dimension of natural rewards, the paramount correlate was social self-esteem, indicating this strategy is used by persons who have high regard about themselves in a social context. Further descriptions using the paramount correlated facet would describe within the constructive thought pattern strategies those who visualize successful performance as being creative, while those who look at their beliefs-assumptions have social boldness and are confident in social situations, and persons with self-talk can be described as affected by anxiety. The behavior focus strategies analyses indicated diligence describes those who practice self-goal setting, sentimentality is used to describe the use of the self-reward strategy, self-punishment is a correlate of anxiety, while perfectionism indicates someone who uses self-observation and organization describes a person who uses self-cueing.

What has not been determined in any research known to the authors is the relative extent to which genetics affects the HEXACO model by placing constraints on training efforts to influence personality dimensions and their effects on self-leadership dimensions and/or facets. That a genetic influence exists was stated by Lewis and Bates (2014):

*...these results indicate that for all of the HEXACO traits only a single underlying common genetic factor is needed to account for genetic covariation among each dimension's facets, although genetic effects specific to the facets was also apparent (p. 16).*

As a possible weakness, as with any survey, miscomprehension by the participants can occur in the interpretation of the instructions, the meaning of the items in terms of sentential miscomprehension, or errors in lexical interpretations of words (Hardy & Ford, 2014).



It remains for further research to encompass additional personality correlates of SL with full-time employees, alternative personality models, as well as cross-cultural research (e.g., Wakabayashi, 2014). Another fruitful line of research would be to determine if the desire for self-improvement or performing well serves to motivate those who want to become leaders in organizations (Ross, 2014).

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