



PRIMARY RESEARCH

Culturally derived leadership qualities: Dispositional resilience among societies

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Abstract

An investigation of dispositional resilience in cultures and its relation to leader effectiveness is presented with an introduction on the study's research problem, research question, dispositional resilience theory, differing dimensions of culture and society, theoretical foundations of the variables through a definition of terms, literature review, a discussion of research methods and instruments, future analysis implications, and the author's conclusions. The research purpose examines the levels of dispositional resilience characteristics in various cultures and how those characteristics affect leader effectiveness. Data analysis is conducted following a review of four studies, with three studies have investigated the relationship of dispositional resilience on practitioner performance and stress levels. These studies reveal the Dispositional Resilience Scale (DRS) as a valid and reliable instrument for measuring individual dispositional resilience (hardiness and resilience) and the GLOBE Study as valid and reliable frameworks for researching different cultures. Using the One-Way ANOVA technique, research determined a statistically significant difference of Confucian country cluster students compared with Latin American and Latin European country cluster students. By determining how some country clusters handle hardiness and resilience, leaders and managers may make better decisions in the management of their organizations.

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INTRODUCTION

The development of strong leadership able to persevere through difficult moments remains an important challenge for many organizations throughout history, which continues to the present day (Oetomo, Satrio, & Lestariningsih, 2016; Yukl, 2013). As such, the potential of strong leadership provides the necessary impetus for research into the characteristics that compromise perseverance and personality hardiness (Bartone, Eid, Helge Johnsen, Christian Laberg, & Snook, 2009). Most research has performed analysis on the individual qualities of leadership that focus on cognitive capability rather than personality traits (Mumford, Zaccaro, Harding, Fleishman, & Reiter-Palmon, 1993). To this point, Stogdill (1948), in research performed following World War II, posited that personality traits have little to do with leadership performance. Research confirmed that personality's effect on leadership resulted only in meager but confused findings (Hollander & Julian, 1969).

However, mere cognitive factors did not sufficiently describe the entirety of effective leadership (Bartone et al. (2009). Later researchers posited that appropriate instruments supported the impact of personality traits in leadership (Bass & Stogdill, 1990; Napitupulu, 2016). House, Hanges, Javidan, Dorfman, and Gupta (2004) provided research that indicated varying cultural dimensions shown by differing cultures but without any direct connection to factors that may reveal hardy or resilient traits. Even in light of growing awareness, very little empirical research exists that identifies and develops dispositional resilience among differing cultures.

According to Maddi (1967) and Kobasa (1982), the concept of dispositional resilience develops early and remains relatively stable throughout life. Those with hardy traits show high levels of commitment, high adaptation, belief in control over their lives, and treated stress as a common condition related to life

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(Bartone, 2000; Taiwan, Na-Nan, & Ngudgratoke, 2017). Across diverse industries, dispositional resilience enjoys a link to positive health and job performance even in stressful conditions (Bartone, 2000). In the extremely stressful conditions of war, dispositional resilience moderates combat stress (Florian, Mikulincer, & Taubman, 1995). Dispositional resilience seems to exist as a moderator that counters stressful environments.

An elemental component of dispositional resilience concerns the interpretation of meaning that people attribute to events that occur around them (Bartone, 2006). Hardy and resilient individuals believe they control events, enjoy relationships, and acknowledge their responsibility in achieving individual goals and responsibilities (Bartone, 2000). In addition, hardy and resilient individuals believe stressful events can be interpreted in positive ways and labor to make these events constructive (Bartone, 2000). The capacity for dispositional resilience in individuals seems to play an important part in success but may also suffer limitations arising from societal and organizational cultural practices. Very little research exists that evaluates the relationship between existing cultural characteristics and hardy and resilient characteristics. In an effort to build on previous studies, this research project aims to empirically measure and determine the levels and relationship of dispositional resilience in Latin American, Latin European, and Confucian country clusters (House et al., 2004).

Statement of the Problem

The foundational ideas of dispositional resilience and culturally contextual leadership have critically importance in comprehension and practice as they determine organizational success (Bartone, 2000; House et al., 2004). Factors like identity, commitment, control disposition, and personality hardiness do not enjoy specific inclusion in House et al. (2004) study of 62 societies. Dispositional resilience, as a factor that helps to form positive leadership enjoys minimal research and its existence in other cultures outside of Western ideals have even less study. The narrow body of knowledge comes only from disparate studies that examine dispositional resilience among citizens within the United States of America (USA). It stands to reason that some people have varying levels of dispositional resilience and that their individual level derives, in large part, from their societal or organizational culture.

Maddi (1967) first conceptualized and operationalized personality strength in a study of ideal identity and premorbid personality as the result of social and cultural upheaval. This study preceded introduction of the Personal Views

Survey by several decades (Maddi, 1997). Other instruments measure personality hardiness and resilience, operationally called dispositional resilience, but have issues with reliability and validity (Bartone, 2008). The Dispositional Resilience Scale (DRS) exists, as the most modern instrument to evaluate dispositional resilience (hardiness and resilience). In addition, it remains the most valid and reliable due to continual revisions, and updates (Bartone, 1991). The relative scarcity and inconclusive diverse research that attempts to determine significant differences and relationships of dispositional resilience to specific cultures provides ample motivation for additional investigation.

Purpose of the Study

The purpose of this study tests if there exists a significance difference in dispositional resilience within the cultures of specific country clusters (Bartone et al., 2009; House et al., 2004). The factors that compromise dispositional resilience exist as personality and cognitive structures compromised of commitment, challenge, and control dispositions (Bartone, 2000). The independent variables of different cultures include the country clusters of Latin America, Latin Europe, and Confucian societies. These country clusters were chosen from examination of their relative similarities and differences in House et al. (2004) research. The cultural dimensions that characterize Latin America have the most dissimilar traits and differences to Latin Europe. Correspondingly, Confucian society rests in between both Latin American and Latin European country clusters. The goal of this study aims to refine and further understanding of dispositional resilience as it relates to leadership in cultures and country clusters in relating to House et al. (2004) research. Further study of dispositional resilience and a comprehensive understanding of its relation to culture may advance the discovery of additional knowledge.

LITERATURE REVIEW

A wealth of knowledge and research exists relating intelligence to leadership theory and the dimensions that identify certain cultures (House et al., 2004). In contrast, personality traits' relation to cultural dimensions is nonexistent. Currently, there are 2,378 articles about cognitive ability in relation to culture in the Academic Search Complete database while only six articles pertain to hardiness and resilience's relation to culture in the same database. These articles discuss personality hardiness and cultural development in relation to research about family disturbances, military service, and mental disease. It seems that personality hardiness takes on more significance when stress and

tension are at their highest. [Bartone \(1999\)](#), [Maddi \(1997\)](#), [Nowack \(1989\)](#) and [Kobasa \(1982\)](#) dominate hardiness and resilience research without the benefit of extensive validation from other scholars. [House et al. \(2004\)](#) also dominates cultural discussion, as researchers consistently cite and reference the study in relation to their own projects. Considering the paucity of validated and reliable research regarding dispositional resilience as it relates to cultural dimensions within specific country clusters ([House et al., 2004](#)) further study should follow.

[Stogdill \(1948\)](#) posited that personality traits do not affect leadership performance, which enjoyed support in subsequent research by ([Hollander & Julian, 1969](#)) that concluded personality traits had an indeterminate relationship with leadership development. [Maddi \(1967\)](#) conceptualized and operationalized hardiness and resilience by creating the “ideal identity” term. According to [Maddi \(1967\)](#), people with ideal identity personality do not have a pervasive sense of powerlessness and actively engage in their ideas of a meaningful life. [Maddi \(1967\)](#) also posited that individuals with ideal identity act to influence events, enjoy new experiences, and appreciate education. Ideal identity aligns with personality hardiness through indication that individuals with hardiness and resilience perceive stressful environments as less threatening and just a routine factor of life ([Kobasa, 1982](#)).

However, all literature does not endorse hardiness and resilience as positive traits. [Funk and Houston \(1987\)](#) suggested that hardiness and resilience have connections with neuroticism and high levels of hardiness and resilience may simply show as low levels of that characteristic. The underlying cause of this association stems from early research, which show hardiness scales listing few items ([Bartone, 1991](#)). These issues seem to have been corrected in subsequent hardiness and resilience instruments by [Bartone \(1999\)](#).

Robert House of the University of Pennsylvania pioneered development of the Global Leadership and Organizational Behavior Effectiveness (GLOBE) program in 1991. [House et al. \(2004\)](#) published “Culture, Leadership, and Organizations: The GLOBE Study of 62 Countries” in which 17,300 managers from 951 organizations, across a wide range of industries, established nine societal cultural dimensions that account for similarities and differences in values, beliefs, norms, and other cultural attributes. The societal cultural dimensions include power distance, uncertainty avoidance, humane orientation, institutional collectivism, in-group collectivism, assertiveness, gender egalitarianism, future orientation, and performance orientation ([House et al., 2004](#)).

Statistical analysis from the survey of over 17,000 leaders from 62 societies resulted in the formation of 21 primary dimensions of leadership ([House et al., 2004](#)). Additional factor analysis by [House et al. \(2004\)](#) condensed 21 societal cultural dimensions into six Culturally Endorsed Theory of Leadership (CLTs) dimensions that include charismatic/value-based leadership, team-oriented leadership, participative leadership, humane-oriented leadership, autonomous leadership, and self-protective leadership. [House et al. \(2004\)](#) societal cultural values may predict CLT leadership dimensions. Moreover, [House et al. \(2004\)](#) found that leadership remains contextual within the specific norms of the respective society or organization.

Variables of Study – Dispositional Resilience

Challenge disposition

Challenge disposition aligns with [Kobasa \(1982\)](#) definition, which refers to belief that change is a normal part of life and produces chances for growth. Adaptation to change is fundamental characteristic of the challenge disposition ([Kobasa, 1982](#)).

Commitment disposition

Commitment disposition refers to [Kobasa \(1982\)](#) definition, which exists as a tendency for individuals becoming actively engaged in the trials of life and having sincere interest in other people, activities, and events. The commitment disposition actively involves life experiences in such a way that creation and development of identity and purpose is achieved ([Kobasa, 1982](#)).

Control disposition

Control disposition refers to [Kobasa \(1982\)](#) classification, which states the belief that an individual has charge over their life can influence events through effort and persistence. The control disposition amplifies resistance to stressful environments and handles them as an expected instead of an unexpected result ([Kobasa, 1982](#)).

Ideal identity

Ideal identity follows [Maddi \(1967\)](#) definition, which lists ideal identity as individuals having control of their lives, determination to control events, and having interest in new experiences even if challenging. Individuals with ideal identity traits identify alternatives to less than positive situations and consider challenging conditions as potentially interesting ([Maddi, 1967](#)).

Personality hardiness

Personality hardiness follows [Bartone \(2008\)](#) characterization, which styles as a “function that includes cognitive, emotional, behavioral qualities”. Personality hardiness also has a combination of personality traits that allows individuals to overcome stressful events and experiences without developing significant negative modifications ([Bartone, 2008](#)).

Premorbid personality

Premorbid personality refers to [Maddi \(1967\)](#) meaning, which describes people with premorbid personalities as individuals that present themselves as no more than “a player of social roles and embodiment of biological needs”. Individuals with premorbid personalities tend to frequently have existential frustration when stressed ([Maddi, 1967](#)). Those with premorbid personalities view life as meaningless and treat challenges and new experiences in apathetic fashion.

Psychological resilience

Psychological resilience follows the [Sinclair and Britt \(2013\)](#) meaning, which refers to the individual process of adapting during traumatic, adverse, or other stressful events.

Variables of Study—GLOBE Study Cultural

Latin America country cluster

[House et al. \(2004\)](#) developed research that showed similar and different cultural dimensions of people within specific countries and societies. Latin American countries include Ecuador, El Salvador, Columbia, Bolivia, Brazil, Guatemala, Argentina, Costa Rica, Venezuela, and Mexico ([House et al., 2004](#)). These countries tend to score higher in performance, team, autonomy, and self or group protective orientation categories ([House et al., 2004](#)). Performance orientation refers to maintaining high standards, decisiveness, and innovation ([House et al., 2004](#)). Team orientation refers to pride, loyalty, and collaboration with emphasis on team cohesiveness and universal purpose ([House et al., 2004](#)). Autonomous orientation refers to an independent, individual, and self-determining approach to management ([House et al., 2004](#)). Self or group protective orientation refers to an emphasis on procedure, safety, and security of the individual or the group ([House et al., 2004](#)).

Conversely, Latin American countries scored in the middle range in participative and humane orientations ([House et al., 2004](#)). According to [House et al. \(2004\)](#), participative orientation supports input and consideration of other’s opinions during decision making while stressing delegation

and equality ([House et al., 2004](#)).

Latin European country cluster

Latin European countries are represented by Israel, Italy, the French-speaking people of Switzerland, Spain, Portugal, and France ([House et al., 2004](#)). The Latin European country cluster falls virtually opposite the Latin American cluster, which means that significant cultural differences exist ([House et al., 2004](#)). According to [House et al. \(2004\)](#), Latin European societies score higher in performance, team, and autonomous orientations. Performance orientation pertains to supporting high standards, having decisiveness, and advancing innovation ([House et al., 2004](#)). Team orientation pertains to pride, loyalty, and collaboration with weight on team cohesiveness and common purpose ([House et al., 2004](#)). Autonomous orientation pertains to an independent, individual, and self-centric approach to leadership and subordinate relationships ([House et al., 2004](#)).

Latin European countries scored in the lower scale in humane orientation while scoring in the middle on participative and self or group protective orientation scales ([House et al., 2004](#)). Participative orientation refers to the consideration of other ideas and input during decision-making ([House et al., 2004](#)). This orientation emphasizes equality of perspective and delegation of work duties ([House et al., 2004](#)). Humane orientation emphasizes compassion and generosity ([House et al., 2004](#)). This orientation involves being patient and supportive of other’s well-being ([House et al., 2004](#)). Self or group protective orientation emphasizes procedure, safety, and security of the individual or the group ([House et al., 2004](#)). Considering that Latin European countries do not score as high in humane, participative, or self or group protective orientation, they do not value these leadership styles as much as the leadership styles they score higher in ([House et al., 2004](#)).

Confucian country cluster

According to [House et al. \(2004\)](#), the Confucian country cluster positions as mostly halfway in between Latin American and Latin European country clusters ([House et al., 2004](#)). Although the Confucian cluster is closer to both Latin American and Latin European cluster, it remains significantly different than either of the latter ([House et al., 2004](#)). Countries within the Confucian cluster include Singapore, Hong Kong, Taiwan, China, South Korea, and Japan ([House et al., 2004](#)). Confucian countries scored higher in team, humane, autonomous, and self or group protective orientation ([House et al., 2004](#)). Team orientation pertains to pride, loyalty, and collaboration with weight on team cohesiveness

and common purpose (House et al., 2004). Autonomous orientation relates to an independent, individual, and self-centric approach to management and subordinate interaction (House et al., 2004). Self or group protective orientation indicates an emphasis on procedure, safety, preservation of dignity, and security of the individual or the group (House et al., 2004).

Confucian countries scored in the lower scale in participative orientation and in the middle range on performance orientation (House et al., 2004). Participative orientation refers to the respect for other ideas and input during decision-making (House et al., 2004). This orientation underscores egalitarianism of perspective and fair allocation of work duties (House et al., 2004). Performance orientation emphasizes support for high standards, decisiveness, and innovation (House et al., 2004).

Hypotheses

This study employed a quantitative cross-sectional research design to determine if there is a substantial difference of dispositional resilience in Latin American, Latin European, and Confucian country clusters. Undergraduate college student groups from each country cluster were administered the Dispositional Research Survey (DRS) (Bartone et al., 2009). The DRS measures hardiness by five categories of very high, high, average, low, and very low.

Evaluation of the relationship of dispositional resilience included the country clusters of Latin America, Latin Europe, and Confucian society. Considering the challenging and stressful conditions experienced by students of other nations in adapting and learning in a collegiate environment (Sherry, Thomas, & Chui, 2010) and that their cultural dimensions have major roles in dictating subsequent leadership behaviors (House et al., 2004), there exists an expectation of a significant difference in how students from differing country clusters interpret stressful conditions and environments. The three hypotheses follow:

H1: At least one categorical difference exists in dispositional resilience among students from the Latin American country cluster compared with the other two country clusters.

Based on House et al. (2004) global leadership dimension scores, I expect at least one category difference in dispositional resilience in students from the Latin American country cluster.

H2: At least one categorical difference of exists in dispositional resilience among students from the Latin European country cluster compared with the other two country clusters.

Based on House et al. (2004) global leadership dimension scores, I expect at least one category difference in dispositional resilience in students from the Latin European country cluster.

H3: At least one categorical difference exists in dispositional resilience among students from the Confucian country cluster compared with the other two country clusters.

Based on House et al. (2004) global leadership dimension scores, I expect to fail to reject the null hypothesis, which would mean that no category difference exists in the dispositional resilience levels of students from the Confucian country cluster compared with the other country clusters.

Significance of the Study

The results of this study aims to assist leadership, practitioners, scholars, and theoreticians in determining the relationship of dispositional resilience to cultures and people from different country clusters. For additional perspective, this study aimed to build upon the growing body of knowledge regarding cultural dimensions, leadership, and dispositional resilience. In addition, this study may benefit present and future scholars and practitioners, as it could enhance understanding of cultures and how dispositional resilience may explain certain perspectives and leadership actions within those cultures.

METHODOLOGY

This study used quantitative research technique to compare the dispositional resilience of people from different cultural and social backgrounds. The broad research questions that guided this study included: 1) Does hardiness and resilience levels significantly differ among individuals from among the three sample populations?

2) Does any significant difference depend on type of culture and society?

Quantitative analysis method, in the form of a One-Way Analysis of Variance (ANOVA) formed the basis of this research as it assesses significant mean differences and relationships between a dependent variable and independent variables with levels (Creswell & Creswell, 2017; Green & Salkind, 2003). The study's dependent variable included DRS scores among the students and independent variables included Latin American, Latin European, and Confucian country clusters, which have already displayed other leadership differences in House et al. (2004) research. The ANOVA *F*-test determined whether each group's (Latin American, Latin European, and Confucian) means of dispositional resilience significantly differed from each other.

Sampling Procedure and Data Collection

The study sample comprised 117 students from the Oral Roberts University (ORU) College of Business undergraduate program. A hybrid non-probability convenience sampling method proved the most effective design given the researcher and professors' schedule and the study's time constraints. The sample included only the undergraduate students that came from Latin American (39), Latin European (49) and Confucian (29) country clusters from the larger population of the ORU College of Business. Administration of the survey during class, over the course of two weeks, and mandated completion of the survey assured that each applicable student in the Latin American, Latin European, and Confucian country clusters finished the survey in a timely fashion. In addition, this method solved potential issues concerning lower sample size and low participation rate, which would have lengthened the research project's time frame. The original research design's desire for a sample size of 484 students was not fulfilled.

The sample included every applicable (from the three studied country clusters) undergraduate student from the ORU College of Business programs without consideration for other demographic or academic characteristics. Study participants included male, female, young, old, full, and part time students - as long as they came from Latin American, Latin European, or Confucian country clusters prior to their entrance into college.

Measures

The instrument for this study used [Bartone \(2006\)](#) Dispositional Resilience Scale, version DRS15v3.2. The DRS15v3.2 exists as the most up-to-date type of the 15 item DRS available. It integrates previous improvements and recent revisions made by [Bartone \(2006\)](#). Improvements and revisions include improved balance, reduction of culture related bias compared to earlier versions, and elimination of idiomatic and potentially troublesome English words and expressions ([Bartone, 2006](#)). The administered DRS consisted of five items for each factor of hardiness and resilience, which includes commitment, control, and challenge ([Bartone, 2006](#)). Through hundreds of research studies and revisions, the DRS has shown validity and reliability, though remaining brief, in measuring the variables of the instrument.

Research Design

Contact with one ORU College of Business professor provided the necessary access to students from Latin American, Latin European, and Confucian country clusters. Stu-

dent participants took the latest version of the DRS, the DRS15v3.2 survey ([Bartone, 2006](#)).

Though the study's original design stipulated use of an online service, Survey Monkey, to administer the survey, a compromise of accessibility, convenience, and time constraints mandated use of paper copies and manual data entry and scoring. Multiple checks by several different researchers assured data entry, scoring accuracy, and validity of this portion of the research project. Participants completed the instrument at the beginning of their regular class period as part of class activity and participation. Every student completed the survey though only students from the desired country clusters provided the content for analysis. Students did not receive grades on how hardy or resilient they scored but on full completion of the survey. Completion of the survey enjoyed a 100% grade while incompleteness had a 0% grade.

Data Analysis

IBM's quantitative research software, SPSS, was used to perform the One-Way ANOVA procedure. The goal for this study dealt with analyzing and determining differences in the levels of dispositional resilience among students from Latin American, Latin European, and Confucian country clusters as described by [House et al. \(2004\)](#). Comparisons of dispositional resilience between the three country clusters also involved a follow-up test to evaluate pair wise differences, which included Tukey's Honestly Significant Difference (HSD).

RESULTS

As previously mentioned, the purpose of the study involved determining significant differences means in dispositional resilience between three country clusters: Latin American, Latin European, and Confucian. Using the DRS15v3.2, a score of 39 equaled very high hardiness, a score in between 34-38 equaled high hardiness, a score in between 28-33 equaled average hardiness, a score in between 22-27 equaled low hardiness, and a score of 21 or lower equaled very low hardiness ([Bartone, 2006](#)).

When evaluating the sample, the mean scores from the One-Way ANOVA results revealed statistically significant mean differences between the three researched country clusters as presented in [Table 1](#). Undergraduate students from the Confucian country cluster had the lowest mean dispositional resilience at 20.92 while Latin American and Latin European had relatively close dispositional resilience scores of 28.86 and 30.24 respectively. According to [Bartone \(2006\)](#), the mean scores indicated Confucian

country cluster students had “Very Low” resilience and the mean scores for Latin American and Latin European students showed “Average” hardiness. The ANOVA significance level of .000 remains below the .005 threshold so the results dictate rejection of the null hypothesis. The SPSS One-Way

ANOVA results ($F(2,114) = 9.883, p = .000$) indicated a statistically significant difference between the groups. Table 2 represents the ANOVA output, which shows that the overall F ratio as significant, $9.883, p = .000$.

TABLE 1. DRS15v3.2 one-way ANOVA scores

Country Cluster	<i>N</i>	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Min.	Max.
Confucian	39	20.92	11.788	1.888	17.10	24.74	1	45
Latin American	29	28.86	10.031	1.863	25.05	32.68	10	43
Latin European	49	30.24	8.821	1.260	27.71	32.78	14	45
Total	117	26.79	10.941	1.011	24.79	28.80	1	45

TABLE 2. ANOVA between and within groups scores

	Sum of Squares	df	Mean Square	<i>F</i>	Sig.
Between Groups	2051.798	2	1025.899	9.883	.000
Within Groups	11833.279	114	103.801		
Total	13885.077	116			

The Tukey HSD post hoc test and multiple comparisons, presented in Table 3 and 4, were run to compare and confirm differences between the country cluster groups. Table 3 indicates that the Confucian country cluster has statically significant mean differences compared with the Latin American (-7.939) and Latin European (-9.322) country clusters

at significance levels of .005 and .000 respectively. Performing the assumption of homogeneity of variances test indicated non-violation, $p = .114$, at the .05 p level, as seen in Table 5 so Welch or Brown-Forsythe statistic did not have use.

TABLE 3. Post hoc test and multiple comparisons

(I) Region	(J) Region	Mean Diff (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Confucian	Latin American	-7.939*	2.498	.005	-13.87	-2.01
Latin European		-9.322*	2.186	.000	-14.51	-4.13
Latin European	Confucian	7.939*	2.498	.005	2.01	13.87
Latin European		-1.383	2.387	.831	-7.05	4.29
Latin American	Confucian	9.322*	2.186	.000	4.13	14.51
Latin European		1.383	2.387	.831	-4.29	7.05

Note: *The mean difference is significant at the 0.05 level

TABLE 4. Homogeneous subset-Tukey HSD post hoc test

Region	<i>N</i>	Subset for Alpha = .05, 1	Subset for Alpha = .05, 2
Confucian	39	20.92	
Latin American	29		28.86
Latin European	49		30.24
Sig.		1.000	.828

Note: Means for groups in homogeneous subsets are display.

a. Uses Harmonic Mean Sample Size = 37.252.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.

TABLE 5. Homogeneity of variances test

Levene Statistic	df1	df2	Sig.
2.213	2	114	.114

DISCUSSION

Given that the One-Way ANOVA output represents statistical significance and the three hypotheses, I fail to reject the first two of the three hypotheses. The study's H1 and H2 hypothesis of at least one categorical (very high, high, average, low, and very low) difference for Latin American (28.86) and Latin European (30.24) country compared with the other two clusters were rejected. However, the study's H3 hypothesis of the Confucian country cluster with a mean of 20.92 did have at least one categorical difference. As indicated by the data, undergraduate students from the Confucian country cluster show lower resilience levels compared with undergraduate students from the Latin American and Latin European country clusters. Of note, students from both Latin American and Latin European country clusters were within 1.38 points of each other and both scored at the "Average" hardiness level. It seems interesting to note that both Latin American and Latin European clusters scored so close to each other, which may reflect shared culture values that contradict House et al. (2004) work. However, because of the limited size of the population and that the sample came from a population of students, results may not enjoy generalizability to the large populations, pose a threat to internal validity, and remain a weakness of the study. The most important weakness in the study involves the sample composition. The study sampled from students and not leaders in industry or academia, which may affect the level of individual dispositional resilience. In addition, the results do not take into consideration the affects of American culture on student perspectives and maturity. Students may come from a less dispositional resilient country cluster and have learned hardiness and resilience while in the United States or vice versa, which could result in a change in the actual score. Still, the results indicate at least one categorical difference in Confucian students compared with Latin American and Latin European students and deserves additional study that has more time and resources than con-

straints characterized by the present study. Though the initial research design called for a study with a larger scale, practical considerations determined its scope and size. A larger and more precise study could provide the data as imagined in the original research design.

CONCLUSION & IMPLICATIONS

Individuals with high levels of hardiness and resilience show a commensurate level of commitment, adaptation, self-control, and lower stress levels. Those with dispositional resilience enjoy better health and employment performance even when under stressful conditions. Study of this character quality exists as important leadership research with wide ranging management implications. Analysis of the One-Way ANOVA output revealed a statistically significant difference between Confucian country cluster students and Latin American and Latin European country cluster students. However, the limited size and composition of the sample and the potentially influential effects of student life in the United States may have distorted the results in favor of a higher than accurate dispositional resilient score. Additional research could fulfill the original study's design goals and provide for dispositional resilience differences related to gender, age, wealth, and other demographic features. Additional research may also determine individual factor scores of dispositional resilience of challenge, commitment, control, ideal identity, premorbid personality, psychological resilience, and personality hardiness and their relationship with various country clusters. By determining how some country clusters handle hardiness and resilience, leaders and managers may make better decisions in the management of their organizations. Leaders may wish to tailor management programs by how individuals from certain country clusters handle stressful environments and conditions. An individual's dispositional resilience score may also inform the capacity of leadership capability, but not comprehensively, which could have profound implications for the leadership field.

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