

3-1-2012

Competitiveness and Individualism-Collectivism in Bali and the U.S.

John M. Houston

Rollins College, jhouston@rollins.edu

Cokorda Bagus Jaya Lesmana

Udayana University

Luh Ketut Suryani Udayana University

Follow this and additional works at: http://scholarship.rollins.edu/as_facpub



Part of the [Personality and Social Contexts Commons](#)

Published In

Houston, John M.; Lesmana, Cokorda Bagus Jaya; and Suryani, Luh Ketut Udayana University, "Competitiveness and Individualism-Collectivism in Bali and the U.S." (2012). *Faculty Publications*. 78.

http://scholarship.rollins.edu/as_facpub/78

This Article is brought to you for free and open access by Rollins Scholarship Online. It has been accepted for inclusion in Faculty Publications by an authorized administrator of Rollins Scholarship Online. For more information, please contact rwalton@rollins.edu.

Competitiveness and Individualism-Collectivism in Bali and the U.S.

John M. Houston, Hoyt Edge, Libby E. Anderson
Rollins College

Cokorda Bagus Jaya Lesmana, and Luh Ketut Suryani
Udayana University
Suryani Institut

Competitiveness is an important individual difference variable that influences behavior across a range of social domains; however, surprisingly few studies have examined competitiveness from a cross-cultural perspective. This study examined the relationship between different aspects of competitiveness and individualism-collectivism as individual difference variables in two cultures by comparing Balinese ($n = 104$) and American ($n = 124$) undergraduate college students. The results indicated that healthy competitiveness was positively related to collectivism for both Balinese and American students; however, unhealthy competitiveness or hypercompetitiveness was only negatively related to collectivism for Balinese students.

Competitiveness is an important personality characteristic that influences behavior across an array of social environments. While researchers have explored competitive behavior in several social contexts, including sports (Gill & Deeter, 1988; Houston, Carter, & Smither, 1997), work (Helmreich, Swain, & Carsud, 1986), and school (Griffin-Pierson, 1990), relatively little research has focused on cross-cultural aspects of competitiveness. This study investigated the relationship between different aspects of competitiveness and collectivism-individualism in Bali and the U.S.

Research on competitiveness spans more than a century, beginning with the work of Triplett (1897) on competitive efforts in sports. Later, the neo-Freudian Karen Horney (1937) stressed the unhealthy aspect of extreme competitiveness by linking "hypercompetitiveness" to neurosis. According to Horney (1937) hypercompetitiveness represents an indiscriminant need for individuals to compete at any cost in order to maintain or increase feelings of self-worth. Following a different theoretical framework based on achievement motivation research, Helmreich and Spence (1978) defined competitiveness in more general

Author info: Correspondence should be sent to: Dr. John Houston, Psychology Department, 1000 Holt Ave., Winter Park, FL 32789-4499. jhouston@rollins.edu

North American Journal of Psychology, 2012, Vol. 14, No. 1, 163-174.
© NAJP

terms as the desire to win against others. Accordingly, general competitiveness is a potentially adaptive trait across a range of occupational domains, including business, law, and sports (Houston, Carter, & Smither, 1997). However, in contexts involving cooperative activities, such as driving, general competitiveness can be socially dysfunctional (Houston, Harris, & Norman, 2003). More recently, Ryckman, Hammer, Kaczor, and Gold (1996) argue that competitive attitudes that focus on self-discovery and personal development represent a psychologically healthy form of competitiveness. Consequently, three aspects of competitiveness have emerged: general competitiveness, hypercompetitiveness, and healthy competitiveness.

While all three forms of competitiveness involve a common desire to succeed on social tasks requiring skill and effort, the underlying motivation for engaging in competitive behavior differs in important ways. Individuals high in general competitiveness express positive attitudes towards competition and enjoy competing against others (Smither & Houston, 1992). However, the attraction of competing with others may be linked to psychologically healthy or unhealthy factors. Thus, Houston, McIntire, Kinnie, and Terry (2002) found that general competitiveness is positively related to both healthy competitiveness and hypercompetitiveness. In contrast, individuals high in hypercompetitiveness view competition as a way to increase feelings of power, self-worth, and superiority. While opponents in competition are often seen as enemies, people who quit competition are viewed as weak. These attitudes towards competition are linked to distinctly unhealthy psychological traits including hostility (Houston et al., 2003), low self-esteem and high levels of neuroticism (Ryckman et al, 1996). Finally, individuals high in healthy competitiveness view competition as an opportunity for personal development and growth. Since these individuals are not motivated to win at other people's expense, other competitors are seen as instrumental in the self-improvement process. These views on competition are associated with higher psychological health and self-esteem and lower neuroticism and aggressiveness.

Over the last twenty years researchers have examined the relationship between competitiveness and culture from a number of perspectives. In a study of work attitudes and rates of economic growth in 43 countries Lynn (1991) found that general competitiveness is positively related to economic growth. Lynn (1993) also investigated sex differences in general competitiveness in university students in 20 countries and found that men scored significantly higher than women in 10 countries, including the United States, Canada, and the United Kingdom. In a comparison of competitiveness among Japanese, Chinese, and American undergraduates, Houston, Harris, Moore, Brummett, and Kametani

(2005) reported that American students scored significantly higher on general competitiveness than Japanese or Chinese students. In addition, men scored higher than women on general competitiveness across the three samples. In a study comparing Dutch and American students, Ryckman, Van den Borne and Syroit (1992) found that American students were more hypercompetitive than Dutch students but that both groups viewed hypercompetitiveness as a socially undesirable trait.

Individualism-collectivism is an important sociopsychological variable used to account for differences among cultures by focusing on the relative emphasis placed on the needs, desires, values and goals of the individual and the group. While individual needs and goals take precedence in individualistic cultures, the needs and goals of the group have the highest priority in collectivistic cultures (Triandis, 1996). In addition, achievement and competition are valued in individualistic cultures, whereas harmony and conformity are valued more in collectivist cultures (Triandis, McCusker, & Hui, 1990). Based on the premise that individualism-collectivism also functions at the individual level of analysis and should be investigated as an individual differences variable, researchers have developed individual difference measures of individualism-collectivism (e.g., Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997; Ramamoorthy & Carroll, 1998). To differentiate cultural individualism-collectivism from personal individualism-collectivism, researchers often use the term *idiocentrics* for those with strong individualistic orientation and *allocentrics* for individuals who adhere more strongly to collectivism (Chui & Hong, 2006). While individualism-collectivism is conceptually linked to a number of personality variables, surprisingly little research has explored the empirical relationship between individualism-collectivism and related individual difference variables.

Although Bali and the United States differ along a number of sociocultural dimensions, the individualism-collectivism construct offers a useful conceptual framework for investigating competitiveness in these two cultures. Research by Hofstede (2001) indicates that, at the national culture level of analysis, individualism is very high in the United States while collectivism is very high in Indonesia. However, a study of 20 countries by Green, Deschamps, and Paez (2005) found that individualism-collectivism varies both between and within countries. Accordingly, given that Bali is the only predominantly Hindu island in the Muslim archipelago of Indonesia, Balinese may view collectivism in a distinct and complex manner. For example, Geertz and Geertz (1975) note that the village or *banjar* plays a particularly important role in Balinese life. Together with the family, the *banjar* forms the most basic unit for a sense of the collective. Traditionally, banishment from the

banjar ranked among the most severe punishments a person could experience.

Based on the theoretical framework of collectivism and individualism presented by Triandis, et al. (1990), the study tested the following hypotheses: 1) American undergraduates should score higher than Balinese undergraduates on measures of competitiveness, 2) Balinese undergraduates should score higher on measures of collectivism than American undergraduates, and 3) measures of competitiveness should be negatively related to measures of collectivism.

METHOD

Participants

A total of 228 undergraduates (104 Balinese and 124 American) ranging in age from 18 to 23 years ($M = 19.6$, $SD = 1.05$) participated. To ensure meaningful comparisons between similar groups of undergraduates, this study focused on two undergraduate institutions with culturally and ethnically homogeneous student populations and enrollments under 5000. Participants in the Balinese sample (42 women and 62 men) had a mean age of 19.5 yr. ($SD = .72$) and attended a selective university in Denpasar, Bali. While 94% of the Balinese students identified themselves as from Bali, 6% reported coming from other Indonesian islands. The American participants (75 women and 49 men) had a mean age of 19.7 years ($SD = 1.26$) and attended a residential college located within metropolitan Orlando, FL. American participants were primarily Euro-American students of middle to high socioeconomic status.

Measures

All participants completed a survey packet containing three measures of competitiveness and two measures of individualism-collectivism. In addition, participants completed a brief demographic sheet with questions on gender, age, and ethnicity. Surveys were administered in group settings at the respective campuses with the Balinese students completing an Indonesian translation of the survey packet. To ensure the accuracy of the Indonesian translation a back-translation procedure was used in which two bilingual researchers translated the measures into Indonesian. After the two researchers resolved minor discrepancies to form a single translation, an independent professional translator was paid to translate the Indonesian version back into English. The back translation was then compared to the original English version by a panel of four professors and judged highly consistent across all items.

The Revised Competitiveness Index. All participants completed the *Revised Competitiveness Index* (CI-R; Houston, Harris, McIntire, & Francis, 2002), a 14-item self-report measure of general competitiveness

designed to assess the desire to win in interpersonal situations. The Index uses a 5-point Likert-type response scale anchored by 1: strongly disagree and 5: strongly agree. Sample scale items include “I enjoy competing against an opponent” and “I often try to outperform others.” Harris and Houston (2010) reported high internal consistency ($\alpha = .90$) and acceptable test-retest reliability ($r = .85$) for time intervals of 18 to 34 days.

The Hypercompetitiveness Attitude Scale. Participants also completed the *Hypercompetitiveness Attitude Scale* (HCA) developed by Ryckman, Hammer, Kaczor, and Gold (1990) to measure the need to compete and win at all costs. The 26-item scale assesses unhealthy competitiveness and uses a 5-point response scale ranging from 1 (never true of me) to 5 (always true of me). Example of items include “If you don’t get the better of others, they will surely get the better of you,” and “Failure or loss in competition makes me feel less worthy as a person.” The scale is correlated with measures of general competitiveness (Houston et al., 2002) as well as neuroticism (Ryckman et al., 1996) with scores having high internal consistency ($\alpha = .91$).

The Personal Development Competitive Attitude Scale. To assess a psychologically healthy concept of competition, participants completed the *Personal Development Competitive Attitude Scale* (PDCA; Ryckman, Hammer, Kaczor, & Gold, 1996). The PDCA is a 15-item self-report measure that uses a 5-point Likert-type response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale includes items such as “I like competition because it teaches me a lot about myself” and “I enjoy competition because it brings me to a higher level of motivation to bring out the best in myself rather than as a means of doing better than others.” Based on a sample of undergraduate students, the authors reported an internal consistency reliability of .90.

Modified Individualism-Collectivism Scale. All participants completed a modified 8-item version of the *Individualism-Collectivism Scale* (I/C-M; Ramamoorthy & Carroll, 1998) using a 5-point Likert-type response scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). The scale was designed to assess individualism-collectivism as an individual difference variable and included items such as “People in groups should be willing to make sacrifices for the sake of the group’s well-being” and “I prefer to work with others rather than working alone.” Higher scores on the scale indicate more positive attitudes towards collectivism. Two subscales from the original instrument were eliminated due to low internal consistency. In addition, items dealing directly with competitiveness were deleted to avoid artificially inflating correlations with other competitiveness measures and blurring the construct boundaries between the main variables.

The Social Behaviors subscale of the Individualism-Collectivism Interpersonal Assessment Inventory. To measure individualistic-collectivistic behaviors, participants completed the Social Behaviors subscale of the *Individualism-Collectivism Interpersonal Assessment Inventory* (ICIAC; Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997). The 25-item measure assesses how often respondents engage in certain behaviors with their colleagues such as “Share credit for their accomplishments” and “Compromise your wishes to act in unison with them.” The measure defines “colleagues” as people with whom you interact on a regular basis but may not be particularly close. Using a 7-point response scale ranging from 0 (Never) to 6 (All the time), the measure assesses individual differences in individualism-collectivism with higher averaged scores indicating a higher collectivistic orientation. Houston, Sabin, and Ospina (2009) reported that the measure is negatively correlated with general competitiveness ($r = -.24$) and has high internal consistency ($\alpha = .87$).

RESULTS

To determine if the items from the translated measures formed internally consistent scales, a series of reliability analyses were conducted on the data from the Balinese sample. The analyses indicated acceptable levels of internal consistency for each scale: *Revised Competitiveness Index* ($\alpha = .70$), *Hypercompetitiveness Attitude Scale* ($\alpha = .67$), *Personal Development Competitive Attitude Scale* ($\alpha = .90$), Social Behaviors subscale of the *Individualism-Collectivism Interpersonal Assessment Inventory* ($\alpha = .87$), and the modified *Individualism-Collectivism Scale* ($\alpha = .71$). Descriptive statistics and coefficient alphas for the scales from both samples are presented in Table 1.

To examine the relationship between competitiveness and individualism-collectivism, correlations between all measures were calculated for each sample. Findings from the U.S. sample indicated that the Social Behaviors subscale of the *Individualism-Collectivism Interpersonal Assessment Inventory* (SB-ICIAI) was negatively correlated with the *Revised Competitiveness Index* (CI-R; $r = -.19$, $p < .05$) but not significantly correlated with the *Hypercompetitiveness Attitude Scale* (HCA) or *Personal Development Competitiveness Attitude Scale* (PDCAS) (see Table 2). The modified *Individualism-Collectivism Scale* (I/C-M) was positively correlated with the PDCAS ($r = .31$, $p < .001$) and the SB-ICIAI ($r = .23$, $p < .05$) but was not significantly correlated with the CI-R or the HCA. All three measures of competitiveness were significantly correlated with each other: CI-R and HCA ($r = .49$, $p < .001$), CI-R and PDCAS ($r = .45$, $p < .001$), and HCA and PDCAS ($r = .32$, $p < .001$).

TABLE 1 Means, Standard Deviations, and Alpha Coefficients for Scale Scores

Measures	Bali (n=104)			United States (n = 124)			
	M	SD	α	M	SD	α	t
Competitiveness							
CI-R	43.0	6.9	.70	47.8	9.2	.89	4.33***
HCA	72.2	8.9	.66	75.3	13.3	.84	1.96*
PDCAS	57.6	10.2	.90	55.6	10.6	.92	-1.45
Individualism-Collectivism							
I/C-M	29.4	5.3	.71	26.5	4.90	.70	4.22***
SB-ICIAI	3.8	.67	.87	3.9	.53	.89	-1.67

Note: Scale abbreviations are as follows: Revised Competitiveness Index (CI-R), Hypercompetitiveness Attitude Scale (HCA), Personal Development Competitiveness Attitude Scale (PDCAS), Modified Individualism-Collectivism Scale (I/C-M), Social Behavior subscale of the Individualism-Collectivism Interpersonal Assessment Inventory (SB-ICIAI). * $p < .05$, *** $p < .001$

TABLE 2 Correlations between Measures of Competitiveness and Individualism-Collectivism

	Bali (n = 104)		U. S. (n = 124)	
	I/CM	SB-ICIAI	I/C-M	SB-ICIAI
CI-R	.05	-.02	.23*	-.19*
HCA	-.05	-.35**	.15	.03
PDCAS	.01	.30**	.14	.06

Note: Scale abbreviations are as follows: Revised Competitiveness Index (CI-R), Hypercompetitiveness Attitude Scale (HCA), Personal Development Competitiveness Attitude Scale (PDCAS), Modified Individualism-Collectivism Scale (I/C-M), Social Behavior subscale of the Individualism-Collectivism Interpersonal Assessment Inventory (SB-ICIAI). * $p < .05$, ** $p < .01$

For the Balinese sample, SB-ICIAI was negatively correlated with HCA ($r = -.35$, $p < .01$) but positively correlated with PDCAS ($r = .31$, $p < .01$). However, the SB-ICIAI was not significantly correlated with the

CI-R (see Table 2). The I/C-M was not significantly correlated with any of the measures of competitiveness or the SB-ICIAI. Finally, the CI-R was positively correlated to the HCA ($r = .22, p < .05$) and the PDCAS ($r = .40, p < .001$); however, the HCA and PDCAS were not correlated.

A series of independent t-tests were then conducted to compare American and Balinese student scores on the competitiveness and individualism-collectivism measures. As Table 1 indicates, American students scored significantly higher on general competitiveness (CI-R) and hypercompetitiveness (HCA) than Balinese students, $t(226) = 4.34, p < .001$ and $t(226) = 1.97, p < .05$ respectively. There was no significant difference in healthy competitiveness (PDCAS). While Balinese students scored higher on collectivism as measured by the I/C-M, $t(226) = 4.20, p < .001$, there was no significant effect for the SB-ICIAI measure of collectivism.

DISCUSSION

The findings generally support the hypothesis that American undergraduates are higher in competitiveness than Balinese undergraduates. As predicted, general competitiveness (CI-R) and hypercompetitiveness (HCA) were both significantly higher for American students. These results are consistent with previous studies indicating that American students are higher in general competitiveness than Japanese or Chinese students (Houston et al., 2005) and higher in hypercompetitiveness than Dutch students (Ryckman et al., 1992). However, no significant difference was found for healthy competitiveness (PDCAS). This may be due to the construct definition of healthy competitiveness which Ryckman et al. (1996) define as “an attitude in which the primary focus is not on the outcome (i.e., on winning), but rather more on enjoyment and mastery of the task” (p. 375). Accordingly, healthy competition may be consistent with a variety of cultural beliefs and attitudes. Thus, if healthy competitiveness is not a distinguishing characteristic of individualism or collectivism, it may not directly link to the theoretical framework of collectivism and individualism outlined by Triandis, et al. (1990) which formed the basis of this hypothesis. Yet given the dearth of cross-cultural studies on healthy competitiveness, we cannot rule out the possibility that these findings are unique to Bali.

The results also provide partial support for the second hypothesis, namely that Balinese undergraduates have a stronger orientation towards collectivism than American undergraduates. While the Balinese students scored significantly higher on the I/C-M than American students, there was no significant difference for SB-ICIAI scores. In interpreting these findings it is important to note that the I/C-M and the SB-ICIAI measure different aspects of collectivism. The I/C-M operationally defines

collectivism in terms of broad attitudes towards group and individual activities. In contrast, the SB-ICIAI focuses on specific social behaviors with regard to colleagues. Triandis, et al. (1988) note that cooperation is likely to be high within the ingroup in collectivist society but unlikely if the other person is a member of the outgroup. Given the centrality of the *banjar* as the primary ingroup for Balinese, the I/C-M, which emphasizes connections with groups, may be more likely to capture the collectivism of Balinese life. Conversely, by focusing attention on colleagues who may not play a significant role in participants' lives in the in-group, the SB-ICIAI may not adequately assess the unique features of Balinese collectivist society.

Finally, the results offer some support for the hypothesis that the measures of competitiveness and collectivism are negatively related. Although the SB-ICIAI was negatively correlated with the CI-R in the U.S. sample and the HCA in the Balinese sample, the I/C-M was not correlated negatively to any of the competitiveness measures in either sample. These results may be due to the continuing attempt to develop appropriate measures of collectivism and individualism on the one hand, and allocentrism and idiocentrism on the other. While the I/C-M scale may be more sensitive to cultural differences, the SB-ICIAI may be more sensitive to individual differences. It should be noted that the relationship between competitiveness and collectivism in many ways represents the most exploratory aspect of the study since it deals with the construct validity of two relatively new measures of collectivism. As these measures are refined and new assessment instruments developed, a clearer understanding of the linkages between collectivism and competitiveness as individual differences variables should emerge.

Mindful of the limitations of using undergraduate samples to explore cultural differences, further research is needed to investigate the generalizability of these results by incorporating more diverse participants from outside academic settings. Despite this limitation, the results provide evidence that different forms of competitiveness are expressed differently across cultures. Consequently, the findings underscore the importance of using the full spectrum of competitiveness measures to develop a comprehensive framework for examining the cross-cultural aspects of competitiveness.

REFERENCES

- Chiu, C. Y., & Hong Y. Y. (2006). *Social psychology of culture*. New York, NY: Psychology Press.
- Geertz, H. & Geertz, C. (1975). *Kinship in Bali*. Chicago: The University of Chicago Press.

- Green, E. G., Deschamps, J., & Paez, D. (2005). Variation of individualism and collectivism within and between 20 countries. *Journal of Cross-Cultural Psychology, 36*, 321-339.
- Griffin-Pierson, S. (1990). The Competitiveness Questionnaire: A measure of two components of competitiveness. *Measurement and Evaluation in Counseling and Development, 23*, 108-115.
- Gill, D. L., & Deeter, T. E. (1988). Development of the Sport Orientation Questionnaire. *Research Quarterly for Exercise and Sport, 59*, 191-202.
- Harris, P.B., & Houston, J. M. (2010). A reliability analysis of the Revised Competitiveness Index. *Psychological Reports, 106*, 870-874.
- Helmreich, R. L., & Spence, J. T. (1978). Work and Family Orientation Questionnaire: An objective instrument to assess components of achievement motivation and attitudes toward family and career. *JSAS Catalogue of Selected Documents in Psychology, 8*, No. 35.
- Helmreich, R. L., Swain, L. L., & Carsud, A. L. (1986). The honeymoon effect in job performance: Temporary increases in the predictive power of achievement motivation. *Journal of Applied Psychology, 71*, 185-188.
- Hofstede, G. (2001). *Culture's consequences* (2nd ed.). Thousand Oaks, CA: Sage.
- Horney, K. (1937). *The neurotic personality of our time*. New York: Norton.
- Houston, J. M., Carter, D., & Smither, R. D. (1997). Competitiveness in elite professional athletes. *Perceptual and Motor Skills, 84*, 1447-1454.
- Houston, J. M., Harris, P. B., McIntire, S., & Francis, D. (2002). Revising the Competitiveness Index. *Psychological Reports, 90*, 31-34.
- Houston, J. M., Harris, P. B., Moore, R., Brummett, R. A., & Kametani, H. (2005). Competitiveness in Japanese, Chinese, and American undergraduates. *Psychological Reports, 97*, 205-212.
- Houston, J. M., Harris, P. B., & Norman, M. (2003). The Aggressive Driving Behavior Scale: Developing a self-report measure of unsafe driving practices. *North American Journal of Psychology, 2*, 269-278.
- Houston, J. M., McIntire, S. A., Kinnie J., & Terry, C. (2002). A factorial analysis of scales measuring competitiveness. *Educational and Psychological Measurement, 62*, 284-298.
- Houston, J. M., Sabin, K. E., & Ospina, A. (2009). Individualism-collectivism and competitiveness: Exploring empirical linkages for women. Paper Presented at 55th Annual Meeting of the Southeastern Psychological Association, New Orleans, Louisiana.
- Lynn, R. (1991). *The secret of the miracle economy*. London: SAU.
- Lynn, R. (1993). Sex differences in competitiveness and the valuation of money in twenty countries. *The Journal of Social Psychology, 133*, 507-511.
- Matsumoto, D., Weissman, M. D., Preston, K., Brown, B. R., & Kupperbusch, C. (1997). Context-specific measurement of individualism-collectivism on the individual level. *Journal of Cross-Cultural Psychology, 28*, 743-767.
- Ramamoorthy, N., & Carroll, S. J. (1998). Individualism/collectivism orientation and reactions toward alternative human resource management practices. *Human Relations, 51*, 571-589.

- Ryckman, R. M., Hammer, M., Kaczor, L. M., & Gold, J. A. (1990). Construction of a hypercompetitive attitude scale. *Journal of Personality Assessment, 55*, 630-639.
- Ryckman, R. M., Hammer, M., Kaczor, L. M., & Gold, J. A. (1996). Construction of a personal development attitude scale. *Journal of Personality Assessment, 66*, 374-385.
- Ryckman, R. M., Van den Borne, H. W., & Syroit, J. E. (1992). Differences in hypercompetitive attitude between American and Dutch university students. *The Journal of Social Psychology, 132*, 331-334.
- Smither, R. D., & Houston, J. M. (1992). The nature of competitiveness: Construction and validation of the Competitiveness Index. *Educational and Psychological Measurement, 52*, 407-418.
- Triandis, H. C., Bontempo, R., Villareal, J., Asai, Masaaki, M., & Lucca, N. (1988). Individualism and collectivism: Cross-Cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology, 54*, 323-338.
- Triandis, H. C. (1996). The psychological measurement of cultural syndromes. *American Psychologist, 51*, 407-415.
- Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology, 59*, 1006-1020.
- Triplett, N. (1897). The dynamogenic factors in pacemaking and competition. *The American Journal of Psychology, 9*, 507-533.

Authors' note: Data collection in Florida was completed as part of Libby Anderson's Psychology Honors project at Rollins College.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.