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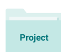

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PILOT STUDY OF A TRANSLATION AND CULTURAL ADAPTATION OF THE ANGER DISORDERS SCALE: SHORT VERSION

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Psychology is a growing field in the Dominican Republic. Recent years have seen an influx of both local and foreign trained psychologists who have founded psychological clinics and begun research programs at various universities. The growth of the field is hindered by a lack of psychological tests in Spanish. In addition, most psychological tests have not been validated with Dominican populations which may create bias at the time of diagnosis. As a first step in alleviating this problem, we conducted the first Spanish translation of the Anger Disorders Scale (ADS) and conducted a validation study. Results show that the instrument has adequate psychometric properties with a Cronbach's Alpha value of .79 and statistically significant convergent validity of $r = .50$ with the State Trait Anger Inventory – II (STAXI-2). Additional tests showed that our sample was adequate for a factor analysis and we proceeded to conduct an exploratory factor analysis with a varimax rotation. Results show a 6 factor structure that explained over 60% of the variance. This first study indicates that the ADS can be used to diagnose and evaluate anger related dysfunctions in Dominican patients.

Keywords: Translation, Anger Disorders Scale, Dominican College Students

Introduction

Psychology is a fast growing field in a number of Latin American countries including the Dominican Republic. In the last few decades a significant number of psychologists trained abroad and locally have opened clinics and developed university based research programs. A significant challenge for researchers and working clinicians is the lack of available scales or assessment tools in Spanish. In addition, few psychological tests are normed with Dominican

samples. In addition, tests that are available in Spanish use linguistic expressions characteristic of the country where the test was translated and those terms may be unknown to Spanish speakers in other countries. This situation often forces researchers and clinicians to create their own translations of existing instruments or to develop their own instruments. Anecdotal evidence suggests that these self developed tools are often applied by clinicians without having conducted the adequate tests to establish the psychometric soundness of the instrument, thus compromising the diagnostic process in clinical settings as well as the internal validity of research studies.

Due to the local need for tests available in Spanish with adequate psychometric properties, the Anger Disorders Scale, Short Version (ADS:S) was chosen for a validation study with Dominican college students. The instrument was chosen due to a lot of local anecdotal data that suggests clinicians are often dealing with patients who have dysfunctional anger and there are not many available tools for its assessment. In addition, the Dominican Republic has seen a dramatic rise in violent crime and aggressive behavior in the last few years (Flake & Forste, 2006) and the cognitive and behavioral mechanisms that may cause or explain these behaviors have not been explored in large part due to a lack of adequate tools.

Anger

According to DiGiuseppe and colleagues (DiGiuseppe, Tafrate, & Eckhards, 1994) anger has in many ways become the “forgotten emotion” (p. 111). Currently, the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 2000), does not include anger or anger related diagnoses in its conceptualization of mental illness. Thus, patients experiencing anger states that lead to dysfunctional behaviors are left out of the potential treatments available through the recognition and insurance coverage of disorders. This issue also leaves many clinicians without clear guidelines as to the prevalence, treatment, and best practices to effectively help patients with anger problems.

This lack of formal recognition of anger problems is in many ways surprising considering that in medicine and health psychology there is a wealth of research documenting the negative effects of anger, specifically anger expression, on numerous behavioral and health outcomes such as depression, substance abuse, cancer, hypertension, and other cardiovascular system pathologies (Barros, Wang, Carvalho, Andrade, & Martins, 2010; DiGiuseppe, et. al., 1994; Galaif, Sussman, Chou, & Wills, 2003; Harburg, Julius, Kaciroti, Gleiberman, & Schork, 2003; Musante & Treiber, 2000). Anger expression, which is sometimes referred to as anger-out, has been defined as the behavioral manifestations of anger. Examples of these behaviors are screaming, throwing, and other observable actions (DiGiuseppe & Tafrate, 2004).

Many authors have also found a lack of consensus regarding definitions of anger and the term is consistently confounded with similar and related constructs like hostility, cynicism, aggression, and violence (DiGiuseppe, et. al., 1994). DiGiuseppe and colleagues (1994) have also highlighted that a number of cultural and linguistic factors have hindered the adequate study and conceptualization of anger such as lack of adequate scripts to deal with dysfunctional anger. They have also suggested that deep rooted cultural (especially in western countries) beliefs about how to properly deal with anger, hinder progress in further understanding this important construct. They specifically point to the western view that “venting” anger is healthy and necessary to deal with the emotion properly (DiGiuseppe, et. al., 1994). This view persists in spite of robust evidence (previously mentioned) that shows anger expression has negative consequences.

The Need for National Norms in Latin American Countries

In the United States, tests are often normed with multiple ethnic groups. In recent years *Latinos* or *Hispanics* have been included in such normative samples. The inclusion of this group in U.S. based studies, however, does not guarantee that these instruments are useful for Latinos who are currently living in their native countries where the social, political, and economic realities differ vastly from their U.S. counterparts. Additionally, Latinos living in Latin American countries have not undergone the process of migration and acculturation, such that their exposure to western ideas and western style test taking may be quite limited, especially among individuals of lower socioeconomic status, who in some cases may not even be alphabetized (Fraine & McDade, 2009). It is therefore important to see if for certain Latino national groups (such as Dominicans) the traditional or western style of psychological assessment works or if modifications need to be made (Sue & Sue, 1977).

In addition, the term Latino and Hispanic is barely useful when describing Latin American populations. The term is poorly operationalized as it lacks specificity, is ambiguous regarding which national groups can and do belong to it, and the term refers to a heterogeneous group of people who consistently report that they do not identify with the term Latino or Hispanic, although there is preference to the term Hispanic over Latino in the United States (Pew Hispanic Center, 2012). The terms ignore aspects of identity whereby more than half of participants of a recent survey stated they identify with their family's country of origin, rather than the broader Hispanic or Hispanic-American (Pew Hispanic Center, 2012). The terms ignore linguistic variation among Latin American countries and impose a monolithic ethno-cultural stereotype constructed by culturally dominant groups, which generally identify Spanish as the only legitimate language of the entire ethnic group (Auer, Hampel, Möller, & Reisberg, 2000; Pew Hispanic Center, 2012).

Across Latin American countries, there are a number of historical, economic, cultural, and political variations. The region has countries that have embraced democracy, others that are struggling to establish democratic systems, and others that have implemented socialist and communist systems of government. There are also vastly different levels of development between countries, such as Chile vs. Haiti for example. Within countries, there are vast differences in socioeconomic status, access to health care and education, as well as exposure to U.S. and European culture. There are countries that include multiple nation states such as Bolivia, which has recently given indigenous groups "nation" or "state" status. For this reason, national norms for psychological instruments may confer larger advantages over sweeping generalized norms across the Latino or Hispanic ethnic group. Our assertion is supported by research that shows there are significant nationality based differences on a number of important psychological and health related behaviors, such as legal and illegal substance abuse and domestic violence (Delva, Wallace, Bachman, Johnston, & Schulenberg, 2005; Flake & Forste, 2006).

Methods

We recruited a sample of 100 students who attend Universidad Iberoamericana in the Dominican Republic. The group of students had an average age of 19.11 years (*SD* = 1.94). Most participants were psychology students (42.4%). Most participants were women (72%). The mean self reported GPA for the students was 3.4 out of a possible 4.0.

Prior to data collection our study was reviewed and approved by the grant review committee where it was selected to receive institutional funds. In addition, the study was submitted to the university's Institutional Review Board (*Comité de Ética*), where it received approval. All participants were treated in accordance with the ethical guidelines required of national and international professional bodies governing psychological research. Our study contained a verbal and a written consent form where participants were informed that their participation was voluntary, confidential and that they were free to withdraw from the study at any time without penalty.

Upon agreeing to the terms of the informed consent, participants were given a package containing a demographic questionnaire designed by the principal investigators and the psychological tests described in detail below. Participants were told to fill out the scales and to return them to the researchers in the envelope provided. Upon completion, participants received the equivalent US $5.00 (RD$200.00) for their participation. Participants were given an opportunity to ask questions at the end of the study.

Anger Disorders Scale: Short Version (ADS:S)

The ADS:S is a self-administered questionnaire comprised of 18 closed multiple choice items that assess multiple dimensions of anger such as anger expression, anger in, and vengeance. The instrument has well established psychometric properties with an alpha level of .86 and convergent validity with the State Trait Anger Inventory of .71 ($p < .001$) (DiGiuseppe & Tafrate, 2004). Because of the ADS:S' adequate properties, ease of administration, and theoretical soundness, it was considered that it's availability in Spanish would be highly advantageous to clinicians and researchers alike. As a result, the scale was translated and back-translated by a group of 4 psychologists for the purposes of this study.

State Trait Anger Inventory-II (STAXI-2)

We chose to administer the STAXI-2 in order to calculate convergent validity scores with the ADS:S. The STAXI-2 was an ideal instrument given its well established psychometric properties and multidimensional conceptualization of anger that is similar to that of the ADS:S. The STAXI-2 was also available in Spanish. The STAXI-2 is a self-administered 49 item questionnaire. It has adequate levels of test-retest reliability (.71) and adequate internal consistency (.89) (Miguel-Tobal, Casado, Cano-Vindel, & Spielberger, 2006).

Results

Prior to evaluating the psychometric properties of the ADS:S, we conducted an analysis of missing values and found that we had less than 5% of our data missing, which made it acceptable to substitute missing values. For the substitution we used the linear trend on point procedure available on SPSS v. 19 for Windows.

We then proceeded to determine the psychometric properties of the instrument and conducted an analysis of internal consistency using the alpha model. We obtained a Cronbach's alpha value of .79. Further analyses revealed that the alpha level of our test would not be improved by the removal of any of the items on the scale. We used a Pearson correlation to calculate convergent validity with the STAXI-II and found a correlation value of .50 that was

statistically significant ($p < .01$). We then conducted an exploratory factor analysis and conducted the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy for which we obtained a value of .69. We then proceeded to run Bartlett's test of sphericity and were able to reject the null hypothesis ($p < .0001$). Considering that our KMO and Bartlett's values were in the acceptable ranges, we proceeded to run a principal componenets analysis with a varimax rotation. We included as factors those with Eigen values greater than 1. Results showed that the matrix converged after 8 iterations and that 6 factors were obtained for our sample, which explained 62.77% of the variance. Table 1 shows the rotated factor solution of the factor analysis. In addition, 5 items had factor loadings of less than .50 and were therefore dropped from the original scale.

Discussion

Our study did not yield the same factor structure as the original scale. Notwithstanding our first 3 factors do correlate with the 3 original subscales, albeit with less items. The indicators of internal consistency and convergent validity indicate that the instrument is adequate for use in Dominican participants. Given the aforementioned differences in the factor structure of the scales, further analyses with larger samples and confirmatory exploratory analytic procedures are warranted in order to better understand the reasons for this variation.

There are a number of issues to consider when contextualizing these results. One issue is making sense of the items that did not correlate significantly with any of the factors established in the original scales, and exploring some of the cultural issues mentioned in the introduction. For the ADS:S, the majority of the items that did not correlate significantly with any factor belong to the anger-in scale of the test. Anger-in refers to coping with anger via passivity and suppression (Hogan & Linden, 2004; Linden, Hogan, Rutledge, et al., 2003). Our experience in the culture suggests that in this population anger is outwardly expressed with significant social acceptance, such that individuals may not need to develop or use anger suppression mechanisms in order to deal with their dysfunctional anger states. Two of the items that did not correlate belonged to the anger-out scale and include not being able to stop thinking about the anger provoking episode, while the other referred to controlling others through angry outbursts. It is possible that in this population outward expression of angers may not be related to a desire to control others, but rather with culturally accepted scripts of anger expression. The item related to thinking about the anger provoking event frequently may be an item that is unrelated to passivity or expression of anger altogether, and may indicate a more cognitive anger coping style that is not a part of the way in which this cultural group deals with dysfunctional anger.

Suggestions for Future Research

This study has a number of limitations to consider. Future studies should include a more heterogeneous participant pool from the Dominican Republic, such that it is possible to develop national norms for these instruments. An ideal scenario would be to gather data from large samples across Latin American countries in order to better understand national variations among these variables and truly establish *Hispanic* or *Latino* norms for Latin Americans living in their native countries. Lastly, many participants expressed apprehension about the study, as it asked questions about psychological variables. This may be related to factors such as inexperience with research participation, as undergraduate participant pools are not common in the Dominican

Republic. In addition, the apprehension may be related to cultural taboos about psychological dysfunctions and mental illness. The participants were also relatively inexperienced with psychological assessment tools. We believe this to be the case even when our sample included psychology students because we selected students who were in their first semesters of college and had not completed any coursework related to psychological testing. In order to better understand and control bias in responses, researchers in Latin American countries may consider including measures of social desirability in their studies.

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References

1. American Psychiatric Association (2000). Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington D.C.: American Psychiatric Association.
2. Auer, S., Hampel, H., Möller, H. J., & Reisberg, B. (2000). Translations of measurements and scales: Opportunities and diversities. International Psychogeriatrics, 12, 391-394. http://dx.doi.org/10.5209/rev_SJOP.2011.v14.n2.1.
3. Barros, F., Wang Y.P., Carvalho Goulart, A., Andrade Lotufo, P. & Martins Benseñor, I. (2010). Application of the Spielberger State-Trait Anger Expression Inventory in clinical patients. Arq Neuropsiquiatrica, 68, 231-234.
4. Delva, J., Wallace, J.M., Bachman, J.C., Johnston, L.D. & Schulenberg, J.E. (2005). The epidemiology of alcohol, marijuana, and cocaine use among Mexican American, Puerto Rican, Cuban American, and other Latin American eight-grade students in the United States: 1991-2002. American Journal of Public Health, 95, 696-702.
5. DiGiuseppe, R. & Froh, J.J. (2002). What cognitions predict state anger? Journal of Rational-Emotive & Cognitive-Behavior Therapy, 20, 133-150.
6. DiGiuseppe, R. & Tafrate, R.C. (2004). Anger Disorders Scale (ADS). Technical Manual. North Tonawanda: Multi-Health Systems, Inc.
7. DiGiuseppe, R., Tafrate, R., & Eckhardt, C. (1994). Critical issues in the treatment of anger. Cognitive and Behavioral Practice, 1, 111-132. http://dx.doi.org/10.1016/S1077-7229(05)80089-6.
8. Flake, D.F. & Forste, R. (2006). Fighting families: Family characteristics associated with domestic violence in five Latin American countries. Journal of Family Violence, 21, 19-29. http://dx.doi.org/10.1007/s10896-005-9002-2.
9. Fraine, M. & McDade, R. (2009). Reducing bias in psychometric assessment of culturally and linguistically diverse students from refugee backgrounds in Australian schools: A process approach. Australian Psychologist, 44, 16-26. http://dx.doi.org/10.1080/00050060802582026.
10. Galaif, E.R., Sussman, S., Chou, C.P., & Wills, T.A. (2003). Longitudinal relations
11. among depression, stress, and coping in high risk youth. Journal of Youth and Adolescence, 32, 243-256.
12. Harburg, E., Julius, M., Kaciroti, N., Gleiberman, L., & Schork, M. (2003).
13. Expressive/suppressive anger-coping responses, gender, and types of mortality: A 17-year follow-up (Tecumseh, Michigan, 1971-1988). Psychosomatic Medicine, 65, 588-597. http://dx.doi.org/10.1097/01.PSY.0000075974.19706.3B.

14. Hogan, B.E., & Linden, W. (2004). Anger response styles and blood pressure: At least don't ruminate about it. Annals of Behavioral Medicine, 27, 38-49.
15. http://dx.doi.org/10.1207/s15324796abm2701_6.
16. Linden, W., Hogan, B.E., Rutledge, T., Chawla, A., Lenz, J.W., & Leung, D. (2003). There is more to anger coping than "in" or "out." Emotion, 3, 12-29. http://dx.doi.org/10.1037/1528-3542.3.1.12.
17. Musante, L. & Treiber, F. (2000). The relationship between anger-coping styles and lifestyle behaviors in teenagers. Journal of Adolescent Health, 27, 63-68. http://dx.doi.org/10.1016/S1054-139X(99)00098-1.
18. Pew Hispanic Research Center (2012). Retrieved from: http://www.pewhispanic.org/2012/04/04/when-labels-dont-fit-hispanics-and-their-views-of-identity.
19. Sue, D.W. & Sue, D. (1977). Barriers to effective cross-cultural counseling. Journal of Counseling Psychology, 24, 420-429. http://dx.doi.org/10.1037/0022-0167.24.5.420.

Tables

Table 1

Factor Loadings for Exploratory Factor Analysis with Varimax Rotation for the ADS:S

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
1	.22	.31	.56	-.06	.09	.16
2	.15	.58	.04	.42	.11	.12
3	.37	.25	.09	.25	.28	.23
4	.00	.86	.13	.03	.01	-.06
5	-.05	.79	.01	-.10	.09	.14
6	.16	-.04	.81	-.06	-.14	-.17
7	.14	.19	.19	.05	-.04	.78
8	.01	.39	.11	.04	.78	-.10
9	.21	.30	.21	.47	.04	-.52
10	.44	.27	.33	.36	-.15	.13
11	.41	.06	.26	.44	-.24	.18
12	.04	-.01	.47	.27	.14	.39
13	-.03	.07	.72	.22	.20	.18
14	-.04	-.07	.01	.82	.09	-.01
15	.63	.18	.03	.09	.10	.35
16	.70	-.15	.15	-.18	.14	-.18
17	.42	-.13	.03	.04	.73	.09
18	.85	.00	.05	.12	.13	-.01

Note: Factor loadings ≥ .50 are in boldface.

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