Analysis of a Cross-Cultural Personality Inventory: Adapted IPIP Big-Five Factors in Inuktitut speaking Inuit children

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Course: LPSY-316 Personality, Individual Differences, and Intelligence

14th November 2018

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The Five-Factor Theory of personality describes a broad-bandwidth structure of personality across the lifespan (McCrae & Costa, 2008). It has been widely validated and applied extensively across diverse cultures and age groups (Costa & McCrae, 1992), in clinical and non-clinical use, with predictive utility in wide-ranging settings (McCrae & Costa, 2008). The model hierarchically categorises personality traits into factors, emergent from analysis of large samples of trait measures (Goldberg, 1999; Lim & Abdullah, 2012). Interpretation of factor analysis has identified the empirical generalization of five universal factors: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C) (McCrae & Costa, 2008).

Personality assessment stretches back 75 years (Goldberg, 1999), including Cattell's Sixteen Personality Factor Questionnaire, the California Psychological Inventory, and the five-factor based, 240-item, NEO-PI(R) which remains in wide usage (Costa & McCrae, 1992; McCrae & Costa, 2008). However, commercialisation of these inventories has drawn criticism that commercial interest hampers scientific progress, with secrecy of intellectual property preventing modification, analysis of internal consistency or assessment of comparative validity across instruments (Goldberg, 1999; Goldberg et al., 2006). In response, Goldberg established the International Personality Item Pool (IPIP) to reinvigorate development of personality inventories though this public domain inventory of items and scales (Goldberg, 1999). Items are translated to over 25 languages, and consist of short phrases, enabling compact expression of context and nuance, ease of comprehension and accurate translation to other languages (Goldberg et al., 2006). IPIP scales have been developed for proxies of commercial instruments, including Big-Five and NEO-PI(R), along

with publication of their psychometric properties and correlations with the original instrument (Goldberg, 1992).

In translation to additional languages, cross-cultural validity must be established. A prominent concern is of cultural bias arising from generalisation from convenience samples of middle-class Western participants (Berry, 2015; Heine & Norenzayan, 2006). Amongst other diverse populations, Indigenous people in the Americas are underrepresented in research (Berry, 2015), with some psychological disorders and emotions only identified in other cultures (Heine & Norenzayan, 2006). Saucier, Thalmayer, and Bel-Bahar (2018) carried out research across twelve mutually isolated languages, including Inuktitut, seeking universal human-attributes. In contrast to the IPIP (Goldberg, 1999), Saucier et al. (2018) followed an emic, lexical analytic approach, assuming a ubiquitous concept has a single ubiquitous term. While Saucier et al.'s (2018) findings lend support of two categories, competence and morality, the Big-Five factors did not emerge from their analysis.

Van der Vijver and van Hemert (2008) describe considerations for cross-cultural comparisons of personality assessment. Instrument translation must follow rigorous process (World Health Organisation, 2018), with both concept and score comparisons made, accounting for confounding influences of construct, method and item biases (Van der Vijver & van Hemert, 2008). Response styles including social desirability, extreme and acquiescent responding are all subject to cultural differences (*ibid.*). Many studies have successfully validated a five-factor model in cultures including Eastern European and Chinese (e.g. Ispas, Iliescu, Ilie, & Johnson, 2010; Mlacic & Goldberg, 2007; Yang, 2010). However, additional factors in the non-Western context may be present, such as Cheung's sixth factor of interpersonal-relatedness identified with the Chinese Personality Assessment Inventory (Church, 2001). Supporting evidence of a relatedness factor is found in other collectivist

cultures, including Inuit (McShane, Hastings, Smylie, Prince, & TIFRC, 2009; Wexler et al., 2013).

Canadian census data record approximately 64,000 Inuit living in 53 communities across Northern Canada (Government of Canada, 2018), with 4,000 Inuktitut speakers residing in Eastern Canada (Saucier et al., 2014). The population is young, with a median age of 24 (Government of Canada, 2018). A historic policy of "cultural genocide and assimilation" has caused multi-generational trauma and driven a rift between indigenous and non-indigenous Canadians (Blue, Darou, & Ruano, 2015, pp.5). Inuit communities were subject to displacement, epidemics, and children removed from families to be educated in residential schools (Blue et al., 2015). Correspondingly, transmission of traditions and practices to younger generations were ruptured (Fraser, Parent & Dupere, 2018), and rapid social, economic and political change over the past three generations has led to intergenerational disconnect (Wexler et al., 2013). High rates of binge-drinking and suicide are recorded (Blue et al., 2015). Inuit culture is known to differ from Western culture, with socially desirable characteristics including non-competitiveness, emotional restraint, sharing, and suppression of ambition (Blue et al., 2015). Stress is typically expressed by reduced activity level, and conflict in the community avoided. Respect for elders and extended family have high importance (*ibid.*). Historical maltreatment of Inuit communities is acknowledged by the Canadian Government, who is now working with Inuit leaders to help heal families and communities (Government of Canada, 2018).

Arising from the aforementioned social difficulties, research of children, their development and outcomes is of particular interest in Inuit communities. Several qualitative studies have been undertaken (McShane et al., 2009; Wexler et al., 2013), as well as quantitative personality-based research (Fok, Allen, Henry, & Mohatt, 2012), particularly regarding the influence of autonomy-relatedness to resilience. In development of such

assessments, Fok et al. (2012) emphasize the need for age- and culture-appropriate refinement of inventories, using shorter scales with suitable language. Allen (2002) provides additional guidance, underscoring the need for cultural congruence, highlighting past issues with inappropriate services and test interpretations leading to pathologization, stereotyping and distrust. Similarly, Blue et al. (2015) recommend a collaborative approach that benefits the community. More broadly, the five-factor model has been adapted for children cross-culturally to assess developmental trait changes, predictions of academic performance, and lifelong interaction with mental and physical health (Herzhoff, Kushner, & Tackett, 2017; Lim & Abdullah, 2012; McCrae et al., 2002; Oshri, Rogosch, & Cicchetti, 2013).

This study aims to assess the psychometric characteristics of an adaptation of the IPIP Big-Five scales for use with Inuktitut speaking Inuit children aged 9- to 12-years. Precedent of similar studies that required low assessment time and complexity, yet adequate reliability, was followed (Mlacic & Goldberg, 2007; Woods & Hampson, 2005; Yang, 2010). A short form with 25 self-report items was developed, with five-point unipolar Likert scale responses including some reverse scored items. When compared with application using longer measures and in other cultures, these measures are expected to demonstrate a similar five-factor structure and item definition of factors, with possible emergence of a sixth. Internal reliability, measured by coefficient alpha, is expected to be adequate. If confirmed, this could indicate the five-factor model is suitable for use in this population. Retest correlations and correlations with parent- or teacher-ratings and other predicted external criteria would then be required to assess construct and predictive validity, before this instrument can be used to assess cultural differences, and develop norms and predictive outcomes for Inuktitut speaking Inuit children.

[Word count: 1,100]

References

Allen, J. (2002). Assessment training for practice in American Indian and Alaska native settings. *Journal of Personality Assessment, 79*(2), 216-225. doi:10.1207/S15327752JPA7902_05

Berry, J. W. (2015). Global psychology: Implications for cross-cultural research and management. *Cross Cultural Management, 22*(3), 342–355.

Blue, A., Darou, W., & Ruano, C. (2015). Through silence we speak: Approaches to counselling and psychotherapy with Canadian First Nation clients. *Online Readings in Psychology and Culture, 10*(3). http://dx.doi.org/10.9707/2307-0919.1095. Retrieved from http://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1095&context=orpc

Church, A. T. (2001). Personality Measurement in Cross-Cultural Perspective. *Journal of Personality, 69*(6), 979–1006. Retrieved from https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=5487069&site=eds-live&scope=site

Costa, P. T., & McCrae, R. R. (1992). Normal Personality Assessment in Clinical Practice: The NEO Personality Inventory. *Psychological Assessment, 4*(1), 5–13.

Fok, C. C. T., Allen, J., Henry, D., & Mohatt, G. V. (2012). Multicultural Mastery Scale for youth: multidimensional assessment of culturally mediated coping strategies. *Psychological Assessment, 24*(2), 313–327. doi:10.1037/a0025505

Fraser, S. L., Parent, V., & Dupere, V. (2018). Communities being well for family well-being: Exploring the socio-ecological determinants of well-being in an Inuit community of Northern Quebec. *Transcultural Psychiatry, 55*(1), 120–146. doi:10.1177/1363461517748814

Goldberg, L. R. (1992). The Development of Markers for the Big-Five Factor Structure. *Psychological Assessment, 4*(1), 26–42. doi:10.1037/1040-3590.4.1.26

Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe*, Vol. 7 (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.

Government of Canada. (2018). *Indigenous peoples and communities: Inuit*. Retrieved from https://www.rcaanc-cirnac.gc.ca/eng/1100100014187/1534785248701

Heine, S. J., & Norenzayan, A. (2006). Toward a Psychological Science for a Cultural Species. *Perspectives on Psychological Science,* 1(3), 251–269. doi:10.1111/j.1745-6916.2006.00015.x

Herzhoff, K., Kushner, S. C., & Tackett, J. L. (2017). Personality development in childhood. In Specht, J. (Ed.) *Personality development across the lifespan.* Cambridge, MA : Academic Press, 2017. Retrieved from https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00003a&AN=lvp.b4319625&site=eds-live&scope=site

Ispas, D., Iliescu, D., Ilie, A., & Johnson, R. E. (2010). Exploring the Cross-Cultural Generalizability of the Five-Factor Model of Personality: The Romanian NEO PI-R. *Journal of Cross-Cultural Psychology, 41*(3), 1074–1088. doi:10.1177/0022022114534769

Lim, P. S., & Melissa Ng Abdullah, L. Y. (2012). Relationship between Big-five personality domains and students' academic achievement. *Pertanika Journal of Social Sciences & Humanities, 20*(4), 973-988

McCrae, R. R., & Costa, P. T., Jr. (2008). A five-factor theory of personality. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality theory and research third edition* (pp. 159–181). New York: Guilford Press

McCrae, R. R., Costa, P. T., Jr., Terracciano, A., Parker, W. D., Mills, C. J., De Fruyt, F., & Mervielde, I. (2002). Personality trait development from age 12 to age 18: Longitudinal, cross-sectional and cross-cultural analyses. *Journal of Personality and Social Psychology, 83*(6), 1456–1468. doi:10.1037/0022-3514.83.6.1456

McShane, K. E., Hastings, P. D., Smylie, J. K., Prince, C., & Tungasuvvingat Inuit Family Resource Centre. (2009). Examining evidence for autonomy and relatedness in urban Inuit parenting. *Culture & Psychology, 15*(4), 411–431. doi:10.1177/1354067X09344880

Mlacic, B., & Goldberg, L. R. (2007). An analysis of a cross-cultural personality inventory: the IPIP Big-Five factor markers in Croatia. *Journal of Personality Assessment, 88*(2), 168–177.

Oshri, A., Rogosch, F. A., & Cicchetti, D. (2013). Child Maltreatment and Mediating Influences of Childhood Personality Types on the Development of Adolescent Psychopathology. *Journal of Clinical Child and Adolescent Psychology, 42*(3), 287–301.

Saucier, G., Thalmayer, A. G., & Bel-Bahar, T. S. (2014). Human attribute concepts: Relative ubiquity across twelve mutually isolated languages. *Journal of Personality and Social Psychology, 107*(1), 199–216. doi:10.1037/a0036492

van der Vijver, F. J. R., & van Hermert, D. A. (2008). Cross-Cultural Personality Assessment. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality theory and research third edition* (pp. 55–72). New York: Guilford Press

Wexler, L., Moses, J., Hopper, K., Joule, L., & Garoutte, J. (2013). Central role of relatedness in Alaska native youth resilience: Preliminary themes from one site of the Circumpolar Indigenous Pathways to Adulthood (CIPA) study. *American Journal of Community Psychology, 52*(3–4), 393–405. doi:10.1007/s10464-013-9605-3

Woods S., & Hampson, S. (2005). Measuring the Big Five with single items using a bipolar response scale. *European Journal of Personality, 19*(5), 373-390

World Health Organization. (2018). *Process of translation and adaptation of instruments.* Retrieved on 7th November 2018 from http://www.who.int/substance_abuse/research_tools/translation/en/

Yang, J.-F. (2010). Cross-Cultural Personality Assessment: The Revised Neo Personality Inventory in China. *Social Behavior & Personality: An International Journal, 38*(8), 1097–1104.