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Toward Sustainable Development through Nurturing Diversity

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Toward Sustainable Development through Nurturing Diversity

Edited by
Leon Jackson • Deon Meiring
Fons van de Vijver • Erhabor Idemudia



Cross-Cultural Psychology
in the Rainbow Nation of Africa

July 17-21, 2012, Stellenbosch, South Africa

IACCP 21st International Congress

**Selected Papers from the Twenty First International Congress
of the International Association for Cross-Cultural Psychology**

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No animals were harmed in the production of this book.

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297 Cross-Cultural Psychology in the Rainbow Nation of Africa – Nurturing Diversity for Sustainable Development

Deon Meiring, Leon Jackson, Erhabor Idemudia & Fons van de Vijver

Foreword¹

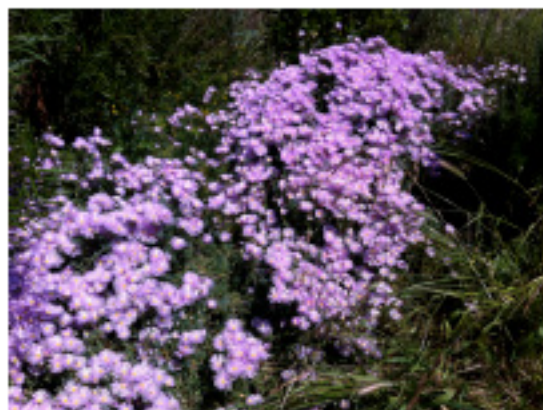
This e-book is a symbolic endpoint of a journey that started in 2008. A bid to present the 21st Conference of the International Association for Cross-Cultural Psychology in Stellenbosch, South Africa, was presented in 2010 in Bremen, Germany. The main objective of the conference was to facilitate networking opportunities, increase awareness of and disseminate cross-cultural research results on issues of a psychological nature. We also



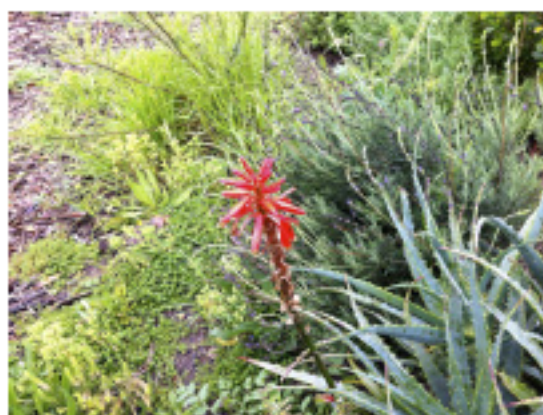
Cross-Cultural Psychology
in the Rainbow Nation of Africa
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wanted to give a boost to cross-cultural psychology in South Africa and indeed the whole African continent. Africa is clearly underrepresented in psychology; cross-cultural psychology is no exception. It is remarkable that diversity is not more studied on the African continent, given its remarkable diversity. Many African countries harbor a remarkable cultural and linguistic diversity. South Africa is a good example. The country has 11 official languages (<http://www.southafrica.info/about/people/language.htm#.U4bZsnKKWm4>). However, South Africa has a long history of racial oppression and discrimination. It is only with the abolishment

of apartheid in 1994, that the concept of racial equality was enshrined in the country's laws. The concept of the Rainbow Nation (http://en.wikipedia.org/wiki/Rainbow_Nation) exemplifies the country's desire to go beyond the racial divides and to build up a country in which diversity is an asset. The theme of the conference was chosen against this backdrop of the need to deal with diversity in South Africa and in Africa in general. The history of South Africa since the abolishment of apartheid shows that there is a long way to go from eliminating discriminating to fully embracing and enacting diversity in all spheres of life. On the one hand, the country has seen the rise of international icons such as the late Nelson Mandela and widespread international acceptance of the value of reconciliation. At the conference we celebrated Madiba's 94th birthday with a keynote lecture given by the Nelson Mandela Rodes Foundation (<http://www.mandelarhodes.org>) on "Finding the future Mandelas". On the other hand, the history also shows that ethnic segregation is deeply seated in society. The conference theme was chosen to reflect this transition from oppression to multiculturalism: "Nurturing diversity through sustainable development". Being different is a main reason for conflict, not only in South Africa. On a symbolic level, Project Flower an indigenous Garden was established in the Stellenbosch area. The garden is now well established after two years with a diversity of cape floral blooming each year in July when IACCP conferences are taking place around the globe. The Fons van de Vijver Cross-Cultural Psychology Scholarship for disadvantaged students has also been established and launched. The first applications for scholarships in the area of cross-cultural studies in South Africa are awaited and scholarships will be awarded.



Name of purple flower



Name of red flower

Project Flower

¹ The editors gratefully acknowledge the help of Rinus Verkooijen in the editorial process.

The conference was attended by 527 delegates, presenting a total of 518 papers and posters. In keeping with the aims and theme of the conference delegates were asked to submit manuscripts presented at the conference for publication in the biennial conference proceedings. More than 30 papers were submitted and we eventually ended with accepting the 21 published in this e-book.

In line with good IACCP tradition, the papers presented at the conference covered many domains. This also holds for the chapters of this volume. For ease of reference these diverse topics were grouped under five different sections namely, acculturation, assessment, human development, industrial and organizational psychology and religion.

The **acculturation section** contains contributions by Christophe Leys and Sarah Miller, Timothy Dean Keeley, Bruna Krimberg von Muhlen and Marlene Neves Strey, Angelica Staniloiu and Hans J. Markowitsch, Maja K. Schachner, Fons J. R. Van de Vijver and Peter Noack and Leon T.B. Jackson and Dudley R. De Koker.

Christophe Leys and Sarah Miller, in the paper *“Using perception of emotional behavior to assess the level of integration of a transgressor belonging to an ethnic minority: A way to define a penalty”*, report on an experiment examining whether judicial sentencing could be affected by the perception of the feeling of guilt expressed by a defendant belonging to an ethnic minority. The aim the authors was to uncover the relevant processes explaining the link between perceived guilt and the penalty in the out-group condition. They found that an out-group member feeling guilty triggers inferences about his/her level of norms adoption; this inference induces a perception of the defendant as possessing more social skills, which corresponds to a higher ability to be accepted in the group and in turn, being perceived as warm induces a milder sentence.

Timothy Dean Keeley, in his paper titled *“Psychological traits affecting both cultural adaptation and foreign language Acquisition”*, reports on an empirical study that seeks to determine the psychometric variables that predict individual differences in the degree of success in both cultural adaptation and foreign language acquisition (FLA). The results of the study seem to suggest that the Global Competency Inventory (GCI) is a very strong predictor of individual differences in oral/aural performance in foreign languages.

Bruna Krimberg von Muhlen and Marlene Neves Strey, in their contribution *“Brands of gender and acculturation in immigration process of Second World War survivors in Southern Brazil”*, investigated the process of acculturation of Jewish survivors of the Second World War who immigrated to the South of Brazil decades ago. Using documentary and discourse analysis of interviews, the authors found that Jewish survivors of the Second World War have gone through a process of acculturation in which their ethnic identity gradually acquired new brands from a new social construction from this international migration to Brazil.

Angelica Staniloiu and Hans J. Markowitsch in their chapter, *“High prevalence of dissociative amnesia and related disorders in immigrated people”*, use a literature review to explain how in immigrant populations, stressful experiences can arise during pre-emigration, migration or post-migration phase and that stresses related to various phases of migration and acculturation can trigger dissociative amnesic disorders via a dysregulation of hormonal stress responses.

The contribution of Maja K. Schachner, Fons J. R. Van de Vijver, and Peter Noack, entitled *“Characteristics of the country of origin and immigrant children’s psychological and school adjustment”*, set out to examine if these differential outcomes can be linked to group-specific acculturation patterns, following similar processes to those observed at individual level; and to what extent characteristics of the country of origin could help to explain differences in the acculturation process and school adjustment of immigrant children in Germany. The results of their empirical study confirm that country-level relationships between different components of the acculturation process are very similar to what has been found at individual level. In addition, they found some relationships between characteristics of the country of origin and acculturation conditions; yet, the relationships with children’s acculturation orientations and outcomes were much weaker.

Leon T. B. Jackson and Dudley R. De Koker, in their paper *“Negative acculturation conditions, well-being and the mediating role of separation in the workplace”*, report on the results of an empirical study which assessed adverse acculturation conditions as predictors of both physical and psychological acculturation out-

comes. The results of their study seem to suggest that mainstream segregation demands, discrimination, and subtle racism, coupled with a dominant ethnic separation acculturation strategy and co-ethnics demanding that their members keep to themselves at work (with limited or no intercultural contact), were associated with the experiences of higher physical and psychological ill-health, and frequent thoughts of intentions to quit.

The **assessment section** contains contributions from Stanley O. Gaines, Jr. and Sarah C. White, Jia He, Alejandra del Carmen Dominguez Espinosa, Ype H. Poortinga and Fons J. R. van de Vijver, Sarah Flint and Kristen Pammer, and Alexei V. Matveev and Miwa Yamazaki Merz. In their chapter, *“Impact of non-normality on evaluating construct validity concerning Inner Wellbeing scales for Zambia and India, 2010-2013”*, Stanley O. Gaines, Jr., and Sarah C. White summarize the results of a research project about domains of inner wellbeing as experienced by individuals in villages within two non-Western nations (i.e., Zambia and India). Results of confirmatory factor analyses for Zambia at Time 1 and for India at Time 1 indicated that, although they had expected seven to eight intercorrelated domains to emerge, inner wellbeing was best regarded as a unidimensional construct. However, after they engaged in intensive reflection and extensive reconceptualization and a new assessment of inner wellbeing, results for Zambia and India Time 2 indicated that inner wellbeing was best regarded as a multidimensional construct with seven intercorrelated domains.

The chapter *“Acquiescent response style and social desirable responding in cross-cultural value surveys”* by Jia He, Alejandra del Carmen Dominguez Espinosa, Ype H. Poortinga and Fons J. R. van de Vijver, presents two studies examining the differential effects of acquiescence and social desirability on value scores across cultures. In the first study, they found that affluence explains a substantial proportion of the variance in the association of response styles with value scores in all the surveys. The second study investigated effects of score standardization and found that value score standardization had some effect on the correlations of acquiescence with various value types, but only limited effects on social desirability.

The paper *“Principles of Test Development in Papua New Guinea”* by Sarah Flint and Kristen Pammer proposes a framework to develop psychometric tests within Papua New Guinea. Linguistic, cultural and social factors are all addressed and strategies for when working within these cultural boundaries are suggested. Models for translation and validation are assessed in light of the unique challenges presented by the linguistic diversity of Papua New Guinea and an alternative methodology of translation more appropriate for Papua New Guinea is also proposed. Furthermore this paper provides a working example of these test development principles while the application of these principles to other Melanesian countries is also discussed.

Research has identified different dimensions of intercultural competence (IC). However, the focus remains inconsistent across different disciplines and contexts. Existing assessment tools do not focus on all dimensions of Intercultural Competence. Instead, each focuses only on a subset of the IC dimensions. To fill this gap, the chapter *“Intercultural Competence Assessment: A Review of Assessment Tools”* of Alexei V. Matveev and Miwa Yamazaki Merz aims to provide a review of currently available assessment tools for IC and to identify a comprehensive list of the key dimensions of IC to help researchers agree on a unified definition of IC and develop a measurement of IC that is applicable across contexts and disciplines. The authors suggest that a comprehensive IC definition and measurement should take into account cognitive, affective, and behavioral dimensions.

The **human development** section includes contributions from Berrin Özlem Otyakmaz, Widya Risnawaty, Sri Tiatri Tjibeng, Jap and Sesilia Monika, Marieke C. van Egmond and Ulrich Kühnen, Anna Chernaya, and Anjali Ghosh. The chapter *“Maternal expectations of child development in two cultural groups in Germany”* by Berrin Özlem Otyakmaz, reports a study that examined the role of culture on developmental expectations by comparing Turkish-German and German mothers with preschool aged children in terms of their estimations regarding children’s mastery on eight different developmental domains (e.g., cognitive, physical, social). The results of her study suggest that Turkish-German mothers expected children to attain developmental milestones later than German mothers in nearly all domains, although the differences differed across domains. Furthermore Turkish-German mothers who grew up in Germany differed in some domains less from German mothers than mothers who grew up in Turkey.

Widya Risnawaty, Sri Tiatri, Tjibeng Jap, and Sesilia Monika in their contribution “*Could the profile of orphans represent the Javanese position in the indulgence versus restraint culture dimension?*” report the findings of a project that was aimed at investigating the dimension of restraint in the behavior and psychological dynamics of Javanese late adolescents, who live at two orphanages in Central Java. The results of the study suggest that the behavior and psychological dynamics are quite similar in the two orphanages. Participants in both orphanage houses tend to control ways to express their feelings, present themselves as calm, tight in norms, and under control. In addition, showing control of emotions and being not easily surprised was also important. These observations may represent the characteristics of Javanese culture as have been found in previous research, namely the tendency to be restrained.

The paper “*Cultural diversity in meta-cognitive beliefs about learning: Within-European similarities and differences?*” by Marieke Christina van Egmond and Ulrich Kühnen addresses the question of how culture influences the beliefs of Western and Eastern European students. Their study was based on the theory that the beliefs of students and faculty in the Western cultural context can be characterized as primarily ‘mind oriented’, whereas previous research has indicated that the beliefs of East-Asian academics have a stronger ‘virtue orientation’. In the mind orientation, the development of one’s cognitive thinking skills is at the heart of the concept of learning. In the virtue orientation, learning is primarily seen as a process of social and moral development of the person. The two-fold survey study was conducted in the Eastern European countries of Poland and Russia and the Western European countries of the Netherlands and Germany. The results suggest that students from both European regions endorse mind oriented beliefs about learning more strongly than virtue oriented ones on the level of both attitudes and behavioral intentions, pointing to a striking cross-cultural similarity across the European region in the domain of beliefs about learning.

The chapter “*Girls’ plays with dolls and doll-houses in various cultures*” by Anna Chernaya presents an analysis of the historical and contemporary context of girls’ plays with dolls and doll-houses. The author suggests that the anthropological materials about children’s plays with dolls and doll-houses help to recreate the doll context as a cultural representation of evolutionary development and that the archaic functions of the doll used in rituals and traditional ceremonies objectivize the historically inherent cultural status of the doll. Dolls plays enhance mastering ethical and the moral values handed down from generation to generation. They also highlight that another aspect of the analysis is connected with the traditional “school” of play replacement of an object. This is illustrated by the material about manufacturing and use of a ‘simple’ doll in many traditional world cultures. Chernaya proposes that dolls plays reflect socially significant images and senses of idealized adult life and that the development of the sign world of dolls is closely connected with the interpretation of the doll image.

Anjali Ghosh in her chapter “*Emotional display rules of visually and hearing impaired students*” reports on a study that seeks to understand the pattern of emotional display rules for three emotions, namely happiness, sadness, and anger, of visually and hearing impaired students towards different members of the society under two different situations, i.e., private and public. The results of this study indicated that overall expression of emotions varied from target person to target person and also from situation to situation. Happiness was observed to be expressed more by visually impaired than hearing impaired students towards parents, friends and teachers in private context. However, the overall expression of anger was found to be more for hearing – impaired students. The study further indicates that impaired individuals like normal individuals regulate both positive and negative emotions depending upon the target person and social situation.

The **industrial and organizational psychology section** contains contributions by Sharon Glazer, Nina Hamedani, Kristina Kayton and Amy Weinberg, Andrew A. Mogaji, and by Anton Grobler and Renier Steyn. Sharon Glazer, Nina Hamedani, Kristina Kayton and Amy Weinberg in “*Culture research landscape throughout the United States Department of Defense*” describe the U.S. Department of Defense Regional Expertise and Culture (REC) research landscape from 2005 through 2011, including major research efforts and topics of study, key contributors and publications, collaborative practices, and future research opportunities. The authors noted the need for better REC research coordination, more social science expertise and personnel, and more

collaborative practices. Their investigation identified validation studies for cross-cultural competence requirements, validation studies of REC training and education programs, role of technology in culture training, and mitigating cognitive dissonance.

Andrew A. Mogaji, in his chapter *“Goal-setting and task performance among Nigerian managers in a cross-cultural context”*, reports on a study that assessed goal-setting and task performance with data from 521 managerial employees in Lagos, Nigeria. Findings of the study showed a significant ethnic difference in task significance/performance but not in goal setting among the Nigerian managers studied. Analysis of his data showed cultural differences in performance-intrinsic reward contingency and task significance but not in goal-setting and performance-extrinsic reward contingency. The results are supported by the findings of previous studies that suggested that ethnic group background has differential effects on workers’ motivation. Mogaji’s results are discussed in terms of the influence of culture on human resources management practices and suggested that managers who value performance-intrinsic reward allocation should engage in goal-setting.

The chapter *“A psychometric evaluation of the Integrity Profile 200 (IP 200) and the adaptation thereof for use in the South African Police Service”* by Anton Grobler and Renier Steyn describes a study to psychometrically evaluate the IP 200, an instrument widely used in South Africa, to assess its utility as an integrity measure for use in the South African Police Service. Results of an exploratory investigation in the South African Police Service revealed poor reliability and unacceptable inter-item correlations. This suggests poor factorial validity (model fit). Subsequently they conducted an exploratory factor analysis to adapt the scale. Four factors were extracted and analyzed, and satisfactory psychometric properties were found for these factors, including the absence of race-based item bias. The factors were Integrity Restricting Orientation, Moral Conscientiousness and Accountability, Organizational/Management Integrity, and a Lie Scale. The results account for a significant deviation and simplification from the original instrument structure. The authors recommended that the original IP 200 should not be used in this context but that the adapted scale be used.

The **religion section** contains chapters by Lesiba Baloyi and Molebogeng Makobe-Rabothata, Jennifer Kyle, and Nkeke Lesolang. The chapter *“The African conception of death: A cultural implication”* by Lesiba Baloyi and Molebogeng Makobe-Rabothata, focuses on how traditional Africans conceive and deal with the bereavement process. The authors adopt the African worldview and philosophy as their framework and dispute the often held view in mainstream psychology that behavior, in this case the concept of death and the bereavement processes have universal applicability, articulation, representation and meaning. They explain that for Africans, death is accompanied by the performance of series of rituals which connect the living dead and the living. Two case studies are presented and discussed to illustrate the African conception of death, its meaning, significance and accompanying mourning rituals and process. The data suggest that the experiences in the participants’ stories in the workplace reveal that African indigenous ways of dealing with death are still not recognized, respected and understood in organizations which have a dominant Western culture.

The contribution *“Spirituality as a predictor of reduced suicide risk in a religiously and ethnically diverse youth sample”* by Jennifer Kyle describes a study that was aimed at examining spiritual faith as a predictor of passive suicidal ideation in a racially and religiously diverse sample of college-aged youth in the US. Kyle’s results suggest that although racial group differences were not significant, the analysis yielded significant results for gender, where females reported more reasons for living than males. In addition, participants with a religious affiliation reported higher levels of social support, religious well-being and reasons for living. The author also found that over and above the influence of gender and religious affiliation, positive faith-based beliefs along with social support was associated to lower levels of passive ideation. Implications of findings and future research are discussed.

Nkeke Lesolang, in the final chapter entitled *“The role of spiritual faith healers in reducing or reinforcing the HIV stigma: A qualitative study”* explores spiritual faith healers’ understanding and conceptualization of HIV/AIDS stigma and the role they play in reducing or reinforcing HIV/AIDS stigma in their communities. Lesolang focuses on the participants’ conceptualization of HIV stigma, from the context of the African world view in order to gain insight into the roles of these spiritual faith healers. The findings indicated that spiritual

faith healers tended to show a less positive attitude towards people living with HIV/AIDS. However, the findings suggest that spiritual faith healers perceive themselves to be having a definite role to play in reducing HIV/AIDS stigma in their communities. These findings are discussed in the context of South African national policies relating to HIV and AIDS. The submission concludes by suggesting that HIV testing must be compulsory for every person who consults a hospital. Such a policy move could contribute positively to health promotion.

In conclusion, we wish that this e-book helps to shed light and provide new insight on reasons for and dynamics behind cross-cultural differences and similarities, and to promote diversity as an inspiring asset and resource, thereby reducing the negative consequences of conflict alluded to earlier.

Editors,
Stellenbosch, June 2014

Part 1:
Acculturation

Using Perception of Guilt to Assess the Level of Cultural Adoption of a Transgressor Belonging to an Ethnic Minority: Influence on Sentencing

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Abstract

Perception of the feeling of guilt experienced by the defendant is known to affect judicial sentencing. This influence differs depending on the defendant's ethnic identity. We investigated the hypothesis that the perception of an out-group defendant's level of host society's norms adoption could mediate this mechanism. 64 native Belgian participants were randomly assigned to two experimental conditions, which differed in the presence or absence of guilt expressed by an out-group defendant during his audition, in a given scenario. Participants' impression of the defendant's social skills (warmth), his level of host's society norms adoption, and the severity of the sentence they would attribute to this defendant were then measured. A double mediation was tested in order to explain the effect of perceived feeling of guilt on sentencing through the perception of both the defendant's level of norms adoption and his warmth. Results revealed that all the hypotheses included in the double mediation were confirmed. These results emphasize the importance of inferences about the level of Norms Adoption by out-group members. An out-group member feeling guilty triggers inferences about his/her level of norms adoption, which is perceived as higher in comparison to a defendant who does not feel guilty. This inference induces a better perception of his social skills (warmth), which corresponds to a higher ability to be accepted in the group. In turn, it leads to a milder sentence. Limitations and implications are discussed.

Introduction

Just like many other types of behaviors, emotional behavior is regulated by norms. For example, people are expected to feel sad at a burial but happy at a wedding (Hochschild, 1983). According to Thoits (2004), emotional norms vary in content over contexts, time and cultures, and people who conform to these norms will likely get more social approval than those who do not. By contrast, the latter are subject to social exclusion and can therefore be stigmatized as "emotional deviants" (Thoits, 1985).

In the context of judicial settings, complying or not with emotional norms may impact the attributed sentence (Leys, Licata, Bernard, & Marchal, 2011; Leys, Licata, Klein, Marchal, & Bernard, submitted). In this context, the feeling of guilt, defined as a negative moral emotion felt after transgressing a social norm (Tangney & Dearing, 2002) is normatively expected. Indeed Leys et al. (2011) showed that felt guilt was expected when a defendant had committed a felony (factual guilt was clearly established), and that the defendant received a harsher penalty when he failed to express guilt than when he did.

Given that emotions have important functions in social communication at an interpersonal level (Van Kleef, Van Doorn, Heerdink, & Koning, 2011), conforming or not with emotional norms triggers inferential processes in observers concerning both the target's personality and the way this target regards the situation. Attribution processes are part of these inferences. Attribution theories explain how an individual can make sense of a specific event. Two main categories of attributions were distinguished (Heider, 1958; Kelley, 1967; Weiner, 1985): external attributions, which relate to the environment (attenuating or aggravating circumstances, etc.), and internal attributions, which relate to the individual (personality, dispositions, social skills, etc.). In Western cultural settings explanations based on personality traits seems mobilized by default while external attributions are drawn upon only in a second step, in order to correct the first explanation (Gilbert, Pelham, & Krull, 1988). Personality perception is thus central in attribution processes. Research on impression formation

has shown that people tend to evaluate others on two dimensions of personality (the Big Two): Warmth and Competence (Abele, Cuddy, Judd, & Yzerbyt, 2008; Dubois & Beauvois, 2005; Fiske, Cuddy, & Glick, 2007). Perception of warmth is particularly important in judicial settings. Indeed, possessing a high level of social skills indicates a person's ability to respect group norms and to be accepted in the group (Fiske, Cuddy, Glick, & Xu, 2002; Fiske, Xu, & Cuddy, 1999). In the context of a trial, the perception of the defendant's personality can be used in order to evaluate how dangerous s/he is for the group and how likely s/he will be able to reintegrate in society.

In this line of thinking, previous studies (Archer, Foushee, Davis, & Aderman, 2006; Esqueda, Espinoza, & Culhane, 2008; Leys et al., 2011) showed that participants assessed the social skills of the transgressor and partially relied upon this judgment to decide the severity of the penalty. In another study (Leys et al., submitted), the ethnic identity of the target was manipulated: the defendant was either presented as Belgian (in-group) or North African (out-group). Results showed that the perceived emotional behavior of the defendant affected the sentence. In the in-group condition, this effect was mediated by perception of warmth and by attribution to external factors (attenuating circumstances), whereas, in the out-group condition, the effect was only mediated by perception of warmth. When considering a set of two emotional norms (to feel guilty and not angry), when out-group members transgressed one of the two norms while complying with the other, they received a more severe sentence. On the contrary, in-group members adopting such an unexpected behavior could trigger attribution to extenuating external factors, therefore lowering the sentence. Thus, these results confirmed that, when dealing with an out-group transgressor, his/her emotional behavior may influence the severity of the penalty through different attributional processes than those applied for in-group transgressors.

In order to explain this difference, this study will examine the role that majority members' evaluation of an ethnic minority transgressor's level of in-group norms adoption could play. We reasoned that perceivers could use the defendant's emotional behavior during the legal judgment process as a clue indicating her/his level of adoption of the host society's norms. This criterion would not be salient for in-group transgressors, since they are necessarily viewed as culturally "integrated" in their own society, even if they adopt a delinquent behavior. However, it could become salient with out-group members, especially when they are targeted by negative stereotypes, which often depicts them as not integrated. It is particularly the case for Muslim immigrants (Billiet & Swyngedouw, 2009) such as the North Africans in Belgium. Therefore, as soon as North Africans fail to fully comply with the in-group's emotional norms, they could be considered as less "integrated" with the host society and thus more severely convicted.

Research on acculturation perceptions (Van Acker et al., 2011; Zagefka, Brown, Broquard, & Martin, 2007) examined how perceptions of the acculturation strategies of minority members affect the attitudes of majority members towards them. These studies relied on Berry's model of acculturation (1997), which distinguishes two dimensions: maintenance of the minority culture, and contact with the host culture. Zagefka et al. (2007) showed that perceiving that minority members wish to have contacts with the host society led to more positive attitudes towards them, whereas perception of cultural maintenance had no effect. Recently, Van Acker et al. (2011) confirmed this result, but further showed that perception of adoption of the majority culture by the migrants had a stronger positive effect on intergroup attitudes than their perceived desire for contact. Thus, we hypothesized that perceiving a defendant's guilt during the legal judgment process would be interpreted as evidence that he/she has adopted the emotional norms of the host culture, and would therefore yield a milder sentence.

In sum, the present study was designed to test hypotheses in line with Leys et al. (submitted) previous studies. We aimed at uncovering the relevant processes explaining the link between perceived guilt and the penalty in the out-group condition. We hypothesized the following (see Figure 1):

1. Confirming previous studies (Leys, Licata, Bernard, & Marchal, 2011; Leys, Licata, Klein, Marchal, & Bernard, submitted), the inflicted penalty will be less severe for a defendant who feels guilty than for a defendant who does not.

2. A North African (out-group) defendant feeling guilty will be perceived as having a higher level of Norms Adoption than a North African defendant feeling no guilt.
3. A North African defendant feeling guilty will be perceived as warmer than a North African defendant feeling no guilt.
4. A North African defendant perceived as having a higher level of Norms Adoption will be perceived as warmer than a North African defendant perceived as having a lower level of Norms Adoption.
5. A North African defendant perceived as having a high level of Norms Adoption will be less severely sentenced than a North African defendant perceived as having a lower level.
6. A North African defendant perceived as warmer will be less severely sentenced than a North African defendant perceived as colder.
7. A double mediation will explain the effect of the feeling of guilt on the sentence through the perception of both the level of Norms Adoption and the defendant's warmth.
8. The effect of the feeling of guilt on warmth will be mediated by the perception of the defendant's level of Norms Adoption.
9. The effect of the level of Norms Adoption on the sentence will be mediated by the perception of the defendant's warmth.

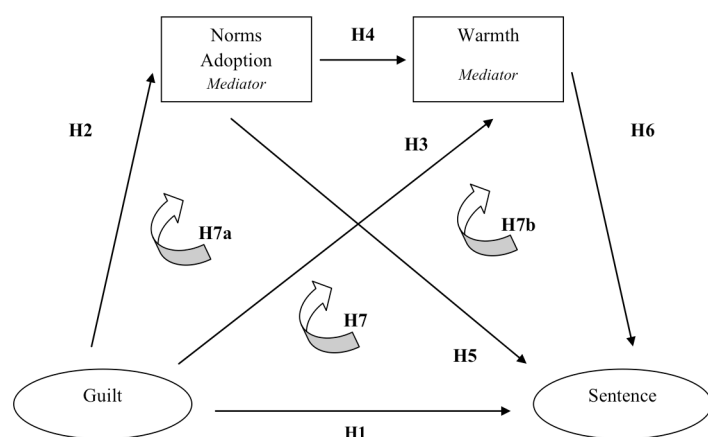


Figure 1. Relation between perceived guilt and sentence mediated by perception of the defendant's level of norms adoption and perception of his/her warmth (hypotheses).

Method Participants and Procedure

Among 80 participants, all students in last year of childcare studies and a last year of high school who volunteered to participate in this research, in accordance with the school directors, only the 64 native Belgian participants were kept (mean age = 18.64 years, $SD = 1.26$; 33 males). All students filled in an informed consent to participate in the study and were free to decline. Anonymity was guaranteed.

Participants were randomly assigned to two experimental conditions. Because a social emotion such as guilt is not associated with any facial correlate (Keltner & Buswell, 1996), guilt was manipulated through vignettes stating its presence or absence in a written sentence. The questionnaire contained several sections: the first explained that participants were about to read a short scenario and were to answer several questions in relation to their impressions of the defendant. Afterwards, a home burglary scenario was presented (see Appendix). Because felt guilt is only expected when factual guilt is unquestioned (people do not expect felt guilt from someone that did not commit the felony), the transgressor was described as caught red handed. As in Leys et al. (submitted) study, the transgressor was named with a fictional North African name: Mr. Youssef El Kader. At the end of the questionnaire, a manipulation check confirmed that participants were all aware of the transgressor's origin.

Guilt was described as either present or absent depending on the condition (see Appendix). Experimental manipulations were introduced in the scenario via three excerpts: one situated at the beginning of the scenario,

which described the defendant's deposition in the magistrate's office (i.e., "At his arrival, he did not feel guilty" / "At his arrival, he felt very guilty"); one in the middle (i.e., "I don't care" / "I feel very guilty"); and at the end of the scenario, which described the defendant's testimony during his trial (i.e., "the defendant keeps feeling no guilt" / "the defendant still felt very guilty"). Excerpts were always congruent. At the end of the questionnaire, a manipulation check, on a 5-point Likert scale, confirmed that participants perceived the transgressor's feeling of guilt according to the condition: $M_{\text{Guilt}} = 3.45$, $SD = 1.53$; $M_{\text{noGuilt}} = 1.38$, $SD = .81$, $t(34) = 4.88$, $p < .001$.

Some information was provided concerning the defendant: he had a small criminal record (simple theft, two years ago). In Belgium, many trials involve recidivists and a first offense rarely yields a strong penalty (except for crimes). Victims were present during the robbery, although no physical harm occurred; no external justification was provided. When the prosecutor inquired about his motives, the defendant provided none.

The dependent variables (see appendix) were Penalty ($\alpha = .77$); attribution to External Factors ($\alpha = .70$); perceived Warmth ($\alpha = .84$); Level of Defendant's Norms Adoption ($\alpha = .69$): "Do you think that the defendant follows the Belgian society's norms?" and "Do you think that the defendant is seen as well integrated into the Belgian society by the prosecutor?". All items were measured on 7-point Likert scales.

Results

Table 1 reports the descriptive statistics of all variables. Confirming the first hypothesis, regressing Perceived Guilt (Absent vs. Present) on Penalty yielded a significant regression coefficient, $\beta = -.43$, $t(60) = -3.68$, $p < .001$, $R^2 = .18$, equivalent to an independent t -test. When the defendant was described as feeling guilty, the attributed sentence was significantly less severe than when he was described as not experiencing that emotion (see Table 1).

Table 1

Severity of the Sentence, Level of Norms Adoption and Degree of Warmth for a Defendant Feeling Guilty and for a Defendant Who Does Not (Means with Standard Deviations; N = 62).

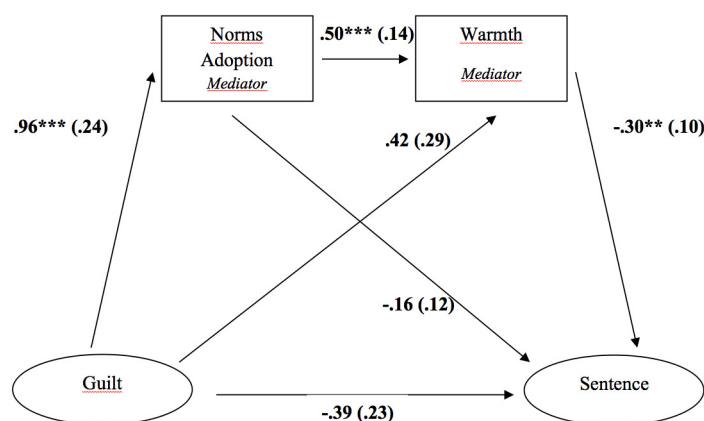
Scale	Guilt	No guilt
Sentence	2.64 (.78)	3.45 (.97)
Norms Adoption	2.94 (1.01)	2.03 (.93)
Warmth	3.79 (1.12)	2.90 (1.15)

In line with the second hypothesis, a defendant feeling guilty was perceived as having a higher level of Norms Adoption than a defendant feeling no guilt, $\beta = -.45$, $t(60) = -3.98$, $p < .001$, $R^2 = .21$ (see Table 1). In line with the third hypothesis, a defendant feeling guilty was perceived as warmer than a defendant feeling no guilt, $\beta = -.37$, $t(60) = -3.98$, $p = .003$, $R^2 = .14$ (see Table 1).

In line with the fourth hypothesis, a defendant perceived as having a higher level of Norms Adoption was perceived as warmer than a defendant perceived as having a lower level of Norms Adoption, $\beta = .52$, $t(60) = 4.68$, $p < .001$, $R^2 = .27$. In line with the fifth hypothesis, a defendant perceived as having a high level of Norms Adoption was less severely sentenced than a defendant perceived as having a lower level of Norms Adoption, $\beta = -.45$, $t(60) = 3.98$, $p < .001$, $R^2 = .21$. In line with the sixth hypothesis, a defendant perceived as warmer was less severely sentenced than a defendant perceived as colder, $\beta = -.54$, $t(60) = 4.98$, $p < .001$, $R^2 = .29$.

Hypotheses 7, 7a and 7b were confirmed through a double mediation test (Hayes, 2013. See Figure 2). Both mediations of Perceived Guilt on Sentence through Norms Adoption and through Warmth are partial. The double mediation, taking both mediators into account in series, is complete: the presence of guilt induces the perception of a high level of Norms Adoption, which, in turn, induces the perception of a high level of warmth, which induces a mild sentence, and conversely for the absence of guilt.

Attribution to External Factors also predicted the Penalty, $\beta = -.56$, $t(60) = -5.27$, $p < .001$, $R^2 = .31$. However, Guilt did not significantly predict attribution to External Factors, $\beta = .22$, $t(60) = 1.79$, $p > .05$, $R^2 = .05$. External factors were taken into account to determine the penalty, but they were not influenced by perception of the defendant's feeling of guilt.



* $p < .05$. ** $p < .01$. *** $p < .001$

Indirect effects:

Hypothesis 7: $-.14 (.08)$, CI $[-.39, -.04]$

Hypothesis 7a: $-.16 (.15)$, CI $[-.52, .04]$

Hypothesis 7b: $-.12 (.11)$, CI $[-.46, .03]$

Figure 2. Relation between perceived guilt and sentence mediated by the perception of the defendant's level of norms adoption and the perception of his/her warmth (results)

Discussion

These results confirm our hypotheses and emphasize the importance of inferences about the level of Norms Adoption by out-group members. Expressing guilt after having transgressed influences the severity of the sentence attributed by observers. This influence can be explained as follows: an out-group member feeling guilty triggers inferences about his/her level of Norms Adoption (perceived as higher than for a transgressor feeling no guilt); this inference induces a perception of the defendant as possessing more social skills (warmth), which corresponds to a higher ability to be accepted in the group. In turn, being perceived as warm induces a milder sentence.

This process is of potentially important consequences in judicial settings. Indeed, considering the level of host society's norms is obviously irrelevant for in-group members. As shown previously (Leys et al., 2011), feeling guilty influences the sentence of in-group members through both attribution of extenuating external factors and perception of the defendant's social skills. Leys, Licata, Bernard, & Marchal (2011) did not find any influence of the latter mediator in case of out-group members. Hence, it seems not only that individuals are influenced by emotional norms when forming impression of a defendant, but also that the inferences they draw differ depending on the defendant's membership with the cultural in-group or with an out-group. These differences could explain, at least partially, the differences of sentencing following the transgressor's ethnicity observed in previous studies (Franklin, 2013; Leys, et al., submitted; Steffensmeier & Demuth, 2000).

Some limitations of this study have to be underlined. First, participants were students and not seasoned magistrates. Previous studies compared students in the field of Law and students from other fields (Leys et al., submitted), and no significant differences were observed. However, seasoned magistrates could cope differently with transgressor's ethnicity issues, and studies on this specific population are needed. Second, the use of questionnaires has its known limitations, such as a low level of implication. However, this study replicates a previous study using the same method. Moreover, it allowed manipulating felt guilt explicitly instead of relying on proxies such as apologies or remorse. Third, felt guilt was manipulated to be normatively present or counter-normatively absent. However, other norms (emotional or not) could yield different results. Further studies should investigate a broader range of norms. Fourth, the level of Norms Adoption is identified as a mediator.

The next step is to set this mediator as an independent variable to establish its effects through experimental manipulation. Lastly, the measure of the penalty's severity on 7 points Likert scales differs from ecological sentencing. We used this measure for methodological reasons but at the cost of ecological validity. Further studies should investigate this issue. Hence, at this point of our research, it seems too soon to infer practical recommendations from our results. Yet we draw attention on possible source of discriminations between groups that are not obvious given that it relates with emotional norms, and with slight variations in cognitive processes.

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Appendix

Scenario

M. Youssef El Kader is caught red handed for burglary, while the owners were home but did not wake up. M. El Kader works in a restaurant; he has two children and has already been convicted for simple theft two years ago. Arriving in the examining magistrate's office for his statement he felt really guilty / he felt no guilt at all. The following takes place in the magistrate's office,

M. Tembele: ...

M. Tembele: "Mister El Kader, you have been caught robbing a house and stealing Hi-Fi devices, jewels and the owners' wallets while they were asleep. Do you recognize the facts?"

M. El Kader: "Well your colleague was there, what is there to add?"

M. Tembele: "And are you comfortable with breaking into a house and stealing people's belongings for your own benefits? What would you have done had they woken up?"

M. El Kader "I feel guilty for them / I don't care ..."

M Tembele: "Can you tell me why you'd do that? Did you need the goods you stole?"

M. El Kader: "I felt compelled; I've let myself doing it."

...

During the trials, evidences have been provided. The prosecutors and the attorney exposed their conclusions. *Flagrante delicto* was confirmed. There was no procedural defect. The defendant felt still guilty / felt still no guilt. The judge now has to define the sentence, taking potential extenuating or aggravating circumstances into account.

Measures

Warmth (social skills) assessment:

Do you perceive the defendant as: Sociable – Thoughtful – Unpleasant (rev.) – Tolerant – Irritable (rev.) – Selfish (rev.) – Disdainful (rev.) – Agreeable – Warm – Cold (rev.) (all going from "not at all" to "totally").

Penalty assessment:

Picture yourself as the judge. What penalty would you give the defendant, compared to the standard penalty: minimal penalty – maximal penalty.

Do you believe that the penalty should be: very mild – very harsh.

Extenuating circumstances:

Do you believe external factors might have influenced the defendant's behavior regarding his felony?

Would you say that the defendant's criminal behavior might be explained by circumstances that did not depend on the defendant?

Do you believe that reasons independent from the defendant might have explained his felony?

Manipulation checks:

The defendant is: North African – Belgian – Other

Do you think the defendant feels guilty?

Psychological Traits Affecting Both Cultural Adaptation and Foreign Language Acquisition

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Abstract

This empirical study goes a long way in determining the psychometric variables that predict individual differences in terms of the degree of success in both cultural adaptation and foreign language acquisition (FLA). Ever since Schumann (1978) introduced his Acculturation Model, the most well-known attempt to link cultural adaptation with FLA, a number of empirical studies have sought to determine these psychometric variables with mixed results due to the wide variation in the research methodologies applied in terms of learning targets, achievement measures, types of treatment, etc. (Dörnyei, 2005). This study overcomes the weaknesses of many previous studies. The experiment involved 86 Chinese students studying at a major private Japanese university in Japan. The 16 psychometric scales of the Kozai Group's Global Competency Inventory (GCI), a validated psychometric instrument for measuring psychological traits affecting success in cultural adaptation, were employed as independent variables. The dependent variable was "Japanese Ability" in terms of oral/aural performance measured by six native Japanese raters reviewing video-recorded individual structured interviews conducted in Japanese with the Chinese students by a Japanese native speaker. Out of the 16 GCI psychometric scales, 14 demonstrated highly significant associations with the "Japanese Ability" of the Chinese students participating in the study. The results are very promising in elucidating the psychological traits modulating both cultural adaptation and foreign language acquisition.

Introduction

A company assumes a substantial financial risk when sending an executive abroad and it is imperative to discern individual differences in cultural adaptation. Thus, there are numerous psychometric instruments that seek to provide such a service. Likewise, accounting for individual differences in foreign language acquisition has been the goal of researchers in the field of second language acquisition (SLA) or foreign language acquisition (FLA). In this paper it is hypothesized that since language and culture are so interrelated a validated and robust psychometric instrument used by corporations in the expatriate selection process, such as the Kozai Group's Global Competency Inventory (GCI), may also serve to predict individual differences in foreign language acquisition.

For many years numerous researchers in SLA such as Taylor (1974), Schumann (1975), and Brown (1980) have argued that success or failure in foreign language acquisition is largely the result of social, psychological, and affective (SPA) factors. Though instruments that incorporate SPA factors, such as the GCI, have been used successfully to predict individual differences in cultural adaptation, there has not been much success in developing psychometric instruments comprised of SPA factors to predict individual differences in foreign language acquisition with a particular focus on oral/aural performance in the foreign language. Thus, there are two main related research questions that informed the experiment reported in this paper. The first is "what psychological traits (including attitudinal, affective and personality factors) make some people better at foreign language acquisition and oral/aural performance than others?" Subsequently, "do the psychological traits that help explain why some people adapt to cultures better than others also help explain individual differences in foreign language acquisition, particularly in terms of oral/aural performance?"

Schumann's Acculturation Model (1978) is one of the most well known early attempts to explore the relationship between cultural adaptation and SLA/FLA. Schumann's (1986) acculturation model predicts that learners will acquire the target language to the degree they acculturate to the target language group. Schumann (1986) argued that two groups of variables – social factors and affective factors – cluster together into a single variable that is a major causal variable in SLA. Schumann called this variable acculturation - the social and

psychological integration of the learner with the target language (TL) group. Schumann (1986, p. 379) stated: "I also propose that any learner can be placed on a continuum that ranges from social and psychological distance to social psychological proximity with speakers of the TL, and that the learner will acquire the second language only to the degree that he acculturates."

Larsen-Freeman and Long (1991) argue that Schumann did not specify the combinations and/or levels of social and psychological factors to predict language outcomes and that Schumann did not explain how these factors affect the rate of attainment. This remark shows the excessive demands of strict empiricism, expecting definitiveness where it may not be available. The experiment presented in this research serves to partially address this concern, however, it must be understood that there is no one single recipe for success in SLA/FLA. The experiment in this research does not attempt to quantitatively verify Schumann's Acculturation Model, but the results do demonstrate that model is very insightful and that any model attempting to explain individual differences will be more robust by incorporating these culture-language related factors.

According to Dörnyei (2005), inconclusive results in the literature concerning the relationship between psychological traits (SPA variables) and SLA have been partly due to methodological limitations or inconsistencies. The main issues concerning reliable and meaningful results are: (1) the dependent variable – measures of individual differences in FLA and (2) the independent variable(s) – measures of psychological traits (such as personality, attitudes, motivation, etc.) – and the theoretical constructs tying together the measured independent variables.

The dependent variable (SLA/FLA) has often been language achievement in terms of academic success in foreign language study measured by such criteria as exam grades, grade point average, final degree results, and course-specific evaluations. All these are very indirect measurements of performance compared to native speakers of the target language and do not capture the finer points of individual differences in oral/aural performance such as communication competence, accent, pronunciation, naturalness of speech, etc. Some early studies (e.g., Naiman et al., 1978) that only examined achievement in FLA by measuring written language ability, found no relationships between these criteria and extraversion - introversion. In contrast, Dewaele and Furnham (1999) have pointed out that in studies where extraversion scores are correlated with linguistic variables extracted from complex verbal tasks, such as conversations, there is a clear pattern of extroverts outperforming introverts. This supports the argument that oral interaction in a foreign language is the most effective way to see how differences in personality traits (SPA factors) may correspond to differences in performance. Accordingly, this study employs evaluation of the participants' oral/aural performance in a foreign language to measure the dependent variable.

There are also problems with consistency: akin to the proverbial comparison of apples and oranges. In other words, are the subjects similar enough in terms of their relevant background or demographic factors (those that would affect FLA performance but are not psychological traits or SPA)? In order to obtain more reliable results for the dependent variable, these relevant demographic variables must be considered in selecting the participants of the study.

As for the independent variables, the approach of this study is to examine factors that have been proven to account for individual differences in successfully cultural adaptation. This approach addresses the need for more complex theoretical constructs. MacIntyre, Clément, Dörnyei, and Noels (1998) offer the Willingness to Communicate (WTC) model in which personality comprises an important part of the construct, with four further layers of variables conceptualized between personality traits and communicative behaviour (Dörnyei, 2005). However, there is still a need to follow a theoretical construct that takes into consideration that actively functioning in a foreign language usually takes place in a foreign cultural environment. Thus, it is necessary to explore which psychological factors facilitate both cultural adaptation and foreign language acquisition.

Method

Design

The design of the experiment incorporated a validated instrument that measures SPA factors that affect cultural adaptation. In this case, successful cultural adaptation is understood as the ability to function successfully in a foreign culture. Examples of functioning include work or study abroad. The psychometric scales of the research instrument provided the SPA variables serving as the independent variables in the analysis. The dependent variable was oral/aural performance in the target language. The analysis focused on associations between scores on the independent variables and the dependent variable.

Sample

In order to avoid the pitfalls of previous studies, in selecting the group from which the sample was taken, considerable attention was paid to the potentially confounding demographic variables, ones that could affect the dependent variable (degree of success in SLA/FLA) but are not under study. These demographic factors include the mother tongue of the participants, a predefined level of attainment in the target language, the number of languages spoken by the participants, the principle instrumental motivation for learning the language, how and where the target language was studied before functioning in the target language in line with the principle motivation, a predefined length of sojourn in the target language country, a predefined age at which the participants first came to the target language country, the number of countries visited besides the target language country for at least one week, and self-reported ability in the target language upon arrival in the target language country.

A group of 550 Chinese students studying content courses in Japanese at Kyushu Sangyo University in Fukuoka, Japan served as the statistical sample of SLA/FLA learners from which 86 students volunteered to participate in the experiment. Though one of the reasons this sample was selected was convenience since the students study at the institution where the experimenter is a professor of international management, the experimenter was also keenly aware that the sample was optimal in terms of controlling for potentially confounding demographic variables.

All the participants speak Chinese as their mother tongue. It is important that all the participants share the same mother tongue because cognate languages, languages with similar phonetic systems, and languages with similar syntactic characteristics are easier to learn. Japanese has borrowed from the Chinese writing system (thus there are numerous cognates in terms of words written in kanji) but the phonetic system and grammatical system of Japanese are quite different from those of Chinese. All the participants had attained a level in Japanese high enough to be admitted to the university where all content classes are taught in Japanese.

The status of a number of the other demographic variables under consideration was anticipated based on experience. The majority of the students would only be proficient in Chinese and Japanese. This factor is relevant since ability in multiple languages greatly facilitates the acquisition of additional languages. The principle instrumental motivation for learning the language would be to study at a Japanese university. The predefined length of sojourn in the target language country refers to 'at least two years' and this could be anticipated since the majority of Chinese students at the university study at a Japanese language school for an average of two years before entering the university. The predefined age at which the participants first came to the target language country is not before the age of 18. The majority of Chinese students at the university have come to Japan at least after graduation from high school in China. The number of countries visited besides the target language country for at least one week was anticipated to be very low since Japan is the only foreign country to which most of the Chinese foreign at the university students have ever been. Self-reported ability in the target language upon arrival in the target language country was anticipated to be low since Japanese is not widely taught in Chinese high schools. All of these demographic variables among others were analyzed in relation to the dependent variable and the results are reported in the statistical analysis section.

Measuring Instruments

Kozai Group's Global Competency Inventory (GCI) was selected as the instrument to provide and measure the SPA independent variables. After reviewing most of the questionnaires that are used to predict people's ability to function effectively in cross-cultural environments, the GCI was considered the most appropriate instrument based on personal expertise and experience in the field of cross-cultural management. The Kozai Group kindly agreed to cooperate by offering the free use and analysis of the GCI in the experiment. Rankings for the experimental subjects in the 16 GCI competencies were obtained in order to explore if relatively higher scores on the GCI corresponded with higher oral/aural performance in a foreign language. The 16 competencies of the GCI are associated with effective intercultural behavior and dynamic global managerial skill acquisition. They are grouped under three factors: Perception Management, which deals with learning effectively and includes (1) Nonjudgmentalness, (2) Inquisitiveness, (3) Tolerance for Ambiguity, (4) Cosmopolitanism, and (5) Interest Flexibility; Relationship Management, which focuses on managing relationships effectively and is comprised of (6) Relationship Interest, (7) Interpersonal Engagement, (8) Emotional Sensitivity, (9) Self-Awareness, and (10) Social Flexibility; and Self-Management, which explores managing the self in challenging situations and is composed of (11) Optimism, (12) Self-Confidence, (13) Self-Identity, (14) Emotional Resilience, (15) Non-Stress Tendency, and (16) Stress Management. Specification of the content domain of the GCI is readily available at <http://kozaigroup.com/PDFs/GCI-Technical-Report-Dec 2008-1.pdf>.

The measurement of the dependent variable (SLA/FLA) was the participants' oral/aural performance in Japanese ("Japanese Ability"). Six native speakers of Japanese, with graduate degrees in various fields and ranging in age for 24 to 62, were hired to view videotaped interviews conducted in Japanese with the participants and rank their ability in spoken Japanese. The evaluation criterion was "how closely the Chinese students sounded like a Japanese native speaker." The six Japanese judges viewed the 86 video files and ranked the subjects independently (no consultation with one another) over a period of one month. The judges were instructed to force-rank the participants' performance on a 5-point Likert scale (1 = the lowest and 5 = the highest) assigning 18 participants with the score of 5, and the remaining four groups of participants (17 in each group) with rankings of 4, 3, 2, or 1 (18 + 17 + 17 + 17 + 17 = 86). They also assigned a numerical rating (100 points as the highest rating) for each subject similar to what a teacher would do when grading papers. The sum of this number was only used to determine cut-off points for the Top and Bottom 17 when there were equal rankings at the "cut-off points."

Table 1
"Japanese Ability" Ranking: Std. Dev. Using 4 Scores

Ranking (across):		5	4.75 - 4	3.75 - 3	2.75 - 2.25	2.0 - 1.0
Std Dev (down)	Total	9	14	21	23	19
0.000	14	9	1	1	0	3
0.409	1	0	0	1	0	0
0.500	28	0	6	5	5	12
0.517	13	0	3	2	6	2
0.816	10	0	2	4	4	0
0.957	12	0	2	3	5	2
1.000	2	0	0	2	0	0
1.258	6	0	0	3	3	0
<i>Avg. Std Dev</i>	<i>0.594</i>	<i>0.000</i>	<i>0.591</i>	<i>0.760</i>	<i>0.773</i>	<i>0.497</i>

At first, calculating the mean scores given by all six raters yielded an average standard deviation of 0.926. To reduce inter-rater variation the highest value and lowest value were discarded leaving four scores. In the case of more than one score representing the highest and/or the lowest value, only one of the equivalent scores was discarded (for example, original scores of 5, 5, 4, 4, 3, 3 would become 5, 4, 4, 3 yielding a mean of 4). The four scores obtained using this system were averaged. This average was used as the measurement of “Japanese Ability.” The highest nine participants (average score of 5) and the lowest 3 participants (average score of 1) obviously requires complete agreement (Std. Dev. = 0). The average scores between 3.75 – 3 and 2.75 – 2.25 had the highest standard deviations, 0.760 and 0.733 respectively. This was expected since the range between 2.25 and 3.75 (34 out of 86) represents the most difficult group to score since difference between the participants ability in Japanese would theoretically be the smallest in the middle groupings. A summary of the standard deviations for the ratings using four scores is presented in Table 1 below.

For comparing GCI mean scores, the Top 17 and Bottom 17 were selected. For the Top 17 participants the average standard deviation between the final 4 ratings of “Japanese Ability” used was 0.210 while that for the Bottom 17 participants was 0.420. This method yields very high reliability in terms of the measurement of “Japanese Ability” in oral/aural performance.

In summary, the reliability of the measurement for “Japanese Ability” when using all 86 subjects is 0.594 in terms of average standard deviation as an indication of inter-rater variability. Given that the ranking of “Japanese Ability” is on a 5-point Likert scale, an average standard deviation of 0.594 is respectively low indicating high relatively inter-rater agreement. The reliability of the measurement for “Japanese Ability” when using the Top 17 and Bottom 17 sub-groups is 0.315 in terms of average standard deviation. The average rating of “Japanese Ability” for the Top 17 is 4.705 while that of the Bottom 17 is 1.617, yielding an average difference between the two groups’ scores of 3.08.

Procedure

A Chinese version GCI was administered to the participants consisting of 86 Chinese students studying at Kyushu Sangyo University where Japanese is the main medium of instruction. The translation of the GCI into Chinese was done under the auspices of the Kozai Group. The author, who is fluent in Chinese, along with 10 Chinese graduate students, checked the reliability of the translation. Thereafter, the students participated in a videotaped seven-minute semi-structured interview with a Japanese native speaker who interviewed all the 86 subjects on an individual basis. For the first few minutes of the interview the students read a short essay in Japanese concerning “reasons for learning foreign languages.” The remaining time of the interview was spent replying to a set of questions concerning their experiences and feelings about studying in Japan and learning Japanese. The Kozai Group provided analysis of the GCI questionnaires yielding scores for each of the 16 independent variables for each participant. Thereafter, the association between these scores and the ranking for dependent variable “Japanese Ability” was analyzed.

Statistical Analysis

For purposes of analysis, using the ranking method of “Japanese Ability” previously described, the 86 participants were divided into five groups with 18 participants in the highest group and 17 participants in the other four groups (in line with the rating system in which 18 participants were assigned a score of 5, though their actual score is an average of the final ratings as previously described). As previously mentioned, the Top 17 and one Bottom 17 were also compared in the analysis since the variance among the raters is lowest for the Top 17 and Bottom 17. Comparison between these two groups yields the most accurate results and allows for appraisal of means between the two groups. So while the comparison between these two groups yields the most reliable results, it is also interesting to explore to what extent the correlations remain positive or negative (as well as any change in significance) and to what extent the *F* value of the ANOVA changes when all five groups are analyzed.

The scores for “Japanese Ability” are analyzed in relation to the total GCI score (summation of all 16 GCI variables), the scores for the three factor variables (summation of their respective components), and the

scores for the 16 individual GCI variables. Multivariate analysis is not carried out since the GCI has already been refined using such techniques producing the principle components that modulate cultural adaptation. The goal of the study is explore whether or not psychological variables that facilitate cultural adaptation also facilitate SLA/FLA. Statistical modeling is most appropriate in this case and the focus requires the designation of dependent and independent variables.

Hypotheses

The 16 competencies of the GCI are associated with effective intercultural behavior. Thus, they represent the psychological traits that help explain why some people adapt to cultures better than others. High scores for the total GCI score, the 16 GCI competencies and the three factor variables (Perception Management, Relationship Management, and Self-Management) are associated with effective cultural adaptation. It is hypothesized that the psychological traits associated with effective cultural adaptation are also associated with effective language acquisition measured in terms of oral/aural performance.

Summary Hypothesis 1a: There are significant positive correlations between “Japanese Ability” and the total GCI score, the scores for the 16 competencies of the GCI, as well as the scores for the three factor variables.

Summary Hypothesis 1b: The mean scores of the Top 17 in “Japanese Ability” subgroup for the total GCI, the 16 competencies of the GCI, as well as the three factor variables are significantly higher than those of the Bottom 17 subgroup.

Summary Null Hypothesis 1a: The correlations between “Japanese Ability” and the total GCI score, the scores for the 16 competencies of the GCI, as well as the scores of the three factor variables are non-significant or significantly negative.

Summary Null Hypothesis 1b: There are no significant differences between the mean scores of the Top 17 in “Japanese Ability” subgroup for the total GCI, the 16 competencies of the GCI, as well as the three factor variables and those of the Bottom 17 subgroup.

Results

Analysis of the Demographic Data

The relevant demographic data was analyzed in relation to “Japanese Ability” in order to determine if these demographic data account for individual differences in the dependent variable. This is important since differences in relevant demographic characteristics have confounded the interpretation of the results of many previous studies. In summary, as predicted, the careful selection of the sample group has made it possible to avoid this pitfall.

The mean age of all 86 subjects was 24.31 with a range of 19 to 32 years of age. There was no significant correlation between age and “Japanese Ability” ($N = 34/86$ Pearson Correlation: 0.116/0.089, Sig. 2-tailed: 0.512/0.415).

In light of the so-called “Critical or Sensitive Period” hypothesis, “Age Started to Study a Foreign Language” (ASSFL) was investigated. The variable ASSFL was created by re-coding the ages: age 9 and below = 4, age 10 ~13 = 3, age 14~17 = 2, and age 19 and above = 1. There is no correlation between the recoded variable and “Japanese Ability” ($N = 34/86$ Pearson Correlation: -0.018/-0.100, Sig. 2-tailed: 0.919/0.359).

As for gender, there were 30 male subjects (34.9%) and 56 female subjects (65.1%). There was no significant relationship between gender and “Japanese Ability” ($N = 34/86$ Pearson Correlation: -0.124/-0.045, Sig. 2-tailed: 0.484/0.678). If there were a correlation then a negative number would mean being male may be an advantage since Male = 1 and Female = 2.

The relationship between “age came to Japan” and “Japanese Ability” was also explored. There was no significant relationship between “age when came to Japan” and “Japanese Ability” ($N = 34/86$ Pearson Correlation: 0.089/0.116, Sig. 2-tailed: 0.415/0.512). However, on average the Top 17 came to Japan at a later age than the Bottom 17 did.

“Months residing in Japan” at the time of the experiment was also recorded and analyzed. There was no significant correlation between “Months residing in Japan” with “Japanese Ability” ($N = 34/86$ Pearson Correlation: 0.076/0.111, Sig. 2-tailed: 0.668/0.308). The lack of a significant correlation between “Months residing in Japan” and “Japanese Ability” is not surprising. Almost all the subjects have been in Japan for at least 2 years. This is sufficient time for adept language learners to acquire a high level of Japanese given sufficient motivation. Length of residence tends to decrease in importance as time passes and 2 out of the 7 longest residents (all subjects included) are in the Bottom 17.

The “number of countries visited besides Japan for at least one week” was also noted. The overall majority of the subjects (88.4%) have not been to a foreign country other than Japan. Three of the 10 people who have visited a foreign country besides Japan are in the Top 17 and one is in the Bottom 17 in terms of “Japanese Ability.” Furthermore, only one subject had lived in another foreign country besides Japan (Russia) and the subject lived there for six months. This subject is not in the Top 17 in terms of “Japanese Ability.” The intent was to capture cases in which participants have extensive experience abroad besides Japan. Given these results analysis of the correlation with “Japanese Ability” is superfluous.

The number of languages spoken by the subjects was also analyzed. Though the correlations between “Japanese Ability” and “Numbers of Languages Spoken” are only significant at 0.112 (88%) for the Top/Bottom 17 and 0.074 (92%) for all subjects, in general, the author has experienced that learning languages gets easier as the number of languages spoken increases. One reason for the lack of a significant correlation may be the fact that all the subjects obviously spoke at least 2 languages (Chinese and Japanese) and the number of subjects who spoke 3 languages was only about 25% of the total number of subjects. Note that 35.3% of the Top 17 spoke 3 languages compared to only 1.2% of the total 86 subjects.

The “number of months spent studying in a Japanese languages school in Japan” was also investigated. There is no significant correlation between the number of months spent studying at a Japanese Language School in Japan with “Japanese Ability” ($N = 34/86$ Pearson Correlation: -0.146/-0.172, Sig. 2-tailed: 0.374/0.112). Note that though the results are not statistically significant they are slightly negative. Ironically, overall the subjects in the Top 17 have spent less time in a Japanese Language School in Japan than the subjects in the Bottom 17. This observation suggests autonomy and self-directed language learning may be a factor in determining the degree of success.

A number of motivational questions were included in the questionnaire. Among these questions two demonstrated a significant relationship between: “I wanted to learn Japanese in order to study at a Japanese University” ($N = 34/86$ Pearson Correlation: 0.407/0.220, Sig. 2-tailed: 0.017/0.042) and “I wanted to learn Japanese because I like to learn foreign languages” ($N = 34/86$ Pearson Correlation: 0.444/0.291, Sig. 2-tailed: 0.009/0.007). In addition, analysis of variance for the Top/Bottom 17 yielded an F of 10.419 and an F of 2.992 for all 86 subjects. It is interesting to note that enjoying learning foreign languages was the most significant factor of the all the motivational factors investigated.

The self-reported ability in Japanese of the subjects was also analyzed. There is no significant correlation between the subjects’ self-reported “Japanese Ability” when they first came to Japan and their present measured “Japanese Ability” ($N = 34/86$ Pearson Correlation: - 0.010/0.051, Sig. 2-tailed: 0.956/0.664).

Analysis of the Total GCI as a Summary Variable

The results clearly indicate that the total GCI (summation of all 16 GCI variables) can be very powerful predictor of oral/aural performance in foreign languages. The analysis of variance of the total GCI scores yielded an F Value of 51.648 ($p < .001$) for the Top 17 versus the Bottom 17 and an F Value of 16.967 ($p < .001$) for all five groups. The F Values are significantly high indicating that the differences between the groups are significantly greater than the differences between the individuals within the groups compared.

As shown in Table 2, the mean score of the Top 17 subgroup for the total GCI is significantly greater than that of the Bottom 17. Thus, the null hypothesis that there is no significant difference between the mean of the Top 17 subgroup’s scores for total GCI and that of the Bottom 17 subgroup is rejected.

The results reported in Table 3 show that there is a high significant positive correlation between the total GCI scores and “Japanese Ability” in the case of the Top 17 and Bottom 17 as well as in the case of all 86 subjects. Therefore, the null hypothesis that the correlation between the total GCI scores and “Japanese Ability” is non-significant or significantly negative is rejected.

Analysis of the Perception Management Variable and Components

The analysis demonstrates that the Perception Management Factor Variable (PMFV) predicts foreign language oral/aural performance; however, the PMFV is the weakest of the three summary variables since two of the competencies in this factor variable did not demonstrate any predictive power on their own.

Table 2

Differences of Means for the GCI Summary Variable

Table 2

Differences of Means for the GCI Summary Variable

GCI Summary Variable	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Inter 95% Conf.
Top 17	17	3.47	0.29	0.07	0.000	0.64	0.0009	0.4594 to
Bottom 17	17	2.83	0.22	0.05				0.8229

Table 3

Correlation between “Japanese Ability” and the GCI Summary Variable

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Global Competency Score	0.779/0.624	0.000/0.000	34/86

Table 4

“Japanese Ability” Groups’ F Values for PMFV and Sig. Components

	Top/Bottom 17	Significance	Five Groups	Significance
PMFV	20.808	.000	7.451	.000
Tolerance of Ambiguity	19.146	.000	5.623	.000
Cosmopolitanism	6.206	.018	2.675	.036
Interest Flexibility	9.830	.004	3.266	.016

The analysis of variance shows that the differences between the groups are greater than the differences among the participants within the groups for the PMFV, Tolerance of Ambiguity, Cosmopolitanism, and Interest Flexibility. The results are not significant for Nonjudgmentalness, and Inquisitiveness. The *F* Values for PMFV and the significant component variables are given in Table 4.

Table 5
Correlations between “Japanese Ability” and the PMFV

Scale	Pearson Correlation	Significance (2-tailed)	Subjects
Perception Management	.613/.416	.000/.000	34/86
Nonjudgmentalness	-.185/-.069	.295/.527	34/86
Inquisitiveness	.076/.015	.671/.894	34/86
Tolerance of Ambiguity	.583/.410	.000/.000	34/86
Cosmopolitanism	.456/.366	.007/.001	34/86
Interest Flexibility	.471/.238	.005/.027	34/86

As seen in Table 5, there are significant correlations between “Japanese Ability” and the scores for the PMFV, Tolerance of Ambiguity, Cosmopolitanism, and Interest Flexibility for both the Top 17 and Bottom 17 as well as for all 86 participants but not for Nonjudgmentalness, and Inquisitiveness. Thus, the null hypothesis that the correlation between the scores for Perception Management with “Japanese Ability” is non-significant or significantly negative is rejected for the PMFV, Tolerance of Ambiguity, and Cosmopolitanism but not for Nonjudgmentalness, and Inquisitiveness.

As seen in Table 6, the Top 17 subgroup mean scores are significantly greater than those of the Bottom 17 for the PMFV and the component variables Tolerance for Ambiguity, Cosmopolitanism, and Interest Flexibility but not for Nonjudgmentalness and Cosmopolitanism.

Table 6
Differences of Means for the PMFV

	<i>N</i>	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Interval 95% Conf.
Perception Management								
Top 17	17	3.5126	0.4713	.071	.000	0.7311	0.1603	0.4046 to
Bottom 17	17	2.7815	0.4632	.055				1.0576
Nonjudgmentalness								
Top 17	17	2.6928	0.5069	0.123	.388	-0.1438	0.1644	-4.876 to
Bottom 17	17	2.8366	0.4498	0.1091				0.1910
Inquisitiveness								
Top 17	17	2.8301	0.50394	0.1235	.672	-0.0654	0.1529	-3.768 to
Bottom 17	17	2.8954	0.3716	0.0090				0.2461
Tol. of Ambiguity								
Top 17	17	4.0412	0.4417	0.1071	.000	0.6026	0.1377	0.3221 to
Bottom 17	17	3.4386	0.3569	0.0865				0.8831
Cosmopolitanism								
Top 17	17	3.0686	0.3362	0.0816	.018	0.2598	0.1043	0.0473 to
Bottom 17	17	2.8088	0.2680	0.0650				0.4722
Interest Flexibility								
Top 17	17	3.0924	0.7248	0.1758	.004	0.7143	0.2278	0.2502 to
Bottom 17	17	2.3782	0.5975	0.1449				1.1783

The null hypothesis that there are no significant differences between the Top 17 subgroup's mean scores and those of the Bottom 17 subgroup is rejected for the PMRV, Tolerance of Ambiguity, and Cosmopolitanism, but not for Nonjudgmentalness and Inquisitiveness.

Analysis of the Relationship Management Variable and Components

Of the three factor variables, the Relationship Management Factor Variable (RMFV) is the second strongest predictor of foreign language oral/aural performance. The analysis of variance for the RMFV and component variables is given in Table 7. All the RMFV variables have significantly high *F* Values indicating that the differences between the groups are significantly greater than the differences between the individuals within the groups compared.

Table 7*“Japanese Ability” Groups’ F Values for RMFV and Sig. Components*

	Top/Bottom 17	Significance	Five Groups	Significance
RMFV	25.601	.000	10.836	.000
Relationship Interest	32.558	.000	8.906	.000
Interpersonal Engagement	15.708	.000	6.473	.036
Emotional Sensitivity	33.283	.000	11.910	.000
Self-Awareness	11.187	.000	4.308	.000
Social Flexibility	31.551	.000	6.806	.000

As shown in Table 8, the mean scores of the Top 17 subgroup are significantly greater than those of the Bottom 17 for the RMFV and all the component variables. The null hypothesis that there are no significant differences between the mean scores of Top 17 subgroup and those of the Bottom 17 subgroup is rejected for the RMFV and all the component variables.

Table 8
Differences of Means for the RMFV

	<i>N</i>	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Interval 95% Conf.
Relationship Management								
Top 17	17	3.3295	0.2813	0.0682	.000	0.6738	0.1181	0.2611 to
Bottom 17	17	2.8924	0.2184	0.0530				0.6130
Rel. Interest								
Top 17	17	3.6150	0.3864	.0937	.000	0.6738	0.1181	0.4333 to
Bottom 17	17	2.9412	0.2962	.0719				0.9143
Int. Engagement								
Top 17	17	3.7279	0.4640	0.1125	.000	0.6544	0.1651	0.3181 to
Bottom 17	17	3.0735	0.4982	0.1208				0.9907
Emotional Sen.								
Top 17	17	3.8382	0.4755	0.1153	.000	0.7721	0.1338	0.4995 to
Bottom 17	17	3.0663	0.2799	.0679				1.0447
Self-Awareness								
Top 17	17	3.6863	0.5763	0.1398	.000	0.5621	0.1681	0.2198 to
Bottom 17	17	3.1242	0.3847	.0933				0.9044
Social Flexibility								
Top 17	17	3.6667	0.4101	.0995	.000	0.6993	0.1245	0.4457 to
Bottom 17	17	2.9637	0.3087	.0748				0.9530

Furthermore, there are significant correlations between the RMFV scores and all the component variable scores with “Japanese Ability” for the Top 17 and Bottom 17 as well as for all 86 participants (Table 9). The null hypothesis that the correlation between the scores for the RMFV and all the component variables with “Japanese Ability” is non-significant or significantly negative is rejected.

Analysis of the Self-Management Variable and Components

The Self-Management Factor Variable (SMFV) is the strongest predictor of foreign language oral/aural performance. The analysis of variance for the SMFV and component variables is given in Table 10. All the SMFV variables have significantly high *F* Values indicating that the differences between the groups are significantly greater than the differences between the individuals within the groups compared. The *F* Value for SMFV is much greater than those for the other two factor variables (Perception Management and Relationship Management). Additionally, the *F* value for Self-confidence is much greater than that of any other GCI component.

As seen in Table 11, there are significant correlations between the scores of the SMFV and all the component variables and Japanese ability for both the Top 17 and Bottom 17 as well as for all 86 participants. The null hypothesis that the correlation between the scores for all the SMFV and all the component variables with “Japanese Ability” is non-significant or significantly negative is rejected.

The analysis of the difference of means between the Top 17 subgroup mean score are significantly greater than that of the Bottom 17 means for the SMFV and all the component variables as shown in Table 12. The null hypothesis that there are no significant differences between the means scores of the Top 17 subgroup and those of the Bottom 17 subgroup is rejected for the SMFV and all the component variables.

Table 9
Correlations between “Japanese Ability” and the RMFV

Scale	Pearson Correlation	Significance (2-tailed)	Subjects
Relationship Management	.661/.523	.000/.000	34/86
Relationship Interest	.798/.509	.000/.000	34/86
Interpersonal Engagement	.600/.453	.000/.000	34/86
Emotional Sensitivity	.707/.535	.000/.000	34/86
Self-Awareness	.527/.395	.000/.000	34/86
Social Flexibility	.691/.450	.000/.000	34/86

Table 10
“Japanese Ability” Groups’ F Values for SMFV and Sig. Components

	Top/Bottom 17	Significance	Five Groups	Significance
SMFV	43.801	.000	16.543	.000
Optimism	23.447	.000	8.444	.000
Self-Confidence	32.666	.000	8.779	.000
Self-Identity	70.531	.000	17.499	.000
Emotional Resilience	15.295	.000	3.643	.009
Non-Stress Tendency	17.640	.000	7.179	.000
Stress Management	4.631	.039	3.098	.020

Table 11
Correlations between “Japanese Ability” and the SMFV

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Self-Management	0.769/0.622	.000/.000	34/86
Optimism	0.659/0.521	.000/.000	34/86
Self-Confidence	0.712/0.490	.000/.000	34/86
Self-Identity	0.801/0.589	.000/.000	34/86
Emotional Resilience	0.508/0.349	.000/.000	34/86
Non-Stress Tendency	0.602/0.494	.000/.000	34/86
Stress Management	0.399/0.309	.019/.004	34/86

Table 12*Differences of Means for the SMFV*

	<i>N</i>	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Standard Error	Interval 95% Conf.
Self-Management								
Top 17	17	3.6788	0.3452	0.0837	.000	0.6788	0.1181	0.4699 to
Bottom 17	17	2.8924	0.9944	0.2411				0.8876
Optimism								
Top 17	17	3.4748	0.5119	0.1242	.000	0.7059	0.1181	0.4089 to
Bottom 17	17	2.7689	0.3150	0.0764				1.0028
Self-Conf.								
Top 17	17	3.7861	0.2447	0.0593				0.3511 to
Bottom 17	17	3.2406	0.3082	0.0748	.000	0.5455	0.0954	0.7399
Self-Identity								
Top 17	17	3.6529	0.3184	0.1153	.000	0.8294	0.0988	0.6282 to
Bottom 17	17	2.8235	0.2538	.0679				1.0306
Emotion. Res.								
Top 17	17	3.4779	0.4244	0.1029	.000	0.4926	0.126	0.2361 to
Bottom 17	17	2.9853	0.2994	0.0726				0.7492
Non-Stress T.								
Top 17	17	3.3922	0.5894	0.1430	.000	0.7974	0.1899	0.4107 to
Bottom 17	17	2.5948	0.5151	0.1249				1.1841
Stress Man.								
Top 17	17	2.9902	0.7488	0.1816	.039	0.451	0.2096	0.02413 to
Bottom 17	17	2.5948	0.4311	0.1046				0.8778

Discussion and Conclusions

Previous research on the effect of social, psychological, and affective factors on foreign language acquisition has not been always been definitive or holistic in approach. In addition, few researchers besides Schumann (1978) have pursued a theoretical approach that combines cultural adaptation and language acquisition. There are a number of reasons why the results of this study appear relatively more definitive.

First of all, this study has overcome the weaknesses of some previous research studies by carefully controlling for demographic factors that could be significantly responsible for individual differences performance in the target language but not related to the psychological traits or SPA factors under investigation. Specifically, all participants had the same mother tongue, started speaking the target language after the age of 18, studied the target language under similar conditions, had limited experience in other foreign countries besides Japan, had similar instrumental motivation, have lived at least two years in the target language country, had reached a level high enough to permit taking content courses in the target language, and spoke only either two or three languages. Furthermore, the dependent variable (SLA/FLA) was measured by the subjects' oral/aural performance in semi-structured interviews in which affective variables are most active. Finally, the main thrust of the study was to investigate if the SPA factors that facilitated functioning successfully in foreign cultures also facilitated foreign language acquisition. This approach offers a more holistic theoretical approach to investigating the role of SPA variables in SLA/FLA.

The results indicate that the Kozai Group's GCI is a very strong predictor of individual differences in oral/aural performance in foreign languages. High scores on a total of 14 of the 16 competencies comprising the GCI were strongly associated with high oral/aural performance in the target foreign language. Among the three factors that comprise the GCI, Self-Management was the strongest predictor followed by Relationship Management. Among the 16 competencies, Self-Identity was the strongest predictor of oral/aural.

These results coincide with the author's expectations based upon 38 years of experience functioning in multiple countries in over 20 languages. The GCI was selected based on this experience. Discussion of all the research findings and background knowledge related to the independent variables examined in this study is not possible in the limited space available here and will hopefully be published in the form of a book soon. Nevertheless, a few comments concerning Self-Identity seem appropriate.

A number of researchers recognize the central relationship between identity and SLA/FLA. Among the affective variables modulating FLA, Ehrman (1996) focuses in particular on learner identity and self-concept: "Every imaginable feeling accompanies learning; especially learning that can be as closely related to who we are, as language learning is." The ability and willingness to mimic accents of native speakers of the target language is strongly modulated by the flexibility of one's linguistic and cultural identity. The development of a strong core identity creates the foundation for obtaining this flexibility.

As Norton (2000, p. 10) stated, "to invest in a language is to invest in an identity." Norton believes that we are encouraged to seek broader explanations for success or failure in language learning and to view the student as having a complex identity that is best understood in the context of wider social, historical, and economic processes. It is being argued here that to be good at acquiring foreign languages requires a flexible self-concept or flexible cultural and linguistic identity along with a well developed strong integrated core identity that allows switching between languages and their corresponding identities without suffering from feelings of internal incongruence.

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Brands of Gender and Acculturation in Immigration Process of Second World War Survivors in Southern Brazil

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Grupo Relações de Gênero, Brazil

Abstract

This study focused on how a migration context drives changes in attitudes and identity. We investigate the process of acculturation of Jewish survivors of the Second World War who immigrated to South of Brazil decades ago. This is a complex immigration because the immigrants who survived the Second World War were more vulnerable to experience stress of acculturation since most of them lost their families, homes, and everything but their lives. This research consisted in a documentary and discourse analysis of interviews made with Jewish survivors' immigrants performed by the Jewish Cultural Institute Marc Chagall in Porto Alegre, Brazil. As results we found that immigrants have gone through a process of acculturation in which their ethnic identity gradually acquired new brands from a new social construction from this international migration to Brazil.

Introduction

Nowadays several researches are being conducted that aim to register the experiences of people involved in major trauma by collecting oral records. The theme that opened this type of research, which is called “testimonial movement”, was the Holocaust. Such traumatic events offer a unique opportunity to study the past (Ferreira, 2006).

We study the acculturation experiences of a few European Jews who survived the World War II. Holocaust survivors who were in concentration camps and those who managed to escape persecution and immigrated to the south of Brazil were the participants of this research. Of those only four are still alive, living in the city of *Porto Alegre*, where this research was conducted.

The aim of this research was to understand how three immigrant men and one woman went through the process of acculturation, during their immigration from Europe to Brazil, as survivors of the Second World War. This research aimed to answer the following questions: How the differences and similarities that immigrants found in their integration in Brazil, compared to its ethnic context in Europe before and during World War II influenced their identity? How did their integration in the Brazilian cultural context take place, taking into account the processes of immigration and acculturation?

To answer those questions it is important to first understand some concepts, such as identity, and also the context that Jews were inserted during the World War II. Identity is understood here as referring to the source and experience of a group. The groups are differentiated by language and culture that represent them. These distinguishing features represent sources of meanings defined by the people themselves, showing that we are not born with an identity and that identity is a social construct that depends on the culture in which each person belongs. Therefore, identity is a process of continuous construction, always remaining unfinished (Pedro, Ferreira, & Moraes, 2009). The war has effects on this construction.

Cultural identities are not rigid or immutable. They are transient and fleeting results from processes of identification with the culture in which each individual is inserted (Gregolin, 2008). According to Hall (2005), in the world result in an immigrant insertion in fragmented identities, multiple and decentered, implying in elements to think about the flexibility of boundaries in the construction of identity. Femenías (2007, 2011) argues that identity is complex, it is a construct that does not correspond to fixed traits, determinants and

independent of the experiences of individuals, but depends on the own experiences and reference groups, in constant restructuring and motion, in continuous dialogue with the environment and oneself, thus, the identity implies beliefs, customs and lifestyles not static.

Through the social identity theory, from the School of Bristol, Jewish identity can be understood as likely to conflict between belongingness to groups. If the identity results from the awareness of belonging to a group and not to another, such as the case for Jews living in the Diaspora, there is a double belonging: to the Jewish community and the specific nationality to which they are linked by immigration and such duplication is often experienced in a conflictuous way (Barlach & Pezo, 2008). Jews in the Diaspora had two desires: preserve their identity and the connection with their cultural center; and to integrate the broader cultural context in which they live (Barclay 1996; Barclay, 2004).

In Germany, during the war, social representations were accentuated by the discriminatory Nazi society around the Jewish identity (Tedesco, 2011). The Jews of that period were characterized by the imperative of geographical displacement and problems in relation to religious identity. The aim was to survive the persecutions, the possibility of extermination practiced by the Holocaust, the loss of family, friends, properties, dignity, deportations, citizenship, among others, and the solution was to break with their origins (Lesser, 1995).

The exile, migration or Diaspora is directly linked to nationalism (in the sense of belonging to a place, heritage or people) and stands in opposition to this by the feeling of estrangement and by the frequent emptying of the feeling of belonging. So soft and provisional identities emerge, and new perceptions of nation and nationality, re-signifying nationality in a transitional context, by constructing more fluid spaces (Almeida, 2011).

The cultural traits that mark a boundary of an ethnic group may change, and cultural characteristics of the individuals in the group can be transformed. According to Huntington (1997, cited by Junior, 2009) flags and other symbols of cultural identity are important because culture and cultural identity is what is most meaningful to most people. People are finding new identities, and yet old, parading under new flags, but often old.

Method

This research uses a qualitative approach, in which works with interpretations of social realities, emphasizing the significance of the data collected and the importance of the social context in which they were cast, playing the corpus and generating meaning (Allum, 2002), through a documental analysis.

Documental sources or archives are any personal records or iconic belongings. In this study data were collected in *Marc Chagall Jewish Cultural Institute of Porto Alegre (ICJMC)*, which has filed documents of Jewish immigrants. Documents to perform data collection were produced by ICJMC, which prepared the project called "Preservation of Jewish Memory", by recording interviews of Jewish immigrants in south of Brazil (the state called *Rio Grande do Sul*), transcribing and archiving in the Oral History Collection, together with some videos and pictures (Chagall, 1992).

As the object of this research is a specific part of the survivors' lives that involves acculturation in the immigration process, we used parts of interests of their life histories for analysis. Therefore the analysis of documents is appropriate, providing information about past occurrences that are not directly observed (Calado & Ferreira, 2006).

Each respondent signed a consent form. In our analysis of the documents were taken all measures to ensure that no identification of any person was possible whose documentation was read, studied and analyzed.

After the data were collected we used Discourse Analysis proposed by Rosalind Gill (2002) which works with the meaning of the speech and not the content of the text by searching the effects of meaning related to speech; it involves the understanding of the meanings that the participant manifests. According to Gill (2002) there are many styles of discourse analysis, but all defend the importance of discourse in the construction of social life, characterized by conflicts of various kinds. The term discourse refers to all forms of speech and all kinds of texts. A discourse analyst is interested in the text itself, and sees every speech as a social practice, embedded in a context, and not in a social vacuum (Gill, 2002).

Results

The corpus of this study consists of one autobiography, four transcribed interviews and two recordings, previously collected by the Institute Marc Chagall, focusing on the experience of war and immigration. From these documents we seek to explore issues of identity and culture present in the life stories of these survivors.

Survey participants are: Hana, who was born in Eastern Europe, close the Russian border, in 1923; Moses, who was born in 1928 in a small town to the south, in same European country than Hana; Benjamin, who was born in 1936 in a small town, in a country of northwestern Europe, and Samuel, born in 1929, in a central European country, but after war, from 1946 until 1958; he lived in another country in Western Europe, where he was naturalized. Although the names used here are fictitious, they were chosen from names commonly used by Jews.

The War and the Issue of Identity

Hana was integrated into the Jewish community in Europe and her grandparents had a kosher kitchen. Aldo, his father, was a traditional Jew who maintained traditions, such as Shabbat and going to the synagogue on religious holidays.

Hana started to feel aggression in public school where she studied because teachers gave lower grades to Jews. So her parents put her in a Jewish school that had classes on Sundays. Upon returning home she used to hear “Jew! You are studying today.” After Hitler’s rise, anti-Semitism became more aggressive and direct. Even the caretaker of the building persecuted her family, and the caretaker’s daughter said to Hana that she couldn’t talk with her anymore because she was a Jewish girl.

In the same country than Hana, Moses lived in a *shtetl*, where there were many Hasidic (religious), rabbis, and his parents were very religious. They also suffered from anti-Semitism.

Already in northwestern Europe Benjamin lived with his parents and sister. The paternal family was not religious, whereas the maternal family was religious. Every evening they used to pray and traditional Jewish dates were celebrated. The first memory he has of Nazism was the fact of having to change to a Jewish school, away from his home because Jews were no longer allowed to study in public schools. His father was supposed to be promoted to be director of the school, but another man was appointed due to anti-Semitism.

Samuel lived in central Europe. He used to go to the synagogue in the Jewish feasts. Until he was expelled from public school, he had no idea what anti-Semitism was. He was expelled because he had some disagreements. He started a fight when someone called him a Jew. Then he also went to a Jewish school, away from home.

Hana was the only one who was already in Brazil during war, managed to escape with her family from persecution before 1939. Moses, during war, was with his family, lived in a ghetto. They were forced to wear the David Star for identification. They were confined in a space with a capacity of 5,000 people, but there were placed 40,000. They were forced to do hard labor. Their belongings were confiscated and food was rationed. In 1943, his parents and his sister were taken to Auschwitz, and sent to the gas chambers. The two sisters and the brother, who remained, were taken to concentration camps. Moses was taken to the labor *Markstaet* camp. They were housed in wooden sheds. He was no more called by his name, but by the number he received. In early 1944 he was taken to the *Finfteichen* camp. In mid-1944 he was taken to the camp in the town of *Goerliz*; from 500 prisoners, 80 remained, including Moses.

Samuel was deported from his hometown in 1941, to the Lodz ghetto, where his father died due to health problems and lack of food. Samuel and his mother were deported to Auschwitz; his mother was sent to the gas chamber. Samuel was tattooed and became a number too. When the Russians started to get close, they were sent to other camps: First to *Mauthausen* and then to *Sachsenhausen*. Who took care of the camp, besides SS, were criminals, considered superior to Jews

Benjamin, during war, had the most peculiar fate. In 1941 the Nazis called his father for a “job”, but he was killed. So he and his sister were taken by the mother to a non-Jewish family, where they spent two nights. Then they were taken to another family, where he saw a former classmate. For safety, he could no longer leave the house, and were taken to a third family. Nearby was a hotel occupied by Nazis, who could not see

Benjamin. So once again there was suspicion of some risk, and moved home again. Another time, they passed through another family. After that, they returned to the third family. Benjamin was instructed on what to say if he ever were stopped and questioned: This family was his uncle and aunt, his father and mother died. Even a non-Jewish surname was invented. With time he forgot prayers in Hebrew. Both the second as the third family were Protestants. He used to read the Bible and celebrate non-Jewish dates. In half of those years in hiding, his mother rode 150 km to see their children after two years without seeing them. She visited them for a few hours, and then went away again.

After war Hana was already in Brazil, as we have seen, worked in a place where the manager was Jewish, showing the search for the reference group with same identity. Benjamin wanted to stay in that third family. His God was divided between Judaism and Christianity, and sometimes wondered if God existed. After war he returned to live with her mother and sister. He felt uneasiness related to everything that was Jewish, in the same time he felt the duty to be happy because he survived. He had to keep busy to not remember the time of war. At the first town where he lived in South America, teamed up with an Israeli Congregation, but felt uncomfortable in joining Jewish institutions. He married a Jewish woman and raised their children according to Judaism. In 1968, on a trip to Europe, visited a Jewish cemetery, and was thrilled with music from their country of origin. The name chosen for his son meant "the small, poor guy that got there." In the 1990s he saw several survivors who had never before spoken about the war, writing books, telling of the aftermath of World War II, and realized that he was not the only one who just "now" could see and face trauma. So he realized that for decades he had not lived but survived. For him "the survivor does not support the memory of yesterday, cannot think about today and life always runs after tomorrow." Received a letter from his "Sister of war" saying that for years she had a sister and a brother, and that after war, they suddenly disappeared. He visited the camp where his father had died, to mourn and "bury him". But he felt an orphan for life. Months later was the Bar Mitzvah of his son, which made him feel that he was following the tradition of passing the message from generation to generation. In 2003 he contacted the administration of the law of the Persecuted Disbursements and received a positive response. That left him relieved, not so much for the money, but because he touched on a subject that cannot move for years; so he achieved his greatest wish: peace of mind. One day he was invited to a Christmas night in a church, and became emotional as he recalled the Protestant culture that he was educated in that third family. Today if he feels like going to synagogue, he goes; if feel like going to church, he goes. If he feels like identifying himself as European, he does; if he feels like identifying with Latino culture, he does. However, he does not want to be presented as a Jewish European, but as a European Jew.

Samuel realized that the war had ended when suddenly there was no more German in Lubeck, and French Jewish officials, along with American Joint, took them to France. He found his brother and sister. But when his brother came to visit him, no one knew what to say, because they were seven years without having seen each other. He lived from 1946 to 1957 in Western Europe. He went to live with an aunt and uncle, but did not accept the authority of anyone. After everything that happened, he lived 12 to 17 years as a hunted animal, he felt revolted. Samuel does not miss his homeland. After the war, he went several times there for work, and he had a family there. In 1955 he worked there almost a year. He had a health problem and went to the doctor, who told him that he had ulcers and should operate, but he sought a second opinion, who told him: "you are not sick, when you leave this country you will no longer have a problem." He left there and had no further problems. For Brazil he has no patriotic spirit. At this point he never identifies with any country.

Samuel transmitted to their children a Jewish liberal education, he said that the important thing is question, not accepting. His family is not religious, but he wishes that future generations knew Judaism. He never wanted to talk about the Holocaust, but concluded that the worst is forgetting everything, as some say it did not exist. The memory must be kept alive in every possible way.

Moses, when the Russians bombed the city he was in, hid in a bunker and was saved. The *Haganah* (Israeli army in formation) took him to the hospital Rothschild in Vienna and then to *Bad Reichenhall* in Bavaria. From there he went to Munich, with the help of Unra and Joint (American organization supporting the Jewish survivors of war). In 1947 he moved to a town near Hanover, where they remained until 1950. His brother

and sister went to Israel in 1948 with the ship Exodus. His other sister went to the US, and Moses chose Brazil because the US would have to fight in the Korean War. He wanted to work, so a Jew began to help another.

Moses was told that his brothers were alive. He traveled and met them. He found an uncle who helped them, and together they went to their hometown, which was destroyed. In 1946, Moses and his brothers went to the city of *Bendzin*. They stayed in a kibbutz. There taught Hebrew, Judaism, to bring Jews to Israel. From March 1950 until the end of 1951 he lived in Munich, a Jewish neighborhood. In Argentina, Bolivia, Sao Paulo and *Porto Alegre*, when arrived he looked for the Jewish quarter, to see whether he felt there at home. In Brazil he worked in the factory of a Jew. The Jews who immigrated to Brazil after war were called "Grimberg", like new. In 1960 he was naturalized and became Brazilian. On the Solemnity of the International Day in memory of the Holocaust, in *Porto Alegre*, as representative of the last survivors alive, said that all the suffering that was passed by Jews was only because of being Jew. And being Jew is fighting for life.

The Culture in Europe and in Brazil

Culture is a system of interrelationships between the individual, social and historical processes of collective behavior in a time frame that makes possible cultural products, which include artistic, daily, scientific, technological and folk demonstrations, that vary in each culture. The fact that human beings see the world through their culture has resulted in a tendency to consider their way of life as the most accurate and most natural. This trend, called ethnocentrism, is responsible for, in his extreme case, the occurrence of numerous social conflicts, like Nazism of Second World War, which led to the migration of Jews to other cultures (Noriega, Carvajal & Grubits, 2009).

In the city where Hana lived in Europe, there was a very large Jewish community and many synagogues. In school she had classes of German as a second language, although there has always been hatred between Germans and people of the nationality of Hana. Jews attended theaters and concerts, as this was part of the educational process in her country. The only thing she thanks her native country for is the education. In her hometown teaching was excellent, the knowledge in terms of art (theater, music, art) was of good quality and there was a rich cultural life.

In the same country of Hana, in another city, Moses' family also spoke Yiddish. He studied in a public school that had few Jews. Teachers and peers were anti-Semitic. Envy was strong, because the Jews were wealthier. The church started to spread anti-Semitism, from the viewpoint of Moses. The religion came first of everything. In his hometown all Jews were religious. A goy (non-Jew) could not go to the synagogue, Jews and non-Jews did not marry each other. They felt more Jews than Europeans. The Hasidic (religious Jews) were in command. They displayed charity without wanting anything in return, different than Brazil. After the war, Jews kept being killed.

Samuel was also born in a city with large and active Jewish community. His father was a store manager until 1933, when he was fired during the Hitler government. In 1938 his brother and sister went to a country in Western Europe, where his father's cousins were willing to stay with them, but Samuel was the youngest and too small to be sent. He ended up in a concentration camp.

Where Benjamin was born there were two Jewish communities. In his school he had no friends. There was a saying that reflects the culture of his country, "talking is silver, silence is gold." If everyone knew how it was during World War II, there was no point in everyone whimpering. That's why he took so long to talk about his war experience. In his country culture was different from Brazil, the laws were followed.

Before Hana was born, her father was in Brazil. When he arrived in Brazil, the Brazilian anthem was played and a "black" took his hat and said to him stand up. His father was touched by his kindness, because if it was in Europe, he would have slapped him. Her father loved Brazil and soon adapted. After years of living there, after the first war, he returned to Europe and met her mother. After she was born her father always dreamed of returning to Brazil. Even in restaurants in Europe, the people said: "Jews undesirable." The father immigrated in January 1939. The money that Hana's mother had saved was to buy the tickets and arranged to buy clothes to Brazil, because where they were there wasn't the habit of getting well dressed. Even in the theaters at night they dressed uniform. Hana, her sister and her mother arrived in August 1939 in Brazil. The

father was hired by a firm of a Jew, and was part of the Israelite Congregation, where they had Portuguese classes. Later, Hana went to college. She followed some habits of her native country, such as food.

Like Hana, Moses also heard that Brazil was paradise, but Jews had difficulty getting visas. So, he went first to Paris to get a visa for Bolivia, a country that was corrupt and gave easily visa, in his opinion. He arrived in La Paz and thought “where am I going?”, “Jew look for Jew.” His area of living was in the Jewish quarter. But then, Bolivia had a revolution every year, inflation was rampant, there was instability and corruption, and he spoke Yiddish, but not Spanish. Decades later got a visa for Brazil.

Benjamin immigrated twice and had no idea what it meant to go to South America, with another language and culture. One scale, from the ship, was in Rio de Janeiro, and when he saw Corcovado, he had the impression that he was saying “welcome and see all the beautiful things we offer”. On the scale of SP he already perceived the reality from Brazil, when he saw a victim of a fatal car accident. And in the scale in Porto Alegre he played football. So he went to the final destination, where he would live in Brazil. A first experience in South America, that contrasted with Europe, was bureaucracy. He also remembered the pension where he stayed and the owner of the pension spoke Yiddish, and the first meal was Nudelsuppe, but when questioned what was that, the owner of the pension said, “it is called like this all around the world, how come you do not know?” Demonstrating that despite the Jewish communities from the outside appear homogeneous, are heterogeneous with diverse food traditions, political orientations, religious, socioeconomic and educational classes, and various national origins. Even so, among the Jews, an ethnic bond is created (Blay, 2009).

Benjamin spoke no Yiddish, and after a year he already spoke Spanish. Since he got his first job, he tried to integrate socially and culturally in the community, but his mental confusion was increased by the difficulties of adapting to the new culture. So, he made friends with whom he had cultural traits in common. In his country of origin, sex was only for procreation, unlike Brazil. As had no Latin American citizenship, when he needed to leave the country to work, had to ask for a visa to return. He realized in these trips throughout Latin America, that the gap between rich and poor is huge and prejudice too. In 1969, when business went badly, he decided to move to Brazil, Porto Alegre, where he assumed the role of director of the company where he worked. Since he came to Brazil for work, he had to adapt. He had no option to like or dislike the country, as he had to work. He agreed to come to Brazil when he looked at the size of the country on the map. In the 1980s he was already “acclimated.” At that time, he only used his native language to write letters to his mother or to speak with friends of same nationality. He felt that Brazilians also have prejudices, but he learned to live with these. He does not understand the existence of different trends of Judaism in Porto Alegre, believing that unity is a strength. He noticed that inherited cultural facets of the family that hid him for longer in Europe.

Samuel was not happy after the war in Europe, and after years of working in a country in Western Europe he went to South America He wanted to go to Uruguay, which until 1960 was called the Switzerland of South America for its economic stability and social policy. However the factory in which he worked in Europe, needed someone in Brazil, and he got the letter guaranteeing employment visa. In this firm people were Jewish. The barriers that he encountered were at work. But he adapted and felt repatriated. He used to speak Yiddish, before learned Portuguese. He came to work, but he is still working for living; unlike Europe, where he worked for 12 years and receives retirement. He sees this as one of defects of Brazil, but nowhere it is perfect, and the country was good for him and thinks he’s being right.

From survivor’s life’s histories, is evidenced that the acculturation process occurred gradually in the course of time. An example of this process refers to abandon Yiddish and adopted Portuguese. Although Jews have a defined identity, the survivors lived the process of acculturation abandoning some customs and habits that shaped the Jewish community in their homelands, and acquired other cultural elements in Brazil.

Discussion

After data were collected we could answer the following questions of the study: How were the differences and similarities that immigrants found in their integration in Brazil, compared to their ethnic context in Europe

before and during World War II? How did that influence their identity? How did their integration in the Brazilian cultural context take place, taking into account the processes of immigration and acculturation?

Anti-Semitism has gained force when, in 1935, the Nuremberg Laws changed the daily life of the Jews. They lost their citizenship and it was forbidden for them to relate to non-Jews Jews who were persecuted by the government of their country, but who managed to immigrate, may be called refugees, as they sought to protect their life in other countries. Those who immigrated after war, no longer suffered persecution in their own country, at least not officially. They could be viewed as economic migrants, seeking better economic conditions because Europe was almost destroyed. In theory, they were considered citizens, and therefore, supposedly, have rights of protection. We noticed that in the history of the four survivors.

In the testimonies we could observe that during the pre-war Jewish identity was related to being religious, attend a synagogue, Jewish feast dates, and pray. This until begin the persecution when they were expelled from schools, being rejected by teachers and lost job opportunities, all because of prejudice against the Jewish identity.

Thus, during the war being Jewish was to have to flee, hide, be deported, confined to ghettos, having to wear David Stars, and having camps as their final destination. Being Jewish was starving, feeling cold, and losing family; being Jewish meant being near death.

Concepts of ethno-cultural or national subordination to hegemonic cultures prevailing in Nazi Europe were emptied. Brazil, for groups persecuted by prejudice, is the place of mixture and ambivalence, because even in an era where “bleaching” was present, many Jewish refugees were able to resume and strengthen individual identities and freely construct their identity in opposition to rigidity imposed by the Nazi regime. Even those who felt that being Jewish was just a part of their multiple identities, often being the smallest part, than, for example, being German (Schpun, 2011), were not spared. That is what happened to Samuel.

Given that the construction of social reality is mainly symbolic, in relation to the consciousness of the survivors as agents, of how they represent themselves and the world, does not mean that they live in full consciousness of its determinations, since everything that constrains themselves, delimits the field of possibilities to act and represent (Chartier, cited by Falcon, 2002).

When an immigrant lacking possessions and government support comes to a new country, the first need is to find a place to sleep, eat, and work. These steps should be addressed immediately, not wait days or weeks (Blay, 2009). The Jews came together, and contacted each other. To survive, immigrants needed community (Blay, 2009). If a Jew cannot adapt, he or she seeks a Jew who lives there. To solve the first problems, it was important to relate with other Jews, integrate themselves in the community, bridge to the establishment in the new country. After months, or years, another emergency presented itself: to build a family. The economic success could wait: finding a mate was priority (Blay, 2009), as noted in the history of the survivors.

After the war ended, all survivors, in different ways, kept their Jewish identity, but all of them, somehow, had their identities strongly influenced by the war experience. Being Jewish after war meant recommence, immigrate, doubt whether God existed, afraid of being Jewish, being guilty of having survived. Living with trauma, but also pursuing peace, fighting against war memories. It meant not having more family and having to get married to have a family again. It was to face trauma. It was trying to live and not just survive. It was waking up from a nightmare, but not having anywhere to go. It was about seeking help from other Jews, seeking work, trying “to be human again.” It was about change and not identifying with any place, not belonging anywhere.

Thus, Jewish identity in the Diaspora was transformed in all survivors. Hana and Moses feel Brazilian Jews. Already Benjamin and Samuel prefer to be viewed as European Jews. Lesser (2001) found that being a Brazilian Jew or a Jewish Brazilian is not the same thing; however, these two notions co-exist simultaneously, often in the same people. It shows that identity is always incomplete, open to change (Femenías, 2011), mainly influenced by culture.

The issue of education was considered a key part of this cultural group. Language is the main cultural code that allows communication between people. And from the ninth and tenth centuries, *Yiddish*, the language of the merged Hebrew, German and medieval Slavic languages, was the main language of communication of

Ashkenazi Jews, as realized in the survivors' stories. Yiddish is a language identified by some studies as part of Jewish identity for Jews coming from Central Europe, and the *ladino*, a language for Jews from Sefarad - region of Spain and Portugal. The language occupies a predominant place for a people scattered in the Diaspora (Barlach & Pezo, 2008).

The elements that represent the Jewish culture are diverse. In the new homeland Jews brought in their luggage cultural elements making explicit the desire they had to express and celebrate their rituals in the new space (Santos & Bezzi, 2009). So while immigrants bring with them habits and values of their home countries, they adopt transnational practices, merging the source with the Brazilian looking to recreate a familiar environment and deal with adjustment difficulties (Rial & Assunção, 2011).

The food tradition is very strong in Judaism, and the surviving immigrants brought their traditions when immigrated. Food is another expression of Jewish culture and identity, with grandmothers teaching granddaughters, mothers and daughters gathered around a flavor and its own knowledge, distinguished and distinctive in the region to which they belong, but only because it pertains to the same people or know. There is a food for every occasion, linked to what one is celebrating: fried cakes in oil to commemorate the miracle of the oil (Chanuka, when the oil light lasted much longer); milk and honey for a sweet reminder of the grant of the boards of law to Moses; on Passover unleavened bread, as it is written in the bible, "will eat unleavened bread in a holy place" in memory of the deliverance of the Jews from slavery in Egypt (Barlach & Pezo, 2008).

The difficulty of getting visa was due to concern about the ethnic formation in Brazil, permeated by the search for a national identity. Between the 1920 and 1940 Jews, and Japanese and Germans, were objects of study for the formulation of Brazilian ethnic type. The concern intensified in the 1930s with the advancement of racist and imperialist thought influenced by Nazism. Between 1819 and 1947, the country received about 4.9 million immigrants (Cruz, 2009; Kreutz, 2010).

The visas to immigrate to Brazil were obtained years later by Moses, Samuel and Benjamin. The transformation of Moses occurred in relation to language, because before learning Portuguese, he spoke Yiddish. In his native country, Jews could not have land, so most of Jews worked in commerce. In his country he was first Jew and then European. The *shtetl* was Hasidic. In Brazil he entered the Brazilian culture "normally". He was used to travel around the world and concluded that he had to fit in the place where he was. In *Porto Alegre* he went to the Jewish quarter, where there is a small community, and he has adapted because did not intend to be alone. In Brazil he feels like being Brazilian first and then Jew, and he thinks Brazilians consider all equal. He married and had children, and all lives according to Judaism. He feels anti-Semitism, but less than Europe because there are too many immigrants in Brazil. In Brazil people marry with people of different religions, different from his country of origin.

The four survivors married Jews. Marriage between Jews incorporated diverse experiences and values, such as those brought from countries of origin. This synthesis resulted in the new Brazilian Jewish families. The marriage between immigrants Jews took place, in most cases, with partners of their own ethnic group, with partners of the same national origin, who identified themselves because they followed the rules brought from the country of birth, which varied according to the customs and local ties with the Jewish religion. Behind these choices, they were sure to find a partner whose values and behaviors would be similar, if not identical, to the partner: compliance with religious rules, the organization of the home, children's education, communication in a common language (Blay, 2009). Weddings interethnic evidence that ethnicity also migrates and so ethno-cultural territories are produced, reproduced and mobilize with the migratory dynamics (Tedesco, 2011).

Final Thoughts

There is a growing interest by researchers about memories of Holocaust survivors and World War II, which occurs at a time when these traumatic events are no longer part of living memory. This interest in historical memories probably occurs because there is an acceleration of social and cultural changes that threaten identities, to separate what we are from what we were (Burke, 2005).

Besides of memory work, of rescue, giving voice to trauma, there is an effort of theoretical and critical elaboration about identities. There is an important statement that has much to do with the concept of psycho-

social identity: after the Holocaust, the recognition of Jews of their Jewish identity was great. If, before the Holocaust, to be accepted socially implied a denial Jewish identity, then change can be seen in proliferation of autobiographical publications of survivors after the Holocaust (Barlach & Pezo, 2008).

Surviving Jews migrated to another economic, political and social reality. Cultural identity, being a dynamic process is modified over time and in historical context, seen in assimilations of new customs and traditions in the new territory. The cultural aspect also undergoes transformations from one generation to another within the same culture. At the same time Jewish cultural identity was preserved through celebrations and rituals that were performed in Europe before immigrating and which are still held in Brazil, with some changes due to process of acculturation, which occurred over time.

As events recede in time, lose some of their specificity, memories start to fit in recurring general schemes of culture. Such schemes help perpetuate memories, but at the cost of distortion (Burke, 2005), which could be considered a limitation of studies with survivors of WWII, but not less important or necessary. After all, according to Burke (2005), we still live in an era of ethnic conflict. Therefore we cannot forget such conflicts, and memory plays a key role.

Thus war trauma in memory is based on a notion of confession in search of the truth of self (Telles, 2011), as seen in biographies of survivors. Perhaps by having borne the pain of war and immigration, they could not change, these four survivors did not die, as Almeida (2011) said: "What cannot be changed must be endured." War offers a lesson of darkness as a gift irreversible to death (Minh-ha, 2011). And escaping from death was not possible for 6 million Jews. So the guilt is so common among those who survived.

What interested us in this research is that testimony has an important social function: remember what happened, not forgetting to which group one belongs (Barlach & Pezo, 2008). And even more, giving visibility to what has been overlooked: the phenomenon of immigration.

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High Prevalence of Dissociative Amnesia and Related Disorders in Immigrated People

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Abstract

Across various cultures, dissociative amnesic disorders have been shown to be triggered by psychological stress or trauma. In immigrant populations, stressful experiences can arise during pre-emigration, migration or post-migration phase. Preliminary data suggest that stresses related to various phases of migration and acculturation could trigger dissociative amnesic disorders via a dysregulation of hormonal stress responses. These findings are highly relevant in the era of increased globalization and call for culturally sensitive approaches, in order to accurately diagnose and optimally manage these conditions in the future.

Introduction

“Memory connects innumerable single phenomena into a whole, and just as the body would be scattered like dust in countless atoms if the attraction of matter did not hold it together so consciousness – without the connecting power of memory – would fall apart in as many fragments as it contains moments.” (Hering, 1870/1895, p. 12).

“Just as everything participates in memory, so memory participates in everything: every last thing. In doing so, it draws the world together, re-remembering it and endowing it with a connectiveness and a significance it would otherwise lack – or rather, without which it would not be what it is or as it is” (Edward Casey, 2000, p. 313).

Dissociative disorders are characterized by failures of integration of memory, perception, consciousness, emotion or identity and are regarded as being causally-bound to psychological trauma or stress. This view is rooted in Janet’s understanding of dissociation as “an inability of the personal self to bind together the various mental components in an integrated whole under its control” (Janet 1907, p.23; see also Maldonado & Spiegel, 2008; van der Hart & Horst, 1989). Janet is credited by several authors with a superior understanding of the dissociation (Maldonado & Spiegel, 2008; van der Hart & Dorahy, 2006), which only partly found its way in the recent international classification of diseases [e.g., DSM-IV-TR (2000), ICD-10(1982)]. Several diagnostic entities were included under the heading of dissociative disorders in DSM-IV-TR (2000), such as dissociative amnesia, dissociative fugue, depersonalization disorder, dissociative identity disorder and dissociative disorder not otherwise specified (such as Ganser syndrome). In contrast to DSM-IV-TR, ICD-10 (1982) also listed under the category of dissociative (conversion) disorder the entity of conversion disorder (with its various forms), which was in DSM-IV-TR (2000) captured under the heading of somatoform disorders.

Herein we will primarily focus on the relationship between migration and the dissociative disorders, which feature amnesia as part of their symptoms. These dissociative disorders include: dissociative amnesia, dissociative fugue, dissociative identity disorder, Ganser Syndrome and trance and possession dissociative disorders.

Dissociative Amnesic Disorders and the Diversity of Memory

The clinical picture of dissociative amnesic disorders reflects the fact that memory is not a unity, but can be classified along a content and time axis, respectively (for a review of the memory systems and their neural correlates, see Markowitsch and Staniloiu, 2012). The time-related partitioning of memory into short-term, working and long-term memory was empirically supported long time ago (Atkinson & Shiffrin, 1968). Along the time dimension, there is another well-established division into anterograde and retrograde memory, or new and old memory, respectively. The construct anterograde amnesia was reportedly advanced by Jean-Martin Charcot, a famous French neurologist from the end of the 19th century, to account for the “pathological forgetting” of events that happened after the traumatic event (Janet, Nicolas, & Penel, 2001). Following Etienne Eugène Azam (1822-1899), Charcot reportedly utilized the construct “retrograde amnesia” (Janet et al., 2001).

Along the content dimension, five distinct long term memory systems have been described: procedural, priming, perceptual, semantic and episodic. These memory systems are considered to build up ontogenetically and phylogenetically onto each other. The episodic memory system is currently viewed as being equivalent to the episodic-autobiographical memory (EAM) system and EAM is construed as the conjunction of subjective time, auto-noetic consciousness and the experiencing self (Tulving, 2005). EAM is a superior neurocognitive ability, which is likely affected by genetic factors, environmental conditions and their interplay. Its emergence and evolving are modulated by the socio-cultural-linguistic milieu (Nelson & Fivush, 2004). Being the most advanced acquisition both ontogenetically and phylogenetically, the EAM system is more susceptible to various types of insults (such as physical injuries or psychological stress) than other memory systems. It is therefore not surprising that processing of information within this system is the most affected in dissociative amnesic conditions, as we will detail below.

Variety and Unity within Dissociative Amnesic Disorders

Dissociative amnesia – one of the dissociative disorders – has as its central feature the inability to recollect personal information. The disturbance is precipitated by stressful experiences or psychological trauma and cannot be explained by normative forgetfulness. It cannot be better accounted for other psychiatric or medical conditions (such as traumatic brain injury). However, comorbidity with other conditions (such as affective disorders or personality disorders) may exist. Furthermore, it is not uncommon for dissociative amnesia to arise after an objectively mild physical injury, such as a mild traumatic brain injury (Staniloiu, Bender, Smolewska, Ellis, Abramowitz, & Markowitsch, 2009). Traditionally, dissociative amnesia has been characterized by the absence of significant brain damage, as evidenced by *standard* structural brain imaging methods. Although feigned amnesia has to be ruled out, there are situations where this is a challenging task (Barbarotto, Laiacina, & Cocchini, 1996; Spiegel et al., 2011). The symptoms of dissociative amnesia might lead to significant impairment of functioning or distress. The degree of experienced distress may be modulated by comorbid conditions, personality features (Stone, Smyth, Carson, Warlow, & Sharpe, 2006) and culturally-shaped views of dissociative experiences, selfhood and past (Kleinman, 1980). A lack of concern (indifference) about the current condition was described in several cases of dissociative amnesia (Janet, 1907; Wilson, Rupp, & Wilson, 1950), but its underpinnings still wait to be unraveled.

Dissociative amnesia can be further classified according to the degree and timeframe of impairment of EAM and the co-occurrence of deficits in semantic memory (personal or general knowledge). The most frequently diagnosed dissociative amnesia has a retrograde nature. This type of amnesia was termed ‘mnestic block syndrome’ (Markowitsch, Kessler, Russ, Frölich, Schneider, & Maurer, 1999b). The ‘mnestic block syndrome’ is characterized by an impairment of EAM, often spanning the whole past life. This impairment is attributed to a stress hormone-mediated memory retrieval blockade. Sometimes the ‘blocked’ episodic-autobiographical material is content-specific (selective) and/or is restricted to specific life epochs (Markowitsch, Thiel, Kessler, von Stockhausen, & Heiss, 1997b). This memory blockade may be reversible, either spontaneously or after the timely implementation of adequate treatment strategies.

Patients with ‘mnestic block syndrome’ usually have largely spared intellectual functions. They can read, write and calculate. They usually *know* how to behave in social situations. Old general knowledge might be preserved. The patients can acquire new EAM’s for long term storage; however, the newly acquired events may be less imbued with emotion in comparison to the ones of normal participants (Brand & Markowitsch, 2009; Reinhold & Markowitsch, 2009).

Some retrograde dissociative amnesic conditions may be accompanied by variable anterograde memory deficits, which could be detected with *standard* tests for anterograde memory. However, cases of dissociative anterograde amnesia, occurring in the absence of retrograde memory impairments seem to be much rarer (Markowitsch, Kessler, Kalbe, & Herholz, 1999a; Janet et al., 2001).

Amnesic disturbances of dissociative nature occur not only in dissociative amnesia, but also in other dissociative disorders, such as dissociative identity disorder, dissociative fugue, Ganser syndrome, and dissociative trance disorder and possession trance. When retrograde dissociative amnesia is accompanied by sudden and purposeful travel and compromised knowledge about personal identity – the condition is called dissociative fugue (Markowitsch, Fink, Thöne, Kessler, & Heiss, 1997a). Several terms had in the past been used in relationship to this condition, such as *les alienés voyageurs*, *determinismo ambulatorio*, *Wanderlust* (cf. e.g., Burgl, 1900). The disorder had initially been attributed to epilepsy, but later a hysterical (psychogenic) origin was suspected (Hacking, 1996). Currently there are debates about its superordinate category in international classifications. Some clinical observations have shown that, after the episode of fugue resolves, patients with a dissociative fugue condition present with profound retrograde amnesia for personal events. Additionally the neuropsychological and neurobiological profiles of these patients were found to bear similarities to those of patients with dissociative amnesia (Markowitsch, Fink et al., 1997a; Markowitsch, Thiel et al., 1997b; Hennig-Fast et al., 2008). Other authors however noted that a history of dissociative fugue was in their sample much more common among patients with a diagnosis of multiple personality disorder (dissociative identity disorder) than a diagnosis of psychogenic (dissociative) amnesia (Coons & Milestein, 1992). Subsequently, some clinicians made predictions that dissociative fugue may later be re-diagnosed as a dissociative identity disorder (Spiegel et al., 2011)

Dissociative Identity Disorder (DID) or multiple personality disorder is assumed to have its onset in childhood, but it is usually diagnosed in the fourth decade. It typically runs a chronic, waxing and waning course. Apart from marked impairments in the sense of identity and self (in the form of the existence of two or more distinct identities or personality states), inability to recall personal information (amnesia) is a common occurrence in DID. Until recently included under the separate entity of dissociative trance disorder, the possession trance seems to be an equivalent of dissociative identity disorder and to have trauma-related psychological and neurobiological underpinnings (Spiegel et al., 2011) Possession trance involves episodes of altered consciousness and perceived replacement of the usual identity by a new one, which is assigned to the influence of a supernatural entity (deity, spirit, power) (DSM-IV-TR, 2000).

A particular type of dissociative disorder that may be accompanied by memory disturbances is Ganser Syndrome, a condition that has been submitted to several diagnostic revisions. As Dwyer and Reid (2004) stated, “Ganser’s syndrome remains an enigma, but despite its rarity it should not be forgotten, for it serves to highlight the limitations of our understanding of the disordered mind” (p. 473). The Ganser syndrome was included under the category of Dissociative Disorders Not Otherwise Specified in DSM-IV-TR, where it was simply defined by giving approximate answers to questions (*vorbeireden*). Ganser’s (1898, 1904) original description of the syndrome however consisted of a constellation of impairments of consciousness (a hysterical semitrance), giving approximate answers to questions (*vorbeireden*), hallucinations and amnesia, suggestive of a “brief reactive psychosis to stress” (see also Staniloiu et al., 2009). Nowadays the relationship of Ganser Syndrome to dissociative amnesia is controversially discussed. The working groups for DSM V seemed to have tried to distance themselves from the Ganser’s initial description of the syndrome, by proposing that Ganser syndrome should solely be defined by giving inappropriate answers to questions and amnesia should be an exclusion criterion (Spiegel et al., 2011).

Stress, Dissociative Amnesic Disorders and the “Breakdown of Adaptation”

Dissociative disorders have been described in a variety of cultures and have been acknowledged to occur in response to traumatic stress (Spiegel et al., 2011). As Goldsmith, Cheit and Wood (2009) remarked, Pliny the Elder (23-79 A.D.) already had talked about “fright” as being one of the causes of partial or total memory “loss”.

Dissociative symptoms and conditions tend to affect younger people (Reinhold & Markowitsch, 2007). Dissociative amnesia was reported to be most frequently diagnosed in the third and fourth decade of life (Putnam, 1997). The younger age clustering may reflect developmentally-dependent differences in the windows of vulnerability to stress of the essential brain structures involved in autobiographical-episodic memory processes and/or the changes in the effectiveness of psychological mechanisms of suppression/repression over the life span. Although several studies reported a direct relationship between the severity of exposure to trauma and incidence of dissociative amnesia, cases of patients who developed dissociative amnesia after a seemingly minor stressor are however not such a rare occurrence. In a substantial number of the latter cases the collateral information revealed a history of repeated traumatic experiences with early onset (cumulative trauma) (Lupien, McEwen, Gunnar, & Heim, 2009).

Both stress and dissociation have been linked to adaptation as well as pathology. While some authors regarded dissociation as being part of a continuum, others have argued in favor of a categorical division into normal (e.g., day dreaming, absorption, reverie) and pathological dissociation, respectively (Spiegel et al., 2011; Seligman & Kirmayer, 2008). Several defensive functions of dissociation, such as behavioral automatism, compartmentalization of information and affect, analgesia and self-detachment were described. These functions were hypothesized to be recruited together in an acute traumatic situation in order to alleviate extreme psychological and probably physical pain (Putnam, 1997). Though these functions may be adaptive initially, a breakdown of adaptation (van der Kolk & van der Hart, 1989) may later ensue, being conducive to the illness.

Similarly to dissociation, stress hormones, such as glucocorticoids could have an adaptive or pathogenetic role. Glucocorticoids are involved in processes of brain maturation and remodelling, learning and memory. During acute stress glucocorticoids hormones are released to reset the homeostasis of the organism in the face of a challenge (a process called “allostasis”; McEwen, 2000). Persistently elevated levels of glucocorticoids could however have detrimental effects on brain function and/or structure as well as on other systems of the body (such as immune, endocrine or cardiovascular system).

The degree to which chronic repeated stress or massive acute stress may affect an individual’s homeostasis and lead to diseases may depend on a gamut of factors, such as genes, developmental phase, prior experiences, personality features, resilience, social support (e.g., Becker-Blease, Deater-Deckard, Eley, Freyd, Stevenson, & Plomin, 2004; Pacheco, Beevers, Benavides, McGeary, Stice, & Schnyer, 2009; McGowan et al., 2009; Dalenberg et al., 2012). Key brain structures for EAM and emotional processing are sensitive to the consequences of exposure to negative or stressful experiences (such as amygdala and hippocampal formation, prefrontal cortex and specific white matter tracts). Reductions in hippocampal volumes and episodic-autobiographical memory impairments were reported in patients with stress-related psychiatric conditions, such as post-traumatic stress disorders (Bremner et al., 1997), recurrent major depressive disorders (especially the ones with history of trauma) (Vythilingam et al., 2002; Campbell, Marriott, Nahmias, & MacQueen, 2004) and dissociative identity disorder (Vermetten, Schmahl, Lindner, Loewenstein, & Bremner, 2006). Glucose hypometabolism in hippocampal formation (in addition to other memory sensitive brain areas) was also reported in a patient with dissociative amnesia with both retrograde and anterograde memory impairments (Markowitsch, Kessler, Van der Ven, Weber-Luxenburger, & Heiss, 1998). In a study which reviewed data from 14 patients with dissociative amnesia with prominent retrograde memory impairments, functional brain imaging obtained in resting state showed evidence of metabolic changes in the right temporofrontal regions with a common significant hypometabolic zone in the right inferolateral prefrontal cortex (Brand, Eggers, Reinhold, Fujiwara, Kessler, Heiss, & Markowitsch, 2009). Furthermore, subtle structural changes within the white matter of the

right prefrontal region were identified in patient with retrograde dissociative amnesia (Tramoni, Aubert-Khalifa, Guye, Ranjeva, Felician, & Ceccaldi, 2009).

We and other authors have argued that the stage of development or declining of the key brain structures for conscious memory processing influences their susceptibility to the stress effects (Lupien et al., 2009; Staniloiu & Markowitsch, 2012). This may partly explain why the same type of traumatic experiences results in different brain morphological or functional changes and a chameleonic psychopathology (Magnin et al., 2014).

The Universality of Dissociative Disorders

It has taken a substantial amount of time and work to prove that dissociative disorders are not just “cameo” illustrations (Hacking, 1996) of a socially created malady. In 2006, Brandt and van Gorp asserted that “all the dissociative disorders are extremely rare” (p.332). Some authors concluded that certain dissociative disorders simply do not exist in their countries (Takahashi, 1991) and others viewed their existence as being the product of cultural contamination (Pope, Poliakoff, Parker, Boynes, & Hudson, 2007). Recent data however suggest that dissociative disorders occur across a variety of cultures and are etiologically linked to psychological stress. In a recent review article, Spiegel et al. (2011) noted that the reported prevalence values for dissociative amnesia range between 1.8% and 7.3%. Johnson et al. (2006) reported for dissociative amnesia a 12 month-prevalence of 1.8% in a USA community of 658 adults who were assessed with psychiatric interview. Sar et al. (2007) conducted a study in Turkey where forty-three of the ninety-seven consecutive outpatients admitted to the psychiatric emergency department were initially screened for dissociative experiences using the screening tool Dissociative Experiences Scale (DES). The patients who had a DES score higher than 25 (39.5% out of 43 assessed) were further evaluated with the Dissociative Disorders Interview Schedule and then the Structured Clinical Interview for Dissociative Disorders (the gold standard diagnostic instrument for dissociative disorders). Seven percent (3 patients) of the 43 patients met diagnostic criteria for dissociative amnesia. The average DES score of patients who met criteria for dissociative disorders was reported to be 43.7.

While many data support the trauma model of dissociative disorders (Dalenberg et al., 2012), the manifestations of dissociative disorders in a particular context may be shaped by social learning and expectancies and culturally-moulded sensation schemas and explanatory models of illness (Hinton, Howes, & Kirmayer, 2008).

Immigration and Stress

Migrants’ physical and mental health reflects the interplay between their genetic predispositions and environmental factors. While certain factors related to migration seem to be protective (the so-called “healthy immigrant effect”), others appear to increase the risk for certain physical and mental diseases (Breslau, Aguilar-Gaxiola, Borges, Kendler, Su, & Kessler, 2007; Alegria et al., 2008). Stressful life experiences could occur during any of the following stages associated with migration, such as during pre-emigration, migration itself or post migration (Lindert, Schouler-Ocak, Heinz, & Priebe, 2008). Legal status, income, living situations, the degree of disruption of the community network, language proficiency (as a measure of acculturation), cultural factors, perceived discrimination, nutrition modulate the risk for physical and mental health problems.

“The price the body pays for being forced to adapt to adverse psychosocial or physical situations” is defined as “allostatic load” and “it represents either the presence of too much stress or the inefficient operation of the stress hormone system” (McEwen, 2000, p. 110f). Data from the field of epigenetics (an area concerned with the influences of the environment on gene expression) point to a high developmental plasticity of the hypothalamic–pituitary–adrenal axis, which plays a significant role in hormonal stress responses (Charney, 2012). Various lived stressful experiences (including the social ones) can – especially if they had their onset in the early life – alter the expression of different genes involved in stress hormone responses, sometimes with long-lasting consequences. However not only lived experiences and familial and socio-economic factors might shape the phenotype. Weather, light and day cycles, eating habits, toxins, radiation, ethnic density, urban design may also interplay with genes and affect their product (Dealberto, 2007; Veling, Susser, van Os, Mackenbach,

Selten, & Hoek, 2008; Charney, 2012). All these factors listed above might be part of the new “ecological niche” (Charney, 2012), to which a migrant might need to adapt.

Studies in Canada and other countries have reported substantial risk for psychopathology in young refugees (Kirmayer et al., 2011). For certain psychiatric conditions it was noted that the risk in migrants might increase with the duration of residence in the new country. This raises the hypothesis that at least in the case of certain psychiatric conditions, chronic stress related to immigration and acculturation might play a role. Higher rates of psychoses among certain immigrant populations and their descendants were reported by several studies (Zolkowska, Cantor-Graae, & McNeil, 2001; Veling, 2013) and posited to be underpinned by complex environment-gene interplays (epigenetic mechanisms).

Apart from the brain, several other body systems can be targets of the allostatic load (including cardiovascular, immune and endocrine system). Evidence for an increased allostatic load in migrants comes from several studies that showed an increased risk for cardiovascular diseases in immigrants. In one study the risk was still significant after adjusting for variables, such as age, sex, ethnicity, income, education, family history of heart disease, diabetes, smoking, physical activity, body mass index, visceral adipose tissue, lipids, insulin, glucose and blood pressure (Lear, Humphries, Hage-Moussa, Chockalingam, & Mancini, 2009). The risk for cardiovascular disease was found to be higher among migrants with lower levels of adjustment (as determined by language proficiency). High prevalence of diabetes mellitus was identified among immigrants, which in one study correlated with the length of residence in the new country (Oza-Frank, Stephenson, & Narayan, 2011). In another study the levels of acculturation predicted hormonal stress responses and pregnancy outcomes among pregnant Hispanic women (Ruiz, Dolbier, & Fleschler, 2006).

Immigration and Dissociative Disorders

A possible connection between immigration and dissociative disorders was suggested long time ago by several psychoanalysts, who remarked that immigration posed a significant threat to feelings of identity and self-cohesiveness (Grinberg & Grinberg, 1989). Dissociative symptoms have extensively been studied as part of posttraumatic stress disorder in immigrant populations or refugees. A higher propensity of certain ethnic groups to react to distress with dissociative symptoms has been described (Guarnaccia, Rivera, Franco, & Neighbors, 1996). This propensity was noted to inversely correlate with successful acculturation to a Western society in some studies (Marshall & Orlando, 2002). Data about the occurrence and characteristics of other dissociative amnesic disorders in migrants remain however limited.

During, Elahi, Taieb, Moro, and Baubet (2011) wrote a recent review on dissociative trance and possession disorders where they included 28 articles with 402 cases with this condition. They concluded that patients with this condition can be found in each continent and culture. They remarked that 18% (73) of patients had a migrant background or belonged to a minority (ethnic or religious). Case reports pointed out to a higher frequency of Ganser syndrome among ethnic minorities (Deibler, Hacker, Rough, Darby, & Lamdan, 2003; Sigal, Altmark, Alfici, & Gelkopf, 1992; Nardi & Di Scipio, 1977; Tsoi, 1973). A number of patients with Ganser syndrome described in single case reports were male subjects with a background of immigration (Assion & Schmidt, 2004; Butzke, Hoffmann, Offinger, & Stanga, 2005; Weller, 1988; Staniloiu et al., 2009). Cases of dissociative amnesia or fugue occurring on a background of immigration were reported by several authors (Fujiwara et al., 2008; Thomas-Antérion, Guedj, Decousus, & Laurent, 2010; Arzy, Collette, Wissmeyer, Lazeyras, Kaplan, & Blanke, 2011; Modai, 1994).

We have described several patients with dissociative amnesic conditions (dissociative amnesia, dissociative fugue, Ganser syndrome) occurring on a background of immigration (Staniloiu, Borsutzky, & Markowitsch, 2010; Markowitsch & Staniloiu, 2013; Staniloiu & Markowitsch, 2012). All these patients underwent extensive medical and neurological work up (including conventional structural brain imaging studies), thorough psychiatric evaluations and comprehensive neuropsychological evaluations. Own gathered data showed that in a substantial number of patients whom we investigated, the dissociative amnesic condition occurred on a background of immigration, several years after the patients had immigrated to the new country of residence. In most cases, the country of new residence was Germany. In two cases, the host countries were located in North

America (Canada and USA) and in one case the host country was Switzerland. The countries of origin were represented by Poland (2 cases), Bulgaria (1 case), former Soviet Union (Kazakhstan; 1 case), former Yugoslavia (Albania; 1 case), United Kingdom (1 case), Portugal (1 case), Spain (1 case) and South America (Venezuela; 1 case). One patient was a second generation immigrant; all the others were first generation immigrants. Most first generation immigrants immigrated during young adulthood; one first generation immigrant came to Germany during childhood. Two patients with migration background were women; seven were men. Age at the time of the onset of dissociative amnesic disorder ranged from 15 years to 48 years. All patients lived in an urban environment in the host country. Most of them were married or in a long term romantic relationship. Two patients belonged to a sexual minority. The educational level ranged from 8 to 17 years. In all cases, but one, the dissociative amnesia occurred after a seemingly objective minor physical insult (e.g., mild concussion). The physical insult was apparently work-related in five patients. A careful anamnesis revealed in all cases a history of recurrent stressful experiences, usually with onset in childhood, youth or young adulthood. These experiences included childhood trauma, loss of parent before age nine years, vicarious exposure to partner's trauma, civil-war related trauma, business or job loss, financial difficulties, loss of income or work status, school related difficulties, illness of partner, interpersonal difficulties with family members or peers, perceived discrimination due to belonging to an ethnic minority or sexual minority. All patients searched for a biological somatic explanation of their symptoms and rejected or were very reluctant to accept any proposals for a psychological or psychiatric mechanism. Most patients showed evidence of severe retrograde dissociative amnesia. One patient developed severe anterograde dissociative amnesia, in the absence of significant retrograde memory impairments (Markowitsch & Staniloiu, 2013). One case presented with both retrograde and anterograde dissociative memory impairments (Staniloiu & Markowitsch, 2012). The neuropsychological profile of patients revealed, in addition to severe memory deficits, impairments of executive functioning, cognitive flexibility, emotional processing and social cognition. Findings from standard structural imaging were in all cases unremarkable. Available data from newer imaging techniques however suggested metabolic and microstructural alterations in brain areas involved in mnemonic processing. All our cases of dissociative amnesic disorders occurring on an immigration background have followed a chronic course, despite various treatment approaches.

Our findings have spoken in the favor of the trauma model of dissociative amnesic disorders (Dalenberg et al., 2012), while leaving open the possibility that the relationship between trauma and functional amnesia may have been moderated by factors such as genetic polymorphisms, culturally- shaped models of personhood, past and illness (Seligman & Kirmayer, 2008; Yehuda et al., 1995). The relationship between age and the onset of trauma has been shown by several studies to play a pronounced role in modulating the trauma-related pathology. While in 1995, Yehuda and colleagues conjectured that culturally-shaped behaviors and traditions, such as commemorating may explain the distribution of abnormalities in mnemonic processing in the Holocaust survivors, in 1997 Yehuda and co-workers found an association between the nature of memory impairment and the age at the time of the trauma onset (Yehuda et al., 1997). In particular, they showed that the survivors who had been younger at the time of the Holocaust were more likely to report symptoms of (dissociative) amnesia and emotional detachment.

The fact that the patients described by us developed the dissociative amnesic condition several years after the immigration to the new country is consistent with both the lag or incubation model of trauma (van der Kolk & van der Hart, 1989) and the cumulative models of trauma. Cumulative trauma in migrants may result from premigration, migration and postmigration stressful experiences (including acculturative stress). As mentioned above acculturative stress has been linked to the emergence of a variety of medical or psychiatric conditions, including dissociative disorders (Haasen, Demiralay, & Reimer, 2008; Ruiz et al., 2006; During et al., 2011). Data on acculturative stress and associated pathology support a trauma explanatory model for dissociative disorders in migrants. They offer a potential understanding of this condition as an acculturation-bound syndrome (During et al., 2011) rather than a culture-bound syndrome (Pope et al., 2007). Specific environmental components of the host country, such as social stress related to social exclusion, defeat or discrimination or to socio-economic disadvantage may interact with genetic vulnerabilities and mediate the onset of dissociative

amnesic disorders, by modifying neurotransmitters' activity and brain connections (Veling, 2013). Disruptions of prefrontal cortex and amygdala connections may arise in predisposed individuals as a result of social defeat or rejection (Hsu et al., 2013; Markowitsch & Staniloiu, 2011). These disruptions may then lead to various abnormalities in processing social and emotional cues, with consequences for the emotional well-being of migrant in the new environment. Furthermore, they may lead in extreme cases to a desynchronization during retrieval, between the processing of fact-like mnemonic information and affect-laden mnemonic information; this desynchronization may result in dissociative amnesic conditions (Brand et al., 2009).

Conclusions

Albeit they were for a while “dissociated” from the research and clinical area (Spiegel, 2006), dissociative disorders presently stir a renewed interest. Epidemiological studies suggest that they continue to be under diagnosed. A substantial number of cases follow a chronic course and evidence based data on the treatment of these conditions remain scant (Markowitsch & Staniloiu, 2012, 2013). Preliminary findings suggest that migration and acculturative stress may represent a risk factor for their development (see, e.g., Ritsner et al., 1996). We conjecture that migration-related stresses interact with genetic predispositions and produce a shift in the expression of biological vulnerabilities for dissociative amnesic conditions. We hypothesize that premorbid risk factors for the development of dissociative amnesic conditions encompass: genetic vulnerabilities for dissociation, a biological biasing towards increased sensitivity to stress, young age, a history of trauma with early onset, impairments in emotional processing, traits of decreased cognitive flexibility, a repressive cognitive style, which may be partly culturally shaped (Beere & Pica, 1995; Fujiwara et al., 2008; Markowitsch, 2002, 2008). There is currently a bulk of data on the relationship between sex/gender and trauma (Spitzer & Freyberger, 2008). Our own results suggest that dissociative amnesia affects men at least as frequently as women. These findings are consistent with results from other working groups (Kritchevsky, Chang, & Squire, 2004) and remind of Charcot's sayings (Illis, 2002). “Male hysteria is therefore not very rare-quite the contrary”, stated Charcot (1999, p. 255). Furthermore, Charcot (1999) opined that hysteria in men is remarkable in its “permanence” and “tenacity”. Based on currently accumulated data, it is however difficult to come up with a conclusion regarding the sex or gender differentiated course of dissociative amnesia. This may be a topic for further explorations. Other questions that might need to be addressed in the future include the following: How do experiences of social adversity or exclusion related to being an ethnic minority affect the risk for dissociative amnesic disorders (Veling, 2013)? What about the social stress related to loss of status or dominance (McEwen & Gianaros, 2010)? How do culture and ethnic features mediate the relations between dissociation and psychological adjustment (Seligman & Kirmayer, 2008; Douglas, 2009)? What about the degree of ethnic identification? For migrants from Poland, there appears to be a decrease in happiness when they move to Western European countries (Bartram, 2013). Is this decrease in happiness a potential risk factor for traumatization or dissociation (Sharot, Riccardi, Raio, & Phelps, 2007)? Which roles play the source country, the host country and the duration of residence in the host country in well-being? Future longitudinal, well-designed studies that incorporate social, biological and ecological models are warranted to shed light on these questions. In the current era of globalization, these studies might be of high importance and they should be guided by paradigms and methodologies that pay increased attention to cultural issues.

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Characteristics of the Country of Origin and Immigrant Children's Psychological and Sociocultural School Adjustment

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Abstract

In many Western countries, immigrant children lag behind their native peers in educational attainment, yet there appear to be systematic differences between immigrant groups. We set out to examine (1) if these differential outcomes can be linked to group specific acculturation patterns, following similar processes to those observed at individual level; and (2) to what extent characteristics of the country of origin could help to explain differences in the acculturation process and school adjustment of immigrant children in Germany. In particular, we investigated country-level relationships between children's acculturation conditions (e.g., perceived parental acculturation expectations and cultural practices in the family), orientations (ethnic and mainstream), and school-related outcomes (psychological and sociocultural) as well as how these in turn are related to characteristics of the countries of origin (e.g. cultural values, level of development and religious composition). Country-level analyses were based on a diverse sample of 695 second- and third-generation immigrant children from more than 50 different countries in Germany. (1) Our results confirm that country-level relationships between different components of the acculturation process are very similar to what has been found at individual level. (2) We found some relationships between characteristics of the country of origin and acculturation conditions, yet, the relationships with children's acculturation orientations and outcomes were much weaker. These findings suggest that (1) there appear to be immigrant group-specific acculturation patterns which can explain differences in school adjustment and (2) characteristics of the country of origin only play a minor role in immigrant children's school adjustment.

Introduction

Education is the key to success in later life and an important outcome of the acculturation process for immigrant youth. However, in many countries, students with an immigrant background lag behind their native peers when it comes to school performance (OECD, 2012). This gap appears to be particularly pronounced in countries with a tracked school system, such as Germany. At the same time, large differences can be observed between different immigrant groups. Differences between children representing different immigrant groups have also been found on a wider range of school adjustment outcomes (Schachner, Van de Vijver, & Noack, 2013). Such differences may be rooted in acculturation patterns of an immigrant group as well as in characteristics of the culture of origin.

Based on the acculturation framework (Arends-Tóth & van de Vijver, 2006) and Bronfenbrenner's (1979) ecological systems theory, the aim of this study is two-fold. Firstly, we want to confirm whether the relationships between different components of the acculturation process that are found at individual level also hold at country level (involving here the country of origin of the child or his or her parents). Similarity of

correlations would suggest similar processes at individual and group level. Secondly, we want to explore the relationship between objective characteristics of the country of origin and children's acculturation conditions, orientations, and school-related outcomes. If such relationships can be found, this might identify some of the causes for why different immigrant groups have different acculturation patterns. In the following, we first introduce ecological models of acculturation and development as they form the background of our research. We then elaborate the acculturation framework in more detail, as we want to investigate its validity at country level, and review empirical findings on the relationship between different components of children's acculturation process and other country-level variables. Based on this theoretical and empirical background, we derive some specific hypotheses. Yet, since the research base at country level we could draw on is still limited and we wanted to include a wide range of variables, the nature of this study is to some extent exploratory.

Ecological Models of Acculturation and Development

Ecological models of acculturation and development propose that acculturative and developmental processes take place in and are influenced by context. In ecological systems theory (Bronfenbrenner, 1979), which has been very influential in developmental research, a distinction is made between different types of environment, in which individual development takes place, ranging from micro-level as the most proximal context to macro-level as the most distal context. A similar distinction between distal and proximal environments impacting on psychological processes has been conceptualised in acculturation research (e.g., Arends-Tóth & van de Vijver, 2006).

Looking at immigrant children's acculturation process, at the micro-level there is the family or group of friends, which may affect children's acculturation orientations and outcomes (Arends-Tóth & van de Vijver, 2006). The family in turn is nested in a particular immigrant group from a particular country of origin. We would therefore expect that there is systematic variation in the acculturation process of children from different immigrant groups and countries of origin. At the same time, the host society also provides a particular societal context, which may vary in the way immigrants are received and where different immigrant groups may have a different status in relation to other immigrant groups and the mainstream society. This societal context also has to be taken into account when interpreting acculturative patterns of different immigrant groups.

Group-Level Relationships Between Acculturation Variables

So far, the relationships between different components of the acculturation process as specified in acculturation models such as the acculturation framework (Arends-Tóth & van de Vijver, 2006) have only been investigated at individual level. In our study, our first aim is to see whether these relationships also hold at the level of the country of origin. In country-level analyses, all cases from a single country are aggregated and some statistic, usually the mean, is taken as an indicator of the status of the country on the variable. In the last decades there is increasing interest in models in which individual- and country-level variables are related to each other (called multilevel equivalence or isomorphism in multilevel research; van de Vijver, van Hemert, & Poortinga, 2008). If we find similar relationships at country- or immigrant group-level to what has been found at individual-level, this supports the idea of immigrant group specific acculturation patterns and suggests that they are based on similar processes at country level to what has been specified at individual level. The acculturation framework (Arends-Tóth & van de Vijver, 2006) divides the acculturation process into conditions, orientations, and outcomes and suggests a mediation model, where a range of conditions affect outcomes either directly or via the individual's orientation towards the culture of origin and the national (majority group) culture.

In particular, a larger perceived distance between the culture of origin and the mainstream culture have been associated with a lower mainstream and a higher ethnic orientation (Suanet & Van de Vijver, 2009). Taking the family as a micro-level environment, acculturation conditions such as educational opportunities at home, perceived parental acculturation expectations, and cultural practices in the family have been shown to affect children's acculturation orientations and school adjustment at individual level (Schachner et al., 2013). In particular, more educational opportunities, more perceived school involvement and interest shown by the

parents, and a more frequent use of the mainstream language at home have been associated with a higher (perceived) mainstream orientation amongst immigrant parents and children and a better school adjustment of the children. Religious practices on the other hand are one way of maintaining cultural traditions of one's country of origin (Güngör, Bornstein, & Phalet, 2012) and have therefore been associated with a higher orientation towards the ethnic culture. Although this has been found mainly amongst Muslim immigrants (Ward, 2013), our own individual-level research could demonstrate that the intensity of religious practice is a stronger predictor of ethnic orientation than the differentiation between various religious denominations (Schachner, Van de Vijver, & Noack, 2011). Due to cultural transmission processes, perceived acculturation expectations of the parents concerning ethnic and mainstream culture have been strongly linked to children's own orientations towards either culture at individual level (Schachner et al., 2013).

Our individual-level analyses further showed that antecedents often have opposite effects on the two acculturation orientations (i.e., where we had anticipated a positive effect on mainstream orientation, there was simultaneously a negative effect on ethnic orientation and the other way round). Although children's own orientations are positively correlated, this suggests that in the family environment, the two cultures seem to be seen as mutually exclusive. This is also in line with literature suggesting that a unidimensional conceptualisation of acculturation, viewing it as a movement from one culture to the other, is prominent in Germany, both within the mainstream society and amongst immigrants (Berry, Phinney, Sam, & Vedder, 2006b; Yağmur & van de Vijver, 2012; Zick, Wagner, Van Dick, & Petzel, 2001).

Acculturation orientations have also been shown to be differentially related to sociocultural and psychological outcomes (Arends-Tóth & van de Vijver, 2006; Ward, 2001; Ward & Searle, 1991). The orientation towards the national culture has been found to be primarily associated with sociocultural outcomes in the domain of the national culture. These are mainly related to the acquisition of cultural skills, such as competence in the national language, the ability to build up relationships with majority group members, and general skills related to the life in the society of settlement. A stronger orientation towards the culture of origin on the other hand is conducive for maintaining stronger ties and a more extensive social support network in the ethnic group and has therefore been associated primarily with psychological outcomes. These include psychological well-being, life satisfaction, and self-esteem as positive indicators, and psychological and mental health problems as negative indicators.

Since we were interested in immigrant children's school adjustment, we focused on sociocultural and psychological outcomes that are relevant in the school context, such as their academic and social self-concept, their academic performance and their relationship with native peers in class. A conceptual overview of the different components of the framework which are included in this study is displayed in Figure 1. At individual level, we have largely confirmed the expected relationships between variables as specified above (Schachner et al., 2013). Our first aim in the present study is to test to what extent these relationships found at individual level generalise to country level.

Acculturation Variables and their Relationship with Other Country-Level Variables

Based on the ecological models of acculturation and development described above, acculturation variables aggregated at country of origin-level can be expected to be related to other characteristics of immigrants' country of origin, such as cultural values, the religious composition, and the level of economic development. In particular, it was the second aim of our study to test for relationships between country-level social indicators (such as level of affluence of the country of origin) and aggregated scores of perceived cultural distance, cultural practices and (perceived) acculturation strategies of parents and children, (perceived) opportunity structures at home and children's psychological and sociocultural school adjustment (aggregation is across all participants from the same country of origin).

Perceived cultural distance. Since perceived cultural distance refers to the subjective perception of cultural differences between the country of origin and the host country, we expect that aggregated perceptions of cultural distance at country of origin-level are associated with between-country differences on more objective measures of the country-level characteristics just mentioned. Yet, very few studies have examined the rela-

tionship between such objective characteristics and perceived cultural distance: In a study with international exchange students in Russia, Suanet and Van de Vijver (2009) investigated country-level relationships between perceived cultural distance and mean differences between host country and country of origin on characteristics such as cultural values and the level of development. However, they only found a significant negative correlation with Uncertainty Avoidance. In a study on German expatriates abroad, Stroppa (2011) found significant relationships between perceived cultural distance and country differences in Assertiveness Orientation, Ingroup Collectivism and Human Orientation. Relationships with socioeconomic indicators could not be confirmed.

Germany is usually amongst the top countries when it comes to economic and political development (World Bank, 2011). In terms of values, Germany scores relatively high on Harmony (vs. Mastery), Egalitarianism (vs. Hierarchy) and Autonomy (vs. Embeddedness; Schwartz, 2009). Using Hofstede's (2009) values, Germany scores relatively low on Power Distance and Indulgence (vs. Restraint), and relatively high on Individualism (vs. Collectivism), Uncertainty Avoidance, Masculinity (vs. Femininity) and Long-Term (vs. Short-Term) Orientation. Concerning the religious composition, Germany has a relatively large proportion of Christians and non-religious people whereas the proportion of Muslims is relatively low (Wikipedia, 2007). Since economic and political development, cultural values and religious composition are central variables when describing cultural differences, it seems likely that children from countries which are more similar to Germany on those characteristics perceive a lower level of cultural distance.

Cultural practices and acculturation strategies. As previously mentioned, a higher perceived cultural distance has been associated with a stronger ethnic orientation at individual level (Suanet & Van de Vijver, 2009). Similarly, at country of origin level, we expect that children from countries that are more dissimilar from Germany in terms of values, religious composition and development show a stronger preference for cultural maintenance and a weaker preference for adopting the mainstream culture and perceive their parents to have similar acculturation expectations. This should also be reflected in the mainstream language being used less at home in these groups.

Concerning the link with values, a study with Turkish immigrant adolescents in Belgium (which is similar to Germany on many country-level characteristics) confirms this at the individual level by revealing that Separatedness, which is comparable to Schwartz's notion of Autonomy and Hofstede's (2001) notion of Individualism, is linked with a higher orientation towards the national culture (Güngör, 2007). Conformity, an opposite value, which is comparable to Schwartz's (2006) notion of Embeddedness and Hofstede's (2001) notion of Collectivism, has been associated with a higher orientation towards the ethnic culture.

Religiosity has been linked to more conservative values at country level (He, van de Vijver, Dominguez Espinosa, & Mui, 2012; Schwartz, 2012). We therefore expect that a higher proportion of people belonging to a religious group in the country of origin is associated with a higher importance of religion in the family as well as a higher (perceived) preference for cultural maintenance and a lower (perceived) preference for cultural adoption by parents and children as well as a lower national language use at home.

Opportunity structures at home and children's school adjustment. As previously mentioned, there is some individual-level evidence linking a better adjustment with lower levels of perceived cultural distance (Suanet & Van de Vijver, 2009; Ward & Searle, 1991). Galchenko and Van de Vijver (2007) also confirmed that exchange students from countries that were more similar to the host country on core country-level characteristics were better adjusted. Yet, relationships of value discrepancies between country of origin and host country with adjustment could not be confirmed (Ward & Searle, 1991). In light of these findings, it seems likely that children from countries that are more similar to Germany in terms of values, religious composition, and level of development, show more psychological and sociocultural adjustment. Further, parents from countries that are more similar to Germany on those variables are likely to be better adjusted themselves. We therefore expect that they provide more opportunities for learning at home, are perceived as more involved in their children's school life, and communicate in the mainstream language more often.

The Present Study

The present study goes beyond previous research as it is one of very few studies in which country-level variables are studied in an acculturation context, using data from immigrants from a large number of countries as well as country-level data from large-scale international data bases. Based on the literature and arguments presented above, we expect the following relationships:

Hypothesis 1: Relationships between different components of immigrant children's acculturation process at country of origin-level replicate what has been found at individual-level (Schachner et al., 2013). Our specific expectations are:

Hypothesis 1a: A larger perceived cultural distance, a higher importance of religion in the family, and a stronger perceived parental expectation to maintain the ethnic culture are associated with a stronger orientation towards the ethnic culture and a weaker orientation towards the mainstream culture.

Hypothesis 1b: More learning opportunities at home, a higher perceived parental interest in children's school life, a more frequent use of the mainstream language at home, and a stronger perceived parental expectation to adopt the mainstream culture are associated with a stronger orientation towards the mainstream culture and a weaker orientation towards the ethnic culture.

Hypothesis 1c: More learning opportunities at home, more perceived parental interest in children's school life, and more frequent use of the mainstream language at home are also associated with better school adjustment outcomes.

Hypothesis 1d: A stronger ethnic orientation is primarily associated with better psychological adjustment, whereas a stronger mainstream orientation is primarily associated with better sociocultural adjustment.

Hypothesis 2: Larger differences on country-level characteristics (cultural values, level of development, and religious composition) are associated with aggregated acculturation variables in the same way as what has been found in relation to perceived cultural distance at individual level.

Hypothesis 2a: Children from countries that are more different from Germany in terms of cultural values, level of development, and religious composition experience a larger cultural distance between their country of origin and Germany.

Hypothesis 2b: Children from countries that are more dissimilar from Germany in terms of values, religious composition and development perceive a greater importance of religion at home and show a stronger preference for cultural maintenance and a lower preference for adopting the mainstream culture. They perceive their parents to have similar acculturation expectations.

Hypothesis 2c: Children from countries that are more similar to Germany in terms of values, religious composition, and level of development show more psychological and sociocultural adjustment. Parents from countries that are more similar to Germany are expected to provide more opportunities for learning at home, to be perceived as more involved in their children's school life, and to communicate in the mainstream language more often.

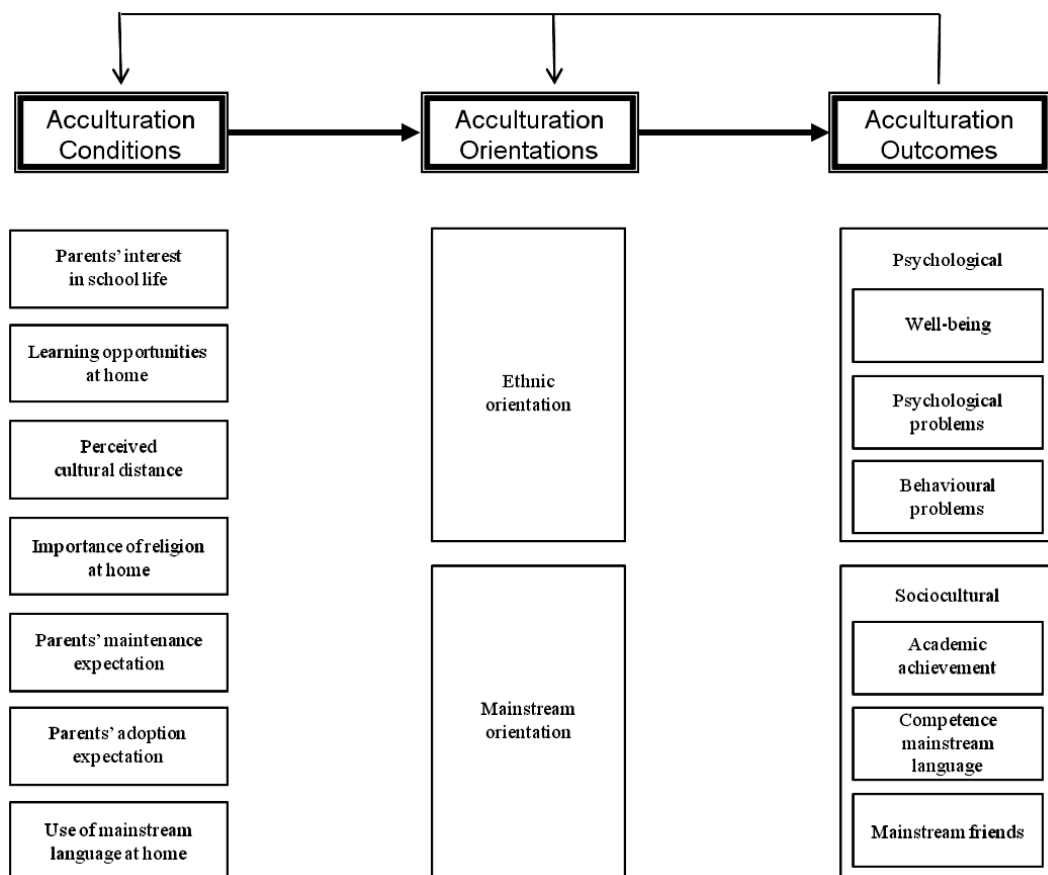


Figure 1. Conceptual overview of components of the acculturation framework included in our study

Method

Participants

A total of 695 students with an immigrant background (age: $M = 11.04$ years, $SD = 0.88$, 49% male) participated in the study. All students came from a mono-ethnic parental background. Students represented 54 countries of origin, reflecting the major immigration waves to Germany, with guest workers from Turkey and Southern Europe arriving in the 1960s and 1970s and refugees from Eastern Europe and the Balkan in the 1990s. The biggest groups came from Turkey ($N = 281$), Italy ($N = 45$), Kosovo ($N = 39$), Greece ($N = 38$), Croatia ($N = 32$), Russia ($N = 30$), and Bosnia ($N = 23$). The majority of students (86%) were born in Germany. Average age at migration for first generation students was $M = 4.66$ years ($SD = 3.31$). The three main secondary school types in Germany were all well represented in the sample: low vocational track (“Hauptschule”, $N = 210$), high vocational track (“Realschule”, $N = 281$), and academic track (“Gymnasium”, $N = 204$). Usually, the concentration of children with an immigrant background is much higher in the lower tracks (OECD, 2012). However, to make results comparable across school types, schools with a similar proportion of immigrants were targeted in all three tracks, averaging at 69%.

Measures

Measures included variables, which were part of a questionnaire administered to students and therefore measured at individual level, whereas country-level variables were taken from various country-level data bases as specified below.

Individual level. Individual-level variables are listed below in the order they occur in the conceptual overview of the different components of the acculturation framework which are included in this study (see Figure 1). Children’s psychological and sociocultural adjustment each consisted of three components, which are listed separately. For psychological adjustment these components were well-being, psychological and behavioural

problems. Psychological and behavioural problems were included as measures tapping into internalising and externalising ways of coping with psychological issues as defined by Lazarus and Folkman (1984). Since boys and girls differ in their (maladaptive) coping strategies, it is important to include both types of outcomes when studying both sexes (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999). For sociocultural adjustment, these components were the number of mainstream friends, national language competence, and academic achievement. Measures not originally available in German were translated using a translation back-translation method (Van de Vijver & Leung, 1997). Some scales were developed or adapted based on qualitative interviews and subsequently tested in a pilot study with 51 immigrant children from the target age group. Scale characteristics are displayed in Table 1.

Learning opportunities at home were measured with a single item, asking the child about the number of books in the household on a 5-point Likert scale from (1) *none or very few* to (5) *more than 200 books*. This is a standard measure for children of this age group, who might not yet know the educational attainments of their parents, and has been validated in large-scale studies (e.g., Albert, Hurrelmann, & Quenzel, 2010).

Perceived parental interest in children's school life was measured using a newly developed scale. This scale comprised three items (e.g., "My parents often ask me what we are doing at school."). Responses were given on a 5-point Likert scale from (1) *no, that's not right* to (5) *yes, that's right*.

Perceived cultural distance was measured using an adaptation of Galchenko and Van de Vijver (2007). The six items measured how similar or different the children perceived their culture of origin and the German culture, tapping into public and private life domains relevant and familiar to children of this age, such as family life, general way of life, dress and parenting styles (e.g., "How similar or different do people dress in Germany and your other country?"). Responses ranged from (1) *very similar* to (5) *very different*.

The importance of religion at home was measured using a single item, which was newly developed and asked the children how important they felt religion was in their family. Responses ranged from (1) *not important at all* to (5) *very important*.

Perceived parental acculturation expectations were measured with 12 items adapted from scales by Arends-Tóth and Van de Vijver (2007), which tapped into the public and private domain and were mirrored for ethnic and mainstream dimensions (e.g., "My parents want me to get to know the customs and traditions from my other country."). Responses ranged from (1) *no, that's not right* to (5) *yes, that's right*.

The use of the mainstream language at home was measured with a single item, asking children which language(s) was spoken at home, with responses ranging from (1) *always my ethnic language* to (5) *always the mainstream language*.

Children's acculturation orientations were measured with a reformulation of the items measuring perceived parental acculturation expectations which had been adapted from Arends-Tóth and Van de Vijver (2007, e.g., "I like the way families live in my other country."), but were extended to tap into more aspects, resulting in a total of 18 items. Responses ranged from (1) *no, that's not right* to (5) *yes, that's right*. Additionally, ethnic and mainstream identity were measured with ten items by Phinney (1992, e.g., "I have a lot of pride to be a member of my ethnic group").

Well-being comprised measures of general life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985), academic self-esteem (SESSKO; Schöne, Dickhäuser, Spinath, & Stiensmeier-Pelster, 2002), and social self-esteem (Marsh, 1988). General life satisfaction was measured with the widely used Satisfaction With Life Scale (SWLS; Diener et al., 1985), which comprises five items (e.g., "I am satisfied with my life."). The SWLS has recently been validated in different immigrant communities and age groups (Ponizovsky, Dimitrova, Schachner, & van de Schoot, 2012). Academic self-esteem was measured with five items from the SESSKO scale by Schöne et al. (2002), which is frequently used in the German context (e.g., "Learning new things is easy for me."). Social self-esteem was

measured using seven items from the relations with peers subscale of the Self-Description Questionnaire for early adolescents (SDQ I) by Marsh (1988; e.g., "I make friends easily."). Answers on all three scales ranged from (1) *no, that's not right* to (5) *yes, that's right*.

Psychological problems were measured with a combination of five items on physiological stress symptoms (e.g., “I feel dizzy and faint.”) and five items on depressive mood (“I worry a lot.”), which have been used with immigrant youth in 13 countries (Berry, Phinney, Sam, & Vedder, 2006a). Responses ranged from (1) *almost never* to (5) *very often*.

Behavioural problems were measured with scales on disruptive behaviour (McCarthy & Hoge, 1987) and delinquency (Jenkins, 1995), consisting of five and six items respectively. In the former, children were asked how often a particular situation had occurred over the last four weeks (e.g., “How often did you chat with your neighbour during class in the last four weeks?”), from (1) *never* to (5) *very often*. In the latter, children were asked how often a particular situation had occurred over the last 12 months (e.g., “How often have you destroyed school property in the last 12 months?”), from (1) *never* to (5) *once a month or more*.

The number of mainstream friends was measured by asking the children to list their five best friends in the classroom, using their respective numbers on the class list. This was then matched with their friends’ questionnaire data to obtain their demographic information and extract the number of mainstream friends for every child. This procedure is less prone to social desirability and has been found to be effective in previous research (Vervoort, Scholte, & Scheepers, 2011). The actual number of friends was then turned into a categorical variable with (0) *no German friend*, (1) *one German friend*, and (2) *at least two German friends*.

National language competence was measured firstly, by asking the child about the respective mark obtained in the last report (German language marks from (1) *very good* to (6) *unsatisfactory* were re-coded to match the second measure). The second measure was a single item where the child rated his or her ability to communicate in the mainstream language (German) from (1) *not at all* to (5) *very good*.

Academic achievement was measured using school type as a proxy. In South-West Germany, where the data were collected, children get a recommendation from primary school for any of three types of secondary school, which is based on standardized exams and binding. The school type (with scores of (1) *low vocational track*, (2) *high vocational track* and (3) *academic track*) is therefore a good indication of overall academic performance for children who just entered secondary schools.

Country level. At country level, a number of indicators from various data bases were included, which were expected to be correlated with aggregated individual-level variables as specified in the introduction. In particular, we chose the most prominent psychological variables describing cultural differences, namely cultural values (Schwartz, 2006; Hofstede, 2001), as well as the most common indicators of economic and political development, namely the Human Development Index (HDI; United Nations, 2010), and the globalisation index (Swiss Federal Institute of Technology Zurich, 2010). For religious composition, we chose the proportion of the two largest religious groups (Muslim and Christian) and the proportion of agnostics in a country.

Values were measured using data from the Schwartz Value Survey (Schwartz, 2009) and Hofstede’s (2009) data on his value dimensions. Schwartz’s (2006) model comprises of seven cultural values along three dimensions: Embeddedness versus Affective and Intellectual Autonomy, Mastery versus Harmony and Hierarchy versus Egalitarianism. Hofstede’s (2001; Hofstede, Hofstede, & Minkov, 2010) model comprises of six dimensions, namely Power Distance, Individualism, Masculinity, Uncertainty Avoidance, Long-Term versus Short-Term orientation, and Indulgence versus Restraint. Values on a national level range from (1) *not important* to (5) *very important*.

Religious composition was measured using the proportion of Muslims, Christians, and non-religious people within a country (Wikipedia, 2007). Muslims and Christians were chosen as they made up the largest religious groups within our sample. The proportion of non-religious people in a country was chosen as non-religious people have been shown to differ from religious people on a number of variables including values (Schwartz, 2012). Values range from (0) *none* to (1) *the total population*.

Globalisation was measured using the KOF Index of Globalisation (Swiss Federal Institute of Technology Zurich, 2010). It combines measures of economic (e.g., percentage of GDP in trade), social (e.g., number of TVs per 1000 people), and political (e.g., number of embassies in the country) dimensions of globalization.

Development was measured with the Human Development Index (HDI; United Nations, 2010), comprising 24 variables. It measures the average achievements in a country in three basic dimensions of human development: a long and healthy life (e.g., life expectancy at birth), access to knowledge (e.g., mean years of schooling), and a decent standard of living (e.g., gross national income per capita).

Procedure

Students were recruited from the lowest two grades in culturally heterogeneous secondary schools in Germany. Subject to permission from school authorities and parental consent, they completed a questionnaire in class and under supervision of the first author and her assistants. The questionnaire was part of a larger project on school-related acculturation processes of immigrant children and took the children about 1.5 hours to complete.

Results

Preliminary Analyses

Prior to the hypothesis tests, exploratory factor analyses (EFA) were carried out on all individual level scales to establish their dimensionality. The expected structure emerged on all subscales. Reliabilities, means, and standard deviations for each subscale are displayed in Table 1. As all internal consistencies were above .60 and several well above .80, it was concluded that the internal consistencies were adequate.

Table 1
Scale Characteristics by Subscale

Scale	<i>M (SD)</i>	Reliability
Acculturation conditions		
Perceived cultural distance	3.45 (.91)	.83
Use of mainstream language at home	2.75 (.85)	-
Learning opportunities at home	3.03 (1.14)	-
Importance of religion at home	3.89 (1.24)	-
Parents' acculturation orientations		
Adoption expectation	3.51 (1.11)	.85
Maintenance expectation	3.97 (1.01)	.84
Parents' interest in children's school life	4.17 (.86)	.67
Attitudes towards mainstream and ethnic culture		
Ethnic identity		
Germany	2.86 (1.18)	.94
Other country	4.22 (.87)	.88
Acculturation orientation		
Mainstream orientation (adoption)	3.42 (.88)	.83
Ethnic orientation (maintenance)	3.80 (.80)	.81
Psychological outcomes		
Depression	1.81 (.86)	.84
Physiological stress symptoms	1.80 (.69)	.73
Self-concept		
Social self	3.95 (.83)	.87
Academic self	3.58 (.80)	.81
Life satisfaction (SWLS)	3.76 (.93)	.82
Disruptive behavior at school	1.99 (.68)	.62
School delinquency	1.27 (.43)	.66
Sociocultural outcomes		
Academic performance	1.99 (.77)	-
Number of national friends	1.06 (.82)	-
Competence national language		
School mark	2.93 (.80)	-
Self-reported competence	4.31 (.72)	-

Note. 679 < *N* < 695

In order to reduce the number of variables in the model, EFAs were computed on the basis of subscale means at individual level. Concerning attitudes towards mainstream and ethnic culture, an ethnic and a mainstream factor emerged including the respective acculturation orientation and identity. With respect to psychological outcomes, three factors emerged: The first one covered positive outcomes related to general well-being and well-being at school, namely social and academic self-concept and general life satisfaction. The other two factors covered negative outcomes, with one factor related to psychological problems (physiological stress symptoms and depression) and one factor related to behavioural problems (school misconduct and delinquency). The three indicators for psychological and sociocultural adjustment respectively were then merged into two higher order factors, one measuring psychological adjustment and the other one measuring sociocultural adjustment. Proportions of variance explained by these higher order factors ranged from 68% to 81% and loadings of individual scales onto these factors ranged from .81 to .90.

Country-Level Analyses

In the first step, we aggregated individual-level variables by country of origin. In order to accommodate the different sample sizes within countries of origin, we used log (base 10) transformations of the number of

participants per country as weights before calculating correlations between them (five countries with only one or two respondents each and extreme scores on some variables were excluded, namely Paraguay, Slovenia, Philippines, The United States of America, and Saudi-Arabia). Country-level correlations of the aggregated individual level variables are displayed in Table 2.

Table 2
Country-Level Correlations between Aggregated Individual-Level Variables

	Opp	P-Int	PCD	Rel	P-Mai	P-Ado	Lang	Eth	Main	Psy	Soc
Acculturation conditions											
Opportunities for learning	-	.25*	-.33**	-.21	-.29**	.00	.02	-.14	.17	.20	.35**
Interest in children's school life		-	.02	.09	.12	.11	-.28*	.24*	-.12	-.12	-.05
Perceived cultural distance			-	.23*	.20	-.22	-.23*	.01	-.35**	.12	-.06
Importance of religion				-	.53**	-.26*	-.22*	.56**	-.35**	-.19	-.24*
Ethnic maintenance expectation					-	.05	-.14	.59**	-.42**	-.15	-.38**
Mainstream adoption expectation						-	.26*	-.17	.44**	-.26*	-.02
Use of mainstream language							-	-.21	.16	-.32**	.09
Acculturation orientations											
Ethnic								-	-.19	-.12	-.58**
Mainstream									-	-.10	.11
Psychological outcomes											
										-	.06
Sociocultural outcomes											
											-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. $44 < N < 80$. Opp = learning opportunities at home. P-Int = parents' interest in school life. PCD = perceived cultural distance. Rel = importance of religion at home. P-Mai = parents' maintenance expectation. P-Ado = parents' adoption expectation. Lang = use of mainstream language at home. Eth = ethnic orientation. Main = mainstream orientation. Psy = psychological outcomes. Soc = sociocultural outcomes. Significant correlations are printed in boldface.

Country-level correlations between these aggregated individual-level variables reveal a similar pattern of relationships to what has been found at individual level (Schachner et al., 2013). Hypothesis 1 was therefore largely supported. In particular, higher levels of perceived cultural distance were associated with a lower preference for the mainstream culture (Hypothesis 1a) but distance was not significantly linked to children's adjustment. More opportunities for learning at home were linked with a lower preference for ethnic maintenance and a better sociocultural adjustment (Hypotheses 1b and 1c). There were no significant positive relationships between acculturation orientations and outcomes (contrary to common findings at individual level); negative links were found between the preference for ethnic maintenance and sociocultural outcomes and between the preference for adoption to the mainstream culture and psychological outcomes (Hypothesis 1d). In the next step, we calculated country-level correlations between the aggregated individual-level variables and the country-level variables. In particular, we were looking for correlations between country-level characteristics and country of origin-level aggregated scores of perceived cultural distance, cultural practices and (perceived) acculturation strategies of parents and children, (perceived) opportunity structures at home and children's psychological and sociocultural school adjustment. Country-level correlations between aggregated individual- and country-level variables are displayed in Table 3.

Table 3*Country-Level Correlations between Aggregated Individual-Level and Country-Level Variables*

Country level variables	Conditions							Orientations		Outcomes	
	Opp	P-Int	PCD	Rel	P-Mai	P-Ado	Lang	Eth	Main	Psy	Soc
Values (Schwartz)											
Harmony	.00	-.09	-.32*	-.08	-.12	.11	.03	.00	-.06	-.07	-.06
Embeddedness	-.12	.14	.45**	.22	.03	.09	-.03	-.09	-.04	-.09	.04
Hierarchy	-.16	-.16	.38**	-.10	-.03	.11	-.06	-.24	.12	.02	.10
Mastery	-.12	-.02	.32*	.09	.04	-.22	-.09	-.02	-.13	-.08	.03
Affective autonomy	.17	.00	-.41**	-.14	.10	-.03	.03	.18	.12	.05	.10
Intellectual autonomy	.15	-.12	-.48**	-.17	-.16	-.07	.13	.04	-.03	.03	.01
Egalitarianism	-.15	-.10	-.09	.21	.17	-.13	-.05	.18	-.21	.12	-.26
Values (Hofstede)											
Power Distance	-.34*	.04	.24	-.01	.01	.01	-.12	.03	-.04	-.38*	-.08
Individualism	.35*	.54**	-.41**	.03	.15	.08	-.29	.37*	-.17	.08	-.21
Masculinity	.34*	.17	-.40**	-.04	.01	.07	-.05	.00	-.02	.12	.04
Uncertainty Avoidance	.01	.05	-.24	.06	.06	.15	.19	.22	.01	-.10	-.32*
Long-Term vs. Short-Term Orientation	.14	-.04	-.17	-.44**	-.24	-.06	-.09	-.22	.22	-.06	.13
Indulgence vs. Restraint	.04	.17	-.06	.09	-.01	.09	.12	.20	.14	-.04	-.11
Religious composition											
Proportion of Christians	.13	.15	-.24*	-.17	.00	-.13	-.09	.19	.06	.05	-.31**
Proportion of Muslims	-.23*	-.10	.15	.37**	.19	.10	.23*	-.02	-.21	-.17	.12
Proportion of non-religious	.34**	.00	-.32**	-.33**	-.25*	-.10	-.12	-.16	.03	.08	.24*
Economic and political development											
Development (HDI)	.37**	.21	-.49**	-.33**	-.31**	-.16	.00	.08	-.03	.05	.16
Globalisation	.33**	.18	-.51**	-.19	-.22	-.05	-.03	.11	.05	.18	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. $44 < N < 80$. Opp = learning opportunities at home, P-Int = parents' interest in school life, PCD = perceived cultural distance, Rel = importance of religion at home, P-Mai = parents' maintenance expectation, P-Ado = parents' adoption expectation, Lang = use of mainstream language at home, Eth = ethnic orientation, Main = mainstream orientation, Psy = psychological outcomes, Soc = sociocultural outcomes. Significant correlations are printed in boldface.

As expected, perceived cultural distance was significantly correlated with most other country-level variables (Hypothesis 2a), notably Schwartz's (2009) cultural values: Higher levels of perceived cultural distance were associated with higher levels of Embeddedness, Hierarchy, and Mastery and with lower levels of Intellectual and Affective Autonomy. However, as for Hofstede's (2009) values, significant (negative) relations were only found for with Individualism and Masculinity. Moreover, higher levels of perceived cultural distance were associated with a lower proportion of Christians and non-religious people and lower levels of development and globalization in the country of origin.

Relationships with parents' and children's acculturation strategies and related behaviour, however, were much weaker (Hypothesis 2b). The importance of religion in the family and parents' maintenance expectations, also strongly linked with one another, showed the same pattern of relationships with country-level variables: They were associated with a stronger Short-Term Orientation, a higher proportion of Muslims and a lower proportion of non-religious people in a country, as well as with lower levels of development. Parents' adoption expectation on the other hand was only significantly and positively linked with Individualism, whereas language use at home did not significantly correlate with any of the country level variables. Finally, ethnic orientation was associated with higher levels of Uncertainty Avoidance in the country of origin; no such relationship was found for mainstream orientation.

Concerning country level links with adjustment (Hypothesis 2c), there were no significant relationships with children's psychological adjustment. However, parents from countries with higher Masculinity values, a higher proportion of non-religious people and higher levels of development provided more opportunities for

learning and parents from more individualistic countries showed a greater interest in their children's school life. Finally, children from countries with lower levels of Uncertainty Avoidance as well as a higher proportion of non-religious people and a lower proportion of Christians showed higher levels of sociocultural adjustment. Taken together, there was some support for Hypothesis 2. Country-level characteristics and how different they were from Germany were associated with acculturation conditions in the family but not so much with children's acculturation orientations and outcomes.

Discussion

Based on the acculturation framework (Arends-Tóth & van de Vijver, 2006) and Bronfenbrenner's (1979) ecological systems theory, the aim of this study was twofold. On the one hand, we wanted to confirm whether relationships between different components of the acculturation process that are found at individual level (Schachner et al., 2013) also hold at the level of the country of origin. On the other hand, we wanted to explore the relationship between social indicators of the country of origin and children's acculturation conditions, orientations and school-related outcomes. Our analyses were based on data from 695 second- and third-generation immigrant children from 54 different countries of origin living in Germany. The results suggest that as expected, the relationships between different aspects of the acculturation process are similar at country of origin level to what has been found at individual level (Hypothesis 1). Further, we found that the relationship with more objective characteristics of the country of origin is generally weak. However, the relationships we found replicate associations with perceived cultural distance at individual level (Hypothesis 2). In the following, we provide a detailed discussion of specific relationships found, followed by some critical remarks about the limitations of our study, a general conclusion and some implications of our research.

Group-Level Relationships Between Acculturation Variables

There were many significant and meaningful relationships between acculturation variables at the level of the country of origin, following similar patterns to what has been found at individual level (Schachner et al., 2013). This supports the idea of immigrant group specific acculturation patterns and suggests that correlations are based on similar processes at group-level to what has been specified at individual-level. However, it can be observed that opposite relationships between aspects related to the maintenance of the culture of origin and aspects related to the adoption of the national culture are even stronger at country of origin-level. Interestingly, almost all significant relationships with adjustment outcomes were negative. In particular, aspects related to cultural maintenance were associated with less positive sociocultural outcomes and aspects related to cultural adoption were associated with less positive psychological outcomes. This pattern was particularly strong for the importance of religion, with more religious immigrant groups showing a stronger tendency towards separation and lower (sociocultural) adjustment.

Taken together, this suggests that at group level, the orientations towards both cultures appear to be mutually exclusive (and even more so than what has been found at individual level). Immigrant groups, in this case differentiated by country of origin, vary in their acculturation strategies between separation as one end of the scale and assimilation as the other end of the scale. This again supports the prominence of a unidimensional conceptualisation of acculturation in Germany, where it is viewed by mainstreamers and immigrants as a movement from one culture to the other (Berry et al., 2006b; Yağmur & van de Vijver, 2012; Zick et al., 2001). Our data also show, however, that choosing one culture over the other comes at a cost for immigrant groups, which often seems to outweigh the benefits. Previous literature has also identified Germany as one of the countries in Europe, where Islam is most underprivileged compared to other religions (Güngör, Fleischmann, Phalet, & Maliepaard, 2013). This societal climate has been associated with more conservative forms of religious practice combined with separation tendencies amongst Muslim immigrants, as we found them in our sample.

Acculturation Variables and their Relationship with Other Country-Level Variables

As expected, we found many relationships between characteristics of children's country of origin and aggregated perceptions of cultural distance. Values, religious composition, and level of development were mostly associated with perceived cultural distance in the expected direction. This suggests that – although most of the

participants were second- or third-generation immigrants and quite young – they had a fairly adequate idea of the degree of difference or similarity between their ancestral culture and the German national culture. This finding is remarkable and novel as to our knowledge objective and subjective measures of cultural distance have not been successfully linked to this extent before. The accuracy of perceptions of cultural distance in this age group also replicates previous studies which found that children of similar age are already aware of status differences between different immigrant groups in a country (Verkuyten, Hagendoorn, & Masson, 1996). These status differences are strongly related to perceived cultural differences between specific ethnic groups and the mainstream society.

We had also expected that children from countries which were more different from Germany in terms of values, religious composition, and development would prefer cultural maintenance more and cultural adoption of the mainstream culture less and perceive their parents to hold similar attitudes. However, it turned out that this was only the case to a limited extent. The links observed were mainly in relation to preferences for ethnic maintenance and they were stronger for perceived parental preferences than for children's own preferences. Except for the link between perceived parental adoption orientation and Individualism, we did not find any other relationships between (perceived) acculturation preferences and cultural values.

As expected, a higher proportion of non-religious people in the country of origin was associated with a lower preference for cultural maintenance. Although not significant, the opposite was the case for the proportion of Muslims in a country, whereas the proportion of Christians in a country was not associated with cultural maintenance. Taken together, this supports literature suggesting that religion is an important vehicle for cultural values, norms, and traditions (Güngör et al., 2012; Ward, 2013) and our individual-level findings that the intensity of religious practice is more important for cultural maintenance than which particular religion is practiced (Schachner et al., 2011). The slightly different findings concerning the proportion of Christians and Muslims in the country of origin support what has also been suggested in the literature, namely that the link between religion and cultural maintenance is especially strong amongst Muslim immigrants. Also, since a lot of the German traditions are rooted in Christianity, the link between religious practice and cultural maintenance may not be as strong amongst Christian immigrants.

Further, the practice of religion is more important in families from Muslim countries compared to families from countries with a higher proportion of Christians and non-religious people. Surprisingly, the proportion of Muslims in the country of origin is also associated with a more frequent use of the mainstream language at home. To some extent, this relationship may be explained by the fact that many families of Muslim children in our sample are already in Germany for a relatively long time. Another explanation may be that we did not differentiate between language spoken with siblings and parents. Since families with a Muslim background are often larger compared to other immigrant families, the higher use of the mainstream language in Muslim families may reflect language use with siblings more than with parents.

Finally, we were interested in the relationships between characteristics of the country of origin, opportunity structures at home and children's school adjustment. Similar to our findings for acculturation strategies, we only found some relationships with variables describing the opportunity structures at home and none with children's actual adjustment. These opportunity structures seem to reflect parental sociocultural adjustment as these structures are all somehow connected to parental competence in the national language, but also to their understanding of the German education system and the kind of support they can provide to their children to succeed in this system. Notably the provision of opportunities to learn (measured in our study as the number of books in the household) was strongly related to most characteristics of the country of origin. In families from countries that were more similar to Germany in terms of values, religious composition and development, children had access to more books at home. This is a very important finding as children's exposure to books is crucial for language acquisition and educational attainment (Schachner et al., 2013).

To summarize, we could indeed find relationships between characteristics of the children's country of origin, their immediate family environment, and different components of their acculturation process as ecological models would suggest. The relationships with perceived parental acculturation strategies and opportunity

structures at home were much stronger than with children's orientations and adjustment. This suggests that amongst second- and third-generation immigrant children, associations of their adjustment outcomes with the culture of origin may have eroded even though the children have still enough knowledge of their ancestral culture to appreciate its differences from mainstream culture. Nevertheless, there may be indirect associations with their culture of origin through the way parents deal with their intercultural situation (e.g., through religious practice or their perceived acculturation strategies) and the opportunities and support they can provide to their children. Given that we did not find many associations of adjustment outcomes with any variables at country of origin level however, this may also mean that individual-level factors are more decisive for these outcomes than factors at group level.

Limitations and Future Directions

Although our study draws on a large dataset and includes children from many different countries of origin, there are several limitations to it. First, most of the children in our sample are second- or third-generation immigrants. This means the relationships with characteristics of the country of origin may not be as strong in our sample as they would have been in a sample of first-generation immigrants. It would be interesting to see similar studies drawing on a sample of first-generation immigrants with more recent immigration experiences and a longer exposure to the country of origin prior to migration. Secondly, the analyses presented in this study are purely correlational and not controlling for relationships at individual-level. This allowed us to include a wide range of variables, take a more exploratory approach and get an overview of the patterning of relationships between variables at the level of the country of origin. Nevertheless, we cannot make conclusions about causality. Based on our research, future studies could select a smaller set of variables and assess the relationships between them simultaneously at both levels, using multilevel analyses. Thirdly, parental attitudes were not assessed amongst parents, but we relied on children's perceptions of parental attitudes and the family environment. Future studies should also include data obtained from parents directly. Fourthly, although we have interpreted some of our findings in relation to Germany as an example for specific type of receiving society (namely assimilationist), it would be interesting to extend this research to other receiving societies and look at interactions between a particular receiving context and different immigrant groups.

Conclusion and Implications

In our study, we drew on a large sample of immigrant children from 54 countries and some of the most important indices used to describe psychological differences between people from different countries. Based on this unique combination of data, our study provided insights on the interplay between macro- and micro-level environments and their associations with immigrant children's adjustment, which is rarely done. Moreover, we assessed all main components of the acculturation process – conditions, orientations, and outcomes – which enabled us to provide an overview of which particular aspects of the process are linked to characteristics of the children's country of origin.

Taken together, our most important findings suggest that (1) the relationship between different components of the acculturation process follows a similar pattern at the level of country of origin to what has been found at individual level. This supports the idea that there is systematic variation between different immigrant groups in the way they acculturate, which is even visible amongst second and third generation immigrant children. (2) The overall pattern of relationships at country of origin level suggests that groups vary in their acculturation practices, strategies, and outcomes along a continuum from separation to assimilation, which is particularly characteristic for the German context and has also been identified in other studies (Berry et al., 2006b; Yağmur & van de Vijver, 2012; Zick et al., 2001). (3) Associations with characteristics of children's country of origin suggest that this group-specific variation to some extent seems to be rooted in differences between countries of origin. Associations were mainly found with specific conditions in the family and not so much with children's outcomes. This suggests that parents are closer to these countries and more likely to be influenced by them still than their children, who belong to the second or third generation of immigrants. Yet, even in the absence of a direct relationship, characteristics of children's countries of origin may be linked to children's outcomes indirectly via the family context. (4) Religion, both concerning the religious composition of the coun-

try of origin and the importance of religion in families from particular immigrant groups, was associated with many other acculturation variables. This supports recent voices that more attention should be paid to religion and religious practice when studying the acculturation of immigrants (Güngör et al., 2013; Ward, 2013).

There are practical and policy implications that can be derived from our study. In particular, our results emphasize the importance of continuing efforts to reduce differences in opportunity structures at home between children from different immigrant groups. Where there is limited access to books and other educational materials at home, it is essential to ensure that children are exposed to such materials in pre-school educational settings. Further, our results suggest that immigrant groups in Germany vary mainly on a continuum between separating into an ethnic community and completely assimilating to the mainstream culture. The tendency towards either end is associated with less beneficial adjustment outcomes. In the light of these findings, it is important to create a societal climate that embraces cultural pluralism and allows immigrants to integrate their ethnic, mainstream and religious identities.

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Negative Acculturation Conditions, Wellbeing, and the Mediating Role of Separation in the Workplace

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Abstract

This article reports on the results of research which assessed adverse acculturation conditions in the workplace. Acculturation conditions such as racism, discrimination, segregation and separation were evaluated as predictors to ascertain how they affect acculturation outcomes such as intentions to quit and ill-health, both physical and psychological, of workers in the workplace. A convenience sample ($N = 327$) was taken from various sectors, for example retail, banking, mining, police service, and the municipality. The study aimed to test the mediating role of separation in the relation between adverse acculturation conditions and wellbeing as measured by ill-health and intentions to quit. The results indicated that racism, discrimination, segregation and separation, ill-health and intentions to quit were positively related. The hypothesized model was confirmed in a structural equation modelling analysis. This meant that more mainstream segregation demands, discrimination, and subtle racism, coupled with a dominant ethnic separation acculturation strategy and co-ethnics demanding that their members keep to themselves at work (with limited or no intercultural contact), were associated with the experiences of higher physical and psychological ill-health, and frequent thoughts of intentions to quit. In addition, mainstream segregation demands, compared to subtle racism and discrimination, were much more strongly associated with ethnic preference to separate. Blacks reported higher segregation demands and discrimination experiences at work (conditions), an individual separation acculturation strategy and physical ill-health at work (outcomes) compared to Whites, although the effects were relatively small. Recommendations for future research are provided.

Introduction

Since 1994, with the eradication of the apartheid system, South African businesses and public sectors have been confronted with large scale socio-political, cultural and economic challenges. Bhorat and Kanbur (2006) have reported that businesses were compelled to convert their unfair or discriminatory structures to ones which can accommodate the broader South African 'Rainbow Nation'. This implied transforming into institutions that are represented by the larger group of interest and still meet the needs of the economy in a sustainable manner. This is where the post-1994 transition was seen as the basis for redressing the economic deficit suffered by the majority of the South African population. As a result, apartheid policies were abandoned and policies such as employment equity, affirmative action and black economic empowerment were introduced (Bhorat & Kanbur 2006), which gave rise to a more multicultural workforce. Contrary to the aim of policies such as employment equity, affirmative action and black economic empowerment, research conducted after 1994 concluded that little change has been seen regarding deprived citizen's sociopolitical and economic conditions since liberation, and that black and white South Africans remain segregated (Christopher, 2001). In addition, recent events such as the killing of White farmers including the right-wing Afrikaner Weerstand Beweging (Afrikaner Resistance Movement) leader, poor representation of Blacks in top management positions as well as general Black unemployment and poverty levels seem to suggest that the South African society still suffer from and struggle with racial polarization. These occurrences impact on acculturation conditions and its associated outcomes in the broader society as well as in the workplace. We propose and test a model of a negative acculturation context, mediators and outcomes in the workplace.

A Model of Negative Acculturation Context, Mediators, and Outcomes in the Workplace

Our theoretical framework combines a mediation model of acculturation in the broader society (Arends-Tóth & Van de Vijver, 2006) and in the workplace (Jackson, Van de Vijver, & Burckard, 2011). The acculturation context variables (i.e., racism, discrimination, segregation) are being investigated in the workplace and this study aims to test the mediating role of ethnic separation as measured by ethnic separation demands and an individual separation strategy in the relation between adverse acculturation conditions such as segregation demands, subtle racism and discrimination and wellbeing as measured by ill-health and intentions to quit.

Acculturation

Acculturation studies focus on issues arising when groups/individuals from different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups. Marisol, Rojas, María, and Pablo (2007) argue that the acculturation concept started to be used by various American social anthropologists towards the end of the 19th century and they added that one of the first definitions of acculturation as a process came from American social anthropologists. Graves (1967) further indicated that acculturation is a term used to describe the process of bidirectional change that takes place when two ethno-cultural groups come into sustained contact with each other. This definition of acculturation implies that dominant and non-dominant cultural groups are influenced and transformed by their intercultural contacts and are expected to modify some aspects of their respective culture as a means of adaptation to ethno-cultural diversity.

Mainstream Acculturation Context

Bourhis, Moise, Perreault, and Senecal (1997) indicated that attitudes of dominant groups are important for the outcome of the acculturation process. In addition to the aforementioned, Berry, Phinney, Sam, and Vedder (2006) have reported that all pluralist societies consist of both dominant and mainstream as well as minority groups. Mainstream acculturation conditions such as racism, discrimination, segregation and separation have been considered in previous research (Ait Ouarasse & Van de Vijver, 2004; Jackson, Van de Vijver, & Burckard, 2011) and it was reported (Gee, Ro, Shariff-Marco, & Chae, 2009) that racism by majority group members impacts negatively on the mental health of immigrants and that discrimination was associated with and impacts on mental and physical health adversely. In this study the focus is on establishing the role that contextual variables such as mainstream segregation demands, subtle racism, discrimination, and separation play in the workplace and how they impact on ill-health and intentions to quit.

Segregation. Zagefka and Brown (2002) indicate that segregation is about demands exerted on ethnicities to keep to their own, while racism and discrimination refer to negative attitudes during intercultural contact. Barrette, Bourhis, Personnaz, and Personnaz, (2004) have reported that host members do not wish minorities to contaminate their culture, and hence accept that minority groups uphold their heritage culture on condition that they keep their distance. For Berry et al. (2006), on the other hand, segregation occurs when individuals or groups become separated from each other, implying minimal or no contact between groups from different cultures. Dahlberg, Fredriksson and Monseny (2010) reported that high levels of segregation are observed in the US and elsewhere. Hofmeyr (2006) has reported that South Africans have little contact with people from other ethnic groups and do not wish to increase future contact with other groups in their private space. However, contact in the workplace is unavoidable. The positive relation between mainstream segregation demands, subtle racism, discrimination, separation and ill-health have been confirmed in previous studies in the South African workplace (Jackson, van de Vijver, & Burckard, 2011). Considering that intergroup contact is on the increase in the South African workplace, this study aims to assess the role of mainstream segregation demands in the workplace in health outcomes and intentions to quit.

Discrimination. Causes of discrimination could be ascribed to different reasons and intentions from different individuals or groups, ranging from isolation of individuals or groups to attitudes of individuals or groups. Ong, Fuller-Rowell and Burrow (2009) have reported that a large-scale national survey established that almost 49% of Black respondents encountered some form of discrimination in their lifetime, for example, by

not being given promotion at work, hassled by police, or even being denied service. 89.7% of these respondents reported race as a reason for the discrimination. In addition, research with adolescents found that 36% of African American adolescents reported having been called a racially insulting name, 46% believed that racial discrimination resulted in them receiving a lower grade than they deserved, and a further 75% reported having been bothered by store personnel because of their race (Fisher, Wallace, & Fenton, 2000). 70% reported racial experiences of others perceiving them as a threat, for example being treated suspiciously, being perceived as incompetent or being talked down to. Roscigno (2007) reported that allegations of racial discrimination in employment are more likely to arise in the high wage service and public sectors, and it is perceived that racial discrimination complaints are most likely to be of alleged discriminatory termination or firing, while complaints of discrimination in hiring or promotion are fewer.

Pavalko et al. (2003) reported that a growing body of research points to an association between discrimination and physical and mental health outcomes. Reports and research documenting discriminatory experiences leave little doubt that these events are frustrating and stressful and do impact on physical and emotional health (Feagin 1991; Feagin & Vera 1995). Most research investigating the association between discrimination and health has found a significant relation between discrimination and psychological wellbeing (e.g., Broman & Clifford 1996). Ayalon and Gum (2011) documented that overall research (Kessler, Mickelson, & Williams, 1999) has shown that everyday discrimination, for example, minor but daily hassles, take a greater toll on one's health than major lifetime discrimination, such as major life events. Research by Moomal et al. (2009) on discrimination and health reported that the broad perception of unfair treatment tends to adversely affect people's health, regardless of whether the discriminatory behavior is attributed to race or other factors.

Racism. Vernellia (2008) defines racism as any action or attitude, conscious or unconscious that undermines an individual or group based on their skin color or race. Racism continues to dominate society and will do so for decades if assumptions held by whites regarding black incompetence are not outgrown. In addition, the defensiveness in reaction from black people allows political interference in what people think, say and do in the economy. The last 30 years have witnessed a change in the way racial attitudes are measured (Durrheim, Baillie, & Johnstone, 2006). Early measures of racism have been characterized as old-fashioned or blatant, containing crude expressions of hate and stereotypes of racial inferiority. Heaven and Moerdyk's (1977) adaptation of Ray's anti-black scale, for example, included such items as "Blacks are not very hygiene-conscious" and "Blacks are a rather ugly race". On the other hand, Swim, Aikin, Hall, and Hunter (1995) reported that the nature of racism has transformed from old-fashioned and blatant types to modern and subtle types. Deitch Barsky, Butz, Chan, Brief, and Bradley (2003) have reported that everyday discrimination may become more general, as blatant racism becomes less established among dominant group members. Hodson, Dovidio, and Gaertner (2002) point to empirical evidence of the adverse effects of subtle racism in the daily life of people as well as in the workplace. Recommendations for admission to colleges were investigated and a key mechanism underlying subtle racism was identified to be the credibility that people give to different types of information when they make their decisions. It was found that more racially biased white people sees the weaker aspect of a black applicant's credentials as more important for admission decisions than when the candidate was white. Dovidio and Gaertner (2000) reported that white employers were less likely to recommend black candidates for positions in the workplace or admission to colleges than the white candidates, when the formers' qualifications for the position or admission were less obvious, or even that the appropriate decision to allow blacks to succeed was more ambiguous.

Ethnic acculturation context. Heim, Hunters, and Jones (2010) reported that racial and ethnic identity is measured on how it develops over time through comparing identities on a social level, and that it is an element of how one sees oneself. Phinney (1990) argued that the way one perceives oneself is derived from belonging to, identifying with, and/or participating in the social and cultural practices of a dominant ethnic group. This normally helps to uphold one's self-esteem when faced with racism (Phinney, 1995). Mallinckrodt and Leong (1992) reported that ethnic social support is crucial for positive wellbeing and is providing people with coping tools when they experience stressful life changes, including the stress when adjusting to unfamiliar customs,

whilst Heim et al. (2010) reported that discrimination appears to draw attention or put emphasis on ethnic identification, which turns out to benefit wellbeing of minority groups. For Berry et al. (2006), separation from cultures or even confusion about where one fits in makes adaptation very difficult. This study aims to establish the mediating effect of ethnic separation in the relationship between adverse mainstream conditions and ill-health, as well as intentions to quit.

Ethnic separation demands and an individual separation acculturation strategy. Various ethnic groups have different attitudes towards cultural adherence and toward having contact with the dominant groups. Separation research on adolescents (Berry et al., 2006) concluded that separation is an acculturation strategy aimed at preventing the influence dominant groups have on minority groups. Research (Pham & Harris, 2001; Zagefka & Brown, 2002) suggests that minority groups of adolescents are mostly rooted within their own culture and show little involvement with the dominant groups. Separation is an acculturation strategy that refers to the minority groups who accept their own cultural principles and uniqueness and reject the dominant culture's principles (Berry, 2001). Belonging to the ethnic profile was associated with poorer sociocultural adaptation, while belonging to the national profile was associated with moderately poorer psychological and sociocultural adaptation (Berry, 2001). In this study ethnic separation demands refer to pressure from co-ethnics to keep to themselves while an individual separation strategy refers to an individual's preference to have only contact with co-ethnics. Overpowering support seems to exist for the notion that integration strategies are usually the most successful, and separation strategies are intermediate (Berry & Kim, 1988; Berry & Sam, 1997). However, Ward (2001) has argued that minority groups may easily move to a separation strategy should the dominant groups react negatively to their integration strategy. Ward, Bochner and Furnham (2001) reported that minority groups will adopt an integration strategy, attempting to be similar to the members of the dominant group, rather than a separation strategy.

Acculturation Outcomes

Ward and Kennedy (1992) reported that sociocultural outcomes related to minority groups' participation and acceptance of the dominant group's surroundings. Acculturation outcomes can be grouped under categories, namely individual acculturation outcomes, family acculturation outcomes and health (physical and psychological) outcomes. Different types of individual acculturation outcomes, for example integration, separation, assimilation, rejection and deculturation, have been studied. Integration refers to the process of successfully combining aspects from both cultures and this has been empirically supported as the healthiest acculturation outcome (Cuellar & Paniagua, 2000). Separation has been defined as to remain separate from dominant cultures, whereas assimilation is the replacement of home culture and language by the new culture, and rejection occurs when the individual rejects the native culture for new culture or vice versa (Berry, 2001). Assimilation and integration preferences were highly related to psychological health and sociocultural adaptation (Ward & Rana-Deuba, 1999). Deculturation takes place when the individual accepts neither home culture nor the new culture. We were interested in the mediating role of ethnic separation, a combination of ethnic separation demands and a separation acculturation strategy in the relation between negative acculturation conditions and well-being at work using ill-health and intentions to quit as indicators.

Psychological acculturation outcomes: Ill-health and intentions to quit. Bennett and Murphy (1997) defined health (physical and psychological) as a state of complete mental and social wellbeing and as a sense of wholeness and happiness on a physical, cultural, spiritual, and mental level. Research (Berry, 2003; Berry & Sam, 1997) indicated that those minority groups who integrate are usually achieving the most encouraging outcomes as opposed to those who separate themselves. Parker, Chan and Tully (2006) suggested that minority members who do not integrate with the dominant group would be more likely to show signs of depression. Noh, Beiser, Kaspar, Hou, and Rummens, (1999) reported that it has been widely known that the experience of race discrimination indeed has a significant negative effect on a person's wellbeing. They also alluded to the fact that racism is the most serious factor facing minority groups and their mental health. With regards to intentions to quit, it can be construed as thoughts that are often triggered when the minority groups do not abide by or adapt to the dominant cultures. Intentions to quit can be seen as a psychological acculturation outcome

indicator as they convey information about how well the individual feels in the acculturation context, and can be linked to education and length of stay of minority groups (Ward & Kennedy, 1999).

Group Differences in the Experience of Intercultural Relations in South Africa

Recent surveys, both national and also international, investigating ethnic differences in opposition to such policies, suggested an element of group self-interest at play in the policy attitudes (Durrheim, 2010; Van de Vijver, Breugelmans, & Schalk-Soekar, 2008). Members of the group that had most to gain from the policies (usually the groups with the least power in society) rated them most favorably, whereas members of the group that had most to lose rated the policies most negatively. The self-interest hypothesis that was proposed as an explanation for resistance to racial policies has received mixed support (Durrheim, 2010). Initial research found that unlike group or collective self-interest (Bobo, 1983), individual self-interest was not related to racial policy attitudes (McConahay & Hough, 1976; Sears & Allen, 1984). Opposition to policies like affirmative action was therefore not so much influenced by the possibility of individuals being personally affected by the policy as well as by the extent to which their group as a whole was likely to be affected by the policy (Bobo, 1988). Recent studies have indicated that Whites still experience the recent South African diverse workplace more positive compared to non-Whites despite recent legislative changes such as the Employment Equity Act (RSA, 1998) and the use of affirmative action policies that favor non-whites in both private and public institutions (Jackson & Van de Vijver, submitted; Jackson, Van de Vijver, & Ali, 2011).

Contextualizing the Study

No industries in the South African workplace are untouched by the socio-political changes, such as Broad-Based Black Economic Empowerment (BBBEE) and affirmative action, or the challenges faced by the South African society as a result of these changes. Although they have transformed the landscape of the South African workplace, issues such as racism and discrimination prevail (Smith, Stones, & Naidoo, 2003) and are implied under with news headlines such as *“Employees of leading accounting firm KPMG are embroiled in a racial clash after a night of drinking at the company’s action-cricket league finals”* (Van Wyk, 2011) and *“For the first time today I was able to feel what discrimination felt like when our payroll department phoned me to enquire what race I was”* (David, 2011), *“Recently a gender audit by the South African National Editors Forum found that white male journalists are paid more and hold more top positions in the South Africa’s newsrooms”* (Anonymous, 2011). Such alleged incidents are continual reminders that the challenges related to racism, discrimination and challenges in cultural contact remain prominent in various spheres of South African society, including the workplace. Given this reality, the study aimed at establishing the extent of employees in the workplace experiencing racism, discrimination, segregation and separation, and how these conditions influence employees’ intentions to quit and their wellbeing.

The goals of the study were therefore to:

- investigate the associations between mainstream adverse conditions such as racism, discrimination, segregation, ethnic separation, and wellbeing at work, as measured by ill-health and intentions to quit;
- to test whether or hypothesized mediation model holds for Black and white group or whether systematic differences in components of the model can be observed;
- determine the mediating effect of ethnic separation in the relationship between adverse acculturation conditions and well-being in the workplace; and
- compare experiences of mainstream adverse conditions of racism, discrimination, segregation, ethnic separation, and wellbeing at work, as measured by ill-health and intentions to quit for Black and white race groups in the workplace.

Research method

Research design and procedure

The aim of the research design is to explain the approach the research will follow. The research design used is classified as quantitative. Welman, Kruger, and Mitchell, (2005) explain quantitative research as an array of interpretive techniques that seek to describe, decode, translate and otherwise come to terms with the

meaning of naturally occurring phenomena in the social world. The specific methods used include questionnaires to gather information. Survey questionnaires were distributed to conveniently selected employees in various sectors of the workplace. These employees were mostly the colleagues and co-workers of network members and acquaintances. In addition, permission was acquired through formal verbal requests to line managers during fiscal visits to various workplaces to gather data from employees not acquainted with the researcher filling out the questionnaires. The purpose, anonymity and voluntary nature of the research and its advantages were explained to prospective participants after permission were granted during lunch break briefings. Participants were given two weeks to complete the questionnaires, which were then to be dropped in a sealed box in the HR section that were later collected by the researcher.

Sampling and Participants

Participants were conveniently sampled from different sectors in the workplace. The usefulness of this sampling technique is that it allows one to gather basic data and trends and is useful in identifying relationships among different phenomena. The participants of this study were therefore employees from various sectors in the South African workplace that were available for, and willing to answer questions on race relations in the workplace (conveniently selected). Table 1 represents some of the characteristics of the participants.

Table 1
Participant Characteristics

Item	Description	Category	Frequency	Percentage
Gender		Male	146	44.65
		Female	181	55.35
Age		18 – 25	76	23.24
		26 – 33	133	40.67
		34 – 41	82	25.08
		42 – 49	24	7.34
		50 – 60	12	3.67
Race		White	77	23.55
		Black	109	33.33
		Coloured	113	34.56
		Indian	26	7.95
		Other	2	0.61
Qualifications		Grade 12	101	30.89
		Certificate	74	22.63
		Diploma	82	25.08
		Degree	41	12.54
		Postgraduate	25	7.65

The sample ($N = 327$) consisted mainly of female employees (55.35%), in the age range between 26 and 33 years (40.67%), coloured (34.56%) and holding a grade 12 or National Senior certificate (30.89%).

Despite their cultural differences, given the history of the country we decided to combine Blacks and Coloureds in the multigroup analyses, thereby maintaining adequate sample size for these groups. There are various cultural differences between these ethnic groups, which would be an argument against their combination. However, we argue that for the purposes of our research, the combination is adequate. It may be noted that our combination of groups is in line with the Employment Equity Act in which all previously disadvantaged groups are called Black: 'Black people' is a generic term which refers to Africans, Coloureds and Indians in the South

African Employment Equity Act 55 of 1998 (RSA, 1998). Furthermore, both Blacks and Coloureds share a history as the victims of institutionalized racism and oppression, and they share the same position in the commonly perceived divide of 'Black' and 'White' in South Africa (Makhalemele, 2005).

Measures

Some instruments with well-established psychometric properties used in other cultural contexts were adapted (Ait Ouarasse & Van de Vijver, 2004). Adaptations involved replacing Dutch and Moroccans with South African and own ethnic group respectively. All acculturation scales follow a five-point Likert format ranging from *strongly agree* (5) to *strongly disagree* (1), and some negatively phrased item were reversed before the analyses so that higher scores reflect more endorsement of the underlying attitude. The measuring instrument consisted of four sections, namely the mainstream domain, the ethnic domain, work-related psychological acculturation outcomes and a biographic section to facilitate comparisons.

Mainstream domain instruments

- *Mainstream segregation demands* (Ait Ouarasse & Van de Vijver, 2004). This is a 12-item measure of the extent to which participants think that mainstream members hold segregationist attitudes towards minority members. A sample item is *"I think that most of my fellow residents would be happy to have people from other cultures than their own to be thrown out of our organization"*.
- *Perceived discrimination* (Ait Ouarasse & Van de Vijver, 2004). The scale is an 11-item measure of the extent to which participants think the situation in the workplace is discriminatory and requires them to drop their cultural characteristics. Discrimination refers to pressure exerted on the minorities to apply fully to the regulations and the general atmosphere regardless of whether these regulations encroach on minority sensitivities. The scale contains items such as *"I experience discrimination in our organization"*.
- *Subtle racism* (Subtle Racism Scale of Duckitt, 1991). This is a 10-item (four of the items were filter items and were not used in the final analysis) measure of the extent to which co-workers hold subtle racist attitudes. A sample item includes *"Some groups in South Africa are getting too demanding in pushing for equal rights"*.

Ethnic domain instrument

- *Perceived co-ethnic separation demands at work* (Ait Ouarasse & Van de Vijver, 2004) is a four-item measure of the extent to which participants think their own ethnic members want them to keep away from the majority culture. Separation is a strategy aimed at the prevention of mainstream influence on minority ways. The scale contains items such as *"My cultural group members do not want me to make contact with members from other cultural groups in our organization"*.
- *Individual separation acculturation strategy*. This new instrument is a three-item measure of the extent to which participants prefer contact with their own ethnic group members and do not seek participation in the 'Rainbow Nation' culture. The scale contains items such as *"I actually avoid contact with members from other cultures"*.

Psychological acculturation outcomes

- *Well-being*: This is an adapted version of the 18 physical health symptoms of the PSI of Spector and Jex (1998), complemented with a list of 9 common psychological complaints based on a slightly modified version of the World Health Organization Cross-National Survey of Psychological and Somatic Symptoms (1988). The scale employs a frequency format that ranges from never (1) to every day (5). The self-report measure asks respondents to indicate whether or not in the past three months they had suffered any of the mentioned symptoms. Some examples of symptoms included in the scale are headaches, backache, fatigue, eyestrain and trouble sleeping, concentrating and constant anxiety or panic attacks.

- *Intentions to quit* (developed for the study). This is a three-item measure of participants' intentions to quit their work. All of the items are positively phrased. It contains items pertaining to.

A *Biographical questionnaire* was also included, dealing with basic biographical questions such as age, sex, and race.

Data Analysis

The statistical analysis was completed with the help of the SPSS-programme (SPSS Inc., 2009). Descriptive statistics (e.g., means, standard deviations, skew and kurtosis) was used to scrutinize data. Cronbach's alpha coefficients were used to determine the internal consistency, homogeneity and uni-dimensionality of the measuring instruments (Clark & Watson, 1995). Coefficient alpha contains important information regarding the variance proportion of the items on a scale in terms of total variance explained by that particular scale. Exploratory factor analyses were carried out to determine construct validity of the measuring instruments. Pearson product-moment correlation coefficients were used to specify the relationship between the variables in terms of statistical significance; we set the value at a 95% confidence interval ($p < .05$). Effect sizes (Steyn, 1999) were used to decide on the practical significance of the findings. Pearson product-moment correlation coefficients were used to specify relationships between the variables. A cut-off point of .30 (medium effect, Cohen, 1988) was set for the practical significance of correlation coefficients. To investigate the mediating role of ethnic separation in the relations between adverse mainstream conditions and wellbeing for Black and White employees, structural equation modelling (SEM-) with multigroup analysis was performed using AMOS 18. Multivariate Analysis of Variance (MANOVA) was carried out with race (two levels: Black and White) as independent variable and the mean scores of the scales as dependent variables. Effect sizes (Cohen, 1988) were used in addition to statistical significance to determine the significance of relationships. Effect sizes indicate whether obtained results are practically important (whereas statistical significance may often show results which are of little practical relevance).

Results

The results of this study consist of three parts: (1) the descriptive statistics of measuring factors/variables and correlation between adverse acculturation conditions or characteristics, mediating variables and wellbeing (the acculturation psychological outcomes as measured by physical and psychological ill-health and intentions to quit); (2) the testing of the mediating role of ethnic separation in the relationship between the adverse acculturation antecedents and wellbeing amongst employees in the South African workplace; and (3) comparisons of Black and White groups.

Exploratory factor analyses and associations between antecedent conditions, intervening variables and wellbeing at work

Exploratory factor analyses were conducted first to confirm that the hypothesized items load on the factors or latent variables. Items with factor loadings higher than .30 were considered as sufficient descriptors of the latent variable. The results indicated that all scales used were uni-factorial; the first factor explained 56.60% of the variance in *Perceived Mainstream Segregation Demands*; 45.87% in *Subtle Racism at Work*; 60.33% in *Perceived Discrimination at Work*; 56.29% in *Ethnic Separation Demands at Work*; 62.48% in an *Individual Separation Acculturation Strategy*; 42.87% in *Physical Ill-Health*; 61.20% in *Psychological Ill-Health*; and 81.12% in *Intentions to quit*. The descriptive statistics the product-moment correlation coefficients between the different constructs used in this research project are presented in Table 2.

Inspection of Table 2 shows that all the alpha coefficients were higher than the recommended lower threshold of .70 (Nunnally & Bernstein, 1994). Table 2 also revealed that *Segregation demands* are statistically significantly related to perceived discrimination (with a large effect for both groups), subtle racism (large effect for both groups), ethnic separation demands (large effect for Blacks and medium effect for Whites), and individual separation strategy (large effect for both groups). *Perceived discrimination* is statistically and significantly correlated to subtle racism (with a large effect), ethnic separation demands (large effect for Blacks and medium effect for Whites), and individual separation strategy (with a medium effect for both groups). *Subtle Racism* is

statistically significantly related to ethnic separation demands (large effect for Blacks and medium effect for Whites) and individual separation strategy (large effect for Whites and medium effect for Blacks). *Physical health* is statistically significantly related to psychological health (large effect for both groups).

Table 2

Descriptive Statistics (n = 327) and correlations between acculturation constructs and outcomes: White (above diagonal) and Black (below diagonal) group

Variable	α	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1 Segregation Demands	.93	2.29	.80	-	.54**	.53**	.35**	.65**	-.06	.03	.09
2 Perceived Discrimination	.92	2.64	.88	.64**	-	.68**	.43**	.40**	.14	.04	.09
3 Subtle Racism	.89	2.57	.76	.64**	.74**	-	.46**	.54**	.15	-.09	-.02
4 Ethnic Separation Demands	.80	2.40	.85	.62**	.51**	.53**	-	.33**	.10	-.10	-.17
5 Individual Separation Strategy	.70	2.25	.90	.54**	.39**	.42**	.46**	-	-.06	-.10	.04
6 Intentions to Quit	.88	2.63	1.09	.09	.08	.14*	.12	.16*	-	.13	.24*
7 Physical Ill Health	.93	1.93	.72	.16*	.10	.16*	.23**	.08	.16*	-	.77**
8 Psychological Ill Health	.91	1.93	.85	.28**	.11	.20**	.37**	.21**	.18**	.64**	-

* $p < .05$ ** $p < .01$

A model testing the mediation effect of separation in the relation between mainstream conditions and wellbeing Black and White groups at work

In this hypothetical model three perceived adverse mainstream attitudes (*segregation demands, discrimination and subtle racism at work*) are antecedent conditions that impact on a single latent variable (wellbeing at work) that is measured using three indicators, namely *physical and psychological ill-health* and *intentions to quit* (psychological acculturation outcomes) through a mediating latent variable (involving ethnic separation) that is measured by two indicators, namely *ethnic integration demands at work* and an *individual separation acculturation strategy*. The similarities and differences between the Black and White groups were explored by testing the fit of a hierarchy of models with increasing constraints on the number of invariant parameters. We used various indices to assess the goodness of fit of the model. However, the solutions for the different hierarchical models proved to be not admissible.

We then decided to report the fit statistic for the hypothetical model using the total sample as this model yielded acceptable results. We used various indices to assess the goodness of fit of the model. The structural equation model analysis (see Figure 1) yielded an acceptable fit: $\chi^2(15, N = 327) = 22.68, p < .09; \chi^2/df = 1.51$ [the χ^2/df (recommended value in small samples, < 3), the adjusted goodness of fit index (AGFI) was .96 (recommended, $\geq .90$), the Tucker Lewis index (TLI) was .99 (recommended, $\geq .90$), the comparative of fit index (CFI) was .99 (recommended, $\geq .90$), and the root mean square error of approximation (RMSEA) was .04 (recommended, $\leq .06$). As can be seen in Figure 1, the acceptable fit of the empirical data to the conceptual model indicates that mainstream acculturation conditions are associated with wellbeing at work as measured with three indicators, namely physical and psychological ill-health and intentions to quit through separation as the intervening variable.

Figure 1 indicated that the paths from mainstream segregation demands and subtle racism to ethnic separation were significant, with mainstream segregation demands yielding the strongest association with ethnic separation compared to the other mainstream adverse conditions and ethnic separation. In addition, the path from ethnic separation to wellbeing at work was also significant. This finding suggests that perceived mainstream segregation demands and subtle racism are related to wellbeing at work in this sample. Employees who experienced more mainstream segregation demands and subtle racism at work also reported less wellbeing at

work. We can therefore conclude that perceived mainstream segregation demands and subtle racism are significant factors in wellbeing at work.

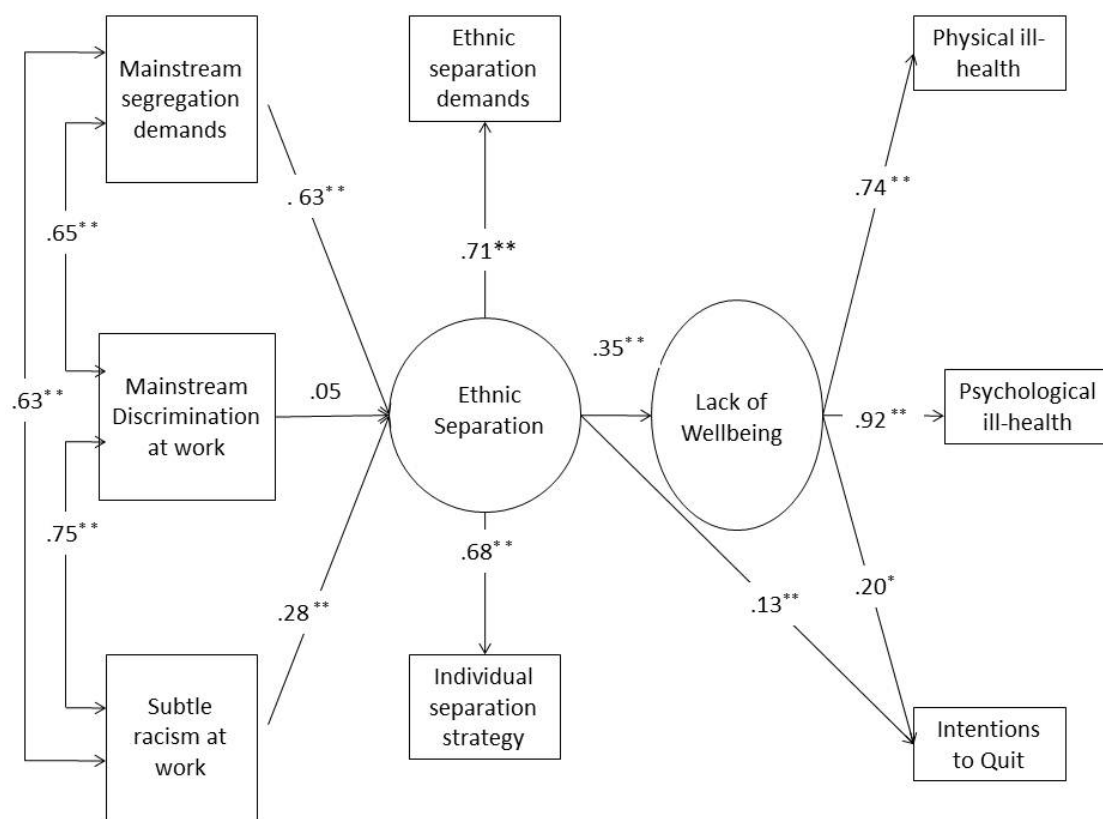


Figure 1. Results of the mediating acculturation model analysis
* $p < .05$ ** $p < .01$

Mediating effects of ethnic separation

The hypothesized model is a mediation model in which adverse antecedent conditions influence ethnic separation, which in turn impacts on wellbeing of workers. We made a closer examination of the direct and indirect effects to evaluate their relative sizes. There is some literature on the testing of the mediation effect (e.g., Baron & Kenny, 1986; Holmbeck, 1997; Hoyle & Kenny, 1999; Judd & Kenny, 1981; Kline, 1998; Preacher & Hayes, 2004). It has been found that the method proposed by Baron and Kenny (1986) can have a low statistical power in many situations and that joint significance tests involving the product of coefficients have been found to have greater statistical power than that of other formal methods of assessing mediation, including the Baron and Kenny approach (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Therefore, we stayed within the structural equation framework to compute the significance of mediation effects by using the bootstrap procedure as implemented in the AMOS programme.

The results of the mediation analysis can be found in Table 3. A close inspection of Table 3 indicated that in line with observations from Figure 1, total and indirect effects were observed for physical and psychological ill-health as well as intentions to quit. In addition, the insignificance of all direct effects between predictors and outcomes suggests that the link with physical and psychological ill-health as well as intentions to quit is fully mediated by ethnic separation. *Mainstream segregation demands* and *subtle racism* have, therefore, an indirect and significant influence on *psychological acculturation outcomes* (physical and psychological ill-health as well as intentions to quit). It can be concluded that *ethnic separation fully mediated* the path from *mainstream segregation demands* and *subtle racism* to *psychological acculturation outcomes* and that *mainstream segregation demands* and *subtle racism* matter for the experience of wellbeing at work.

Comparisons of Black and White groups

In order to examine Black and White group differences in the experience of mainstream antecedent conditions, ethnic intervening separation at work and an individual separation strategy as well as well-being, a multivariate analysis of variance (MANOVA) was carried out with race (two levels: Black and White) as independent variable and the mean scores of the scales as dependent variables. The mean scores of the scales per race group are presented in Table 3. The multivariate effect of race just was significant, Wilks' Lambda = 0.94, $F(8, 290) = 2.531, p < .01$. Univariate analyses showed that segregation demands and discrimination at work (conditions), an individual separation acculturation strategy and physical ill-health at work (outcomes) were the only dependent variables that showed a significant race difference. Blacks reported higher segregation demands and discrimination experiences at work (conditions), an individual separation acculturation strategy and physical ill-health at work (outcomes) compared to Whites. The last column of Table 4, presenting Cohen's *d* values, which gauge the size of the race differences, shows that this effect size is small. Our data suggest that the participants of our study are well aware of negative acculturation conditions and outcomes of the workplace and seem to acknowledge that their environment puts pressure on them to act in a certain fashion in relation to its diversity. Scores on discrimination at work are rather high compared to the scores on the other scales, which suggest that this is the most common adverse acculturation condition faced by these mine employees.

Table 3

Mediation Effects of Separation in the Workplace (Standardized Effects)

Predictor	Physical Ill-health			Psychological Ill-health			Intentions to Quit		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
Segregation	.00	.17*	.17*	.00	.21*	.21*	.00	.12*	.12*
Subtle Racism	.00	.07*	.07*	.00	.09*	.09*	.00	.06*	.06*
Discrimination	.00	.01	.01	.00	.01	.01	.00	.01	.01
Ethnic Separation	.00	.26*	.26*	.00	.32*	.32*	.13	.07*	.20*

* $p < .05$ ** $p < .01$

Table 4

Mean scores (SD) per scale for the Black (A combination of Blacks and Coloureds in the sample: $n = 222$) and White ($n = 77$) group

Scales	Black M	Black SD	White M	White SD	Cohen's <i>d</i>
1. Segregation demands at work	2.37	(0.84)	2.03	(0.61)	0.45**#
2. Discrimination at work	2.72	(0.90)	2.41	(0.74)	0.33**#
3. Subtle racism at work	2.61	(0.77)	2.44	(0.70)	0.23
4. Ethnic separation demands (work)	2.41	(0.85)	2.31	(0.82)	0.12
5. Separation acculturation strategy	2.32	(0.92)	2.06	(0.72)	0.31**#
6. Physical ill-health	1.93	(0.72)	1.75	(0.54)	0.28**#
7. Psychological ill-health	1.92	(0.85)	1.82	(0.81)	0.24
8. Work success	2.69	(1.09)	2.52	(1.12)	0.15

* $p < .05$ ** $p < .01$ # small, significant effect size

Discussion

The aim of the study was to determine the relationships between adverse acculturation conditions (pressure to segregate and overt and covert discrimination), separation attitudes, and (lack of) wellbeing at work. Adverse mainstream conditions were positively related to ethnic separation demands and work and an individual separation strategy, ill-health and intentions to quit. This implies that a work environment characterized by more mainstream segregation, discrimination and subtle racism is more likely to contribute to ethnic members encouraging each other to separate and limited mainstream contact as well as higher levels of ill-health symptoms and frequent thoughts of intentions to quit. Our finding seems to concur with previous consistent

links between perceived racism, discrimination, and poor psychological outcomes (Clark, Anderson, Clark, & Williams, 1999; Gee, Ro, Shariff-Marco, & Chae, 2009).

The study also tested the association between acculturation mainstream antecedent conditions and wellbeing through separation as a latent mediating ethnic variable. The hypothesized model was confirmed in a structural equation modelling analysis. This means that more mainstream segregation demands and subtle racism, coupled with a dominant ethnic separation acculturation strategy and co-ethnics demanding that their members keep to themselves at work (with limited or no intercultural contact), are associated with the experience of higher physical and psychological ill-health and more frequent thoughts of intentions to quit. In addition, mainstream segregation demands, compared to subtle racism and discrimination, were much more strongly associated with ethnic preference to separate. This result supports the positive relations found (Berry et al., 2006; Heim, Hunter, & Jones, 2010; Jackson et al., 2011) between negative acculturation conditions, separation and ill-health as well as the importance of taking both the mainstream and ethnic conditions into consideration in acculturation studies, as recommended by the Integrated Acculturation Model (Bourhis et al, 1997). It therefore seems likely that a workplace culture that promotes ethnic cultural separation coupled with encouragement by ethnic members at work contributes to the experience of higher levels of ill-health symptoms (Jackson et al., 2011).

The study also focused on the mediating effect of the separation in the path from adverse antecedent variables to wellbeing, as measured by ill-health symptoms and intentions to quit. Our findings suggest an indirect and significant influence of adverse conditions (excluding discrimination) on physical and psychological ill-health symptoms and intentions to quit. It could, therefore, be concluded that separation mediates the path from mainstream segregation demands and subtle racism to physical and psychological ill-health symptoms and intentions to quit. It can be concluded that separation demands fully mediate the path from mainstream segregation demands and subtle racism to psychological acculturation outcomes at work, and that mainstream adverse conditions matter for the experience of wellbeing at work. Our findings are in line with a recent review of discrimination and health that suggests that racism precedes, rather than follows negative mental health outcomes and health-related behaviors (Gee et al., 2009; Jackson et al., 2011).

Our study also challenges public perception and discourse that portrays some groups as victims and others as perpetrators of negative intercultural attitudes (Jackson et al., 2011). Therefore another aim of the study was to determine whether Blacks and Whites experience the mainstream antecedent conditions, intervening variables and well-being at work differently. The results showed that segregation demands and discrimination at work (conditions), an individual separation acculturation strategy and physical ill-health at work (outcomes) were the only dependent variables that showed a significant race difference. Blacks reported higher segregation demands and discrimination experiences at work (conditions), an individual separation acculturation strategy and physical ill-health at work (outcomes) compared to Whites, although the effects were relatively small. Our findings differ from those of Jackson et al. (2011) who found that only subtle racism was reported by Blacks as more common in the workplace than by Whites. Blacks still see more discrimination in their work environment. The results did not show major differences in perception of adversity in the work place. Therefore, our main conclusion partly support public perception and discourse that portrays Blacks as victims of negative intercultural attitudes and that racism, discrimination and segregation are still prevalent in the workplaces that we studied.

This paper extends the psychological knowledge by incorporating cross-cultural and social-psychological theories into a framework for explaining the dynamics involved in the relationship between segregation, racism, discrimination, separation and well-being of the workplace. The findings of the study contribute to the growing literature on acculturation in South Africa in relation to how South Africans cope with the separatism, discrimination and racism at work. This study also extends national surveys that look at race perceptions on changes in the new South Africa by combining the influence of both mainstream and ethnic perception in predicting specifying paths to wellness at workplace of post-Apartheid South Africa. These findings are important in an effort to facilitate better future race relations in a young democracy with a history of bad ethnic relations. It

is recommended that institutions with a multicultural workforce deal with overt and, even more importantly, subtle racism in the work place to increase wellness at work to support national initiatives to facilitate better intercultural relations.

The main limitations of the study involve the limited sample size and the cross-sectional design used. Future studies could consider specific industries with larger sample sizes as well as longitudinal design to firmly establish cause and effect as well as the impact of the issues covered as well other issues of relevance for sound race relations in South Africa. In the light of recent racial polarization in South Africa, future research could consider the experience of Indians as well as various immigrant groups in the workplace of the “New” South Africa.

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Part 2: Assessment

Developing Nations and Developing Surveys: Measuring Inner Wellbeing in Zambia and India, 2010-2013¹

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Abstract

In the present chapter, we summarize the results of a programme of research that we have undertaken concerning domains of inner wellbeing (i.e., individuals' feelings and thoughts about what they can do and be) as experienced by individuals in villages within two nations in the global South (i.e., Zambia and India). Results of confirmatory factor analyses for Zambia at Time 1 (in 2010, $n = 361$) and for India at Time 1 (in 2011, $n = 287$) indicated that, although we had expected seven to eight intercorrelated domains to emerge, inner wellbeing was best regarded as a unidimensional construct. However, after we engaged in intensive reflection and extensive reconceptualization and measurement of inner wellbeing, results for Zambia Time 2 (in 2012, $n = 344$) and for India Time 2 (in 2013, $n = 335$) indicated that inner wellbeing was best regarded as a multidimensional construct with seven intercorrelated domains (i.e., economic confidence, agency/participation, social connections, close relationships, physical/mental health, competence/self-worth, and values/meaning). Implications for the conceptualization and measurement of inner wellbeing within the global South, and for theoretical and methodological issues concerning wellbeing in general, are discussed.

Introduction

According to Ryan and Deci (2001), wellbeing is "optimal psychological functioning and experience" (p. 142). Within the global West, wellbeing frequently is regarded as an intrapersonal construct that transcends social contexts. However, within as well as outside the global West, individuals' actual experience of wellbeing is most accurately regarded as inherently interpersonal (see Leary, 2007). At least one psychological theory from the global West (i.e., self-determination theory; Ryan & Deci, 2000) posits that relatedness is a primary psychological need, alongside autonomy and competence; we would argue that outside the global West, the interpersonal roots of wellbeing are even more obvious aspects of individuals' daily lives.

Since the mid-to-late 1980s, two major approaches to conceptualizing and measuring wellbeing as an individual-difference construct within the global West have emerged: (1) Subjective wellbeing (i.e., the degree to which individuals think and feel positively toward their lives), measured by two independently derived surveys (i.e., the Satisfaction with Life Scale, created by Diener, Emmons, Larsen, & Griffin, 1985; and the Positive & Negative Affect Schedule, created by Watson, Clark, & Tellegen, 1988); and (2) psychological wellbeing (i.e., the degree to which individuals believe that they have obtained meaning in their lives), measured by one multi-dimensional survey (unnamed and unpublished in full form, but nonetheless created by Ryff, 1989). According to Ryan and Deci (2001), Diener's concept of subjective wellbeing reflects an hedonic perspective; whereas Ryff's concept of psychological wellbeing reflects an eudaimonic perspective. Although Diener (e.g., Oishi, Diener, D.-W. Choi, Kim-Prieto, & I. Choi, 2007) and Ryff (e.g., Karasawa, Curhan, Markus, Kitayama, Love, Radler, & Ryff, 2011) have extended their research beyond the global West, neither subjective wellbeing nor psychological wellbeing originated from research outside the global West.

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Several alternative approaches to conceptualizing and measuring wellbeing have arisen outside the global West (for a review, see White, Gaines, & Jha, 2012). Particularly relevant to the present chapter is White's (2009) conceptualization and proposed measurement of inner wellbeing (i.e., individuals' feelings and thoughts about what they can do and be) within the global South. Based on the results of qualitative research that she conducted in Zambia in 2009, White proposed that inner wellbeing is a construct with several distinct, yet interrelated, dimensions. In the present chapter, we report the results of a three-year study (2010-13) – influenced by White's aforementioned work – concerning inner wellbeing among individuals in two developing nations within the global South – namely, Zambia and India. As will become evident shortly, although we began with White's conceptualization and measurement of inner wellbeing, we gradually changed our conceptualization and (especially) measurement of the domains of inner wellbeing across time in both nations.

Zambia, Time 1 (2010): Attempted Replication of White's (2009) Conceptualization and Measurement of Inner Wellbeing

In 2010, members of the Wellbeing and Poverty Pathways Project team went to Zambia with the goal of conceptualizing and measuring inner wellbeing as White (2009) had done previously. White developed a prototypical, 50-item survey of inner wellbeing that was designed to measure individual differences along seven interrelated domains: (1) Access to resources (12 items; sample item: "There are times in each year where I have to struggle to make ends meet"); (2) agency/participation (6 items; sample item: "I can make a difference to my community when I work with others"); (3) social connections (6 items; sample item: "I have people I can go to for help and advice"); (4) close relationships (6 items; sample item: "I have to take too much responsibility for the running of our household," to be reverse-scored); (5) physical/mental health (9 items; sample item: "I get enough good quality food"); (6) competence/self-worth (6 items; sample item: "I am able to do things which help other people"); and (7) values/meaning (5 items; sample item: "I worry that our community doesn't live according to God's laws," to be reverse-scored). Within each domain, individuals were to be given a set of declaratory statements and were asked to indicate (a) whether they agreed or disagreed with each statement and (b) whether they strongly agreed or disagreed with each statement. At the time, however, White did not administer the prototype survey. Thus, information concerning the validity and reliability of White's prototype survey is not available.

When we applied a revised version of White's questionnaire (six items per domain) to participants in Zambia at Time 1 ($n = 361$), we encountered numerous instances of severe non-normality (i.e., skewness and kurtosis values exceeding 2.30 in absolute value; see Lei & Lomax, 2005) that initially prevented us from testing White's seven-factor intercorrelated model of domains of inner wellbeing. By normalizing all item scores (i.e., converting the raw scores into standardized z scores so that for all items, the mean is .00 and the standard deviation is 1.00; see Mels, 2006) via PRELIS 9.1 (the pre-processor complement to LISREL 9.1; Jöreskog & Sörbom, 2012b), we were able to eliminate most (but not all) instances of severe non-normality in item score distributions. In turn, by eliminating most instances of severe non-normality, we were able to calculate a matrix of zero-order correlations among item scores via PRELIS 9.1 for entry into confirmatory factor analyses via maximum likelihood solutions (and invoking the ridge option and ridge constant; see Jöreskog, Sörbom, du Toit, & du Toit, 2001) in LISREL 9.1 (Jöreskog & Sörbom, 2012a). (We do not report results using robust maximum likelihood solutions, which required computing asymptotic covariance matrices and resulted in models that consistently failed to fit the data; see Jöreskog & Sörbom, 1996a, b, concerning the advantages and disadvantages of using asymptotic covariance matrices.)

Results of confirmatory factor analyses (details of which are also reported in Gaines & White, 2013) indicated that the best-fitting linear model (based on χ^2 , χ^2/df , SRMSR, and AGFI as goodness-of-fit statistics; see Brown, 2006) was not an intercorrelated seven-factor model (for which we could not obtain a solution), or even an uncorrelated seven-factor model (for which we could obtain a solution; $\chi^2 = 532.49$, $df = 854$, NS; $\chi^2/df = .54$; SRMSR = .05; AGFI = .92), but rather a unifactorial model (for which we could obtain a solution; $\chi^2 = 467.45$, $df = 860$, ns; $\chi^2/df = .54$; SRMSR = .04; adjusted goodness-of-fit index = .93). (We also attempted to test the goodness-of-fit of categorical models but consistently failed to obtain solutions, regardless of num-

ber of factors or correlations among factors; see Jöreskog & Sörbom, 1996a, b, concerning the advantages and disadvantages of categorical models). For the unifactorial model, 24 of the 42 loadings were positive, with 16 of those items reaching significance ($ps < .05$ or lower) or approaching significance ($ps < .10$); yet 18 of the 42 loadings were negative (even after reverse-worded items were rescored so that higher scores should reflect higher levels of inner wellbeing), with 6 were reaching or approaching significance. In light of these results, we found it necessary to completely revise White's original measure of inner wellbeing; yet we did not dismiss White's model, out of concern that the format and content of the original items did not allow us to conduct fair tests of the model.

India, Time 1 (2011): Completely Revamped Survey, Slightly Revamped Model

In 2011, members of the Wellbeing and Poverty Pathways Project team went to India with the goal of conceptualizing inner wellbeing in a somewhat different manner, and measuring inner wellbeing in a dramatically different manner, than we had done in Zambia during the previous year. The less-than-encouraging results that we obtained for Zambia Time 1 prompted us to reflect at length upon our conceptualization and measurement of inner wellbeing. White, Gaines, and Jha (2012) summarized the evolution of the survey as follows:

Faced with general questions ('Do you have people who help you in times of need?') people asked for specific examples ('What kinds of need do you mean?'). Faced with abstract terms, they sought to bring them down to earth. This made us realize that what seems straightforward and self-evident in one context [e.g., university settings with Psychology undergraduates as participants] might not be so in another [e.g., village settings with participants who generally had not enjoyed the benefits of university education], that the wellbeing approaches assume a culture of questioning that is by no means generally shared (p. 772).

For India Time 1 ($n = 287$), we divided White's (2009) access to resources domain into the separate domains of *enabling environment* and *economic confidence*; and we retained White's *agency/participation*, *social connections*, *close relationships*, *physical/mental health*, *competence/self-worth*, and *values/meaning* domains. Also, we made the items more concrete (i.e., less abstract) than we had done previously. Finally, rather than present a list of declarative statements with agree-disagree scale format, we presented a list of questions (four items per domain) with scales that offered gradations of responses.

We encountered some instances of non-normality of item scale distributions for India Time 1, though not nearly as numerous as the instances that we had found for Zambia Time 1. Nevertheless, we normalized all item scores and calculated a zero-order correlation matrix in PRELIS 9.1; and we entered the matrix into confirmatory factor analyses (again using maximum likelihood method, ridge option, and ridge constant) using LISREL 9.1. (We do not report results using robust maximum likelihood solutions, which required computing asymptotic covariance matrices and resulted in models that consistently failed to fit the data.)

Results of confirmatory factor analyses (also reported in White, Gaines, & Jha, 2013) indicated that the best-fitting linear model was not an intercorrelated eight-factor model (for which we could not obtain a solution), or even an uncorrelated eight-factor model (for which we *could* obtain a solution; $\chi^2 = 384.64$, $df = 488$, ns ; $\chi^2/df = .79$; SRMSR = .07; AGFI = .90), but rather a unifactorial model (for which we *could* obtain a solution; $\chi^2 = 262.24$, $df = 495$, ns ; $\chi^2/df = .53$; SRMSR = .04; AGFI = .93). (We also attempted to test the goodness-of-fit of categorical models but consistently failed to obtain solutions, regardless of number of factors or correlations among factors.) For the unifactorial model, a majority of the items loaded significantly to marginally, and *all* items loaded positively (after reverse-worded items were rescored), on their hypothesized domains, except for the domain of enabling environment. Overall, results for India Time 1 were encouraging for our slightly revised model and wholly revised survey measuring interrelated domains of inner wellbeing, though it became clear that the domain of enabling environment was problematic.

Zambia, Time 2 (2012): Slightly Revamped Model, Slightly Revamped Survey

In 2012, members of the Wellbeing and Poverty Pathways Project team went back to Zambia with a seven-domain, intercorrelated-factor model (i.e., *economic confidence*, *agency/participation*, *social connections*, *close relationships*, *physical/mental health*, *competence/self-worth*, and *values/meaning*; in the wake of problematic results, we dropped the domain of enabling environment) and slightly revised survey (five items per

domain, and taking into account local conditions for Zambia as distinct from local conditions in India), compared to the model and survey that we used in India Time 2, keeping in mind that the survey in particular was quite different from the survey that we had used in Zambia Time 1. We did not find any instances of non-normality in item score distributions for Zambia Time 2 ($n = 344$). Thus, we were able to calculate the zero-order correlation matrix in PRELIS 9.1 for entry into LISREL 9.1 (again using maximum likelihood method, ridge option, and ridge constant) without having to normalize item scores in advance. (We do not report results using robust maximum likelihood solutions, which required computing asymptotic covariance matrices and resulted in models that consistently failed to fit the data.)

Results of the confirmatory factor analyses concerning linear models (also reported in Gaines & White, 2013) indicated that a seven-domain, intercorrelated factor model ($\chi^2 = 231.06$, $df = 567$, NS ; $\chi^2/df = .41$; $SRMSR = .03$; $AGFI = .96$) provided significantly better fit than did either a seven-domain, uncorrelated factor model ($\chi^2 = 531.54$, $df = 588$, ns ; $\chi^2/df = .90$; $SRMSR = .08$; adjusted goodness-of-fit index = .89) or a unifactorial model ($\chi^2 = 289.96$, $df = 594$, ns ; $\chi^2/df = .49$; $SRMSR = .04$; $AGFI = .95$). (We also attempted to test the goodness-of-fit of categorical models but consistently failed to obtain solutions, regardless of number of factors or correlations among factors.) For the seven-factor intercorrelated model, all but one of the items loaded significantly to marginally, and positively (after reverse-worded items were rescored), on the hypothesized domain. In addition, all seven domains were represented within the correlated factor structure. Taken as a whole, results for Zambia Time 2 indicated that we had developed a survey possessing high construct validity (see Nunnally & Bernstein, 1994). As such, we present the full Zambia Time 2 survey in Table 1 (all Tables are printed at the end of the chapter).

India, Time 2 (2013): Same Model, Slightly Revamped Survey

Finally, members of the Wellbeing and Poverty Pathways Project team went back to India in 2013, with the same seven-domain, intercorrelated-factor model (i.e., *economic confidence, agency/participation, social connections, close relationships, physical/mental health, competence/self-worth, and values/meaning*) and slightly different survey (five items per domains, and taking into account local conditions in India as distinct from local conditions in Zambia) compared to Zambia Time 2, keeping in mind that both the model and the survey that we used in India Time 2 were somewhat different from the model and survey that we had used in India Time 1. We encountered approximately the same number of instances of non-normality for India Time 2 ($n = 335$) as we did for India Time 1. Hence, prior to calculating a zero-order correlation matrix in PRELIS 9.1 for entry into confirmatory factor analyses (again using maximum likelihood method, ridge option, and ridge constant) in LISREL 9.1, we found it necessary to normalize item scores in advance via PRELIS 9.1. (We do not report results using robust maximum likelihood solutions, which required computing asymptotic covariance matrices and resulted in models that consistently failed to fit the data.)

Results of confirmatory factor analyses concerning linear models (also reported in White, Gaines, & Jha, 2013) indicated that a seven-domain, intercorrelated-factor model ($\chi^2 = 288.95$, $df = 567$, NS ; $\chi^2/df = .51$; $SRMSR = .04$; adjusted goodness-of-fit index = .94) provided significantly better fit to the data than did either a seven-domain, uncorrelated factor ($\chi^2 = 544.33$, $df = 588$, NS ; $\chi^2/df = .93$; $SRMSR = .08$; adjusted goodness-of-fit index = .88) model or a unifactorial model ($\chi^2 = 384.43$, $df = 594$, NS ; $\chi^2/df = .65$; $SRMSR = .05$; adjusted goodness-of-fit index = .92). (We also attempted to test the goodness-of-fit of categorical models but consistently failed to obtain solutions, regardless of number of factors or correlations among factors.) For the seven-factor intercorrelated model, all items loaded significantly to marginally, and positively (after reverse-worded items were rescored), on the hypothesized domain; and all seven domains were represented. As was the case for Zambia Time 2, results for India Time 2 indicated that the survey possessed high construct validity. Therefore, we present the full India Time 2 survey in Table 2.

Concluding Thoughts

Throughout the present chapter, we have focused on construct validity as a psychometric issue. However, a related yet distinct issue that we have not addressed so far is reliability of lack of measurement error (Nunnally-

ly & Bernstein, 1994). Even with the surveys for Zambia Time 2 and India Time 2, the small number of items made it impossible for us to consistently obtain Cronbach's alphas of .70 or above. Thus, we recommend that future researchers attempt to double the number of items that we used in both nations at Time 2 (i.e., increase the number of items per scale from five to ten).

Earlier in the present chapter, we addressed the theme of conceptualizing and measuring wellbeing in the global South versus the global West. Our conceptualization and measurement of inner wellbeing, developed in response to White's (2009) earlier work in Zambia, are notable for their dissimilarity to Diener's dominant conceptualization and measurement of subjective wellbeing (e.g., Diener, Oishi, & Lucas, 2003). By the same token, our conceptualization (if not our measurement) of inner wellbeing bears some resemblance to Ryff's influential conceptualization and measurement of psychological wellbeing (e.g., Ryff & Singer, 2006) – an approach that, in turn, Ryan and Deci (2001) viewed as compatible with their self-determination theory (Ryan & Deci, 2000). We strongly encourage future researchers to compare and contrast these three approaches (and their relative compatibility with self-determination theory) in cross-cultural research on wellbeing.

In closing, we return to the theme of wellbeing as an inherently interpersonal construct. One of the major challenges that we faced as researchers from the global West, conceptualizing and measuring wellbeing in the global South, was immersing ourselves sufficiently within the social contexts of villages in Zambia and India to emerge with culturally embedded constructs of the domains of inner wellbeing. We believe that the results of the present programme of research affirm that we have striven toward (and, hopefully, we have succeeded in) meeting such a challenge.

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Table 1.

Set of Items Measuring Dimensions of Inner Wellbeing, Zambia Time

1. Economic wellbeing		1	2	3	4
1.1 How well would you say you are managing economically at present?	1. Very badly; 2. Badly; 3. Managing; 4. Well; 5. Very well				
1.2 If guests come do you feel you can look after them in the proper way?	1. Not at all. 2. Very little 3. Just ok 4. Somewhat well 5. Very well				
1.3 Do you feel that people around you have got ahead of you?	1. Everybody is ahead of me 2. Many people are ahead of me 3. I am at the same level as most people 4. I am ahead of many people 5. I am ahead of everybody				
1.4 Do you feel that your children will have a better life than you have had?	1. I never feel that my children will have a better life... 2. Very little ... 3. Sometimes feel so/ sometimes not 4. More often than not 5. I feel sure that my children will have a better life...				
1.5 How well could you manage if something bad were to happen (e.g., illness in the family)?	1. We could not manage if even the slightest thing happened; 2. There are very few things that might happen that we could manage; 3. We can manage if something small happens but not if something big happens; 4. There are many things that might happen that we could manage. 5. We could manage almost all the things that might happen				

2. Having a say and taking part	
2.1 If there is a village meeting do you have an opportunity to voice your opinion?	<ol style="list-style-type: none"> 1. I never get the opportunity to speak 2. More often than not I am denied the opportunity to speak. 3. I sometimes get the opportunity to speak and sometimes do not 4. I get an opportunity to speak more than half the time 5. I always get the opportunity to speak
2.2 If official decisions are made that affect you badly, do you feel that you have power to change them?	<ol style="list-style-type: none"> 1. I never feel that I can make a change 2. It is only on few occasions that I feel can make a change 3. I sometimes feel I can make a change and sometimes not 4. More often than not I feel can make a change 5. I always feel that I can make a change
2.3 Do feel that you are heard? (Beyond family – that listened to seriously, not necessarily that people do what you say)	<ol style="list-style-type: none"> 1. Never 2. Very little of the time 3. Sometimes yes, sometimes no 4. More often than not 5. Always
2.4 How confident do you feel that (along with others) you will be able to bring change to your community?	<ol style="list-style-type: none"> 1. I never have confidence that I'll be able to bring change 2. Very little of the time 3. Sometimes yes, sometimes no... 4. More often than not... 5. I have complete confidence.....
2.5 How much freedom do you have to make your own decisions about the things that matter to you?	<ol style="list-style-type: none"> 1. I have no freedom at all.... 2. I have very little freedom 3. I sometimes have freedom and sometimes not 4. I have freedom most of the time 5. I have complete freedom

3 Social Connections		1	2	3	4
1. Do you know the kind of people who can help you get things done?	1. I don't know anybody at all 2. I know of people but don't know them directly 3. I know some people who can help with small things 4. I know some people who can help with some important things 5. I know people who can help with whatever I might need				
2. When do you get to hear about events in the community?	1. I always get to hear about events only after they have happened. 2. More often than not I get to hear about events only after they have happened 3. I sometimes get to hear of events after they have happened and sometimes before. 4. More often than not I get to hear about events before they happen 5. I always get to hear about events before they happen				
3. Do you feel there are people beyond your immediate family who you'll be able to count on even through bad times?	1. I never feel I can count on anybody 2. More often than not I feel that there is no-one I can count on 3. Sometimes I feel there are people I can count on/ sometimes not 4. More often than not I feel there are people I can count on 5. I always feel there are people I can count on.				
4. What proportion of people in the community are helpful to you?	1. Nobody at all 2. Less than half 3. Half the people 4. More than half 5. Everybody				

4. Close relationships	
1. When your mind/heart is troubled/heavy, do you feel there is someone that you can go to?	<ol style="list-style-type: none"> 1. Never 2. Very little of the time 3. Sometimes yes, sometimes no 4. More often than not 5. Always
2. How happy are you with the way people in your family behave towards/treat you)?	<ol style="list-style-type: none"> 1. Very unhappy 2. Slightly unhappy 3. Neither happy nor unhappy 4. Slightly happy 5. Very happy
3. Even when others are around, how often do you feel isolated or alone?	<ol style="list-style-type: none"> 1. I always feel isolated and alone even when there are others around 2. Much of the time... 3. Sometimes/sometimes not 4. It is unusual for me to feel isolated and alone even when there are others around 5. I never feel isolated and alone
4. How fairly do you feel the responsibility for running the household is shared between you and other household members?	<ol style="list-style-type: none"> 1. Responsibility for running the household is not shared at all 2. Responsibility for running the household is shared unfairly 3. Responsibility ... is partly fair and partly unfair 4. Responsibility is fair most of the time 5. Responsibility for running the household is totally fair
5. How much of the time do you feel there is harmony in your home?	<ol style="list-style-type: none"> 1. Never 2. Very little of the time 3. Sometimes yes, sometimes no 4. More often than not 5. Always

5. Physical and mental health		1	2	3	4
1. Do you ever have trouble sleeping?	1. Always 2. More often than not 3. Sometimes yes, sometimes no 4. Very little of the time 5. Never				
2. How often do you feel too weak for what you need to do?	1. Always 2. More often than not 3. Sometimes yes, sometimes no 4. Very little of the time 5. Never				
3. Do you suffer from tension?	1. Always 2. More often than not 3. Sometimes yes, sometimes no 4. Very little of the time 5. Never				
4. How much do you worry about your health?	1. Always 2. More often than not 3. Sometimes yes, sometimes no 4. Very little of the time 5. Never				
5. How often do you have good times?	1. Never 2. Very little of the time 3. Sometimes yes, sometimes no 4. More often than not 5. Almost all of the time				

6. How you feel about yourself	
1 How well have you been able to face life's difficulties?	1. Very badly 2. Somewhat badly 3. Sometimes well and sometimes badly 4. Somewhat well 5. Very well
2 How far do you feel you are able to help other people?	1. I am never able to help other people 2. Very little of the time am I able to help to people 3. I am sometimes able to help people and sometimes not 4. I am generally able to help other people 5. I am always able to help other people
3 To what extent do you have faith in yourself?	1. I have no faith in myself at all 2. I often find it hard to have faith in myself 3. Sometimes/sometimes not 4. More often than not I have faith in myself 5. I have complete faith in myself
4 To what extent do you tend to doubt the decisions that you have made?	1. I always doubt decisions that I have made 2. More often than not I tend to doubt decisions... 3. Sometimes/sometimes not 4. It is unusual for me to ... 5. I never doubt decisions that I have made
5 Looking to the future, how confident do you feel that you will be able to fulfil your responsibilities?	1. Not at all (feel) 2. Very little 3. Sometimes/ sometimes not 4. More often than not 5. Totally confiden

Table 2.*Set of Items Measuring Dimensions of Inner Wellbeing, India Time 2*

7. Values		1	2	3	4
1	To what extent have you been able to practise your religion in the way you would like?	1. Not at all (feel) 2. Very little 3. Sometimes/ sometimes not 4. Generally 5. Absolutely			
2	To what extent do you feel that life has been fair for you?	1. Utterly unfair 2. Generally unfair 3. Neither fair nor unfair 4. Generally fair 5. Totally fair			
3	How far would you say you feel peace in your heart at the end of the day?	1. Not at all (feel) 2. Very little 3. Sometimes/ sometimes not 4. More often than not 5. Very strongly (feel)			
4	To what extent would you say that you live in fear of harm from witchcraft or evil powers?	1. Very strongly (feel) 2. More often than not 3. Sometimes/ sometimes not 4. Very little 5. Not at all (feel)			
5	To what extent do you feel that life has been good to you?	1. Very bad 2. Bad 3. Just ok 4. Good 5. Very good			

1. Economic wellbeing		1	2	3	4	5
1.1	How well would you say you are managing economically at present?	1. Very badly (great difficulty) 2. Badly (some difficulty) 3. Managing 4. Well 5. Very well				
1.2	If guests come do you feel you can look after them in the proper way?	1 Not at all 2 Very little 3 Just ok 4 Somewhat well Very well				
1.3	Do you feel that people around are richer than you?	1. I am behind everybody 2. I am behind many people 3. I am at the same level as most people 4. I am ahead of many people I am ahead of everybody				
1.4	(Given your current situation) How confident do you feel that your children will have a better life than you have had?	1. I never feel that my children will have a better life... 2. Very little ... 3. Sometimes feel so/ sometimes not 4. More often than not 5. I feel sure that my children will have a better life...				
1.5	How well could you manage if something bad were to happen (e.g., illness in the family)?	1. We could not manage if even the slightest thing happened; 2. There are very few things that might happen that we could manage 3. We can manage if something small happens but not if something big happens; 4. There are many things that might happen that we could manage. 5. We could manage almost all the things that might happen				

2. Having a say and taking part	
2.1. If there is a village meeting (gram sabha) do you have an opportunity to voice your opinion?	1. Never/ Don't go 2. Very little of the time 3. Sometimes yes, sometimes no 4. More often than not 5. Always
2.2. If official decisions are made that affect you badly, do you feel that you have power to change them?	1 Not at all 2 Very little 3 Sometimes yes, sometimes no 4 More often than not 5 Completely
2.3. Do feel that you are heard? (Beyond family – that listened to seriously, not necessarily that people do what you say)	1. Never 2. Very little of the time 3. Sometimes yes, sometimes no 4. More often than not 5. Always
2.4. How confident do you feel that the community can get together to take action?	1 None at all 2 Very little 3 Sometimes yes, sometimes no... 4 Mostly 5 Complete confidence.....
2.5. How much of the time do you have to things you do not wish to?	1 Always 2 More often than not 3 Sometimes yes, sometimes no 4 Very little of the time 5 Never

3. Social Connections		1	2	3	4	5
3.1 Do you know the kind of people who can help you get things done?	<ol style="list-style-type: none"> 1. I don't know anybody at all 2. I know of people but don't know them directly 3. I know some people who can help with small things 4. I know some people who can help with some important things 5. I know people who can help with whatever I might need 					
3.2 When do you get to hear about gossip in the community?	<ol style="list-style-type: none"> 1. I always get to hear gossip late 2. More often than not I get to gossip late 3. I sometimes get to gossip on time and sometimes late 4. More often than not I get to hear about gossip on time 5. I always get to hear about gossip in good time 					
3.3 How much can you trust people beyond your immediate family to be with you through bad times?	<ol style="list-style-type: none"> 1. Not at all 2. Very little 3. Sometimes yes, sometimes no... 4. Mostly 5. Completely 					
3.4 What proportion of people in the community are helpful to you?	<ol style="list-style-type: none"> 1. Nobody at all 2. Less than half 3. Half the people 4. More than half 5. Everybody 					
3.5 Even when others are around, how often do you feel alone?	<ol style="list-style-type: none"> 1. I always feel alone even when there are others around 2. Much of the time... 3. Sometimes/sometimes not 4. It is unusual for me to feel alone even when there are others around 5. I never alone when there are others around 					

4. Close relationships	
4.1 How well do you get along amongst yourselves?	<ol style="list-style-type: none"> 1. Not at all 2. Very little 3. Sometimes yes, sometimes no... 4. Mostly 5. Completely
4.2 If there is a problem in your family how easily can you sort it out?	<ol style="list-style-type: none"> 1. With great difficulty 2. With difficulty 3. Sometimes with difficulty, sometimes easily 4. Easily 5. Very easily
4.3 When your mind/heart is troubled/heavy, do you feel there is someone that you can go to?	<ol style="list-style-type: none"> 1. Not at all 2. Very little 3. Sometimes yes, sometimes no... 4. Mostly 5. Completely
4.4 How much do people in your house care for you?	<ol style="list-style-type: none"> 1. Not at all 2. Very little 3. Sometimes yes, sometimes no... 4. Mostly 5. Completely
4.5 How uneasy are you made by the amount of violence in your home?	<ol style="list-style-type: none"> 1. Completely 2. Mostly 3. Sometimes yes, sometimes no 4. Very little 5. Not at all

Acquiescent and Socially Desirable Response Styles in Cross-Cultural Value Surveys

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Abstract

The present chapter presents two studies examining the differential effects of acquiescence and social desirability on value scores across cultures. In the first study, culture-level acquiescence indexes were extracted from data in eight multinational surveys, and culture-level social desirability scores were obtained from a meta-analysis of the Marlowe-Crowne Social Desirability Scale. Both types of indexes were correlated with cultural value dimensions reported in the literature and with indicators of affluence. We found that affluence explains a substantial proportion of the variance in the association of response styles with value scores in all the surveys. The second study investigated effects of score standardization. This study was based on a large cross-cultural data set collected with the Schwartz Value Survey (SVS). We found that value score standardization had some effect on the correlations of acquiescence with various value types, but only limited effects on social desirability. We conclude that affluence affects the relationship of response styles and value scores. Implications for the interpretation of cross-cultural differences in response styles and value surveys are discussed.

Introduction

The present chapter reports two studies that are part of a larger research effort to systematically examine the effects of response styles on value scores from a cross-cultural perspective. In a first study we explored relationships among response styles, affluence, and values, and in the second study we mapped the effect of value score standardization on variance due to response styles. Value surveys can be vulnerable to various response styles (e.g., Van Vaerenbergh & Thomas, 2012). Response styles are found to be interrelated, and among the most frequently studied response styles are acquiescent response style (ARS: the tendency to agree to items irrespective of content) and socially desirable response style (SDR: the tendency to answer questions in a socially acceptable manner) (He & van de Vijver, 2013). In value studies, ARS and SDR seem to play an important role. Respondents' endorsement of a value item on a Likert scale may obscure the true standing on the value due to a tendency to react affirmatively rather than denial (Schwartz, 1992). Values are defined as desirable goals (Kluckhohn, 1951), and the desirability component embedded in instruments assessing values may create a tendency to react in a socially desirable manner (Fisher & Katz, 2000). In cross-cultural value surveys, issues become even more complicated, because differences in response styles and "true" value differences are con-

founded. Moreover, differences can arise not only at the individual level but also from cultural differences in values and response styles (e.g., Johnson, Kulesa, Cho, & Shavitt, 2005; Smith & Fischer, 2008).

Previous investigations have found that response styles at culture level are associated with a number of values; yet findings so far have made use of scattered data, and have reported in part conflicting findings (see below). In addition, a role for affluence in the relationship between response styles and values has been suggested, but seldom tested empirically. In Study 1, we address this issue with a large data set of ARS and SDR indexes at culture level. To account for the effects of response styles, especially ARS, within-subject or within-culture standardization of value scores has been proposed (Schwartz, 1992). Nonetheless, there is almost no empirical evidence to support the suggested removal of response style effects by standardization or to support the idea that this procedure offsets both ARS and SDR. We test the effects of score standardization of value scores from the Schwartz Value Survey in Study 2.

The contribution of our studies is that we use a large data set of ARS and SDR scores at culture level to examine their relationships with value scores and affluence, so as to validate previous findings with more stable estimates. In addition, we provide empirical evidence as to the effects of score standardization by comparing the correlation patterns of raw and standardized Schwartz value scores with ARS and SDR. In the next section, we first review associations of ARS, SDR, affluence, and values that were reported previously. We then examine the findings of value score standardization on response styles and describe the research questions.

ARS, SDR, Affluence, and Values

ARS refers to the tendency to agree with propositions in general regardless of the content (Lentz, 1938). SDR is defined as the tendency of respondents to answer questions in a manner that will be viewed favorably by others (Crowne & Marlowe, 1960). It has been assumed that ARS and SDR are positively associated, because they exert joint impact on item responses (Ferrando & Anguiano-Carrasco, 2010), and both response styles are related to conformity (e.g., Gudjonsson & Young, 2011). Based on their shared affinity with conformity, we expect that ARS and SDR are positively related at culture level.

ARS at culture level was found to be systematically associated with affluence-related indicators and cultural values in various multinational studies. Specifically, ARS showed negative associations with “hard” social indicators such as the Human Development Index (HDI), political freedom, and democracy (Meisenberg & Williams, 2008; van Dijk, Datema, Piggen, Welten, & van de Vijver, 2009), and positive associations with “soft” indicators such as collectivism, hierarchy, and embeddedness (Harzing, 2006; Smith, 2004, 2011). There are also contradictory findings. For instance, Johnson, Kulesa, Cho, and Shavitt (2005) reported negative effects of power distance and uncertainty avoidance on ARS, whereas Harzing (2006) and Smith (2004, 2011) found a positive effect of power distance and a non-significant effect of uncertainty avoidance. The inconsistent results may be due to the fluctuation of ARS scores from different studies (e.g., number of countries covered, content of items from which these ARS indexes were constructed, and number of anchor points on the response scale). We replicate previous studies with ARS indexes compiled from more surveys involving various topics and answer scales, with a view to arrive at stable ARS measures.

There is limited empirical evidence on the culture-level correlates of SDR. The only culture-level study on the Lie scale of the Eysenck Personality Questionnaire, an SDR measure, showed substantial negative correlations with HDI, Gross National Product, political freedom, and democracy (van Hemert, van de Vijver, Poortinga, & Georgas, 2002). It was also reported that the Lie scale was positively linked with cultural values of collectivism and power distance. Taking a similar approach to deriving culture-level scores of SDR, we expect the scores of the Marlowe-Crowne Social Desirability scale from different cultures to replicate these patterns.

To summarize, ARS and SDR are conceptually distinct yet related response styles that show similar patterns of correlations with affluence indicators. The correlates reviewed above imply that affluence may play a role in the relations between the two response styles and cultural values (e.g., Smith & Fischer, 2008). We investigate to what extent affluence serves as the common denominator in both response styles in Study 1.

Value Score Standardization

Score standardization refers to the procedure of transforming a set of raw scores to some other metric, usually by computing deviance scores (i.e., subtracting the mean of each score) or *z* scores (which corrects for individual differences in both means and standard deviations). The procedure has become a popular practice to adjust for response styles in data obtained from subjective evaluation of values, attitudes, and other psychological constructs using rating scales (Fischer, 2004). Score standardization takes different forms and these have different implications. Fischer (2004) distinguished within-subject, within-group, and within-culture standardization, and each may correct for differences in means, standard deviations, or both. It has been claimed that score standardization was effective in controlling for response styles (e.g., Hofstede, 1980; van de Vijver & Leung, 1997). At the same time, standardization may eliminate content-related differences or introduce new distortions (Dolnicar & Grün, 2007). There is no evidence that standardization removes all and only response style effects that jeopardize the validity of self-reported values.

In the Schwartz Value Survey, an explicit rationale and instruction for standardization are detailed for analysis of individual-level value types and for culture-level value types (Schwartz, 1992, 1999; Schwartz & Sagiv, 1995). For the former, within-subject standardization is recommended, which amounts to subtracting a respondent's mean score from each item score. The idea behind the standardization is that individuals can differ in their value preferences, but that one person cannot have more values than another. Therefore, differences in individual means across all value item ratings reflect scale use and not value substance. Value scores should be converted into scores that indicate the relative importance of each value in the participant's value system. On the basis of data from two countries, Schwartz, Verkasalo, Antonovsky, and Sagiv (1997) suggested that within-subject standardization of value items mainly corrects for scale bias with only a small proportion of content-related variance being eliminated. Similarly, within-culture standardization is suggested for culture-level value types. Standardization here includes the correction of a country's value type scores for the mean deviation of that country from the grand mean score of all countries (Schwartz, 2009b). Overall, it remains rather unclear whether and to which extent standardization affects response styles on value scores. Previous discussion has focused mainly on ARS and extreme responding (Dolnicar & Grün, 2007; Fischer, 2004), whereas SDR has been neglected. In Study 2 we study the correlation patterns of ASR and SDR with both raw and standardized value scores.

Summary of Research Questions

We seek to answer the following research questions:

What is the relationship at the culture level among ARS, SDR, and cultural values? (Study 1)

How much of the culture-level variance in the relationship of ARS and SDR with cultural values can be accounted for by affluence? (Study 1)

What are the effects when value scores are standardized to correct for ARS and SDR? (Study 2)

Study 1

To answer the first two research questions, we studied the associations of ARS, SDR, affluence, and cultural values. The study was carried out by means of secondary data analyses with large data sets on ARS and SDR at culture level.

Method

In this section, we describe the construction of multiple ARS measures, the meta-analytically derived SDR, the indicators for affluence, and the cultural value measures.

Culture-level ARS data. We located in the literature eight multinational surveys with Likert scales from which we could construct ARS indexes. Different response formats and scale characteristics were used in these surveys. Topics of the surveys range from social issues to learning motivations in different school subjects. More specifically, the ARS indexes were constructed from the European Values Survey (EVS, in 2008), Georgas et al.'s Family Value Study (in 2000), the European Social Survey (ESS, in 2008), the International Social Survey Program (ISSP; data sets in 2003, 2005, and 2006), the Program for International Student Assessment

(PISA, in 2009), and the Trends in International Mathematics and Science Study (TIMSS, in 2007). Most datasets were published online; data of the Family Value Study were provided by James Georgas. More information on the database is presented in Table 1.

Table 1
Overview of Surveys for Constructing Acquiescence Indexes

Survey	N of Items Utilized	Response		
		Likert Points	N of Countries	N of Respondents
ESS (2008)	26	5	29	37,827
EVS (2008)	18	5	45	51,076
Family Value Study (2006)	36	7	27	5,194
ISSP 2003	6	5	29	37,768
ISSP 2005	8	5	16	22,653
ISSP 2006	7	5	33	48,641
PISA	4	4	14	83,361
TIMSS-Math	8	4	50	218,426
TIMSS-Science	8	4	29	140,419

Note. ESS = European Social Survey; EVS = European Values Survey; ISSP = International Social Survey Programme; PISA = Programme for International Student Assessment; TIMSS = Trends in International Mathematics and Science Study.

Computation of the ARS index. We derived ARS measures in two ways. The first, conventional operationalization was to select a variety of items that measure different constructs and use the same Likert answer scale. The proportion of answers expressing agreement is an index of ARS. For scales with bidirectional items (i.e., scales with both positively and negatively worded items), ARS indexes can be computed as the proportion of responses expressing agreement for positively worded items and for negatively worded items separately and the average can be taken as ARS scores (van Dijk et al., 2009).

In data obtained from ISSP (three waves), PISA, and TIMSS (two scales in TIMSS were used, one for motivation in learning math and the other one for science), we identified six scales with bidirectional items; hence, we calculated six ARS scores based on such items. For the other three surveys, we compiled three ARS indexes using the proportion of agreement responses (e.g., answers of 4 and 5 of the 5-point Likert scale). It should be noted that ARS indexes constructed this way (i.e., inclusion of the endorsement of the positive end of a scale) especially in unbalanced (positive vs negative) item sets can be viewed as a weaker form of extreme response style (He & van de Vijver, 2013). We first calculated the individual index for each respondent, and then averaged the index across members of the same country to obtain a country-level index. In total, we compiled nine ARS scores at country level, and the number of countries ranged from 14 to 50. We replaced the missing values of the ARS indexes across the surveys using EM imputation; the imputation was supported by the nonsignificance of Little's MCAR test: $\chi^2(182) = 174.73$, $p = .64$ (Little & Rubin, 2002). We treated the nine ARS indexes as tau equivalent estimates (Lord & Novick, 1968), and used the mean as a global indicator of ARS. The value of Cronbach's alpha for this ARS scale was .87.

Culture-level SDR data. Culture-level SDR was derived from an instrument-based meta-analysis (van Hemert, 2003) using the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). This scale was chosen because of its popularity over the years and the prolific number of publications around the world.

A total of 1052 publications from 1960 to 2011 which used the Marlowe-Crowne Social Desirability Scale or its various adapted forms were reviewed. Data from 153 journal articles, 4 unpublished theses, and 1 technical report were retained after excluding studies done with clinical, army, and inmate samples, and studies with “faking” or experimental instructions. Among all the studies, the scale was used in English (49.7%), French (10.1%), Spanish (8.2%), Chinese (6.9%), German (5.7%), Danish (3.8%), Portuguese (2.5%), Japanese, Swedish, Hebrew, Turkish and Arab/Iranian (1.9% each), Italian and Dutch (1.3% each), and Croatian, Greek, Norwegian, Indonesian, and Hindu (0.6% each).

Computation of the SDR index. Means and standard deviations of the Marlowe-Crowne Social Desirability Scale (33 items) were recorded for each study and aggregated to the culture level. For studies using different short or adapted forms of the scale, scores were converted using the following formula: $m \times [33 / (n \times r)]$, where m is the reported mean, n is the number of items, and r is the number of anchor options in the response scale. The means of the full original scale and those of the transformed scores were compared and no significant difference was found. Cronbach’s alpha of the full scale was .76, and of the various short forms the reliability ranged from .76 to .82 (corrected with the Spearman-Brown formula). At the end, the mean scores of SDR at culture-level were obtained for 42 countries (for more details, see Domínguez Espinosa & van de Vijver, 2012).

Measures of affluence. The affluence level of a country was measured with the Human Development Index, literacy rates, and democratization.

The Human Development Index (HDI) is a composite measure of the average achievements of a country on three dimensions of human development: a long and healthy life (life expectancy), access to knowledge (enrolment in education), and standard of living (Gross Domestic Product per capita) (United Nations, 2010). Data were available for 194 countries.

Literacy rate of adults in a country (percentage of people aged 15 and above) were extracted from the World Data Bank for 130 countries (The World Bank, 2011) as an approximation of level of education.

Index of democratization, the entitlement of ideologically and socially different groups to compete for political power, was obtained from the Polyarchy Index of Democracy (Vanhanen, 2007). The average index from 1998 to 2000 was available for 184 countries.

Measures of cultural values. We compiled cultural value scores from five traditions:

(i) Individualism, power distance, uncertainty avoidance, and masculinity scores were taken from Hofstede (2009) (N = 70).

(ii) Schwartz cultural value dimension scores including harmony, embeddedness, hierarchy, mastery, intellectual autonomy, affective autonomy, and egalitarianism were taken from Schwartz (2009a). It should be noted that dimension scores here were standardized within-cultures (N = 75).

(iii) Secularism and self-expression scores were extracted from Inglehart’s value dimensions (Inglehart, Basafiez, Diez-Medrano, Halman, & Luijkx, 2004) (N = 80).

(iv) The nine societal value dimensions including power distance, uncertainty avoidance, institution collectivism, ingroup collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation, and humane orientation from the GLOBE leadership project were taken for 62 countries (House, Hanges, Javidan, Dorfman, & Gupta, 2004).

(v) Dimensions including social cynicism, reward for application, social complexity, fate control, and religiosity were taken from the Social Axioms scale for 39 countries (Leung & Bond, 2004).

Results

Correlation analyses were used to study the associations among the variables of interest. We describe the findings in two parts. First, we report the relationships of the two response styles and affluence indicators. Second, we compare the zero-order correlations and partial correlations (corrected for affluence) of the two response styles with cultural values.

ARS, SDR, and affluence. The correlation of the ARS and SDR was .48, $p < .01$, which indicated that the two response styles were rather strongly related at the culture level. As shown in Table 2, both ARS and SDR

showed strong negative correlations (.51 to .66, $p < .05$) with HDI, literacy rate, and democratization. Thus, affluence showed a consistent association with the two response styles, with less affluent countries tending to use more ARS and SDR.

Table 2

Correlations of ARS and SDR with Affluence Factors

	ARS	SDR
Human Development Index (HDI)	-.55*	-.66**
Literacy Rate	-.56*	-.55*
Democratization	-.51*	-.63**

Note. ARS = Acquiescent Response Style. SDR = Social Desirability Responding. HDI = Human Development Index.

The role of affluence in the correlations between response styles and values. Correlations of ARS and SDR with all the cultural value variables were computed, both with effects of HDI uncontrolled and controlled for. The two sets of correlations can be found in Table 3. As shown in the table, ARS was positively related to embeddedness, hierarchy, collectivism (GLOBE), uncertainty avoidance (GLOBE), future orientation, performance orientation, reward for application, and religiosity, and negatively related to individualism (Hofstede), harmony, secularism, and autonomy. However, nine out of the 13 significant correlations became nonsignificant after correcting for HDI. Leaving out the non-significant correlations in both zero-order and partial correlations, the average explained variance dropped from 17.02% to 6.24%.

Table 3
Correlations of ARS and SDR with Cultural Value Scores from Five Research Traditions

	ARS		SDR	
	Zero-order	HDI partialled out	Zero-order	HDI partialled out
Hofstede Values				
Power Distance	.14	-.20	.37*	-.15
Individualism	-.27*	.01	-.54**	-.09
Masculinity	.12	.10	.19	.20
Uncertainty Avoidance	-.07	-.14	-.04	-.08
Schwartz Values				
Harmony	-.35*	-.20	-.15	-.10
Embeddedness	.43*	.04	.56**	.13
Hierarchy	.36	.20	.30	.13
Mastery	.16	.18	-.15	-.03
Affective Autonomy	-.32*	-.05	-.50**	-.09
Intellectual Autonomy	-.49*	-.20	-.45*	-.07
Egalitarianism	.07	.31*	-.25	-.09
Inglehart Values				
Secularism	-.71**	-.59**	-.54**	-.06
Self-Expression	-.07	.36**	-.56**	.11
GLOBE-should be				
Power Distance	.12	.14	.02	.09
Uncertainty Avoidance	.36*	-.10	.32	-.10
Institution Collectivism	.42**	.29*	.25	-.06
Ingroup Collectivism	.31*	.28	-.13	-.08
Gender Egalitarianism	-.25	-.01	-.28	.04
Assertiveness	-.07	-.14	.19	.06
Future Orientation	.48**	.14*	.16	-.08
Performance Orientation	.33*	.26	.07	.03
Humane Orientation	-.15	-.23	-.20	-.18
Social Axioms				
Social Cynicism	.02	-.25	.48*	.29
Reward for Application	.61**	.27	.68**	.14
Social Complexity	-.36*	.11	-.60**	-.27
Fate Control	.31	-.28	.82**	.49*
Religiosity	.49**	.08	.71**	.32

Note. ARS = Acquiescent Response Style; SDR = Social Desirability Responding; HDI = Human Development Index. * $p < .05$. ** $p < .01$.

We found positive correlations of SDR with power distance, embeddedness, social cynicism, reward for application, fate control, and religiosity. Negative correlations were found for individualism, autonomy, secularism, self-expression, and social complexity. Among the 12 significant correlations, only fate control stayed significant when HDI was controlled for. Leaving out the non-significant correlations in both zero-order and partial correlations, the average explained variance dropped from 31.47% to 4.64%.

Discussion

We set out to test the relationship between response styles and cultural values after statistically controlling for affluence. The findings support that affluence serves as a common denominator of relationships between the two response styles and cultural values. Correcting for affluence leads to a large reduction of the correlations between various psychological indicators and response styles. The reduction was larger for SDR than for ARS. Implications of the differential reductions in correlations are discussed in the General Discussion section.

Study 2

In this study, we explored the effects of value score standardization on ARS and SDR. We focused only on value scores from Schwartz Value Survey, for which there is a large data set so that we could construct value scores with raw and standardized data.

Method

Measures of ARS and SDR. The same measures of culture-level ARS and SDR as in Study 1 were used for the current analysis. Specifically, we had one global ARS index and one SDR index from the Marlowe-Crowne Social Desirability Scale.

Schwartz values of raw and standardized scores. With the original data of the Schwartz Value Survey collected by Schwartz and collaborators in 73 countries from 1988 to 2010, we were able to compute the seven culture-level value scores with both raw scores and within-culture standardized scores. Followed the coding manual (Schwartz, 2009b), the within-culture standardization was done in three steps: 1) calculate the mean of value ratings for all respondents from a country, 2) subtract the mean score from the scale mean (a score of 4 in this case), and 3) subtract the score difference obtained in Step 2 from each cultural value type score. In total, we had seven dimension scores in the raw and the standardized form.

Results

We correlated the response style measures with both raw and standardized scores of the Schwartz value types (Table 4). We found consistent, positive correlations of ARS with raw value scores. Because opposing values in the motivational continuum are conflicting and should show dissimilar correlations, the consistent, positive correlations of all raw value scores with ARS suggest strong confounding of value scores and response styles. With standardized value scores, ARS was significantly associated to only a few value types, such as embeddedness versus autonomy, which pointed to the role of conformity. The variance explained in the value scores by ARS on average dropped from 18.90% to 10.52% as a consequence of score standardization. The shift of correlations between ARS and culture-level value types is shown in Figure 1.

Table 4
Correlations of ARS and SDR with Raw and Standardized Schwartz Value Scores

	ARS		SDR	
	Raw Value Score	Standardized Value Score	Raw Value Score	Standardized Value Score
Culture-Level Type				
Harmony	.20*	-.36	.08	-.12
Embeddedness	.53*	.41*	.47**	.55**
Hierarchy	.51*	.32	.27	.20
Mastery	.58*	.21	.13	-.14
Affective Autonomy	.08	-.27*	-.43*	-.50**
Intellectual Autonomy	.04	-.46*	-.28	-.40*
Egalitarianism	.64*	.04	.06	-.18

Note. The entries for standardized value scores differ slightly from the corresponding entries in Table 3 because here a uniform set of 55 items in the SVS was taken for analysis. ARS = Acquiescent Response Style; SDR = Socially Desirable Responding; HDI = Human Development Index. * $p < .05$. ** $p < .01$.

The correlation patterns of SDR with raw and standardized value scores were very similar (Table 4). SDR showed positive associations with embeddedness (versus autonomy) in both sets of value scores. Standardization made the correlation slightly stronger. The explained variance increased from 10.04% to 13.94%. Still, the shift of patterning was rather limited and did not suggest a decrement in correlations after standardization as found for ARS. The shift of correlations between SDR and culture-level value types is presented in Figure 2.

Discussion

We compared the correlation patterns of ARS and SDR with raw and standardized value scores in the Schwartz value framework. We found that the correlation patterns of ARS with values were strongly affected by the standardization procedure, although not to the same extent for these value types, whereas the effects for SDR were more limited.

General Discussion

We address three main findings and some possible implications: (i) the correlation of ARS and SDR with affluence indicators; (ii) the pattern of correlations of these two response styles with value scores, with and without the effect of affluence partialled out; and (iii) shifts in the correlations between response styles and value scores as a consequence of value score standardization. We discuss the implications integrating results of both studies.

In Study 1 we found that the correlation between ARS and SDR at country level was rather strong and that both response styles showed substantial correlations with three affluence-related indicators. The correlation with affluence suggests substantial and systematic differences between countries. At face value the correlation between them would seem to suggest that the two response styles address partly different aspects of the HDI variable. However, method effects may have played a role; the two styles were obtained through very distinct methods. ARS scores were derived from distributions of responses on Likert scales, whereas SDR scores were based on a separate measure (the Marlowe-Crowne scale). How the response style effects work out for value scores in five research traditions (Hofstede, Schwartz, GLOBE, Inglehart, and Social Axioms) is presented in Table 3. The table also shows that after correction for affluence the number of significant correlations decreases dramatically, especially for SDR, where only one of twelve entries remains significant. Perhaps more than any other of our findings this illustrates how response styles can influence findings of cross-cultural differences in

the domain of values as they have been reported in numerous previous studies. In addition, the entries clearly suggest that there is differentiation in the size of the correlations. ARS and SDR probably should not be treated as having general effects; instead they affect differentially various values and value dimensions. This heterogeneity also holds across traditions; the GLOBE study which asked for values as they “should be” did not lead to any significant correlations with SDR across countries.

We found that ARS is mostly associated with values regarding “fitting in” or “normativeness” (secularism, institution collectivism, in-group collectivism). ARS is also positively correlated with embeddedness and negatively with autonomy, which equally points to “fitting in”. This pattern of correlations is much weaker after correction for the effects of HDI.

As mentioned, with one exception significant correlations of SDR with value scores became insignificant after correcting for HDI. Low and insignificant correlations were found with various value scores known to be related to affluence (e.g., individualism and low power distance, secularism, and low autonomy), and for four of the five factors of the Social Axions Scale, which measures generalized beliefs about people and events in the social world. Here we also found the only remaining significant effect. Ignoring this single exception, it can be concluded that affluence can account for most country differences in correlations between SDR and value scores.

Estimated effects of both ARS and SDR response styles are reduced strongly after correction for differences in HDI. However, standardization does not lead to large shifts in correlations for SDR, and the limited effects are difficult to interpret. For ARS standardization leads to substantial shifts in correlations, but these are more varied, at least for the value types distinguished by Schwartz (Schwartz, 1992, 1999) that we could analyze. In Table 4 some correlations for a given value type of standardized scores and raw scores even have an opposite sign, while in other instances the correlation remains almost the same. Still, there is consistency in the sense that related values tend to show similar shifts. Figures 1 and 2 where value types are organized in a circle so that similar values are next to each other provide an illustration of this patterning for ARS.

In general terms there are three ways in which variance due to response styles can be interpreted. The first is to ignore such variance, effectively treating it as error variance. Although this option is chosen implicitly by authors when response style effects are not considered, this cannot be a viable option in cross-cultural research on values in view of the size of various correlations of response styles with other variables reported here. Ignoring the impact of response styles at country level would imply that affluence will be related to many values at country level, thereby obscuring real associations. The second way is to treat response style effects as systematic variance that is due to cross-cultural non-equivalence in measures used to assess value dimensions. Here response styles are seen as a validity threat and presumably the validity of scores will be improved if such non-target variance is corrected for. A study by Van Herk, Poortinga, and Verhallen (2004) can serve as an example. These authors found higher ARS scores for representative samples of respondents in countries from Southern Europe compared with samples from countries in Western Europe. At face value the higher scores expressed higher levels of product liking and purchase intentions. However, there was no evidence for corresponding national differences in volumes of actual purchases. In this case, response styles added non-target variance to scores, and should be viewed as cultural bias.

Standardization as recommended by Schwartz (2009b) amounts to a form of correction for general response tendencies that can be assumed to affect all scores equally. Apparently, standardization reduces effects of ARS on value scores. The better recovery of theoretically expected patterns (Table 4) and empirically support through the relationships with the other value measurements (Table 3) in the case of ARS seems to suggest that score standardization is an effective way to control for ARS in Schwartz Value Survey, at least partially. As mentioned, the entries in Table 4 suggest that ARS has differential effects for various value types. To counter the effects of SDR, standardization is a more remote option, since value score standardization does not affect the substantial correlations of SDR with the value type scores. If anything, the pattern of correlations is somewhat more sharply defined after standardization if SDR is seen as an expression of positive social values

(e.g., embeddedness). Thus, a general correction to reduce or remove response style effects may be hard to justify.

ARS with SVS culture level

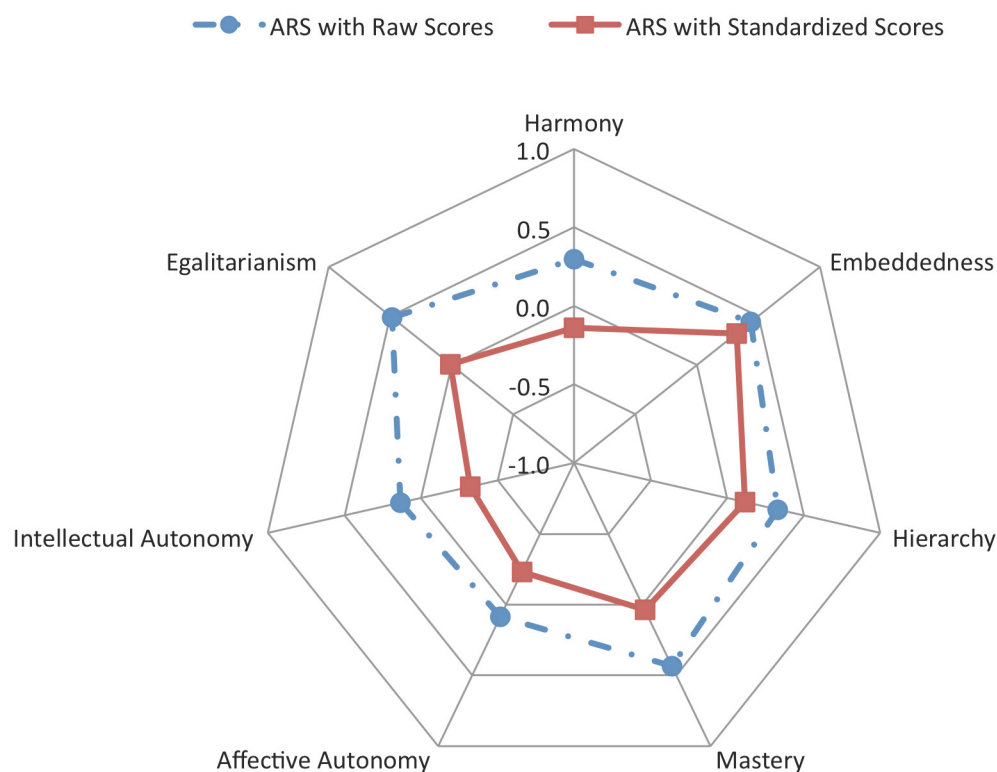


Figure 1. Correlations of acquiescence (ars) with raw and standardized culture-level Schwartz value scores

The third way of dealing with cultural variance due to response styles is to approach this variance not as validity threat, but as providing information about the interpretation of cross-cultural differences in a target variable. For example, Smith (2004) interpreted differences in ARS as reflecting differences in collectivism. The correlations in Tables 3 and 4 suggest substantial relationships of SDR with individualism-collectivism, a dimension known to be highly correlated with affluence. Like individualism-collectivism SDR may be seen from this perspective as a psychological correlate of affluence. From this perspective any correction is likely to amount to overcorrection. The strong consequences of partialing out affluence-related variance underscore the need for a substantive interpretation; ARS and especially SDR are likely to contain information on the standing of individuals and cultures on value types and value dimensions. At the same time, it is conceptually an unsatisfactory state of affairs, if cross-cultural differences in response styles, in affluence, and in values appear as a mixture of interrelated variables. One way to disentangle the mixed effects is to view affluence as a moderator of the link between response styles and values. The affluence level of a country would then be a psychological indicator of the preferred national communication style (Smith, 2004, 2011), which provides a perspective in examining cross-cultural similarities and differences. Response styles are higher in less affluent countries, where people tend to endorse values pertaining to “fitting in.”

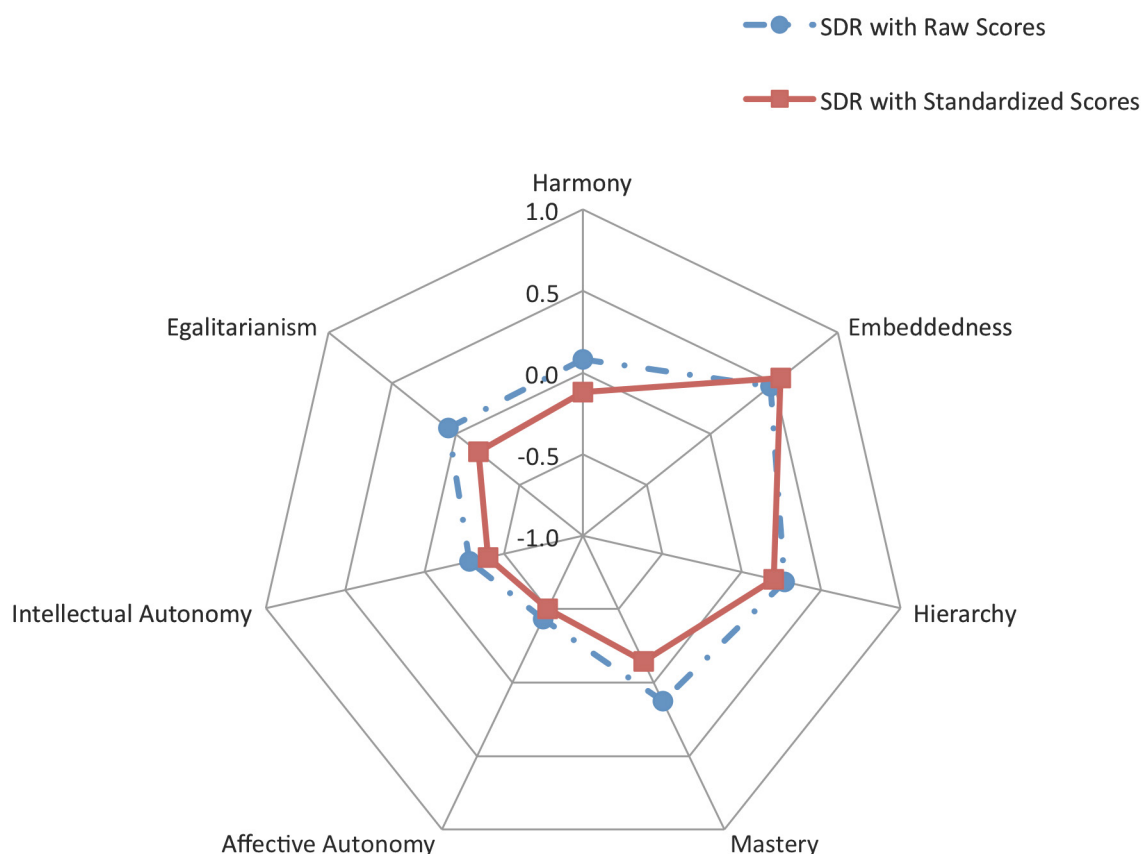


Figure 2. Correlations of social desirable responding (sdr) with raw and standardized culture-level Schwartz value scores

It should be noted that there are some limitations in the present study. We constructed ARS indexes from different surveys with unbalanced numbers of countries available, which resulted in many missing values. Caution needs to be taken in generalizing the findings of correlations with ARS. In addition, we only studied the effects of value score standardization in one dataset (i.e., Schwartz Value Survey), while more value surveys with raw and standardized scores might be examined to test the generalizability of our findings. Last but not least, apart from the overlap in variance suggested by correlations in Table 3 and 4, there is also non-explained variance that requires further differentiation and interpretation.

Conclusions

In summary, in large data sets we found notable associations between ARS and SDR that cannot be ignored when cross-cultural score differences observed in various traditions of values research are interpreted. We examined effects of correction for affluence (HDI) and standardization. When a distinction is made between valid cross-cultural variance or target variance, and variance due to non-equivalence or bias of variables, evidence for both can be pointed to. All in all, a complex picture has emerged from our two studies. In future research we intend to further tease apart variance components as mentioned in this chapter and extend the search to other types of response styles, such as extremity and midpoint responding.

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Principles of Test Development in Papua New Guinea

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Abstract

With over 800 languages and more than 1000 cultural groups, Papua New Guinea (PNG) provides a challenging environment in which to develop culturally appropriate psychometric tests. Consequently, few tests have been specifically developed for parallel-emic research in PNG. This paper proposes a framework in which to develop psychometric tests within PNG. Linguistic, cultural and social factors are all addressed and strategies for working within these cultural boundaries are posited. Models for translation and validation are assessed in light of the unique challenges presented by the linguistic diversity of PNG. An alternative methodology of translation more appropriate for PNG is also proposed. Furthermore this paper provides a working example of these test development principles. A reading ability test was successfully constructed in line with the principles of test development proposed here. The application of these principles to other Melanesian countries is also discussed.

Introduction

In current psychological research practices, there is a growing acceptance that cultural considerations need to be addressed when undertaking any psychological research. Cognitive psychology, in particular, has been criticized for its reliance on undergraduate university students as participants, thus research is often representative only of western, industrialized and wealthy groups. Awareness of this bias has increased recently and attempts are being made to close this gap (Baddeley, Gardner, & Grantham-McGregor, 1995; Dornyei & Kátona, 1992; Heinrich, Heine, & Norenzayan, 2010). Conducting research with individuals outside of the Western, Educated, Industrialized, Rich and Democratic (WEIRD; Heinrich, Heine & Norenzayan, 2010) nations is vitally important to provide a complete understanding of human cognition.

Of primary concern when undertaking research in a developing country is to determine the validity of the test to be used within that society. This means taking into account linguistic, social and cultural factors. Even in countries that are becoming “westernized” it is necessary to address these factors within each unique cultural setting. Basic health issues such as poor nutrition and limited access to medical care need to be taken into account when assessing cognitive function (Crnic, 1983; Scrimshaw, 1998; Strickland, 2002). For example, adequate protein, especially during childhood is vital for neuronal myelination which is necessary for optimal cognitive functioning. Similarly, limited access to healthcare often means that preventable or treatable illnesses, such as malaria and tuberculosis, as well as parasites such as *Trichuris trichiura* (whipworm) have a negative impact on health, development and cognitive functioning (Connolly & Kvalsvig, 1993; Nokes et al., 1992). Factors which are barely considered in research in developed countries may be important when researching in developing countries. For example individuals born in western countries take for granted that they know their date of birth, however in countries where record keeping is poor or where many births occur outside of a hospital, date of birth or even year of birth may be unknown. These are the types of complications which are apparent when conducting research in Papua New Guinea (PNG).

While this paper addresses PNG in particular, the principles outlined here are applicable to many other countries and cultures. For example, many Melanesian countries share similar cultural practices and nuances as PNG. Likewise, due to their proximity and immigration rates, some remote communities in Northern Queensland, Australia are influenced by similar cultural and linguistic practices as those found in PNG. Consequently, while this paper focuses on PNG and addresses the principles of test development in that country specifically, they are not limited to PNG alone.

There are a number of factors which must be taken into consideration when developing any assessment tool. Bias in test development has been discussed extensively in the last few decades (Hambleton, Merenda, & Spielberger, 2005; Hambleton, Yu, & Slater, 1999; Harkness, van de Vijver, & Mohler, 2003; Matsumoto & van de Vijver, 2012; Poortinga & van de Vijver, 1987; van de Vijver & Leung, 1997, 2000; van de Vijver & Poortinga, 2005; van de Vijver & Tanzer, 1997). Bias refers to differences in test items which do not demonstrate the same meaning within and across cultures (Matsumoto & van de Vijver, 2012). Bias has been discussed on three distinct levels: construct bias, method bias and item bias (Matsumoto & van de Vijver, 2012; van de Vijver & Hambleton, 1996). The importance of understanding bias and controlling for it when adapting or constructing cross-cultural tests cannot be overstated, however as these issues have been discussed extensively elsewhere, the current paper will not focus on these biases. Item format and use of images or words plays an important role in developing an assessment tool, and these have, likewise, been discussed at length in other places (Anderson & Morgan, 2008; Baddeley et al., 1995; Beardsall, 1998; Geisinger, 1994; Goodman, 2005; Irvine & Carroll, 1980; Rosselli & Ardila, 2003). There are many other factors that must be considered when developing a cross-cultural assessment tool, especially in a country as complex as PNG. These factors include choosing the most appropriate approach to undertaking cross-cultural research, etic and emic factors (Berry, 1969), appropriate methodology for translation and development in a pidgin or a creole (Seigel, 1998, 2007), as well as cultural and functional equivalence of words and concepts. From a practical administration standpoint, a researcher must also address medical issues, socioeconomic issues as well as differences in cultural values. These differences in cultural values may include differences in the concept of time and urgency as well as the drive to give socially acceptable answers (see Figure 1 for a flow chart of these considerations). This paper will discuss these factors in principle as they pertain to the development of an assessment tool in PNG.

Approaches to Cross-Cultural Research

There have been numerous papers which have discussed the appropriateness of using different methodologies when conducting cross-cultural research (Harkness et al., 2003; He & van de Vijver, 2012; Van de Vijver & Hambleton, 1996; van de Vijver & Leung, 1997, 2010). Identifying the most appropriate approach to take to conducting cross-cultural research allows for increased validity of the comparison and reduces biases. These approaches have been identified in the literature as adoption, adaptation and assembly. Adoption provides a close translation of an existing instrument for use in a target culture. This method is easy and cheap to implement, as it does not require much else beyond providing the best translation possible. As the adopted test has not been substantially changed it has high validity and provides the ability to compare results across cultures easily. Adaptation is a hybrid method. It allows for a close translation of some items and changes only some of the items. Where linguistic, cultural or psychometric problems render a close translation inappropriate, the item is modified so that it meets the required standard to make it a suitable substitution (He & van de Vijver, 2012). Adaptation is the most commonly used approach when conducting psychometric tests (Hambleton et al., 2005). Assembly refers to the compilation of a new instrument. This methodology maximizes cultural appropriateness as it allows items to be developed which meet all the linguistic, cultural and psychometric requirements. However, this methodology has its limitations. It can be expensive and requires a great deal of time to develop, pilot test, refine and implement. There are benefits and pitfalls to each of the described methodological approaches. It may come down to a trade-off between ecological validity, which is higher in cases of adaptation and assembly, or statistical comparability, for which adoption may provide the best approach (He & van de Vijver, 2012).

Berry, Poortinga, Segall and Dasen (1992) posited that there were two primary and two secondary approaches to cross-cultural research. The primary approaches are etic and emic approaches. Further to this, he posited that secondary approaches further refine the primary approaches. The etic approach to cross-cultural psychology attempts to view a culture from a meta-cultural perspective (Helfrich, 1999). This means that researchers taking this approach use a descriptive system which is deemed equally valid to all cultures, thus does not take unique cultural factors into account. The objects of comparison, that is the cultures being examined or factors thereof, are operationalized into variables which can be evaluated in a more quantifiable way. Con-

sequently, the comparisons are not aimed at explaining the nature of the culture, rather they aim to examine the influence culture has on thought and behavior. Hence culture is seen primarily as a method of influencing cognition, learning and behavior in individuals who identify with that culture (Berry et al., 1992). The emic approach views culture as an integral part of an individual's identity, not simply a factor which exerts its influence on the individual. Thus the cognition, learning and behavior of an individual cannot be separated from their cultural context and must be examined as a whole cohesive unit.

When studying language and culture it is imprecise to view etic and emic concepts as diametrically opposed concepts. Rather, both provide important and complementary information (Berry, 1969, 1989; Niblo & Jackson, 2004). Individually these concepts provide only some of the information necessary to understand the behavior and cognition of individuals, however together the picture becomes a complete view of the drives of an individual within a particular culture. In order to combine these concepts the two secondary approaches can be used. These are imposed etic and parallel emic approaches.

Cross-cultural psychological research has dealt with the problem of conducting research in other cultures in several ways. Imposed etic (Berry, 1969) research is where researchers take a Western developed and standardized test and apply it directly to another culture. This idea relates to the use of an adopted test methodology for psychometric tests (He & van de Vijver, 2012; van de Vijver & Leung, 2010). Understandably this has led to many researchers finding a difference between cultures on the particular test, however the validity of this approach has been questioned (Smith & Bond, 1993) as this methodology is based on the faulty assumption that the items in the test would have the same meaning to the test participants as they had in their original culture. There are many examples of where this is not the case. Take for example the Western concept of family which generally means nuclear family, but may be stretched to include blood relatives. In Papua New Guinea, the concept of family can extend to an entire village, and in a modern context may also include close friends who have been given the same rights as family members.

An alternative methodology, termed parallel emic studies (Berry, 1969, 1989), requires the construction and validation of an assessment tool within the culture it is designed to be tested, as in the case of the assembly methodology (He & van de Vijver, 2012; van de Vijver & Leung, 2010) discussed earlier. This is a much more complicated process. It requires the test developer to have a near-native understanding of cultural, linguistic and social components of the culture in order to accurately represent these in the assessment. Parallel emic assessments could be used for cross-cultural assessments only once the tool has been deemed valid within the culture in which it was written. When the tool has been tested across cultures, cautious comments can be made about the universality of some of these features. Testing across cultures should be done only with extreme caution. Creating two parallel emic assessments in two different cultures and then attempting to validate the comparison is problematic although not impossible. When an assessment tool has reached this stage it can be regarded as derived-etic.

From this discussion it is evident that imposed etic is the least desirable research methodology (Berry, 1969, 1989, 1999). An assessment developed with an imposed etic approach cannot be deemed adequate as there are inherent cultural peculiarities which need to be considered in each cultural context. While there are both advantages and disadvantages to the application of etic, parallel emic and derived-etic and adaptation and assembly methodologies, the complexity associated with cultural and linguistic factors in PNG means that an assembly based parallel emic approach will provide the best cultural validity. Parallel emic, and by extension derived-etic, should be the 'gold standard' for cross-cultural research to ensure as many cultural confounds are taken into account as possible. Despite the long standing evidence for the lack of validity in the imposed etic model, a meta-analysis of cross-cultural research found that of 635 empirical articles, 591 (or 93%) were imposed etic (Ongel & Smith, 1994). Furthermore, only 6% could be considered emic and less than 1% met the criteria for derived-etic. In a more recent review of articles published by the Australian Psychological Society in the 20 years preceding 2004 (Niblo & Jackson, 2004), it was found that of the 35 articles reviewed, 89% (or 31 articles) were imposed etic, one article was emic, and three articles (9%) were derived-etic. This over-reliance on imposed-etic methodology questions the validity of the findings of many cross-cultural research

articles. Parallel emic research is the most desirable methodology. This is all the more apparent when research methodology is applied to cultures outside the experience or understanding of the researcher, for example when Western researchers undertake research in PNG.

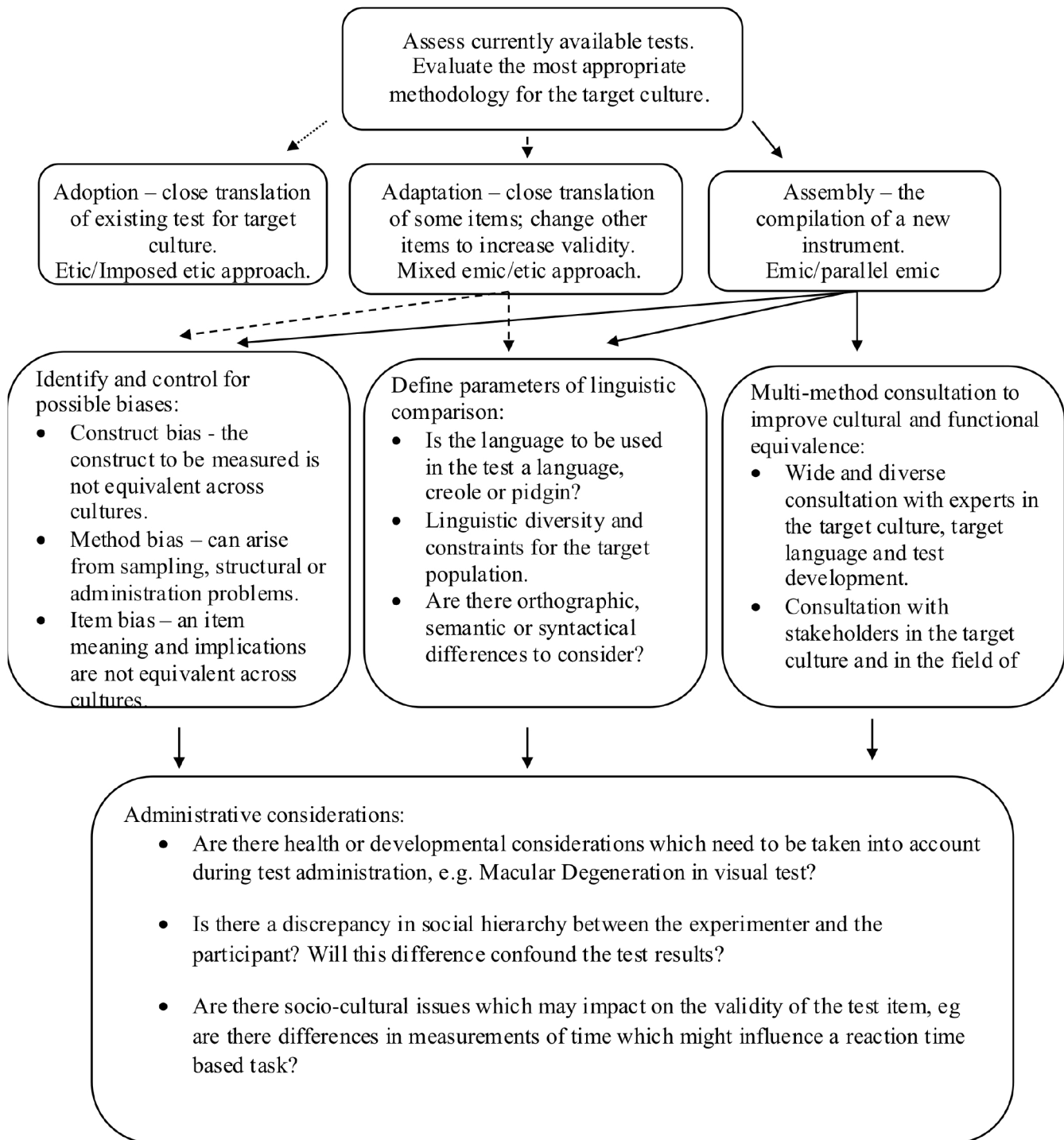


Figure 1. Flow chart of the principles involved in test development in Papua New Guinea and considerations which are recommended.

Papua New Guinea is a culturally rich country with many facets to make it ideal for psychological research. When researching in PNG the parallel emic version of test development is certainly preferred. Papua New Guineans have a long history of ‘fear of the other’ which can impede research undertaken there. This impediment is evinced through, for example, lack of support from leaders or elders, which can disrupt or draw out the approval process, or participants supplying what they believe to be the desired answer, as in the case

of Margaret Meads research in PNG. This is fear of the other not without justification. For decades Papua New Guinea was colonized or administered by different countries. Prior to Australia's administration of PNG after the First World War, the British controlled the southern area called British New Guinea and the Germans controlled the northern half of the island, known as Papua. During the period of colonization by the British and Germans, Papua New Guineans were more or less forced into an indenture system of labor. This remained more or less unchanged under the Australian administration of PNG (Fitzpatrick, 1980). During this time Papua New Guinean workers were considered to be little better than slaves (Fitzpatrick, 1980; Nibbrig, 1992). Given this history it is not surprising that there is a reluctance to engage with people from outside PNG. Therefore, in order to successfully conduct research in PNG a parallel emic approach, which is sensitive to the culture and history of PNG, can reduce the fear of the other ingrained in some Papua New Guineans.

However this xenophobia runs deeper than simply distrust of non-Papua New Guineans. Papua New Guinea has itself only been an independent country since 1992 when it was granted independence from Australian administration. Since independence, Papua New Guinea has sought to become a unified country from what was, even during colonization, a diverse and at times hostile collection of cultural and ethnic groups. For example, in the Southern Highlands Province tribal violence is a significant problem (Kopi, Hinton, & Robinson, 2010). In 1996 24% of all trauma admissions to Mendi hospital were related to tribal violence (Matthew, Kapua, Soaki, & Watters, 1996). Tribal violence is often carried out in rural areas between culturally and geographically similar people (Macintyre, 2008).

This violence is generally the result of a number of social and economic factors as well as historical precedents. While this type of violence is not usually directed to Westerners, when conducting research in PNG it is important to understand the fragile nature of social equity in PNG. For example, when constructing assessment materials it is important to acknowledge that even to the level of clothing there are cultural differences in different areas of PNG. Men in the Southern Highlands find it acceptable to grow a beard at any time, whereas men in the coastal regions grow a beard only when they are in mourning. An understanding of the sociocultural issues that may arise in PNG is needed so these differences can be taken into account in illustrations and discussions. This will help avoid giving offence, distracting from the property being tested, and provide an accurate assessment that is not unduly biased.

Language Use in Test Development

Papua New Guinea is a developing country with a population of almost 5.2 million people (National Statistical Office of Papua New Guinea, 2010) who speak over 800 languages (Lewis, 2009). PNG has three official languages; Motu (the lingua franca of the people from the Papuan region), Tok Pisin (Pidgin) and English. The most widely spoken of these languages are Tok Pisin and English. The majority of people in PNG, particularly in areas that are close to main cities and towns, can speak their own language, Tok Ples, as well Tok Pisin and/or English. Individuals who are themselves English speakers tend work in government and related areas, the service industry or hospitality. Beyond early primary school, English is the primary language used in classrooms.

Accurate and appropriate language use is vital to the development of valid assessment tools. There are many factors to address in relation to linguistic usage including the nature and development of the language to be used in an assembled test. For example, establishing the developmental level of the language in question will determine how it is structured and later can be translated. Understanding whether the language is a pidgin, creole or fully developed language is important. A pidgin or a creole cannot be treated the same way as a fully developed language can, as they do not have the structure or regularity that a fully developed language does. As PNG is a linguistically diverse country and many people within PNG are bilingual or are polyglots, it is important to address how this linguistic diversity can influence the development of psychometric tests. Similarly, functional and cultural equivalence provides an important footing for linguistic comparison. Likewise, orthographic regularity can help determine how best to evaluate a linguistic segment and compare across segments.

Pidgin and creole assessment and translation. In order to accurately develop an assessment tool in a creole language it is first important to understand the origins of the creole and the origins of the pidgin from which

it has developed. A pidgin is considered a contact language. This means that it arose, often spontaneously, as a mixture of other languages as a means of communication between speakers of different languages. A pidgin is characterized by a limited vocabulary and a simple grammatical structure and is learnt only as a second language. In PNG Tok Pisin started out as a pidgin language. It developed as a means by which a master could talk to his workers, and amongst the workers themselves who had often come from different cultural and linguistic backgrounds.

A creole has a basic and stable structure. It is starting to have a unique vocabulary and can be learnt as a primary language. All creoles develop from pidgin languages. In PNG, Tok Pisin is now considered a creole. While there are variations across PNG in pronunciation and slang, there is a more or less stable grammatical structure and accepted basic vocabulary. Due to the transient and continually evolving nature of a pidgin, and to a lesser extent a creole, it can be very difficult to use conventional translation methods to translate to and from these languages.

Brislin (1970, 1986) proposed one of the most commonly used translation methods, the translation -- back translation model. In this translation method each item is translated from the source language (SL) into the target language (TL) by a speaker fluent in both the SL and the TL. Another speaker, also fluent in the SL and the TL then takes the translation, now in the TL and translates it back into the SL. The original and adapted versions of the test can be reviewed with a view to resolving issues in semantic, idiomatic, experimental and conceptual equivalence. A pre-test is then recommended using judgmental procedures. This methodology can be expanded further to include field-tests and full pilot studies to increase the validity of the test and identify any discrepancies which may have gone unnoticed in judgmental procedures (Hambleton & Patsula, 1998; van de Vijver & Hambleton, 1996).

While this is a functional method for translation in fully developed and stable languages, although it should be noted that linguistic equivalence is not always possible due to the isomorphic nature of language (Harkness & Schoua-Glusberg, 1998), this methodology is not suited to rapidly evolving languages such as pidgins and creoles. In Tok Pisin a more appropriate methodology is to gather a number of translations from the source language to the target language. Given the diversity in the way the language is operationalized, gathering translations from several individuals from different cultural and linguistic backgrounds would increase the accuracy and applicability of the translations. This 'team approach' is advocated by recent research in adapting and translating test questions (Harkness, 2008; Harkness & Schoua-Glusberg, 1998). A speaker fluent in both the target and source languages (Harkness, 2008; Harkness et al., 2003) is then able to use judgmental procedures to assess the translations and the 'most correct' translation identified and used (Hambleton & Patsula, 1998). The purpose of this population-based methodology is to identify possible differences in translations and assess which can be most readily used and provide the most reliable result. The translation -- back translation method does not make allowances for the scope of differences found in pidgin and creole translation, as in this methodology, differences compound across the forward and back translations rather than resolving. The population-based methodology identifies these differences and resolves them using expertise in both languages. It is still recommended that field testing and pilot studies are undertaken, as suggested by the International Test Commission (2001), to ensure validity and reliability (Hambleton, 2001; Hambleton et al., 2005; Hambleton et al., 1999; Tanzer & Sim, 1999; van de Vijver & Hambleton, 1996; van de Vijver & Leung, 1997; van de Vijver & Poortinga, 2005).

Linguistic diversity. When developing a test in a country as linguistically diverse as PNG the researcher must first define the scope of the linguistic aspect of the test. With over 800 languages, many of them only oral languages, it may be unrealistic to assemble a linguistically equivalent test for each language. Even taking into account that there are three official languages in PNG, the use of all of these languages may not be appropriate. Motu, for example, is spoken only by people from the Papuan region of PNG, thus if the test is to be administered outside of this region a Motuan translation would be redundant. Language selection in PNG will depend on the region in which the testing is being conducted, as well as the demographics of the participants. For example, conducting research in one of the settlements in Port Moresby is not the same as conducting research

in one of the traditional villages in and around Port Moresby. Despite being located in the Papuan region, most of the people living in the settlements have come from other regions in PNG and so few speak Motu, in contrast to the traditional villages where Motu is the most commonly spoken language. Judgment on the part of the researcher in consultation with individuals who understand the linguistic constraints of the people for whom the test is being developed will provide the most reliable linguistic foundation for test development.

Cultural and functional equivalence. It is important to control for cultural and functional equivalence when conducting cross-cultural research. A concept in one culture is not necessarily directly transferable to another culture. For example in western cultures the concept of family is generally understood to refer to a nuclear family, and possibly including grandparents, but not necessarily uncles and aunts and cousins. While in Papua New Guinean Tok Pisin there are a number of different words for different concepts of 'family'. *Famili* refers to a nuclear family in the same way as family is commonly used in English. *Lain* refers to an extended family, which may include up to second and third relations, or in fact a whole village. Finally, *wantok* is used in the context of a cultural group, for example Motuan people (the traditional landowners of the area around Port Moresby), or a social group, for example close friends and family. Specificity when conducting psychological research is important, not only to gain the most accurate information, but also to be able to standardize responses. Therefore, understanding cultural and functional equivalence can prevent misunderstandings. Following on from the example above, there would be a difference in the response given by English speakers who were asked questions about their family, where 'family' is understood to refer to nuclear family, compared to Tok Pisin speakers who were asked about their '*wantok*', an acceptable translation for family but with different connotations. With such a diverse range of meanings and specific words for each context it is important to be appropriate when employing a particular word.

To ensure that there is consistency in concepts and syntax, the development of these tests would be undertaken by individuals who have a deep understanding of the complex nature of culturally diverse test development. For researchers, especially those who are not native to Papua New Guinea, a wide consultation process, both formally and informally in manner, may be utilized to establish the use of appropriate words and concepts and increase the validity of the measures. Such a procedure has been discussed for use in Sub-Saharan Africa (Abubakar, van de Vijver, van Baar, Kitsao-Wekulo, & Holding, 2009). Abubakar and colleagues (2009) advocated for a multimethod consultation approach, including a diverse range of consultation methods and attention being given to the appropriateness of the consultants chosen as cultural understanding of the target population can help ensure the validity of the research.

Orthographically regular and irregular language differences. Orthographic regularity refers to the consistency with which graphemes correspond to phonemes. In the case of orthographically regular languages, words are spelt as they sound. Orthographical regularity plays a significant role in the processing speed and cognitive load that reading text places on an individual. Research into individuals with dyslexia and other Specific Language Impairments (SLI) has demonstrated that reading speed in orthographically regular languages, such as German and Italian, is faster when compared to orthographically irregular languages such as English. In one study (Landerl, Wimmer, & Frith, 1997), German and English dyslexic readers were compared on single word/non-word reading and phonological processing tasks. They found that German dyslexic readers were faster at both tasks than their English counterparts. Landerl, Wimmer and Frith posited that this difference was due to the orthographic differences of the languages (1997). Orthographically regular languages are easier to process than orthographically irregular languages. Numerous other studies have supported the idea that orthography plays an important role in reading speed (Di Filippo et al., 2005, 2006; Frith, Wimmer, & Landerl, 1998; Hutzler & Wimmer, 2004; Paulesu et al., 2000).

This research has important implications for bilingual research in PNG. Creoles are generally orthographically regular languages as they have evolved from pidgins which start as spoken language, where the written form comes after the pidgin is established. Consequently, Tok Pisin is an orthographically regular language. This difference is important particularly when conducting cross cultural research where one language, for example English, is orthographically irregular language and the other, such as Tok Pisin, is orthographically

regular. In cases such as this where there is a discrepancy in orthographic regularity it is necessary to be selective about outcome measures which can be applied. For example, a timed reading test or a test of reading speed would not provide a meaningful measure of reading ability. It is easier and faster to read orthographically regular words than to read orthographically irregular word (Landerl, Wimmer & Frith, 1997). Thus a reading speed test in this context would provide only a measure of the orthographical differences between the two languages.

Administrative Considerations

Alongside linguistic and cultural considerations, medical, socioeconomic and differences in cultural values, such as understanding time and urgency, may be important for accurate test development. Papua New Guinea faces many challenges with developing nationhood. Access to education for the whole population is certainly a major consideration, but it is mediated by infrastructure, financial and health constraints. Test items and administration techniques should be sensitive to these factors. In some cases it may be necessary to administer additional tests prior to conducting the primary research. For example, due to the cost and limits in accessing visual health care it may be important to administer visual tests, such as the Amsler grid test for Macular Degeneration (MD) or the Landolts C test for visual acuity, prior to reading test. While official statistics are not available for rates of MD in the general PNG population, anecdotal evidence shows that MD rates are much higher than expected in young adults, although this varies between villages. In PNG there are cases of MD in individuals in their 20s, where as in Australia it is most common for MD to be related to aging. In Australia in 2004 the most common cause of blindness was age-related MD (48%; Taylor et al. 2005).

Papua New Guinea is a country which values respect and has a clear social hierarchy. Landowners are generally the wealthiest people in a village and also wield the greatest social and political influence within that village. Landowners are treated with respect and deference, such as is evident towards politicians and business owners. Education is highly valued by Papua New Guineans, particularly by families who can barely afford to send their children to school (Papua New Guinea Education Advocacy Network, 2011). Consequently, educated individuals are also held in high esteem. When asked a question or request by someone who is deemed to be of a high social standing, it is common practice in PNG to do as much as possible to assist this person. This can be taken to the point of agreeing to something that is impossible to do so that the person of high standing does not lose face.

When conducting research in PNG, especially as educated, relatively wealthy person, it is important to phrase questions and design tests to put the participant at ease and in a position of as close to equality as possible. This is especially important when the researcher is a non- Papua New Guinean.

Our understanding of time is a social and cultural construct (Arrow, Poole, Henry, Wheelan, & Moreland, 2004). Time can be discussed in several ways: clock time; predictable time (such as the predictable cycle of the seasons); goal motivated time; unpredictable event and predictable event time (Ancona, Okhuysen, & Perlow, 2001). For the purpose of this discussion we will be focusing on the notions of event time. While it is generally accepted that time can be measured within the 24 hour day, the standard of time used in relation to events is less certain. In most western countries, when a meeting time, for example, is agreed upon all the meeting participants will turn up within minutes of the appointed time. In PNG, however, this is not the case. Adherence to a strict idea of event times is uncommon in PNG (Mellam, 2002; Mellam & Espnes, 2003). Time is a fluid concept, so a person could turn up an hour late for a meeting and this would not be socially unacceptable. Within the context of undertaking research in PNG, it is important to remember that simply because you arranged a time to meet with a participant or contact there is no certainty that that meeting will take place at that time. Likewise, when conducting research which is based on reaction times, it is important to note that the reaction times of a PNG participant may be quite different to the reaction times of an Australian participant, for example. This difference in reaction time makes reaction time based tests difficult to administer and measure. For an Australian participant a task which measures reaction time seeks to gain a 'first response' to the stimuli by reducing time to think about the response. In PNG this concept is outside of the experience of many Papua New Guineans, consequently due to habit or to difficulty in responding in the desired way their reaction times may be slower than Australian participants. Because the difference in reaction times may be

culturally influenced it may not be accurate to compare reaction times without moderating the results through an understanding of these cultural differences.

Conclusion

Test development in PNG not a straightforward process. In order to develop the most accurate tool possible, it is necessary to evaluate the most appropriate methodology and evaluate this in light of etic and emic factors. The gold standard for cross-cultural research in PNG should be the assembly approach which utilizes parallel-emic methodology. Using parallel-emic methodology will reduce the number of cultural value and cultural prejudice related confounds. Orthographic and semantic difference must be considered seriously and weighed against the possible benefits of using components of a test with such confounds. Translation method is another very important consideration. There may be times when conventional back-translation methods are most appropriate, however should be used with caution for creole languages. In such instances a moderated translation approach may be more appropriate. Finally, there are numerous socioeconomic factors specific to the culture which must at least be acknowledged and ideally controlled for when developing a cross-cultural test in Papua New Guinea.

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Intercultural Competence Assessment: What Are Its Key Dimensions Across Assessment Tools?

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Abstract

Prior research has identified different dimensions of intercultural competence (IC). However, its focus remains inconsistent across different disciplines and contexts. Existing assessment tools do not focus on all dimensions of Intercultural Competence. Instead, each focuses only on a subset of the IC dimensions. To fill this gap, this study aims (1) to provide a review of currently available assessment tools for IC and (2) to identify a comprehensive list of the key dimensions of IC. This will help researchers agree on a unified definition of IC and develop a measurement of IC that is applicable across contexts and disciplines. The authors find that a comprehensive IC definition and measurement should take into account cognitive (culture-specific knowledge, attitude, open-mindedness/flexibility, critical thinking, motivation, and personal autonomy), affective (cultural empathy and emotional stability/control), and behavioral (experience, social initiative, leadership, and communication) dimensions.

Introduction

Intercultural Competence (IC) is one's knowledge and ability to successfully deal with intercultural encounters. Such knowledge and ability are essential tools in our society because people are largely involved in cultural exchange through their everyday interactions (Eni S.p.A, 2011). Individuals, who develop their sensitivity and awareness toward cultures other than their own, gain necessary knowledge, attitudes, and skills to communicate effectively in various intercultural encounters over time. Therefore, cultural sensitivity is associated with greater potential for exercising intercultural competence. That is, a person who is culturally sensitive has the capacity to recognize, acknowledge, and respect cultural differences. Hence, such an individual is considered culturally competent (Chen & Starosta, 1996). Importantly, while IC assessment aims to identify one's knowledge, attitudes, and abilities/skills at a given point of time, intercultural competence is, in fact, considered a *process* that continues throughout one's lifetime (Deardorff, 2006). In this sense, individuals develop and change over time to become/remain culturally competent.

As mentioned, a goal of IC assessment is to evaluate one's level of knowledge and ability at a given moment in the cultural encounter (Mažeikienė & Virgailaitė-Mečkauskaitė, 2007). However, there exist various IC assessment tools that all focus on different elements of IC, such as intercultural sensitivity (i.e., attitudes), interpersonal skills, intercultural communication skills, cultural empathy, open-mindedness, emotional stability, flexibility, social initiative, emotional resilience, intercultural uncertainty, perceptual acuity, personal autonomy, and working effectively in teams (Bennett & Hammer, 1998; Brinkmann, 2011; Matveev & Nelson, 2004; Trompenaars & Wooliams, 2009).

While prior research has proposed different measurements of IC along with different IC dimensions, it has not examined yet the totality of all possible IC dimensions across all existing IC assessment tools. This has led to the fact that no agreed-upon definition (Ruben, 1989) and measurement of IC (Chiu, Lonner, Matsumoto, & Ward, 2013) exist. In addition, it has led to the fact that different IC assessment tools are used in different contexts and disciplines.

To fill this gap in the existing literature, this research aims to review all available IC assessment tools and identify their respective key dimensions. Based upon all of the models' key dimensions, we argue that a more

comprehensive IC measurement that is applicable across contexts and disciplines should take into consideration cognitive (culture-specific knowledge, attitude, open-mindedness/flexibility, critical thinking, motivation, and personal autonomy), affective (cultural empathy and emotional stability), and behavioral (experience, social initiative, leadership, and communication) dimensions. As such, we contribute to the existing literature in that we identify a comprehensive list of all of the dimensions of IC. As mentioned, IC measurement that aims to be comprehensive should take the combinations of these dimensions into consideration.

In the following sections, we will discuss intercultural competence, the ten available intercultural competence assessment tools, and the identified IC dimensions. We will conclude by discussing our research and suggesting future research possibilities.

Intercultural Competence

Scholars vary in their definition of intercultural competence (IC) depending on the contexts. While some focus on cultural awareness, knowledge, and motivation, others focus on communication and behavioral skills (Byram, 1997; Spitzberg, 1983). Yet another group of researchers defines IC with such dimensions as interpersonal skills, effectiveness, cultural uncertainty, and cultural empathy (Arasaratnam & Doerfel, 2005; Gudykunst, 1995; Matveev & Nelson, 2004; Van der Zee & Brinkmann, 2004). Matveev and Nelson (2004) in their study of intercultural competence in a business setting described IC with four dimensions: interpersonal skills, team effectiveness, intercultural uncertainty, and intercultural empathy.

Furthermore, Chen and Starosta (1996) discussed cultural sensitivity and define it in terms of an individual's ability to experience and response to cultural differences (see also Hammer, Bennett, & Wiseman, 2003; Straffon, 2003). Greater cultural sensitivity is, in fact, associated with greater potential for exercising intercultural competence. Cultural sensitivity also refers to the affective capacity to recognize, acknowledge, and respect cultural differences (Chen & Starosta, 1996). Chen and Starosta (1996) argue that intercultural competence requires effective and appropriate interaction with people who have multilevel cultural identities. Furthermore, intercultural sensitivity is a process of cultural learning and involves cognitive, affective, and behavioral learning processes (Bhawuk & Sakuda, 2009). Thus, an intercultural sensitive communicator must be a chameleon who can change and adjust to whatever situation she/he finds herself/himself (Chen & Starosta, 1996).

Other scholars discuss the results of communication as an indicator of intercultural competence (Hammer et al., 2003; McCroskey, 1982, Spitzberg, 1983; Wiseman, 2002). McCroskey's (1982) stated that *communication skill* is the ability of a person to perform appropriate behavior while *competence* means the ability of a person to demonstrate his or her knowledge of appropriate behavior. Thus, the skills to demonstrate competent behavior are different from the actual performance of competent behavior. In other words, a person can be skilled but not competent or competent but not skilled (see McCroskey, 1982). This performance-based view of IC leads us to further discuss different intercultural competence assessment tools.

Intercultural Competence Assessment

The goal of intercultural competence (IC) assessment is to understand at "what level a person is at the given moment, what their knowledge level and abilities are" (Mažeikienė & Virgailaitė-Mečkauskaitė, 2007, p. 74). Prior research has suggested different criteria that are essential in IC and intercultural communication competence (ICC; Leclerc & Martin, 2004; Matveev & Nelson, 2004). In the following, we will provide a brief overview of a total of ten available tools that were developed to assess IC or related constructs. This will provide insights into the key dimensions of IC. Gaining a better understand of all relevant dimensions of IC is important for developing a cross-disciplinary assessment tool of IC.

Intercultural Development Inventory

The Intercultural Development Inventory (IDI) measures people's orientation toward cultural differences. It was developed based on the theoretical framework of the Developmental Model of Intercultural Sensitivity (DMIS; Bennett & Hammer, 1998). To illustrate, the DMIS was originally created to understand how people construe cultural differences (Hammer et al., 2003). It measures the development of a person's attitude to-

ward another culture along six stages: three ethno-centric stages (denial, defense, and minimization) and three ethno-relative stages (acceptance, adaptation, and integration). The ethno-centric orientations are applied when a person's culture is experienced as central to reality. On the other hand, the ethno-relative orientations are applied when a person's culture is experienced in the context of other cultures. The DMIS assumes that "construing cultural differences can become an active part of one's worldview, eventuating in an expanded understanding of one's own and other cultures and an increased competence in intercultural relations" (Hammer et al., p. 423).

According to Hammer et al. (2003), the IDI scale was developed in two phases: (1) the development of the initial 60-item version of the IDI and (2) the development of the final 50-item version. The final items for the IDI assess the five dimensions of the DMIS: Denial/Defense (DD) scale (13 items, $\alpha = 0.83$), Reversal (R) scale (9 items, $\alpha = 0.80$), Minimization (M) scale (9 items, $\alpha = 0.83$), Acceptance/Adaptation (AA) scale (14 items, $\alpha = 0.84$), and Encapsulated Marginality (EM) scale (5 items, $\alpha = 0.80$).

Prior research has used the IDI as a means to measure both intercultural competence and intercultural sensitivity (Paige, Jacobs-Cassuto, Yershova, & DeJaeghere, 2003) in such various contexts as education, study abroad programs, healthcare (e.g., to train physician trainees), corporations, and government agencies (Altshuler, Sussman, & Kachur, 2003; Anderson, Lawton, Rexeisen, & Hubbard, 2006; DeJaeghere & Zhang, 2008; Greenholtz, 2000; Hammer, 2011).

Multicultural Personality Questionnaire

The Multicultural Personality Questionnaire (MPQ) provides another assessment of IC (Van der Zee & Brinkmann, 2004; Van der Zee & Van Oudenhoven, 2000). The MPQ was developed to assess multicultural effectiveness without accentuating communication skills (Arasaratnam, 2009). Van der Zee and Van Oudenhoven (2000) selected seven dimensions that are relevant to the success of international trainees. They later introduced a revised scale with a total of 78 items and 5 dimensions (Van der Zee and Van Oudenhoven, 2001): cultural empathy (14 items, $\alpha = 0.83$, based on 13 items), open-mindedness (14 items, $\alpha = 0.84$), social initiative (17 items, $\alpha = 0.90$), emotional stability (20 items, $\alpha = 0.82$), and flexibility (13 items, $\alpha = 0.81$). Tested in education on native and international students in the Netherlands, MPQ yielded sufficient reliability (Van Oudenhoven & Van der Zee, 2002).

In their research, the authors found that foreign students displayed lower subjective well-being at the start of their academic program compared to local students because they were not used to the new culture and lifestyle (Van der Zee and Van Oudenhoven, 2001). As emotional stability is important to maintain mental health, emotionally stable students performed better academically. Thus, MPQ was able to predict students' academic performance based on their states of cultural empathy, open-mindedness, emotional stability, flexibility, and social initiative.

Arasaratnam's ICCI

A more recent assessment tool of IC evaluates the level of competence in intercultural encounters in terms of cognitive, affective, and behavioral dimensions (Arasaratnam, 2009). Arasaratnam and Doerfel (2005) identified empathy, motivation, attitude toward other cultures, and interaction involvement (experience and listening) as important elements of intercultural communication competence (ICC). Arasaratnam's (2009) intercultural communication competence instrument (ICCI) adapted the Multicultural Personality Questionnaire (MPQ) to measure cultural empathy (Van der Zee & Brinkmann, 2004). The measure of experience was based on whether participants had studied abroad or lived abroad for more than three months, had formal training in intercultural communication, and had close personal friends from other cultures. Interaction involvement was measured by a modified version of Cegala's (1981) Interaction Involvement Scale, which measures conversation attention, conversation awareness, and conversation confidence.

Arasaratnam (2009) found that a positive relationship between interaction involvement and cultural empathy, and between interaction involvement and attitude toward other cultures. The study also yielded a positive relationship between attitude toward other cultures and cultural empathy, between attitude toward other cul-

tures and experience, between attitude toward other cultures and motivation, between motivation and experience, between ICC and interaction involvement, between ICC and motivation, and between ICC and empathy.

Intercultural Adjustment Potential Scale

The Intercultural Adjustment Potential Scale (ICAPS, Matsumoto, LeRoux, Ratzlaff, Tatani, Uchida, Kim et al., 2001) aims to measure individuals' potential ability to adjust to a foreign culture. It measures individual differences in terms of intercultural adjustment ability. It is "a function of the psychological skills that individuals possess" (Matsumoto & Hwang, 2013, p. 857). The scale contains four dimensions that are necessary for intercultural adjustment: emotion regulation, openness, flexibility, and critical thinking.

Intercultural adjustment can be measured in terms of communication acculturation, uncertainty management, and cultural learning (Gudykunst, 1995; Kim, 2001). In reality, individuals' actual adjustment can lead to positive (e.g., gaining self-awareness) and negative (e.g., culture shock) outcomes. However, individuals' potential adjustment deals with individuals' ability to deal with or adapt to life in another culture prior to their home culture departure. The ability to adjust is often driven by personal characteristics.

Interestingly, research has shown that individuals who decided to study abroad (vs. who stayed in their home culture) showed higher levels of adjustment prior to their departure (i.e., potential adjustment; Berry, 1997). Similarly, Savicki, Downing-Burnette, Heller, Binder, and Suntinger (2004) compared students who studied abroad with students who remained in their home culture (i.e., actual adjustment.) The authors found that the students who studied abroad (vs. stayed in their home culture) showed significantly higher actual adjustments three months into their stay.

Cross-Cultural Adaptability Inventory

The Cross-Cultural Adaptability Inventory (CCAI, Kelly & Meyers, 2011) assesses one's readiness to interact with members from another culture and one's ability to adapt to another culture. The CCAI helps understand the qualities that enhance cross-cultural effectiveness (Davis & Finney, 2006). The inventory "responds to practical concerns, which are expressed both by culturally diverse and cross-culturally oriented populations and by the trainers and professionals who work with them" (Kelly & Meyers, 2011, p. 1). The CCAI includes four dimensions: emotional resilience (18 items, $\alpha = 0.81$), flexibility and openness (15 items, $\alpha = 0.67$), perceptual acuity (10 items, $\alpha = 0.81$), and personal autonomy (7 items, $\alpha = 0.63$) (Nguyen, Biderman, & McNary, 2010). The CCAI has been applied in education, business, and other contexts to promote cultural awareness within the classroom, student affairs, resident life, minority studies, and community programs (Kelly & Meyers, 2011).

The CCAI measure also helps in cultural diversity training (Kelly & Meyers, 2011). For example, Goldstein and Smith (1999) investigated the impact of cross-cultural training and demographic variables on adaptability among student sojourners in the US. While the treatment group received a week-long intercultural training, the control group received minimal or no training. The participants with the week-long training showed greater cross-cultural adaptability than the participants with little or no training (Goldstein & Smith, 1999). The treatment group participants exhibited a gain in emotional resilience, and flexibility and openness. The interactive and experiential characteristics of the training program explained the gain in these dimensions of intercultural competence. DeWald and Solomon (2009) adopted the CCAI in the dental hygiene context and concluded that the CCAI constitutes a good measure to identify and address students' strengths and weaknesses.

Culture Shock Inventory

The Culture Shock Inventory (CSI, Reddin, 1994; Paige et al., 2003) is another scale that measures specific human characteristics that are associated with intercultural sensitivity. Culture shock is a "multifaceted experience resulting from numerous stressors occurring in contact with a different culture" (Winkelman, 1994, p. 121). As societies become more multicultural, people are more likely to experience different types of culture shock in unfamiliar cultural settings. Winkelman (1994) argues that people experience culture shocks due to a variety of factors, such as previous experience with other cultures and cross-cultural adaptation, the degree of

difference between one's own and the host culture, the level of preparation, social support networks, and individual psychological characteristics.

The CSI is a self-report measure that predicts difficulties in dealing with culture shock. It assesses people's experience with people from other countries, including their language skills, openness to new ideas and beliefs, and specific culture-related knowledge (Earley & Petersob, 2004). In addition, Rudmin (2009) applies the CSI to measure acculturative stress. Acculturative stress is a type of stress that is experienced in the process of acculturation. It includes a lower mental health status (e.g., confusion, anxiety, and depression), feelings of marginality and alienation, heightened psychosomatic symptoms, and identity confusion (Rudmin, 2009). While acculturative stress is different from IC, Rudmin (2009) argues that individuals who become competent in intercultural encounters may go through such acculturative stresses and experience them as part of culture shock.

Intercultural Sensitivity Inventory

The Intercultural Sensitivity Inventory (ICSI) is a key element in Intercultural Competence Assessment. Intercultural Sensitivity is an individual's ability to respond to, recognize, and acknowledge cultural differences in intercultural encounters. Importantly, greater cultural sensitivity is associated with greater potential for exercising IC (Hammer et al., 2003). Bhawuk and Brislin's (1992) ICSI ($\alpha = 0.57$) is a useful tool in examining people's understandings about their effective behavior when dealing with people with individualistic versus collectivistic orientation, their level of open-mindedness toward cultural differences in intercultural encounters, and their flexibility in adopting unfamiliar ways that reflect other's cultures and norms (Bhawuk & Brislin, 1992). Specifically, the ICSI determines a person's ability to successfully modify his or her behavior in a culturally appropriate manner when moving from one culture to another. That is, the more culturally sensitive a person is, the more likely he or she is able to modify the behavior in a foreign culture. People "who can perform such alternations demonstrate greater intercultural sensitivity and are believed to have greater potential for successful overseas assignments" (Bhawuk & Sakuda, 2009, p. 261).

The ICSI was originally developed to measure graduate students' intercultural sensitivity in an international business context. The ICSI consists of three sections: the U.S. section, the Japan section (both of these sections are based on individualism-collectivism theory), and the Flex/Open section (which measures open-mindedness and flexibility). The scenarios used in the ICSI assessment determine the level of intercultural sensitivity based on whether a person identifies differences between culturally expected behaviors, shows empathy to members of other cultures, and is willing to modify his/her behavior to match a culturally appropriate response (Bhawuk & Sakuda, 2009). Thus, items of the ICSI ask, for instance, whether a person allows a conflict when he/she disagrees with the group, whether a person likes to be direct and forthright when dealing with people with whom a person works, etc.

Bhawuk and Sakuda (2009) point out that intercultural sensitivity is a process of cultural learning and involves cognitive, affective, and behavioral learning processes. This thinking is in line with Deardorff (2006)'s argument that intercultural competence is a process that continues throughout one's lifetime. Therefore, a person goes through the process of cultural learning during which his or her level of cultural sensitivity and competence change.

According to Bhawuk and Sakuda (2009), at the cognitive level, a person recognizes cultural differences and evaluates such differences based on the values and beliefs of the person's own culture. At the affective level, a person expresses an interest in understanding and experiencing cultural differences. Experiencing cultural differences might lead to discomfort, which might result in the person being more emotional. At the behavioral level, a person formulates a culturally appropriate response to his or her cultural experience. A person's willingness to modify behavior and beliefs is important to become culturally sensitive. As such, these three processes are important in forming sensitive behaviors in cultural encounters.

Intercultural Competence Profiler

The Intercultural Competence Profiler (ICP) is a multifunctional instrument which assesses an individual's qualification for international assignments. The ICP attempts to "describe and measure certain modes of

thought, sensitivities, intellectual skills, and explanatory capacities that might in some measure contribute to the formation of an intercultural competence” (Trompenaars & Woolliams, 2009; p. 166). It enables “a participant to assess his or her current Intercultural Competence or that of their organization or business unit” (p. 166). According to Trompenaars and Woolliams (2009), the ICP does not focus on a single basic area of cultural knowledge or behavior, unlike other competence tools. However, it addresses the competence spectrum, or cross-cultural awareness, and as such the business benefits deriving from effective action in multicultural situations (THT Consulting, 2012).

The ICP distinguishes four aspects of IC: recognition, respect, reconciliation, and realization. Recognition is the first aspect of IC. It is the process of developing awareness. The process of recognition includes worldly consciousness (individuals understanding their roles in society and the world), ideas and practices, and global dynamics. The second aspect of IC is respect, which is the process of showing appreciation for cultural differences. This process includes acceptance, self-determination, and human dignity. The third aspect of IC is reconciliation. Reconciliation is about resolving cultural differences, that is, we reconcile human relationships, time, and nature. The fourth aspect of IC is realization. It is the process of implementing reconciling actions. In the realization process, we engage in controlling tasks, managing individuals, and facilitating teams.

Intercultural Readiness Check

The Intercultural Readiness Check (IRC, Intercultural Business Improvement, 2012) focuses on the ability to establish and maintain effective working relationships with people who have different cultural backgrounds. It assesses individuals along the following six dimensions: intercultural sensitivity (29 items, $\alpha = 0.80$), intercultural communication (28 items, $\alpha = 0.84$), intercultural relationship building (14 items, $\alpha = 0.80$), conflict management (8 items, $\alpha = 0.59$), leadership (15 items, $\alpha = 0.70$), and tolerance for ambiguity (8 items, $\alpha = 0.78$). Intercultural sensitivity measures “the degree to which individuals take an active interest in others, their cultural backgrounds, and needs and perspectives”. Intercultural communication measures “the degree to which individuals actively engage in and monitor their own communication and communicative behaviors”. Intercultural relationship building or commitment measures “the degree to which individuals actively influence the social environment, and are concerned with integrating different people and their personalities”. Conflict management measures the degree to which individuals deal with conflicts with others. Leadership measures the degree to which individuals develop leadership competences to manage diverse team members. Finally, tolerance for ambiguity measures the degree to which individuals prefer certainty or a predictable situation, or in other words, avoid ambiguous situations (see Brinkmann, 2011, p. 1 for details). The IRC was tested with participants around the world and has been implemented in organizational settings. Importantly, it offers new insights into “how individuals may be helped or hindered in their intercultural development” (Brinkmann, 2011, p. 5). Hence, the scale helps individuals recognize the necessary skills that they should develop for their work in diverse cultural settings.

Intercultural Competence Questionnaire

The Intercultural Competence Questionnaire (ICQ) is based on the Intercultural Competence Model rooted in Abe and Wiseman’s (1983) Intercultural Abilities Model, and Cui and Awa’s (1992) concept of Intercultural Effectiveness. The ICQ identifies four dimensions of intercultural competence: interpersonal skills, team effectiveness, intercultural uncertainty, and intercultural empathy (Matveev, 2002; Matveev & Nelson, 2004). The seven-point, 23-item ICQ includes items such as “I acknowledge differences in communication and interaction styles when working with people from different countries” and “My team involves every member in the decision-making process without any consideration given to the national origin of a team member.”

The questions in the ICQ prompt the respondents about each of the four dimensions and are randomly distributed across the questionnaire to ensure unbiased answers. Several reverse-worded items ensure control for acquiescent response sets, reduce the boredom in questionnaire completion, and minimize the inertia of answering an unbroken series of positively worded items (Schriesheim & Hill, 1981; Harrison & McLaughlin, 1993). Multi-item composition of each dimension of intercultural competence minimizes item-context effects

and ensures validity of this assessment instrument (Ackerman, 1991). The ICQ was pilot tested using 380 participants with diverse demographics ($\alpha = .88$; Matveev, 2002).

Further application of the ICQ with international subjects in the Russian Federation showed a high internal consistency alpha of .82. The ICQ was further used to assess intercultural competence of business professionals in China, Germany, the Philippines, Romania, and the United Arab Emirates (Congden, Matveev, & Desplaces, 2009; Desplaces, Matveev, & Congden, 2009; Matveev & Del Villar, 2013; Matveev, Milter, Deselnicu, & Muratbekova-Touron, 2013). A summary of the described assessment tools is provided in Table 1.

Key Dimensions of Intercultural Competence Instruments

The previous review of the existing measurements of intercultural competence highlights that (1) a multitude of IC measurements exist across different contexts and that (2) the existing IC measurements all focus on different dimensions. To gain a more complete understanding of the IC construct, it is helpful to identify the key dimensions of IC across all IC measurements. In line with Bhawuk and Sakuda (2009), we argue that IC constitutes a process of cultural learning that involves cognitive, affective, and behavioral learning processes. In line with this thinking, we will base our discussion along possible cognitive, affective, and behavioral dimensions.

Cognitive Dimensions

Cognition is about people's thoughts, attitudes, and interpretations. Cognitive dimensions seem to play a particular important role in IC. For example, most models of IC assessment suggest the need for people to be open-minded and flexible in order to be intercultural component. Therefore, open-mindedness/flexibility constitutes an important dimension of IC.

Table 1
Summary of Intercultural Competence Assessment Tools

Instrument/ Author/Year	Total Numbers of Items/ Types of Scales/Reliability	Description
Intercultural Development Inventory (IDI, Hammer, Bennett, & Wiseman, 2003)	50 items: Denial/Defense (13 items, $\alpha = 0.85$); Reversal (9 items, $\alpha = 0.80$); Minimization (9 items, $\alpha = 0.83$); Acceptance/Adaptation (14 items, $\alpha = 0.84$); Encapsulated Marginality (5 items, $\alpha = 0.80$) scales	The IDI measures the orientation toward cultural differences described in its developmental model of intercultural sensitivity (DMIS). The IDI has been used in education, study abroad program, healthcare (e.g., to train physician trainees), and corporations and government agencies.
Multicultural Personality Questionnaire (MPQ, Van der Zee & Brinkmann, 2004)	78 items: cultural empathy (14 items, $\alpha = 0.83$, based on 13 items), open-mindedness (14 items, $\alpha = 0.84$), social initiative (17 items, $\alpha = 0.90$), emotional stability (20 items, $\alpha = 0.82$), and flexibility (13 items, $\alpha = 0.81$)	The MPQ assesses multicultural effectiveness without accentuating communication skills. The MPQ has applied to measure multicultural effectiveness among international students, the adjustment of Western expatriates in a foreign country etc.
Intercultural Communication Competence Instrument (ICCI, Arasaratnam, 2009)	52 items: attitude towards other cultures (8 items, $\alpha = 0.70$), ethnocentrism (22 items, $\alpha = 0.86$), motivation (4 items, $\alpha = 0.81$), interaction involvement (8 items, $\alpha = 0.80$), and intercultural communication competence (10 items, $\alpha = .77$).	The ICCI measures individual competence in intercultural encounters in terms of cognitive, affective, and behavioral dimensions.
Intercultural Adjustment Potential Scale (ICAPS, Matsumoto et al., 2001)	55 items: emotion regulation, openness, flexibility, and critical thinking	The ICAPS measures individual differences in terms of their abilities to adjust to a foreign culture. Adjustment potential predicts their actual adjustment.
Cross-Cultural Adaptability Inventory (CCAI, Kelly & Meyers, 1992)	50 items: emotional resilience (18 items, $\alpha = 0.81$, flexibility and openness (15 items, $\alpha = 0.67$), perceptual acuity (10 items, $\alpha = 0.81$, and personal autonomy (7 items, $\alpha = 0.63$), the reliabilities are based on the study by Nguyen et al. (2010)	The CCAI measures an individual's ability to adapt to another culture. The scale can be used in such contexts as dental hygiene, multi-national corporations, study-abroad, pre-departure training, immigrants, diversity training programs, and university classes on cross-cultural issues.

Instrument/ Author/Year	Total Numbers of Items/ Types of Scales/Reliability	Description
Culture Shock Inventory (CSI, Reddin, 1994)	80 items ($\alpha = 0.57 \sim 0.86$): degree of Western ethnocentrism, cross-cultural experience, cognitive flexibility, behavioral flexibility, specific cultural experience, general cultural knowledge, general cultural behavior, and interpersonal sensitivity	The CSI measures the degree of direct experience with people from other countries, including the individuals' language skills, their openness to new ideas and beliefs, and their specific culture-related knowledge. The scale has been widely used by the Peace Corps for its training programs and law enforcement officers who work in culturally diverse settings.
Intercultural Sensitivity Inventory (ICSI, Bhawuk & Brislin, 1992)	46 items ($\alpha = 0.84$): US section (16 items), Japan (JPN) section (16 items), Flex/Open section (14 items)	The scenario-based ICSI examines people's understandings about their effective behavior when dealing with people with individualistic vs. collectivistic orientation, their levels of open-mindedness toward cultural differences, and their flexibility in adopting unfamiliar ways.
Intercultural Competence Profiler (ICP, Trompenaars & Wooliams, 2009)	Recognition, respect, reconciliation, and realization (alpha reliability was not provided)	The ICP measures individuals' current intercultural competence or that of their organization or business unit. It measures certain modes of thought, sensitivities, intellectual skills, and explanatory capacities that contribute to the formation of IC.
Intercultural Readiness Check (IRC, Van der Zee & Brinkmann (2004)	102 items: intercultural sensitivity (29 items, $\alpha = 0.80$), intercultural communication (28 items, $\alpha = 0.84$), intercultural relationship building (14 items, $\alpha = 0.80$), conflict management (8 items, $\alpha = 0.59$), leadership (15 items, $\alpha = 0.70$), and tolerance for ambiguity (8 items, $\alpha = 0.78$).	The IRC measures the ability to establish and maintain effective working relationship with people who have different cultural background.
Intercultural Competence Questionnaire (ICQ, Matveev, 2002)	23 Items ($\alpha = 0.88$): interpersonal skills, team effectiveness, intercultural uncertainty, and intercultural empathy	The ICQ measures intercultural competence in organizational settings. The scale was used to assess intercultural competence in seven countries.

Source: Altshuler et al. (2003); Anderson et al. (2006); Bhawuk & Brislin (1992); DeJaeghere & Zhang (2008); DeWald & Solomon (2009); Goldstein & Smith (1999); Greenholtz (2000); Intercultural Business Improvement (2012); Kelly & Meyers (1992); Hammer (2011); Hammer et al. (2003); Matsumoto et al. (2001); Matveev (2002); Reddin (1994); Nguyen et al. (2010); Trompenaars & Wooliams (2009); Van der Zee & Brinkmann (2004); Van der Zee & Van Oudenhoven (2001); Van Oudenhoven & Van der Zee (2002).

Another important cognitive dimension is people's culture-specific knowledge, as emphasized by the Culture Shock Inventory (CSI), Intercultural Sensitivity Inventory (ICSI), and Intercultural Competence Profiler (ICP). Furthermore, the Intercultural Development Inventory (IDI), Intercultural Communication Competence Inventory (ICCI), Cross-Cultural Adaptability Inventory (CCAI), and ICP suggest that people's attitudes about foreign cultures also constitute an important dimension of IC. Moreover, the Intercultural Adjustment Potential Scale (ICAPS) and the ICP suggest that critical thinking constitutes an important dimension of IC. Finally, motivation constitutes an important dimension according to Arasaratnam's ICCI, and personal autonomy constitutes an important dimension according to the CCAI. As a result, people's knowledge, attitude, open-mindedness/flexibility, critical thinking, motivation, and personal autonomy constitute six important cognitive dimensions of the IC construct.

Affective Dimensions

Affect is about people's feelings, moods, and emotions. Affective dimensions are also important in the process to becoming an intercultural competent person. For example, the Multicultural Personality Questionnaire (MPQ), Arasaratnam's ICCI, ICSI, ICP, Intercultural Readiness Check (IRC), and Intercultural Competence Questionnaire (ICQ) all highlight the importance of cultural empathy. Similarly, the MPQ, ICAPS, CCAI, and ICSI all emphasize the importance of emotional stability and emotional control. Consequently, cultural empathy and emotional stability/control constitute two important affective dimensions of IC.

Behavioral Dimensions

Finally, behavior is about action and social exchange. It is an important component of IC. For example, particularly the CSI and the ICP emphasize the importance of people's experience with a foreign culture. The MPQ, Arasaratnam's ICCI, CSI, ICSI, ICP, and ICQ also emphasize the importance of social initiative, or interaction. Furthermore, ICCI and IRC emphasize importance of peoples' intercultural communication skills. Finally, the IRC suggests that leadership constitutes another behavioral dimension of IC. As a result, people's experience, social initiative, leadership, and communication constitute three important behavioral dimensions of IC. Table 2 summarizes the most important identified dimensions of IC and provides the IC models that put a strong emphasis on the respective dimension.

Table 2

Key Dimensions of IC Supporting IC Models

IC Models	Cognitive Dimensions						Affective Dimensions		Behavioral Dimensions			
	C-sk	Att	OM/F	Mot	CT	PA	CE	ES/C	Exp	SI	L	C
IDI		X										
MPQ			X				X	X		X		
Arasaratnam's ICCI		X		X			X			X		X
ICAPS			X		X			X				
CCAI		X	X			X		X				
CSI	X		X						X	X		
ICSI	X		X				X	X		X		
ICP	X	X	X				X		X	X		
IRC			X				X				X	X
ICQ							X			X		

Note. Cognitive Dimensions: C-sk= Culture-specific knowledge, Att=Attitude, OM/F= Open-Mindedness/ Flexibility; Mot= Motivation, CT= Critical Thinking, PA= Personal Autonomy

For Affective Dimensions; CE Cultural Empathy, ES/C= Emotional Stability/Control;

For Behavioral Dimensions: Exp= Experience, SI= Social Initiative, L= Leadership, C= Communication

Conclusion

In this research, we have demonstrated that a multitude of IC models exist that aim to measure Intercultural Competence (IC). However, each model focuses on a different context and uses slightly different dimensions to assess IC. As a result, scholars across disciplines have faced challenges in defining and measuring IC. To provide scholars across disciplines with a basis for the development of a cross-disciplinary IC measurement and to gain a better understanding of the dimensions that make up IC, we have reviewed a total of ten available assessment tools for IC and identified the key dimensions of each model. Table 2 summarizes the key dimensions across all of the ten IC models.

To review, we discussed the Intercultural Development Inventory (IDI), the Multicultural Personality Questionnaire (MPQ) and the Arasaratnam's Intercultural Communication Competence Instrument (ICCI), Intercultural Adjustment Potential Scale (ICAPS), the Cross-Cultural Adaptability Inventory (CCAI), Culture Shock Inventory (CSI), Intercultural Sensitivity Inventory (ICSI), Intercultural Competence Profiler (ICP), Intercultural Readiness Check (IRC), and Intercultural Competence Questionnaire (ICQ) in this study. Each of the assessment tools places a different emphasis on certain IC dimensions. Across all models, we argued that the key IC dimensions are either cognitive, affective, or behavioral nature. Specifically, we identified the following six cognitive dimensions across all IC models: culture-specific knowledge, attitude, open-mindedness/flexibility, critical thinking, and motivation.

Furthermore, we identified the following two affective dimensions: cultural empathy and emotional stability/control. Finally, we identified the following three behavioral dimensions: experience, social initiative, and leadership. As a result, the IC construct is made up of a total of eleven key dimensions of which six are of cognitive nature, two of affective nature, and three of behavioral nature. As Table 2 demonstrates, the ten IC models examined touch upon different dimensions of the IC construct while neglecting others. In order to assess IC in a more comprehensive manner, future research should develop a more inclusive assessment tool to address all of the dimensions of IC. Such a comprehensive assessment tool could be used in a various contexts and across disciplines.

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Part 3: Development

Maternal Expectations of Child Development in Two Cultural Groups in Germany

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Abstract

Cross-cultural research on developmental expectations has shown that the ages mothers expect children can master developmental skills vary according to their cultural background. This study examined the role of culture on developmental expectations by comparing Turkish-German ($n = 107$) and German ($n = 127$) mothers with preschool aged children in terms of their estimations regarding children's mastery on 8 different developmental domains (e.g., cognitive, physical, social). Results have shown that Turkish-German mothers expected children to attain developmental milestones later than German mothers in nearly all domains. But the differences were not quite to the same extent in all domains. Furthermore Turkish-German mothers who grew up in Germany differed in some domains less from German mothers than mothers who grew up in Turkey. This is seen as an evident that parental ethnotheories are not adopted in a determined and probably already dysfunctional mode for the child's adaptation to its current environment but that they are reinterpreted by integrating new information and reflecting the demands of the environment in order to allow their children an optimal adaptation to their environment.

Introduction

A considerable number of children in Germany have an immigrant background. In the age group of 0-6 years the proportion of children with an immigrant background amounts to 35% throughout Germany; in metropolises like Munich or Stuttgart their proportion exceeds those of children without an immigrant background. Children with Turkish immigrant background represent one of the two major immigration groups in Germany (Statistische Ämter des Bundes und der Länder, 2010). In contrast to their demographic importance, children with immigrant background are rarely represented in developmental psychological research. Only a few empirical studies refer to early childhood in families with immigrant background (Leyendecker, 2003; Otyakmaz, 2007), not much is known about parental beliefs in these families (e.g., beliefs about child rearing and development or socializations goals). However, since parents are the persons whose parental beliefs determine the physical and social environment they provide to the children and in turn shape their social, cognitive and emotional development (Goodnow, 2002; Harkness & Super, 1992), it is important to study and understand parental beliefs about child development.

Parental ethnotheories vary in the concepts of parents about the nature of a child and its development, in their valuations of a child's skills they give priority and worth to be fostered or in their expectations, when a child should have attained which kind of developmental milestone and should have achieved which kind of skill (Goodnow, Cashmore, Cotton, & Knight, 1984; Rosenthal & Roer-Strier, 2001; Sissons Joshi & MacLean, 1997; Willemsen & van de Vijver, 1997), whether at all and if so, how and by whom a child should be supported in the attainment of these skills (Goodnow et al., 1984; Rogoff, Mistry, Göncü, & Mosier, 1993). Besides individual differences the variations are due to different determinants like educational, socio-economic, generational and not least cultural background of the parents. The latter aspect is of special interest in the present paper.

One of the earliest studies on the role of culture in developmental expectations compared middle-class Anglo-Australian mothers to the Lebanese-Australians (Goodnow et al., 1984). Goodnow et al (1984) had shown that Anglo mothers believe children are born with a bundle of 'potential' traits and mothers' task is to become aware of these potentials as early as possible and arrange the environment to support the child's devel-

opment to the fullest. Unlike Anglo mothers, Lebanese-Australians considered early childhood as a moratorium which should prevent children from untimely learning requirements. Studies show that several other cultural contexts also reflect a similar understanding of early childhood as Lebanese mothers do. Stevenson, Chen and Lee (1992) argued that in China, childhood is divided into two periods: Innocence and comprehension. It is assumed that children in the period of innocence widely lack cognitive abilities. Ho (1994) states that traditionally Chinese parents see early childhood as a period when children are passive and dependent who are to be cared for, who should not be held responsible for his or her wrongdoings or failures since they don't have the cognitive capacity to think about their actions, and thus there is no clear attempt of parents to actively stimulate their children's cognitive development. Once children reach the period of comprehension, at the age of four to five, parents begin with the systematic training of a child. A similar concept of early childhood could be identified also in traditional Korean and Japanese families (Ho, 1994). It is important to point out that the authors describe this concept of early childhood as the traditional way to conceptualize childhood. As cultures go through a societal shift in accordance with technological and socio-economic transformations this specification is likely to change; not as an adaptation of the Western concept of early childhood but probably a transformation and variation of the traditional idea. A similar view of childhood can be seen in Turkish culture as well.

Pfluger-Schindelbeck (1989) found in her ethnographic study in a Turkish village that children in their early childhood were seen as not capable of rational thinking and behavior because of the assumed immaturity of their intellect („aklı ermemiş“). According to Karakaşoğlu-Aydın (2000) in Turkey, a child is met with permissiveness in early childhood because he is regarded as not capable of distinguishing between wrong and right, between good and bad, and that his behavior is not guided by rationality but by his needs. An intentional education in the sense of guidance regarding right or wrong behavior is not seen as possible in this period. The child should be given unlimited freedom during this stage. Only after this period conscious education and stronger guidance begins (Karakaşoğlu-Aydın 2000; Pfluger-Schindelbeck 1989). While Pfluger-Schindelbeck and Karakaşoğlu-Aydın refer to parenting in Turkey Leyendecker (2003) found that children in Turkish immigrant families in Germany also perceive unlimited freedom and experience permissive parenting until about the age of three. Though there is no empirical research on Turkish-German mothers' beliefs about children's nature and development in early childhood, the mentioned references let conclude that they may also have similar concepts of early childhood as it is described for parents in China or in Turkey.

Cross-cultural variations in parental ethnotheories can be reflected in different organizations of children's developmental contexts or in parents' child-rearing behavior and thus, in children's developmental outcomes (McGillicuddy-DeLisi & Sigel, 1995; Goodnow, 2002; Harkness & Super, 1992). But this cultural “canalization” (Valsiner, 1987) of children's development is not to be understood as unidirectionally influenced by the parents, but as an interactional process of co-construction between individual and environment, here parent and child (Bornstein, 1991; Valsiner, 1987). Nor are parental ethnotheories unidirectionally and uniformly shaped by a more general cultural belief system, but are individual reconstructions of the proposed beliefs and behaviors of a culture (Lightfoot & Valsiner, 1992).

Parental ethnotheories do not only vary by culture; individual variances (Keller, 2003) as well as educational (Ninio, 1988; Ribas, Seidl de Moura, & Bornstein, 2003) or generational (Ho, 1994; Keller, 2003) differences are also of importance. Cross-cultural differences are not only to be found in international but also in intranational comparisons in immigration societies between parents with different cultural and ethnic backgrounds (Carlson & Harwood, 2000; Willemsen & van de Vijver, 1997). In immigration societies the socioeconomic and ethnic/cultural backgrounds of the families often confound (Otyakmaz, 2007). Moreover, studies show that in these societies parenting beliefs of immigrants can adapt to those of the majority culture by acculturation (Berry et al., 2002). Second generation parents, in contrast to the first generation, are socialized not in the origin but in the immigration context (Bornstein & Cote, 2006; Durgel, 2011).

Developmental Expectations

One important aspect of parental ethnotheories which was focused in several cross-cultural studies is parents' expectations about ages of children at which various skills should be attained. The studies on developmental expectations showed that cultural variations occur even in the relatively short period of early childhood not only for a few months but years.

One of the first attempts to interpret the obtained cross-cultural differences in mothers' developmental expectations was made in using the family models of independence and interdependence which were handled as antagonists in early cross-cultural psychology (Hess et al., 1980). The family model of independence which is considered as characteristic for urban western middle-class families emphasizes autonomy from birth on, uniqueness, self-confidence and the separateness from others. The family model of interdependence, which is regarded as typical for families in non-western, rural or low socioeconomic urban contexts, stresses relatedness and hierarchical involvement of its members, self-effacement, obedience and conformance (Keller, 2011). But in the last years this prototypically described family models are not viewed as solely existing in pure but also in hybrid and transitory forms (Keller 2011). Kağıtçıbaşı (2007) criticizes the antagonism between *the* "modern Western" culture and *the* "traditional non-Western" culture which is inherent in the two contrasting family models and also the implicated evaluation of the Western model as the better family model which is assumed to be adapted by members of traditional cultures by the means of technological and economic improvement. She conceptualizes a third family model which she regards as an alternative model of modernization: The family model of emotional interdependence. This family model is characterized by maintaining emotional relatedness of family members as essential but at the same time the child's autonomy gains high significance as a socialization goal (Kağıtçıbaşı, 2007).

One of the earliest studies on maternal developmental expectations found (Hess et al., 1980) that Japanese mothers desired "early mastery of skills that show self-control, compliance with adult authority and social courtesy in interaction with adults" and thus were consistent with the interdependent socialization pattern. Anglo-American mothers valued the "early acquisition of skills that display individual action, standing up for rights and other forms of verbal assertion" (p. 269). With their earlier expectations of social and verbal assertiveness they were in line with the independent socialization pattern. Earlier expectations of developmental milestones were interpreted as reflecting the cultural value of a particular skill. In the study of Goodnow et al. (1984) the major differences were also found in the expectations of social and verbal assertiveness. Here the Anglo-Australian mothers expected social and verbal assertiveness earlier than the Lebanese-Australian mothers. In contrast to the results of Hess et al. the Anglo-Australian mothers generally had earlier expectations than the Lebanese-Australian mothers across all domains. But this referred only to pre-school years and not to school-related skills such as counting from 1-10 or knowing colors. Moreover school readiness was expected even earlier by the Lebanese-Australian mothers. Because of the complexity of their findings Goodnow et al. pointed out: "Any simple equivalence of early expectations with high value, however, is likely to be misleading. The more subtle, and more interesting, picture needs to take account of several other facets to ideas about children and parenting" (p.203). Also according to Sissons, Joshi and Mac Lean (1997) who studied maternal expectations in India, Japan, and England the major theoretical challenge is to make sense of the differences with reference to a full understanding of the cultures concerned. They found that Indian mothers had later developmental expectations than Japanese and English mothers. The similarity between English and Japanese mothers and the difference between Japanese and Indian mothers indicate that the results cannot be interpreted „in any simple sense by such dimensions as individualism/collectivism or independence/interdependence“ (Sissons Joshi & Mac Lean, 1997, p.239). Despite a predominantly interdependent orientation in Japan as in India there seem to be other essential differences in the living conditions of the both groups which had an impact on their developmental expectations. Research on developmental expectations of mothers with different ethno-cultural backgrounds in the USA does not allow an unambiguous interpretation of the results along the categories of independence/interdependence either (Carlson & Harwood, 2000; Pachter & Dworkin, 1997). The findings on the impact of educational background on developmental expectations are also not consistent:

While in a study with two groups of Israeli mothers with similar educational but distinct ethno-cultural background domain-specific differences were found (Rosenthal & Roer-Strier, 2001), in an earlier Israeli study the domain-independent overall earlier expectations of the parents of Anglo-American origin in comparison to parents of Asian-North-African origin were widely explained by their educational background (Ninio, 1988).

Two studies in the Netherlands examined the developmental expectations of mothers with Turkish immigrant background: Willemsen and van de Vijver (1997) who made a comparative study with Turkish-Dutch, Dutch and mothers in Zambia, found that in nearly all six developmental domains, that were assessed, Zambian mothers had the latest, Dutch mothers the earliest expectations and the Turkish-Dutch mothers were in between. While there were only marginal differences in the expectations of physical development, major differences were found in the social domain. But there were some single items as exceptions to this general tendency. Turkish-Dutch mothers expected „eat without help“ and „dress without help“ later than Dutch and Zambian mothers but had earlier expectations in school-related items like „count to ten“ or „write first words“. Durgel (2011), who assessed the developmental expectations of Turkish-Dutch and Dutch mothers with a revised version of the questionnaire used by Willemsen and van de Vijver, also found that Turkish-Dutch mothers had significantly later expectations in all domains with the exception of psychomotor development. Moreover, first generation Turkish-Dutch mothers were later in their expectations than second generation mothers. The latter were closer to the expectations of the Dutch mothers. Overall the cross-cultural studies on developmental expectations show that mothers with diverse cultural backgrounds differ in their developmental expectations even in the relatively short period of early childhood not only for a few months but years. But it is not really possible to integrate the various results in a coherent theoretical explanation, such as that in all interdependent contexts later developmental expectations are predominant or that the expected ages reflect the cultural value of a particular skill.

Taking the theoretical reflections about Turkish-German mothers' possible conceptions of early childhood and the results of the two Dutch studies, the present study investigates whether a) Turkish-German mothers expect children to attain the developmental milestones later than German mothers, b) so called school-related items constitute an exception, and c) first generation Turkish-German mothers have later expectations of mastery than second generation mothers.

Method

Sample

The participants of the present study were 127 German and 107 Turkish-German mothers of pre-school aged children living in several cities in a highly industrialized area - the Ruhr area - in Germany. They were recruited either from public day-care centers or by snowball sampling through the recommendation of other mothers. Moreover, Turkish-German mothers were individually contacted by bilingual Turkish-German research assistants at community festivals or similar occasions.

With the choice of distinct recruiting procedures it was attempted to prevent a sample bias resulting from probable unequal rates of participation of the samples (van de Vijver, 2002). The differing motivations for the participation of diverse social groups lead to a sample selection because of the disproportionate participation of middle-class members which is repeatedly discussed in developmental psychological research (Wolke & Söhne, 1997). Recruitment of minority families by contacting face to face is not unusual (Johnson, Breckenridge & McGowan, 1984) and should provide equivalence.

The participating German mothers had a mean age of 34.69 years ($SD=5.47$), their preschool-aged children of 3.20 years ($SD=1.17$). Fifty-one percent of the German children were female and 49% were male. The Turkish-German mothers had an average age of 32.29 years ($SD=4.60$), their children had a mean age of 3.75 years ($SD=1.45$). Forty-two percent of the Turkish-German children were female and 58% male. Mothers' and children's mean age of both samples differed significantly (ANOVA); this was not the case for the gender distribution (χ^2 -test). The age difference between German and Turkish-German mothers reflects the fact that Turkish-German women are younger than German women when they give birth to their first child (BMFSFJ,

2010). The age differences between the children may be caused by the fact that Turkish-German children enter the early day-care institutions later than German children, so that their average age might be higher than that of the German children (BMFSFJ, 2010). As the children were also recruited via public day-care centers the age differences of the sample might reflect the age differences of the children visiting these centers. Forty three Turkish-German mothers belonged to the first generation and 56 to the second generation. The mothers were assigned to the first generation if they had migrated to Germany after reaching the age of 14 and to the second generation if they had been born in Germany or had migrated before reaching the age of six (Durgel, 2011; Leyendecker et al., 2008). Qualifications received in Germany and Turkey were regarded equivalently. The highest level of education (1 = non, 2 = primary school, 3 = secondary school, 4 = high school, 5 = university) of the participating German mothers was higher than that of the Turkish-German mothers (ANOVA): $F(1, 223) = 29.302, p < .001, \eta^2 = .12$. There were no significant educational differences between first and second generation Turkish-German mothers.

Developmental Expectations Questionnaire

The developmental expectations questionnaire which was kindly provided by Elif Durgel in Turkish and English language was translated by the author into German taking both versions into consideration. The instrument was developed by Durgel and van de Vijver (2008) by revising scales of previous studies (Goodnow et al., 1984; Hess et al. 1980, Willemsen & van de Vijver, 1997) and consists of 61 items assigned to eight developmental domains (subscales): psychomotor skills (“Hop on one foot several times”); cognitive skills (“Say own age”), self-control (“Wait for own turn in games”), social skills, (“Invite friends to join the game”), autonomy (“Decide what to eat for lunch”), obedience (“Do not do things forbidden by parents”), family orientation (“Know that family members support each other”), and well-mannered (“Behave respectfully towards adults”).

With Chronbach's Alphas between $\alpha = .73$ and $\alpha = .96$ the reliability of the instrument as a whole and of the single domains, all tested separately for both samples, can be accepted as good. The factorial structure of the particular subscales are equivalent for both samples (Tucker's phi $> .95$). The mothers were asked to mark at what age a child is able to acquire the skills listed on the questionnaire. They had the possibility to indicate their expectations in a range between 1-6 years with half-yearly intervals. It was also possible to mark “earlier” (for the analysis coded as 0.5 years) or later (coded as 6.5 years). Turkish-German mothers were given the choice of getting the questionnaire either in a Turkish or a German version.

Results

A MANCOVA, conducted with the mothers' ethnic background as independent, the developmental expectations as dependent variables, and with mother's educational background and her and her child's age as covariates, was significant: Wilks' $\Lambda = .81, F(8, 210) = 6.286, p < .001, \eta^2 = .19$. As with the result of the overall multivariate testing Turkish-German mothers have later expectations of the attainment of developmental milestones than German mothers (Table 1) in all developmental domains apart from psychomotor skills. The major differences are related to the developmental expectations of obedience and family orientation (0.73 and 0.76 years).

Table 1*MANCOVA Developmental Expectations (Maternal Education, Mother's and Child's Age Controlled)*

Domain	German		Turkish-German		part. η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Psychomotor	2.87	.57	3.05	.61	.001
Cognitive	3.22	.46	3.61	.65	.079***
Self-Control	3.69	.79	4.16	.98	.051**
Social	3.02	.65	3.43	.86	.050**
Autonomy	3.69	.66	4.06	.77	.042**
Obedience	3.83	.81	4.59	1.00	.116***
Family-Orientation	3.63	.88	4.36	1.00	.110***
Well-Mannered	3.85	.90	4.14	.93	.027*

Although the difference of the cognitive domain as a whole was significant, some single school-related items in the narrow sense like „counting to ten“ or „writing own name“ showed no significant differences between Turkish-German and German mothers (Table 2).

Table 2*MANCOVA Cognitive Domain Items (Maternal Education, Mother's and Child's Age Controlled)*

Cognitive domain	German		Turkish-German		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Say own age	2.5	0.6	2.9	0.8	< .00
Name at least 3 colors	2.6	0.6	3.0	0.7	< .00
Write own name	4.5	0.8	4.5	1.0	ns
Count to 10	3.2	0.8	3.3	0.9	ns
Understand time concepts like	3.5	0.9	3.9	1.0	< .00
Understand 'more', 'less', and	3.2	0.9	3.5	1.0	ns
Distinguish men and women	2.3	0.7	2.8	1.1	< .00
Tell what season it is	4.0	0.9	4.8	1.1	< .00

A MANCOVA conducted to analyze the expectations of first and second generation Turkish-German mothers separately showed that significant differences in self-control, social skills, autonomy and being well-mannered only existed between first generation Turkish-German and German mothers, but not between German and second generation mothers (tab.3). At the same time there were no significant differences between first and second generation mothers in these domains. Referring to obedience and family-orientation German mothers had significantly earlier expectations than Turkish-German mothers of both generations. The difference between first generation Turkish-German and German mothers exceeded one year and additionally there was a significant difference between first and second generation mothers (Table 3).

Table 3*MANCOVA Developmental Expectations German, First- and Second-Generation Turkish-German Mothers*

	German		First generation		Second generation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Psychomotor	2.87	.57	3.20	.65	2.95	.56
Cognitive	3.22 _a	.46	3.65 _b	.68	3.58 _b	.63
Self-Control	3.69 _a	.79	4.33 _b	.88	4.04 _{a,b}	1.06
Social	3.02 _a	.65	3.54 _b	.94	3.35 _{a,b}	.80
Autonomy	3.69 _a	.66	4.26 _b	.82	3.92 _{a,b}	.70
Obedience	3.83 _a	.81	4.91 _b	.95	4.34 _c	1.02
Family-Orientation	3.63 _a	.88	4.69 _b	1.03	4.11 _c	.98
Well-Mannered	3.85 _a	.90	4.32 _b	.93	4.03 _{a,b}	.94

Note. Means with different subscripts were significantly different in a post hoc test.

Discussion

The present study examined developmental expectations of Turkish-German and German mothers and found that Turkish-German mothers expect the acquirement of skills in nearly all developmental domains later than German mothers. The result is hardly surprising since the studies conducted in the Dutch context achieved similar results (Durgel, 2011; Willemsen & van de Vijver, 1997). A feasible explanation for the findings could be the aforementioned concept of early childhood which is assumed to be hold by Turkish-German mothers. If mothers believe that children in their early years are not capable of rational thinking and behavior and are mainly guided by their needs, then they will not expect the development of cognitive or social skills too early in this period. The non-existing difference in the expectation of psychomotor development could be caused by a more genetic predisposition of this domain and less by cultural impact (Willemsen & van de Vijver, 1997). It is noticeable that the major differences between Turkish-German and German mothers occur in those domains which exclusively refer to intra-familial processes: obedience and family-orientation. It seems that Turkish-German mothers are more likely to allow their children greater latitude with respect to their comprehension of childhood in those domains which are in their own decision-making and responsibility. In domains with more relevance for the extra-familial space, like social skills, the differences to German mothers are still significant but smaller. Presumably the permission of extended development ages should have no negative impact on meeting the demands of the extra-familial environment. This prevails particularly for education which is highly valued by Turkish-German mothers as a long-term socialization goal for their children (Leyendecker et al., 2008). This interpretation is concordant with the findings of Goodnow et al. (1984). According to the authors, Lebanese-Australian mothers explained the prolonged development times in early childhood by reasoning that life will become serious for the children soon enough. At the same time they set an earlier age as appropriate for starting school. The differences between the developmental domains and between first and second generation Turkish-German mothers illustrate that parental ethnotheories are not adopted in a determined and probably already dysfunctional mode for the child's adaptation to its current environment but that they are reinterpreted by integrating new information and reflecting the demands of the environment in order to allow their children an optimal adaptation to their environment. The findings are concordant with Kağıtçıbaşı's Family Modernization theory (2007) in the sense that change does not mean to adopt the „Western“ style but to maintain those aspects of parenting which touch the relationships of the family members, in this case a lenient attitude towards child behavior referred to intra-familial processes, and to develop expectations which support

successful behavior in domains like autonomy, self-control and social skills which are needed for advancement in the extra-familial educational context.

A limitation of the present study is that solely the maternal developmental expectations were assessed but neither the mother's actual parenting behavior nor the child's development. Further research is required to examine how the developmental expectations of mothers affect their parenting behavior and child development. Due to the lack of empirical research on Turkish-German mothers' concepts of early childhood, the explanations of the findings are based on descriptions of early childhood concepts in traditional Turkish or traditional Chinese culture. Thus there is a need for updated qualitative research on parental ethnotheories, namely the beliefs Turkish-German, German and Turkish mothers (in Turkey) hold on the nature of the child and its development.

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Could the Profile of Orphans Represent the Javanese Position in the Indulgence Versus Restraint Culture Dimension?

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Abstract

Javanese culture (one of the cultural groups in Indonesia) emphasizes the importance of social norms and social consequences as a control to social behavior. The aim of this research is to study the dimension of restraint in the behavior and psychological dynamics of Javanese late adolescents, who live at two orphanages in Central Java. The participants are 40 male adolescents in the care of two public orphanage houses, with the age range between 12 to 19 years. The method used in data retrieval is qualitative, that is through observation, interviews, and drawing test. The results showed that the behavior and psychological dynamics that occur on the individual self between those two orphanages are quite similar. Participants in both orphanage houses tend to control ways to express their feelings. They also present themselves as calm, tight in norms, and under control. Additionally, showing control of emotions and being not easily surprised is also important. These observations may represent the characteristics of Javanese culture as have been found in previous research, namely, the tendency to be restrained in the Indulgence Versus Restraint dimensions (Hofstede, Hofstede, & Minkov, 2010).

Introduction

This research was part of the main research project regarding the benefit of Training Senam Resiliensi for children and adolescents in orphanage houses. Senam Resiliensi is a kind of exercise method that was developed based on the Qigong technique. The researchers used a drawing test to have a comprehensive understanding of the orphans. In the middle of conducting the main research project, researchers found an interesting phenomenon in several orphans in two orphanages: the incongruence between some orphans' daily behavior and the interpretation of their drawing test. In daily behavior they look obedient, polite, modest, under control, and respectful. In contrary, interpretation of their drawing test show that they tend to have loose norms, and their drawings express their rebellion. A question arised, whether there is incongruity between orphans in two orphanage houses.

From the researcher's observation, the orphans' daily behavior is similar with the behavioral characteristics of Javanese people, in accordance to previous findings from The Training of Senam Resiliensi for seniors in houses for the elderly. The previous study found the same characteristics of Javanese culture, for instance, manut (obedience), telaten (persistence), and nrimo (acceptance) (Jap, Risnawaty, Monika, & Tiatri, 2010). Another question that emerges is whether the study of children in two orphanages represent the culture of Java.

Broadly speaking, although Javanese have spread to various areas of Indonesia, Javanese cultures have similarities across these places. The same case happened here. This study used samples in two orphanage houses located in different districts, relatively far from each other (the distance from Orphanage House-SLA to Orphanage House PEM is 42.4 kilometers). The children of the two orphanage houses came from various areas in Central Java. Still, the Javanese culture is the dominant culture in those two areas. Studies regarding Javanese culture (e.g., Pemberton, 1994) found that there are no significant cultural differences between groups

of people in Central Java. Thus, highly selective sample of orphans can be used to indicate some aspects of Javanese culture.

Referring to Matsumoto and Juang (2008), culture can be defined as “a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and wellbeing, and derived meaning of life” (p. 13). Javanese culture emphasizes the importance of social norms and social consequences as a control to social behavior (Herusatoto, 2009; Margana & Nursam, 2010). These values are in line with the description on tight societies that maintain strong values of group organization, formality, permanence, durability, and social solidarity. Conversely, in loose societies, norms are expressed with a wide range of alternative channels, and deviant behavior is easily tolerated (Hofstede et al., 2010).

The focus of cultural aspect that would be analyzed in current study was the cultural dimensions of *Indulgence Versus Restraint* (Hofstede et al., 2010). Corresponding to the *Indulgence Versus Restraint* (IVR) dimension, findings from research regarding Javanese culture (e.g., Rahyono, 2011; Dewi, 2005) showed that the Javanese culture is more akin to the *Restraint* dimension. Based on Hofstede, the definition of this dimension is as follows:

Indulgence stands for a tendency to allow relatively free gratification of basic and natural human desires related to enjoying life and having fun. Its opposite pole, restraint, reflects a conviction that such gratification needs to be curbed and regulated by strict social norms (Hofstede et al., 2010, p. 281).

Misho (cited in Hofstede et al., 2010) stated that indulgence values will decrease if the society becomes more structured.

When the system of organization was constructed, it is influenced by the culture surrounding the organization itself. The orphanage house can be seen as the organization that has its own system and rules that were developed by that organization, and embedded by agents (i.e., administrators and caregivers). As an organization, the systems and rules that apply in the orphanage house become a reference value that was adopted and internalized by the orphans. Likewise, the internalization of values and culture could be expressed through their social behavior (Hofstede et al., 2010).

In academic terms, the orphanage house’s system and rules usually refer to organizational culture (Hofstede et al., 2010; Matsumoto & Juang, 2008). Organizational culture can be defined as “meaning and information system shared within organization and transmitted across successive generations of members that allow the organization to survive and thrive” (Matsumoto & Juang, 2008, p. 398).

Up to now, culture was studied through research on language (e.g., Rahyono, 2011; Sartini, 2009), and through questionnaire deployed in organizations (e.g., Hofstede et al., 2010), or questionnaire that was filled-in by the participants (Dewi, 2005; Rachim & Nashori, 2007). There are limited previous studies on culture that make use of drawing tests of orphans. This research intends to study the culture in a different way, thus using hand drawings as a data source. This research attempts to obtain the description of culture and values that is represented in the orphans’ behavior. Expression of behaviors that reflect their personality can be captured through a graphical expression that was collected from the drawing test, and supported by data from interviews and observations.

In short, the aim of this research was to investigate the characteristics of orphans in these two orphanage houses in Javanese culture, using Hofstede’s theory about cultural dimensions, specifically the dimensions of *Indulgence Versus Restraint* (IVR). Another consideration for the significance of the current study is the scarcity of scientific evidence that can explain more about dimension of *Indulgence Versus Restraint* (Hofstede et al., 2010). Furthermore, the investigation could lead to the answer of whether the orphans’ profile could represent the Javanese Position in *Indulgence Versus Restraint* (IVR) Culture Dimension.

Method

Participants

Participants were 40 male adolescents in two government-owned orphanage houses in two small cities SLA and PEM, located away from one another in Central Java, Indonesia. Henceforth, the orphanage house in SLA is called OH-SLA, and the orphanage house in PEM is called OH-PEM. Their age ranged between 12 and 19 years old. The number of participants was 20 from each orphanage house. Table 1 shows demographic data of the participant based on their age. The majority of the participants in OH-SLA were aged 15 and 16 years old, and participants in OH-PEM were 14 years old (Table 1). Based on their level of education, the majority of participants were junior high school students. Only 15% of them were primary school students, and the rest were senior high school students (Table 2). The local government, through the social office and the orphanage houses, paid their school fee as well as their living cost.

Table 1

Demographic Data of Participants Based on Their Age

Age	Setting			
	OH-SLA		OH-PEM	
12	2	10 %	3	15 %
13	2	10 %	3	15 %
14	4	20 %	7	35 %
15	6	30 %	2	10 %
16	6	30 %	2	10 %
18	0	0 %	2	10 %
19	0	0 %	1	5 %

Table 2

Demographic Data of Participants Based on Their Level of Education

Level of education	Setting			
	OH-SLA		OH-PEM	
Primary School	0	0 %	3	15 %
Junior High School (1 st grade)	8	40 %	3	15 %
Junior High School (2 nd grade)	1	5 %	7	35 %
Junior High School (3 rd grade)	5	25 %	2	10 %
Senior High School (1 st grade)	6	30 %	2	10 %
Senior High School (2 st grade)	0	0 %	3	15 %

Data Collection

Three methods were used to collect data: (a) drawing test – Draw A Person Test; (b) interview; (c) observation. The drawing test was administered by one of the research teams. Observations were done in the orphanage houses during a four-month period (August – November) in 2010. Finally, interviews were conducted with the headmaster and caregivers of the orphanage houses and the orphans themselves.

Procedure

Several steps were conducted by the research team: (1) obtaining informed-consent from the social office, the headmaster of the orphanage house, and the orphans as participants, (2) introducing the research team and the aim of this research, (3) collecting data through the drawing test – giving instruction for participant to draw a person at plain paper of A4 sizes, (4) interviewing the headmaster, the caregivers and the participant, (5) throughout the research project, the research team observed the participants' behavior. Figure 1, 2, 3, and 4 (which can be found at the end of this chapter) show picture samples from "Draw a Person" drawing test.

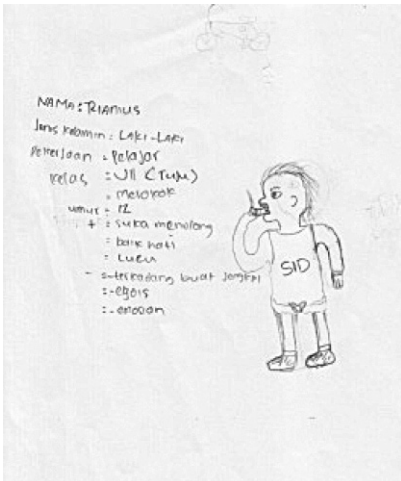


Figure 1. Sample Picture from “Draw A Person” drawing test: participant at OH-SLA

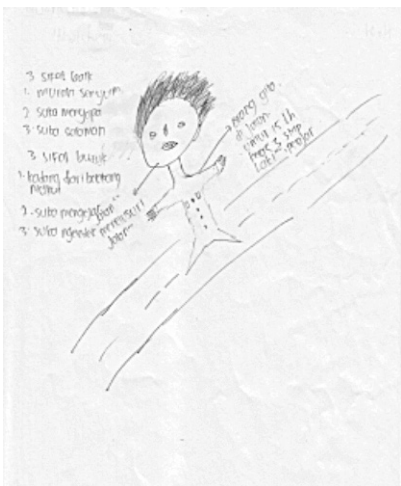


Figure 2. Sample picture from “Draw A Person” drawing test: participant at OH-SLA

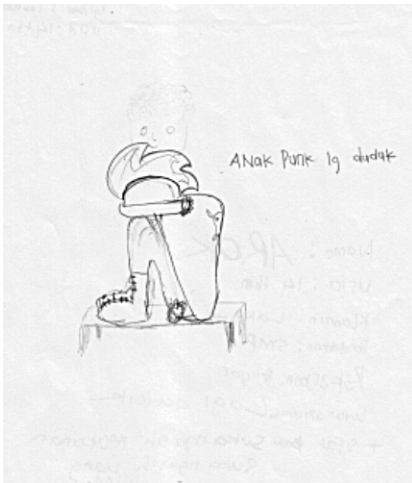


Figure 3. Sample picture from “Draw A Person” drawing test: participant at OH-PEM

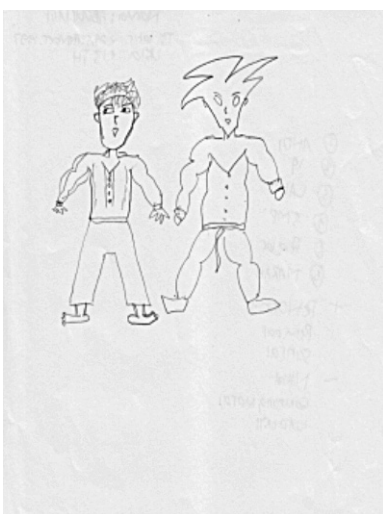


Figure 4. Sample picture from “Draw A Person” drawing test: participant at OH-PEM

After the data were collected, the next step was data analysis. Qualitative analysis was conducted at individual and organizational level. The picture resulting from the drawing test was analyzed using an inter-rater method. Inter-rater reliability was examined by Pearson Correlation among the scores given by the three raters (Tables 3-6). The raters were psychologists with experience in examining Drawing A Person test for 4 to 8 years. Each rater interpreted the data by giving codes in 6-scales based on 7 dimensions that were made by reference to theory of projective technique (Machover, 1978; Ogdon, 1984) and theory of cultural dimension (Hofstede et al., 2010).

This research used a mainly qualitative method. Data collected from the interview and observation were analyzed using content analysis. All the data were then integrated to describe the dynamic of behavioral characteristics of adolescents based on Indulgence Versus Restraint (IVR) theory.

The interpretation technique used in this study was based on the theory of interpretation for Draw A Person Test (Machover, 1978). In an attempt to quantify the data interpretation, the study used an inter-rater technique. Each rater quantified the interpretation of the data to some coded numbers, according to seven dimensions and its indicators. This method is also done by other researchers in the study of projective use of mother and child drawing (Gillespie, 1994).

Results

Description of the Result of Drawing A Person Test

The dominant theme of the drawings of 40 participants were “students at 12-15 years old”. There were 10 coding schemes used for scoring, namely: (a) size of person drawn, (b) the placement of drawing in the paper, (c) facing position, (d) the completeness of body parts, (e) the proportionality of body parts, (f) the facial expression, (g) the symmetry of body shapes, (h) additional accessories, and (i) drawing execution (the line pressures, the line shape, and the shading).

Table 3
Interrater Reliability at OH-SLA

Dimension	Pearson Correlation
SLA 1.1	.722**
SLA 1.2	
SLA 1.3	.722**
SLA 2.1	.588**
SLA 2.2	.588**
SLA 2.3	
SLA 3.1	
SLA 3.2	
SLA 3.3	
SLA 4.1	.771**
SLA 4.2	.584**
SLA 4.3	.717**
SLA 5.1	.587**
SLA 5.2	
SLA 5.3	.587**
SLA.6.1	.732**
SLA.6.2	.732**
SLA 6.3	.716**
SLA 7.1	.819**
SLA 7.2	.819**
SLA 7.3	

* $p < .05$. ** $p < .01$

Table 4
Interrater Reliability at OH-PEM

Dimension	Pearson Correlation
PEM 1.1	.471**
PEM1.2	.471**
PEM 1.3	
PEM 2.1	.533**
PEM 2.2	.557**
PEM 2.3	.533**
PEM 3.1	
PEM 3.2	
PEM 3.3	
PEM 4.1	.694**
PEM 4.2	
PEM 4.3	.694**
PEM 5.1	
PEM 5.2	
PEM 5.3	
PEM 6.1	.732**
PEM 6.2	.512*
PEM 6.3	.512*

* $p < .05$. ** $p < .01$

Table 5*Global Correlation Coefficient among Raters of Data of OH-SLA*

Rater	Person Correlation
SLA 1.1	.746**
SLA 1.2	.567**
SLA 1.3	.746**

Table 6*Global Correlation Coefficient among Raters of Data of OH-PEM*

Rater	Person Correlation
PEM 1.1	.453*
PEM 1.2	.599**
PEM 1.3	.599**

The results showed that behavior and psychological dynamics that occur in the participant between those two orphanage houses are quite similar. The results from the Draw A Person Test indicated that the mean form each dimension were below score 3.5. The total mean score from OH-SLA is 3.11 and from OH-PEM is 3.07. The mean scores mean the personality of participants from each OH tend to be appropriate with characteristics that was projected from the Restraint value. The mean score of each dimension is represented in Table 7. The lowest mean score of the last dimension indicate a state of being loose in norms (mean score of OH-SLA is 2.78; mean score of OH-PEM is 2.67). This score could be interpreted that the participants tend to obey social norms.

Table 7*Descriptive Means for Each Dimension in Draw A Person Test*

	Mean at OH-SLA	Mean at OH-PEM
Dimension 1: Interest in social life	3.08	2.78
Dimension 2: Express their feeling	3.25	3.12
Dimension 3: Loose in Control	3.07	3.42
Dimension 4: Full of energy	3.43	3.28
Dimension 5: Having fun	3.02	3.00
Dimension 6: Egocentrism	3.15	3.13
Dimension 7: Loose in norms	2.78	2.67
<i>Total Mean</i>	<i>3.11</i>	<i>3.07</i>

Note. mean score = 3.5 ; the higher the score, the higher the level of indulgence

Description of the Participants based on Observation

Certain aspects that were focused on during observations were related to the dimensions of *Indulgence Versus Restrain* (IVR), namely: (a) interest in social life; (b) expression of their feelings; (c) loose in control; (d) full of energy; (e) having fun; (f) egocentrism; (g) loose in norms. The observations were conducted during their daily activities, such as when they return home from school, having lunch, watching TV, and queuing for taking a bath.

The observations were also performed by research assistants during the training of Senam Resiliensi, as well as the activities before and after the training. The research assistant observed the behavior of participants of the training and wrote down his observations. Table 8 shows the sample of observation report.

Table 8
Sample of Observation Report

Location	Time	Occasion	Observation
OH-SLA	02.15 pm	Returned home from school	The participants entered the OH quietly, and then practiced hand kissing to the caregivers. They did not say anything unless they were asked.
	1.00-2.00pm	Having lunch	The participants took their plate and food from the kitchen, then took a seat in the dining room, and had lunch quietly, without talking each other.
	Sunday, at 10.00-11.00 am	Watching TV	There were seven participants sitting in front of the television watching soccer games silently.
	05.10-06.10 pm	Queuing for taking a bath	The participants queued for taking a bath without making jokes.
	Tuesday, 14 Dec 2010, at 05.00-06.00 am	Senam Resiliensi Training	Most of the participants followed the instruction obediently. Only two or three participants took the activity lightly, and sometimes they seem to be daydreaming. In general, the atmosphere during the training was very quiet, and none of the participants talked each other, and none of them left the training location during the training.

Sample of observation notes in Table 8 showed an indication that the orphans tend to behave congruently to Restraint characteristic. For example: (a) Practicing hand kissing, entering OH quietly, having lunch and dinner quietly; most of the participants followed the instructions obediently indicating that they were adhering to norms. (b) They did not say anything unless they were asked, which indicated that they are in control for when they should express their feeling. (c) watching soccer games silently, the participants queued for taking a bath without making a joke show that they have less intention of having fun and tend to show less energy. (d) In general, the atmosphere during the training was very quiet and none of the participants talked to each other, and none of them left the training location during the training. Based on the sample behavior description, the observation indicates that the orphans' behavior is inclined to represent characteristics of Restraint.

Description of Participants based on Interviews

The result of observation was confirmed in the interviews with the headmasters and caregivers. One of the interviewee was Mr. D. Mr. D himself is an alumnus of the OH-SLA who was now working as a caregiver in OH-SLA. Based on the information obtained from Mr. D, on average, the participants stayed in the OH-SLA for 4 to 5 years. They were like any other normal adolescent within their age group in Java, they all had sufficient well-being and were emotionally normal. No orphans had problems in following the rules in the OH. Following the regulation of the OH, they also did their everyday duties when it was their turn without any problems. Only one or two orphans have behavioral problems and did not obey the rules in OH. Based on the description obtained from interview it can be inferred that the orphans' behavior again tend to be closer to the Restraint characteristic.

Discussion

Based on the orphans' profiles, we could conclude that the orphans in the public orphanage houses in Central Java could be categorized as more restrained compared to indulgence in the IVR dimension proposed by Hofstede et al. (2010). This suggests that the culture of orphanage houses as an organization has adopted the Javanese cultural values which are then incorporated into the rules that were applied, both written and unwritten. The rules are established and invested by the agent in this case is the caregiver, which are then adhered to and executed by the orphanage. Therefore, the characteristics of the orphans were: controlling themselves in

expressing feelings, showing less vitality, being more careful in having fun, having to think of mutual interest and implementing the norm tightly. These characteristics represented Javanese culture. Javanese culture teaches its members to control ways of expressing their feelings, presenting themselves as calm, behaving in a socially acceptable manner by following norms strictly, and are not easily surprised by being under control. In short, this research showed that orphans' profile (mainly measured by the Drawing A Person, combined with the caregivers' comments and longitudinal observation), could represent the Javanese position in Indulgence Versus Restraint (IVR) culture dimensions. Other studies showed similar findings, that the behavior and attitudes of the adolescent are influenced by the norms and Javanese cultural values (Rachim & Nashori, 2007). The result showed that the higher the adolescent participants adopt the values and culture of Java, the lower their delinquency is.

The strength of this study was its contribution as a research model that used novel tools, namely the projective technique in investigating the Indulgence Versus Restraint Cultural Dimension. In this study, using a projective technique, which is the drawing test has been proved to provide an alternative way to measure culture that represents and is internalized within participants. Occasionally, the drawing test is used at clinical, industry and organization, and educational settings as tools for diagnosing maladaptive behavior or psychological disorder. The drawing test as an instrument of research has not been widely used to explore culture.

There are advantages and disadvantages in the use of drawing test as an instrument of research. The advantage is minimizing fake results or responses from participants. Basically, the drawing test as part of the projective technique could hide the purpose of the test and the way to measure the data from participants. Thus, participants could usually perform naturally, minimizing the 'faking good/bad' attitude toward the test. A disadvantage or a weakness of the test is the fact that it can be considered less objective. Like any other test using a projective technique, aspects of validity and reliability are still not measured objectively. To overcome this weakness, this study also conducted an integrated analysis from interviews and observation in order to obtain data more accurately.

Beside the strength, this research has limitations. One of the limitations that the research did not use more structured and objective observations and interviews. Moreover the interview was conducted by the caregiver, who had less involvement of the orphans. However, the limitation of qualitative analysis of the Draw A Person data had been minimized by using quantification and scoring the participants' drawing.

This research has at least two implications. First, again, this study strengthens the finding that Javanese culture could be categorized as more akin to restraint rather than to indulgent in the IVR Dimension. Second, for future research regarding indigenous culture, a drawing test could be considered as a tool to obtain comprehensive data in the understanding of a cultural phenomenon.

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Cultural Diversity in Meta-Cognitive Beliefs about Learning: Within-European Similarities and Differences?

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Abstract

Previous work on cross-cultural differences in the domain of education, has primarily studied Western (European) and Asian cultures or comparisons thereof. Current internationalization trends in higher education however call for a greater understanding of possible within-European cultural differences in the domain of learning. The current paper therefore addresses the question how culture influences the beliefs of Western and Eastern European students. The studies are based on the theory that the beliefs of students and faculty in the Western cultural context can be characterized as primarily 'mind oriented', whereas previous research has indicated that the beliefs of East-Asian academics has a stronger 'virtue orientation'. In the mind orientation, the development of one's cognitive thinking skills is at the heart of the concept of learning. In the virtue orientation, learning is primarily seen as a process of social and moral development of the person. Since the psychological literature has not yet reached a consensus on the degree and domains in which cultural differences emerge across the Eastern and Western European regions, a two-fold survey study was conducted in the Eastern European countries of Poland and Russia; and the Western European countries of the Netherlands and Germany. Students from both European regions were found to endorse mind oriented beliefs about learning more strongly than virtue oriented ones on the level of both attitudes and behavioral intentions, pointing to a striking cross-cultural similarity across the European region in the domain of beliefs about learning.

Introduction

Which characteristics are most important for students while pursuing their university studies? To be critical, persistent, creative, respectful, diligent, or smart? Different people may answer this question differently, but all students and teachers have certain beliefs about which characteristics make a 'good' student. The kinds of ideas that both students and teachers have about what learning should be like are called meta-cognitive beliefs about learning. Previous research has found that on a cultural level, two orientations emerge that describe a qualitative difference in these beliefs across East-Asian and Western contexts. The overarching theme that has been found to characterize the orientation in meta-cognitive beliefs about learning for Western academics has been termed as a 'mind orientation' towards learning (Li, 2005). The essence of this orientation is the belief that learning is primarily concerned with the development of the mind, and a good student thus possesses mental skills such as creativity and intelligence. Learning may however also be thought of as a process of personal development that does not only include the cognitive domain, but encompasses social and moral aspects as well. This latter orientation has been found to capture the beliefs of East-Asian students and has been characterized as a 'virtue-orientation' (Li, 2005).

The existence of cultural orientations in meta-cognitive beliefs about learning is highly relevant in the context of increasing international student exchange in higher education. In the European context, the transition of post-Communist countries to the European Union has boosted the within-European rate of international academic exchange (European Union Press Release, 2008; Lane & Kinser, 2012; Student Statistics Federal Statistical Office, 2007). The participation of increasing numbers of Eastern European students in Western European institutions of higher education calls for insight into the way students from diverse cultural backgrounds conceptualize learning.

In order to develop a well-founded understanding of the influence of culture on meta-cognitive beliefs about learning of students in the European context, we build on the mind – virtue orientation framework to explore the cultural orientation of the meta-cognitive beliefs about learning of students from two large Central/Eastern European countries: Poland and Russia. The orientation that students from these countries endorse will be compared with each other and with the orientations of students from two Western European case-countries: Germany and the Netherlands. Because of the exploratory nature of the studies, we will take a culture-equals-nation approach (Hofstede, 2001; Holtbrugge & Mohr, 2010). This approach allows us to examine within-regional differences that are neglected when comparing the Western European region as such with the Central/Eastern European one. Cultural variations that might have resulted from the different contextual factors that influenced each nation should therefore come to light in our analyses.

Like the majority of the cross-cultural literature, research on cultural differences in the domain of learning has primarily focused on comparisons between Western (US American or Western European) and Asian (primarily Chinese) students (for a comprehensive theoretical review see: Van Egmond, Kühnen, & Li, 2013). Cross-cultural literature in this domain that addresses the region of Central and Eastern Europe specifically is scarce. The Eastern European region however provides a particularly interesting context due to the macro-societal changes that characterize it (Ammermüller, Heijke, & Wößmann, 2005). Both Tudge, Hogan, Snezhkova, Kulakova and Etz (2000) and Holloway, Mirny, Bempechat and Li (2000) for example suggest that it is likely that values of conformity and compromise, which were conducive to successful socialization during communism, have changed in the direction of values that are needed to succeed in a market economy, like those of initiative taking and independence. Higher education plays an essential role in shaping these societies and transmitting societal values. Moreover, in the context of increasing within-European academic exchange, a solid understanding of the cultural orientation of students' meta-cognitive beliefs about learning in these countries is valuable in order to accommodate processes of intercultural communication in the academic classroom.

Next, we will provide a short theoretical introduction into the concepts of the mind and virtue orientation and will integrate literature that relates to cultural differences in beliefs about learning across the European region. The hypotheses for our empirical investigation are based on this review.

Cultural Orientations In Meta-Cognitive Beliefs About Learning

The vast majority of studies that have been conducted on cultural differences in learning juxtapose the Western 'Socratic' cultural context with the 'Confucian' legacy, which has shaped the East Asian region (Tweed & Lehman, 2002). The theory of the mind and virtue orientations aims at broadening this perspective. In fact, the foundational study by Li (2003) revealed that the size and basic structure of the mental construct of learning is similar for both Western and Asian students. The domains of the concepts of learning that her analysis revealed were labeled as the purposes (e.g., what people think the goal of learning is; whether or not and why learning is important), processes that are assumed to underlie learning (e.g., which strategy to apply), affect and motivation (e.g., whether one experiences joy or dread from learning and from successes and failures), and social perceptions (e.g., the perception of successful learners vs. unsuccessful ones and perceptions of teachers). The content of these categories that are used by the European American and Chinese students in China however differed systematically and qualitatively. The American students were found to give primary importance to characteristics of the individual that enable a person to acquire knowledge, such as cognitive skill, intelligence, but also thinking, communicating and active engagement in the classroom. For Chinese students, Li (2003) found that the most central elements of the content of their beliefs about learning pertained to a personal-agentic dimension such as diligence, self-exertion, and endurance of hardship, perseverance, and concentration. These characteristics include a moral and virtuous orientation and take prevalence over the mere cognitive elements in the pursuit of learning. In addition to the objective mastery of academic subjects, good learning aims at the unity of knowing and morality in the view of this orientation. Knowledge itself and the process of acquiring it are evaluated by the contribution they make to society. Li (2003) therefore conceptualized the theme that the meta-cognitive beliefs about learning of Chinese students center on as 'virtue-oriented'.

We used the established mind-virtue orientation distinction to study learning beliefs of Western versus Eastern Europeans. We however acknowledge that predictions about cultural differences or similarities between these regions are difficult to make given the inconclusive and sometimes even contradictory findings that emerge from previous studies on related topics. For example, some studies are based on an expected cultural similarity across the Eastern and Western parts of the European region, since prior to the introduction of Communism, Eastern European societies identified themselves largely with Western Europe's cultural, religious, and intellectual heritage (Whitmarsh & Ritter, 2007; Varnum, Grossmann, Katunar, Nisbett, & Kitayama, 2008). In this line of reasoning, it would be plausible to hypothesize that Eastern Europe shares the Socratic tradition, which has been found to be related to the way learning is conceptualized in the West (e.g., Tweed & Lehman, 2002; Li, 2003). Several empirical studies find support for this line of reasoning. Related to the domain of learning specifically, Szejnberg, den Brok and Hurek (2004) found that the preferences of Polish students in teacher-student interpersonal behavior are largely similar to the preferences of students from Western regions, such as the Netherlands, Australia and the US. Polish students only indicated that teachers should provide slightly more responsibility and be slightly less strict than students from other countries reported. These authors therefore suggest that, when it comes to interpersonal teacher-student behavior, only minimal cultural differences exist between the perceptions of Polish students and those from other regions. A study that examined the beliefs of Polish university students towards the specific sub-domain of learning, that of creativity, also found that Polish students valued the more Western traits of this concept whereas Chinese students did so less. (Rudowicz, Tokarz, & Beauvale, 2009). Similarly, Rudowicz and colleagues found that Polish students attach a high desirability to cognitive abilities, such as being smart, curious, and inventive. These characteristics are also reflected in the mind orientation. Together these findings may lead to the expectation that Polish students value mind-oriented beliefs about learning more strongly than virtue-oriented beliefs, just like their Western European counterparts in Germany and the Netherlands. Other recent work by Lammers, Savina, Skotko and Churlyayeva (2010) also speaks in favor of a high degree of cross-cultural similarity in the perception of 'good' learning at the university level between a typically Western (USA) and post-Communist (Russia) context. Here, it was found that knowledgeable, respectful, effectively communicating and creative teachers are perceived as the most skilled instructors in both cultural settings. These characteristics thus also concur on the theoretical level with the mind orientation towards learning.

So far, we reviewed empirical evidence, which points in favor of the similarity between Eastern and Western European cultural beliefs. The available literature does however also contain studies that provide counter-evidence to this interpretation and suggests cultural differences between regions within the European continent, as well as within the Eastern European region. Most recently, Holtbrügge and Mohr (2010) for example found that cultural values are related to learning style preferences of students from a diverse range of countries, including those of Germany, the Netherlands, Poland and Russia. In particular, students' individualism was found to be related to a preference for active learning style and focus on abstract conceptualizations. The cultural values of power distance, uncertainty avoidance and long-term orientation however explained less variance in individual learning style preferences. The notion of a higher degree of collectivism among Eastern as compared to Western Europeans is also supported by a recent study by Kokkoris and Kühnen (2013) who found the former to hold more interdependent self-views than the latter. In a domain that is closely related to that of cultural beliefs about learning, research on cognitive styles suggests that East Europeans have more in common with East Asians than with Americans or Germans. Kühnen, et al. (2001) have for example shown that the visual attention pattern of Russians is more holistic than analytic. Since analytic thinking skills have been linked with the (mind-oriented) emphasis on critical thinking skills (Lun, Fischer & Ward, 2010), it could be hypothesized that the more holistic cognitive style of Eastern Europeans is incongruent with this formal logical tradition that is integral to the mind orientation. More recently, Varnum et al. (2008; 2010) found additional supportive evidence that Central and Eastern Europeans tend to be more holistic in their thinking than Western Europeans and North Americans. The patterns of cognition of Central and Eastern European students were found to be more holistic on a categorization task and two visual attention tasks. One aspect of analytic

(as opposed to holistic) thinking is the strong desire for cognitive consistency which is for instance manifested in dissonance reduction after preliminary choices. Heine and Lehman (1997) for example found Canadian participants to justify their choices ex-post more than Japanese respondents did. Using an almost identical experimental paradigm, Kokkoris and Kühnen (2013) recently found stronger dissonance reduction among Eastern as compared to Western Europeans, supporting the argument of higher degrees of holism among the former (Varnum, et al, 2008). Although these studies are not directly related to learning beliefs, one might argue that the Western Europeans' stronger need for cognitive consistency reflected in these findings implies a stronger general preference for formal logic in reasoning and a more pronounced willingness to challenge contradictions in argumentation, both of which are aspects of mind orientation. Furthermore, Kolman and colleagues (2002) not only found important differences between the value orientations of Western European (Dutch) and Central European students, but also within the four Central European countries included in their study (Czech Republic, Hungary, Poland and Slovakia). All Eastern European countries for example tended more strongly towards masculinity than femininity and power distance and uncertainty avoidance were found to be exhibited more strongly in these societies as well, although these values could be expected to relate to beliefs about learning to a lesser extent based on Holtbrügge and Mohr's (2010) results.

Following this line of reasoning, it could be hypothesized that the beliefs about learning of both Polish and Russian students in the current study would be less mind-oriented and more virtue-oriented than the beliefs of Dutch and German students. After all, it is unlikely that critical thinking skills that are applied to questioning the words of authorities are valued in cultures in which the social order and the maintenance of harmony in social relationships is central, as is the case of societies that are oriented towards collectivistic cultural values. Instead, this is a tradition that can only flourish when the independent evaluation of knowledge regardless of the social status of the transmitter of this knowledge, is acceptable. This mind orientation characteristic thus reflects individualist cultural values.

In support of this expectation is the fact that differences between the countries existed prior to 1989, with Poland for example being among the most liberal and Western-oriented societies. Moreover, the communist political structure was merely imposed on the societal level here, but its values were not endorsed on the personal and psychological level. Recent large-scale research has also found the Eastern European countries to still represent distinct cultural regions from Western Europe in the domain of values (Inglehart & Welzel, 2005; Schwartz & Bardi, 1997). Other studies however suggest that this difference in values primarily persists for individuals who have actually been raised during the time of the Cold War, not the younger generations (Van Herk & Poortinga, 2012).

To summarize, the above review provides an ambiguous answer to the question whether cultural differences might be expected between Western and Eastern European students in their beliefs about learning. Evidence was found both in favor of a cultural difference and in favor of cultural similarity between these regions. In an effort to resolve this ambiguity in the domain of meta-cognitive beliefs about learning for young, contemporary students a survey study was designed to measure these differences empirically. Given the theoretical ambiguity, it is possible to formulate predictions for the current study on mind and virtue orientation among Western and Eastern Europeans in equally plausible directions. Hence, we abstain from making a specific prediction and regard the current investigation as rather exploratory in nature. Therefore, we simply applied the materials that were created for previous studies, which revealed clear cultural differences between Germans and Chinese (Van Egmond, 2011). For the present studies, the rating scale by which both mind and virtue orientation can be measured on an attitudinal level, as well as the scenarios for which participants are asked to make behavioral predictions were conducted in Poland, Russia, Germany and The Netherlands. First, Poland was selected as a case-country, based on its post-Communist background, combined with a Catholic tradition. Russia is more secular when it comes to work ethics. However, this influence that was superimposed during communist times does not prevent the Orthodox religion from having significantly shaped people's contemporary beliefs regarding the meaning of work and the need for mental evolution of the individual into the direction of Orthodox religiosity in contemporary Russia (Böhmer, 2008). However, whether or not the

difference in religious backgrounds will be expressed in a difference in orientation of philosophically inclined meta-cognitive beliefs about learning is a question that is yet to be explored. Moreover, Russia is the country with the largest cultural influence in the region, which makes it an interesting context to study in and of itself. All in all, the high diversity in both societal and religious characteristics of the included countries would make it highly likely that differences in cultural orientations of meta-cognitive beliefs about learning would emerge between these countries. Lastly, Germany was included as a first case-study for Western Europe since it is the largest non-English speaking Western European country in the number of receiving foreign students (OECD, 2010). The Netherlands was included to assess whether the results that are obtained from Germany would hold in a different Western European setting. An 18-item Likert rating scale was applied in all samples, which measures both the mind and virtue orientation of students' beliefs about learning on an attitudinal level. Secondly, a behavioral scenario questionnaire was included to obtain an indication of behavioral preferences of students in concrete, everyday academic situations. Overall the study had a 4 (culture: The Netherlands, Germany, Poland, Romania) by 2 (orientation: mind, virtue) factorial design with culture as a between-, and orientation as a within-participants factor.

Methods

Participants

The total sample consisted of 313 students from four countries: the Netherlands, Germany, Poland and Russia. The Dutch sub-sample consisted of 70 participants (36 female, 34 male), with a mean age of 21 years ($M = 21.03$, $SD = 2.18$). All participants were enrolled at the University of Groningen at the time of the study. Students from a range of disciplines were represented with the largest sub-sample of participants enrolled in a business / economics major (46.7%). Another 30% of the sample was enrolled in a medical major and only 18.3% studied a social science discipline, such as sociology, psychology or pedagogy. The German sample was recruited through a student mailing list at the University of Osnabrück (a public university in Northern Germany) and resulted in a total sample of 101 participants (76.2 % female)¹. The mean age of the sample was 22 years ($M = 22.84$, $SD = 4.26$) and students were enrolled in the social sciences (21.2 %), humanities (20 %), business / economics and law (30.6 %), and biomedical / engineering / technological sciences (28.2%). The Polish sample consisted of 81 participants in total, with a mean age of 23 years ($M = 23.6$, $SD = 3.87$). Female students were over-represented here (75%), but students were recruited at both public (66.3 %) and private institutions. Russian participants ($n = 58$) were recruited in Yaroslavl (Yaroslavl Pedagogical University, 65.5%) and Samara (State Inter-regional Academy for Social Sciences and Humanities, German and English department, 29.3%). The mean age was 20 years ($M = 20.12$, $SD = 2.65$) and included only 13% of males.

Material

All participants completed the mind – virtue orientation scale and behavioral scenario questionnaire in their native language. Translations were created using the forward- and back-translation method. The attitudinal rating scale consists of 18 items; nine measuring mind-oriented beliefs about learning and nine measuring virtue-oriented beliefs about learning. Agreement with each item was indicated on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The behavioral scenario questionnaire consisted of nine scenarios that describe situations that students will typically encounter at some point during their university studies. In each scenario a hypothetical student was described who found him/herself in an everyday academic situation in which the protagonist has to make a behavioral decision between a mind oriented and a virtue oriented way of acting (e.g., *Samantha is attending a Psychology lecture. The professor is explaining one of the classic theories, developed by an authority in the field. She however recognizes that she has a doubt about the theory. What should she do?*). The names of the protagonists were adjusted in each translation to reflect common names in the countries at hand.

¹ The full sample that participated in fact consisted of 336 students. However, in order to create a sample that was comparable in size (and thus degrees of freedom) to the samples from the other countries that are included in this study, a random sample of 30% was drawn. Only this 30% of the full sample of participants is included in the following analyses.

The questions that followed each scenario consisted of two subsections. First, students were asked to select either a mind-oriented option (1 in the example below) or a virtue-oriented option (2) that they would recommend as the most appropriate response to the described situation for the protagonist (Option 1 = Pursue her feelings of doubt and follow-up on it. She should express her thoughts openly and Option 2 = She should study the theory and the words of the authority better to make sure she fully understands the theory before expressing her thoughts openly). Secondly, participants were asked to rate the likelihood with which they themselves would engage in both the mind-oriented option and the virtue-oriented option (e.g., If you were Samantha, how likely is it that you would...) on a 7-point Likert scale, ranging from 1 (very unlikely) to 7 (very likely).

Procedure

Dutch participants were approached by a research assistant at the university library and cafeteria and were requested to anonymously complete a paper version of the survey material. The German, Polish and Russian participants were sent a link to an online version of the survey by program coordinators at their university departments. All subjects participated voluntarily.

Results

Reliability

The reliability scores for all four samples reached satisfactory levels. The reliability scores of the mind and virtue-oriented items of the scale are reported per country in Table 1. For all four countries, the Cronbach's alpha scores are above the .6 threshold.

Table 1
Means and Cronbach's Alpha Scores by Country and Subscale.

		The			
		Netherlands	Germany	Poland	Russia
Mind orientation	<i>M (SD)</i>	4.70 (.77)	5.38 (.71)	4.62 (2.1)	5.26 (1.0)
	<i>α</i>	.83	.71	.96	.78
Virtue orientation	<i>M (SD)</i>	4.43 (.65)	4.76 (.70)	4.04 (1.7)	4.84 (1.0)
	<i>α</i>	.77	.65	.91	.78
Full scale <i>α</i>		.88	.76	.97	.86

Rating Scale: Mind And Virtue-Oriented Beliefs

The main research question was whether the beliefs about learning of students from the Netherlands, Germany, Poland and Russia are more mind-oriented or virtue-oriented and, if cultural differences could be found in the orientations of beliefs about learning between these groups of European students. To answer this question, the mean scores for mind and virtue orientation were submitted to an analysis of variance with culture (Dutch / German / Polish / Russian) as between-subjects factor and orientation of beliefs (mind / virtue) as within-subjects factor to answer this question. This ANOVA revealed a significant main effect of orientation, $F(1, 309) = 103.7, p < .001, \eta^2 = .25$. As listed in Table 1, students from all four countries endorse the mind-oriented beliefs more strongly than the virtue-oriented beliefs (all four $ps < .01$).

The analysis however also revealed a significant interaction effect between orientation and culture, $F(3, 309) = 3.52, p < .05, \eta^2 = .03$. This effect was however mainly driven by the Dutch sample. Fisher's least significant difference post-hoc tests revealed that with regard to mind orientation, students from the Netherlands scored lower than any other cultural group, while the remaining three groups did not differ significantly from one another. By contrast, with regard to virtue orientation the Dutch and Polish sample displayed lower scores (not significantly differing from one another) than both the German and the Russian

sample (which also were not significantly different from one another). As also evidenced by the small interaction effect, this effect was rather small. Additionally, it is important to recall that the study was conducted with the goal to identify potential cultural differences (or similarities) in the *relative* emphasis that people place on mind and virtue orientation, not on absolute differences across cultures. After all, the pattern of a higher endorsement of mind oriented beliefs over virtue oriented ones remains for all four samples. Lastly, within-subjects analyses of variance revealed that the possible mediating variables of gender and academic discipline did not result in a significant interaction with students' orientation beliefs in this study either.

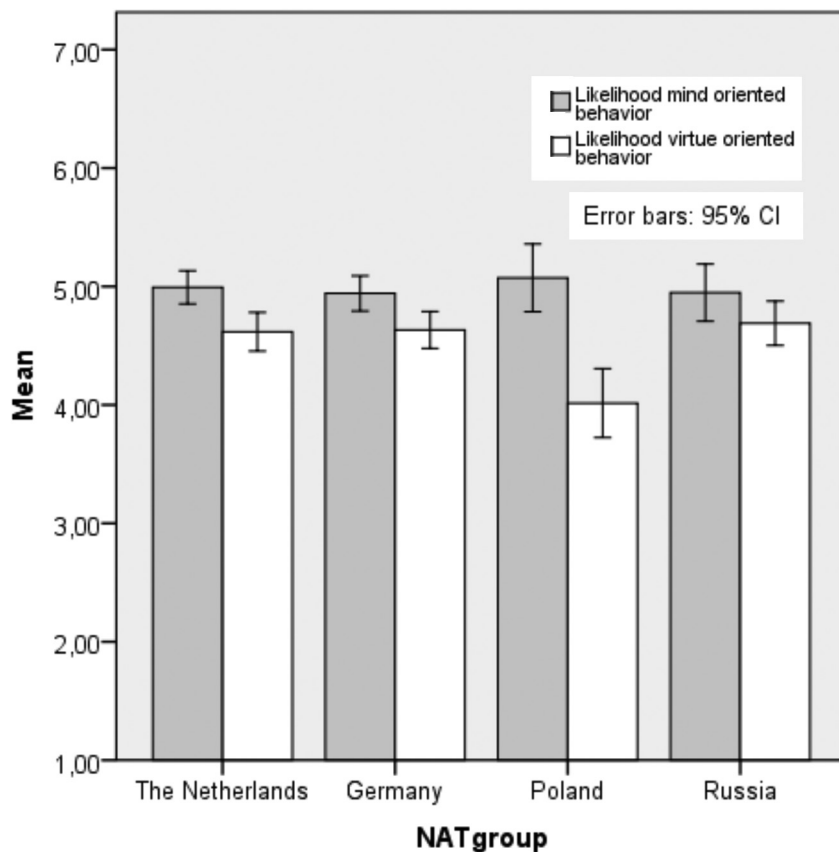


Figure 1. Self-reported behavioral likelihood of engaging in mind and virtue oriented behaviors, by culture.

Scenarios: Forced-choices of Appropriate Behavior

In order to look for potential cultural differences with regard to the behaviors that students see as the most appropriate course of action in the nine academic scenarios that they were presented with, the mean number of selected mind orientation options was submitted to a one-way analysis of variance with culture as between-subjects factor (Dutch, German, Polish, Russian). This analysis also yielded a significant effect, $F(3, 274) = 7.30, p < .001$. Post hoc comparisons using the LSD test revealed that the Polish students are the ones who select the mind-oriented behavioral option most frequently again. In all four samples, students thus express a preference for the mind oriented responses, as indicated by the finding that all mean scores are above the mid-point of $M_{\text{mind options}} = 4.5$. The degree to which they do so however differs.

Scenarios: Predictions for Own Behavior

The two mean scores for the likelihood with which students indicate to engage in the mind and virtue-oriented behavioral responses were subjected to an analysis of variance with culture (Dutch / German / Polish / Russian) as between- and orientation as within-subjects factor. This analysis also yielded a significant effect for orientation, $F(1, 297) = 73.58, p < .001, \eta^2 = .20$. Students in all four countries predict to behave more like the mind-oriented than virtue-oriented ways in the described scenarios. This pattern of results is in the same

direction as the results of the attitudinal scale ratings. As illustrated in Figure 1, students from all four samples indicate higher likelihood ratings for the mind-oriented options than the virtue-oriented options. However, the analysis of variance also yielded a significant interaction effect for culture, $F(3, 297) = 10.68, p < .001, \eta^2 = .10$. LSD post-hoc comparisons reveal that it is primarily the Polish students who significantly differ from all three other groups (all $ps < .05$) in their likelihood of engaging in virtue-oriented behaviors. Polish students indicate to be less likely to engage in these types of behaviors than students from both other countries. However, due to the comparably large standard deviation in this sub-sample, we abstain from speculations about the reasons for this finding.

Table 2

Correlations Between Mind and Virtue Orientations Scores as Measured by the Scale and Scenarios in All Four Samples and the Respective Fisher r-to-z Transformation Scores

	Scale measure	Scenario measure (Behavioral likelihood)		Z score
		Mind	Virtue	
The Netherlands	Mind	.37***	.10	1.58*
	Virtue	.11	.39***	-1.67*
Germany	Mind	.51***	.18	2.58***
	Virtue	.05	.37***	-2.3**
Poland	Mind	.35***	.09	1.63*
	Virtue	.17	.31***	-.89
Russia	Mind	.51***	.19	1.97**
	Virtue	.17	.35***	-1.04
Overall	Mind	.40***	.11*	3.73***
	Virtue	.11	.34***	-2.98***

* $p < .10$ level (marginal significance) ** $p < .05$. *** $p < .01$.

Further Analyses

We conducted correlational analyses in an attempt to assess the convergent validity of our measures. In other words, if a correlation is found between mind orientation as measured on the scale and the likelihood of engaging in mind oriented behavior as measured in the scenarios, this would support the convergent validity of both measures. Moreover, if this pattern is found in all four samples to the same degree, this would support the cross-cultural validity of the measures. Of course, the same holds true for the virtue orientation scale and the prediction to engage in virtue oriented behavior. By contrast, the discriminant validity of our measures would be supported, if the measure on the mind (virtue) orientation scale would not correlate with the prediction to engage in virtue (mind) oriented behavior. For this reason, Pearson's correlations were calculated between mind and virtue orientation as measured on the scale and the likelihood of engaging in mind and virtue oriented behavior as measured in the scenarios in all four samples separately. The hypothesis that follows from our above reasoning states that the scores for mind (virtue) orientation as measured on the scale would correlate significantly with the scores that are obtained for mind (virtue) orientation as assessed on the scenario measure. In addition, the correlations between the mind (virtue) orientation on the scale and the virtue (mind) orientation behavioral prediction should be smaller. As demonstrated in Table 2, the data support this prediction: Overall the mind orientation subscale correlated highly significantly with the behavioral intention for mind, but not for virtue oriented behavior, while the reverse was true for the virtue orientation subscale. This pattern of correlations was observed in all four samples. In terms of cross-cultural comparison, the largest discrepancy is found between the correlation for the mind orientation on both measures in Germany and Poland. A Fisher r-to-z transformation however indicates that this difference is not significant ($z = 1.24, p > .05$). These findings thus support the convergent validity across cultures of the applied measures.

Discussion

The reported study provides first empirical evidence for an overlap, rather than difference in culturally shaped meta-cognitive beliefs about learning across diverse European national contexts. That is to say that more than twenty years after the systemic changes that took place in the communist Eastern European countries, the current studies find remarkable similarity in students' perspectives on their academic studies. The study provides additional support for the hypothesis that the meta-cognitive beliefs about learning primarily take on a mind oriented focus across the European region. This study thus supports the finding that students from Poland as well as Russia are oriented towards the culturally Western mind orientation of learning that is also strongly endorsed in the Western European countries of Germany and the Netherlands. Despite relative differences in the degree to which mind orientation is preferred over virtue orientation, it is a rather robust finding that mind orientation takes prevalence over virtue orientation in the domain of meta-cognitive beliefs about learning.

The main cultural difference that emerged is in the degree to which primarily Polish students indicate to be likely to engage in virtue-oriented ways in response to common academic situations. They are less inclined to engage in these types of behaviors than either students in Germany, Russia or the Netherlands. These results are thus in line with the findings of Szejnberg, den Brok and Hurek (2004) as well as those of Lammers et al. (2010) and Kowalski (2008) in the sense that they support the conclusion that the ideals for learning that exist in Western and Eastern European contexts are relatively similar.

On the attitudinal level, no cultural difference was found in the degree to which students from Western (German and Dutch) and Central / Eastern European countries (Poland, and Russia) endorse mind and virtue-oriented beliefs about learning. Students in all countries indicated to endorse the culturally 'western' mind-oriented beliefs about learning more strongly than the virtue-oriented ones. However, when it comes to behavioral intentions in concrete academic settings the orientation of Polish students slightly deviates from both the Dutch and Russian context in the sense that Polish students endorse virtue orientation to an even lesser extent than students from the other two countries do.

Theoretical implications

On a theoretical level, our results are in line with the literature that suggests that historical traditions which relate back to the legacy of ancient Greek philosophy (and Socrates in particular) are shared in diverse European contexts. Our analysis reveals a rather robust emphasis that is placed on mind-oriented elements of the concept of learning over virtue-oriented aspects across the included Western and Eastern European countries. It is the ancient philosophical legacy that penetrates contemporary thought over and above temporary and super-imposed socio-political influences. This is remarkable, given that previous studies have also found similarities between Eastern Europeans and East Asians with regard to some aspects of cognitive functions, such as collectivistic values and holistic cognition (e.g., Varnum et al., 2008; Kokkoris & Kühnen, 2013; Kolman et al., 2002; Kühnen, et al., 2001). However, in line with recent studies that are related to cultural values and learning preferences, our findings suggest that there a high degree of similarity exists in the cultural orientation towards learning across Europe. This result also implies that the emphasis on virtue-oriented beliefs and learning-related behaviors that has been found for Chinese students may not be merely due to their collectivistic values or holistic cognition, but indeed may reflect the specifically Confucian heritage in learning beliefs.

Practical implications

On an applied level, the findings have important implications in the domain of international academic exchange. In line with Van Herk and Poortinga's findings (2012) for the value orientations of young Europeans, the current study namely suggests that cultural beliefs about learning are highly similar for European student generations that have been born after the fall of Communism. The stereotypic beliefs of Western European faculty members who welcome students from Central and Eastern European countries into their classroom with the belief that they are at a disadvantage, due to the heritage of communism in these countries can be contradicted with our findings. In fact, our results indicate that students from Poland and Russia are equally willing

to engage in mind-oriented beliefs about learning as students from Western European countries are on both the attitudinal and behavioral level. Our results thus warn against the influence of such uniformed beliefs that faculty might have, because there is a risk that such beliefs can lead to self-fulfilling prophecies (see Jussim & Harber, 2005). Instead, the relative similarity that our study indicates should enable students and faculty members to take full advantage of the opening up of the European higher education landscape (Kühnen et al., 2012).

Limitations and future research directions

The interpretation of our findings is limited by the fact that a lack of evidence in favor of the alternative hypotheses may not be understood as evidence in favor of the null hypothesis. It may for example be that the non-significant findings that we observed are due to the fact that cultural differences that might exist between students in these countries are not captured by the applied instrument. One might argue that there are specific Eastern European assumptions about learning that are not captured by the mind and virtue orientation measures. Moreover, cultural differences in other domains may play a role that is not captured by the mind and virtue orientation framework (e.g., pursuing a university education for the reason that it serves the purpose of finding a good job). Secondly, although the included samples were large enough to obtain meaningful results, it is questionable if samples of 70 or more students from each country form truly representative samples of each of the national academic climates. Future research should be directed at answering the question whether the results of the current study can be generalized to a wider population of non-university students as well. It would also be advisable to include students from an even more diverse range of countries, academic disciplines and types of higher education settings in order to assess differences that exist within the Eastern and Western contexts themselves. Additional attention could then also be paid to the development of the measures' validity.

In conclusion, the cultural similarity that is found in the beliefs and behavioral preferences of students from diverse West and East European countries that are each marked by large social, historical, religious and cultural variation is remarkable. Even though these cultures differ for example in the endorsement of cultural values (e.g., Inglehart & Welzel, 2005 or Schwartz & Bardi, 1997) and cognitive style (Varnum, Grossmann, Katunar, Nisbett, & Kitayama, 2008), we provide evidence that students from the Netherlands, Germany, Poland and Russia share the same meta-cognitive beliefs about learning to a large extent. This finding might be a tentative sign for a relatively harmonious integration of students from highly diverse European regions into a joint Western-oriented higher education system.

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Emotional Display Rules of Visually and Hearing Impaired Students

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Abstract

The objective of the study is to understand the pattern of emotional display rules of visually and hearing impaired students towards different members of the society under two different situations i.e., private and public. This is to be studied for three emotions namely, happiness, sadness and anger. The Display Rule Assessment Inventory of Matsumoto Yoo, Hiramaya, and Petrova (2005) was administered on all the participants. The overall expression of emotions varied from target person to target person and also from situation to situation. "Happiness" was observed to be expressed more by visually impaired than hearing impaired students towards parents, friends and teachers in private context. However, overall expression of anger was found to be more for hearing – impaired students. ANOVA results indicate significant main effect of context or situation on overall expression of both positive and negative emotions. The study indicates that impaired individuals like the normal individuals regulate both positive and negative emotions depending upon the target person and social situation.

Introduction

Emotion is the most common aspect of human experience. It is a mental state that arises spontaneously rather than through conscious effort and is often accompanied by physiological changes. Emotion is associated with mood, temperament, personality, disposition, and motivation. So, both mental and physiological state of emotion is associated with a wide variety of feelings, thoughts and behavior, and emotions are subjective experiences. Our emotions have a great impact on others when we express them in ways that can be perceived by others. The universal bases of seven emotions namely, anger, contempt, disgust, fear, happiness, sadness and surprise are well recognizable through facial expressions (Ekman, 1999; Ekman & Rosenberg, 1998). But even though all of us may identify happiness in people's expressions clearly, and we may all experience happiness for similar underlying reasons, it does not mean that we all show our happiness in the same way. This brings up the concept of emotional display rules. Display rules are a group's informal norms about when, where and how one should express emotions. In this paper our research question is to know about emotional display rules of two differently-abled groups of individuals (i.e., visually and hearing impaired individuals). We want to know how these individuals display their emotions (i.e., anger, happiness and sadness) towards parents, friends and teachers under two different situations (i.e., private and public).

India is a land of unity in diversity where people of many religion, ethnicity, language, caste and creed live together. The way of life of Indian people (i.e., customs, food habits, religious practices) differ from region to region yet they have more or less similar value patterns. This affects one's behavior, socialization and upbringing which are manifested through one's moral and social development, emotional expression etc.

The concept of 'cultural display rules' of emotions was originally coined by Ekman & Friesen (1969, 1975), who said that cultural display rules are the rules learned early in childhood that help individuals to manage and modify their emotional expressions depending on social situations. Ekman & Friesen (1975) have suggested that unwritten codes or display rules govern the manner in which emotions may be expressed, and different rules may be internalized as a function of an individual's culture, gender or family background. Saarni (1979) has identified two types of emotional display rules: (a) prosocial, and (b) self-protective. Prosocial display rules involve altering emotional displays in order to protect another individual's feelings. On the other hand, self-protective display rules involve masking emotion in order to save face or to protect oneself from negative consequences.

Developmental research according to Matsumoto (1990) revealed that display rules become differentiated with age, and the presence of another individual has shown to inhibit both posed and spontaneous expressions. Matsumoto (1990) refers to display rules as values concerning the appropriateness of emotional displays that are communicated from one generation to the next. In one study, it was found that children understand verbal display rules better than facial display rules, and they understand prosocial display rules better than self-protective ones. Matsumoto, Yoo, Fontaine, Anguas-Wong, Arriola, Ataca, Bond et al. (2008) investigated universal effects of display rules across 32 countries and found greater expression toward in-groups versus out-groups and an overall regulation effect.

Human beings may be normal or suffer from several kinds of impairment such as visual, hearing, mental etc. These individuals with any form of impairment experience challenges not only in their physical capacities, but also challenges in their psychological capacities to adjust to their disabilities. It has already been mentioned that in this study, our focus will be on visual and hearing impaired individuals. Visual impairment means impairment in vision that even with correction adversely affects a person's educational performance and day to day activities. Hearing impairment, on the other hand, is a broad term that refers to hearing losses of varying degrees from hard-of hearing to total deafness. The major challenge facing students with hearing impairments is communication. One particular area of challenge for the hearing impaired children is the ability to socialize as because they cannot communicate. And for visually impaired children the difficulty is because they cannot draw on visual cues. It is difficult for a visually impaired child to grasp how important facial expressions are for socialization. Hearing impaired children have difficulties in acknowledging that different people can hold different mental states regarding the same situation (Peterson & Siegal, 2000). The consequences of these difficulties can be inferred from their problems in relationships with peers. An important aspect of regulating relationships with others is the use of emotions. It has been observed that in course of development, children learn to display their emotions depending upon the social circumstances and in accordance with the cultural norms (Malatesta & Haviland, 1982). The display rules can be aimed at various goals, such as self-protective or pro-social. The social interaction patterns of normal children at about age ten are strongly regulated by a number of largely implicit display rules (Saarni, 1979). In contrast, hearing impaired children have been found to mask their emotions particularly anger and happiness, less frequently than normal hearing children (Hosie et al., 2000). Moreover, Hosie and colleagues (2000) found that hearing impaired children's reasons for masking their true feelings were comparatively less protective whereas hearing children gave more reasons that were pro-social or concerned with norm maintenance.

Research studies have indicated that hearing impaired children have impaired emotional competence because of their impaired emotion socialization secondary to their limited communication skills (Rieffe & Meerum Terwogt, 2006), though emotional competence involves a broad complexity of elements (Saarni, 1999), including awareness of one's own and others' emotions and the regulation of emotions. There are several studies which have examined the expressive behavior of blind individuals. Some studies examined voluntarily produced expressions and indicated that blind individuals have difficulties in expressing their emotions (Galati, Scherer & Ricci-Bitti, 1997; Ortega, Igleseas, Fernandez & Corraliza, 1983; Rinn, 1991; Webb, 1977). But some other studies reported that blind individuals spontaneously produced the same types of emotional expressions as sighted individuals (Cole, Jenkins & Shott, 1989; Ortega et al. 1983; Galati, Sini, Schmidt & Tinti, 2003; Galati, Miceli & Sini, 2001; Pelag et al. 2006), using different kinds of procedures. Galati et al. (2003) observed that emotional facial expressions of congenitally blind and sighted children were similar. However, the frequency of certain facial movements was higher in the blind than the sighted children and social influences were evident only in the expressions of the sighted children who often masked their negative emotions. Matsumoto & Willingham (2009) examined the similarities in expression between congenitally blind, non-congenitally blind and sighted individuals of 2004 Paralympics and 2004 Olympic game athletes to implicate the source of the expression. No differences between the groups were observed either on the level of individual facial actions or in facial emotional configurations. The findings provide strong evidence about the production of spontaneous facial expression of emotion which is not dependent on observational learning but simultaneously suggest a strong learned component of the social management of expression, even among blind individuals.

The present investigation aims:

- To study the pattern of emotional display rules for happiness, sadness and anger in visually and hearing

impaired individuals towards three target persons [i.e., parents and friends (in-group members) and teacher (out-group member)].

- To study the pattern of these display rules under two different hypothetical contexts: private and public settings.

Method

Participants

Participants of this study were two groups of students: (i) visually impaired and (ii) hearing impaired. They were studying in classes IX and X in different visually and hearing impaired schools selected from four different regions of India – East, West, North and South. These four regions differ from each other with respect to language, customs, habits etc. though being members of a collectivist society all of them possess more or less similar value pattern. Two visually and two hearing impaired schools from each of the four regions were selected and then permission from the concerned authorities were taken to interview the students. There were 240 visually (Male = 130, Female = 110) and 204 hearing impaired (Male = 139, Female = 65) individuals in this study. The mean age of the visually impaired students was 16.64 years ($SD = 1.78$) and for the hearing impaired students it was 16.33 years ($SD = 2.30$). Majority of the visually impaired students were residing in boarding schools whereas the hearing impaired students were day scholars and residing with their parents. The socioeconomic condition of the students varied from lower middle to upper middle status.

Measures Used

Display Rule Assessment Inventory: Display Rule Assessment Inventory of Matsumoto et al. (2005) was used in this study. The inventory measures display rules across a wide range of target persons like family members, friends, acquaintances and teachers/ professors. Seven universally expressed emotions namely anger, contempt, disgust, fear, happiness, sadness and surprise are used in the inventory. But in the present investigation only three emotions namely, happiness (positive emotion), sadness and anger (negative emotions) were used. Participants were asked to mention their expressive behavior towards three target persons namely, parents and close friend (i.e. in-group members) and teacher (i.e., out-group member). They were asked to express “what they should do if they felt” these three emotions toward these target persons under two different settings/contexts (a) in private context (i.e., “at home or in the classroom with the target person alone”) and (b) in public context (i.e., “at restaurant or in the classroom with the target person within earshot of others”). The response alternatives correspond to the theoretical modes of expression management originally described by Ekman & Freisen (1969, 1975), which are: (a) show more than you feel it (amplify), (b) express it as you feel it (express), (c) show less than you feel it (deamplify), (e) show the emotion while smiling at the same time (qualify), (f) hide your feelings by smiling (masking), and (g) show nothing (neutralize).

Background Information Schedule: Background information schedule included items like participants' age, gender, disability status, family structure, educational level, socio-economic condition of the family etc.

Procedure

Informed consents were taken from the visually and hearing impaired participants of the selected schools. Visually impaired participants were interviewed individually and hearing impaired participants were either interviewed individually or tested in group situation in the classroom with the help of their teachers. The language of instruction and administration for the test were either English or Hindi or Bengali depending upon the languages known by the participant. All of them were asked to imagine how they would express these three emotions in a hypothetical situation through their behavior in terms of six verbal responses (described above) toward in-group members (i.e., parents and friends) and also toward one out-group member (i.e., teachers) under private and public settings.

Results

The data were scored by following the scoring method suggested by Matsumoto et al. (2008). The original nominal raw data were converted into continuous scales so as to maximize the use of inferential statistics. Homogeneity Analysis via Alternating Least Squares (HOMALS) analysis was used by Matsumoto et al. (2008) to arrive at one dimensional solution and which was found to be equivalent across cultures. The nominal

expressive mode responses were recoded into the following scalar values for analysis- amplify: .57; express: .38; qualify: .12; deamplify: -.15; masking: -.38; and neutralize: -.53. Matsumoto et al (2008) referred this dimension as a measure of overall expressivity. To ease in the interpretation of these scores .5338 was added to each category, resulting in a score ranging from “0” (hide your feelings by smiling) to “1.0989” (show more than you feel it), qualification and masking categories are given more negative values based on this HOMALS analysis.

Descriptive and inferential statistical analyses were done to treat the data. To understand the nature of overall expressivity pattern of emotions mean and standard deviation distributions of all the three emotions towards different target persons under private and public contexts were calculated. Repeated measure Analysis of variance (ANOVA) analyses were also computed to see the effect of target person (parent, friend and teacher) and context (private and public) on overall expression of emotions of visually and hearing impaired students. Means and standard deviations (*SD*) results for the three emotions are presented in Table 1.

Table 1

Mean and SD Values for Three Emotions under Two Settings for Visually Impaired (VI) & Hearing Impaired (HI) Students

		Private		Public		Private		Public	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Happiness	Parent	1.02	.15	.92	.24	.69	.34	.64	.38
	Friend	1.01	.19	.90	.25	.67	.36	.66	.39
	Teacher	.94	.23	.90	.23	.68	.35	.67	.37
Anger	Parent	.64	.33	.51	.30	.82	.34	.65	.37
	Friend	.72	.34	.50	.27	.72	.31	.61	.34
	Teacher	.51	.30	.46	.23	.69	.37	.73	.35
Sadness	Parent	.68	.31	.55	.31	.61	.38	.57	.36
	Friend	.76	.29	.53	.28	.62	.39	.48	.38
	Teacher	.65	.31	.54	.26	.54	.36	.51	.35

The values reported in Table 1 indicate that overall expressivity scores varied for different emotions in terms of magnitude, but the styles of expression were more or less in the same direction. The overall expressivity scores indicate that the positive emotion ‘happiness’ was expressed more towards parents by the visually impaired group and that too in the private situation. But for the hearing impaired group this overall expressivity was more for ‘anger’ towards the parents. The values reported above indicate that both positive and negative emotions, particularly anger and sadness are expressed less or suppressed in public situation, particularly towards the out group member (i.e., towards ‘teachers’). This was found more in the visually impaired group, which indicate that they suppress their negative emotions publicly.

The differences in mean scores between the two settings/contexts (private and public) were calculated and the values are presented in Table 2. This difference between the contexts was found to be less in case of hearing impaired group, except for the emotion ‘anger’ which they displayed more towards out-group member (i.e., teachers publicly). It may have happened as they are more familiar with their teachers because of their sign language communication. It was also observed that regardless of the status of the group (visually impaired or hearing impaired) expression of emotions were more toward in-group members in comparison to out-group members and that too in private setting. The values reported above indicate that the mean difference between the settings is higher for negative emotions, namely sadness and anger for both the groups and that is mainly for in-group members. This shows that the individuals expressed negative emotions more in private situation (i.e., when they were alone with the target person), indicating that suppression of negative emotions is much in public situation than private.

Table 2*Mean Differences Between the Two Settings for VI and HI Students*

Emotions	Target Person	VI	HI
Anger	Parent	.13	.17
	Friend	.22	.11
	Teacher	.05	-.04
Happiness	Parent	.10	.05
	Friend	.11	.01
	Teacher	.04	.01
Sadness	Parent	.13	.04
	Friend	.23	.14
	Teacher	.11	.03

Target and Context Effect by Disability Status and Gender of the Group

It was observed that overall expression for emotions differed from target person to target person and also from context to context for both visually impaired and hearing impaired individuals. As the data were collected for different emotions under two situations, we computed repeated measure ANOVA to see whether there is any significant effect of target persons (parents, friend and teacher) and context (private vs. public) on overall expression of happiness, sadness and anger. This was done separately for three emotions by taking disability status of the group (visually impaired and hearing impaired) and gender (male vs. female) as between subject factors. For the emotion happiness, significant main effect of context $F(1,440) = 23.54, p < .001, \eta_p^2 = .05$ was observed which indicate that overall expression of happiness varied from private to public context. The disability status of the group (visually impaired vs. hearing impaired) interacted significantly with the context $F(1, 440) = 9.99, p < .01, \eta_p^2 = .02$, and also with the target persons $F(2, 439) = 3.51, p < .05, \eta_p^2 = .02$ which show that the two groups of respondents expressed happiness differently for different target persons and also under private and public situations.

Significant main effect of context: $F(1, 440) = 108.00, p < .001, \eta_p^2 = .20$ was also observed for the emotion sadness, which reveals that sadness is expressed differently under private and public contexts. The significant interaction effect of context x disability status: $F(1, 440) = 16.24, p < .001, \eta_p^2 = .04$ indicate varied pattern of overall expression of sadness by visually impaired and hearing impaired students.

The main effects of target person: $F(2, 439) = 12.07, p < .001, \eta_p^2 = .05$ and context: $F(1,440) = 74.80, p < .001, \eta_p^2 = .14$ were found to be significant for overall expression of anger which reveal that anger expression varied from target person to target person and also from private to public context. These main effects were qualified by a significant interaction effect of target x disability status: $F(2, 439) = 16.88, p < .001, \eta_p^2 = .07$, and target x gender: $F(2, 439) = 12.47, p < .001, \eta_p^2 = .05$. This shows that both disability status (i.e., visually and hearing impaired groups) and gender (i.e., males and females) display anger differently towards parents, friends and teachers under private and public settings.

The interaction effects of target x context were found significant for happiness ($F(2, 439) = 5.37, p < .005, \eta_p^2 = .02$), sadness ($F(2, 439) = 10.09, p < .001, \eta_p^2 = .04$) and anger ($F(2, 439) = 28.40, p < .001, \eta_p^2 = .12$). This reveals that both visually and hearing impaired groups displayed happiness, sadness and anger differently for parents, friends and teacher under public and private settings.

Discussion

Emotional display rules of visually and hearing impaired students towards three target persons was studied under private and public contexts. Display rules for three emotions namely, happiness, sadness and anger expressed through six verbal responses indicate the overall expressivity score for each emotion. It was observed that overall expression varied from target person to target person and also from situation to situation. The study reflects more endorsement for positive emotion (i.e., happiness) than negative emotions (i.e., sadness and anger). Negative emotions were expressed less in public situation, particularly towards the out group member (i.e. towards 'teachers'), which suggests that we Indians want to maintain social relationships with all members

of the society especially to out-group members, as we are collectivist in nature, and thus behave accordingly depending upon the situation. This is in line with the results of Matsumoto et al. (2008), who observed that all individuals in all societies make social differentiation by their overall expressivity more toward in-group than out-group members.

Display of happiness by visually impaired group was found to be more pronounced or amplified for in-group members (i.e., parents and friends) and that too in private situation. Hearing impaired students, on the other hand, expressed more anger publicly towards teachers. The reason may be that they are more at ease with their teachers because of their communication with them and do not hesitate to express it more publicly. Thus they do not mask or suppress their negative emotion 'anger' toward them in public situation. This is in accordance with the findings of Hosie et al. (2000), who observed that hearing impaired children mask their anger and happiness less frequently than normal children, and the reasons for masking their true feelings are less protective.

The magnitude of difference between the two settings for overall expression was found to be more for negative emotions than positive emotion and this is mainly for in-group members. The probable explanation may be that in our culture to show negative emotion in front of outsiders (i.e., publicly) is not a good sign of behavior. The restriction is even more in case of students, so they prefer to mask or suppress it publicly.

Gender was not found to be of much importance in this study, only it interacted significantly with the target persons while expressing anger. This shows male and female students of both visually and hearing impaired groups expressed anger differently toward parents, friends and teachers, but not the other emotions.

The present study examined the display of positive and negative emotions of two differently-abled groups of students. Self - report of the emotions toward different target persons is definitely a limitation of the study as it did not actually measured the expression of emotions. But still this gives an indication of the display rules followed by these groups. The study implies that overall expression and regulation of emotions is an important thing for maintaining social relationships for the impaired groups like the normal individuals. Future studies may be done with other indicators which will improve our findings.

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Girls' Plays with Dolls and Doll-Houses in Various Cultures

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Abstract

The article presents an analysis of the historical and contemporary context of girls' plays with dolls and doll-houses. The anthropological materials about children's plays with dolls and doll-houses help to recreate the doll context as a cultural represent of evolutionary development. The archaic functions of the doll used in rituals and traditional ceremonies objectivize the historically inherent cultural status of the doll. In traditional cultures, through dolls plays children who play with their peers and older children, receive relevant information about their natural and social environment, social relationships, symbols, values and ideals of adults' world. Dolls plays enhance mastering ethical and the moral values handed down from generation to generation. Another aspect of the analysis is connected with the traditional "school" of play replacement of an object. It is illustrated by the material about manufacturing and use of a 'simple' doll in many traditional world cultures. Dolls plays reflect socially significant images and senses of idealized adult life. The development of the sign world of dolls is closely connected with the interpretation of the doll image as a sign of humans taken in their social and cultural context.

Introduction

The article presents an analysis of historical context of girls' plays with dolls and doll-houses. The anthropological material about children's plays with dolls and doll-houses helps to recreate the doll context as a cultural representation of cultural-historical development. The defining role in the suggested analysis belongs to the cultural historic theory. It postulates the preeminence of the analysis of psychological functions as the products of development. According to Vygotsky and Luriya, only two aspects of psychological development have been sufficiently studied so far. They are: phylogenetic development, which views the personal behavior as the result of long biological evolution, and ontogenetic development, which studies the regularities in the child development and its role in the adult cultural development. However, there is a third aspect which understands the process of a person's cultural development as the result of historical evolution. But this approach has not become the commonly accepted knowledge among psychologists. Bygone historic epochs have left evidence about their existence. Based on it we can reconstruct psychological behavioral mechanisms. Our reference to historic evidence concerning girls' plays with dolls in some primitive and traditional cultures gives an opportunity to observe historic tendencies in the doll-play development both as a cultural phenomenon and as a means for the cultural development of the child.

Understanding play as a psychological phenomenon is a significant postulate of the cultural historic theory. Play has the status of the main vector of the child's cultural development, including his sign activity. Play as psychological tools influences the process of the transformation of the natural psychological processes in culturally determined higher psychological functions. L. Vygotsky gives the famous example of a child who wants to ride a horse but cannot. Using object substitution the child uses a stick in the role of a horse. Another example of object substitution described by Vygotsky, has a direct connection with the present research. Vygotsky (1993) writes that each of us can see a child nursing a wooden log with an earnest air. No actor can play this role with the same conviction. The child genuinely looks at this piece of wood and images it as a doll, to most primitive objects he attributes such qualities which are motivated by his personal experience and imagination. Through play the child develops abstract meaning separate from the objects in the world, which is a critical feature in the development of higher mental functions.

In developmental psychology the scientific interest in girls' plays with dolls is determined by the specific socially and personally important functions of dolls, which only enrich ontogenetic development. They can be socializing, entertaining, recreational, relaxing, psychotherapeutic, training, and so on. The doll representation as a cultural artifact, as an object of childhood material culture, as one of the main symbol of childhood form ideal conditions for conducting research of girls' plays with dolls within the context of cultural-historical theory.

According to this approach the play content is necessary to be viewed not only as a means of child development but also as a product of historical development. The possibility to connect two meaningful lines of the analysis of girls' plays with dolls – cultural historical and proper psychological – is the key point of the article. The content of the suggested analysis is concentrated on the peculiarities of girls' plays with “simple” dolls in different cultures as a more representative historical phenomenon.

The main aim of the present research is to compare different historical and cultural contexts of girls' plays with dolls and doll- houses, which are meaningful for the deeper understanding of their development psychological potential. We apply this approach to two lines of cultural development. One of them is connected with the genesis of play substitution, which has historic roots in the ambivalent use of the doll both as an object of adults' ritual practices and as an attribute of children's games. The cultural counterpart of object substitution lies in the use of a neutral object, adding symbolic meanings to it and thus representing a specific sign of a person. Another line of cultural development is connected with historically conditioned context of the doll as an object of material culture. It has direct correlation to ethnic life within a definite natural and social environment, which can dictate socially important cultural phenomena of human behavior.

Addressing historic realities of girls' playing with dolls and doll-houses in different cultures demands a specific choice of empirical material for the present research. The database includes archeological, ethnographic and anthropological materials about children's play with dolls and doll-houses in primitive and traditional cultures (the larger part of it is about traditional dolls' plays in Russian culture). For the comparative psychological analysis we also use the database about the dolls' plays in European, American and African cultures. In the research we analyze some old and contemporary girls' plays with dolls and doll-houses. The objective of this research is to observe general regularities in the historical development of girls' plays with dolls. We do not claim that our research is comprehensive in its historical and ethnographic analysis of the empirical material, because it has some constraints.

The main method of the research is theoretical reconstruction of cultural conditions of development which are historically fixed in games. In addition we also use the method of comparative psychological analysis for studying girls' plays with dolls in different cultures.

The Doll in the History of Culture

The doll, an anthropomorphic figure, is defined in the dictionary by Dahl (2001) as made of cloth, leather, paper, wood, etc. The image is either of a person or sometimes of an animal. It is one of the oldest artifacts of game culture. Since old times they have been produced and used only in playing (not utilitarian) purposes – rituals, rites, celebrations, children's games. Archeological findings bring in their contribution to the support of the idea of the doll's ancient origin. Among them are: an anthropomorphic figure of ivory, found on the territory of the Czech Republic (dating back 30-35 thousand years ago); dolls of ceramics, wood, alabaster, found in Ancient Egypt and in the Ancient Orient cultures, Sumer and Akkadia, dating back to the Bronze Age; terracotta, wooden, metal dolls found during archeological excavations at the settlements of Cretan Mycenaean Era, Aegean, Etruscan cultures; clay, bone and stone figures which functioned as amulets or averters against evil forces and illnesses, patrons of families at the time of Jomon culture, Japan (10,000– 300 BC); alabaster dolls with moving legs and arms found in the base of a Persian Temple from 1,100 BC; a terracotta doll and toy utensils found by the German archeologist Schliemann during his excavations of Troy; dolls found in women's and children's burial places, sarcophagus, (a Rome doll in the Creperia Tryphaena sarcophagus, the Capitol

Museum); ancient gravestone epitaphs (A Girl with a Doll. A Gravestone Stella. Attica. Marble. About 340 BC).

According to the analysis of archeologists and anthropologists, many of the found dolls are considered to be attributes of children's games. Moreover, the analyzed artifacts leave open the question of authenticity and functionality of the doll. One of the reasons of multiple interpretations or whom they belonged to, children or adults, lies in the apparent likeness of them with similar in appearance but different in functioning anthropomorphic objects, such as: oblatory or sacrificial objects, anthropomorphic amulets used by a kin person in rituals, devil's dolls used as a magic tool by a shaman, a magician or a witch; miniature statuettes used to accompany the dead in their afterlife; women's figures as former attributes of agricultural magic.

Now, we will try to compare the anthropomorphic wooden figures, the exhibits in the British Museum and the wooden figures on display in the State Russian Museum. The former were found in the burial places of Ancient (23rd – 18th centuries BC) and Middle (18th – 11th centuries BC) reigns. They belonged to the world of adults and served the purpose to accompany the dead slave-owner in the after world: a brewer, a plough-man with oxen, slaves carrying sags with crops into the barn, carpenters and weavers at their usual work, shepherds with cows, rowers on the wooden barks with raised sails, warrior units with bows and arrows, cooks roasting geese and baking round bread. The latter group dates back to the beginning of the 20th century. They represent children's toys. They were made by the *Bogorodsky* masters and show everyday scenes from the adult life – 'butter churning', 'cabbage chopping', 'washing with a roller', 'having dinner'. The survey of the doll studies in anthropology, history and ethnography also proves the dual nature of archaic dolls, which were used both by adults in their cult traditions or religious rituals and by children in their plays.

Numerous studies have been conducted on duality of the toys artifacts. It has been argued that researchers should demonstrate some caution when analyzing the objects (material) world of children, exhibits of their world. After some thorough research many of the dolls from old times turn out to be the original objects of worshipping, or the agricultural goddesses but not toys. According to Kharuzina (1912), the fact of naïve mixing in everyday life objects meant for fun and objects meant for serious things, the frequent use of human images for different purposes raises a question: whether it is correct to consider a doll as the first and original toy of a child, or whether a doll is a later interpretation of a human image created for more serious purposes. Aries (1999) argues that specialists in history and collectors of dolls and miniature statuettes find it difficult to differentiate a doll as a child's toy from other miniature objects found on archeological sites. There are various scientific points of view on the dual nature of the doll. According to the theory of survivals (Tylor, Eliade), when the objects of adult life 'descend' into the world of children's usage, it means that they have lost their utilitarian and sacred functions. There is a curious observation, that the development of civilization puts an end to the use of some ancient objects, but they can have a second life as a children's toy.

According to the labor theory (Plekhanov, Elkonin) the invention of tools preceded the invention of toys. There was a stage when those tools were miniature copies of the objects world of adults, they formed the relationship 'a toy – a tool', and they had direct correlation to the future adult activities of children. Now that relationship does not exist, and the process of manipulating with such objects is stimulated by a response to novelty.

Another point of view is connected with the idea that the doll can be used simultaneously as a children's toy, as an object of worshipping, as a sacrificial object, as an attribute of homeopathic magic, and of the shamanistic ritual. Basing on the anthropological data of toys in primitive cultures, Ethnographical studies argued that we traditionally consider the doll as a natural toy for girls, which is true as we can see it in many cultures of the world. On the other hand, in primitive cultures people believe that a doll possesses some human qualities. Thus, pre-historic men could not separate the image and the soul. Such understanding is often found in faiths and legends of numerous cultures. The natives of the Torres Strait Islands have wooden statuettes called *madub*. They are believed to come alive at night and walk around the plantations with a howler. The sound produced with it helps vegetation grow. The Ob Ostyaks and the Yamal Samoeds make for their children special dolls, *okans*, which are small, about 2-3 inches. They resemble women's figures but do not have heads or bodies

or limbs. It is done in order to avoid any resemblance with sacred images, which are carved out of wood in commemoration of dead relatives.

It should be noted that modern anthropological data show that various people living today still believe in the magic power of such dolls, which they use as toys, amulets and averters, symbols of protection. Achayvayamsky reindeer-breeders (an ethnic group counting about 400 people who live in Koryak Region in the Far East of Russia) still believe that anthropomorphic figures can have protective power, so they use such figures as personal and family amulets. *Okkamacklies*, small anthropomorphic figures made from a willow twig which only vaguely resemble a human, are usually placed into a cod thus protecting a child from evil spirits. The wooden doll *gychgy* originally used to make fire, now also protects the house. A doll made of reindeer skin and stuffed with deer hair (a doll looking for a herd of horses) is used by hunters for protection and luck in hunting. The Evenkis of the Nenets group believe that anthropomorphic figures *khomokhons* which are carved out of the larch-tree log possess protective power. Similar dolls are used by girls between 3-5 years of age in their games. As a further example we will speak about how the so called commemorative doll can be used. In the north-west of Siberia in Khanty-Mansi region when a person dies Khanty make a burial doll without a face. They remember the deceased by feeding the doll with fresh food for as long as 40 days for women and 50 days for men. In spring when a special time for remembrance of the dead comes, the burial doll is placed into a symbolic reindeer skin tent, chum, together with the effigy of the bird teal. Then they set fire to the chum. If it burns well, it means that the spirit of the dead have passed away to the North, because all birds fly to the north at that time. In autumn when the remembrance time comes, a burial doll is placed into a symbolic chum near the river together with the effigy of the fish syrok. Again the fire is started and people wait until the spirit passes away to the North, because all the fish move north to the Arctic Ocean. Eight-year old girls use in their play the same burial doll, made by their Mansi granny. All the above mentioned facts question the cultural scheme of transition, descending into the sphere of children's usage. On the contrary, they prove the ambivalent attitude to objects, dominant in many traditional cultures¹.

As an argument for it we can use the ideas of the "law of participation" by Levy-Bruhl. Vygotsky and Luria (1993) note the law of participation formulated by him describes another type of logic, unlike ours. This type of naïve logical connections explains the fact why one and the same thing can co-participate in absolutely different forms of being. Archaic societies lived under the dominance of coherent semiotic model of the world. There was no distinction between utilitarian and symbolic functions of objects. As a result, a thing could serve two purposes simultaneously, utilitarian and semiotic. Functional vibration, which gave the kin person an opportunity to perceive and use any object both as a very practical utilitarian thing and aesthetically valuable, to which some supernatural power could be attributed.

It can be suggested that the given arguments illustrate some anthropogenetic regularity in the process of the man mastering the objects world. It is also connected with the parallel process of mastering utilitarian functions of objects, their natural objective meanings and attributed symbolic meanings and senses. The above mentioned anthropological data are of great importance to understand the doll phenomenon as a cultural artifact. It illustrates anthropological achievements and acquisitions made in the process of evolutionary development in the sphere of mastering objects world and attributing symbolic functions to it. The unity of utilitarian and symbolic functions of objects in the consciousness of first pre-historic men is vividly observed in primitive cultures of miniature anthropomorphic figures. The doll was used both as a sacred ritual object – a talisman-guardian, an amulet and as a child's toy.

The Doll as a Childhood Artifact in Traditional Culture

Another line of the cultural-historical analysis is closely connected with the interpretation of the doll as a childhood artifact oriented towards the study of its multifunctionality in a traditional culture. The cultural prototype of the self-made doll is an anthropomorphic image, which demonstrates some common features with a man. This image goes back to the far past of humankind. The psychological roots of anthropomorphism and personification of objects lie in the phenomenological peculiarity of human consciousness, the ambivalent

¹ Field data by prof. Mukhina, expedition in Irkutsk region, 2011

attitude of men to a thing. The anthropological data prove that dolls are used in the ritual practice of adults and in the rituals of childhood period. Adults used ritual dolls in the rites of the 'transitional' type, agricultural holidays marking the beginning or the end of sowing, harvesting and cattle pasturing. Such dolls symbolized the land fertility, good harvest and general wellbeing. According to the anthropological data different types of dolls are used in agricultural rituals: a crude doll made of sheaf of corn in East and West European cultures, or a doll dressed in a *sarafan* and a cap *cocoshnik* in Russia. They symbolized the Mother Crop, Harvest Maid. Figures made of twigs, straw or corn ears used in the Russian burial ritual, sinking or tearing the doll embodied the greatness of the earth power. A straw effigy of Shrove-tide *maslennitsa*, a ritual doll *kukushka* (coocoo) symbolized the memory of the late relatives. 'Rain' dolls or 'sun' dolls were used in the cultures of Dagestan and the North-Eastern Caucasus in the rituals to call rain or the sun and embodied the myth about the dying and resurrecting god.

Family ritual dolls, such as birth dolls, baptizing dolls, wedding or funeral dolls, burial dolls always accompanied family rituals which involved several generations of a family simultaneously. Birth and baptizing dolls, which were specifically made by the birth date of children, served the function of a family averter. It was dearly kept in the family as a family relic or simply as a doll with which a baby played. In the North of Russia a small birth doll was placed in the cod next to an infant girl singing traditional folk songs:

Sleep and insomnia

Don't play with my dear child

But play with that doll.²

The Vepss birth doll specifically made for the birth of a child was placed into the cod to warm it. After the child birth, the doll was hung above the cod to protect the baby from evil spirits and evil eyes. When the infant grew up a bit, the doll which was the size of a palm was given to him as his first toy. Evenkis, Chukchi, Eskimos and Koryaks adjusted the dolls made from fur, wood, leather or bone to the children's cods. *Wedding dolls* transmitted very important information connected with 'feminine magic' - successful marriage, birth-giving, preserving and continuation of family. Such dolls were handed down on the mother's side from older generations to younger ones. Dolls-helpers described in Russian folk fairy-tales were given to the bride by her mother. Burial dolls were a symbolic image of dead people and also served as an object to help communicate with them.

Let us now turn to some ethnographic material which also illustrates the local traditions of doll-making. According to ethnographers, the arch-typical feature of a hand-made doll is its construction. The simplest one, the most primitive in the Russian culture is the construction with the highest degree of relativity. It is a splinter, clay and cloth post doll. In Central Russia splinter dolls are popular. They are flat dolls, cut from a wooden block. In the North of Russia solid carved dolls *pankis* are made out of a rounded block of wood, carved from a log with the axe or the knife. In northern parts of Russia the basis in the doll construction is a post. So-called post-dolls (*zakrutki*, *skrutki*, *skatki*, *skalki*) were made from a piece of cloth or a shawl twisted in a tight rope. In Ukraine a similar type of a traditional doll is common; it is a *motanka* or an *uzelkovaya* doll. The folk name for such a doll was a *lyal'ka*. The process of making that doll was called to *'twist a doll'*. The doll was made from a self-made fabric colored with natural juice. The post which was filled with pieces of threads, grass, cereal was tied up in such a way as to make a round or oval head at the top. As a rule, the *'motanka'* did not have arms, legs or an upper part of the body. It was faceless or with a face, which was tied crosswise with a crude thread. This type of the crossed face is found everywhere in Ukraine (the ethnographic material at the beginning of the 20th century), as well as in Central, North and North Caucasian regions of Russia and in the mountainous parts of Kirghizia, Tadzhikistan, Uzbekistan, Georgia. The post doll which resembled a swaddled infant (*lyal'ka*) was placed in the cod to the new-born as an averter. Later it was given to girls for play. There is

2 The materials of the folklore expedition by Moscow University (1971)

one more type of doll construction which shows symbolism but at the same time possesses easily recognizable anthropomorphic features – a head with a face, an upper part of the body, arms and legs. In central and southern parts of Russia that type of dolls is represented by cloth dolls. They were made from a canvas bag which was filled with pieces of fabric, wool, sawdust and sand. In some areas the doll was filled with coal cinder which gave the name an 'zola' or 'zol'naya' doll, or it was filled with grains or cereal, 'zernovushka', 'zernovka', 'krupenichka'. A head was sewn to the doll separately. The Volga and Central Asia peoples constructed dolls in the form of a cross, dolls- *krestushki*. The basis is twigs or chips tied up in the form of a cross. It is then put on in a dress, a head shawl and so on (The Volga region 1950-1960s; Kirghizia, 1995). The peoples of the Far North, Nenets and Khanty, use the beak of a water fowl with feathers to construct a doll. They sew on it colourful pieces of fabric and then put on fur clothes like those of an adult. The peoples of Central Asia use a *babka* (knucklebones) as the foundation of a doll. The *babka* served as a head, and a body was sewn on to it. The doll was dressed in clothes traditional for the local culture. Though the diversity in the doll construction which is determined by the differences in traditional cultures is still kept, we can single out some common features. The doll wears a dress, a head shawl, a *sarafan* (dress) and so on. It has a plait. Quite often such dolls form a family; there is a doll-mother, a doll-infant, a doll-kid. To construct such dolls textile was used, so the dolls were soft. A special role in the interpretation of dolls of children's images belongs to the attributes of the dolls life. Dolls houses, dolls sets in the traditional culture of the Russian North a mother doll and an infant doll live in a tub-form house with an infant cot and cradle. Evenkis dolls 'live' in a birth-bark '*babakan*' with a covering of thin fur, with fur sleeping bags and a fur blankets. The girls in the Far North of Russia still play with a traditional Chukcha doll resembling a baby or a child. The doll is made from pieces of reindeer skin, is dressed in overalls, *karkar* or *kuhlyanka*, a fur coat identical to real children's clothes. For example, the overalls have the similar flap on the back, *macks*, like those in real overalls for children. It stimulates the girl to act out real processes of child caring manipulations. When playing with such dolls the girls can change moss from under the flap the same way as an actual mother does while taking care of an infant. Komi girl's had as many dolls in the doll family as there were in her real one. The gender of the doll was shown by the cut and symbolism of clothes.

The anthropological and ethnographic data from different cultures and from different historical periods show the high level of preserving the tradition of doll-making used in ancient cultural practices. At the same time the tradition of making dolls for adults, though no longer used, is continued in cultural traditions of making dolls for children. A traditional hand-made doll, made by adults for a child's play can show some typical ritual features. They are primitiveness, schematic forms of some body parts (a face, an upper part of the body, arms, legs and a head), and the name tabooing. Such specific hand-made dolls condition do not intend to have absolute likeness and detailed similarity with a human, which is typical for 'usual' dolls, so calls dolls - exact copies which began to appear in the period of workmanship and later commercial toys manufacturing. A child, who plays with a primitive doll, has an opportunity to 'complete' the schematic image of the doll in accordance with the play plot. Hand-made dolls are more suitable for playing because they require the work of imagination. The material used for doll-making should motivate, stimulate and encourage playing. The psychological value of a hand-made doll is in different degrees of the symbolism of a doll image, starting from a simple object (a blade of grass, a splinter, a stick, an animal bone), which only vaguely indicate the doll, to the traditional hand-made doll, which has more expressive anthropomorphic feature.

Cultural and Psychological Context of the Girls' Plays with Self-Made 'Plain Dolls'

The second point is the 'makeshift' dolls of children's own devising. Brookshaw (2009) notes, that such items – also referred to under the names of folk toys, emergent toys, homemade toys, street toys, slum dolls, playthings, or simply as kids' toys – are generally made by children who do not have access to commercially manufactured toys, either through their social status or due to the traditions of a culture the child lives in. The main advantage of the self-made doll over the commercially produced doll is that the first offers a wide scope for children's imagination and creates ideal conditions for the development. The functional duality of percep-

tion and usage of an object both as utilitarian and for playing takes place in contemporary early ontogenesis as an important fact of historical development. It is illustrated by situations of object substitute and activities when a child uses one object for another. The child attributes to a neutral object a certain meaning specific for the sense field of the play.

Let us now use some examples referring to different historic epochs and cultures. They illustrate a wide variety of objects substitutes that can be used in doll plays. They are 'makeshift' dolls of children's. The analysis includes the data-base referring for the end of 19th century, beginning of the 20th century and contemporary period. At first we used Pokrovsky (1895); Hall & Ellis (1897); Kharuzina (1912) materials. Secondly we used contemporary period anthropological database about Russian ethnic groups (1970-1980) and North African region by Rossie (2005). The database by Pokrovsky described Cheremis, Votyakis, Ostyakis, and Samoyedy (all Russian groups), where girls used for dolls making two groups of objects and materials. The first is made of natural materials: sticks, pebbles, wood, clay, chalk. The second also uses utility objects: head scarves rolled into a rolling pin, rags. The database by Kharuzina characterized North America and Europe regions and described natural materials: corn cobs, flowers, leaves, grass, feathers, beaks, wings. The database by Hall and Ellis from New York, New Jersey; Edinburgh, Scotland (we used non-traditional child's plays for comparative analysis) illustrated free groups of objects and materials. The first is a natural materials: sticks decorated with flowers, leaves, grass; crop ears, hazel nuts, acorns, potatoes, clay pipes, shells, flowers, mud and clay, apples, herbs, wooden blocks, feathers. The second are utility objects: pillows tied over with a belt, bottles filled with water of different colors and given names, small clothes pegs, parts of dresses, newspapers, armchairs and chairs, cloth elephants, handkerchiefs, buttons, matches, tooth brushes, aprons, ropes, a tool for taking off boots, dough balls, towels, brooms, nails, bed legs, candy sticks, buttons with hooks, keys, umbrellas. The third are toys and game objects: game dice, skittles, and rubber balls. Here are some examples from recent anthropological data-base about Russian ethnic groups: Nenets, Yakuts, Khakas, Kirghizes, and Uzbeks. Today they are used for 'makeshift' dolls of children's: wooden logs, splinters, beaks of wild birds and poultry: goose, ducks; knee joint bones of cattle: horse, cow, sheep and utility objects: rags rolled tightly, handkerchiefs. The Nenets girls made plain dolls from the beak of a bird, goose, duck (a doll's head) and a prolonged piece of cloth with colorful strips sewn on it (a doll's body). Russian girls are played with sheep or goat knucklebones dolls. Yakut dolls are made from horse or cow knuckle-bones. Archaic Khakas dolls are made from sheep's or horses knuckle-bones. Kirghiz and Tadzhik dolls are made from a handkerchief and two crossing sticks. A dolls in a Moroccan village as Rossie (2005) describes it, could be a sign of a bride-groom, a shepherd, a well-known person, a warrior, a horseman, a mule-driver, etc.

In the analysis of anthropological materials we can look at universal objects and materials used to make dolls. They are divided into the following groups: 1. – natural vegetation and animal materials, 2. – utilitarian or household objects, 3. – toys and plays objects. They are objects and materials typical for the analyzed cultural and historical contexts. It should be mentioned that materials used for making dolls are connected with local traditions. It should be also noted that in traditional cultures natural materials are mostly used for making 'makeshift' dolls of children's, whereas urban cultures prefer to use utility objects with the tendency to reduce the status of self-made dolls and less often use objects substitutes in the game arsenal of modern children. Apart from that, the given database can be used by professionals working with children and supporting the development of sign activities.

Play substitution gives an opportunity to use a neutral object as the main play characters, as dolls. Hall and Ellis (1897) pointed out that when using objects as dolls children attributed to them some of human psychic features and treated them as a living and feeling creature. This ontogenetic peculiarity is reflected in girls' attitude to their dolls. Psychological research of early ontogenesis by Vygotsky show a special importance of object substitution in the process of child development. The choice of an object substitute for a doll has much importance for the process of play substitution. This object must show likeness to a person or give the player an opportunity to perform some actions in accordance with the play plot: "to feed", "to rock it to sleep" or "to put it to bed", etc. The latter condition in particular – not physical likeness but the possibility to perform

some symbolic play actions with the object in the play area - is of great importance. The objects substitute is the foundation aspect in a doll play. According to Vygotsky (1935) “ a bunch of rags or a piece of wood become a small baby in a play, because they can allow performing the same gestures as when carrying a baby in the hands or feeding it”. In *Tool and symbol in child development* Vygotsky argued, that in play the child is far from consciously the relativity of the sign operation or of the arbitrarily established connection of sign and meaning. In order to become an object’s sign, the stimulus finds support in the properties of the designated object itself. Not ‘everything can represent everything’ for the child in this game. The objects’ real properties and their sign meanings come into complex structural interaction during play. Performing symbolic or conditional meaningful actions the child does object actions but without using the real object. The latter becomes a supporting means to reproduce some abstract ideal relations. The opportunity to substitute some objects by others, some actions by other actions or functional substitute of objects by symbolic means proves that the functions of the object substituted are transferred to symbolic means. Thus, through object substitution during dolls games the child develops the abilities of sign activities.

The facts mentioned in the article enable us to single out the psychological potential of doll plays in traditional cultures. First of all, there are two very important facts which stimulate and motivate the play; they are the material used for doll-making and the steps of constructing the doll. They do not limit imagination or make it stereotyped, they serve as a starting point, from which the psychological potential of a child’s play develops, as well as its symbolism. A self-made or a plain doll which is made by adults for children themselves is widely presented in the game arsenal of the girls from 3 to 15 belonging to different cultures. Secondly, the traditional doll is very important in the social-cultural development of a child. Girls playing with dolls, made by parents or oldest family persons, could perform simple actions with them, to feed, to swaddle, to dress, or to put to bed. In case of families, a family role-playing was acted out. A doll could be a bride, a wife, a mother, a small child, who lives on the “doll’s environment” with doll-houses with beds, utensils, clothes, etc. It is determined by its orientation towards the family values, maternity, the reflection of real family relationships typical for traditional cultures. The development of the sign world of dolls is connected with the interpretation of the doll image as a sign of the man, taken in his certain social and cultural context. In traditional cultures through dolls plays children who play with peers and older or younger children receive relevant information about natural and social environment, social relations, symbols, values and ideals of adults’ world. In traditional cultures through playing with dolls younger children learned social roles, ethical and moral values, which are handed down from one generation to the next.

Social and Cultural Context of the Girls’ Plays with Dolls and Doll-Houses

Playing with dolls and doll-houses reflects socially important images and senses of idealized adult life. The peculiarities of social and cultural context of plays are analyzed according to specific topics and plots of girls’ doll playing referring to different cultures. For that purpose the data-base collected by different researchers were analyzed: Doll plays of Saharan and North African girls by Rossie (2005); doll plays of British, Scottish, American girls by St. Hall (1895-1900), doll plays of European children at the beginning of the 20th century³; the Bratz-doll plays of Russia by the author (2005). The analyzed topics and plots are played out with different and similar dolls: primitive and plain, self-made girl-dolls, boy-dolls and infant-dolls typical for Saharan and North African girls; wax, paper, china, cloth, rubber, carton, plaster, wooden, knitted dolls which were the objects of admiration for British, Scottish, American girls at the beginning of the 20th century; the Bratz dolls – modern doll rivals of Barbie.

A doll play of European children at the beginning of the 20th century is characterized by modern images. For example, kindergarten plays of French girls of 1924. “Their doll is a big one. It is dressed like the children of their social standing – it is not just a toy, it is a child’s child. In the evening the doll is brushed, undressed and put to bed, in the morning it is dressed, washed, brushed, its bed is made according to the traditional ritual – the straw mattress is turned over, the linen is aired, its dressing table is put away, the jar is filled with water, the doll’s furniture is dusted, once a week the doll’s house is cleaned”. Images of a modern doll reflect the

context of today. These contexts, as a rule, are set by the doll manufacturers fulfilling the functions of creation of a modern social context. Adults put the ideas of adults' life into the child's dolls area. They give dolls names, professions, ethnoses; they create the corresponding attributes of dolls' life – dolls houses, furniture, cars etc. They make dolls' friends, and even dolls' children. The child, dealing with ready-made standard image of a doll is strictly limited in possibilities of its interpretation. Dolls plays reflect socially significant images and senses of idealized adult life. Creating the toy world for children adults alters childhood by enlarging the toy assortment quantitatively, contextually, functionally and conceptually. A child's toy becomes a mirror of an ideal of an adult, a result of adult interpretation of children's dreams and wishes.

In the analyzed plots we can single out three blocks:

1. *Playing the doll's life: bathing, dressing, putting to bed.* The psychological status of Playing the Doll's Life – it doesn't require a partner, it can be played as the type of game when children play closely to each other but not together, when each child plays with his or her own doll. Such playing is typical for the children of early and junior pre-school age. The doll's life playing is a school of a plot-role game, in which children often act out separate plots which in prospect of the development can be connected in one plot. At senior pre-school age the doll's life playing can be transformed into directed games, when one child directs the actions of the toys performing the functions of people and objects. It should be noted that the typology of the content of playing the doll's life in different cultures is conditioned by the typology of everyday situations. The cultural specific aspects can be further understood from an object context which is additional to the plot.

2. *The plays which reflect the family relationships context.* The most typical game plots are formed around such cultural prototypes of a family life as weddings, birth giving, funerals, and so on. The psychological status of such games is that they vividly demonstrate ethnic, cultural specific picture of a family life, the traditions in the relationships between genders, bringing up children, and also rituals connected with birth and death.

3. *Playing adult life, which reflects the peculiarities of social normative relationships between adults, a wide social context of adult life.* In the analyzed materials such plays are transported into plots which reflect the peculiarities of a professional life, public holidays, entertainments of adults. Acting out the adult life, children reflect the peculiarities of social normative relationships between adults and a wide social context of adult life. In the analyzed material such plays are transported into plots which reflect the peculiarities of a professional life, public holidays, and entertainments of adults. I would like to stress the ideological, ethical and moral aspects of such plots, complex social contexts of adult life which children learn.

Conclusion

I addressed the cultural historic analysis of girls' plays with dolls and doll-houses which is based on the theoretical reconstruction of psychological conditions for personal development. They are observed through universal historical experience of using the doll as a human representation. Girls' plays with dolls are viewed as a unity of specific historical and ethnographic representations of conditions for personal development.

The empirical anthropological material shows the pre-historic ways of sign acquisition as a cultural means. The ability to simultaneously perceive and use objects both in utilitarian and symbolic functions is related to the ontogenetic ability for object substitution which is formed in early ontogenesis. The social representation of the doll as one of the oldest iconic signs of people occupies an important place in cultural acquisition of behavioral norms in early ontogenesis. The given database characterized historical, ethno-cultural aspects of development psychological potential in girls' plays with dolls and can be further used in the system of psychological care and support of child development through games.

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Part 4:
Industrial and Organizational
Psychology

Culture Research Landscape Throughout the United States Department of Defense¹

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Abstract

This contribution delineates the U.S. Department of Defense (DoD) regional expertise and culture (REC) research landscape from 2005 through 2011, including major research efforts and topics of study, key contributors and publications, collaborative practices, and future research opportunities. Through interviews and survey responses, subject matter experts (SMEs) in REC research noted the need for better REC research coordination, more social science expertise and personnel, and greater collaborative practices. Key contributors to REC research across the DoD are located at AFCLC, ARI, ARL, AFRL, CAOCL, NAWCTSD, TRADOC, and the HSCB Modeling program. Opportunities for future research include: (1) Validation studies for 3C requirements; (2) Validation studies of REC training and education programs; (3) Role of technology in culture training; (4) Mitigating Cognitive Dissonance: Crossing the Culture Divide; (5) Navigating Culture During a High Stakes Mission; (6) Team cohesion in a multinational context.

Introduction

Following the September 11, 2001 attacks on the World Trade Center and Pentagon and the 2003 U.S. invasion of Iraq, the U.S. Department of Defense (DoD⁴) realized that the U.S. military was not optimally prepared to interact with people from Middle Eastern and South Asian cultures (U.S. House of Representatives, 2008). Thus, in 2004, by mandate of law, the U.S. Secretary of Defense opened the Defense Language Office (DLO⁵). Although the DLO focused primarily on language development, DoD researchers expressed the importance of culture and regional expertise (Department of Defense, 2007a), and particularly cross-cultural competence (3C; i.e., knowledge skills, abilities, and attitudes that guide behaviors in intercultural settings; McCloskey, Behymer, Papautsky, Ross, & Abbe, 2010). In early 2011, former Under Secretary of Defense for Personnel & Readiness, Dr. Clifford L. Stanley, signed the *Department of Defense Strategic Plan for Language Skills, Regional Expertise, and Cultural Capabilities 2011–2016*. This strategic plan puts forth three goals (p. 6):

1. Identify, validate, and prioritize requirements for language skills, regional expertise, and cultural capabilities, and generate accurate demand signals in support of DoD missions.
2. Build, enhance, and sustain a Total Force with a mix of language skills, regional expertise, and cultural capabilities to meet existing and emerging needs in support of national security objectives.
3. Strengthen language skills, regional expertise, and cultural capabilities to increase interoperability and to build partner capacity.

Although there has been renewed U.S. DoD interest in research on “regional expertise and culture” (REC) in the name of national security, the critical need for language and cultural proficiency dates as far back

1 This project was supported by the Defense Language Office (DLO). A more comprehensive report was presented to the DLO and a copy of it can be obtained by contacting: Sharon Glazer, Ph.D. at sglazer1@umd.edu.

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4 A list of acronyms and definitions used throughout this report can be obtained from first author.

5 One year after this work was commissioned, the DLO changed its name to DLNSEO (Defense Language and National Security Education Office)

as World War II (Kruse et al., 2008). The current push is to incorporate such skills into operational planning so that REC capabilities are regarded as warfighting skills and core competencies of the DoD (Defense Foreign Language, 2005). Today's REC research throughout the U.S. DoD and academia worldwide is contributing to the fulfillment of these strategic goals by (a) defining culture capabilities; (b) devising measures of regional proficiency; (c) assessing needs for training, training programs, and post-training skills levels; (d) developing software technology that would educate service people on specific cultures and also reinforce the practice of normative cultural behaviors; and (e) studying personnel issues, such as multinational teams. More information on these topics is presented in the Results section of this report.

Scope of Project

Objectives and Purpose

The goal of this project was to document the landscape of U.S. DoD-funded research in the areas of REC. In 2011, this research team charted the U.S. DoD unclassified research landscape by identifying (a) groups engaged in REC research across the DoD; (b) research programs, themes, and/or topics; and (c) influential REC documents (i.e., reports, articles, and web sources). This report also provides information on collaborative activities throughout the U.S. DoD, as well as opportunities for enhancing its REC research landscape. The project was limited to U.S.-based research efforts on REC because currently there is little publicly available literature on cooperations among militaries around the globe, with the exception of NATO efforts in culture training (Soeters & Recht, 2001). Thus, attempting any comparisons of research programs from different countries is strictly limited. In this chapter, our aim is to elucidate programs that are publicly known, at least in the USA, in order to increase awareness of research needs (in the USA and probably elsewhere with militaries from around the globe deploying their forces to other countries), research collaboration opportunities with U.S. entities, and efforts that borrow from cross-cultural academic literature. Thus, we assert that although the work is dominantly U.S.-centric, the applicability and relevance is probably not limited to U.S. interests.

Significance of this Report

U.S. DoD REC researchers and program managers, as well as policy makers and other stakeholders (e.g., soldiers, officers and, academic scholars) want to know (a) what research efforts have been commissioned in the USA and (b) identify U.S. groups engaging in REC research. For researchers around the globe, this report identifies operational issues that require research attention. It also helps academic scholars and contractors become more aware of the REC research efforts in the U.S. DoD and become more involved with and informed about DoD REC research efforts.

Methodology

Procedure

The research team (a) scoured relevant U.S.-based open source documents and electronic media, all of which were accessible via the Internet and (b) informally interviewed U.S.-based subject matter experts (SMEs) that are researchers, managers, and policymakers in the U.S. DoD REC arena. We then developed and administered a semi-structured interview schedule and a survey questionnaire, both of which were exempt from human subjects requirements. Still, participation in interviews and completion of surveys were voluntary and all responses were held in strict confidentiality. SMEs could engage in the discovery process as much or as little as they desired, and we requested their approval to audio-record their interviews for accurate transcription.

Semi-Structured Interview Guide and Survey. We employed two rounds of primary data collection. Round 1 was in the form of a semi-structured interview (please contact first author for a copy of the interview protocol) that lasted approximately 120 minutes. Round 2 SMEs either participated in a modified semi-structured interview that lasted an average of 80 minutes or they completed a 23-item online survey questionnaire (please contact first author for a copy of the questionnaire) that took approximately 25 to 30 minutes to complete. Data

collection efforts focused on identifying U.S.-based research investigators or groups, research topics, programs, objectives, and agendas, and funding sources.

Media Resources. Sharable print and electronic materials were also reviewed. “Print media” refers to journal articles, reports, white papers, briefs, proceedings, file drawer manuscripts, and strategic plans. “Electronic media” refers to web sites, PowerPoint presentations (e.g., conference presentations), databases, and digital tools. A list of open source media is presented in the references section of this report; additional DoD-related resources not cited in this report but identified by SMEs are listed in Appendix A.

Sample

This report is based on information obtained from interviews or surveys of 48 SMEs, as well as fact-finding efforts through open sources, referrals, and academic and conference literature. SMEs have engaged in, are beginning to engage in, or influence REC research in some way. They are not necessarily topic experts, but are linked to the U.S. DoD REC research community by conducting, commissioning, managing, or gathering information about research.

We employed both purposive and snowball sampling technique to identify and recruit SME interviewees and survey respondents who contribute to the conduct of REC research for the U.S. DoD. On our behalf, the DLO asked 17 SMEs to participate in Round 1 interviews; one of them requested to complete the survey distributed for Round 2. For Round 2, the DLO and this project team asked some SMEs to be interviewed (in order to delve deeper into the responses), others were given a choice of interview or survey, and still others were asked only to complete a survey. Seven out of nine SMEs were interviewed and 25 completed some or all of the survey. Interviewees from both rounds worked for U.S. military service branches, U.S. DoD policy organizations, or a U.S. federally funded research and development center (FFRDC), U.S. academic institutions, or U.S.-based consulting firms. Most SMEs were not researchers and at least two reported that they were newly assigned to the REC research community (without REC research or practical experience).

Educational and Professional Backgrounds. SMEs had a range of professional and educational backgrounds, as well as years of work, government sector affiliations, and REC research experience. All SMEs, but one, had at least some graduate-level education. Eleven SMEs held master’s degrees only and most ($n = 36$) had doctoral degrees. SMEs’ various educational backgrounds are shown in Table 1. Their job titles were as diverse as their disciplinary backgrounds, including branch chief, director, deputy director, associate director, program manager, deputy manager, researcher, professor, consultants, and executives.

Table 1
Discipline of SMEs’ Highest Degree

Discipline of Highest Degree	Number
Anthropology	10
Industrial/Organizational Psychology, Human Factors Psychology, or International Business	7
Industrial Engineering, Engineering, Information Telecommunications/ Information Systems Management, Operations Research Systems Analysis, or Computer Science	6
Other Social Sciences, Humanities, Education (e.g., Sociology, Economics, Language/Linguistics, Cross-Cultural Rhetoric, Cultural History)	6
Experimental Psychology, Psychology, Cognitive Psychology	4
International Relations/Affairs/Studies and Strategic Intelligence Analysis	4
Political Science or Policy Analysis	4
Social or Personality Psychology	4
Geography	3

Time Involved in REC Research for the DoD. At the time of the interview (i.e., early 2011), most DoD SMEs had been working in the area of REC for a period ranging from two months to 10 years ($M = 4.8$ years).

REC research activities in U.S. DoD organizations are relatively new, mostly starting within the last seven years. The greatest number of contributors entered the REC arena around 2008. Two SMEs mentioned that their service began to focus on culture in 2003, around the time of Operation Iraqi Freedom (the Second Gulf War with Iraq). Many of those individuals happened to fall into culture work without prior culture training or education.

Data Analysis

Data analysis consisted of thematic coding of transcripts and notes *vis à vis* Atlas.ti, (a qualitative data analysis software tool), as well as descriptive summaries from questionnaires. In addition, we reviewed documents that captured information relevant to project goals, including publicly documented organizational mission statements, published summaries of state-of-the-art research activities (e.g., Pool, 2011), and conference abstracts describing current research activities.

Results

In this section we present (a) a high level summary of groups engaged in REC research across the U.S. DoD; (b) research themes and topics; (c) influential documents; and (d) collaborative practices. Opportunities for research are presented thereafter, in part, on the basis of SME input.

Table 2a

Agency/Institutional REC Research Topics and Missions - Army

Service Organization	Topics	Mission
ARI	Training; education; leader development	“The mission of the Army Research Institute [ARI] for the Behavioral and Social Sciences is to enhance individual and group performance along with group decision making and individual decision making. ...ARI is the primary research institute for conducting research and analysis on personnel performance and training. The research contributes to recruiting, selection, assignment, training, mission performance, and situation awareness. ...” (U.S. Army Research Institute for the Behavioral and Social Sciences).
ARL –HRED	Human performance modeling	“Scientific research and technology directed toward optimizing Soldier performance and Soldier-machine interactions to maximize battlefield effectiveness...” (U.S. Army Research Laboratory, Human Research and Engineering Directorate).
ARL – Relevant Information for Social Cultural Depiction (RISCD)	Risk taking and decision making; culture impact on adoption, design, and usage of mobile devices; culture and human-robot interaction; perspective-taking and culture stress; operational use of socio-cultural information	“Understanding and modeling cognitive aspects of socio-cultural influences on Soldier/Commander decision-making and communication to enhance performance with systems and in the mission context” (SME, personal communication, September 9, 2011).
Army Research Office (ARO)	Training; cultural consensus model; collaboration, negotiation, interaction; institutional environment	“To serve as the Army’s premier extramural basic research agency in the engineering, physical, information and life sciences; developing and exploiting innovative advances to insure the Nation’s technological superiority” (U.S. Army Research Laboratory).
HTS	Population dynamics and the military decision-making process	“Recruit, train, deploy, and support an embedded operationally focused socio-cultural capability; conduct operationally relevant socio-cultural research and analysis; develop and maintain a socio-cultural knowledge base, in order to enable operational decision-making, enhance operational effectiveness, and preserve and share socio-cultural institutional knowledge” (The Human Terrain System).

TRADOC Culture Center (TCC)	Cultural awareness training; developing mission requirements and partnership programs	“TRADOC develops the Army’s Soldier and Civilian leaders, and designs, develops, and integrates capabilities, concepts and doctrine in order to build an Army that is a versatile mix of tailorable, adaptable, and networked organizations operating on a rotational cycle for Full Spectrum Operations; support the Army’s Human Capital Core Enterprise and sustain the All-Volunteer Force” (U.S. Army Training and Doctrine Command).
AGC	Cultural mapping; cultural awareness; intelligence analysis; training	“To coordinate, integrate and synchronize geospatial information requirements and standards across the Army; develop and field geospatial-enterprise enabled systems and capabilities to the Army and the Department of Defense; and to provide direct geospatial support and products to warfighters” (U.S. Army Corps of Engineers Army Geospatial Center).
Army Engineer Research and Development Center (ERDC) – CERL	Content analysis of texts; stability operations; displaced populations	“CERL conducts research to support sustainable military installations. Research is directed toward increasing the Army’s ability to more efficiently construct, operate, and maintain its installations and ensure environmental quality and safety at a reduced life-cycle cost....CERL also supports ERDC’s R&D mission in civil works and military engineering” (U.S. Army Corps of Engineers Construction Engineering Research Laboratory).

Table 2b
Agency/Institutional REC Research Topics and Missions - Navy

Service Organization	Topics	Mission
CLREC	Cultural awareness; pre-deployment training; humanitarian assistance and disaster relief	“The Navy will organize, recruit, train, manage, and deliver LREC capabilities consistent with CNO’s Guidance, the Navy Strategic Plan and the Navy Strategy for Our People. ...we will deliver LREC: (1) with a development process that leverages legacy and emerging capabilities, but optimizes existing MPT&E infrastructure; (2) with the right capacity, competency and proficiency; (3) that is capabilities and effects-based, aligned with, and adaptable to, operational need as defined, forecast and validated by the warfighter; (4) that is managed, tracked and detailed to the right place and time to facilitate coalition, combined, Joint and Navy missions; and (5) that is continually assessed relative to operational readiness and relevance, and shaped as needed to optimize its capability/capacity” (U.S. Navy Language Skills, Regional Expertise and Cultural Awareness Strategy).
NETC	Language and culture training via game modules	“To develop the workforce through education and training that builds personal, professional and leadership skills” (Naval Education and Training Command).
NAWCTSD	Procurement of training capability or systems; decision making, teamwork, and culture	“To be the principal Navy center for research, development, test and evaluation, acquisition and product support of training systems, to provide Interservice coordination and training systems support for the Army and Air Force, and to perform such other functions and tasks as directed by higher authority” (Naval Air Warfare Center Training Systems Division).
ONR	IED and network analysis; population influence	“ONR manages the Navy’s basic, applied, and advanced research to foster transition from science and technology to higher levels of research, development, test and evaluation” (Office of Naval Research).

Table 2c
 Agency/Institutional REC Research Topics and Missions - Air Force

Service Organization	Topics	Mission
AFCLC	Validation of training and education programs; transfer of learning; outcome assessments; conceptual research and operational definitions; validation of 3C-related KSAs and proficiency measures; gaps in experiential learning	“Develop and maintain a cross-culturally competent Total Force across the Continuum of Learning (education, training & experience)” (U.S. Air Force Culture and Language Center).
AFOSR	Computational models; belief revision; group decision making; cultural shifts; social networks; collective violence	“AFOSR continues to expand the horizon of scientific knowledge through its leadership and management of the Air Force’s basic research program. ... AFOSR’s mission is to support Air Force goals of control and maximum utilization of air, space, and cyberspace” (U.S. Air Force Office of Scientific Research).
AFRL	Trust; influence; deception; precautionary mechanisms (threat detection, reactions)	“AFRL’s mission is leading the discovery, development and integration of affordable warfighting technologies for America’s aerospace forces. It is a full-spectrum laboratory, responsible for planning and executing the Air Force’ science and technology program. ...The laboratory provides leading-edge warfighting capabilities keeping our air, space and cyberspace forces the world’s best” (U.S. Air Force Research Laboratory).
BIA	Decision making; interpretation; influence networks; motivation; beliefs and values; behavioral analysis	“Provide responsive, authoritative, reliable support to professional military education, operational level warfighters, and policy makers to enable understanding, holistic planning, and exploitation of the perceptual and behavioral dimensions of the “human terrain” of any military or military-supported mission” (Behavioral Influences Analysis Center).

Table 2d
 Agency/Institutional REC Research Topics and Missions - Marine Corps (branch of U.S. Navy)

Service Organization	Topics	Mission
CAOCL	Pre-deployment training; regional culture and language familiarization; ensure LREC knowledge is included in operational planning; curricula development; maintenance of the training and readiness manual related to culture	“...CAOCL ensures Marines are equipped with operationally relevant regional, culture, and language knowledge to allow them to plan and operate successfully in the joint and combined expeditionary environment: (1) in any region of the world; (2) in current and potential operating conditions; and (3) targeting persistent and emerging threats and opportunities” (USMC Center for Advanced Operational Culture Learning).
MCCDC	Soldiers’ skill sets (including cultural knowledge)	“Develop fully integrated Marine Corps warfighting capabilities; including doctrine, organization, training and education, materiel, leadership, personnel, and facilities, to enable the Marine Corps to field combat-ready forces” (Marine Corps Combat Development Command).

Table 2e

Agency/Institutional REC Research Topics and Missions - Department of Defense (DoD)

Service Organization	Topics	Mission
Defense Advanced Research Projects Agency (DARPA)		“To prevent strategic surprise from negatively impacting U.S. national security and create strategic surprise for U.S. adversaries by maintaining the technological superiority of the U.S. military” (DARPA).
Defense Intelligence Agency (DIA)	Cultural priming	“To prevent strategic surprise and deliver a decision advantage to warfighters, defense planners, and policymakers” (DIA).
HSCB	Data collection and management; multi-scale and hybrid modeling of regional stability; analysis and modeling of non-kinetic courses of action; training methodologies	“The Office of Naval Research (ONR) Human Social, Culture and Behavior Modeling Program invests in research on building capability through the development of a knowledge base, building models, and creating training capacity in order to understand, predict, and shape human behavior cross-culturally” (ONR, HSCB Thrust)
Intelligence Advance Research Projects Activity (IARPA)	Cultural Emics	“Invests in high-risk/high-payoff research programs that have the potential to provide our nation with an overwhelming intelligence advantage over future adversaries” (IARPA).
Institute for Defense Analyses (IDA)		“To provide objective analyses of national security issues, particularly those requiring scientific and technical expertise, and conduct related research on other national challenges” (IDA).

Table 2f
Agency/Institutional REC Research Topics and Missions - Private Contractors

Service Organization	Topics	Mission
CASL	Regional proficiency; 3C; cultural priming; culture and leadership; socio-cultural linguistics	“CASL’s overarching mission is to defend and protect our country by improving our language readiness and capabilities...” (University of Maryland Center for Advanced Study of Language).
Personnel Decisions Research Institutes (PDRI)	Regional proficiency competencies and minimum qualifications	“To design, develop and implement human capital and training solutions that incorporate recent advances in the behavioral sciences and adhere to the highest principles of professional practice” (PDRI).
CPG	Defining 3C constructs; determining foundational competency levels of 3C	“We provide our customers with design, development, deployment, and assessment of organizational and training solutions. Our overall purpose is to find the best ways to train and assess cognitive performance” (Cognitive Performance Group).
361 Interactive	General 3C assessment and training of general cognitive skills; model of 3C and its constituent knowledge	“With a special focus on integrating technology with learning, 361 Interactive seeks to create innovative educational and training solutions” (361 Interactive).
ARA	3C model for the military domain; 3C relationship to mission-relevant performance; cultural sense-making; training requirements	“To solve problems of national importance by providing science and engineering research, technical support services, specialty products, and integrated solutions” (Applied Research Associates).
Global Cognition	Conducts research and develops training/assessment applications in the areas of cultural cognition, metacognition, cross-cultural competence, and cognitive skills and expertise	“Helps individuals and organizations understand and interact with the diverse people and ideas they encounter across the world” (Global Cognition).
Monitor 360	Cultural analysis methods; cultural research and analysis for various geographies	“Monitor 360 helps organizations make sense of complex, cross-disciplinary global strategic and analytical challenges” (Monitor 360).
RAND	Cross-cultural skills training; KSA analysis for soldiers	“The RAND Corporation is a nonprofit institution that helps improve policy and decision making through research and analysis” (RAND Corporation).
Humintell	Emotion; nonverbal behavior; facial expressions; culture; micro-expressions; cross-cultural adaptation	“To be the worldwide leader in research, consulting and training in the areas of emotion, nonverbal behavior, facial expressions and culture to government and industry” (Humintell).

Table 3a
Foundational DoD Literature on Regional Expertise and Culture

Year	Title	Authors
2005	<i>Defense Language Transformation Roadmap</i>	Defense Foreign Language Steering Committee (DFLSC)
	<i>DoD Regional and Cultural Capabilities: The Way Ahead</i>	
2007	<i>Regional and Cultural Expertise: Building a DoD Framework to Meet National Defense Challenges</i>	Department of Defense
	DoD Instruction Number 5160.70 Subject: <i>Management of DoD Language and Regional Proficiency Capabilities</i>	Department of Defense
2008	<i>Building Language Skills and Cultural Competencies in the Military: DoD's Challenge in Today's Educational Environment</i>	John E. Kruse, Suzanne McKenna, Noah B. Bleicher, Thomas E. Hawley, Andrew Hyde, and Sasha Rogers, & Lorry M. Fenner
2010	<i>Strategic Roadmap for Human Social, Cultural, and Behavioral Science and Technology</i>	Jean MacMillan, Jared Freeman, Greg L. Zacharias, Bruce Bullock, & Jonathan Pfautz
2011	<i>Socio-cultural Data to Accomplish Department of Defense Missions: Toward a Unified Social Framework</i>	Robert Pool
	<i>Strategic Plan for Language Skills, Regional Expertise, and Cultural Capabilities 2011–2016</i>	Department of Defense

Table 3b
Supporting DoD Literature on Regional Expertise and Culture

Year	Title	Authors
2006	<i>The Army's New TRADOC Culture Center</i>	Maj. Remi Hajjar
	<i>Counterinsurgency Warfare (COIN) (Field Manual No. 3-24)</i>	Headquarters, Department of the Army; Forward by Gen. David H. Petraeus & Gen. James H. Mattis
2007	<i>On the Uses of Cultural Knowledge</i>	Sheila Miyoshi Jager
2008	<i>Stability Operations (Field Manual No. 3-07)</i>	Headquarters, Department of the Army
	<i>U.S. Naval Language Skills, Regional Expertise and Cultural Awareness Strategy</i>	Chief of Naval Operations
	<i>Statement by BG Richard C. Longo, Director of Training, U.S. Army, Office of the Deputy Chief of Staff, and the U.S. Army Senior Language Authority Before the House Armed Services Committee Oversight and Investigations Subcommittee Second Session, 110th Congress</i>	Army
	<i>The U.S. Army Study of the Human Dimension in the Future: 2015–2024</i>	Army TRADOC
	<i>Marine Corps Vision & Strategy 2025</i>	Marine Corps
	<i>Operational Culture for the Warfighter: Principles and Applications</i>	Barak A. Salmoni & Paula Holmes-Eber
	<i>Toward an operational definition of Cross-Cultural Competence from interview data (DEOMI Internal Report CCC-08-1)</i>	Karol G. Ross
2009	<i>Understanding Human Dynamics</i>	Defense Science Board Task Force
	<i>Army Culture and Foreign Language Strategy</i>	Headquarters, Department of the Army
	<i>Air Force Culture, Region & Language Flight Plan</i>	U.S. Air Force
	<i>Joint Publication 3-24, Counterinsurgency Operations</i>	Joint Chiefs of Staff

	<i>Joint Professional Military Education (JPME) Special Areas of Emphasis (SAE)</i>	Chairman of the Joint Chiefs of Staff
	<i>Cross-cultural skills for deployed Air Force personnel: Defining cross-cultural performance</i> (Air Force Research Number: MG-811-AF)	C. H. Hardison, C. S. Sims, F. Ali, A. Villamizar, B. F. Mundell, & P. Howe
	<i>Identifying the core content and structure of a schema for cultural understanding</i> (Technical Report 1251; Army Project Number 622785A790)	J. Rentsch, I. Mot, & A. Abbe
2010	<i>Technical Report 1278 A Developmental Model of Cross-Cultural Competence at the Tactical Level</i>	Michael J. McCloskey, Kyle J. Behymer, Elizabeth Lerner Papautsky, Karol G. Ross, & Allison Abbe
2011	<i>Interagency Language Roundtable Skill Level Descriptors for Competence in Intercultural Communication [DRAFT] Developmental Levels for Language, Region and Culture Learning in the U.S. Air Force</i>	Interagency Language Roundtable U.S. Air Force Backgrounder

Programmatic Contributors and Research Themes

Most of the REC programs throughout the military services of the U.S. DoD began after the USA engaged in war against Iraq in 2003. The U.S. Army, Marine Corps, Air Force, and Navy's Culture Centers of Excellence were established to help prepare soldiers for intercultural experiences via training activities that would teach them how to interact, engage with, and understand locals in countries where they are stationed (see report by McFate, 2007 for more details on these centers' missions). However, according to one interviewee, despite the existence of these culture centers and some limited culture-related research, REC research did not have solid financial support until a real socio-cultural research investment was made at ONR in April 2008. . The U.S. Office of the Secretary of Defense (OSD) HSCB program, executed by the ONR, was initiated in 2008 after Dr. R.E. Foster and Capt. Sean Biggerstaff promoted its development through their 2006 report, which identified gaps across the DoD. At this time, culture also became incorporated into the strategic technology objectives of the U.S. Naval Air Systems Command (Naval Aviation Enterprise, 2006), which encouraged human performance science and technology research, with a focus on culture.

Table 2 lists research topics and U.S. organization's missions, organized by agency. This representation illustrates how service-specific missions galvanized research topics and REC research efforts in different ways across these four U.S. military components.

Table 3 presents foundational DoD reports on REC programs that shaped interest and narrowed foci for the U.S. DoD's REC vision of the 21st century. Most of these documents are laid out in a structure of goals and proposed actions. Additional supporting materials on REC activities in the DoD are also presented in Table 3.

Table 4*A Working Clearinghouse of DoD-Relevant Research Efforts: Themes, Topics, and Organizations*

THEMES AND TOPICS	ORGANIZATION
Training and Education	TRADOC;CLREC
Culture training	DLI
Curricula development	AFCLC
Curricula comparison	eCrossCulture Corp.
Distributed learning	AFCLC
Immersive learning	CASL; STTC
Knowledge generation and skill-building	NDU
Social task analysis	Lockheed Martin
Validation of training/education programs & tools	AFCLC; ARI
Software Development	CLREC
Game-based learning	Kinection; Pacific Northwest Natl. Lab; STTC; TRAC; USC
Language processing	Aptima
Simulation	Los Alamos Natl. Lab; MacKerrow; STTC
Software usability/Organizational anthropology	Sandia Natl. Labs
Text mining and analysis	CMU; ERDC-CERL; MITRE; Pacific Northwest Natl. Lab
Virtual world	Charles River Analytics; STTC
Cross-Cultural Competence (3C)	
3C & diversity training	361 Interactive; CASL; FIT
3C learning recommendations	AFCLC; NAWCTSD; PDRI
Conceptual and operational definitions	AFCLC
Cross-cultural adaptation/Cultural adaptability	AFRL; SFSU
Cultural effectiveness	ARA; Global Cognition
Defining 3C performance measures	AFCLC; ARI
Developing markers for competencies	AFCLC; ARI; NAWCTSD; PDRI
Developmental model of 3C	361 Interactive; ARI; CPG; DEOMI
Socio-Cultural Knowledge	
Cultural intelligence	Oak Ridge Natl. Lab
Culture and mental models	CPG
Cultural sense-making	Global Cognition; UMich
Cultural values	CASL
Decision-making	AFRL; CASL; Global Cognition; ONR; Milcord; UMD
Emotion, nonverbal behavior, facial expressions	SFSU
Ethnography	HTS; UCF
Mental models	CPG; NPS
Narratives	ASU
Socio-cultural dynamics of human behavior	HTS
Socio-cultural knowledge for counterinsurgency	HTS; IDA
Socio-cultural perspectives and intelligence analysis	MITRE
Social network analysis	ARO; Global Cognition; MITRE; Sandia Nat'l Labs; Uof I; USC; VTech

Personnel and Validation Studies	
Leadership	SJSU-GLAC
Needs assessment, development, implementation, evaluation	AFRL; AFCLC
Personnel selection	ARI
Regional proficiency assessment	CASL;NAWCTSD; PDRI
Stability operations	ERDC-CERL; ODU
Teamwork	AFRL; NAWCTSD; Pacific Science & Engineering Group; UCF
Forecasting and Computational Modeling	
Adversarial organizational structure dynamics	Lockheed Martin
Collaboration in teams and negotiations	UMD
Cultural consensus modeling	UCI; U of I; UMD;
Decision-making	Knowledge Based Systems; Milcord
Intercultural knowledge, skills, and abilities	Alelo
	CASL; Global Cognition; UMich
Perspective-taking/sense-making	
Social dynamics	Knowledge Based Systems
Social radar	CASL
Verification and validation	Aptima; Evidence Based Research; GMU; Lockheed Martin; Los Alamos Natl. Lab; MITRE; NPS; Soar Tech; TRAC

Note: Table may not be complete and fully representative of all people working on themes and topics presented.

On the basis of these U.S. DoD documents, it is apparent that the major thrust for REC research is in a nascent stage, beginning development around 2006. This is further evident in the small number of REC researchers in the DoD. For this reason, much of the “research ... is [being] farmed out to ... research houses and to contracting companies. [But,] frequently the people who are doing it are so disconnected, both from the operating context and the context of institutionalization, that their results[, although they] may be very good, ... end... up in a binder on the shelf because people can’t use it, either because it doesn’t take one of those contexts or both into account.” Despite these personnel challenges, various DoD agencies include “culture” and/or “region” in their mission statements.

Culture Research Themes in the U.S. Services. When interviewees discussed topics of culture research, most of them mentioned 3C, which includes mental schemas and traits that enable or prevent individual mastery of 3C; curricula development; and identifying knowledge, skills, abilities, and attitudes (KSAs) relevant to culture learning. In addition, a few agencies indicated some dabbling in computational forecasting, models, and simulations of foreign cultures, as well as human terrain systems (in which social scientists are deployed with military units and provide military personnel with an understanding of the cultural context to help with intercultural interactions and decision-making; Pool, 2011) as “operations research.”

Research Themes and Topics. Table 4 organizes research topics along six themes. These themes are (a) training and education, (b) software development, (c) cross-cultural competence, (d) socio-cultural knowledge, (e) personnel and validation studies, and (f) forecasting and computational modeling. A review of the table’s contents suggests that U.S. DoD research, as well as basic research conducted in academia, are supporting the DoD’s 2011-2016 strategic plan (Department of Defense, 2011) by (a) identifying requirements for REC learning outcomes, (b) developing and testing high-tech software, and (c) assessing individual and team factors among personnel.

As a point of comparison to culture-related research topics addressed in the U.S. DoD, we searched for if other countries have defense-funded culture-related research, but we were not able to find much in this area with exception of programs addressing 3C and socio-cultural knowledge training. In the German military’s

Center for Internal Leadership, military personnel are learning their own culture in an effort then to better understand others' cultures (Birkenstock, 2012). German military students are also sent to the USA to immerse themselves in American culture (Pastorek, n.d.). In Afghanistan, military leadership is sharing with their own soldiers pamphlets that address socio-cultural practices they might observe or experience with U.S. soldiers (Ferris-Rotman, 2012). In a NATO study, Febbraro, McKee, and Riedel (2008) encouraged more cultural sensitivity training efforts. In an effort to address cross-cultural training needs, the Norwegian Defense Media Center developed and evaluated self-report learning through a virtual training module. The researchers found that cadets felt they learned from this type of training program Prasolova-Førland, Fominykh, Darisiro, and Mørch (2013). Van Hemert, de Koning, and van den Berg (n.d.), from the TNO Defence, Security and Safety Division in the Netherlands wrote theoretical piece on cross-cultural interactions between UK and Afghans based on qualitative interviews with UK military practitioners. Ooink (2008) also conducted a study to evaluate the effectiveness of Dutch military cultural training programs. Soldiers who took part in the training and then deployed to Afghanistan returned home with decreased attitudes toward Afghans indicating that in terms of shifting attitudes, the cultural training program at that time was not successful and Ooink recommended approaches to improve the training.

Collaboration Activities

Means of Collaboration. SMEs discussed engaging in informal and formal collaboration. In general, informal outlets allow individuals to gather and disseminate information relevant to their research efforts and to form collegial relationships that can facilitate research cooperation and activities. Table 5 lists examples of collaboration activities facilitated through conferences, workshops, working groups, interest groups, and online tools.

Formal collaborative tools mentioned by interviewees include action panels (Research, Development, Test, and Evaluation—RDT&E) and funding mechanisms (contact first author to learn which REC research agencies fund external studies), such as Broad Agency Announcements (see Table 6 for example REC-related DoD agncy research collaborations). For example, funding supports interdisciplinary teams address questions that transcend traditional academic boundaries.

Collaborations with Academe. Although a small handful of REC experts in academia are collaborating with military to inform REC research, SMEs were concerned about a divide between the DoD and academia. Those from academia remarked that expert theoretical knowledge is not utilized sufficiently. In fact, DoD SMEs recommended other DoD employees as experts in culture, while naming only three academic researchers. Moreover, the academic researchers known to the DoD are often the same small number of individuals, which restricts lines of knowledge sharing. Because of security issues, however, academic contractors often are prohibited from contributing to the DoD REC mission. DoD researchers also indicated that they had insufficient time to keep up-to-date on the sizable body of external academic literature that may be relevant to their work. Further exasperating this situation is the fact that DoD researchers have limited access to academic journals due to government procurement constraints. The end result is that DoD researchers may not be as informed as they would like on the most current theories and methodologies related to their work because they are largely disseminated through external academic publications. A a result, there is also redundancy in efforts U.S. DoD REC research efforts.

Table 5
Examples of Informal Collaboration

Activity	Output/Deliverable
Conferences	HSCB Modeling TRADOC Culture Summit Academic Associations/Annual Meetings Social Computing and Cultural Modeling Air Force Office of Scientific Research
Workshops	National Research Council of the National Academies NATO HSCB Cross-Cultural Competence Project
Working Groups	Interagency Language Roundtable (ILR) Working Group Meetings
Interest Groups	MORS Social Science Community of Practice Symposiums Military Anth List Serve Irregular Warfare Modeling and Simulation (IWM&S) Group Wiki
Online Tools	HSCB Newsletter Strategic Coordination Group (SCG) Culture Catches Topical E-mail Briefs

Table 6
Examples of Formal Collaboration

Outreach-Based	
Broad Agency Announcements (BAAs) Issued by	HSCB (jointly issued by ONR and OSD)
	IARPA
	DARPA
Program-Based	
Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASAALT)	Composed of ARL-HRED, U.S. Army Corps of Engineers's Engineer Research and Development Center (ERDC), and ARI; sponsors socio-cultural and language research ranging from 6.1 – 6.3, also funds AGC.
	<p>Mission: To provide soldiers with a decisive advantage in any mission by developing, acquiring, fielding, and sustaining the world's best equipment and services and leveraging technologies and capabilities to meet current and future Army needs.</p> <p>The Minerva Initiative is a DoD-sponsored, university-based social science research initiative launched by the Secretary of Defense in 2008, focusing on areas of strategic importance to U.S. national security policy.</p>
Minerva Initiative	<p>Goal: To improve the DoD's basic understanding of the social, cultural, behavioral, and political forces that shape regions of the world of strategic importance to the U.S.</p> <p>Collaborators: universities, DoD research institutes, individual scholars, interdisciplinary and cross-institutional projects.</p> <p>The MURI program supports research by teams of investigators that intersect more than one traditional science and engineering to accelerate both research progress and transition of research results to application. Most MURI efforts involve researchers from multiple academic institutions and departments.</p>
DoD Multidisciplinary University Research Initiatives (MURI)	<p>For example, Project Interaction: Intercultural Assessment of Collaboration in Teams and in Ongoing Negotiations (PI: Dr. Michele Gelfand, University of Maryland) sponsored by ARO and brings together eight U.S. universities.</p> <p>These programs provide funding for early-stage R&D projects at small technology companies for projects that serve a DoD need and have commercial applications.</p>
DoD Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR)	<p>The SBIR Program provides up to \$1,150,000 in funding directly to small technology companies (or individual entrepreneurs who form a company).</p> <p>The STTR Program provides up to \$850,000 in funding directly to small companies working cooperatively with researchers at universities and other research institutions.</p>
Online Tool	
DEOMI	www.defenseculture.org

Future Research Direction

Listed below are several topics for future research. These suggestions are based on an analysis of SME input, as well as analysis of state-of-the-art academic research and gaps between basic academic and DoD applied research. Although these topics are based on U.S.-based efforts or needs, they are a clear call for researchers anywhere in the world to address.

Opportunity 1: Validation Studies for 3C Requirements

The DoD is saturated with literature reviews on 3C. A common conclusion is that research is needed to validate the 3C framework (MacMillan, Freeman, Zacharias, Bullock, & Pfautz, 2010). Note that there are a few validation studies completed (e.g., Hardison, et al., 2009; Matsumoto, LeRoux, & Schaab, in review; Rentsch, Mot, & Abbe, 2009; Ross, 2008; Warren & Sutton, 2005) or in progress (e.g., ARI), but they are not clearly linking 3C with performance. However, we propose that before validating components of the 3C framework, it is important to evaluate its links to performance and to assess the return on investment. This type of effort is not only needed within U.S. DoD, but it is clearly missing from academic literature too.

Performance indicators must be determined in relation to job and rank. Related questions one might ask are: At what point in one's career and in what jobs would relating 3C to performance be important? Which types and levels of DoD personnel need 3C training? For example, if 100% of the General Purpose Forces (GPF) go through 3C, should we expect that for XX% of them levels of 3C will not actually be relevantly linked to performance, but for XX% it would be? Second, cross-cultural factors need to be mapped on to relevant job performance standards. 3C is expected to relate to job performance criteria that require 3C-related knowledge, skills, abilities, attitudes, and individual differences (personality). Only after these links are established should researchers engage in a series of validation studies to ensure construct validity, discriminant validity, and finally concurrent and predictive validity. On the basis of the above studies' results, training and education curricula can be developed

Opportunity 2: Validation Studies for Training and Education Programs

Once performance criteria and 3C components are validated, it would be possible to reliably assess the relationship between culture training and mission effectiveness. Particular attention must be paid to validation of training and performance measures to assess the return on investment of current and future programs. Unfortunately, there is limited information regarding the usefulness and importance of REC training and education in U.S. DoD or scholarly academic literature .

Opportunity 3: Role of Technology in Culture Training

According to SMEs, more basic research is needed on use of technology for culture training. Although Humintell, Inc. has completed an unpublished validation study of GlobeSmart Commander web-based culture training tool for the Army (personal communication, November 9, 2011), there is no research on which mode of REC training and learning would yield maximum benefits for service members of various backgrounds. For example, it would be useful to investigate whether an interactive simulation game on a hand-held device is equally effective for a 20-year-old and a 38-year-old. Future research could also examine whether bringing together soldiers stationed all over the world into a virtual platform and representing them by avatars would yield comparable learning results as face-to-face training. Determining individual difference variables that best predict the likelihood of a soldier's success in learning through avatars versus self-paced, self-guided online training programs also would be fruitful research.

Opportunity 4: Mitigating Cognitive Dissonance: Crossing the Culture Divide

We observed that an area prime for research relates to cognitive dissonance, an affective state of discomfort caused by conflicting perspectives or conflicting cognition in relation to a situation (Bem, 1967). In such situations, a person typically will change his or her cognition to match his or her behavior. Cognitive dissonance might occur in soldiers who are trained for combat but then are required to engage in peacemaking efforts. Researchers need to think about how culture training can be implemented so as to minimize psycholog-

ical distress to the soldier, who must toggle between thoughts of *enemy* and *ally*. One SME said that U.S. soldiers are engaged in a “gigantic cultural change war, not just cultural, but mentally and physically cultural war.” The challenge is not only in understanding cultures, but also how to manage psychological challenges of irregular warfare and physical challenges of not being present at the site of engagement (due to use of unmanned robotics). Such research could also be done with international assignees.

Opportunity 5: Navigating Culture During a High Stakes Mission

Based on a study by Hardison and colleagues (2009) of RAND Corporation, it was apparent from a survey study of over 6,000 Air Force members that “managing stress in an unfamiliar cultural setting” (p. 20) is one of nine important cross-cultural enablers for coping with airmen’s “day-to-day activities and are likely to be needed in a variety of [Air Force] jobs” (p. 7). Indeed, if one takes a moment to consider why 3C is necessary, it comes down to the need to feel comfortable in ambiguous situations. Cognitive, affective, and behavioral preparation to interact with people of different cultural backgrounds are resources to deal with the uncertainties of different situations. According to the Conservation of Resources Theory, “people must invest resources in order to protect against resource loss, recover from losses, and gain resources” (Hobfoll, 2001, p. 349). To exemplify this idea in terms of 3C, in order to cope with the stressors of unfamiliar situations, it is prudent that the military train all the GPF to some level of 3C, as the strategies for engaging in unfamiliar situations is a type of coping resource that would help mitigate possible psychological (e.g., anxiety), physiological (e.g., hyperventilation), and behavioral (e.g., unnecessary beating of another person) responses.

Other studies that have recognized the importance of understanding the links between stress and performance have come from the Navy’s studies on tactical decision-making under stress (e.g., Flin, Salas, Strub, & Martin, 1997) and from the Walter Reed Army Institute for Research studies on stress during peacekeeping (e.g., Castro, 2003). In 2011, at the TRADOC Culture V Summit, Salas spoke about the stress related to decision-making in multicultural and intercultural teams. Although there is a strong history of stress research and a recent history of acculturative stress research, work-related stress research across cultures or in multicultural teams is much more limited (Glazer, 2008). Yet, one of the goals for 3C training for any nation’s troops on overseas deployments is to provide military personnel with the tools to cope with ambiguous situations, conflicts, and feelings of uncertainty and to mitigate potential negative consequences.

One way stress researchers have studied whether a coping strategy was learned is to engage in pre- and post-testing of research participants’ responses to stressful situations. If the coping response was learned, then responses to stressors would not be as negative (and possibly not negative at all) at post-test versus pre-test. Thus, an area ripe for research is the mitigation of undesirable affective, behavioral, and cognitive responses to difficult intercultural situations.

Opportunity 6: Team Cohesion in a Multinational Context

Finally, given the increasing utilization of military teams comprised of multinational coalitions, team cohesion is another area in need of empirical study. In particular, SMEs we interviewed stressed the importance of team research as it relates to 3C training, noting that there are several directions the research could go. Literature on multinational transitional teams, long-term teams, and problem-focused short-term teams will likely require different 3C training foci. Furthermore, multinational teams differ in performance outcomes based on the composition (who is on the team) in terms of status, nationality, gender, experience, objectives, leadership, and other factors. Both individual and team training would benefit multinational campaigns. Without taking these attributes and training targets into consideration, multinational teams are apt to be less productive. Topics currently under investigation include assessment of 3C transfer of knowledge, skills, and abilities, and how to translate them from individual competencies into unit effectiveness.

Project Limitations

A major limitation in this project was not being able to access some key DoD personnel and materials. This created a challenge in investigating the REC research domain within the U.S. DoD. Some DoD personnel were not accessible because of their workload or perception of the project’s relevance, or simply because they

were not readily identifiable. In addition, materials were often difficult to access due to various factors associated with this project team being external to the DoD, or because the team was not aware of materials that could not be identified or found easily through Internet searches. Finally, this report is a static representation of the state of the REC research community that is affiliated mostly with the military services.

Conclusion

The primary purpose of this report was to document and characterize various aspects of the U.S. DoD REC research landscape, including its key contributors. Results from interviews and surveys indicate that the DoD REC research programs are steadily addressing the *2011-2016 DoD Strategic Plan* (Department of Defense, 2011). DoD agencies, the Services, and contractors are working on (a) identifying and validating measures of socio-cultural factors that influence personnel performance, (b) building and implementing training programs and tools on regions and cultures in general, and (c) strengthening collaborative efforts and knowledge sharing through online tools, professional events, and funding opportunities. Specifically, thematic research topics addressed are: training & education, software development, cross-cultural competence, socio-cultural knowledge, personnel & validation studies, and forecasting & computational modeling. DoD REC research is not only building upon basic research found in the social sciences, but in some cases it is also paving the path as evident in a 2011 call for papers on cross-cultural competence in the *Journal of Cross-Cultural Psychology*. Research is occurring through formal and informal collaborations, getting presented at national and international conferences, and lead by scientists in disciplines ranging from psychology, anthropology, and sociology to computer science and engineering. Still, more work is needed to (a) create transparency in research, possibly through an online research portal (R-Space), that would be accessible worldwide, (b) solidify cross-agency and organization (e.g., with academia) collaborations, including international defense ministry to defense ministry collaborations, and (c) increase DoD research funding to study important issues that are steeped in cultural understanding in order equip policy-makers, foreign diplomats and attachés, and military personnel with enhanced knowledge, skills, and abilities to be effective envoys abroad.

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Appendix A

Additional DoD References Not Cited in Body of Report

NAME OF SOURCE	LINK OR AUTHOR
Army Publishing Directorate	http://www.apd.army.mil/
Center for Army Lessons Learned (CALL)	http://usacac.army.mil/cac2/call/index.asp
CIA World Factbook	https://www.cia.gov/library/publications/the-world-factbook/
Defense Acquisition University training site	http://www.dau.mil/Training/default.aspx
Defense Connect Online (DCO)	https://www.dco.dod.mil/public/dsp/dco_login.cfm?banner=true
Defense Technical Information Center (DTIC)	http://www.dtic.mil/dtic/
Foreign Area Officer (FAO) Web	https://myfao.nps.edu/web/fao
Global Cognition	http://globalcognition.org/Articles.html
GlobeSmart Commander	http://www.globesmartcommander.com/
Human Terrain Teams	http://humanterrainsystem.army.mil/
Marine Corps Center for Lessons Learned	https://acc.dau.mil/CommunityBrowser.aspx?id=23451&lang=en-US
Milgaming	https://milgaming.army.mil/
Navy Knowledge Online (NKO)	https://wwwa.nko.navy.mil/portal/home/
Open Source Center (OSC)	https://www.opensource.gov/
Adaptability in Coalition Teamwork	NATO RTO (2008)
Air University Quality Enhancement Plan 2009–2014: Cross-Culturally Competent Airmen	Air University (2009)
Applications in Operational Culture: Perspectives from the Field	Holmes-Eber et al. (2009)
Assessing the Development of Cross-Cultural Competence in Soldiers	McCloskey et al. (2010)
Comparison of cultural values of U.S. college students and U.S. Army soldiers	Schaab et al. (in review)
Cross-Cultural Competence [Special Issue]	U.S. Army Intelligence Center of Excellence
Behavioral, attitudinal, and cultural factors influencing interagency information sharing	Schaab, DeCostanza, & Hixson (in review)
Development of training themes for JIIM operations	Ross et al. (in review)
Framing the Cultural Training Landscape	Alrich (2008)
Improving the Organizational Effectiveness of Coalition Operations (HFM 163)	NATO Research and Technology Organization ¹
Japan Earthquake 2011 Support	Navy Operational Cultural Awareness Training (OCAT) Briefs
Skill Level Descriptions for Competence in Intercultural Communication (Draft)	Interagency Language Roundtable (2011)
Social Science: Web of War	Weinberger (2011)
Soldier Manual and Training Guide for Civil Affairs	http://armypubs.army.mil/doctrine/soldier_manual_1.html ²
Small Wars Manual	US Marine Corps (1940)

Note. ¹Cannot access scientific report; ²Cannot access guide.

Goal-Setting and Task Performance among Nigerian Managers in a Cross-Cultural Context

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Abstract

This study assessed goal-setting and task performance among Nigerian managers. Data were collected from 521 subjects including 176 Yoruba, 147 Igbo and 198 Hausa/Fulani managerial employees in Lagos, Nigeria. The relevant scales of the 57-item questionnaire designed by Mendonca and Kanungo (1994) were used to obtain measures of the dependent variables. Mean scores in goal setting and performance-intrinsic reward contingency were highest among the Yoruba managers followed by Hausa/Fulani and Igbo managers respectively. Mean score in task significance was highest among the Igbo managers followed by Yoruba and Hausa/Fulani managers respectively. Mean score in performance-extrinsic reward contingency was highest among the Hausa/Fulani managers followed by Yoruba and Igbo managers respectively. One-way ANOVA showed cultural differences in performance-intrinsic reward contingency ($p < .05$) and task significance ($p < .01$) but not in goal-setting and performance-extrinsic reward contingency respectively. The results were discussed in terms of the influence of culture on human resources management practices and that managers who value performance-intrinsic reward allocation should engage in goal-setting more than the others.

Introduction

Organizations do not exist in a vacuum but in a specific culture or socio-cultural environment (Aluko, 2003). Relating Nigerian organizations to their specific cultural settings in order to understand Nigerian managers' perception about goal-setting and task performance is the aim of this study. Nigeria is a multi-ethnic society with more than 300 ethnic groups. The country is culturally diverse in such features as language, religion, food, marriage systems, trading systems and ethnic tribes (Mogaji, 2007). The three dominant tribal groups used in this study are the Hausa/Fulanis who dominate the north, the Igbos who dominate the south-east and the Yorubas who dominate the south-west.

The findings of this study will be useful to provide solutions to the problem of work motivation in Nigeria. This can be achieved by looking at cultural differences in the perception of goal-setting and task performance.

Performance is a multidimensional construct, the measurement of which varies depending on a variety of factors (Esu & Inyang, 2009). According to these researchers, the desired performance is closely related to the organization's vision: social responsibility, customer orientation and profitability. Establishing standards of performance is not a new concept or process. Standards exist whether they are discussed or put in writing. The philosophy behind establishing performance standards is whether to accept or reject the task or job performed by the employees in the organization. Armstrong (2004) defines objectives or goals (the terms are used interchangeably) as "what organizations, functions, departments and individuals are expected to achieve over a period of time" (p. 488).

Theoretical Framework

The model of performance management system offered by Watkins (2007) was used in this study. According to him, a performance management system enables individuals and organizations to achieve strategic ambitions through processes that are both systemic and systematic. Moreover, performance improvement management systems seek to achieve goals. Armstrong and Baron (1998) and Armstrong (2004) described performance management "as a strategic and integrated approach to delivering sustained success to organizations by improving the performance of the people who work in them and by developing the capability of teams and

individual contributors”(p. 477). Akata (2003) considers it as “a systematic and holistic (all-embracing) process of work planning, monitoring and measurement aimed at continuously improving the teams and individual employee’s contribution to the achievement of organizational goals” (p.14). Oladimeji (1999) defines performance management as “a means of getting better results from the organization, teams and individuals by understanding and managing performance within agreed framework of planned goals, objectives and standards” (p. 51).

According to Esu and Inyang (2009), the concept of performance management is theoretically under-pinned on the theory of motivation. There are several motivational theories in the literature. Of all these theories, the goal setting theory fits the performance management concept best. This is because performance standards are antecedent situations in the employee’s work environment. Goals are performance levels which individuals and organizations have agreed upon as performance standards. Philosophically, the goal setting theory is based on the assumption that people set conscious goals that energized them and direct their thought and behavior towards the achievement of the goal (Bateman & Zeithaml, 1993). Lessons from researchers in goal setting theory show that properly conceived goals trigger a motivational process that improves performance (Locke, 1981).

Locke & Latham (2006) described the goal-setting theory (Locke & Latham, 1990, 2002), which was developed inductively within industrial/organizational (I/O) psychology over a 25-year period, based on some 400 laboratory and field studies. These studies showed that specific, high (hard) goals lead to a higher level of task performance than do easy goals or vague, abstract goals such as the exhortation to “do one’s best”. So long as a person is committed to the goal, has the requisite ability to attain it, and does not have conflicting goals, there is a positive, linear relationship between goal difficulty and task performance. Goals are related to affect in that goals set the primary standard for self-satisfaction with performance. High, or hard, goals are motivating because they require one to attain more in order to be satisfied than do low, or easy goals. Feelings of success in the workplace occur to the extent that people see that they are able to grow and meet job challenges by pursuing and attaining goals that are important and meaningful.

Review of Literature

No previous pattern of relationships or differences were found between goal-setting and task performance among the Nigeria’s three ethnic groups. Therefore, a review of the ethnographic and historical analysis of the characteristics of these three groups, was carried out, to determine the hypothesis formulated and tested in this study.

The historical factors’ model propounded by Eze (1995) was developed out of extensive investigations and observations (Eze, 1981a, b, 1984). He reported that certain crucial events or factors in the historical developments of black Africans are individually and collectively responsible for the development of their motive structures, motivators and needs. Eze (1978) collected data from 170 managers including Yoruba, Edo, Igbo and White subjects to investigate the effect of ethnic group’s affiliation on the motivation and satisfaction levels of Nigerian workers. He found that ethnic group background, not nationality, has differential effects on workers’ motivation. Fagbemi (1981) conducted a similar study using 60 management personnel of Hausa, Yoruba and Igbo origins as research subjects. His data and results supported Eze’s findings. Eze (1995) reported the incompatible work ethics model described by Ocho (1984) who stated that low motivation and negative work attitudes may have developed among Nigerian workers as a result of their lack of identification with organizational goals.

Obasan and Sotunde (2011) examined the relationship between goal-setting and performance appraisal. They used a self-designed questionnaire to collect data from 1000 public servants working in the human resources department of government ministries and parastatals in Abeokuta, a Yoruba-speaking area of south-western Nigeria. Analyzing the data with descriptive statistics, the results showed that goals are hardly set in public service in Nigeria. The study recommended that appreciable and attainable goals should be set for organizations and individuals so that such can form the basis for assessment.

Peterson, Fanimokun, Mogaji, and Smith (2006) collected data from 581 Nigerian managers to illustrate national subculture differences by developing and testing hypotheses based on the characteristics of Nigeria’s

three major subcultures- Hausa, Yoruba and Ibo tribal groups. The theoretical basis for the study is that norms, rules and roles in societies and organizations provide people with sources to guide the way they handle work situations. The managers' use of these social structures differs among nations and subcultures depending on the cultural values in each. Their findings show theoretically meaningful subculture differences in the sources of guidance most frequently reported and in the relationships between sources used and effectiveness. A number of these qualities held in common, do in fact appear in international comparative research (e.g., Smith et al., 2002).

While studying the differences in entrepreneurial drive and emergence among the Nigerian tribes, Akpor-Robaro (2012) conducted a theoretical survey and found the differences in the socio-cultural features of the tribes to reflect the socio-cultural features of Nigeria in time. He found that Ibo culture contains a high value for economic power and independence followed by the Yoruba and Hausa cultures respectively. He also found uncertainty avoidance to rank highest in the Ibo culture followed by the Yoruba and Hausa cultures respectively. The degree of collectivism is highest in the Hausa culture followed by the Yoruba and Ibo cultures respectively. Hence, the Ibo culture is most individualistic followed by the Yoruba and Hausa cultures. According to Akpor-Robaro (2012), the present Nigerian collective culture, however, can be described as an achievement-oriented culture. He found the Ibo culture to rank highest in achievement orientation followed by the Yoruba and Hausa cultures respectively. He also found the Ibo culture to rank highest in masculinity followed by the Yoruba and Hausa cultures respectively.

Aluko (2003) posited that there are not many studies that have focused on how organizations perform in the different ethno-cultural and geographical locations in Nigeria. He went further to say that cross-cultural studies dealing with organizational performance in Nigeria remain largely an uncharted course. He collected data from 750 Nigerian workers from Ikeja (Yoruba culture), Asaba (Ibo culture) and Kano (Hausa culture) with 250 subjects from each of the three areas to study the impact of culture on organizational performance. In his analysis of cultural variables, the results showed no significant cultural differences among the workers. However, the findings revealed that the Ibo workers were more aggressive and tended to be individualistic. The Yoruba workers tended to be averagely aggressive but not individualistic. The Hausas are at the rear, with very little aggression and are largely collectively oriented. However, the Hausa workers exhibited more religious values at work as they appear to be more inclined and attached to their religion- Islam. In general, the workers are largely extrinsically oriented as the premium placed on monetary reward is very high. The emphasis and premium on money, is highest among the Ibo workers followed by the Yoruba and Hausa workers respectively. The findings of this study suggest that Nigerian culture emphasizes low individualism and high collectivism. It also emphasizes low power distance, since the workers expressed a preference for consultative management. He concluded by saying that analyses made by a single scholar should be susceptible to replication, amplification and modification by others since there is the absence of comparative studies measuring the variables of interest across the ethnic groups in Nigeria like the present study.

Examining how both the socio-cultural environment and the enterprise environment, affect internal work culture and Human Resources Management (HRM) practices, the model of culture-fit as proposed by Kanungo and his associates (Kanungo & Jaegar, 1990; Mendonca & Kanungo, 1994) was tested. The model was partly tested by Aycan and Kanungo (1996) and Aycan, Kanungo, Mendonca, Yu, Deller, Stahl and Kurshid (2000) to examine the way in which managers' perception of socio-cultural environment affected their assumptions about employees in their organizations and HRM practices. They collected data from 1954 employees from business organizations in 10 countries. The instrument used was a 57-item questionnaire which measured managerial perceptions of socio-cultural environment, internal work culture and human resource management practices. The multiple regression analyses of data revealed national culture differences in patterns of relationships among the three sets of variables. For example, managers who perceived paternalism and high power distance in their socio-cultural environment assumed employee reactivity, and furthermore, did not provide job enrichment and empowerment. Managers who characterized their socio-cultural environment as fatalistic, were also found to assume that employees by nature, were not malleable. These managers did not administer job

enrichment, empowering supervision, and performance-reward contingency. Moreover, managers who valued high loyalty assumed that employees should fulfill obligations to one another, and engaged in empowering HR practices. Nigeria was not among the countries studied.

Distinguishing between intrinsic and extrinsic motivation, Eze (1995) studied 172 Nigerian managers and supervisors, and found out that they attached more importance to higher-order (intrinsic) motivators than, to lower-order (extrinsic) motivators. There was a significant difference in the managers' responses due to age but not as a result of length of service and education. The results suggested that the Nigerian managers studied were extrinsically motivated. Ethnicity was not considered as a factor in that study.

Hypothesis

There will be significant ethnic differences in goal-setting, task significance/performance, performance-intrinsic and performance-extrinsic rewards contingency among the Nigerian managers.

Method

Participants

The subjects for this study comprised 521 employees drawn from the three major ethnic groups in Nigeria. The sample included 176 Yoruba, 147 Igbo and 198 Hausa/Fulani managerial employees. There was an equal sample of 50 female managers in each group. Participants were randomly selected from among the MBA executive part-time students in Lagos, Nigeria. They were employees of various public and private sector business organizations.

Research Instrument

The instrument used for data collection is the 57-item questionnaire designed by Mendonca & Kanungo (1994). The entire questionnaire has four parts. The first part asked for demographic information. In the second, third, and fourth parts, dimensions of socio-cultural environment, internal work culture and HRM practices were assessed, respectively, using a total of 57 statements. Respondents were asked to indicate the extent to which they agreed with each statement by using a six-point Likert-type scale (from 1 = strongly disagree to 6 = strongly agree). One-third of the items were reverse-coded to minimize response bias. Subscales were coded in such a way that high scores reflected the variable name (for example, a high score on a particular subscale shows that the sample is high on that subscale). Psychometric properties of the measures were reported by Mathur, Aycan & Kanungo (1996). The adequacy of the psychometric properties of scales (especially internal consistency) was tested and confirmed by Aycan et al. (2000) who carried out factor analysis which produced the following results. Task significance is a dimension of job design scale which produced a Cronbach's alpha of .66. A sample item of this dimension is, "my job requires me to do the same routine, repetitive tasks" (reverse coded). Goal setting is a dimension of supervision and control scale which produced a Cronbach's alpha of .72. Sample items are, "my supervisor and I jointly set specific goals (what and how to do my job)", "my supervisor encourages and provides me with support to handle difficult assignments." Performance-intrinsic reward contingency and performance-extrinsic reward contingency are dimensions of the performance-reward contingency scale which produced a Cronbach's alpha of .52. A sample item of this dimension is, "although I put in more time and effort in my job than my peers, I am paid the same as my peers" (reverse coded).

Participants evaluated their perception of goal-setting by the goal-setting subscale of the questionnaire and task performance, by the task significance and performance-reward contingency subscales of the questionnaire. A single item was used to assess task significance. Two questions were used to assess goal setting. The performance-reward contingency scale has three questions. Two questions were used to assess performance-intrinsic reward contingency and one question was used to assess performance-extrinsic reward contingency.

Research Design

A randomized three groups' design was used in this study.

Procedure

The questionnaire, developed in English, was administered in its original language. It was administered to the subjects in the classroom during their lecture in Business Organization and Administration. It took them less than 30 minutes on the average to complete. Respondents did not report any difficulty in understanding the statements because English Language is the official language in Nigeria.

Results

The results of this study are presented in Table 1 below. The results in Table 1 show that Yoruba managers had the highest mean score in goal-setting and performance-intrinsic reward contingency followed by the Hausa/Fulani and Igbo managers respectively. Hausa/Fulani managers had the highest mean score in performance-extrinsic reward contingency followed by the Yoruba and Igbo managers respectively. However, Igbo managers had the highest mean score in task significance followed by the Yoruba and Hausa/Fulani managers respectively.

Table 1

Mean Scores and Standard Deviations of Measures According to Ethnic Group

Measure	Yoruba		Igbo		Hausa/Fulani	
	Mean	SD	Mean	SD	Mean	SD
Goal Sett	3.86	1.44	3.69	1.35	3.72	1.43
Perf-Extr	3.53	1.21	3.44	1.18	3.67	1.02
Perf-Intr	4.12	1.61	3.78	1.53	3.94	1.61
Task Sign	4.13	1.45	4.14	1.34	3.51	1.36

The results in Table 2 below show that significant differences were found among the three major ethnic groups in Task significance ($p < .01$) and performance-intrinsic reward contingency ($p < .05$) and not in goal setting and performance-extrinsic reward contingency, respectively. The results in Table 1 show that task significance is highest among the Igbo managers followed by the Yoruba managers but lowest among the Hausa/Fulani managers. Moreover, performance-intrinsic reward contingency is highest among the Yoruba managers followed by the Hausa/Fulani managers but lowest among the Igbo managers. The results in Table 2 show that there is partial support for the hypothesis as there is a significant ethnic difference in task significance and performance-intrinsic reward contingency.

It was found that managers who are intrinsically motivated to perform their duties would also be willing to significantly perform their tasks. This result is supported by Akpor-Robaro (2012) who found the Ibo culture to rank highest in achievement orientation followed by the Yoruba and Hausa/Fulani cultures respectively. The results in Table 1 show that goal setting is highest among the Yoruba managers followed by the Hausa/Fulani and Igbo managers respectively. Moreover, performance-extrinsic reward contingency is highest among the Hausa/Fulani managers followed by the Yoruba managers but lowest among the Igbo managers. The results in Table 2 show that there is no support for the hypothesis in the sense that there is no significant ethnic difference in goal setting and performance-extrinsic reward contingency.

Table 2

One-way ANOVA Summary Table Showing Differences in Measures According to Ethnic Group

	Source of Variation	Sum of Squares	df	Mean Square	F
Goal Setting	Between Groups	3.50	3	1.17	.57
	Within Groups	1092.37	533	2.05	
	Total	1095.87	536		
Perf-Extrinsic	Between Groups	4.86	3	1.62	1.23
	Within groups	700.73	533	1.32	
	Total	705.59	536		
Perf-Intrinsic	Between Groups	26.77	3	8.93	3.50*
	Within groups	1359.10	533	2.55	
	Total	1385.87	536		
Task Significance	Between Groups	48.97	3	16.32	8.46**
	Within groups	1028.77	533	1.93	
	Total	1077.74	536		

* $p < .05$. ** $p < .01$.

The lack of significant ethnic difference is in consonance with Aluko (2003) who found no significant cultural difference among Nigerian workers who are largely extrinsically motivated.

Discussion

There was a significant ethnic difference in task significance/performance but not in goal setting among the Nigerian managers studied. The results are supported by the findings of Eze (1978) and Fagbemi (1981) who found that ethnic group background has differential effects on workers' motivation.

There are various approaches that allow management to design jobs for employee motivation, to increase productivity and to achieve future growth. In order for the job design to be effective, management needs to look at what aspects of the jobs that are important and better fit the organizational goals. Thus, one of the major purposes of job design is to be able to discuss what is needed from the job and the employees. It is of current interest in establishing a link between human resource management (HRM) or high involvement practices and organizational performance with an increase in intrinsic motivation. An individual experiences this state when there is a match between an individual's perceived skills and tasks. Thus, effective job design has become one of the salient aspects of human resources management and organizational behavior so as to survive in the global workplace.

The study has important implications for human resources practitioners, who desire to ensure that employees obtain accurate feedback in perceived good or poor performance situations, to maintain or enhance future performance. Organizations should ensure that supervisors have adequate reward power and also trained to acquire expertise necessary to deliver feedback accurately. Supervisors should also be encouraged to maintain quality relationship with their subordinates, so as to enhance quality interaction that can enhance participation in goal-setting and decision making.

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A Psychometric Evaluation of the Integrity Profile 200 (IP 200) and the Adaptation Thereof for Use in the South African Police Service

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Abstract

Integrity is an essential element of orderly co-existence and an important facet of professional policing. The objective of this study was to psychometrically evaluate the Integrity Profile 200 (IP 200), an instrument widely used in South Africa, to assess its utility as an integrity measure for use in the South African Police Service. Although the literature indicates that the constructs measured with the IP 200 are sound, an exploratory investigation in the South African Police Service reveals poor reliability and unacceptable inter-item correlations. This suggests poor factorial validity (model fit). Subsequently an exploratory factor analysis (N = 1457) was done to adapt the scale and improve the model fit. Four factors were extracted and analysed, and satisfactory psychometric properties were found for these factors, including the absence of race-based item bias. The factors are: (i) Integrity restricting orientation; (ii) Moral conscientiousness and accountability; (iii) Organisational/management integrity, and (iv) Lie scale. The results account for a significant deviation and simplification from the original instrument structure. It is recommended that the original IP 200 should not be used in this context but that the adapted scale be used.

Introduction

Integrity in a policing context has specific importance because the relationship with the public is of an asymmetrical nature owing to the elements of power and authority (Benson, 2010). Furthermore Walkin (2005) is of the opinion that the people in professions that provide a service have a higher social purpose, and that they ought to be good people. Gottschalk (2010), Lee and Vaughn (2010), Miller (2010), and Wolfe and Piquero (2011) suggest that the public has social expectations of the police to set an example and that the integrity of police officials should be above suspicion. Burger (1999) and the Office of Police Integrity (2009) indicate that police integrity should be broadly defined on the basis of related concepts, namely principleness, creditworthiness, reliability, pure-mindedness, worthiness, honesty, ethics, incorruptibility, conscientiousness and standards. Benson (2010, p. 190) defines police integrity as “the tendency of a police official to resist the temptation to abuse the powers and privileges of his position”.

Although high integrity may be expected of police officials, divides in integrity-deviating behaviour often occur (Benson, 2010; Gottschalk, 2010; Huberts, Kaptein & Lasthuizen, 2007; Lee & Vaughn, 2010; Schafer & Martinelli, 2008; Wright, 2010). Haarr (1997), Lee and Vaughn (2010), and Miller (2010) divide integrity-deviating behaviour by police officials into four categories: work avoidance and manipulation, deviant behaviour by employees against the organisation, employee deviance in the interests of the organisation, and informal remuneration. Deviant behaviour also occurs in the South African Police Service (SAPS), as reflected in many newspaper reports and the damning report of Holtzhausen (2001). Benson (2010), Burger (1999) and Grobler (2003) have identified possible reasons for a lack of integrity in SAPS members. These include inadequate and insufficient policy and procedures, managers whose behaviour is not in line with the SAPS code of ethics, the inability of the organisation to fulfil the lifestyle aspirations of its members, and inadequate selection and recruitment.

According to Benson (2010) and Grobler (2003), the SAPS have responded to the issue of integrity-deviating behaviour. In an attempt to deliver a responsible, effective and high quality service with honesty and

integrity, a corruption and fraud prevention plan, disciplinary regulations, as well as an ethical code were introduced. Various writers (Kaptein & Avelino, 2005; Miller, 2010; Svensson, Wood & Callaghan, 2010) support the institutionalisation of an ethical code. Arnold and Lampe (1999) and Miller (2010) maintain that this is often regarded as the first step in addressing integrity and ethical behaviour especially with regard to the organisation's clients. In spite of these initiatives and actions to control deviant behaviour, for example corruption in the SAPS, the SAPS is seen as one of the least trustworthy organisations in South Africa (Benson, 2010). The process of addressing integrity-limiting behaviour in an organisation, and thereby improving integrity in the organisation, requires continuous attention (Arnold & Lampe, 1999; Miller, 2010; Schafer, 2010b). Self-examination is a first step in addressing integrity in an organisational context (Kaptein & Avelino, 2005; Office of Police Integrity, 2009; Sellbom, Fischler & Ben-Porath, et al, 2007). Self-examination will, among other things, provide information regarding possible risk areas and individuals, and assist in the management and development and implementation of integrity interventions. If these risk areas and individuals cannot be removed from the organisation, an active reorientation with regard to the organisation's values and norms should be considered (Gruys, Stewart, Goodstein, Bing & Wicks, 2008; Lee & Vaughn 2010; Miller, 2010; Office of Police Integrity, 2009). This self-examination relates to the need for a measure of integrity.

The measurement of integrity, however, is a controversial subject in organisational and industrial psychology (Congress of the US, 1990; Huberts, et al, 2007; Sellbom, et al, 2007), mainly because there is little or no research to support the instrumentation (Congress of the US, 1990; Murphy, 1995). It is, however, important to have a reliable and valid instrument available for measuring integrity (Congress of the US, 1990; Kaptein & Van Reenen, 2001; Murphy, 1995) if one wishes to predict integrity-related behaviour (Sellbom, et al, 2007). A further controversy related to integrity measures is that these measures historically discriminate against minority groups (Congress of the US, 1990). This could prove to be a pertinent issue in the South African context.

Some integrity measuring instruments focus on operational integrity and are based on situational judgement measurements (Gottschalk, 2010; Miller, 2010; Office of Police Integrity, 2009). The development of such tests is very costly, and appropriate instruments are not readily available in South Africa. In order to address the issue of the measurement of integrity in the SAPS, a more readily available instrument of measurement needs to be found and used. Although many traditional psychometric tests are available, no such measuring instrument for integrity has yet been standardised for use in the SAPS (Grobler, 2003). The IP 200 questionnaire, a questionnaire readily available and often used in South Africa, and the integrity model on which it is based, have also not yet been empirically evaluated to verify that it explains integrity as a construct in the SAPS (Grobler, 2003). Also, no other integrity measures have been standardised in the SAPS. To address this gap, the objectives of this study are to administer the IP 200 to assess its reliability and factorial validity, and to evaluate the instrument in terms of race bias. Factorial validity will be a proxy for the model fit of the instrument.

Integrity measuring instrumentation should be standardised and interpreted specifically in terms of the organisation, because what may be acceptable in one organisation or country will not necessarily be acceptable in another (Department of Public Service and Administration, 2001; Kaptein & Van Reenen, 2001). Gottschalk (2010) and Huberts, et al (2007) support this notion, and they suggest that, because integrity is such an important concept in policing, integrity-measuring instruments should be evaluated differently to other professions and should be organisation-specific.

Having an effective and comprehensive measure of integrity may be a forerunner to taking many corrective actions (Sellbom, et al, 2007). Gottschalk (2010), Huberts, et al (2007), Kaptein and Van Reenen (2001) and Miller (2010) support Arnold and Lampe's (1999) view that a self-investigation by means of an integrity measure is essential for any integrity intervention in order to develop an integrity profile for every individual and group in the organisation. Melamed and Jackson (1995) as well as the Office of Police Integrity (2009) are of the opinion that an organisation's values and creditworthiness can be determined by the degree to which it is

prepared to address the internal endemically, and propose that valid and reliable measuring instruments (psychometric instruments) can play an important role in this process (2010).

Method

Research Design

A survey design was chosen for the research. This specific design entails a cross-sectional design, where a sample of the population is studied in the same time period (Shaughnessy & Zechmeister, 1997). This design is applicable when an attempt is being made to determine the relationships between the variables in a population. According to Shaughnessy and Zechmeister (1997), this design is ideal for descriptive and predictive functions.

A survey design was used for the empirical investigation. According to de la Rey (1978), this method is a backward look where the researcher gathers information on a particular phenomenon and then processes it over time. On the basis of this information the course of the phenomenon is determined and the factors that influence its course are established. The survey method will be based on the administration of questionnaires, which, according to Dooley (1984), is the method most used in the social sciences, and which Glick (1985) and Xenikou and Furnham (1996) propose as the best method for measuring organisational climate.

Participants

Two groups of participants were used in the study. The first group (later called the exploratory group) consisted of 402 participants, from two police stations, namely Alexandra and Kathlehong. The IP 200 was administered on them. Following the unsatisfactory results achieved with this sample, a much larger sample ($N=1,776$) was drawn in order to perform the required exploratory factor analysis. This involved 14 police stations. The 14 stations were those identified by political leaders as part of a larger renewal strategy in SAPS, which included looking at issues of integrity. The police stations consisted of large, medium and small stations.

Measuring Instrument

The Integrity Profile 200 was selected as instrument by the institutional sponsor (SAPS Management) due to its face validity appropriateness to the law enforcement environment. The test distributor granted permission to conduct further research to adapt / customise the instrument for the environment. The Integrity Profile 200 (1999) is based on a model developed by scientists from various disciplines in the social sciences and the humanities (Fick, 2001). The most important step in the development of the model was defining the construct widely enough so that all aspects of integrity were covered (Fick, 2001; Integrity Profile 200, 1999). These constructs cover the broad spectrum of integrity, from the development, correction or remediation of integrity, to the defence mechanisms that are used to justify behaviour that violates integrity. From this Fick (2001) defines nine substructures of integrity, which are represented in the Integrity Profile 200. These are *socialisation*, *reliability*, *creditworthiness*, *work ethic*, *dysfunctional behaviour*, *integrity limiting attitude*, *values*, *manipulative abuse of power*, *support-transformation*, and *management integrity*. Numerous resemblances between Fick's model and literature could be found, notably *socialisation* (Bayram, Gursakal & Bilgel, 2009; Miller, 2010; Schafer, 2010a; Wolfe & Piquero, 2011), *reliability* (Gruys, et al, 2008; Lee & Vaughn 2010; Simons, 1999; South African Police Service, 2002), *creditworthiness* (Benson, 2010; Lee & Vaughn 2010; Office of Police Integrity, 2009; Republic of South Africa, 1997; Van Aswegen & Engelbrecht, 2009), *work ethic* (Babović, 2000; Gruys, et al, 2008; Schafer & Martinelli, 2008; Svensson, et al, 2010), *dysfunctional behaviour* (Lee & Vaughn 2010; Sellbom, et al, 2007; Trevinyo-Rodriguez, 2007; Van Duyne, Stocco, Bajovic, Milenović, & Lojpur, 2010), *integrity limiting attitude* (Benson, 2010; Lee & Vaughn 2010; Miller, 2010; Trevinyo-Rodriguez, 2007), *values* (Holtzhauzen, 2001; Matei, Matei & Savulescu, 2010; Svensson, et al, 2010; Van Duyne, et al, 2010), *manipulative abuse of power* (Huberts, et al, 2007; Kempen, 2001; Lee & Vaughn 2010; Schafer, 2010a), *support-transformation* (Burger, 1999; Hkulalwa, 2001; Van Aswegen & Engelbrecht, 2009; Wolfe & Piquero, 2011), and *management integrity* (Huberts, et al, 2007; Schafer, 2010a, 2010b; Sechrest & Burns, 1992; Sellbom, et al, 2007). It is clear from the aforementioned that many authors on integrity include factors or elements of integrity as conceptualised by the IP 200 Integrity Model (Fick, 2001) in their writings. It would

thus appear that this model is embedded in present literature on integrity, and that it explains the concept broadly enough as to probably be of use in the SAPS.

The IP 200 is an integrated instrument consisting of nine substructures that have been specifically developed to measure the multidimensionality of integrity. Each substructure is measured with 20 items. The instrument also contains a monitoring scale, consisting of a lie scale (10 items) and a consistency scale comprising a combination of 20 items (Integrity Profile 200, 1999; 2000). The respondents provided answers on a 5 point Likert Scale. Misrepresentation is often a problem encountered in most overt integrity tests (Murphy, 1995), and a lie scale or consistency scale is therefore important for placing the results into perspective (Fick, 2001).

Previous research conducted in the United States of America indicates that the IP 200 has acceptable psychometric characteristics. In order to determine reliability, a previous study ($N = 2\ 200$) made use of two techniques, namely the half-split method and the test-retest method. The reliability coefficients that were reported were 0.92 and 0.90 respectively (Integrity Profile 200, 1999; 2000). IP 200 scores were also compared with the "Integrity Assessment Centre" (IAC) results of 211 individuals in supervisory positions. The reported correlation coefficient of 0.76 indicates a coefficient of determination of 0.58, suggesting a 58% shared variance between the measures. A further study in which 384 individuals were evaluated using the IP 200, IP 200 scores correlated the socialisation and functionality vs. dysfunctional factors (0.73 and 0.79 respectively; Integrity Profile 200, 2000).

Statistical Analysis

The statistical analysis was carried out using the SAS program (SAS Institute, 2000). Cronbach's alpha coefficients, inter-item correlations, analysis of variance, as well as explorative factor analysis were calculated.

The Cronbach's alpha coefficient indicates the proportional variance error of a particular scale, while the inter-item correlation is a measurement of its internal consistency. According to Clark and Watson (1995), the inter-item correlation is an important index for supplying information that supplements the alpha coefficients of a scale. Decisions will be guided by cut-off scores for reliability of $\alpha > 0.70$ (Nunnally & Bernstein, 1994) and an inter-item correlation of $0.15 < r < 0.50$ (Clark & Watson, 1995).

An extension of Cleary and Hilton's (1968) method was used to determine item bias (Van de Vijver & Leung, 1997). Item bias analysis was undertaken through the use of linear regression and analysis of variance procedures. The assumption is that an item is unbiased if persons from different cultures, with the same standing on the theoretical construct that underlies the instrument, have the same score on the item (Meiring, Van de Vijver, Rothman, & Barrick 2005).

Principle component analysis was carried out to ascertain the optimal number of factors and an oblique rotation (Promax) was applied to crystallise the solution and to assist in assigning names to the factors. This was done by means of SAS FACTOR.

Results

In the exploratory part of the study, the IP 200 was administered to 402 police officers at the Alexandra and Kathlehong police station. The Cronbach's alpha coefficients and the inter-item correlations of the instrument were not satisfactory. The alpha coefficients of the substructures varied between 0.16 and 0.59, while those of the subfields varied between .09 and .73. The inter-item correlations varied between 0 and .73. These statistics did not comply with the reliability ($\alpha > 0.70$; Nunnally & Bernstein (1994) and inter-item correlation ($0.15 < r < 0.50$); Clark & Watson, 1995) guidelines. This is an indication that the substructures and subfields did not have the required internal consistency (Grobler, 2003).

Owing to the poor results that were obtained for the substructures and the subfields which were the basis of Fick's (2001) integrity model, the data obtained from the second group ($N = 1,457$) was subjected to an exploratory factor analysis. In this group most of the participants held the rank of inspector, and have been promoted in the past five years. The majority of the participants had more than 10 years' service in the SAPS and more than six years' service in their current police station. The age group that was best represented was 31–40 years. The types of work done by the participants in the police stations showed a wide distribution between

client service centre, crime prevention, administration and detective services, as well as the so-called “other” work, for example labourers and cleaners. The group under investigation consisted of 87.29% South African Police Act staff and 12.28% Public Service Act staff. With regard to the highest level of training, most of the participants had a Grade 12 qualification, in other words, the minimum requirement for appointment as a functional or uniform member. Most participants were Black (79.33%), and the official language best represented was Xhosa (16.93%), Venda (15.67%), Zulu (14.22), Tswana (14.22%) and Afrikaans (13.97%).

First-order factor analysis was carried out on all 200 variables (items) using the SAS FACTOR (N=1 457). Eleven factors with eigenvalues greater than one (1) were identified. The scree plot, however, showed a sharp levelling off to the right after the eighth factor, hence only eight factors were analysed with regard to factor loadings. The loadings on all eight factors were unacceptable (loadings < 0.35), and only four factors, which explained 53% of the variance, were included in the final factor structure. The inter-correlations of the four-factor structure of the adapted IP 200 revealed acceptable interfactor correlations, being 0.36, -0.14, -0.41, 0.29, -0.11, 0.36. This meets the guidelines of Nunnally and Bernstein (1994). As a result of these relatively strong correlations (Cohen, 1988), the four factors were rotated by means of the oblique method using a Promax rotation in order to minimise the variance of the distinguishing factors (StatSoft, 1995).

In total 68 of the 200 variables (items) loaded on the four factors, F_1 , F_2 , F_3 and F_4 , and consisted of 26, 23, 9 and 10 items respectively. A cut-off point of 0.35 for inclusion in the interpretation of a factor was used. The factor designations were developed by inspecting the items that loaded on the four factors, and where they were grouped in the integrity model of the IP 200, which is based on Fick's (2001) model. Inspection showed that the items of F_1 were grouped largely under job behaviour, attitudes, dysfunctional behaviour and the manipulative abuse of power, as described in the IP200. We called this factor *integrity limiting orientation*. F_2 showed strong similarities with the IP 200 substructures of socialisation, reliability, work ethic and value. We called this factor *moral conscientiousness and accountability*. The items for F_3 described the integrity of management and the organisation. Items of the original subfields of the IP 200, such as participation, social responsibility, lifestyle aspirations and creditworthiness, were found in F_3 . We called this factor *organisational/management integrity*. Lastly, F_4 agrees with the original lie scale of the IP 200, and was called as such. The squared multiple correlations (SMC), which varied from 0.84 to 0.92, are an indication that the factors are internally consistent and that they are well defined by the variables (items). The communalities of F_2 , F_3 and F_4 , are high, although F_1 only has average communalities. Fifty-three per cent (53%) of the variance is explained by the four factors, with F_1 being the strongest factor, which explains 19.84% of the total variance and 37.40% of the covariance.

In Table 1 the descriptive statistics, Cronbach's alpha coefficient and interitem correlations of the adapted IP 200 are shown.

Table 1

Descriptive statistics, Cronbach's Alpha Coefficient and Interitem correlations for the Adapted IP 200 (N = 1457)

No. of items	Factor	M	SD	Mean ^b	Skewness	Kurtosis	α	r (average)
26	F_1^a	47.69	11.45	1.83	0.39	0.89	0.83	0.16
23	F_2	38.00	10.50	1.65	1.80	6.48	0.85	0.21
9	F_3	21.58	5.04	2.40	0.03	0.59	0.73	0.23
10	F_4	31.34	5.87	3.13	-0.85	0.57	0.85	0.36

^aFactor designations: F_1 : Integrity limiting orientation; F_2 : Moral conscientiousness and accountability; F_3 : Organisational/management integrity, and F_4 : Lie scale.

^bMean score presented on a 5 point scale

Apart from F_2 (*moral conscientiousness and accountability*), the scores of the factors are normally distributed, although the skewness and kurtosis scores are within the parameters of 2 and 7 respectively (Hair, Anderson, Tatham & Black, 1998).

The Cronbach's alpha coefficient of the factors in Table 1 are acceptable if the guideline of $\alpha > 0.70$ (Nunnally & Bernstein, 1994) is applied, as well as the inter-item correlations ($0.15 < r < 0.50$, Clark & Watson, 1995). It would thus appear that the factors have sufficient levels of internal consistency.

The mean and standard deviation should serve as guidelines when the adapted IP 200 is used. With (i) *integrity limiting orientation*, lower scores should be interpreted positively as integrity-limiting orientation refers to a tendency to justify deviant behaviour by means of rationalisation and other defence mechanisms, to display work behaviour that is characterised by a deviation from the rules and the unfair handling of other people, the misuse of power and position to one's own advantage, actions characterised by unethical behaviour, and emotional withdrawal and isolation. These factors concentrate mainly on the work environment and the rationalisation of deviant behaviour, which mostly concerns the satisfaction of needs at the cost of the organisation, junior employees and colleagues. With the second factor, (ii) *moral conscientiousness and accountability*, lower scores should be interpreted positively. A low score indicates that value is attached to membership of a group; behaviour is characterised by self-pride and self-confidence; there is the courage of one's own convictions and a high degree of responsibility and accountability, especially with regard to the attainment of goals. This factor does not focus primarily on the work environment, but rather on general values with regard to the community and individual characteristics in general. With (iii) *organisational/management integrity*, a low score indicates that the organisation provides for the employees' lifestyle aspirations and meets its social responsibilities; that the management is creditworthy, encourages participation and is willing to change. This factor therefore measures the individual's perception of and attitude towards the organisation as well as management. Lower scores on organisational/management integrity would be interpreted positively. The fourth factor does not form part of the integrity model. On (iv) the *lie scale*, a low score indicates the degree to which the respondent has distorted the results, consciously or unconsciously. A high score should be interpreted positively.

The results of the item bias analysis, carried out by means of a variance analysis on the 68 items of the adapted IP 200, were satisfactory. The bias analysis was done with regard to the Black, White and Coloured race groups. The analysis could not be applied to the Indian race group because the group comprised fewer than 50 members, which is regarded as the minimum by Van de Vijver and Leung (1997). It is thus clear that the adapted IP 200 has no race group bias (Grobler 2003).

Discussion

Integrity is an essential element of orderly co-existence and an imperative facet of professional policing, specifically in terms of the social expectations of the public (Benson, 2010; Gottschalk, 2010; Hertzog, 2000; Lee & Vaughn, 2010; Miller, 2010; Sellbom, et al, 2007; Schafer & Martinelli, 2008; Wolfe & Piquero, 2011). Integrity-deviating behaviour often occurs in police organisations, although high integrity is expected of police officials (Benson, 2010; Gottschalk, 2010; Huberts, et al, 2007; Lee & Vaughn, 2010; Schafer & Martinelli, 2008; Wright, 2010). According to Benson (2010) and Grobler (2003), this is not only an international phenomenon, but is also found within the South African context. Arnold and Lampe (1999), Kaptein and Avelino (2005), Kaptein and Van Reenen (2001), Miller (2010), Office of Police Integrity (2009), and Sellbom, et al (2007) regard self-examination (integrity audit) as a first step in addressing integrity-limiting behaviour in an organisational context.

In order to carry out any integrity audit, whether on an organisational or an individual level, it is necessary to have a standardised integrity instrument (Congress of the US, 1990; Kaptein & Van Reenen, 2001; Murphy, 1995; Sellbom, et al, 2007). The value of the utilisation of the IP 200 Integrity Model and the IP 200 questionnaire was determined within the SAPS context. It seems that the constructs of the IP 200 Integrity Model are well represented in literature. Finding literature on the dynamic interplay between the constructs

was difficult and would have been over-ambitious and beyond the scope of this paper. This could also be seen as one of the limitations of this paper which could be explored by future researchers.

The IP 200 was administered and evaluated to assess the factorial validity (model fit) of the instrument in the South African context. The psychometric properties of the IP 200 were tested with significantly poor results. It was found that the substructures and the subfields did not have the necessary internal consistency. This led to an explanatory factor analysis, with the intention to reveal latent structure of integrity as it pertains to the South African population. After all 200 items of the IP 200 had been subjected to an exploratory factor analysis, four factors that explained 53% of the variance were included in the final factor structure. These factors are internally consistent (acceptable Cronbach's alpha values and interim correlations) and are well defined by the variables deduced from high square multiple correlations (SMC) and item communalities.

The empirical results of the study suggest an integrity model consisting of four factors, which contrasts the multi-dimensional literature based Fick (IP 200, 1999, 2000) model. The SAPS integrity model two distinct areas, namely an individual and organisational facet. The individual integrity consists of two factors, namely *integrity-limiting orientation* (F_1) and *moral conscientiousness and accountability* (F_2), which are analogous to the work that Treviño-Rodríguez (2007) has done. The relatively low weighted average was obtained for F_1 and F_2 (1.83/5 and 1.65/5 in Table 1) and is an indication that the respondents are indeed accountable and have the necessary courage of their own convictions to act according to ethical principles, and are able to justify this. These results support the view of Hertzog (2000), Kempen (2001), Lersch and Mieczkowski (1996), Sechrest and Burns (1992) as well as Tswete and Selebi (2000), that there are just individuals in an organisation who are guilty of unethical and deviant behaviour, and that such individuals do not represent the norm.

In contrast to the IP 200 Integrity Model (Fick, 2001), in which the corporate facet comprises two factors, the adapted model has only one factor. This factor is called *organisational/management integrity* (F_3). The weighted average score (2.40/5 in Table 1) indicates that the organisation provides averagely for the employees' lifestyle aspirations and meets its social responsibilities only relatively, and that management's creditworthiness is not without repute. The individuals' perception of and attitude towards the organisation as well as management is thus lukewarm.

The fourth factor that was empirically obtained is concerned with the measuring instrument and is not part of the integrity model. A high weighted average was obtained, which is an indication that the participants answered the questionnaire honestly.

Item bias with regard to the different race groups (excluding Indians owing to poor representation in the population) was carried out, with the result that no significant differences between the race groups were reported. It is thus clear that the adapted IP 200 contains no uniform or non-uniform bias for the race groups in the SAPS.

The relatively positive results of the individual integrity factors are an indication that the average police official has the necessary integrity, as expected from the public. Interventions on individual level should still be institutionalised, such as integrity testing or screening during the recruitment and selection process, regular integrity testing of serving police officials to determine the organisation's (and sub-unit) integrity profile. This could also be used for targeted integrity interventions on individual as well as unit level.

If these results are regarded as a self-investigation of integrity, as suggested by many authors in the introduction, it would seem that the focus should be on organisational and management integrity, owing to the negative score obtained on this factor (See Table 1), and its impact on the individual factors. Benson (2010), Huberts, et al (2007), Lee and Vaughn, (2010), Miller (2010), Office of Police Integrity (2009), Peterson (2004), Schafer and Martinelli (2008) and Schafer (2010a & b) indicate that there is a relationship between police officials' behaviour and their perception of the organisation. If the individual's opinion is that the organisation's values and norms (as contained in the code of conduct) are not visible in management behaviour, deviant behaviour will be manifested, which could clash with the organisation and with the attainment of goals. A positive attitude towards the organisation, management and the work of police officials will result in the individual desist-

ing from deviant behaviour, especially if it negatively affects the image of the organisation and goal attainment (Simons, 1999).

Simons (1999) maintains that management integrity is an essential component when an organisation is in the process of transformation; in other words, all management and organisational processes should be modelled on clear moral and ethical principles. According to Hertzog (2000), Kaptein and Van Reenen (2001), as well as Sechrest and Burns (1992), these principles should be communicated clearly and unambiguously to all members of the organisation. According to Burger (1999) and Kaptein and Van Reenen (2001), the example set by the management of the organisation is the most important component of organisational integrity; in other words, management behaviour should be directed by, for example, a code of ethics. In studies by Van Aswegen and Engelbrecht (2009) as well as Wallace, Hunt and Richards (1999) it was determined that there is a direct relationship between the way in which management demonstrates its values (management integrity) and organisational climate, including trust, the perception of leadership support, cooperation, conflict and role ambiguity in a police environment.

This study has specific shortcomings that should be taken into account. Reference was already made to the absence of a discussion on the dynamic interplay between the constructs of the IP 200 model. This was difficult and beyond the scope of this paper. This could be explored by future researchers. A further matter that needs to be addressed in future research is the investigation of differences in factor structures across ethnic groups.

The measurement is based on self-reporting, which was not verified by means of objective criteria. The inclusion of the lie scale somewhat compensated for it, but future researchers are urged to find objective external criteria. In many respects this research is only a first step in a long process, and objective criteria should be included in future studies. Finally, the population comprised only participants stationed at 14 police stations, which are not representative of the SAPS as a whole. However, this research covered a broad range of police stations and the standardisation data collected could be used as a starting point for future investigations.

Recommendations

The SAPS has an urgent need for an integrity measure, especially in terms of an “integrity thermometer”, as Kaptein and van Reenen (2001) call it, as part of an organisational development and integrity intervention. The adapted IP 200 can be applied as such a tool and can be tentatively (experimentally) used as a selection tool for police recruits, as well as an integrity barometer in identified units, sections or police stations in order to develop integrity profiles for these.

One area in this study that has been identified as a problem in the 14 police stations are the negative perceptions of management/organisational integrity. It is recommended that interventions should be developed so that members have certainty with regard to expectations, that they see management as being consistent, that goal setting is realistic and attainable, that members obtain support from the organisation and management, and that ongoing feedback occurs through open communication and remuneration as well as through recognition. These interventions would be in line with the seven-factor development model of Kaptein and Van Reenen (2001), and the writings of Burger (1999), Hertzog (2000), Sechrest and Burns (1992), as well as Wallace, et al (1999).

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Part 5: Religion

The African Conception of Death: A Cultural Implication

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Abstract

From an African perspective death is a natural transition from the visible to the invisible spiritual ontology where the spirit, the essence of the person, is not destroyed but moves to live in the spirit ancestors' realm dead. It signifies an inextricable spiritual connection between the visible and invisible worlds. This chapter focuses on how traditional Africans conceive and deal with the bereavement process. We adopt the African worldview and philosophy as our framework. We dispute the often held view in mainstream psychology that behavior, in this case the concept of death and the bereavement processes have universal applicability, articulation, representation and meaning. For Africans, death is accompanied by a series of the performance of rituals which connect the living dead and the living. Two case studies are presented and discussed to illustrate the African conception of death, its meaning, significance and accompanying mourning rituals and process. We approach the participants' stories from a qualitative narrative inquiry viewpoint as our methodology. The experiences in the participants' stories in the workplace reveal that African indigenous ways of dealing with death are still not recognized, respected and understood in organizations which have a dominant Western culture.

Introduction

The professional study of psychology in African has been and is still dominated by Euro-American approaches (Nwoye, 2013). Similarly, views on conceptions of death in psychology are based on traditional Euro-American epistemological paradigms. Matoane (2012) argues that a lot of psychological theories from the West are regarded as universal. Subsequently, theories of death in mainstream psychology mirror this dominant thinking which is based on certain assumptions and realities about a person and the social world in which they exist. For example, the assumption that Erickson's theory of development in the field of psychology is applicable to all humanity in general represents this dominant and universalist position. A review of literature in mainstream psychology texts reveals an abysmal ignorance and absence of valid and relevant historical and cultural material and reality on African people (Parham, 2002 & Nobles, 1986 & 2006). For Western or European-centered psychology, the African as a member of an ethnic group does not exist (Parham, 2002). These Euro-American conceptions are mostly presented as having universal applicability to all human diversity (Parham, 2002, Grills, 2002, Mkhize, 2004, Nsamenang, 2006, Nobles & Cooper, 2013). This universal applicability is limited and excludes other realities such as those of Africans whose conceptions of death for example, are different in interpretation, representation and meaning. No measure of imported experience can ever be authentic, unless it is constructed and interpreted from within the context of the lived experiences of the recipients. Amankwantia II in (Parham, (2002, p. xxii) argues that "only arrogance and hegemonic intent can explain the blind application of particular experiences of humanity as if they were valid global models". In understanding the African cultural reality, we have to avoid what Nobles, 2013, calls 'conceptual incarnation' and demonstrate the understanding that there is no normative population or behavior in the world, except for that particular context (Parham, 2002). In our view and experience, the misunderstanding and conflict that often arise in multicultural context especially the workplace, is due to the different conceptions of experiences such as death, its cultural implications and meanings of the rituals performed during and after death. This is so

mainly because there is no or very little dialogical engagements and conversations between the different world-views and realities.

The Work Context

Work, like any other contexts plays a very important role in the life, interaction and meaning of the African people. To this effect, work plays a vital role in understanding and facilitating healthy employees and organizations (Bergh, 2011). Consequently, the facilitation of a healthy interaction between employees and their work context leads to positive wellbeing and cosmic order and harmony. By contrast, poor work experiences and the loss of work have been associated with many psychological ill effects for employees (Bergh, 2011). Bergh (2007) suggests that the presence of certain values and the extent to which individuals can identify with their workplace influence their work experiences. Job satisfaction is affected by different sets of factors which assist in understanding why people are satisfied or dissatisfied. Misunderstandings, conflict and unfair treatment arise from lack of supportive policies which take into account the diverse population in the workplace. Instead of seeking clarity, Euro-American thinkers have a tendency of rejecting or negating cultural realities that they do not understand or cannot be proven using Western conventions (Parham, 2002; King, 2013). The “culture-negating dimension of Western psychology” (King, 2013, p. 225) contradicts the overwhelming evidence of the importance that culture plays in understanding human behavior (Holliday, 2009). The question to be asked and addressed in this chapter is: how do employers and employees deal with cultural differences, and why is it important to attend to these cultural differences in the work place. The two case studies presented in this chapter are an example of a culture-negating Western system of thought.

This chapter deals with the African conception of death, the bereavement process, its meaning and significance to the people of African ancestry. The aim is to present the African conception of death as a culturally salient psychological material whose meaning needs to be differently understood in mainstream psychology in general, and in the workplace in particular. Death will therefore be presented using the African epistemological paradigm and worldview as an underlying philosophy. The African ways of knowing, doing and being as well as the understanding of self will be espoused (Ramosé, 2002a; Mkhize, 2004; Nobles, 2006; Mariette, 2013). Therefore a communal, interdependent and co-existent sense of being which is based on the philosophy of Ubuntu is presented. Ubuntu is the basis of African philosophy (Ramosé, 2002). This framework will provide an understanding on how Africans perceive and make sense of death as a natural transition from this life into the next (Mariette, 2013), as well as an integral part of their being-in-the-world. It is envisaged that this understanding will provide a broader and inclusive conception of death especially in the workplace. This will hopefully create a conversational space that will reduce the often experienced misunderstanding, tension, conflict and hostilities which in most instances result in strained relationships, loss of jobs and psychological trauma on employees. The lack of dialogical engagement in socially and culturally polarized contexts such as South Africa maintains the domination of the knowledge landscape by Euro-American paradigms. The problem arising from this situation has been, as we argue, that African people’s cultural experiences have been conceived and theorized from foreign ways of knowing and doing (Grills, 2002; Obasi, 2002; Nobles, 2013; Tlou, 2013). This in our view continues to create epistemological injustice, inconsistencies and has profound cultural implications in multicultural communities and contexts such as South Africa. We argue that a congruent and authentic understanding of death in Africa and the Diaspora contexts, like any other concept and experience, should seriously take into account the cultural experiences and philosophies of the African people. In this way, psychology will become relevant and inclusive of other cultural experiences and represent indigenous life in what Motha (2010), so eloquently refers to as the epistemology and ontology of postcolonial becoming. In our view, postcolonial becoming of previously colonized indigenous people should fully and unconditionally acknowledge African lived experiences and cultural practices as authentic, different and equal to other knowledge systems. Africans should and, must be able to determine, define and present their cultural practices and concepts as part of valid human knowledge experience in the broader psychology landscape and cross-cultural interactions. We will present two case studies to demonstrate the potential conflict, emotional hurt and misunderstanding which

could arise in a multicultural work context if there is lack of dialogical engagement to deal with the culture-negating attitudes and discourse.

The African Philosophy and Worldview

Before we espouse the African worldview, it is important to ask the question: Is there an African epistemology and philosophy? This question has been the subject of critical dialogue by scholars in the field of philosophy for many decades (Wiredu, 1980; Hountondji, 1983; Mbiti, 1990; Gyekye 1995; Kaphagawani & Malherbe, 2002). Despite these questions, there is proof that there is a display of African behavior that continues to maintain cultural connections and traditions, the wellspring flowing from the African ontology and epistemology (Ramose, 2002a, Grills, 2002, Nobles, 2013). To the extent that there is such an animal as an African, there is an African epistemology, ways in which Africans conceive and understand the world as well as the unique ways in which Africans use their knowledge systems to advance their development. According to Obasi (2002), “African philosophy is the study of a particular system of ethics, conduct, thought, nature of the universe, and so on, that has its basis in the culture and experiences of African people” (p. 54). Epistemology is a subset of African philosophy (Kaphagawani & Malherbe, 2002). As Keeney, (1979) plausibly argued, one cannot not have an epistemology. All people, Africans included, have an epistemology and some form of knowledge (Okere, 2005). The African philosophy, epistemology or worldview presented here is not “restricted to a specific African ethnocultural group, but rather reflects a basic historical continuity, historical consciousness and cultural unity which offer an understanding of things African, African culture and cultural adaptations and what it means to be African” (Grills, 2002, p. 12).

The assertion that there is an African philosophy, epistemology or worldview does not in any way dismiss or deny the differences that exists even between African communities in Africa and elsewhere in the world. Amuleru-Marshall and Amuleru-Marshall (2013) warn against overgeneralizations and being prescriptive by arguing that “Even when one presumes to be accessing deep cultural structure, it would not be found that African Caribbean culture is characterized by a common worldview that resembles that which is advanced by American Africentric psychologists” (p. 322). We take cognizance of these differences but still agree that in the main, there are things uniquely African, shared African conceptual frameworks and cultural practices which espouse the African reality which is different from Western conceptions (Biko, 2004 & Nobles, 2013). Ramose, (2002a), maintains that “a persuasive philosophical argument can be made that there is a ‘family atmosphere’ that is, a kind of philosophical affinity and kinship among and between the indigenous people of Africa” p.40. African psychological reality and thought is a view that reflects an African orientation to life, the world, and relationships with others and one’s self and is prevalent in people of African ancestry and the Diaspora (Grills, 2002; Obasi, 2002).

The African worldview refers to the way in which Africans perceive their world which, in turn, influences their ways of knowing and doing. There is no such thing as a value-free cultural system. All knowledge systems have philosophical underpinnings, are contextual and culture based and to some extent biased. African (Black) philosophy is rooted in the nature of Black culture which is based on particular indigenous philosophical assumptions (Nobles, 2006). Worldviews and cultural systems are by their very nature biased towards other cultural value systems. A worldview is the embodiment of people’s cultural beingness and identity. The world view of African people can be conceptualized along the following dimensions (Grills, 2002; Lyons, Bike, Johnson, & Bethea, 2012):

1. Cosmology (i.e., the structure of reality) which may be grounded in interdependence, collectivism and harmony with nature.
2. Ontology (i.e., the nature of being and reality) where there is recognition of the spiritual bases of nature, one’s existence, and the universe.
3. Axiology, the primary importance of human to human interaction as a value system
4. Epistemology, a system of truths and a method for revealing or understanding truth or generating knowledge (Grills, 2002)

The above dimensions are supported by Okere (2005) and Battiste (2008) who argue that indigenous people's epistemology is derived from their immediate ecology, experiences, perceptions thoughts and memories and experiences which are shared with others and their spiritual world. From a philosophical, epistemological and ontological viewpoint, inquiry and reality cannot be confined to normative standards and linear reasoning determined by rational laws and rules (Grills & Ajei, 2002). There are things that are beyond the confinements of rationality, things spiritual. For instance, it is difficult to understand why death occurs despite all the possible predictions and technological advancements.

Death and the African Philosophy

Death is a natural transition from the visible to the invisible or spiritual ontology where the spirit, the essence of the person, is not destroyed but moves to live in the spirit ancestors' realm. (King, 2013). The above meaning attached to death is therefore consistent with the African's cultural, historical epistemological and methodological conceptions of being-in-world, and are premised on these dimensions. Perceptions and conceptions about death in any cultural system are based on certain philosophical presuppositions and worldviews. Similarly, conceptions of death particularly in indigenous Sub-Saharan Africa are understood on the above dimensions. Given that there are cultural differences in conceptions of the person, conceptions of humanness can vary across cultures as well (Park, Haslam, & Kashima, 2012). It is for this reason that we are careful not to assume that all Africans conceive death according to the above dimensions of being-in-the-world. All systems are influenced by, and based on a particular epistemological paradigm consistent with that particular cultural context. In line with this worldview, we will attempt to provide an indigenous African conception of death which is based on the African epistemological paradigm. We posit that death ought to be understood within its philosophical-socio-cultural context for its meaningful interpretation and understanding.

According to Mbiti (1990), African philosophy is the understanding, attitude of mind, logic, and perceptions behind the manner in which African people think, act, or speak in different situations of life. The being of an African does not exclude the spiritual connectedness with the world of the living dead or as Mbiti (1990) puts it, the spiritual presence in the affairs of the living or becoming a member in the company of spirits...considered to be in a state of personal immortality (Nobles, 2006). Nsamenang (1992, 2006) states that an African worldview envisions the human life cycle in three phases of selfhood. There is a spiritual selfhood, which begins at conception, or perhaps earlier in an ancestral spirit that reincarnates. Second is a social or experiential selfhood which begins at conception the cycle from rite of incorporation or introduction of the child into the human community through to death, third; an ancestral selfhood which follows biological death.

It is worth noting that from the indigenous African worldview, these selfhoods do not exist as autonomous, independent and in isolation. They are interdependent, interrelated and co-exist in a collaborative and collective way, hence the concept of collective or interdependent self (Mkhize, 2004). The self gets defined and understood in relation to the others, and gets meaning from its relational connectedness to other cosmic life forces. The meaning attributed to the self is based on the meaningful contribution the self makes to the wellbeing of others and the environment. Life experiences and developmental phases, death included, are not viewed as separate from each other, outside of their encompassing context. When people die, they transcend to the spirit world to be in the company of the living dead or ancestors. Ancestors protect and provide guidance to those in the material realm and therefore are highly respected, venerated and very important to the community of the living (King, 2013). There is therefore continuous and unbreakable communication and connectedness between the living and the living dead. For the traditional African people the deceased is believed to be living in the ontology of the invisible intangible beings, dynamically engaging in an evolving state of existence in the world of the animated being (Baloyi, 2008). The belief here is in the actual presence and influence of the deceased, the living dead in the lives of the living. Implied here is spiritual disposition. Spirituality in terms of traditional African thought forms an integral part of the cosmic ontological unity. The spirit of the living dead is embodied in this cosmic unity. The spirit is therefore a member of life forces that constitutes the wholeness of the cosmic unity. Be-ing as a wholeness includes the totality of all beings, animate and inanimate. Viewed from this perspective, Africans do not conceive death and life as two separate phases, instead, there is a har-

monious and interdependent coexistence between the two life forces (Ramose, 2002a). This is approaching the African person in his /her religious understanding of the two dimensional community of the living and the living dead (Bujo, 1998). It is however worth noting that the belief in after life has many variations and is shared by many traditional Western religious and indigenous traditional cultures.

The African Conception of Death

From the Euro-American perspectives, life is seen to be consisting of discrete stages, starting with conception and ending with death. Death therefore marks the end stage of life. On dying, the dead person literally ceases to exist. On the contrary, an African worldview understands death as an integrated and continuous developmental life process which is inseparable from the interwoven connections between the visible and invisible ontologies. People do not cease to exist once they are physically dead, instead, they transcend to the spiritual world to live in the community of the living dead (Mbiti, 1990, Ramose, 2002a & Bujo, 1998). For indigenous African people, dying marks a further developmental milestone which is not separate from life developmental processes and stages. For the indigenous African people, dying is a transition to, or 'growing' to a different phase of being. The dead transcends to the state of collective immortality and exists in the company of the spirits (Nobles, 2006). Motsei (2004) emphasises the spiritual connectedness by reminding us that when we die, we transcend to heaven. This heaven is however here on earth, in Setswana - *legodimo le mo lefatsheng*-earth-bound emphasises the interconnectedness and interdependence of the two ontologies. She further states that we tend to perceive heaven as a place remote and high above us which we get to inhabit only once we die, yet heaven is in the here and now. Like birth, death is characterised by a series of cultural rituals and rites of passage which at times continue for the duration of the mourning period, as long as the living dead is remembered and continues to influence the actions of the living. The mourning or grieving process cannot therefore be linked or limited to some time span in a discrete sense. It is for this reason that Africans take time off from work when their loved ones are dead, to perform rituals that eternally connect them to the deceased. Therefore from an indigenous African ontological viewpoint, death does not imply an end to life, instead, it marks the beginning of another phase of being (King, 2013). The process of reincarnation, in which Africans believe, allows life process. The meaning of reincarnation here should not be understood in the Western ancestors amongst others, to return to their families in their grandchildren Oluwole (1992), to maintain this never ending evolutionary sense of the dead coming back in a different form or spaces. Instead, it emphasises different forms of remembering and acknowledging the ever present spiritual beingness of the living dead. Dreams are also forms of communication which maintain these unbreakable connectedness. For traditional Africans, the living dead are an inseparable and influential part of their being. It is for this reason that when Africans perform rituals by the grave side for example, that they do not refer to connecting with the dead person's spirit. They communicate with the living dead as, 'I am talking to my father or mother or grandfather, not the spirit or body of my dead father or dead mother'. This is a clear illustration that the living dead are regarded as genuine and authentically living with and among the living and having an influence on them.

Rituals and Death

Rituals are representation of cultural performances and rites of passage which mark a people's life experience. Properly construed, rituals are an expression of people's thoughts, emotions, social organization and cultural identities. They are therefore regarded as viable scientific methods of connections and dialogue. Baloyi (2008) posits that rituals are forms of expressions and connections performed by individuals, groups of people or communities in communication with the living-dead and the Supreme Being. In traditional African thought of death, the grieving process is characterized by rituals such as the bereaved family members shaving their hair, and the slaughtering of a domestic animal. Different rituals are performed depending on who is the deceased and how they have died. In South Africa some of the Bapedi tribe that originates from Limpopo province, believe that when a married man dies, his widow is forbidden from arriving home after sunset, visiting neighbors, attending family and community functions and wears black clothes. The black clothes symbolize the dark cloud, death which is associated with loss and pain (*bohloko*) in Sepedi. In case of the wife dying, the widower is also forbidden from having an intimate affair before a stipulated period, usually six months to one

year depending on the cultural group concerned. He is also barred from arriving home after sun set. There are different practices which vary from different ethnic groups and they all have symbolic significance. The performance of these rituals is seen as important in maintaining balance and harmony between the living and the living dead. This is the basis on which the connection between the physical and spiritual ontologies is maintained and enhanced.

Ubuntu, Harmony and Cosmic Order

Every culture is premised on a certain worldview. Mkhize, (2004) defines a worldview as a set of basic assumptions that a group of people develops in order to explain reality and their place and purpose in the world. These assumptions provide a frame of reference to address problems in life. Traditional Africans understand their being-in-the-world as a qualitative tapestry of connected systems which deal with life issues collectively and collaboratively. This connectedness is reflected and manifests itself in people's relationships with the others and their enviroing context. Human beings are therefore interdependent and are expected to co-exist harmoniously and responsibly in order to promote peace and order. Ramose (2002b) argues that "Peace through the concrete realization of justice is the fundamental law of *Ubuntu* philosophy. Justice without peace is the negation of the strife towards cosmic harmony. But peace without justice is the dislocation of *Umuntu* from the cosmic order" (p. 52). This quality of being-with-and-for-the-others life (Mkhize, 2004), is referred to as ubuntu. Ubuntu is therefore an African philosophy, a way of being-in-the-world. However, the African way of being-in-the-world extends beyond their physical space and include their relationship with the living dead. Therefore, Umuntu cannot attain Ubuntu without the intervention of the living-dead. The living dead are important to the upkeep and protection of the family of the living. This speaks to the Ubuntu understanding of cosmic harmony (Ramose, 2002a). Death cannot therefore fully be understood outside the philosophy of Ubuntu. The philosophy of Ubuntu is inextricably linked to the living dead. Providing food to the masses of people who come to the funeral including slaughtering an animal is an Ubuntu philosophy imperative. The process of burying the dead, the accompanying rituals and the veneration of the living dead constitute performances and conversations as authentic. The methodology through which African experiences and practices are studied and construed should be consistent with the African worldview and philosophy. In this way research in the African context will reflect authentic epistemological and methodological justice and relevance.

Methodology

In line with the traditional African worldview, philosophy and oral tradition, we used the indigenous story-telling as the method of inquiry through which we understood the narratives of the two participants. Oral traditions play an important role in knowledge production, preservation and dissemination, and are not less important than written texts (Oluwole, 1997). Story-telling as a cultural representation in research contexts is usually referred to as narrative inquiry (Stake, 2000; Lee, 2009). Through story-telling, knowledge is produced, preserved and disseminated from one generation to the other. Story-telling has been one of the key cultural ways knowledge was explored, sustained and protected within indigenous communities. "Reclaiming story-telling and retelling our traditional stories is to engage in one form of decolonization" (Lee, 2009, p. 2). Story-telling is embodied within the oral traditions which reflects the memory of indigenous people and encompasses their cultural values. In the context of academy, scholarly research and the science discourse, African indigenous methodologies are faced with the challenge of legitimacy and acceptability in a multicultural research contexts (Weber-Pillwax, 2004). However, indigenous researchers are gradually finding appropriate ways to apply their own tribal epistemologies into their research work. According to Kovach (2010), indigenous researchers have the responsibility to assist others to understand and know indigenous worldviews in a responsible and respectful way.

The two case studies in this chapter provide one way of creating conversations and space for possible learning, creating an understanding of alternative realities and meaning in multicultural contexts. From the traditional African worldview, knowledge is not only acquired through formal learning and education. The Sesotho/Setswana saying; *go tsamaya ke go bona/go ithuta*, moving around or getting out of one's comfort zone opens possibilities to new experiences and learnings. The above idiom indicates the boundless, non-restrictive,

non-formal and spontaneous ways of learning, knowing and being of Africans which is not limited by prescriptive laws, time and space. Every encounter is therefore a qualitative knowledge generating and experiential space. The African saying in *Sesotho/Setswana motho ke taba*, a human being is a story or the very nature of being human tells a narrative about people's cultural and historical background. Kovach (2010) maintains that stories remind us of who we are and where we belong. The line of argument here is that stories are an inextricable part of our identity and being. Emphasis here is on the interconnectedness between the value of knowledge and relationships. Therefore the act of listening to people's stories is in itself a knowledge seeking method. Similarly, stories as indigenous inquiry are grounded within a relationship-based approach to research (Kovach, 2010). Inherent in these narratives, ways of knowing and doing are the different non-linear methodologies which contain African philosophical thought, epistemologies, narratives, rituals and performances which are fundamental to the African identity. These forms of knowing and doing then are characterized by indigenous methodologies that are different from the traditional Euro-American research paradigms.

Indigenous methodology can be defined as a research by and for indigenous peoples, using techniques and methodologies obtained from the traditions and knowledge of those peoples, Evans, Hole, Berg, Hutchinson & Sookraj (in Denzin, Lincoln & Smith, 2008). The qualitative nature of these narratives and conversations provide meaning and, by implication very useful sites of knowledge. Lyons, Bike Johnson & Bethea (2012, p.155) point to the "potential congruence that may exist between qualitative research and African cultural values". On this reasoning, these authors argue for the relevance of qualitative research to the life experiences of people of African descent. In support of the qualitative-relationship nature of the-being-of-Africans, Lee (2009) maintains that within each indigenous group there are multiple sites from which to intervene that require a range of research projects that are ethical, respectful for, by and with indigenous people's qualitative approaches. Kovach (2010) concurs with Lee (2009) that indigenous methodologies can be situated within the qualitative landscape because they encompass characteristics congruent with other relational qualitative approaches. In our view, qualitative narrative enquiry is congruent and consistent with the African worldview because it allows the researcher to be subjective and reflexive and therefore in touch with his or her culture and lived experiences. On the other hand, this form of inquiry benefits participants by providing them with a space to be listened to and authentically connect with researchers. In research and therapeutic contexts, pre-existing relationships are therefore deemed significant (Kovach, 2010). The use of story-telling (Purakau) in clinical therapeutic contexts has also been used by other indigenous communities such as the Maori practitioners (Lee, 2009). In the case of our encounter with the two participants presented in this chapter, they narrated their stories in the context of therapeutic conversations. The narrative sessions took place three months apart at different consultation places. Both participants came voluntarily to share their stories with the therapist.¹

¹ The names used in the two cases are pseudonyms.

Case 1:

Presenting problem and background Information:

Sizwe is a black Shangaan male, aged 35 years. He worked for a Coin Security firm as a security guard. During the conversation he complained about insomnia, loss of appetite, loss of interest in his work and general low mood.

His sister passed away due to HIV/AIDS related illness. Sizwe was worried about how he was going to provide food for all the relatives and community members who were going to be physically assisting with funeral arrangements (setting up tents, cooking, providing wood for cooking and digging the grave) as well as those that will be providing emotional and spiritual support to the family before and after the funeral. Sizwe was overwhelmed by all these demands and asked for financial assistance from his boss to buy a cow for the funeral ritual. According to Sizwe, slaughtering of an animal and spilling blood symbolizes an unbreakable spiritual connectedness between the leaving and the living-dead and had to be done for Sizwe's sister to rest in peace. Sizwe reported that his boss responded by asking him why is he wasting lots of money feeding the whole nation some of whom did not have any relationship with him or the family. Besides not giving him the advance, the boss reportedly walked away as Sizwe was trying to explain his dilemma and told him, 'you must change your wasteful culture'. Sizwe was badly scared emotionally to the extent of seeking therapy two days before the burial of his sister.

During the initial conversation with Sizwe, we established that he was not emotionally coping with the death of his sister. He was however mostly disturbed and unhappy with how his employer treated him. When asked what his expectation was, Sizwe told the therapist that given his emotional state, he expected his boss to be empathic, supportive and sensitive to his painful loss. The unmet expectations seemingly resulted in a lot of hurt, frustration, misunderstood, disappointment and general feeling of being undermined and disrespected.

Reflections and Observations on Narratives

Our reflections on the two narratives proved both challenging and interesting. We are inextricably linked to the worldview and epistemological paradigm and culture as those of the participants. This made it easy to connect with the participants. The pre-existing relationship that Kovach (2010) maintains was somehow 'already there' and therefore the negotiation of the relationship and our shared worldviews created deep connections. In this way, we are in essence re-telling a story about the story. We see ourselves in the stories of the participants. Our experiences are in line with the African worldview and narrative inquiry research method (Kovach, 2010) because it allows researchers to be culturally responsive by allowing indigenous stories to be legitimately told and represented (Lee, 2009). The indigenous languages (Sepedi and XiTsonga) adopted by the therapist during his conversation with participants assisted in creating deep connections and meaningful narratives. At the level of participants' process, the following observations were made:

The two cases demonstrate conflicting worldviews and cultural differences between the employers and the employees. Employees and employers were faced with several cultural and organizational challenges. Both employees and their organizations believed in different sets of values which are important for the existence and functioning of each. This invariably created tensions between the two epistemological paradigms.

Case 2:

Presenting problem and background information:

Takalani is a black Venda female, aged 48 yrs. She was employed as an ordinary worker in a textile firm. When she consulted, her husband had been killed in a car accident and she was referred for therapy a month after her husband's burial. The initial conversation with Takalani revealed that she had generalized anxiety and fear, insomnia, exhaustion, persistent headaches and lack of motivation.

Takalani stayed with her two children, aged seven and thirteen. Most of her relatives or support systems were staying in the rural Limpopo province in South Africa. Her culture required that as a widow she was supposed to observe certain prescribed cultural rituals, for example (not arriving home after sunset, performs cleansing rituals every day before sunset for several months, *go aramela go ntsha seffi* (cleans bad spirits through steaming)). It was discovered that Takalani was very worried about losing her job because her employer wanted her to continue with her night duty shift a week after her husband was buried. Takalani mentioned several times that her employer was unsupportive, unreasonable and disrespectful of her traditional practices. On one occasion her boss allegedly asked her 'how long was she going to stay at home for someone who was dead and would not bring her back to life?'. Her boss reportedly blamed her 'backward culture' for her problems. She was caught up between her belief system and cultural practices and her work (organizational demands), and wanted to do the impossible task of satisfying both realities. Takalani felt very vulnerable, confused, ambivalent and worried that she would lose her job.

The difference in the epistemological and ontological realities which result in misunderstanding, hurt, conflict and frustrations cannot be blamed on one particular epistemological paradigm and cultural belief system. Both the African and the Euro-American worldviews have different understanding, meaning and significance they attach to death.

- Despite the employees' attempt to explain their cultural dilemma, there was no interest on the part of the employers to listen to the meaning attached to death. The lack of conversation around death and its meaning created feelings of rejection, lack of support and hostilities.
- Organizational expectations in the above cases are inconsistent/ in conflict with the African employees' cultural belief systems, while on the other hand, the employees' expectations are also at variance with the culture of the organizations.
- Based on the experiences of participant in the two cases presented, the philosophy of Ubuntu (love, respect and caring for fellow human beings), which is the basis of African philosophy and sense of being, does not form part of organizations' culture.
- African culture conceives and perceives death as a grieving process which is not restricted to time. This process is marked by a series of spiritually connecting rituals which have symbolic and material meanings to the living dead and the living, therefore death and mourning are not regarded as discrete activities but circular processes which stretch over time.
- The employees represent an African value and belief system which is based on the African worldview, while the predominant value system of their companies represents the capitalist production based paradigm. None is less valid or more significant to the other. They both have legitimate claims over their respective realities.
- The attempt to explain the significance of death and the accompanying rituals by both employees seem to be dismissed without any attempt to create a conversational space about this African reality.
- Employees, by virtue of their financially dependent position are left with the either/or choice which places them in an untenable paradoxical position, resulting in emotional pain which is manifested in physical symptoms.
- The solution for the above challenges lies in the mutual respect and understanding of cultural differences of the two worldviews on the conception and understanding of death. Therefore, the need for a conversational space and epistemological engagement between the two worldviews is imperative for

the meaningful and peaceful co-existence of employers and employees.

Conclusion

The dominance of Euro-American worldviews and epistemological paradigms has deprived the world from learning each other's diverse cultures. Kincheloe and Steinberg (2008) emphasize the importance of exchanging information between people of different nations because it enhances multiple perspectives in all dimensions of life. The methodologies through which different cultures are studied and understood should also be consistent with indigenous epistemologies. The move from a universalist understanding and application on human behavior and concepts, to a culture appropriate and sensitive praxis is therefore imperative to address the colonial discourse which has dominated the field of psychology and the workplace. The acknowledgement and appreciation of the role of culture in human behavior and in the workplace is likely to create positive working conditions, experience and enhance the quality of relationships through the congruent implementation of policies that support diversity. Diversity are not easy to implement, however, if properly applied diversity can also be a resource (Leung, 2012). The recognition of cultural diversity in our context (for both employer and employee) is not only an African issue, but a human right issue, it is a constitutional imperative. The two cases presented above have illustrated the epistemological and ontological distance that exists between Euro-American and African worldviews and often result in misunderstanding and hostilities. The need for inter-cultural conversations and the openness to listen to the stories of those who are different to one's culture is greater than ever before.

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Spirituality as a Predictor of Reduced Suicide Risk in a Religiously and Ethnically Diverse Youth Sample

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Abstract

Cross-cultural suicide research on spiritual faith as a protective factor in youth is limited. The aim of this study is to examine spiritual faith as a predictor of passive suicidal ideation in a racially and religiously diverse sample of college-aged youth. Participants ($N = 243$) completed self-report instruments to assess suicidality, social support, reasons for living as well as existential and religious well-being. Over 50% of the sample reported identifying with a racial group including Asian, Hispanic and Black. Approximately 81% of participants reported they had spiritual beliefs ($N = 196$) representing a variety of religions, including Catholicism, Judaism and Islam. Analyses of variance were used to assess any mean group differences for race, gender and having a religious affiliation using each of the predictor variables. Although racial group differences were not found significant, the analysis yielded significant results for gender, where females reported more reasons for living than males. And for those with religious affiliation, participants reported higher levels of social support, religious well-being and reasons for living. In the final regression model, over and above the influence of gender and religious affiliation, positive faith-based beliefs along with social support was associated to lower levels of passive ideation. Implications of findings and future research are also discussed.

Introduction

Although suicide rates may differ by country, suicide is a global health crisis. According to the World Health Organization, suicide is the second leading cause of death for adolescents and young adults worldwide (WHO, 2002) and is also the second leading cause of death in the United States (Crosby, Han, Ortega, Parks & Gfoerer, 2011). Furthermore, suicide rates overshadow the depth of suicide risk among youth, especially the number of youth who think about self-harm. For example, these statistics do not include suicide attempts, which are up to 20 times more frequent than completed suicide (WHO, 2002); nor do these numbers include the larger proportion of youth who think about suicide (Gaynes, West, Ford, et al. 2004).

One of the principal goals of cross-cultural psychology is to test the generalizability of existing psychological theories in culturally diverse samples (Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2011). Although suicide exists in almost all cultures and ethnic subgroups (Chu, Goldblum, Floyd, & Bongar, 2010), suicide and protective factors research in cross-cultural youth samples is limited and in particular, the exploration of spiritual faith as a protective factor against suicide. Spiritual faith is embedded in the cultural norms, values and traditions of most ethnic groups (Lun & Bond, 2013). Hence the examination of spiritual faith from a cross-cultural perspective would provide a novel investigation, exploring its deep-rooted connection to culture and its role as a resiliency factor for youth. Therefore the goal of this paper is to examine spirituality as a protective factor in youth, highlighting its role as a sociocultural protective factor in ethnically diverse youth.

Risk and Protective Factors

Suicide risk factors in youth include mood disorders (Esposito, Spirito, Boergers, & Donaldson, 2003), substance use disorders (Patton, Coffey, Sawyer et al., 2009), emotional distress due to life stressors (Hovanessian, Isakov, & Cervellione, 2009), feelings of hopelessness (Brown, Beck, Steer & Grisham, 2000), and a history past attempts (Esposito, Spirito, Boergers, & Donaldson, 2003). In addition, access to pesticides is a risk factor for suicide in Asia and the Indian subcontinent and is a highly lethal method of suicide (Hvistendahl, 2013).

In contrast, protective factors serve as a buffer to the expression of suicide. Protective factors such as high levels of family and social support are associated with lower levels of suicide risk (Compton, Thompson, & Kaslow, 2005) and can include other factors such as spiritual faith (Cotton, Larkin, Hoopes, Cromer, & Rosenthal, 2005) adaptive coping styles (Grosz, Zimmerman, & Asnis, 1995) and access to community supports (Daigle, Pouliot, Chagnon, Greenfield, & Mishara, 2011). In addition, Compas and Reeslund, (2009) indicate that complex association among risk and protective factors in youth, are based upon a dynamic interaction of individual and environmental resiliency factors, ranging from spiritual capacity to community support.

Spiritual Faith and Its Relation to Culture and Protective Factors

Spiritual faith is an overarching term that includes both religiosity and spirituality (Griffin-Fennel & Williams, 2006). For example, religiosity is associated with the adherence to beliefs, doctrines and practices of a given religion, with an emphasis on the individual's relationship with God (Slater, Hall, & Edwards, 2003; Ellison, Burr, & McCall, 1997). Spirituality on the other hand is the internalized aspects of positive faith-based beliefs that support overall life satisfaction (Griffin-Fennel & Williams, 2006). Both are key aspects of spiritual faith, where religiosity is maintained through daily practice; and spirituality is the result of one's life journey along a religious path.

In addition, spiritual faith is filtered through a cultural lens and impacts culture by bolstering cultural traditions and strengthening cultural identity, where the church serves as informal meeting places for help seeking during time of stress (Goldston et al., 2008). In the United States, different cultural groups utilize spiritual faith to the same end, and that is to help manage adversity and increase interpersonal relating among cultural group members. For example, in the Black community, the church is a place of shared connectedness, fostering supportive relationships amongst the members of their cultural group who may be experiencing similar stressors (Molock, Puri, Matlin, & Barksdale, 2006). The Black church is a powerful psychological symbol, representing strength and their ability to endure during times of stress. Similarly, in both the Latino and Asian communities, the church provides a meeting place but more importantly a connection to one's cultural group and also reinforces the ties among tightknit families (Peña et al., 2011; Wong, Uhm, & Li, 2012). For all cultural groups spiritual faith bolsters a powerful human need to connect to others (Baumeister & Leary, 1995).

On an individual level, spiritual faith also empowers its members to search for personal meaning through prayer that can be restorative in the face of adversity (Ebstyn King, & Roeser, 2009). Along with personal meaning, spiritual faith can foster hope for the future especially during times of uncertainty, such as during the course of an illness or a pending divorce. By using prayer and other religious activities, conducted within a cultural context, individuals can use these faith-based practices to enhance coping with stressful life events by reducing fear, loneliness and guilt (Wachholtz & Sambamoorthi, 2011). In addition, a lack of personal meaning or belonging can promote feelings of loneliness, hopelessness, isolation and sadness that are associated with negative outcomes such as depression and suicide (Stellrecht, et al., 2006; Wang, Richard Lightsey, Pietruszka, Uruk, & Wells, 2007).

Purpose of the Present Study

Spiritual faith is embedded in the cultural traditions across ethnic groups (Lun & Bond, 2013) and the exploration of spiritual faith in a cross-cultural context would provide a novel investigation of its association to race, gender and suicide risk. As referenced earlier, racial and ethnic groups are dissimilar in their use of a variety of resiliency factors (Goldston, Molock, Whitbeck, Murakami, Zayas, & Hall, 2008). Moreover, these cultural groups may differ in their exposure to risk based on their socio-economic status, neighborhood and family violence, leading some to hypothesize that different cultural or racial cultural groups experience risk and protective factors in varying degrees (Kaslow et al., 2005). In addition to racial disparity, there is a gender disparity in levels of risk and the use of protective factors, where females tend to utilize their support networks when distressed versus males who have ridged gender roles that allow little flexibility or support for help-seeking (Griffin-Fennel & Williams, 2006). Both groups may use spiritual faith differently; men may tend to choose a private relationship with God versus women who may seek the comfort of shared experiences in church with other cultural group members.

Each domain of spiritual faith, religiosity, and spirituality, may provide its own means of assuaging suicide risk in youth that are universal across all faiths and cultural groups. Although spiritual faith has been found to be a protective factor against suicide risk in adults, it is unclear if these findings translate to racially diverse youth samples. Therefore, the aim of the current study is to examine the role of spiritual well-being and its ability to protect youth against thoughts of self-harm. More specifically, the following research question guided the design of the current study: Over and above the influence of gender, race and religious affiliation, can having spiritual faith lessen the probability of suicidal ideation? In order to address this question and generalize the study's findings, a cross sectional design will be employed, using self-report surveys in a diverse sample of youth.

Method

Participants

Participants ($N = 243$) were recruited from an online subject pool for introductory psychology undergraduate students at an urban university in the United States. Participants had the option of selecting this study among several being offered via the online subject pool and were offered course credit for participation. In order to provide consent, all participants were 18 years or older and their ages ranged from 18 to 56 ($M = 21.14$, $SD = 6.00$) and the most common age was 19 years. Sixty-one percent of participants were female ($n = 148$) and 39% were male ($n = 95$). In terms of race, approximately 33% of participants identified themselves as white ($n = 81$), 27% self-identified as Asian ($n = 66$), 19% self-identified as Hispanic ($n = 47$), and about 8% self-identified as Black ($n = 19$). Approximately 81% of participants reported that they had spiritual beliefs ($n = 196$). In addition, over 83% of the sample self-identified with a religious group ($n = 203$), such as Catholic (30%), Jewish (17%), Muslim (6%), Hindu or Buddhist (4%); and 17% reported no religious affiliation ($n = 40$). Over 39% of the sample ($n = 96$) was born outside the United States, with the highest proportion of participants' from China, Russia and the Middle East.

Procedure

All potential participants were at least 18 years old and provided informed consent. Participants completed a comprehensive battery of self-report instruments chosen to assess the following variables: suicidality, social support, spiritual well-being, and reasons for living. This research study was part of a larger study; for a complete review of the procedures, see Kyle (2013).

Instruments

Harkavy Asnis Suicide Scale. The Harkavy Asnis Suicide Scale (HASS) was designed to collect information on current and past suicidal behavior (Harkavy-Friedman & Asnis, 1989). For the purpose of this study, participants completed the first section (HASS-I), capturing demographic information, the frequency of current passive suicidal ideation as well as past history of suicidal ideation and attempts. Regarding internal consistency, the coefficient alpha was obtained from clinical and non-clinical samples ranging from 0.897 to 0.915 (Harkavy-Friedman & Asnis, 1989).

Young Adult Social Support Inventory. The Young Adult Social Support Inventory (YA-SSI) assessed social support in college-age youth noting the amount of support received from a variety of sources such as parents or siblings (McCubbin & Thompson, 1989). The Young Adult Social Support Inventory has eleven subscales and yields subscale scores as well as a total scale score by summing items. However, for the purpose of this study, participants completed the following subscales of the YA-SSI: Parents, Siblings, College Friends, Spiritual Faith, and Church. Participants rated the social support received by responding either no, yes or yes a lot. A total score was obtained by summing the participants' responses. For each of the subscales, the reliability data (Cronbach's alpha) are as follows: Parent = .95, Sibling = .95, Spiritual Faith = .91, College Friends = .91, Church/Synagogue Groups = .90. The overall internal reliability was .89 (Cronbach's alpha) and the test-retest reliability was .90 (McCubbin & Thompson, 1989).

Spiritual Well-Being Scale. The Spiritual Well-Being Scale (SWBS) measures participants' spiritual life and has two subscales, religious and existential well-being (Paloutzian & Ellison, 1982). The Religious

Well-Being subscale provided an assessment of the participants' relationship with God and the Existential Well-Being Subscale gave an assessment of the participants' life purpose and satisfaction. Using a 6-point Likert scale, participants were asked to rate their agreement with statements about life satisfaction and their relationship with God. The scale has twenty items and yielded three scores: religious well-being (10 items), existential well-being (10 items) and a total scale score for spiritual well-being (20 items). For the purpose of this study, only the subscales were used in the final regression model. The test-retest reliability data are as follows: Spiritual Well-Being Scale = .93, Religious Well-Being = .96, Existential Well-Being Subscale = .86. For each of the sub-scales, the internal consistency data (Cronbach's alpha) are as follows: Spiritual Well-Being Scale = .89, Religious Well-Being = .87, Existential Well-Being Subscale = .78 (Paloutzian & Ellison, 1982).

College Student-Reasons for Living Inventory. The College Student-Reasons for Living scale was designed to ascertain the reasons a college student may have for choosing life over suicide (Westefeld, Cardin, & Deaton, 1992). Using a 6-point Likert scale, participants were asked to rate their agreement with life affirming statements, e.g., "I believe I can cope with my problems" or "It is against my religious beliefs to commit suicide." The College Student-Reasons for Living inventory yielded a total scale score by summing the five subscales including Survival & Coping, Future-related Concerns, Moral Objections, Responsibility to Friends & Family and Fear of Suicide. The internal consistency of the scale is robust at .91 (Westefeld, Cardin, & Deaton, 1992). Reliability data (Cronbach's alpha) for the total scale ranged from .91 to .93 (Westefeld, Badura, Kiel, & Scheel, 1996; Westefeld, Cardin, & Deaton, 1992).

Research Design and Statistical Analysis

In order to make inferences about the larger population of diverse youth at risk for suicide, the research design is a cross sectional and used self-report surveys to explore spirituality and its relation to suicide risk. Descriptive statistics were computed for all variables, including means, standard deviations and correlations for suicidal ideation and the predictor variables, including social support, spiritual well-being and reasons for living (see Table 1). Using the three dichotomous categorical variables, i.e., race, gender and religious affiliation, a series of Oneway Analyses of Variance were conducted for each categorical variable comparing the mean group differences on each of the predictor variables, including spiritual well-being, social support, and reasons for living as well as the criterion variable, passive suicidal ideation. Variables yielding significant associations to the predictor variables were then loaded into regression analysis.

Table 1

Summary of Correlations for Criterion and Predictor Variables Including Means & Standard Deviations

	PI	E. WB	R.WB	SS	RL	Mean	SD
Passive Ideation	1					3.38	3.55
Existential Well-Being	-.125	1				34.07	4.14
Religious Well-Being	.008	.390**	1			35.07	5.35
Social Support	-.372**	-.077	-.318**	1		25.68	9.82
Reasons for Living	-.219**	-.064	-.284**	.447**	1	193.56	30.30

PI = Passive Ideation; E.WB = Existential Well-Being; R.WB = Religious Well-Being; SS = Social Support; RL = Reasons for Living ***p* < .01

For this study, the hierarchical regression analyses were performed in order to determine whether the predictor variables could be used to predict a continuous dependent variable (Cohen, Cohen, West, & Aiken, 2003). After controlling for dichotomous cohort variables, participant's totals scores on the predictor variables, including social support, spiritual well-being and reasons for living were used to predict participant's current level of passive suicidal ideation.

Results

Descriptive analyses of the HASS Demographics scale indicate that over one third (*n* = 78) of the sample reported a lifetime history of suicidal ideation and for some participants beginning as early as age 8. Only 2.5%

of the sample ($n = 6$) reported a history of suicide attempts and most participants reported only one suicide attempt. In addition, analysis of the Harkavy Anis Suicide Scale indicated that 78% of participants ($n = 189$) reported current passive suicidal ideation within past two weeks, e.g., thought that they would be better off dead.

Using a Oneway Analysis of Variance to compare differences across all five racial groups found no significant difference in the mean scores for the predictor variables, including existential and religious well-being, social support, reasons for living and passive ideation (Table 2). However, for gender there was a statistically significant difference at the $p < .05$ level in mean scores for reasons for living: $F(1, 242) = 6.711, p = .01$. Although statistically significant, the actual difference in means was very small, for females ($M = 197.55, SD = 30.219$) and males ($M = 187.35, SD = 29.523$). The effect size, calculated by eta squared, was .03.

Table 2
Summary of Analysis of Variance Comparing Participants' Self-Identified Racial Groups Using the Predictor and Criterion Variables (N = 243)

	Sum of Squares	df	Mean Square	F	Sig.
Passive Ideation	58.491	4	14.623	1.166	.326
	2958.389	236	12.536		
Existential Well-Being	76.181	4	19.045	1.116	.349
	4060.765	238	17.062		
Religious Well-Being	95.145	4	23.786	0.827	.509
	6841.522	238	28.746		
Spiritual Well-Being	100.281	4	25.070	0.394	.813
	15154.962	238	63.676		
Social Support	879.846	4	219.962	2.332	.057
	22449.117	238	94.324		
Reasons for Living	6029.036	4	1507.259	1.659	.160
	216166.849	238	908.264		

A One-way Analysis of Variance was used to examine whether participants who were affiliated with a religious group differed from those without a religious affiliation with respect to their scores on the predictor variables including social support, existential and religious well-being, reasons for living and passive ideation (Table 3). Comparing the group means for those with and without religious affiliation found no statistical difference in mean scores for passive ideation and existential well-being. However, for social support, there was a statistically significant difference at the $p < .05$ level in mean scores for those with and without religious affiliation: $F(1, 242) = 22.584, p < .001$ indicating that for those without religious affiliation ($M = 19.40, SD = 8.270$) reported less social support than those with religious affiliation ($M = 26.99, SD = 9.624$). Although statistically significant, the actual difference in means was small and the effect size, calculated by eta squared, was .09.

Table 3

Summary of Analysis of Variance Comparing Participants With and Without Religious Affiliation Using Passive Ideation, Existential Well-being and Social Support Variables (N = 243)

		Sum of Squares	df	Mean Square	F	Sig.
Passive Ideation	Between Groups	31.338	1	31.338	2.509	.115
	Within Groups	2985.542	239	12.492		
	Total	3016.880	240			
Existential Well-Being	Between Groups	3.633	1	3.633	0.212	.646
	Within Groups	4133.313	241	17.151		
	Total	4136.947	242			
Social Support	Between Groups	1998.864	1	1998.864	22.584	.000
	Within Groups	21330.099	241	88.507		
	Total	23328.963	242			

Although previous analysis indicated the data were statistically normal, the Levene's F test revealed that the homogeneity of variance assumption was not met for religious well-being ($p = .030$) and reasons for living ($p = .040$). As such, the Welch's F test was used. The Oneway Analysis of Variance of participant's average score on the measure of religious well-being revealed a statistically significant main effect, Welch's $F(1, 85.161) = 32.608, p < .001$, indicating that for those without religious affiliation ($M = 34.41, SD = 5.43$) reported less religious well-being than those with religious affiliation ($M = 38.26, SD = 3.60$). The estimated omega squared ($\omega^2 = .12$) indicated that approximately 12% of the total variation in average score on students' measure of religious well-being is attributable to differences in religious affiliation. Similarly, the one-way Analysis of Variance of participant's average score on the reasons for living measure revealed a statistically significant main effect, Welch's $F(1, 78.145) = 25.901, p < .001$, indicating a group difference in the average score on the reasons for living measure. For those with religious affiliation ($M = 197.10, SD = 30.631$) reporting higher levels of reasons for living than those without religious affiliation ($M = 176.60, SD = 22.045$). The estimated omega squared ($\omega^2 = .09$) indicated that approximately 9% of the total variation in average score on the reasons for living measure is attributable to differences in religious affiliation.

In order to address the study's key aim, hierarchical multiple regression was used to assess the ability of the independent variables, existential and religious well-being, social support, and reasons for living to predict levels of passive ideation, after controlling for the influence of cohort variables, gender and religious affiliation (see table 4). Entering the predictors on different steps of the regression was based on earlier analysis of gender and religious affiliation, which suggested a significant association between these variables and the other predictor variables. Preliminary analyses were conducted to ensure no violations of the assumption of normality, linearity, multicollinearity, and homoscedasticity. Gender was entered at step 1, explaining 7.6 % of the variance in passive suicidal ideation. After entry of religious affiliation at Step 2, religious affiliation explained an additional 5.5% of the variance in passive suicide ideation. After the predictor variables, existential and religious well-being, social support and the reasons for living were loaded at step 3, the total variance explained by the model as a whole was 18.2%, $F(6, 240) = 8.691, p < .001$. The independent variables explained an additional 16.5% of the variance in level of passive ideation, after controlling for the influence of gender and religious affiliation, R squared change = .165, F change (4, 234) = 11.808, $p < .001$. In the final model, only the existential well-being and social support were statistically significant, with social support recording a higher beta value ($\beta = -.348; t = 5.287, p < .001$) than existential well-being ($\beta = -.137; t = -2.095, p < .05$).

Table 4

Summary of Hierarchical Regression Analysis Predicting Passive Ideation Using Cohort Variables, Gender and Religious Affiliation, and the Predictor Variables, Social Support, Spiritual Well-Being, Reasons For Living (N = 243)

		<i>b</i>	Std. Error	beta	<i>t</i>	Sig.	95% CI for <i>b</i>	
							Lower	Upper
1	Gender	-.552	.469	-.076	-1.177	.241	-1.475	0.372
2	Gender	-.600	.468	-.083	-1.283	.201	-1.522	0.321
	Religious affiliation	-.999	.601	-.107	-1.663	.098	-2.182	0.184
3	Gender	-.748	.438	-.103	-1.708	.089	-1.610	0.115
	Religious affiliation	.020	.595	.002	0.034	.973	-1.151	1.192
	Existential well-being	-.116	.055	-.135	-2.095	.037	-0.225	-0.007
	Religious well-being	-.051	.047	-.077	-1.095	.275	-0.143	0.041
	Reasons for living	-.012	.008	-.105	-1.541	.125	-0.028	0.003
	Social support	-.131	.025	-.364	-5.287	.000	-0.180	-0.082

Discussion

This study sought to examine the role of spirituality as a protective factor against suicide risk in a sample of ethnically and religiously diverse youth. For youth, spiritual well-being and social support are associated with reduced levels of suicide risk; specifically existential well-being was associated with reduced likelihood of a participant reporting passive suicidal ideation. These findings suggest that spiritual faith may operate via the internalization of positive, faith-based beliefs; and thereby enhance the youth’s ability to cope, possibly assuaging the progression from passive ideation to ideation with intent. In addition, spirituality may resonate with youth who have internalized the positive life values from their faith-based beliefs (Mattis, 2000), and therefore rely on the faith-based coping to reframe stressful events.

In addition to faith-based beliefs, social support provided by family, peers and their spiritual faith were also associated with reduced risk of passive ideation. Youth may use interpersonal supports such as friends or family relations to stave off feelings of loneliness and stress. In addition, females reported more reasons for living than males suggesting that social belonging and connection with others may comfort females (Griffin-Fennel & Williams, 2006) and therefore they tend to report more reasons for living. The positive protective effect of social relationships is well supported in the literature on suicide (Joiner, 2005). During times of stress, youth who report spiritual faith may find solace in their relationship with family or fellow worshipers as a means of reducing stress and moderating risk. Spirituality may resonate with ethnically diverse youth due to early experiences in the family that centered on religious and cultural traditions. During rituals and faith-based practice, youth experienced the positive aspects of faith such as enhanced coping and connecting to other members of their family, cultural and religious groups.

Furthermore, those with religious affiliation to organized religion reported significantly higher levels of social support and religious well-being than those without any affiliation. This is also supported by previous research. For example, Saroglou (2011) exploring the four major religions including Christianity, Islam, Hinduism and Buddhism, found that social belonging was a robust factor across all faiths. Belonging not only provides a means of connecting among worshipers, but also allows one to connect with a higher power. Youth, who identify with a particular religious group, are more likely to cite their relationship with God as important to their overall well-being.

Previous research using the Spiritual Well-Being Scale and Reasons for Living Inventory found positive correlation between Religious Well-Being sub-scale and the Reasons for Living Inventory (Ellis & Smith,

1991), which was not found in this study. However, existential well-being was associated with reduce suicide risk and was found inversely related to reasons for living. This suggests that youth may have internalized the positive aspects of spiritual faith versus the faith-based prohibitions against suicide. The positive aspects of spiritual faith, such as coping may be more salient in the lives of youth, providing an anchor as they weather daily stressors. In a recent study published by the Pew Forum on Religion and Public Life (2010) found that youth from the United States attended church in lower numbers but yet reported higher levels of spirituality. Although youth identified with a particular religion, this finding confirms that youth tend to be more spiritual rather than religious.

Further, when examining the correlations among the predictor variables, the spirituality factors had no relation to passive suicidal ideation. However, when all the predictor variables were loaded into the final model, only existential well-being and social support were predictive of reduced risk of passive ideation. This suggests that existential well-being may be capturing a unique facet of youth's experience of spiritual faith that is protective above and beyond the College Student-Reasons for Living Inventory. The Reasons for Living Inventory as well as the College Student-Reasons for Living Inventory are well-established measures of protective beliefs about suicide. In addition, the College Student-Reasons for Living Inventory was normed using university students in United States (Westefeld, Cardin, & Deaton, 1992) and recent research has shown promise with ethnically diverse samples (Richardson-Vejlgaard, Sher, Oquendo, Lizardi, & Stanley, 2009). However, there are very few studies, if any that have used the College Student-Reasons for Living Inventory with religiously diverse samples that included Muslim and Hindu participants. For these groups, there may be variability in the religious and cultural definitions of suicide and associated protective beliefs that have yet to be measured.

As reported by earlier studies, the College Student-Reasons for Living Inventory (CS-RFLI) was found inversely related to risk (Malone, Oquendo, Haas, Ellis, Li, & Mann, 2000). Although students were having thoughts of passive ideation, the total CS-RFLI did not predict suicide risk in this youth sample and do not factor into the overall model. Although this is an interesting finding, this may simply be the product of using a non-clinical sample and participants who were not currently in crisis. In addition, reasons for living may have been overshadowed by social support in the final model; And the overall significance of existential well-being in the final model may be attributable to the large amount of variance accounted for by social support over and above reasons for living, thus nullifying its association to passive suicidal ideation. These findings suggest dynamic associations among risk and protective variables, where one variable may moderate another and its association to risk.

Unexpectedly, the comparisons of mean scores on the predictor variables across all racial groups were not significant. This may have been an artifact of the relatively small number of participants per group. Or the within group variability may have been large overshadowing the smaller between groups differences. This large within group variability may suggest that suicide is a universal phenomenon. In a cross-cultural study of suicide notes from Turkish and American youth, Leenaars et al. (2010) reported that the notes from Turkish students expressed ambivalence in their intent to die. Although ambivalence about death is common phenomenon prior to an attempt, the authors reasoned that ambivalence reflects the youth's internalization of the stigma of suicide from the surrounding culture, a collectivistic society that emphasized relatedness versus individualism and free will. Therefore, the meaning ascribed to the suicidal act was based on the cultural context in which suicide occurs. In this case, the shame was shared by all cultural group members and further reinforced the culture's stigmatization of suicide. Therefore the focus of suicide research in culturally diverse youth may benefit from comparing the differences in the cross-cultural meaning of the suicidal act.

Future Directions

Although existential wellbeing was found related to reduced risk of passive ideation, research on the universality of protective and risk factors remains problematic. For example, Colucci and Martin (2007) found conflicting results after conducting an exhaustive analysis of the available research on cross-cultural youth suicide, leading the authors to conclude that further research is needed. However, an cultural perspective on suicide may be best served by underscoring that risk as well as protective factors may be present in varying

amounts cross-culturally and the meaning of suicide will vary with cultural context which it occurs. Therefore, research should begin to understand the influence of individual and environmental-level protective factors on suicide risk in a cultural context.

In addition, spiritual faith and its cultural referents can be integrated into psychotherapy (Comas-Diaz, 2008) serving as a source of restorative healing. But spiritual faith may also serve as an avenue for community outreach and suicide prevention. For example, the African-American community traditionally underutilizes mental health services and in an effort to conduct community outreach Molock, Matlin, Barksdale, Puri, and Lyles (2008) have used the Black church and the authoritative power of the church pastor to conduct outreach to those who are less likely to seek out those services outside of their church or community.

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The Role of Spiritual Faith Healers in Reducing or Reinforcing the HIV Stigma: A Qualitative Study

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Abstract

The role of spiritual faith healers in managing various conditions of ill-health has been studied and debated. The aim of this study was to explore spiritual faith healers' understanding and conceptualisation of HIV/AIDS stigma and the role they play in reducing or reinforcing HIV/AIDS stigma in their communities. A qualitative approach, and in particular, the grounded theory methodology was used. The application of this methodology included personal interviews with eight practising spiritual faith healers in Limpopo Province (South Africa), while additional information was gleaned from the literature review. The researcher focused on the participants' conceptualisation of HIV stigma, from the context of the African world view in order to gain insight into the roles of these spiritual faith healers. The findings indicated that spiritual faith healers tended to show a less positive attitude towards people living with Aids. However, the findings suggest that spiritual faith healers perceive themselves to be having a definite role to play in reducing HIV/AIDS stigma in their communities. These findings are discussed in the context of South African national policies relating to HIV and AIDS. The study is concluded by suggesting that HIV testing must be compulsory for every person who consults in a hospital. Such a policy move could contribute positively in terms of health promotion.

Introduction

Numerous research studies are currently focussing on HIV/AIDS stigma in Africa because of its severity and the fact that it seems to be highly stigmatized in the Sub-Saharan region. The "lack of scientific research on the manifestation of HIV/AIDS stigma (in Sub-Saharan Africa) presents a serious challenge to the understanding, alleviation and prevention of HIV/AIDS related stigma" (Kelly, 2002).

In a study focusing on HIV stigma in the African context, Kelly referred to the vulnerability to HIV-stigma and discrimination as linked to existing stereotypes, including poverty, intolerance and inequality between women and men. Kelly's study shows that in Sub-Saharan Africa, issues of gender as well as poverty, lack of economic opportunities, limited access to education, information as well as traditional norms and practices, significantly increase a woman's vulnerability to HIV and lie at the root of her experience in trying to cope with the related stigma and discrimination.

A number of studies have been conducted mostly from HIV/AIDS infected and affected persons in South Africa including Limpopo, (France (2005); Fredericksson & Kabanus (2005); Haber, Roby & High-George (2011); Kelly (2002); Link & Phelan (2001); Natrass (2004) and Nyblade, MacQuarrie, Phillip, Kwesigabo, Mbawambo, Ndega, Katende, Yuan, Brown & Staple (2005). Whilst these studies have suggested that existing stereotypes, including poverty, lack of economic opportunities, limited access to education, information as well as traditional norms and practices, significantly increase a woman's vulnerability to HIV and lie at the root of her experience in trying to cope with the related stigma and discrimination, none of them has investigated the issues related to HIV and AIDS from the perspective of the spiritual healers. This study therefore, addresses this gap by focusing on spiritual healer's understanding of HIV stigma and the role that they see themselves playing to reduce or reinforce the stigma.

Stigma in the Context of Religious Communities

According to Lagarde, Nel, Seck Gueye-Ndiye, Piau, Pison, Delaunay, Ndoye, and Mboup, (2000) it has been recognised that religion plays an important role in relation to the HIV/AIDS epidemic. Religious elements

include doctrinal positions and religious teachings with which ministers address HIV/AIDS and HIV prevention and efforts undertaken by the church in communities and societies within which they work. Furthermore, the church has direct “jurisdiction” over issues of personal behaviour, morality, family life, and belief. Their regular involvement with members and followers includes direct contact with people at key life events such as birth, coming of age, marriage, and death. Their position includes being a spiritual home for members and as a source of strength, support and hope for people who are ill or in need.

Manglos and Trinitapol (2011) argue that faith healing can be understood as the third therapeutic system that co-existed with the well-documented biomedical and traditional systems. Its success in the healing approaches lies with their unique ability to combine individual pragmatic and communal-ritualized aspects of healing to inform interpretations of AIDS epidemic and its consequences (p.107). Therefore, a great potential exists within the religious sector to provide care, comfort and unique spiritual support to HIV/AIDS infected and affected communities. According to France (2005) and Trinitapoli (2006) the church has not yet comprehensively addressed the ambivalent but often negative interpretation of sexuality that is common in religious dogma. This ambivalence has been transformed into widespread fear of people with HIV and cruelty towards them. Furthermore, because religious teachings generally encourage love one’s neighbour, acceptance of others, and encourages tolerance towards “others” which may be different from one’s religion, race and creed, Christians should not be prejudiced to those less fortunate than themselves (France, 2005:9).

Nicholas and Durrheim (1995) refer to religiosity as being conceptualized as personal control against deviance and, therefore, positively associated with conventionality and conformity. A study by Lagarde et al., (2000) on Christian and Muslim leaders in Senegal has revealed a minimum involvement in AIDS prevention, suggesting that religion is negatively linked to preventative behaviours. Some studies suggested that religion has the ability to modulate preventative behaviours, and suggest that there is a need to intensify the efforts to involve religious leaders at the local level (Agadjanian (2005); Chiakwa, (1999); Ejizu, (2007); Lagarde, et al, (2000); Leeuw, (2004); Mbiti, (2006) and Sandlana, (2005). AIDS-stigma is also a key obstacle to HIV prevention and AIDS care, and to date very little research has been done to investigate the impact of people’s attitude toward the infected and affected. Parker and Birdsall (2005) argues that observers are largely in agreement that early on in the epidemic, faith based organizations constituted “part of the problem” rather than “part of a solution”. The faith based organizations have been faulted for their delayed responses, for failure to acknowledge the scope of the implications of rising HIV infection rates and for moralistic, judgemental and socially conservative stances towards HIV/AIDS which has contributed to silence and secrecy. The association of HIV infection with poor moral behaviour, and the failure to openly discuss the root causes underpinning HIV transmission, particularly differentials in power, have contributed to the stigmatization and discrimination of people living with HIV/AIDS within the church.

While there is great potential within the religious sector to provide love and support among its members, there is also evidence of reluctance from individuals within this sector to positively respond to national calls for prevention and educating the communities about HIV/AIDS because of their moral judgement stand ‘sex before marriage is a sin’.

African Religion in Illness and Health

In a study focussing on HIV stigma in the African context, Kelly (2002) referred to vulnerability to HIV stigma and discrimination as linked to existing stereotypes, including poverty, intolerance and inequality between women and men. Kelly’s study shows that in Sub-Saharan Africa, issues of gender as well as poverty, lack of economic opportunities, limited access to education, information as well as traditional norms and practices significantly increase a woman’s vulnerability to HIV lie at the root of her experience in trying to cope with the related stigma and discrimination.

Traditional African religion plays an important part in shaping African cultures. It is through this religion that the community is able to live in harmony with one another. According to Mbiti (2006), from birth to death of an individual, the family and community conduct certain rituals for every occasion and every individual

understands the ritual for the occasion. The whole community is expected to practise the culture and, therefore, the belief is that illness occurs if one of the family or community does not adhere to cultural beliefs. Disagreeing with these beliefs is regarded as culturally immoral and evil because Africans regard moral values as a high priority (Mbiti, 2006). Anything which does not adhere to these values is regarded as a taboo and is punishable by the ancestors either by becoming ill or a misfortune befalling the person. Africans, therefore, emphasise illness or the social construction of sickness rather than the disease or the biomedical sickness (Katz & Wexler, 1989; Mbiti, 2006). Chiakwa (1999) puts it in context by declaring that sickness is evidence of a breakdown of physical, social as well as spiritual mechanisms of the individual and the community. He argues that man was believed to be a unitary being, consisting of biological body and the spiritual body. He had to be healed medically, socially, psychologically and spiritually. The healing, therefore, becomes a transition towards greater meaning, balance, connectedness, and wholeness, both within the individual and between individuals and their environment (Katz & Wexler, 1989; Muthali, 2006). Benor (2006) adds that it lets one feel one is part of a larger “whole”, a cosmic, transpersonal awareness. It is the latter which gives healing the label “spiritual” healing.

According to Lagarde, et al., (2000), religion plays an important role in relation to the HIV/AIDS epidemic. Furthermore, the church has “jurisdiction” over issues of personal behaviour, morality, family life and belief. Their regular involvement with members includes direct contact with people at key life events such as birth, coming of age, marriage and death. Their position includes being a spiritual home for members and a source of strength, support and hope for people who are ill or in need (Lagarde et al., 2000).

Aim of the Study

The aim of the study was to explore spiritual faith healers’ understanding and conceptualisation of HIV/AIDS stigma and the role they play in reducing and reinforcing stigma in their communities. Specifically, the study sought to answer the following research questions:

- How do spiritual faith healers understand and define HIV/AIDS stigma?
- What are spiritual faith healers’ specific roles in reducing or reinforcing HIV/AIDS stigma?

Methodology

This is a qualitative study that used the grounded method approach as a mode of enquiry. Strauss & Corbin, (1987) describes grounded theory as a research method in which theory is developed from data, rather than the other way round. This method was chosen for this research particularly because it helped the researcher to look for a pattern within the African traditional and spiritual faith healing contexts, and develop ideas about patterns or/and relationships from pre-existing theories or inductions. She then focused on a few regularities and made contrasts with alternative explanations.

A total of eight participants were carefully chosen on the basis of all of them practicing spiritual faith healing in their communities. The participants were selected through snowball sampling. Snowball is a method for identifying and “sampling” or selecting the cases in a network. It is a multi-stage technique, which begins with one or a few people or cases and spreads out on the basis of links to the initial cases. According to Neuman (2006) this practical way of gaining access to respondents has theoretical as well as methodological advantages. Participants interviewed were from the traditional African churches as well as Christian denominations. Four males and four females were interviewed for the study. Their ages ranged from forty five to sixty nine years. Six had secondary education while three had a post- secondary level of education.

The study was conducted in the five (5) districts of Limpopo, namely, Capricorn, Waterberg, Vhembe, Sekhukhune, and Mopani. These areas represent the origin of different ethnic groupings in the Province, namely, Northern Sotho, Xitsonga, and Tshivenda. Twenty-one point six per cent (21.6%) of the people living in these areas are unemployed and are communal, while fifty-five point seven per cent (55.7%) are not economically active (*Statistics South Africa, 2005*). They depend on subsistence agriculture while many of them are poor. Due to their communal living, most of these people believe in African churches which combine roles both Christian as well as African healing methods such as African rituals.

Data Collection and Analysis

In depth semi-structured interviews were conducted in Sepedi, Xitsonga, and Tshivenda the three languages commonly spoken in Limpopo Province. This gave the interviewer the chance to formulate more questions based on specific themes or issues that were formulated beforehand.

All interviews were tape-recorded and fully transcribed and analysed qualitatively. The researcher interviewed the participants individually at the spiritual healers' gatherings. The medium of communication was the participants' choice, usually the home language. Thereafter, the translations were double-checked by two bilingual researchers by means of back translation. Semi-structured interviews were used as a method of data collection while the data were analysed qualitatively. The author then analysed the interviews transcripts independently using NVivo by QRS International, qualitative analysis software, and applying a grounded theory approach by which empirical data are thematically categorized by induction. The second analysis revealed that the themes from the first and second analyses, although differently grouped, extracted the same issues from the empirical material. This was taken as a confirmation of the grounding of the analysis in the data. To be included as a theme, supporting data had to be contained in the in-depth interviews from all participants. The open-ended questions were analysed manually.

Results

The following two themes were extracted from the interviews with spiritual healers, namely: Spiritual faith healers' understanding of HIV/AIDS stigma; and the roles of spiritual faith healers in reducing or reinforcing HIV stigma.

Theme 1: Spiritual faith healers' understanding of HIV/AIDS stigma

It does appear that spiritual healers have an understanding of what is considered the indications or symptoms of HIV and AIDS as reflected in the following theme:

Sub-theme 1: Understanding of HIV issues. This is what the participants said:

Participant 1: "People will separate themselves from such a person, his/her family and friends. It hurts. They will talk about the person behind his/her back and also avoid him/her. Such a person will be naturally discriminated for the discriminated for disease or condition unacceptable by society. Such a person is cut off from the rest of society because of disclosure".

Participant 2: "People are not opening up, so you might not know if a person is negative or positive. People do not want to disclose their status".

Spiritual healers tended to acknowledge that HIV is spread in many ways as reflected in the following extracts:

Participant 1: "I had denial that it cannot happen to me, until 2007 when I developed a full perspective of what HIV/AIDS is, because I saw these people and developed a feeling of fear and now I had to restructure my behaviour to that of acceptance and this thing is real".

Participant 2: "It was scary; people tell you that if you have this virus you are going to die. Now I do believe because it is here and just have to find ways of preventing it".

Participant 4: "It pains me to see how the whole thing of HIV is, because when the person coughs he/she coughs blood, so it is painful to see that".

Participant 5: "It is terrible because by that time I was given some pictures of HIV infected people. It was horrible to see that I felt like everyone can be a victim. The discrimination is very high against those infected by the virus. What is needed from us is support to these people who are HIV positive".

Participant 6: "I felt there was denial, people are not afraid to hide it. These people need sympathy".

Participant 8: "The unfortunate part was that HIV was presented by politicians as being dangerous, a killer disease. People with HIV were promiscuous, irresponsible, truck-people, prostitutes. It was actually scary in a way it was said. It made me feel scary. Obviously, the kind of feelings one has that makes one scary".

All the spiritual healers expressed the fact that many people in the society do not go for testing. Some members of the community give reasons such as being afraid of being infected through association with people

who have HIV and are rejected by society because of being labelled after disclosure. Spiritual healers commented: *“This displays society’s insensitivity and ignorance”* (Participant 8).

Some of the spiritual faith healers praised organizations in the society which created HIV awareness programmes. These organizations encourage testing and also sharing of experiences of people which help in accepting and understanding HIV better *“there are a lot of organisations spreading the word that HIV/AIDS kill and it is very much alive. There are many interactions about HIV/AIDS, but people do not care about what happens as long as they enjoy life”* (Participant 2). *“...being HIV, people should learn to trust one another, because we don’t trust each other”* (Participant 3).

It was also regarded as a way of eliminating the stigma of ignorance and discrimination. There was also a concern by spiritual healers that the high pregnancy rate means faster spreading of HIV/AIDS. Spiritual healers alluded to the secrecy clause which is enshrined by the Government in the HIV and AIDS Act which states that, *“it is a person’s right to disclose or not to disclose”*. They further commented: *“It becomes difficult to help, and a real challenge to society because people do not talk about HIV and nobody knows who is positive or negative. Only if people open up, will society be able to help them”* (Participant 8).

A number of spiritual faith healers raised concerns about stigma and discrimination meted by members of the society against PLWA. The following extracts by two spiritual healers illustrate this point: *“..... as having no self –control, regarded as irresponsible, being a slut as misbehaved”* (Participant 2). *“If you deal with the person, you should wear gloves, wash your hands, and that the remaining food eaten by the affected must be thrown in the toilet. HIV is meant for others and not those next to you”* (Participant 3).

Based on the above findings, it could be suggested that spiritual faith healers understand HIV/AIDS stigma.

Theme 2: Roles of spiritual faith healers within the church:

From this theme three subthemes emerged. Church involvement, the church is not doing enough and denial by church members.

Sub-theme 2.1: Church involvement: The church’s involvement in contributing to the AIDS pandemic has been acknowledged world-wide. The contribution is that the church first accepts or/and welcomes their condition which is symbolical in that the HIV person attends church like any other person with no special attention to her/his condition. By reading the scriptures, the church supports the infected person morally and spiritually and also prays for them. For example, the church accommodates an infected person like any other person. It gives support through the scriptures which are read to encourage and motivate the infected. Furthermore, it supports them physically by giving food parcels to the sick, telling them it is not the end of the world and organising workshops for caregivers, and also spiritually by giving them biblical texts to strengthen them, paying them visits and praying for them. The spiritual faith healers commented: *“the church tries to do practical things but reality on the ground is difficult and different”* (Participant 8). All the spiritual healers stated that *“HIV stigma is not normal stigma”* (Participant 1). Their perception is that the HIV stigma is inflammatory to the whole world, meaning if you are stigmatized by others, you are ‘gone/nothing’. The church helps these people to live positively, assuring them God’s and the church’s love.

Sub-theme 2.2: Church is not doing enough: Although AIDS has established itself in Africa, most of the spiritual faith healers mentioned that *“pastors do not talk about the cure for the virus, church does not dwell much on the HIV issues, these issues are not discussed in church”* (Participants 5, 6). As much as the church tries to build centres to encourage church members, the connotation is that those who go for such sessions are already infected by HIV. It separates people from the congregation and therefore, they become stigmatized. The church was also noted as not doing enough for those with HIV/AIDS. Most of the pastors are old and they regard talking about sex as promoting it in the church. The church does not even talk about a cure for the virus and there is still a lot of negligence in the church in that as grown up persons and pastors, they still view HIV as a punishment from God. *“... referring to the church, there is still a lot of negligence, there is no talking about the cure for the virus. They don’t take care of equipment’s they use. For example, equipment is used for several people without sterilization. What I can say is that the church is neglecting these HIV/AIDS issues”* (Participant

1). Another spiritual healer mentioned that ... “generally the issue is not talked about in church. Up to now, most churches do not dwell much into the whole HIV issue” (Participant 5). Other churches regard HIV issues as socio-cultural. For example, they regard a person as being bewitched or having neglected cultural taboos and would therefore, use rituals as a cure. Some churches believe that “*Satan is using us, and people don't take note that Scriptures testifies it*” (Participant 5).

Sub-theme 2.3: Feelings of denial by church members: The spiritual faith healers showed an understanding of HIV issues, by stating that “*sometimes it is not the person's fault that they found themselves being positive, and that they see the treatment for HIV as the same as any other treatment*” (Participant 4). Another spiritual faith healer mentioned that “*the more people talk about HIV, people tend to accept and change their mind set about the disease*” (Participants 2, 4, 6). Spiritual healers as part of the community are also involved in cultural activities such as spiritual rituals. These then make them understand their flock informally outside the church as well as formally within the church activities.

Discussion

The results of the study identified two themes namely: spiritual faith healers' understanding of HIV stigma and roles of spiritual faith healers within the church. The results of this study reveal that spiritual healers as part of the community understand the HIV issues in the societies they live in and are also involved in cultural activities such as spiritual rituals. This makes them understand their flock informally, outside the church as well as formally in church activities. However, spiritual faith healers are also bound by the church dogma which expects them to practice what the church prescribes. The church has a stand on HIV issues. It helps PLWA to live positively assuring them God's love and supporting them morally and spiritually. It accepts their condition such as ‘love your neighbour as you love yourself’. This is what the Bible prescribes. However, most of the pastors are old, and regard talking about sex as promoting it in the church and therefore, view HIV as a punishment from God.

According to Ejizu, morality in Africa is s imperative of the human make-up and not an option and, therefore, society might invoke severe punishment on anyone who would try to oppose or disobey a promulgated law or norm of morality. For most African groups, ostracizing an individual or family that has disobeyed the community is thought to be the most severe punishment that could be meted out to anybody. This would usually put the family in a predicament for fear of the tremendous power of the community in a traditional African background. Stigma is therefore, regarded as all that which is not in line with the traditional African view, for example, most spiritual faith healers commented that “*The infected are views by society as promiscuous, irresponsible, truck people, and prostitutes*”. This labelling is followed by alienation by society and therefore, are discriminated against.

The society insists on culture and the adherence thereof by its people. It also stigmatizes people quietly and without notice, the society shuns those who may not toe the line. Furthermore, stigma and discrimination hinder preventative efforts and make positive people fear to seek help/care and support from family and friends rather they go to church and also find it discriminating in a sense. Society also pushes the infected and their families away by blaming them for deviating from the African moral standards, thereby stigmatizing them by not trying to understand their fate. Some authors contend that society's mind-set lies in the African culture which must be accommodative towards those who are infected and affected. If HIV testing is compulsory, society will regard HIV as any other illness and therefore stigma will automatically be reduced among societies.

Furthermore, society must adapt to the demands of how to behave towards others, and start supporting them because they need love, caring, empathy and encouragement. These actions are what Herek (2002) calls “intrinsic” religious orientation. In other words, since the intrinsic use religious teachings to inform their everyday interactions with others, they should love their neighbour, for them that is the right thing to do.

A statement such as If you deal with the person you should wear gloves, wash your hand, and that the remaining food eaten by the affected must be thrown in the toilet, refers to what Nyblade et al. (2005) call “enactment of stigma” through discriminatory practices, including physical isolation. These include, for example,

fear of contagion in separating eating utensils and living quarters, social isolation from events, loss of social networks, and diminished standing in the community also verbal discrimination and abuse, gossip and blaming.

The spiritual faith healers identified families dissociating themselves from the patients for fear of being infected, and fear of the unknown caused by promiscuous relationships of one of the family members. This is in line with what Herek (2002) defines as symbolic context of stigma based on pre-existing attitudes towards a person or group targeted by HIV. This might be economic, political or within the local community context. He also defines what he calls “felt stigma” which motivates individuals with stigmatized condition to attempt to “pass” as members of the non-stigmatized majority. Some of the participants mentioned the question of non-disclosure by HIV infected persons. This Herek argues, reduces their likelihood of being targeted as having HIV. But it also disrupts their lives because of non-disclosure. Spiritual faith healers alluded to the government “HIV secrecy clause” which is a challenge to society due to non-disclosure as a right.

According to Herek, stigma and discrimination hinder preventative efforts and make positive people fear to seek help/care and support and thus adopt what he calls “successive passing”. That is, people pretend and act as if things are normal so that they are not identified as the “other”. Because of the blame by society, PLWA attend church regularly but do not trust anyone including the church elders.

Lunginaah, Yiridoe, and Taabazuing (2005) noted that dimensions of culture in Africa, such as values, beliefs and norms are culture constructs which influence marital and other social behaviours (Mbiti, 2006). In their studies, Lunginaah et al., (2005) acknowledges the potential role the churches could play in HIV/AIDS prevention efforts to eradicate the AIDS epidemic which cannot be done without the help of the African churches. One agrees in that the African churches involve people’s settings in their healing processes, that is, the body, family and environment of the patient. `Abdu’l-Baha (2007) contends that as the world crumbles in one’s life, spirituality consoles the person. In such a situation a person looks to God for survival.

Sub-theme 2.2 Church is not doing enough. Although AIDS has established itself in Africa, Agadjanian (2005) argues that informal communication regarding HIV/AIDS is still characterized by considerable uncertainty, ambivalence and stigmatization. However, the church is not doing enough in its contribution towards alleviating the plight of the infected. One argues that it separates people from the congregation and, therefore, they become stigmatized. Allport (1954) explains the setting of people apart from other individuals or groups through attachments of a perception of negative values as prejudice. For, example, as much as the church tries to build centres to encourage church members (the infected and affected), connotation is that those who go for such sessions are already infected by HIV.

Parker and Birdsall (2005) noted the inconsistent and sometimes contradictory roles by the church, which need to be understood as dependent on many contextual factors both in the micro as well as the macro level. These may be attitudinal or unofficial stances by religious bodies on the question of HIV/AIDS. They include societal factors, which involve the position occupied by a faith group or religion within a community or society as a whole. The researcher’s understanding is that there are no continuous workshops for the pastors regarding the HIV pandemic and the church is actually avoiding HIV issues are not discussed in church.

Summary

Spiritual faith healers showed an understanding of HIV stigma. Their stance was that of being helpless reinforces stigma because of the church dogma which avoids HIV issues. The church avoids the realities of the world but concentrates at how many people attend church as compared to the other churches. Therefore, sticking to what the Bible is advocating is more comfortable and safer for the church than deviating for a fight against AIDS. The programmes offered by the church are discriminatory. For example, person feels singled out of the group (congregation) to attend such programmes. A pastor sees HIV as punishment from God, but this is within the church rules. The ‘HIV secrecy clause’ enshrined in the South African National Policy on HIV/AIDS for learners and Educators (August 1999) have a potential to prevent those affected. It is suggested that the tendency not to disclose has the potential to encourage stigmatization and discrimination whilst at the same time hindering efforts to find solutions to the problem.

Limitations of the Study

The limitation was that spiritual faith healers were more comfortable to be interviewed at their council offices as a group than as individuals. This compromised the study because each had to say what was perceived as right and not what he/she thought was right. Another limitation was that PLWA were not interviewed in this study. Their own understanding of HIV/AIDS stigma might have shed more light that could have enriched the researcher's interpretation of the results. Lastly, the results of the present investigation cannot be generalized to the entire population of the spiritual faith healers in Limpopo Province since only a small fraction was interviewed for the study.

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Recommendations

The church must give continuous training/workshops to its pastors on HIV issues. Second, more teachings on HIV in church will influence the church community to regard it as any other disease. Third, testing should be compulsory for every person who consults in a hospital. This could encourage HIV/AIDS to be accepted as the only condition of ill health not a killer disease. Lastly, future studies on this topic can be successful if the field worker is one of their own. Meaning somebody they know.

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Report of the XXI Congress
of IACCP

*Cross-Cultural Psychology
Bulletin, 2013*

Cross-Cultural Psychology in the Rainbow Nation of Africa – Nurturing Diversity for Sustainable Development

Report of the XXI International Congress of the International Association for Cross-Cultural Psychology

Deon Meiring, Leon Jackson, Erhabor Idemudia & Fons van de Vijver

This report was written just a few days after Hurricane Sandy swept through the East Coast of the United States of America, leaving behind a trail of devastation and unimaginable misery. The following day, CNN reported scenes of destruction and havoc, as well as heroic actions of New Yorkers—people trying to pick up their lives and return to work again. On the southern point of Africa, where we were gearing up for the ANC national conference in Mangaung, there was a different storm brewing that would help determine the fate of South Africans for the next five years.



The 21st International Congress of the International Association of Cross-cultural Psychology (IACCP) took place from 17 to 21 July 2012 on the Stellenbosch University campus. Stellenbosch, situated in a magnificent mountain valley 50 km from Cape Town, has charming scenery, some of the world's most famous vineyards and a rich cultural history.

The IACCP Congress was conceived in 2006 when South Africa was chosen to host the International Union of Psychological Science's 2012 International Congress of Psychology (ICP) in Cape Town. At that time, we were attending the IACCP Congress in Xi'an, China. Knowing that the ICP would come to South Africa, we proposed at the 2008 Bremen Congress EC meeting to host the IACCP 2012 Congress. Our proposal was accepted.

The planning and execution of the IACCP 2012 Congress in Stellenbosch was a labour-intensive four-year project. Five South African universities (Stellenbosch University, North-West University, University of Limpopo, University of Pretoria and University of the Western Cape) were involved, along with Paragon Conventions, an events company. The organisers put together a local organising committee (LOC) in August 2008, applied for funding from the South African National Research Foundation (NRF) and commenced with the journey to host the first-ever IACCP Congress on African soil, adopting the theme *Cross-Cultural Psychology in the Rainbow Nation of Africa – Nurturing Diversity for Sustainable Development*.

Attendance

Despite the economic recession, the Congress was well-attended with 517 delegates from 52 countries around the world (see Table 1). For obvious reasons, South Africa topped the delegate list, followed by the USA (47)—amazing considering the distance that Americans had to travel to South Africa. Popular rivalry between the Osnabrück group from Germany and the Tilburg group from the Netherlands filled the third and fourth “most well attended” countries.

Pre-Conference Activities

PhD Winter School

The four-day PhD Winter School kicked off on 13 July 2012 at the Stellenbosch University. It was the second IACCP school, following the PhD Summer School that took place at regional conference in Istanbul in 2011. The Winter School was sponsored by the IACCP with the Jacobs Foundation sponsoring the culture and development stream. The programme was designed to facilitate cross-cultural contact and understanding among future academic leaders and broaden their academic vision in the field of cross-cultural psychology.

Table 1. Attendance from 52 countries

1.	South Africa	110	14.	Hong Kong	9	27.	Taiwan	3	40.	Namibia	2
2.	USA	47	15.	Poland	9	28.	Brazil	3	41.	Portugal	2
3.	Germany	39	16.	Norway	8	29.	Bulgaria	3	42.	Romania	2
4.	Netherlands	33	17.	Switzerland	8	30.	Denmark	3	43.	Zambia	1
5.	U Kingdom	27	18.	Turkey	8	31.	Finland	3	44.	Austria	1
6.	Australia	20	19.	China	8	32.	Hungary	3	45.	Egypt	1
7.	Canada	17	20.	India	8	33.	Italy	3	46.	Lebanon	1
8.	Israel	16	21.	Singapore	5	34.	Kazakhstan	3	47.	Oman	1
9.	Indonesia	12	22.	Czech Republic	4	35.	Mexico	3	48.	Slovakia	1
10.	Russia	12	23.	Ghana	4	36.	Spain	3	49.	Slovenia	1
11.	Belgium	10	24.	Japan	4	37.	Botswana	2	50.	Sweden	1
12.	France	10	25.	Philippines	4	38.	Iran	2	51.	Zimbabwe	1
13.	Nigeria	10	26.	Saudi Arabia	4	39.	Malaysia	2	52.	Luxembourg	1

There was much excitement as 38 students met at the Metanoia Dormitory for a team-building session, followed by a memorable dinner at the Stellenbosch Hotel in the evening—good traditional Western Cape food, the best red wine in South Africa and good company till past midnight! Over the next few days, three cross-cultural research streams (Cultural, well-being & societal development, Culture & Development and Acculturation & Intercultural Relations) were presented by Ronald Ficher (organizer of the Winter School), Hiltrud Otto, David Sam and Colleen Ward. The PhD Winter School was a huge success and was a good investment in our future generation of cross-cultural psychologists.

Workshops

On 17 July, workshops were well-attended by both the delegates and PhD Summer School students, who attended for free. The workshops were presented by some well-known and up-and-coming researchers in the field of cross-cultural psychology: Fons van de Vijver (An Introduction into Cross-Cultural Psychology), David Matsumoto (Emotion Assessment in Diverse Context—Culture, Emotion, and Expression), Amina Abubakar (Development and Adaptation of Psychological Tests and Scales for Use in Health and Education Related Fields in Resource-Constrained Settings), and Barbara Byrne (Beginner's Guide to Structural Equation Modelling: Basic Concepts and Applications). These workshops were inspirational, and delegates complimented both the content and the quality of the presenters, some saying that it had been a real learning experience.



Winter School Students Eva Sekwena and Leila Wardani work together on a Winter School project.

Opening

The opening of the IACCP 2012 Congress took place during the late afternoon on 17 July in the Endler Hall of the conservatorium of Stellenbosch University. It was a perfect winter day in Stellenbosch with a maximum temperature of 20^c degrees and no rain in sight. Situated in the Cape of Storms region, Stellenbosch is famous for being called the city of all seasons. To our relief, we only had one rain shower on the Thursday evening for the entire Congress—what a blessing.

The opening programme kicked off with a spectacular big bang: delegates arrived and were welcomed with an Amarula drink (African marula liqueur) and a typical African marimba band in the foyer of the Endler. The entire opening programme was designed and conducted by a master's student from the Music and Drama Department of Stellenbosch University. It included typical South African performing artists, traditional dance, praise poetry and singing, the Stellenbosch University Jazz Band, and single piano and a vocal artist. The highlight of the evening was the Young Caballeros choir that captivated the audience.

During the opening ceremony, Deon Meiring, one of the local conference organisers, announced the establishment of the Fons van de Vijver Cross-Cultural Scholarship in South Africa. Fons van de Vijver received the scholarship trophy during the opening session for his continuous and dedicated cross-cultural work over the years in South Africa.

Scientific Programme

Our Congress theme was *Cross-Cultural Psychology in the Rainbow Nation of Africa—Nurturing Diversity for Sustain-*



Amina Abubakar teaches her workshop, *Development and adaptation of psychological tests and scales for use in health and education related fields in resource-constrained settings.*

able Development. We chose this theme, after much deliberation among the LOC members, in order to emphasize that it is imperative that we nurture our young democracy in South Africa, and that if we don't, we will not have sustainable development in the future. The Congress aimed to produce scientific collaboration and exchange of ideas among psychologists around the world. Cross-cultural psychology is not a well-established branch of science in South Africa despite the country being a multicultural society with huge diversity. The Congress also wanted to attract more attention to cross-cultural research in South Africa and stimulate psychological theories in all branches of psychology and related disciplines.

Lastly, the IACCP Congress could be an important catalyst to unlocking awareness of and sensitivity for cross-cultural differences and similarities in our country and other African states in the region.

A packed scientific programme of more than 389 presentations was squeezed into ten to fourteen parallel sessions per day. Ten invited keynotes were given by distinguished scholars: Charles Newton, Colleen Ward, Colin Tredoux, Johnny Fontaine, Sheena Iyenga, Klaus Boehnke, Sig Hung Ng, Michael Ungar and Yoshihisa Kashima. Shaun Johnston from the Mandela Rhodes Foundation gave a keynote talk on "Finding the future Mandelas," explaining the kind of work that is being done to keep the Mandela legacy alive in areas that were of special interest or concern to the past president during his active political career.

Delegates had the privilege of celebrating Nelson Mandela's 94th birthday on 18 July, International Nelson Mandela Day, with the South African nation. Blowing out the candles on 94 cupcakes and singing "Happy birthday" to Madiba was one of the highlights of the day.

A large number of symposia—42 in total of 90 minutes each—were presented. Eleven special invited symposium speakers were asked to present some of their best work to their colleagues: Amina Abubakar, Anna Doring, Deborah Best, Hiltrud Otto, Ian Roth-



Opening Ceremony The Young Caballeros perform an exciting program.



Welcoming At the cocktail party.

mann, Joopie van Rooyen, Lind Theron, Nicola Taylor, Silvia Xiaohua Chen, Wiliam Gabrenya and Ype Poortinga. The presidential speech was delivered on Thursday, 19 July 2012 by Kwok Leung on “The role of indigenous research in constructing universal theories.” The Walt J. Lonner Distinguished Lecture Series address by Scott Atran on “Religious and sacred imperatives in human conflict” followed. Shalom Schwartz delivered a state-of-the-art lecture on Thursday afternoon, titled “Does religion affect people’s basic values? Comparing Roman Catholics, Protestants, Eastern Orthodox, Muslims, Jews and non-religious across 33 countries.”

For the first time in IACCP history, the scientific programme also included a rapid papers session. Such a session consists of five to ten presenters using slides and poster boards. Each rapid paper presenter prepares a few slides, up to three minutes in total duration, describing the rationale, aim, method and findings of his/her study. Presentations were followed by a conventional poster session. The format seemed to work well, although the programme was challenged by a large number of no-shows.

The closing session of the Congress was held on Saturday afternoon, 21 July. In comparison with other IACCP congresses, it was well attended with more than 250 delegates present. Deon Meiring delivered a final word by giving an overview of the conference—starting with Xi’an, China, up to the end of journey and the IACCP 2012 proceedings. During the short ceremony, the IACCP, student congress helpers, and Paragon Conventions were thanked for their support.

Social Programme

The social programme lived up to the usual high expectations of IACCP delegates when they were treated to a cheese and wine evening at the Wallenberg Centre, Stellenbosch Institute for Advanced Study (STIAS), on 18 July 2012. A number of the prestigious Stellenbosch wine farms served some of the best wines in the region that evening. Kwok Leung, president of the IACCP, hosted a party at the STIAS manor house welcoming new IACCP members with a glass of JC le



Mandela cupcakes Enjoying cupcakes at a party celebrating International Nelson Mandela Day. From left: Leila Wardani, Lidia Lae, Miki Tanaka.



Welcoming newcomers President Kwok Leung welcomes new IACCP members at the wine tasting party.

Roux champagne. New friendships were established and old relationships reinforced.

As always, the Congress dinner, held on 20 July 2012, was a highlight. Busses transported delegates to the prestigious Spier wine estate on the outskirts of Stellenbosch. In a magical setting amidst the ancient oaks and colonial splendor of the historical Spier Manor House, Moyo, a true African restaurant, offered a unique dining experience. Delegates were treated to an Umdliva buffet dinner consisting of a selection of cuisine flavours from the continent of Africa, prepared at an outdoor kitchen using only the finest ingredients. A further highlight of the evening was the traditional IACCP disco that lasted long into the African night.



Dinner dance Dance party at the Congress banquet (a crucial IACCP tradition).

Special Projects Performed in Conjunction with the Congress

Two community-based projects were initiated in local Stellenbosch townships in 2011 and launched during the Congress as one part of the legacy of the IACCP 2012 Congress: Project Flower and Project Child.

Project Flower

IACCP 2012 joined with the South African National Biodiversity Institute (SANBI) to implement the Outreach Greening or School Indigenous Greening Programme at the Sustainability Institute. This project was initiated by Prof. Michael Bond, who visited the Kirstenbosch National Botanical Garden and showed a keen interest in taking pictures of flowers. When asked about the link between flower diversity and a congress on culture, Prof Bond replied, "What comes to mind is the use of the metaphor of the diverse flower garden in the Baha'i writings to symbolise the beauty of unity across cultural groups." The aim of the project was to introduce botanical gardens to communities by providing the resources and specialised

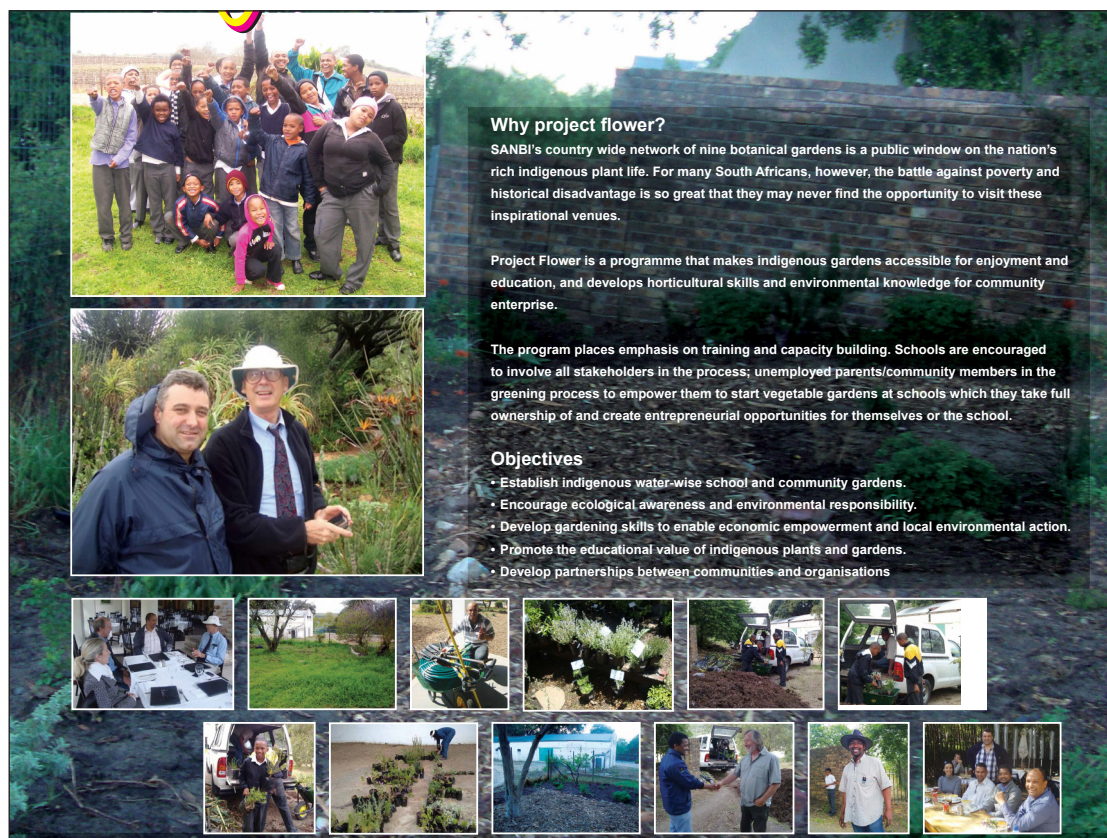


Hunting and gathering Judith Gibbons, Henrik Dobewall and Kahaema Byer forage at the banquet buffet line.

knowledge to train and empower the schools and communities to plan, plant and maintain indigenous, water-wise gardens. During the Congress attendees visited the garden at the Sustainability Institute.

Project Child

Project Child was initiated by Prof. Heidi Keller and her PhD student, Hiltrud Otto. It focused on exploring social experiences of infants in a multi-cultural setting of Kayamandi township in Stellenbosch and Khayelitsha in Cape Town. The project was a collaboration among IACCP 2012, the Department of Psychology at Stellenbosch University and Prof Keller's research team. The data gathered over the course of the project contributed to the development of a culturally-appropriate suite of early intervention programmes that will serve the interests of infants and children living in conditions of social adversity in Stellenbosch. Findings of this project were presented by a master's student of Stellenbosch University at an invited symposium titled "The cultural shaping of social experiences of infants: A collaborative enterprise—early social experiences of infants growing up in Stellenbosch and Khayelitsha."



Why project flower?
 SANBI's country wide network of nine botanical gardens is a public window on the nation's rich indigenous plant life. For many South Africans, however, the battle against poverty and historical disadvantage is so great that they may never find the opportunity to visit these inspirational venues.

Project Flower is a programme that makes indigenous gardens accessible for enjoyment and education, and develops horticultural skills and environmental knowledge for community enterprise.

The program places emphasis on training and capacity building. Schools are encouraged to involve all stakeholders in the process; unemployed parents/community members in the greening process to empower them to start vegetable gardens at schools which they take full ownership of and create entrepreneurial opportunities for themselves or the school.

Objectives

- Establish indigenous water-wise school and community gardens.
- Encourage ecological awareness and environmental responsibility.
- Develop gardening skills to enable economic empowerment and local environmental action.
- Promote the educational value of indigenous plants and gardens.
- Develop partnerships between communities and organisations

logical Association's (APA) PsycEXTRA®, a unique database that combines bibliographic records of congress information in the behavioural and social sciences. All the IACCP 2012 Congress information was uploaded on PsycEXTRA database. Participation in the database will enhance visibility and broaden the dissemination of the IACCP 2012 Congress information.

Lastly, the IACCP 2012 Congress

recruited over 100 new IACCP members for the Association. From a financial perspective, the IACCP Congress was a success with surplus revenue being paid into the Fons van de Vijver Cross-Cultural Scholarship for disadvantaged students to expand cross-cultural studies in South Africa.



Congress staff Student helpers from the University of Pretoria and Stellenbosch University. From left: Lelani Borman, Suzaane Gericke, Samantha Adams, Louise Moolman.

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