Same tasks, but different foci? Intercultural differences on cognitive, knowledge and assessment center measures when comparing a homogenous west-European sample of cadet pilot applicants with a highly heterogeneous sample from Mauritius.

Jan L. Lorenz and Viktor Oubaid

Department for Aviation and Space Psychology, DLR German Aerospace Center, Hamburg, Germany

Abstract. A sample of 52 Mauritian cadet pilot applicants was compared to a sample of 860 German cadet pilot applicants on several cognitive selection exercises and an expert rating of social skills shown during an assessment center exercise. Initial results imply that Mauritians in general – and in spite of a high intra-variability of cultural determinants – were significantly biased towards a more cooperation-oriented team work approach. While some foreseeable differences on knowledge tests could be found, the performance on various cognitive tasks showed unexpected differences. Limitations of the design and future directions for the intercultural comparison of heterogeneous with more homogenous cultural groups are discussed.

Keywords: selection; pilot; intercultural; cross-cultural; assessment

Introduction

The Republic of Mauritius is a fascinating country not only because of its touristic appeal but also because of its highly pluralistic society. Lacking an actual indigenous population Mauritius has had a plethora of cultural influences brought forth from a moved colonial past and recent migration trends. Before gaining its independence in 1968, Mauritius was discovered by Arab sailors in the middle ages, used as an outpost by the Portuguese and colonized first by the Dutch, then by the French and finally by the British. Due to the abolition of slavery in 1835, the British brought Indian people to Mauritius to work the fields and to work as soldiers. Today, the ancestors of these Indians and more recent immigrants constitute the predominant Indo-Mauritian majority (68%) of all approximately 1.3 million Mauritians. In Mauritius, people with Indian, African (27%), Chinese (3%) and European (2%) origins form a multicultural and pluralistic public (CIA, 2014).

The languages used and religions practiced on Mauritius are equally diverse: Most people (86.5%) speak Mauritian Creole, while French is often used in a professional or formal verbal context and English, the official language used in parliament and laws, is often used for formal written communication. Other Asian dialects like Urdu persist as well. The most prevalent religion is Hinduism (48.5%), followed by Roman Catholics (26.3%) and Muslims (17.3%, CIA, 2014). Thus, identifying a global and common cultural identity becomes a daunting task. We assume that the most common factor is indeed the cultural heterogeneity of the people who live in Mauritius.

A cultural comparison with German citizens thus turned out to be quite a challenge. There are few intercultural studies including Mauritius – and most of these do not address any cultural dimensions or psychological variables. Most deal with business, healthcare, ethnological, tourism- or education-related issues.

One example of such a business-related paper is a study dealing with adopting or migrating HRM strategies from the 'West' to Mauritius (Iles, Ramgutty-Wong & Yolles, 2004). This study depicts the constraints und which personnel selection is being conducted in Mauritius. The authors report that on the one hand, Mauritius has become a prospering developing country far different from many African states – "success-story" (Iles et al., 2004, p647). On the other hand, they describe the dissemination and application of HRM (best) practices from other countries as problematic in Mauritius because of a continuing influence of nepotism, favoritism, patronage and ethnic bias throughout HRM work. The authors describe the public sector as dominated by the Indo-Mauritian workforce while the private sector features more Franco-Mauritian and Creole personnel. They even describe the public is that politically backed "cronies" of the ruling regime are often preferred over more qualified applicants (Iles et al., 2004, p649).

This vivid description by Iles et al. (2004) serves to illustrate why a major Mauritian airline tasked DLR selection specialists as an independent and internationally experienced organization to conduct a purely merit-based personnel selection campaign for both readyentry pilot and ab-initio pilot training positions. The DLR, the German Aerospace Center, runs a research facility for Aviation and Space Psychology in Hamburg which has a longstanding history of frequent cooperations with international airlines to provide scientifically valid support with psychometric selection campaigns while at the same time collecting data during these campaigns to advance the knowledge-base in this domain. For us, working with Mauritians provided a unique opportunity to collect data for a cross-cultural comparison.

To frame concrete hypotheses for the cross-cultural comparisons, we did of course seek psychological studies relating to cross-cultural effects when comparing Mauritians with foreign nationals. But even the few studies that are psychological in nature usually focus on clinical differences that cannot be used to formulate hypotheses about performance and behavior in specific selection exercises.

To conduct cross-cultural research at all, is a daunting task. As participants of a crosscultural comparison cannot be allotted a culture, but have been raised in one, no real psychological experiment can be conducted (e.g. Simon, 2006). In addition, culture per se is not a mono-causal or uniform construct; it can even be argued that nationality may have increasingly less to do with any one individual's culture than other factors (Gupta, 1992). Furthermore, cultural beliefs and nationality as a latent variable may be interlaced with rituals and practical differences in education and social status. Many differences on a national level, for instance, that had formerly been attributed to cultural factors, under closer examination turned out to be language effects (e.g. Lass, Yan, Chen, Becker & Lüer, 2008).

However, with his groundbreaking work Geert Hofstede (1980, 2010, 2011) proposed meaningful dimensions with which to differentiate cultural values and beliefs on a national level. In over 50 countries Hofstede initially examined more than 100000 IBM employees using a 47-item questionnaire that turned out to be valid and reliable when comparing countries. The most recent edition, the VSM2013 (online resource: http://geert-hofstede.com), features 30 items and permits the identification of six distinct cultural dimensions (Hofstede, Hofstede & Minkov, 2010).

We assume that these dimensions would provide a basis for formulating hypotheses when comparing the social behavior members of two distinct nations such as Germany and Mauritius exhibit in team-based assessment center tasks. It can be reasoned that the Individualism/Collectivism dimension postulated by Hofstede and most frequently used to differentiate between cultures, may be best suited to shed light on team behavior (e.g. Paul, Samarah, Seetharaman & Mykytyn Jr, 2004). Other dimensions such as Power Distance should play a less vital role, as among applicants roughly equal in age and with an equal educational degree, no salient status differences can be assumed. We therefore limit our focus on the Individualism/Collectivism dimension.

While Hofstede et al. (2010) found Germans to be rather individualistic (ranked 19th of 70 examined nations on Individualism, index score of 67, while the first ranked US have an index score of 90), the results for Mauritius are both sparse and ambiguous. A thorough internet and literature search turned up reports of two studies that claim to have examined Hofstede's dimensions in Mauritians. Firstly, Liu and Sudweeks published a conference paper in 2003 reporting the results of a case study conducted with staff members of an international communication technology company. They employed a questionnaire that contained four items supposedly based on Hofstede's "framework" (Liu & Sudweeks, 2003, pp4) to measure 115 Mauritian employees' individualism levels. They found Mauritians to be highly collectivist in their tendency to strive for consensus and attributed these findings to the Asian background of many Mauritians. Unfortunately, the authors apparently did not use Hofstede's original items (e.g. Hofstede, 2010). Even though the questionnaire items were well formulated, their validity and reliability are thus questionable at best. Secondly, in her 2004 book chapter on HRM practices in Mauritius, Anita Ramgutty-Wong describes a study in which two groups of Mauritian students participated. In contrast to the paper described above, the results indicate that Mauritians are individualistic rather than collectivist. Unfortunately, Ramgutty-Wong does not specify how the study was conducted. Neither sample size nor instruments used are mentioned. As both studies have conflicting results and appear to be somewhat unreliable sources for information, the empirical data on individualism or collectivism in Mauritius is not suitable to unequivocally categorize Mauritius one way or the other.

That is why, for the sake of simplicity, we did assume that most cultural influxes that constitute the actual Mauritian 'culture' in the form of psychologically active values, beliefs and habits are derived from the original countries most Mauritians stem from. These countries are India and several African nations. India is ranked considerably lower by Hofstede et al. (2010) and others on Individualism than Germany (ranked 33rd of 70 examined nations on Individualism, index score of 48) and most African countries seem to be even more collectivist in nature (ranked between places 50 and 63 out of 70 countries on Individualism with index scores of 20 to 27). We therefore assume that Mauritians in general should be more collectivistic in their beliefs, values and behavior. Of course this neglects both the changes that the original countries have undergone since the Mauritians' (ancestors') emigration and the influences that post-colonial plurality has had on the society. Moreover, authors like Ramgutty-Wong (2004) assume that the struggle for prestigious and well-paid jobs in a developing country might have led to advanced individualism. Nonetheless, we suppose that a deeply rooted collectivist interest in (extended) family values is still dominant in Mauritius. The wide-spread instances of favoritism of relatives etc. in HRM selection campaigns that has been reported by Iles et al. (2004) support this proposition. Mauritius appears to be a society in which favoring the members of ones' ethnic group or family over others is a matter of loyalty – which is a typical example of collectivist norms influencing individuals' behavior.

In summary, we base our hypotheses on the assumption that the behavior Mauritians exhibit in social situations should be influenced by prevalent collectivist values and beliefs. As a collectivist behavioral orientation has been found to lead to more collaborative effort in virtual team-based tasks (Paul, Samarah, Seetharaman & Mykytyn Jr, 2004), we hypothesize (1) that a similar influence should work in favor of Mauritians when compared with Germans concerning cooperative behavior. We assume that this tendency might even be enhanced by the striving for consensus that diverse teams in such a pluralistic country as Mauritius

necessitate on a daily basis. We do, however, also hypothesize (2) that the typically collectivist tendency to place the group's interest above one's own and to strive for harmony in general (e.g. Hofstede, 2011), might result in a more timid communication style that Mauritians exhibit in teams when being compared with Germans.

Concerning the basic cognitive abilities of the applicants, we propose (3) a nullhypothesis. We found no reason to assume that Mauritian applicants, if trained in the same way as Germans are, should perform either better or worse.

We did, however, hypothesize (4) that Mauritians should display more pronounced written English knowledge skills than Germans since English is one of the official languages of Mauritius. Even though English is not frequently spoken in Mauritius, its written form is considerably more present in everday life in Mauritius than it is in Germany.

Method

The Mauritian subsample consisted of a total of 52 applicants for an ab-initio pilot training position with a major Mauritian airline. Some applicants had prior knowledge in aviation because they had commenced some sort of pilot training on their own or were already working for the airline in another capacity. The vast majority of subjects, however, were high school or university graduates with no prior knowledge in aviation. The average age was 24,73 years (SD=2,20) and most applicants were male (92,3%). The only prerequisites for an application were a minimum age of 20 years at the time of application and an A-levels high school degree or an equivalent education. Members of all major ethnic groups and religions had applied and were tested: Indo-Mauritians of Hindu, Muslim and Christian faith, Creole Mauritians, Franco-Mauritians and Sino-Mauritians. The selection exercises took place in Mauritius in the fall of 2013 and in spring of 2014. The most recent ab-initio selection campaign prior to the campaign which is the topic of this study had been conducted seven years earlier in 2006/2007. That is why several applicants had applied previously and many applicants appeared to be highly motivated to participate.

For the German subsample, a group of comparable applicants (ab initio applicants, minimum age = 20 years) was selected randomly from our database of several ten-thousands of participants (age M=21,16, SD=2,04; 90,5% males). These German applicants had applied for a sponsored ab-initio pilot training position in conjunction with a contract with a leading German airline and were generally undergoing a similar if slightly more extensive selection process. In contrast to the Mauritian sample, the hiring process in Germany was not a one-time affair but had been a continuous procedure for many years.

All participants from both countries underwent a similar selection process involving three eliminatory selection stages: Stage 1 was a computerized test battery comprising a number of knowledge tests, a personality questionnaire and cognitive skills tests. Stage 2 consisted of one or more group exercise or exercises and the final stage 3 entailed a semi-structured, hypothesis-based interview. All participants from both subsamples were thoroughly prepared with established and proven instruction material and computer-based training programs for the computerized tests. The testing material used, the instructions and the training package were provided in German for the German participants and in English for the Mauritian subsample. We assumed that the use of English material should not prove problematic since English is one of the official written languages in Mauritius. During the testing we were able to verify this assumption, and the language test was used as a control variable to support the assumed English language proficiency among the Mauritian subsample (see below). The elimination process was completed in accordance with confidential company standards each airline had set. Yet, they turned out to be nearly identical in so far that both

companies expected at least average performance levels on all tests and procedures. The actual testing was conducted under fairly equal conditions: Both in Germany and Mauritius the computerized testing was done using touchscreen devices of similar size and latency in a calm, air-conditioned room with artificial lighting. The assessment center task was done in a paper-pencil setting with equal group sizes in both countries varying from three to five group members. Once more, the task was conducted in both instances in an air-conditioned room with artificial lighting. The instructions that had been carefully translated into English were given by a trained professional assessment center assistant who has had many years of experience with the specific task that was used. For both subsamples two trained and experienced independent observers (aviation psychologists with > 3 yrs experience in behaviour observation) were present during the group task and rated the applicants' performance using an anchor-based, standardized 6-point Likert-scale. Four dimensions of group task performance were being rated: leadership, cooperation, communication and stressresistance. For the purpose of this paper only the data relating to cooperative behavior and communication style will be examined. As the hypotheses introduced above state, we proposed that on average the Mauritian applicants should exhibit more cooperative behavior and should be rated lower in communication than the German applicants.

There were, however, some differences in the procedures. While the German participants were tested on a separate date and in a large group for stage 1 and were reinvited for stages 2 and 3 in case they had been successful, the Mauritian participants were invited for a two-day testing period which contained the computerized testing on the first day and, in case of success, the group exercise as well as the interview on the second day. In addition, the German subsample underwent a wider and slightly different variety of tests and exercises in both stage 1 and 2. Of course, only the tests and the exercise that all participants had in common were the focus of this study. Another difference was the maximum time that the applicants could allocate to using the computer-based training material before being tested.

While due to organizational constraints the Mauritian subsample received its material via a direct download link two weeks in advance, the German applicants were provided with access to a download page up to three months prior to the test date. That is why the German applicants may have trained more often with the training programs. Of course, we do not have any actual knowledge about the absolute numbers of completed training runs per person because the material provided can be used offline and without any data feedback.

The group task used in this study was one that had been thoroughly discussed by European applicants on several internet bulletin boards and pilot networks. In addition, a number of German companies provide expensive training opportunities for this specific task in the context of a larger assessment center preparation seminar. Thus, we had to assume that a certain number of German participants would have more knowledge about the task and would turn out to be prepared in some way. To countermand this difference, for the German subsample, we deliberately chose a group from 2006 - when the task was still largely unknown to German applicants as well.

The computerized tests and the group task that were used in this study had all been developed in Germany which might imply a cultural bias favoring German participants. Yet, Simon (2006) argues, that most tests were designed with the explicit goal to measure interindividual differences and can, for the most part, be employed in varying (cross-)cultural settings as long as conditions for all participants are controlled equally. As stated above, the preparation for the testing and the actual testing were conducted in as equal a manner as possible for both subsamples. In addition, except for the group tasks, all tests had been used successfully in different cultural settings ranging from the Middle East to East Asia by DLR selection specialists. The tests were found to be sensitive enough to provide meaningful data in all cultural environments they had been used in. The battery of tests used to measure the cognitive abilities of all applicants comprised DLR tests specifically designed to measure aviation-related capabilities such as spatial orientation, memory function, attention control, psychomotor coordination and multitasking capability. In addition, computer-based multiple-choice tests were employed to measure basic knowledge in written English and mechanical comprehension. Finally, a computer-based mental arithmetic test had to be completed. Others have described the principles and psychometric properties of our testing procedure in more detail (e.g. Zierke, in press; Damitz, Manzey, Kleinmann, & Severin , 2003; Maschke, Oubaid & Pecena, 2011).

For the purpose of this paper the results of the written English test and the test for the acoustic running memory span (RMS; e.g. Broadway & Engle, 2010) as well as an optical detection test (OWT) were analyzed. During the RMS participants wear headphones and listen to a continuously presented row of numbers between one and nine and have to reproduce as many numbers as they can remember as soon as the presentation stops in reverse order. They use a virtual touchpad to enter the numbers. The OWT features briefly presented black and white pictures of stylized aeronautical instrument displays with different distinguishing properties such as form or color. In accordance with changing instructions, these instrument displays have to be scanned for the instructed property and the values displayed have to be retained and reproduced, once again using a touchscreen interface. Referring to the hypotheses presented above, we assumed that Mauritians should perform better on the written English test and no differences were proposed for both of the other tests.

Results

All statistics were calculated by using SPSS 20.0 for MS Windows. The data was analysed to examine group differences in social-interactive behaviour (Cooperation and Communication) and two cognitive measures. T-test analyses were performed to determine whether Mauritians and Germans differ as predicted and Hedges g (Hedges, 1981) were calculated to estimate the effect sizes. Hedges g was chosen over Cohen's d (Cohen, 1988), because both Cohen's d and Hedges' g pool variances on the assumption of equal population variances, but g pools using n - 1 for each sample instead of n, which provides a better estimate, especially the smaller the sample sizes (see Grissom & Kim, 2005).

Mean scores (and standard deviations) on the social-interactive measures are presented in Table 1. Scores represented the mean behaviour ratings of two observers, ranging from 1 (does not fulfil requirements) to 6 (exceeds requirements).

	Germans n=860		Mauritians n=52		
	М	SD	М	SD	
Cooperation	3.32	.72	3.77	.91	
Communication	3.01	.87	3.06	1.18	

Table 1. Mean scores and standard deviations of Mauritian and German applicants in Cooperation and Communication

Notes. Mean differences: Cooperation: t=3.53 p<.001, g=.62; Communication: t=0.28 p=.783, g=.06

Whereas the groups differ significantly in *Cooperation* (p<.001), no significant group difference can be observed for *Communication*. The effect size for the mean difference in

Cooperation was rather high. In other words, Mauritians show a more cooperative behaviour in a group task compared to Germans.

Results indicated that Hypothesis 1 was supported as Mauritians showed higher behaviour ratings in Cooperation. Hypothesis 2 was not supported as Mauritians showed nearly equal communicative behaviour.

Next, the data of the cognitive measures and the English language test was analysed. Table 2 shows the results for the cognitive tests RMS and OWT. Scores represented the number of right answers in the tests.

Table 2.	Mean	scores	and	standard	deviations	of	Mauritian	and	German	applicants	in
cognitive tests RMS and OWT and the English language skill test											

	Gern n=8		Mauritians n=52		
	М	SD	М	SD	
RMS Memory	115.48	20.98	109.29	26.82	
OWT Optical detection	53.38	10.56	48.00	9.78	
Englisch test	43.65	6.44	48.86	5.01	

Notes. Mean differences: RMS: t=1.62 p<.05, g=.29; OWT: t=3.55 p<.001, g=.51; English: t=7.09 p<.001, g=.82

All three test scores show significant group differences, with a small effect size for the RMS (g=.29), a medium size for the OWT (g=.51) and high (g=.82) for the English language test. Germans gain higher scores in the tests compared to Mauritian applicants. Hypothesis 3 is not supported by the data as Germans had significant higher scores in the cognitive measures. Hypothesis 4 is supported with Mauritians having higher scores in the English test.

Discussion

The major hypothesis concerning the cooperative behavior in team-based workscenarios is supported by our data: Mauritians were rated significantly higher on cooperation during the assessment center group task than Germans. As we theorized this may be due to a general tendency to favor a harmonious solution in conflict situations that could be rooted in collectivist values prevalent in the pluralistic society of Mauritius.

The second hypothesis relating to the behavior in the group task proposed that some Mauritians could be too timid or muted in their communicative behavior – once again in an effort to strive for acceptance, consensus and harmony. This hypothesis could not be supported by our data. No meaningful differences could be discerned when comparing the average results on the communication measure rated during the group task. Mauritians in general were rated just as communicative as Germans when working on a team-based assessment center task. There was, however, a higher standard deviation. This could simply be due to the smaller sample size, but could alternatively indicate larger inter-individual differences that could result in a small number of Mauritians being extremely timid. Yet, this assumption would necessitate further systematic research.

Apparently, living in a highly pluralistic society with salient collectivist influences like Mauritius fosters the exhibition of a pronounced cooperative behavior in team task situations.

However, it also appears that upbringing within this community instilled in a small number of applicants a tendency to behave too timidly to speak up in crucial moments during the aforementioned team task. These two tendencies appear to represent two sides of the same coin: If the tendency to cooperate is moderately pronounced, a behavior well suited for the cockpit environment is displayed, whereas if this tendency is overly pronounced it may lead to a timid and muted communication style that is detrimental to the communicative endeavors needed for a safe flight.

We can only speculate about the origins of this phenomenon. If we postulate that most post-colonial cultural influxes and processes are based on migrants from countries that promote predominantly collectivist values, a mediated influence of these values may play a certain role. As McLeod, Lobel, and Cox (1996) and Paul et al. (2005) noted, people who view themselves as collectivist are more prone to engage in collaborative behaviors than others. It would be worthwhile to test the assumption underlying both hypotheses discussed above in future research by employing Hofstede's (2011, 2010, 1980) original instruments to establish a ranking on all six cultural dimensions using a sample that is representative for the general Mauritian public, i.e. mirroring the demographics of Mauritius.

The results obtained and discussed above appear even more impressive if one considers the properties of the Mauritian sample. The pilot profession can be considered a rather 'western' occupation in so far as it is set in a complex machine designed by 'western' scientists and engineers, by definition is a rather individualistic work environment for the pilot and co-pilot and uses the English language as the universal means of communication worldwide. It is an unproven, yet reasonable assumption that such a profession might attract people who are already more 'western' in their beliefs and actions than the majority of their fellow countrymen is. After all, to feel comfortable to apply for a job in a 'western' work environment in the first place. It could consequently be argued that the results derived from our limited sample even underestimate the degree of cultural influences on cooperative group behavior. A similar study with a truly random Mauritian sample would be suited to shed more light on this hypothesis.

On the other hand, this constriction of the sample's prototypicality for Mauritian people, which is further increased by the prerequisites for applicants (high school degree, internet access etc.), considerably limits our findings' generalizability to other settings and Mauritians in general. We would, consequently, refrain from stating that Mauritians generally tend to cooperate more in small group settings than Germans. Nevertheless, we do think that it would be an interesting topic to investigate in future research endeavors.

It can be assumed that members of similar cultural spheres would be prone to comparable biases, but once again, our restricted sample does not warrant this generalization and further research is needed to validate this proposition.

It can be seen as a limitation of our research design that the authors conducting this study collected the data as well. That means there were no true double-blind conditions as the researchers did, for example, also rate the applicants' behavior. Then again, the raters were thoroughly trained and had several years of experience with rating this specific task, thereby minimizing the risk of biases in the rating process. Additionally, if there had been a bias towards the ideas of this study, it would probably have applied to both hypotheses in equal measure. Finally, it can be argued that during the selection campaign the most prevalent motivation was to find suitable candidates for the airline – and not to generate data to match hypotheses.

With regard to the written English language skills we had proposed an advantage for the Mauritian subsample. The differences in the average performance on the conducted test turned out to be significant and meaningful. Mauritians on average performed far better than Germans on the English language test. As English in its written form is one of the official languages used on Mauritius, this was hardly surprising. Moreover, these results support our strategy to supply Mauritian applicants with tests and preparation material written in English. The results presented relating to the cognitive performance measures that were examined using the running memory span test RMS and the optical detection and retention test OWT disprove the hypotheses that there are no differences between Mauritians and Germans on cognitive measures. The German subsample did perform significantly better on both tests. As these results were unexpected, there is no easy way to explain the differences found. We still do not assume that there are any systematic differences in the cognitive 'hard-wiring' of Mauritians when compared to Germans, but rather that other extraneous factors may have contributed to the unpredicted findings. For one, even though both groups had sufficient time to practice and were supplied with the same training material, the German applicants had much more time to prepare. In addition, some may even have acquired the training material from other sources, including commercial test preparation centers, that were not readily available to the Mauritian subsample. Furthermore, even though Mauritius is in the process of expanding its high tech affinity and availability of modern internet access opportunities to the public, some Mauritian applicants may still have been less familiar with touchscreen devices than Germans. These factors may have contributed to the unexpected outcomes. It would be preferable in future studies to either control these factors or systematically examine them as possible mediating factors.

One of the practical goals of this study had been to evaluate the applicability of our tests in this fascinatingly diverse cultural environment. It came as no surprise that the computerized test battery in conjunction with the provided training material served well to measure the applicants' performance levels, since parts of the battery are being put to use successfully in many different countries around the globe (e.g. Oubaid, 2004, Oubaid, 2006). Yet, we were pleasantly surprised that the Mauritian applicants were able to perform so well that we were able to use Western-European norms to ultimately gauge their performance.

Most remarkably perhaps, the newly adapted team task that was used abroad for the first time, turned out to consistently produce relevant behavior among the observed groups. Moreover, our rating system allowed us to adequately quantify our observations. It should also be noted that the behavioral differences which the Mauritian participants exhibited in comparison with the German subsample could be mapped quite well within the existing rating framework's ranges.

References

- Broadway, J. M., & Engle, R. W. (2010). Validating running memory span: Measurement of working memory capacity and links with fluid intelligence. Behavior Research Methods, 42(2), 563-570.
- CIA (2014). The world factbook 2013-2014. Washington, DC: Central Intelligence Agency.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2. Ed.). Hillsdale, NJ: Erlbaum
- Damitz, M., Manzey, D., Kleinmann, M., & Severin, K. (2003). Assessment center for pilot selection: Construct and criterion validity and the impact of assessor type. Applied Psychology, 52(2), 193-212.
- Gupta, A., & Ferguson, J. (1992). Beyond "culture": Space, identity, and the politics of difference. Cultural anthropology, 7(1), 6-23.
- Grissom, R. J., & Kim, J, J. (2005). Effect sizes for research: A broad practical approach. Mahwah, NJ: Erlbaum
- Hedges, L.V. (1981). Distribution theory for Glass's estimator of effect size and related estimators. Journal of Educational Statistics, 6 (2), 107–128

- Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1). http://dx.doi.org/10.9707/2307-0919.1014
- Hofstede, G., Hofstede, G.J., & Minkov, M. (2010). Cultures and Organizations: Software of the Mind, 3rd ed., McGraw-Hill, New York, NY.
- Iles, P., Ramgutty-Wong, A., & Yolles, M. (2004). HRM and knowledge migration across cultures: Issues, limitations, and Mauritian specificities. Employee Relations, 26(6), 643-662.
- Lass, U., Yan, S., Chen, G., Becker, D., & Lüer, G. (2008). Position effects in encoding briefly exposed item matrices: evidence for a reading bias or merely a matter of the selection criterion? Psychological research, 72(6), 641-647.
- Liu, Y. & Sudweeks, F. (2003). Culture, technology and teamwork: a case study of a Mauritian organisation. In: 4th International We-B (Working for E-Business) Conference, 24-25 November 2003, Perth, W.A.
- Maschke, P., Oubaid, V., & Pecena, Y. (2011). How do astronaut candidate profiles differ from airline pilot profiles? Results from the 2008/2009 ESA astronaut selection. Aviation Psychology and Applied Human Factors, 1(1), 38.
- McLeod, P. L., Lobel, S. A., & Cox, T. H. (1996). Ethnic diversity and creativity in small groups. Small group research, 27(2), 248-264.
- Oubaid, V. (2004) Cross cultural use of computer assisted testing system. Proceedings of the 48th Annual Conference of the International Military Testing Association IMTA, 25-29 September 2004, Brussels, Belgium,
- Oubaid, V. (2006). The problem of commercial test training: facts, data and anti-faking strategies. In: Proceedings of the 27th EEAP Conference, 24-28 September 2006, Potsdam, Germany
- Paul, S., Samarah, I. M., Seetharaman, P., & Mykytyn Jr, P. P. (2004). An empirical investigation of collaborative conflict management style in group support system-based global virtual teams. Journal of Management Information Systems, 21(3), 185-222.
- Ramgutty-Wong, A. (2004). HRM in Mauritius. In K. Kamoche, Y. Debrah, F. Horwitz & G. N. Muuka (Eds.). Managing human resources in Africa (pp. 53-68). London: Routledge.
- Simon, P. (2006). The solution of fundamental methodological problems in cross-cultural psychology by guaranteeing the equivalence of measurements. In J. Straub, D. Weidemann, C. Kölbl & B. Zielke (Eds.), Pursuit of meaning: Advances in cultural and cross-cultural psychology (pp. 269-292). Bielefeld: Transcript.
- Zierke, O. (in press). Predictive validity of knowledge tests for pilot training outcome. Aviation Psychology and Applied Human Factors.

Contact Information (Times New Roman, 14pt, bold, no sub-headers)

Time New Roman, 12pt, max. of three heading levels

If you have any questions or concerns regarding the above, please contact <u>conference@eaap.net</u>.