

## A comparison of sampling techniques in sport marketing research

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### Aim of the paper

The aim of the paper is to compare questionnaire data derived from disparate sampling techniques to address the appropriateness of generalising results.

### Literature review

The convenience sampling technique can invoke serious debate among scholars as to whether it is justifiable or not. Student samples are especially convenient because they permit scholars working in academic institutions to easily access large numbers of potential respondents. Snowball sampling is also convenient insofar as researchers need only initiate the process and then allow it to develop organically. The key criticisms of convenience sampling are that respondents are not representative of the wider population or that the phenomenon under investigation manifests itself differently in the case of students (Shen et al., 2011) or within the unique, unrepresentative sample that can result from a snowball technique. Despite pervasive criticism, empirical research is rarely carried out with the expressed purpose of exploring purported group differences based on sampling technique. One way to assess the appropriateness of generalising convenience sample derived results is to measure the construct of interest across samples (John & Benet-Martinez, 2000; Merenda, 2006). Sport marketing scholars have done little to empirically assess the issue of generalisability in conjunction with convenience sampling and little formal guidance has been offered. Many sport-based journals in which marketing research is published do not provide editorial guidelines related to the use of convenience samples as is the case with business journals (Bello et al., 2009). Despite the importance of this issue, a comparison of sport marketing data derived from disparate sampling techniques to explore the appropriateness of generalising results to wider populations has not taken place.

### Methods

New Zealanders ( $N = 1353$ ) accessed through three sampling techniques completed identical questionnaires in the immediate aftermath of the 2011 Rugby World Cup (RWC). Questions were adapted from previous research (Portlock & Rose, 2009) to measure individuals' perceptions of the ethics of RWC related ambush marketing. The student sample ( $n = 589$ ) was comprised of undergraduate students enrolled in an undergraduate sport and recreation programme at a large university. The snowball sample ( $n =$

257) was initiated by the three researchers using a combination of personal and professional contacts. The third sample ( $n = 507$ ) was accessed in conjunction with a private market research firm using a comprehensive random selection procedure and was therefore deemed to be representative of the New Zealand population. The third sample therefore serves as a "control" group of sorts in the current research. Participants responded using a 7-point Likert scale (1 = disagree and 7 = agree).

### Results

Analysis of variance was used to identify differences among the three groups on the nine variables of interest. Results indicated that sampling technique had a statistically significant effect ( $p < .05$ ) on six of the nine outcome variables although the respective effect sizes ( $\eta^2 = .01 - .02$ ) can be considered "small" (Cohen, 1988).

### Discussion

Although the differences were neither large nor identified in all nine variables under examination, some disparity was evident amongst the three groups. Therefore, this analysis suggests that generalising the results derived from the two convenience sampling techniques to a wider population (for whom the third sample is representative) would not have been entirely accurate. Nor do the results of this study, however, support the wholesale rejection of making guarded generalisations as a result of convenience sampling data because the differences were not of great practical significance. Given the equivocal nature of the results, the sport marketing community must engage in more research and discussion about convenience samples and clearly articulate on its own terms, when and why convenience samples are appropriate within sport marketing and more broadly, sport management research.

### References

- Bello, D., Leung, K., Radebaugh, L., Tung, R. L. & Van Wittleoostuijn, A. 2009. From the Editors: Student samples in international business research. *Journal of International Business Studies*, 40, 361-364.
- Cohen, J. 1988. *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ, Lawrence Erlbaum Associates.
- John, O. P. & Benet-Martinez, V. 2000. Measurement: reliability, construct validation, and scale construction. In: REIS, H. T. & JUDD, C. M. (eds.) *Handbook of research methods in social and personality psychology*. New York: Cambridge Press.
- Merenda, P. F. 2006. An overview of adapting educational and psychological assessment instruments: past and present. *Psychological Reports*, 99, 307-314.
- Shen, W., Kiger, T. B., Davies, S. E., Rasch, R. L., Simon, K. M. & Ones, D. S. 2011. Samples in Applied Psychology: Over a Decade of Research in Review. *Journal of Applied Psychology*, 96, 1055-1064.