October 20, 2011

Dear review committee,

Please find the attached final revisions to our manuscript "Tomorrow's seniors: Technology and leisure programming" in response to Reviewers A, B, and C.

While the authors addressed concerns throughout the manuscript as noted by the reviewers, specifics are given to certain items:

Reviewer A

- 1. Description of the modifications to the changes in the survey instrument affecting reliability is located on page 7. Psychometric information is also provided therein.
- 2. Response to reviewer comment: "The use of a Chi-square test to establish relevant differences is flawed."

Please refer to page 7 of the manuscript for a detailed justification of the use of the Chisquare test. The non-probability nature of sample selection "Nonparametric tests can be used when the parametric assumptions of normality and homogeneity of variance are not met." (Hinkle, Wiersma & Jurs, 1994, p. 534), and for comparison of two nominal variables (boomers v. seniors) with four levels organized into a 2 X 4 contingency table. "The χ^2 test is frequently used to compare two or more groups on a nominal variable with two or more categories." (Hinkle, Wiersma & Jurs, 1994, p. 542) Further, the purpose of the study was to primarily describe the use of technology among seniors and boomers – lending itself to a simple description of amount of use – captured by frequency statistics. The Chi-square test is also best used for the comparison of amount of technology use by male and female seniors and boomers as it is a comparison between four dichotomous groups.

- 3. A definition of internet as separate from e-mail is described on page 11.
- 4. Response to reviewer comment: "Critical Reasoning the paper's use of statistical inference without any collaborative evidence of the underlying independence of the sample populations (based on percentages of self-reported usage patterns) lacks scientific rigor."

As mentioned early in the manuscript, the study is exploratory, the researchers made no assumptions about the populations to begin with – no preemptive case was made a priori to suggest either groups' preference or not for technology usage. As such, the use of the Chi-square test to measure the frequency of technology usage and preference revealed differences and similarities between the two groups (boomers and seniors).

Reviewer C

- a. "the underlying research is not situated within a theoretical framework, and its results have a limited generalizability to a larger, or more global population due to flaws in the sampling strategy."
- b. "the fundamental flaw with this study is that it does not build on existing research regarding Internet and technology use. While older adults have received lesser attention by the academic community than their younger counterparts, many studies exist on adult Internet and technology...." An exhaustive search of recent (less than 3 years old) studies on technology usage among seniors and boomers resulted in a limited number of studies, all of which were used as support for our study. All of the examples of studies suggested by Review C are five or more years old. The researchers feel that due to the dynamic nature of technological usage and change, it is appropriate to refer to research that is less than 3 years old. Further, the lead researcher on the subject of leisure among Boomers is an acknowledged expert in the field with a book on the subject to her name. In addition, to reiterate, your study was exploratory, ultimately seeks to answer questions rarely addressed in literature on the subject, and therefore lacks a theoretical framework. The researchers have also acknowledged that a sample of convenience was chosen, but by using a Chi-square test of independence, we were able to address that issue. A chi-square test requires no assumptions of normality, or random selection of a sample.
- c. "The statistical analyses could be improved and strengthened significantly in this work. Information on reliability and validity of the various survey items should be included. Data should be adjusted to reflect at minimum, the demographics of the population. Because the older adult population is notoriously heterogenous.."

The researchers have provided information on the reliability and validity of the test, please refer to pages 6 and 7 in the manuscript.

Data regarding the specifics of the demographics is also provided in the manuscript, however, correlating the levels of education, socio-economic standard of the participants with their use of technology was outside the realm of inquiry.

While the researchers also do not agree that the older adult population studied (from the Villages) are heterogenous – ironically, the non-random nature of sample selection – an admitted flaw of our study- forces us to make no assumptions about homogeneity of variance. A problem mitigated, again, by the use of the Chi-square test of independence.

d. "Finally, the monikers "Boomers" and "Seniors" while actively used in the popular press, do not demonstrate value to the research community, as they are vaguely defined and carry significant cultural and hegemonic weight, especially in the U.S...."

The researchers believe that the terms "boomers and seniors" are used not merely by popular press, but are technical terms used by research published in prominent peer-reviewed journals in the U.S. Please refer to the following:

- Miller, N. H., Berra, K., & Long, J. (2010). Hypertension 2008—Awareness, Understanding, and treatment of previously diagnosed hypertension in Baby Boomers and Seniors: A survey conducted by Harris Interactive on behalf of the Preventive Cardiovascular Nurses Association. *Journal of Clinical Hypertension*, 12(5), 328-334.
- Frey, W. H. (2010). Baby boomers and the new demographics of America's seniors. *Generations*, 34(3), 28-37. Retrieved from EBSCO*host*.
- Knapp, J. L., & Pruett, C. D. (2006). The graying of the Baby Boomers: Implications for Senior Adult Ministry. *Journal of Religion, Spirituality & Aging*, 19(1), 3-15. doi:10.1300/J496v19n01_02
- Papoff, K., & Norris, J. (2009). Instant ticket purchasing by Ontario Baby Boomers: Increasing risk for problem gamblers. *Journal of Gambling Studies*, 25(2), 185-199. doi:10.1007/s10899-009-9117-0
- Myers, D., & SungHo, R. (2008). Aging Baby Boomers and the generational housing bubble: Foresight and mitigation of an epic transition. *Journal of the American Planning Association*, 74(1), 17-33. doi:10.1080/01944360701802006
- MaloneBeach, E. E., & Langeland, K. L. (2011). Boomers' prospective needs for senior centers and related services: A survey of persons 50-59. *Journal of Gerontological Social Work*, 54(1), 116-130. doi:10.1080/01634372.2010.524283

Further, the researchers have taken care to define each cohort in terms of their age throughout the manuscript. If the editors prefer, we can modify our term to include the word, "Baby" in front of Boomer. In addition, if preferred, we can also add the above citations as support for our use of the terms.

Please contact me further with any questions. We look forward to the publication.

Sincerely,

Lynda J. Sperazza, PhD, CPRP