

Longitudinal Methods Workshop

Multivariate analysis of change: concepts, analysis, and applications

Presented by Associate Professor Scott Hofer and Dr Lesa Hoffman

The Pennsylvania State University

10-14 July 2006

Venue: Australian National University

Overview

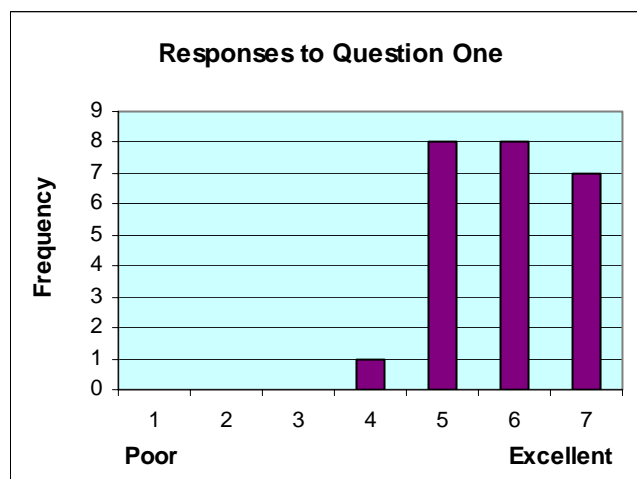
The Research Network in Ageing Well jointly funded this popular Longitudinal Methods Workshop in association with the Australian Government Department of Families, Community Services and Indigenous Affairs (FACSA). Associate Professor Scott Hofer and Dr Lesa Hoffman travelled from the Pennsylvania State University to present the workshop and they certainly gave the thirty participants a run for their money. Over a period of five days workshop participants explored the intricacies of modelling change via longitudinal mixed linear modelling (LMLM) and structural equation modelling (SEM) using SPSS and AMOS software.

In true Research Network fashion the workshop was well represented by a number of institutions across Australia currently involved in ageing research; including Monash University, The University of New Castle, The Department of Health (WA), La Trobe, Canberra Hospital, University of New South Wales, University of Sydney, University of Canberra, FACSA (ACT), and the Australian National University. The length and nature of the workshop facilitated networking between the workshop participants and the workshop presenters also discussed their interest in global networking between ageing researchers. In addition, Steve Gray, archive manager of the ANU ASSDA Archive gave a presentation on the last day of the workshop, promoting ageing research networking through the use of the archive. Both the ASSDA presentation and the workshop as a whole were well received by the participants. The workshop course evaluation survey revealed that overall, participants felt the workshop catered to their needs and stretched their knowledge base in longitudinal methods of modelling change.

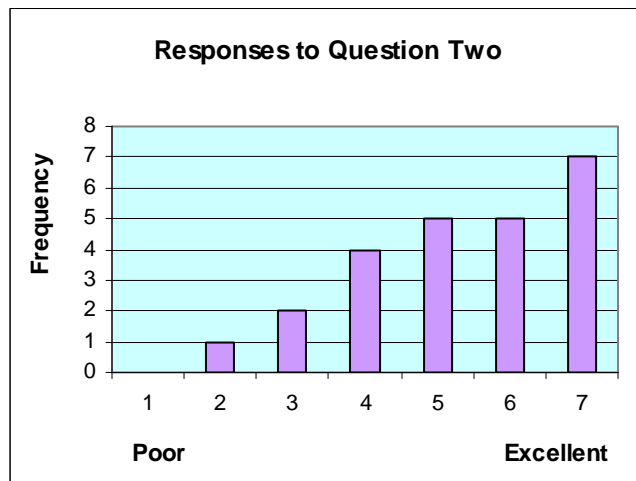
Evaluation of workshop

The workshop participants were asked to complete an evaluation survey concerning the workshop on the final day of the workshop. Of the thirty participants asked to complete the form, there were 24 respondents. Respondents were directed to evaluate on a scale of 1-7 how appropriate various aspects of the workshop were.

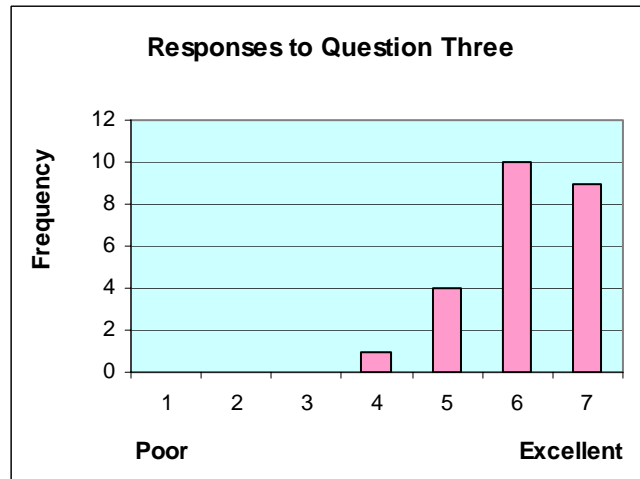
Question one: The workshop was well organised and structured appropriately



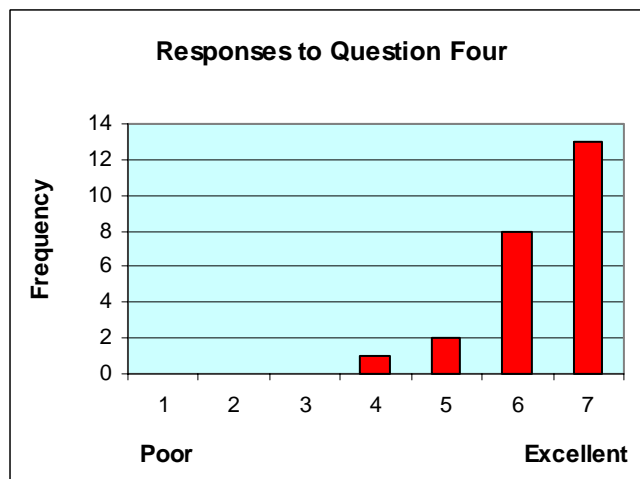
Question Two: The goals of the workshop were made clear



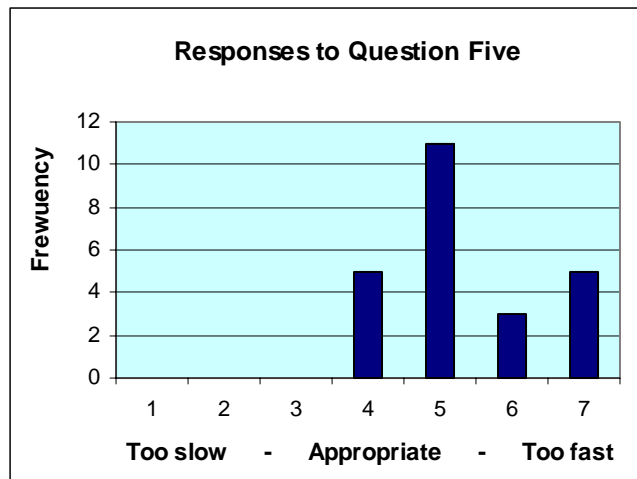
Question Three: The workshop served well to heighten or sustain your level of interest in the subject matter



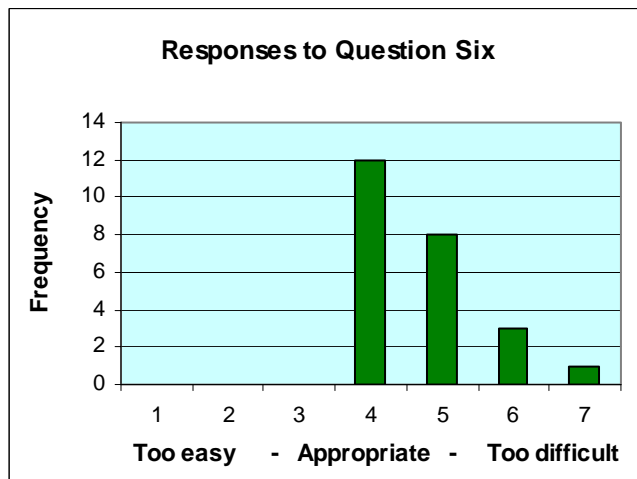
Question Four: The reference and support materials used in this workshop, (e.g. Readings, manual, software, electronic media) were appropriate to the goals of the workshop and valuable as aids to learning



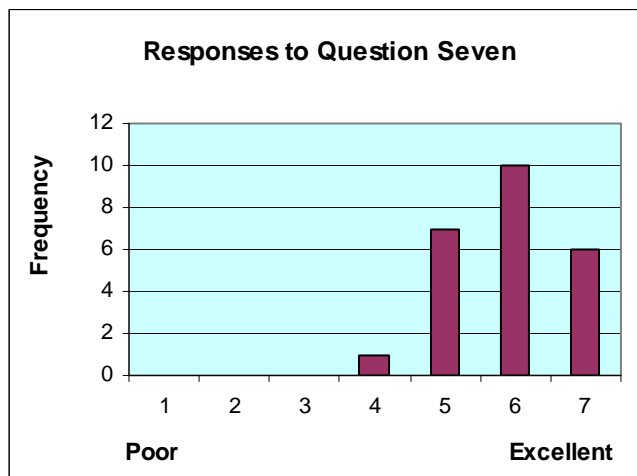
Question Five: Pace of the course: 1 = too slow, 4 = most appropriate to assist my learning, 7 = too fast



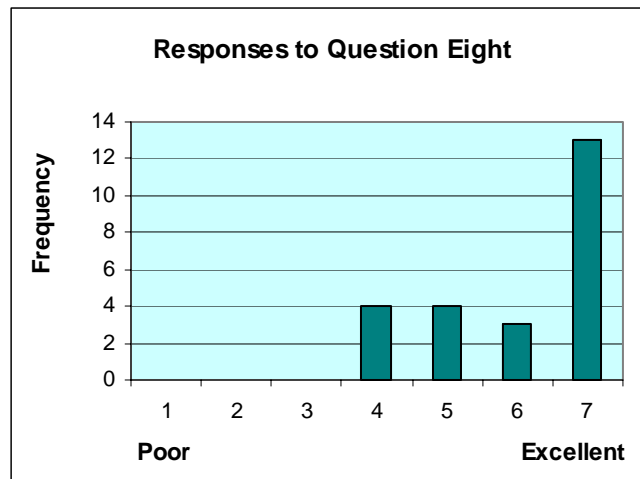
Question Six: Difficulty of the course: 1 = too easy, 4 = appropriate for a course at this level, 7 = too difficult



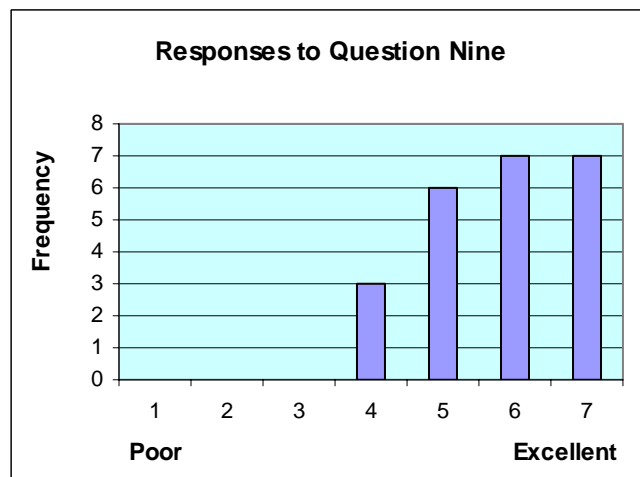
Question Seven: How would you rate the overall impact of this workshop on your understanding and knowledge of this subject?



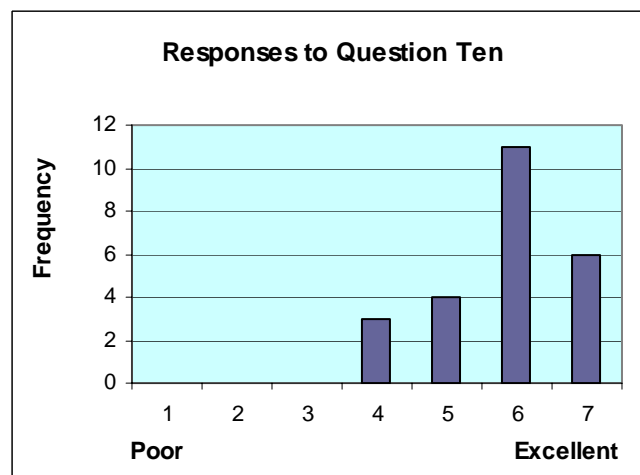
Question Eight: Overall, how relevant was this workshop to your own research work?



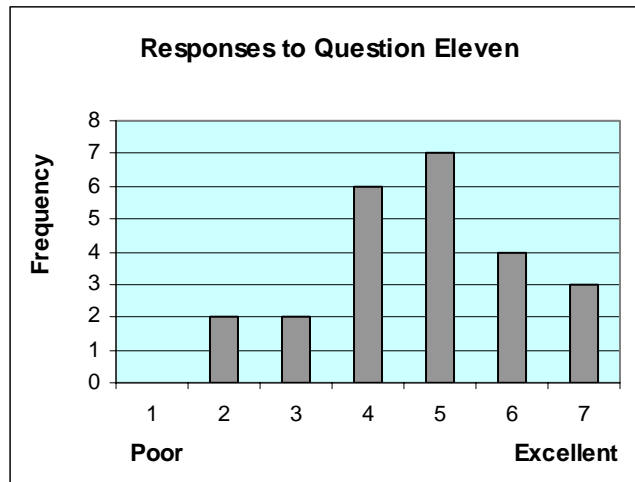
Question Nine: Did this workshop address subject material that you initially wanted to learn at the outset of the workshop?



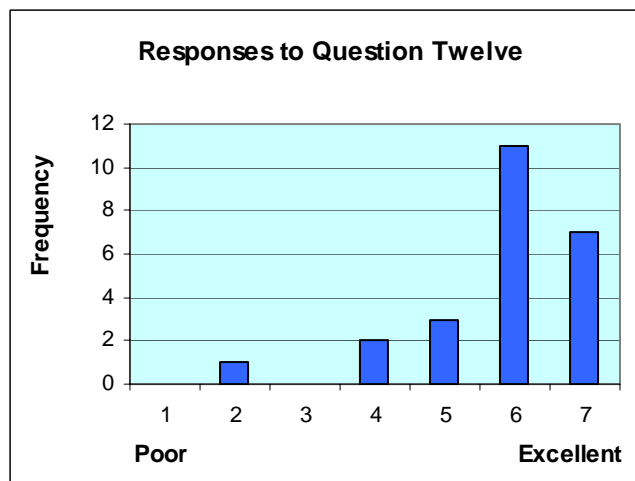
Question Ten: How would you rate the overall impact of this workshop on your development (i.e. gains in your skills, motivation, development of personal attributes)?



Question Eleven: How would you rate the facilities used for this workshop (i.e. workshop lab and computers)?



Question Twelve: How would you rate the catering provided for the workshop?



Summary of findings

Responses to the questions were predominantly positive with most workshop participants feeling that their learning needs were met. Respondents felt the workshop was well organised and structured and that the goals of the workshop were made relatively clear. Participants were especially pleased with the reference and support materials provided to aid learning (which included an extensive specialised manual, course reader, workshop internet site, and statistics software). Five of the respondents thought the pace of the workshop was too fast for them, but most respondents found the pace to be appropriate to assist their learning. Similarly, while four respondents found the workshop a bit too difficult the majority of respondents thought the level of difficulty was appropriate. Most respondents reported that the workshop supplied them with the types of knowledge they had hoped to gain to apply in their own lines of work. Respondents also thought the overall impact of this workshop on their development (i.e. gains in your skills, motivation, and development of personal attributes) was excellent. Finally, while the lab facilities used for the workshop were regarded by most as fair, the catering was a huge success.

Overall, respondents seem satisfied with the workshop and the amount of knowledge they walked away with.

All Comments made by survey respondents (unedited)

- “I really appreciate all the effort that was put into both organising and delivering the workshop.”
- “Sorry about contributing to a ceiling effect! The workshop has been a wonderful experience. Having had no prior experience with LMLM or SEM this has really challenged me, but I have been able to keep up. It’s opened my eyes to a wide world of possibilities and has helped me think about variance and data in an entirely new way – thanks!”
- “For me, it would have been most helpful if textbook –page handouts were handed before the course and reading materials were assigned for the following day’s discussion.”
- “Great humour, thanks!”
- “The only comment I would have is that the date used in modelling should be described better (some of the data components are presented the way they are in the data). It helps in understanding of the models.”
- “An excellent course overall, highly relevant to the needs of longitudinal data analysts.”
- This was an excellent (thought very challenging) workshop. The presenters are obviously quite skilled at presenting statistical methodologies in an applied format, which was much appreciated. Given that much of the information is typically taught over a longer period of time (allowing greater consolidation), I thought the extensive notes and web access to course notes was a great help.”
- “I think we should have all introduced each other prior to the workshop. The pace was very fast, which is understandable given the amount of learning required. Yet, it was hard to ask questions at each point because the info was still being absorbed.”
- “Problem that datasets have to be deleted, limits the usefulness of the exercises – can’t repeat later on in own time.”
- “Had software problems that detracted from learning. Eg. Couldn’t run AMOS output as ‘not enough disk space’.”
- “The squeaking door and access and continued beeping was terrible. The teaching was fantastic. Lesa is extremely talented at teaching (and statistics obviously). She is incredibly good at expressing things in different ways, which really helps comprehension and retention of information. I am very appreciative of having had the opportunity to do this course, particularly given the lack of resources to learn about longitudinal analysis in Australia. Thankyou for taking the time and the energy it must have required to run this course.”
- Great course – thanks very much. Well done Leas! Website and advice on reference materials – great! Would have preferred MLM in MLwiN rather than SPSS. Very helpful to have SPSS syntax. Would probably have benefited from a little less by way of making through advanced models – more in getting the basics right first, to create a solid grounding.”
- “Will need help to analyse actual data sets. Its very helpful to have SPSS syntax provided (and SEM models). I think the workshop was as good as it could be given the limited time to “ground” the info and interpret coefficients.”
- “Lesa was excellent! Too much to take in over one week. More examples would have helped and clearer explanation of research questions and outcomes – somewhat dazzled by models and equations”
- “Scott was great, very friendly smile in amongst the chaos!”