

Abstract

Surveys are one of the more commonly utilized data collection instruments in aviation research. Unfortunately, there often is little information provided as to how the surveys utilized in such studies were developed. This is problematic because the validity and construction of surveys are critical to the successful collection of data. Further, without the proper distribution methodologies in place, survey response rates can be poor. This qualitative study provides a literature-based process to assist aviation researchers to design and validate a survey instrument. First a literature-based survey development protocol was developed. Next, a validation process utilizing a panel of experts was created. Panel members were sought with experience and qualifications specific to the subject areas covered in the survey including its (a) construction, (b) implementation, (c) graduate level research, (d) higher education, (e) aviation higher education, (f) the aviation industry, (g) flight instruction and certification, and (h) demographic measures. Interviews were conducted each of the five expert panel members using a semi-structured protocol. The results of the interviews were coded using NVivo qualitative analysis software. The panel members determined that the example survey was a valid instrument to use in an applicable study. A summary of panel member feedback that could be generalized to a wide range of aviation surveys is provided. In summary, through a careful review of available literature and through the conduct of a panel of experts review, an explicit, structured process was fashioned for aviation researchers to use in order to successfully create and validate a survey instrument for use in a variety of studies.