

Quantitative and Qualitative Instrument Validation Requirements

This document's purpose is to specify student requirements for qualitative and quantitative instrument validation.

Quantitative Instrument Validation

Quantitative data collection tests hypotheses and answers questions on correlation and regression between two or more variables. The accuracy of the data solely depends on the validity and reliability of each measurement instrument or subscale derived from an authoritative source. *To conduct a reliable and acceptable dissertation study, students must locate, find, and submit valid quantitative instruments that have been published in peer-reviewed scholarly articles to their chair for approval.*

The quantitative instrument must have an acceptable Cronbach's alpha to assess scale, testing items' reliability, or internal consistency. Quantitative instrument reliability depends on the strength of consistency in assessing those measurement items. Any Cronbach alpha coefficient that is less than .7 is not acceptable. Items that have \geq .7 are reliable measurement instruments for specified variables.

Dissertation students shall not develop new instruments when previously validated data collection instruments exist. Additionally, per United States copyright laws, students must receive written permission from the author(s) or organization(s) with the rights and privileges to the instrument they would like to adopt before using or revising any preexisting instrument.

If there is no preexisting valid published instrument for the construct to be measured, students are encouraged to change the focus of their research. If the student maintains that they would like to develop their own instrument, they must follow the necessary procedures to test and validate their own instrument. Students must be cognizant that this process will most likely significantly increase the duration of completing their doctoral study. Furthermore, the chair must be qualified to lead the student in the validation of the new instrument. In order to guide in this process, the chair must have sufficient expert experience in instrument validation and have previously guided dissertation candidates in doing so and present evidence of such to Westcliff University's Dissertation Department.

Dissertation students can use a translator to translate pre-existing instruments into another language after receiving permission from the owner(s) and/or author(s). Students shall submit to their dissertation chair the professional qualifications of at least two credentialed qualified language



translators before translating a pre-existing survey. One qualified translator is responsible for translating the survey questions into the appropriate language of the population sample. The second qualified translator is responsible for translating the responses back into the original language of the existing survey. The dissertation candidate must then submit the original instrument and the back translation to a panel of experts to assess the accuracy of the translation of the instrument. The panel must be comprised of at least three members and have experience with translation in the two languages in question and also have knowledge of the construct(s) being studied. The chair must then review and approve (or not) the findings of the panel of experts with the dissertation candidate.

Qualitative Instrument Validation

If dissertation students use interview questions, they must be submitted to a panel of experts for review for validation. The committee or panel should consist of at least three professionals with a proven record of accomplishments in the qualitative research area. Students must request a resume or curriculum vitae from each content expert member as proof of qualifications and submit to their chair for approval. The dissertation chair is responsible for ensuring there are no interview biases in the questioning technique. Once the dissertation chair approves the interview technique, the student can conduct the field test for the interviews; the student provides the panel of experts the interview questions to demonstrate credibility, transferability, dependability, and confirmability. Dissertation students are highly discouraged from conducting interviews with their current employer. Interviews with people who students supervise professionally, friends, or family members are prohibited.

If observations are used to collect data, the student is responsible for providing proof of training qualifications to their chair that they have the skills required for conducting observations.