

LEARNING CHECK

1. In a research study, a researcher gives a self-report measure of extraversion that asks respondents to indicate the extent to which each in a series of statements describes them (e.g., "I am a cheerful, high-spirited person") using a 1 (*not at all descriptive of me*) to 5 (*extremely descriptive of me*) response range. This researcher also includes a self-report measure of need for cognition, to which respondents used a 1 (*not at all descriptive of me*) to 9 (*extremely descriptive of me*) range to respond to items such as "I like to have the responsibility of handling a situation that requires a lot of thinking." If the same person completed both measures, how can you tell if a person scored higher on extraversion or on need for cognition?

A: Because the extraversion measure and the need for cognition measure used different response ranges, it would make no sense to compare raw scores on these two measures. A score of 3 on the extraversion measure falls in the middle of the possible response range, whereas a score of 3 on the need for cognition measure falls toward the low end of the possible response range. Thus, we need to convert a person's score on the extraversion measure and his or her score on the need for cognition measure to get the respective z scores. Then, both measures will be the same scale of measurement, allowing to us to compare a person's scores on both measures.

Table 5.4 Information for Two Job Applicants for an RA position

Data source	Candidate	
	Barbara	Mareike
Interpersonal Skills	8.0	6.0
College GPA	3.25	3.85
Quality of Reference Letters	8.5	11.5

Notes. Interpersonal skills are measured on a 1 (*low*) to 9 (*high*) scale as judged by the Dean of Students. GPA is measured on a 0.0-to-4.0 range. Quality of reference letters is measured using a 1 (*poor*) to 15 (*outstanding*) range as judged by current RAs, and a mean is provided in the table.