RASCH ANALYSIS APPLICATION IN AGRICULTURE

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Abstract

Rasch model belongs to Latent Trait Theory and is preferred in survey studies due to its superior properties that convert ordinal scale to interval scale. Most of the surveys and scales used in education, health and social sciences have ordinal scale. In this case the researcher may encounters many problems. For instance; when the raw scores obtained by summing the items used and the correct answers to the survey or scale evaluation it will be plausible to encounter a problem. Thus in order to solve these problems Rash analysis is used. As mentioned, Rasch analyses is commonly used in education, psychometry and rehabilitation fields due to its superior properties. However its application in Agriculture data that are obtained by ordinal scale (*for example, milk and meat quality*) are almost nonexistent. Material of this study consists of ordinal scale data obtained from animal farms. Data generated by RUMM2030 package program are evaluated in Rasch model. As a result, purpose of this study is to show applicability of Rasch analyses which is commonly used health, education and social sciences in agriculture that may also have ordinal scale data.

Key words: Rasch analysis, ordınal scale, ıtem characteristic curves.