**Comparison between the Methodologies used by Beck (2018) and Reano et al. (2019).**

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In Reano et al.’s. (2019) article, the researcher adopts a qualitative framework based on the theme assessment of the data gathered through an open-ended survey. The authors used pre-and post-test timeframes for gathering their data, an approach similar to that used by Beck (2018). Despite surveys being employed by both researchers, the distinction lies in the kind of surveys both researchers adopt. The survey, closed-ended, and structured questionnaires are necessary for a quantitative research approach to get accurate and reliable information from all study participants. Therefore, not integrating accurate and reliable tools in performing surveys in the quantitative area necessitates the performance of pilot-testing of the questionnaires.

Additionally, the manner in which data is analyzed in both studies is another critical element of distinction. Beck’s (2018) research employs inferential statistics to determine whether the data can be utilized to refuse the null hypothesis. Notably, to account for the shortfalls of his research identified during the study process, the researcher integrated various statistical techniques. On the other hand, Reano et al. (2019) study applied open-ended surveys to generate descriptive text information, which was then examined for recurring themes. Notably, the qualitative method is characterized by the classification of sensory, auditory, visual, and textual information into codes and themes. In addition, Beck (2018) attempted to disapprove the null hypothesis using a conventional methodology. The variables were statistically evaluated after being investigated for existing connections in relation to the proposed hypothesis. Beck (2018) employed closed-ended questionnaires to gather data from student participants studying two courses over many years. Also, there was a quasi-experimental approach adopted during the research process.

The quantitative approach’s strength is its capacity to generalize research findings to a broader audience accurately. However, its core shortcoming is that it sometimes proves challenging to assess certain phenomena and cannot look into more complicated occurrences. Notably, the qualitative approach’s merit over statistical inference is its capacity to provide complicated and meaningful answers to stated research questions. According to Queirós et al. (2017), the quantitative research approach is flawed when it comes to extrapolation of findings to the greater populace other than those involved in the study, individual bias, and ­absolute comparability.

**References**

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