

Replication studies in the Humanities and Social sciences theories

Musbahu Hassan

+2348036260636 email -hmusbaho@gmail.com

Department of General Studies, Dr Yusufu Bala Usman College Daura, Katsina State Nigeria.

ABSTRACT: Replication is a term referring to the repetition of a research study, generally with different situations and different subjects, to determine if the basic findings of the original study can be applied to other circumstances. This study was set to find out whether theories subjected to replication studies produce same results any time they are tested. Data for the study was obtained from books and journal articles. Replication studies were said to be possible in social sciences and humanities, and their theories were found to be credible on grounds of replicability. This research recommended that when conducting replication studies, the most efficient, effective and feasible method of replication should be adopted. Since the various attitudes and approaches of researchers brings about varied results of replication, standardized procedure should be followed in conducting replication studies. The study further highlighted that Results of replication studies should not be regarded as conclusive ends, other strategies such as innovative studies should also be considered in the study of social sciences and humanities theories.

Keywords: Social Sciences, Replication, Merit

Introduction

Replication and theory are two important concepts in both natural sciences, social science and humanities. Theory is one of the most important words in the lexicon of contemporary social science studies. Severin and Tankard, (2001) defines a theory as ‘a set of ideas of systematic generalization based on scientific observations leading to further empirical observation.’ This means that we can use theories to make predictions about the outcome of certain events. According to business dictionary, ‘theory is a set of assumptions, prepositions or acceptable facts that attempts to provide a plausible or rational explanation of cause and effects - causal relationships among a group or observed phenomena’. The words theory, theoretical and theorize are constantly and consequentially used by all social scientist and humanities studies. For instance, one way of describing what social scientist of political science do is to say that they develop theories about political thought, political economy, administrative theories, international issues such as treaties, negotiations etc.

It is important to note that empirical social science research is always driven or informed by ‘theory.’ According to Onabajo, (2010) ‘theory and research are closely related through the scientific method. Onabajo explained that theory and research are in the origin of each other.’ This

implies that theory and research works hand in hand. A well-researched subject forms a theory and a theory can also spring up from a hypothesis that begins a research. While theory follows a logical guide, research makes use of factual evidence.

Replication studies is referring to repeating a study of an occurrences using the same methods but with different subjects and conditions. Credibility of scientific claims is established with evidence for their replicability using data. Replication is repeating a study's procedure and observing whether the prior finding recurs (Nosek & Errington, 2020). Replication means that a study is actually replicated under different conditions and subjects with or without reaching the same conclusions. Replication requires replicability in the same way as falsification requires falsifiability (Popper, 1965).

Replication is a technical term used in connection with the elaboration model, referring to elaboration outcome in which the initially observed relationship between two variables persist when a control variable is held constant, thereby supporting the idea that the original relationship is genuine, whenever the partial relationships are essentially the same as the original relationship: the term replication is assigned to the result regardless of whether the test variable is antecedent or intervening. This means that the original relationship has been replicated under test condition (Earl Babbie, 2010).

Replication refers to checking with a view to find out whether the same result is produced each time as a result of further test. Scientific studies ought to be replicable, meaning that a study should produce the same result if repeated exactly (Gillian Fournier, 2004). Replicability can be increased by doing in depth research on other similar experiments and ruling out variables you may not have thought of originally. Under the replication studies the researcher apply the existing theory to new situation in order to determine whether the results are reliable and valid, the role of extraneous variable and to merge previous findings with the new ones. Replication is not conclusive verification and failure to replicate is not referring to conclusive falsification. In view of the foregoing it is advisable not to rely too much on replicable findings because they may tend to be invalid. It should however be noted that replication cannot replace innovative studies because replication is not competent to provide new concept or original approaches. Innovative studies contribute to the theory development by introducing new concepts or extending the explanatory domain of a theory to interesting and important phenomena (Tsang, 2006). This paper is positioned to explain what really a theory is and what happen when it is replicated, discuss the possibility of replication in both Humanities, Social and Natural Sciences, and also highlight on whether replication of Social Science and humanities theories produce accurate result anytime they are tested.

Replication studies in the Social sciences and Humanities

Replication has been a relatively neglected topic in textbooks on social sciences research methodology. This may be partly due to the suspicions that replication is a matter not possible in, or has no relationship with social science research. The objectors often emphasise that replication presupposes the performance of experiments or studies under exactly identical conditions, which is not possible in social sciences and humanities that deals with the dynamic human behaviour. They go on to claim that while this is possible in the natural sciences, it is not possible in the social sciences because no two social situations can be exactly identical. The importance and prevalence of replication research varies greatly depending on the discipline and research area. In the so called hard or pure sciences, for example replication studies are common and play an integral role in the process of testing and demonstrating the general or crucial findings. In social sciences, conducting replication

research contributes to the essence of the scientific method” involving observation that can be repeated and verified by others (American Psychological Association, 2010 1; 4).

It should be noted that if replication is interpreted in strict sense, it is also impossible in the natural sciences because even in the natural Sciences it is impossible to get exactly identical conditions when repeating an experiment. Replication is in general, more achievable in the natural sciences. However, if most replication of social conditions has been performed in the social sciences, the claim that replication is always impossible is as implausible as the claim that replication is always possible. Within social science research, some scholars believe that a study is not complete until it has been replicated.

Theories are usually constructed through hypothetical derivations to fit the available evidence obtained from empirical studies; when a theoretical study is replicated by the second researcher, it means the study on a theory producing a confirmatory result regarding the previous ones is said to be credible; in other words, such theory is regarded to be a theory that has merit. The first replication of a theory on which empirical study is conducted under exactly the same condition had in most cases entails merit; Subsequent replications usually lack merit. The reason for failure of subsequent replications is usually attributed to the nature and inaccuracy of structures and mechanisms postulated in the theory. This assertion is peculiar to social sciences and humanities where flexible human behaviour and environments are involved. When numerous replications in diverse circumstances are repeatedly successful, it is highly likely that the theory has hit upon some real structure or mechanism in the social world. When a theory fails to be replicated, it is more plausible to regard the original findings as the result of chance factors or idiosyncrasies of the context, rather than the manifestation of real structures or mechanisms. (Tsang, 2006)

Replication of theories in social sciences usually fails to produce the same result with the previous study. It has been evident overtime that theories have been replicated under almost the same condition and time but results of such replication use to be quite distinct with the content of the original study. This is in view of the fact that the structures and mechanism within such theories sometimes misbehave and eventually produce a result contrary to the initial result. The attitudes and approaches of different researchers also go a long way in bringing about varied test results in replication studies. Peels, (2020) highlighted on the possibility of success of Replication in Humanities:

I conclude that replication is possible in the humanities. By that, I mean that empirical studies in the humanities are often such that an independent repetition of it, using similar or different methods and conducted under similar circumstances, can be carried out. I also conclude that replicability is desirable in the humanities: by that, I mean that many empirical studies in the humanities should indeed be such that an independent repetition of it, using similar or different methods and conducted under similar circumstances, can be carried out. And I conclude that carrying out replication studies in the humanities is desirable: we should actually frequently carry out such independent repetitions of published studies. Exactly how desirable replication in the humanities is remains to be seen; paradoxically, carrying out replication studies in the humanities may tell us more about exactly how desirable doing so is.

In another vein Bouter & Peels, (2018) submitted that replication is indeed possible and desirable in the humanities, to this, first and foremost, humanistic scholars and their professional organizations should face the issue and get their act together. Funding agencies need to make proposals for humanistic replication studies eligible and must demand that funded primary studies are

replicable. Journals in the humanities should encourage replication studies and publish them, irrespective of their results.

Replication of theories should not be emphasized to the determinant of other methods and approaches of scientific inquiry, but it should be fully regarded in order to establish long pattern of knowledge built on more solid foundation.

Conclusion and Recommendations

This Study realizes that Replication Studies are being conducted in both the Humanities, Social and Natural Science. In Natural Sciences, for example replication studies are common and play an integral role in the process of testing and demonstrating the general or crucial findings. In social sciences and humanities, conducting replication research contributes to the essence of the scientific method involving observation that can be repeated and verified by others. It was further concluded that the first replication of a theory on which empirical study is conducted under exactly the same condition had in most cases entails merit; Subsequent replications usually lack merit. The reason for failure of subsequent replications is usually attributed to the nature and inaccuracy of structures and mechanisms postulated in the theory. This assertion is peculiar to social sciences and humanities where flexible human behaviour and environments are involved.

Based the aforementioned conclusions this study recommended that when conducting replication studies, the most efficient, effective and feasible method of replication should be adopted. For example, there are cases where exact replication is feasible than using conceptual replication study. It should be noted that the various structures and mechanism within a theory usually affects the credibility of replication. In view of the foregoing, researcher should as much as possible make careful study of such structures and mechanisms before embarking on a replication study. Since the various attitudes and approaches of researchers brings about varied results of replication: standardize procedure should be introduced to different category of replication studies.

Replication is not conclusive verification and failure to replicate is not referring to conclusive falsification. Therefore, it is advisable not to rely too much on replicable findings because they may tend to be invalid. Results of replication studies should not be regarded as conclusive ends; other strategies such as innovative studies should also be considered.

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