

Meta- analysis: Base of Major Social Science Theories

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Abstract

Meta-analytic techniques in social science analysis are becoming increasingly relevant today. In this article, we will present how a meta-analysis method can be a useful base for sociologists. Different methods for meta-analysis, unique "concept-driven" literature searches. However, this search strategy may limit the researcher's ability to fully exploit the substantial body of pertinent research in fields with high theoretical diversity, such as social science. We tend to adopt a "beat-driven" strategy, where repetitive searches and updated computerized search techniques are used to find more publications cross disciplinary. This measure-based search approach is typically illustrated by two meta-analyses that look at how various social factors affect the all-cause mortality rate. A trend like imperialism might be a jumble of different perspectives on what humanity means. Imperialism, both political and economic, is occasionally mentioned. Imperialism is not limited to historical methods, political or economic facets. Instead, imperialism may be a collection of various human endeavors. To reach a conclusion, systematic reviews and meta-analyses combine the findings of various studies. While meta-analyses of applied scientific discipline analysis may run into practical issues due to the nature of the analysis domain, they are particularly useful for combining evidence to inform policy. Data from secondary sources were used to write this article.

Keywords : discipline, meta-analysis, philosophy , social science & theory.

Introduction

Background

A meta-analysis could be employed in mathematical analysis that combines the results of multiple scientific fields. Meta-analysis may be done once their square measure and multiple scientific studies address the identical question, with every individual study coverage measurement that square measure expected to own some extent of the fault. The intention is to practice approaches from statistics to derive a pooled estimate nearest to the unknown common truth.. Existing strategies for meta-analysis yield a weighted average of the outcomes of the individual subjects, and what differs is that the manner during which

these weights, square measures allotted and additionally the style during which the uncertainty is computed round the purpose estimate generated.

As a term of art, 'social theory' may be a clearly recent invention. No such term exists in English or in the other languages before 1940s. The words 'social' and 'society' derive from the Latin words *socius* and *societas* which means *companion* and *association*. Social science may be a layer of educational disciplines involved with society and besides the relationships among people in a society. The disciplines, however, do not appear to be restricted to social science, anthropology, communication studies, economics, folkloristics, history, musicology, human geography, law, linguistics, psychology, public health, and political science. The condition generally refers specifically to the sector of social science, the initial "science of society", founded within the nineteenth century.

The chronicle of the social sciences has grown within the usual parts of Western philosophy and shares varied precursors. It began mostly by choice within the early nineteenth century with the positivist philosophy of scientific discipline. Since the mid-20th century, the term "social skill" has been used to refer not simply to social science but also to any or all those subject areas that analyze society and culture, from social science to media studies. The concept that society could also be examined in a standardized and objective manner, with bookish rules and methodology, is relatively recent. Whereas there is a proof of former social science in medieval Islam where philosophers like Confucius had theorized on topics like, *Lang Syne*, social functions. The scientific analysis of "Man" is odd to the intellectual became independent from the Age of Enlightenment and toward the discourses of modernity.

Close to the start of the twentieth century, Enlightenment philosophy was challenged in numerous quarters. When the use of classical theories since the height of the scientific revolution, numerous fields substituted arithmetic studies for experimental studies and examining the equations to create a theoretical construction. The effect of science subfields became terribly quantitative in methodology. The social sciences play a key and additional integrated role in up-to-date information development. For historical reasons, the social sciences area unit usually outlined between the arts and the natural sciences. As a solution, the choice on that disciplines area unit element of social sciences and that do not seem to vary an excellent deal from one country to another over time.

Research Questions

This article tries to answer the subsequent analysis questions:

- How does one outline Meta-analysis?
- What are the different theories of the social sciences?
- What is the importance of Meta-analysis in social knowledge?

Objectives

The primary purpose of this article is to produce a general understanding of diverse theories of social skills. Particularly, this article aims:

- To comprehend the value of Meta-analysis,

- To investigate various social science theories,
- To evaluate the significance of Meta-analysis in terms of social skills.

Methods and Materials

This study adopts qualitative approach followed by analytical and descriptive strategies. The information for this writing was gathered and noted down by library and websites search. Classical info was delineated in numerous themes and sub themes. Materials like Websites, books, diaries, articles, etc. were held in.

Results and Discussion

A meta-analysis is a mathematical analysis that combines the findings from various scientific disciplines. When there are several scientific studies that address the same issue, each of which is expected to contain some degree of error, meta-analytic thinking is frequently used to address the issue. The accumulation of knowledge leading to the next applied mathematics power and more robust purpose estimate than is practical to derive from any single subject is a major benefit of this strategy. However, in acting a meta-analysis, associate investigator should build selections which may influence the results, together with deciding a way to explore for studies, choosing studies supported a collection of objective criteria, coping with incomplete information, analyzing the information, and accounting for or selecting to not account for publication bias (Walker & et al., 2008). Meta-analysis is a statistical tool in research that is used to collect and assess the findings of numerous independent studies on a certain issue. It entails examining and summarizing individual study findings, statistically synthesizing the data, and forming conclusions based on the combined evidence.

Assortment of Meta-analysis

In recent years, the use of meta-analysis in social science has been steadily increasing. Sociologists have usually adopted alternative disciplines' literature search conventions (which we experience a tendency to label here "concept-driven" approaches) that believe a decent connection between the ideas being studied and therefore the keywords accustomed classify analysis reports. The "ideal type" concept-driven search model is comprised of two principal phases. Foremost, the source area unit known to employ a keyword search in list databases, complemented with searches in literature reviews, consultations with specialists, and searches of highly relevant journals. The research worker then evaluates this primary set of publications for study eligibility. Second, further sources are known through searches of the bibliographies of coded publications. Adherence to a concept-driven approach lowers the hazards of introducing heterogeneousness (Backer & Sanders, 2006) and conjointly immediate produces closure, suggesting that the literature has been exhausted. In some studies (e.g., Psychotherapeutic and medicine), the reliance on narrowly defined search language is a smaller amount problematic as there's additional widespread agreement on that theoretical idea a specific life representative. In social scientific discipline and alternative social sciences, however, students usually take issue on the simplest thanks to operationalize ideas like gender difference, socioeconomic standing,

civil order, terrorism, or structure success. As a result, we will notice numerous empirical measures for every of those ideas within the literature. (Acharya, 2074). To any complicated matters, several of those numerous empirical lives are a unit sufficiently general, therefore on function associate adequate measure for one more idea of a completely separate sub-discipline of study. For example, the thought of gender conflict is frequently measured in myriad ways that, together with through gendered comparisons of wages and promotions, violence occurrences, or time allotted to housekeeping. At identical time, a unique study seeking to survive, what proportion someone is “overworked” may additionally examine time allocations and thus embrace “time spent doing housework” (by gender) as a covert while not essentially ever addressing gender problems.

The multiplicity of sub-domains and disciplines employing a given live creates inconsistencies within the means, science analysis is indexed, that successively renders the concept-driven approach less appropriate (Backer & Sanders, 2006). Whereas several sociologists, in concert with those conducting meta-analyses, area unit conscious of this downside, it's not been totally self-addressed by the literature on meta-analytic strategies. We experience a tendency to thus ask for to explicate another “ideal type”: a “criterion-driven” approach. This approach draws from the insights of qualitative social science strategies concerning the advantages of approaching one’s analysis with associate open mind and mistreatment the information to fine-tune the following analysis and search procedures (Glaser & Strauss, 1967; Corbin & Strauss, 2015; Burawoy, 1998). The primary goal of a meta-analysis is to improve statistical power and accuracy by pooling data from several studies, which can offer a more solid and trustworthy estimate of the impact size or connection between variables. Meta-analysis can assist in finding patterns, trends, or consistency in data from several researches that may not be apparent in individual studies alone.

Orientalism

Orientalism is a Middle Ages concept having roots in the religious assembly of Vienna in 1312. It consists of groups, ideologies, and beliefs aimed towards gaining dominance over the eastern hemisphere. The phrase 'Orientalism' refers to a mistaken image of the East, the belief that the West is superior, and the use of stale, clichéd ways to comprehend the Oriental world. Talking about 'the Orient' is a sensitive issue that sparks heated debate. It is a key source of erroneous cultural beliefs that shape how the West perceives the East, particularly the Middle East. The concept of Orientalism, in which European philosophy describes 'the Orient,' is an area of dispute. (Ammon, 1989). When one considers the whole influence of Orientalism, one discovers that it serves as a critical source for the formation and spread of erroneous cultural representations. These inaccurate images have greatly affected the foundations of Western attitudes and perceptions of the Eastern world, notably the Middle East. The concept of Orientalism, the idea and practice of presenting 'the Orient' inside European intellectual frameworks, is still hotly argued and challenged. Its consequences echo across society, touching on politics, academics, cultural exchanges, and more.

Eurocentrism

Eurocentrism is a type of prejudice in which one's own culture is thought to be better to others. It entails assessing non-European countries by European criteria, which extends to the rest of the Western world. Because of its relationship to political, economic, and cultural supremacy, this movement, which is frequently associated with Europe and the United States, is more correctly defined as Euro-America-centrism. (Corbin & Strauss 2015) This Eurocentric viewpoint pervades everyday life and even the work of social scientists.

Although it originated in Europe, Eurocentrism is not restricted to Europeans or the Western world. European concepts applied to numerous disciplines shaped the establishment of the European Union, impacting history, economics, and social studies. Gurung (2007) These European-derived conceptions have had a tremendous effect on the structures and values of civilizations. Surprisingly, the opposite viewpoint is not often stated clearly. Before the word "Eurocentrism" was commonly used, colonial philosophers highlighted worries about the rise of prejudice. (Tibaw1, 1963; Tibaw1, 1979). Meta-analysis, a strong statistical approach, may be unwittingly impacted by Eurocentric tendencies if it concentrates unduly on European settings, ignoring varied global viewpoints in the papers under consideration.

Post colonialism

Postcolonial studies is an important educational discipline that focuses on the deep connection between historical victimization, imperialism, and the complex aftermath of colonized peoples' and their territories' administration and exploitation. This specialist field investigates the fundamental human implications of European imperial supremacy, including history, civilisation, literature, and rhetorical speech. Within this context, the word "post-victimization" refers to both a reaction to and a departure from the condition of victimization. It is akin to a reaction to the terrible events of colonialism, and it serves as a counterbalance to modernist viewpoints. The word "victimization" can refer to both the political institutions imposed during colonialism and the underlying beliefs or attitudes that backed these systems. Postcolonialism, in essence, acts as a philosophical reaction to these belief systems, surpassing simply recounting of events during the victimhood era (Prelli, 1989). While the term "postcolonial studies" is commonly used, this discipline encompasses a wide range of techniques, and there is no widely agreed-upon set of fundamental principles.

However, when used to meta-analysis, it provides a helpful lens through which to investigate the inherent biases and inequities existing in the selection and interpretation of research findings. Postcolonial approaches provide for a more nuanced understanding of how dominant narratives and viewpoints may impact research results synthesis, eventually calling for a more inclusive and equitable approach to knowledge synthesis.

External Knowledge

The function of the external world is to understand knowledge, i.e., it interacts with external symbolic storage. exterior knowledge is defined as the interplay of psychological

features between inner and exterior representations (Navarro-Prieto et al., 1999). outward knowledge is the information that goes between the human head's inner knowledge and, as a result, the perception and manipulation of its outward representations.

Pedagogical Theory of Modernization

Modernization theory, each attempt to recognize the social variables that lead to social advancement and development of societies and seeks to clarify the method of societal development. Modernization theory is open to criticism originating among socialist and liberal-market ideologies, world-systems theorists, globalization theorists and dependency theorists among others. Modernization theory stresses not only the method of modification, however conjointly the responses to that modification. It conjointly appears at the internal dynamics, relating social and cultural structures and so the adaptation of recent technologies. Modernization theory maintains that ancient societies can grow as they adopt additional trendy practices. Advocates of the tenderization theory claim that the modern state area unit wealthier and additional powerful which their voters are a unit freer to take joy from the next normal of living.

Ancient non secular beliefs and cultural traits, per the speculation, sometimes lessen vital as modernization takes hold. Historians link modernization to the processes of urbanization and industry and therefore stretch out of education. As Yarkova et al., (2007) noted, "Urbanization attended modernization and so the fast method of industry" (p. 11). In social science vital theory, modernization is coupled to associate an overarching method of rationalization.

Globalization and Modernization

Globalization is often outlined because of the integration of economic, political and societal cultures. It's argued that globalization is supposed to spread modernization across borders. Global trade has matured incessantly since the EU discovery of recent continents within the early trendy period; it grew significantly as a termination of the commercial Revolution and therefore the mid-20th century adoption of the shipping instrumentation. (Rothman, Greanland. & Lash, 2008). Annual trans-border holiday-maker arrivals rose to 456 million by 1990 and virtually tripled since, reaching a complete of over 12 billion in 2016.

Communication is another major space that has matured thanks to modernization. Communication industries have enabled laissez-faire economy to unfold throughout the globe. Telephone, TV broadcasts, news services and on-line service suppliers have contended a vital half in globalization. Former US president Lyndon B. Johnson was a friend of the modernization theory and believed that TV had potential to produce academic tools in development (Lindo-Fuentes, 2009). With the various apparent positive attributes of globalization, there are negative effects.

The dominant, neoliberal model of globalization usually will increase disparities between societies' wealth and its pathetic. (Yarkova, Sanghera, & Amsler 2007) In major cities of

developing states, there exist pockets wherever technologies of the modernized world, data processors, cell phones and satellite TV, exist aboard stark financial condition.

Academic Imperialism

Academic imperialism is a multilayered phenomenon that occurs within the academic sector and is defined by disparities in academics' and institutions' power, representation, and resource distribution. This topic has historical origins dating back to the 1960s, especially in the international setting. Educational imperialism originated in a larger historical context during the colonial era, when imperial powers built and imposed academic institutions in their occupied areas. Raju (2011). This imposition not only worked as a control tool, but it also set the groundwork for long-term intellectual dependency. The domination of one set of academics or academic clusters over others is a fundamental feature of academic imperialism. This dominance frequently results in the marginalization or open rejection of alternate viewpoints and research from underrepresented sources. The lack of variety in academic discourse and scholarship that results inhibits the development of a thorough and holistic understanding of numerous issues. To combat this, it is critical to guarantee more balanced representation of research from various sources, particularly in meta-analyses. Such initiatives not only combat academic imperialism, but also promote intellectual variety, so increasing the legitimacy and use of synthesized knowledge.

Academic reliance is a key result of global academic imperialism, which is especially visible in non-Western nations. (Sardar, 1999) These countries frequently rely on expertise and knowledge provided by Western academic institutions, continuing a one-sided flow of scientific and intellectual ideas. Western scientific traditions and ideals tend to dominate the academic scene in non-Western countries, frequently being imported wholesale. This not only inhibits indigenous scientific knowledge growth but also perpetuates a sense of cultural servitude. Academic reliance may be seen in the concentration of important academic journals in Western nations, which results in an unbalanced diffusion of intellectual publications. These periodicals frequently concentrate works by Western university students and researchers, unintentionally marginalizing the contributions of scholars from non-Western institutions. As a result, Western knowledge is perceived as the "gold standard," whereas information generated in non-Western nations may be discounted.

Recognizing and addressing these differences is critical for combating academic imperialism and promoting a more inclusive global academic community. Collaborations, resource sharing, and support for academic projects in non-Western nations can assist bridge the gap and establish a truly diversified and enriched academic environment. This strategy not only empowers researchers all over the world, but it also prepares the path for the development of a more balanced and mutually beneficial global knowledge ecosystem.

The need for Meta-analysis of the Social Sciences

Systematic reviews and meta-analyses are a unit of more and more vital techniques in scientific analysis. These proficiencies are a unit accustomed synthesis, analysis results to

see an associate overall impact estimate for a population of subjects. A scientific review refers to the method of consistently locating and collating all accessible info on a command. (Sachdeva & Gupta 1948) Meta-analysis refers to the applied mathematics techniques accustomed mix this info to relinquish associate overall estimate of the impact within the population.

Advanced meta-analysis techniques can even be accustomed discover what study-stage or sample characteristics have a control on the development being contemplated; for example, whether studies conducted in one cultural context show considerably completely different effects from surveys taken in alternative cultural contexts. Though meta-analysis was originally prepared to be employed within the social sciences (Glass, 1976), the technique was rapidly taken and developed to be applied within the medical sciences. A variety of techniques and procedures, every requiring method selection, constitute the umbrella term 'meta-analyses. Number of these problems are self-addressed by review coordinating bodies, and traces are created in a way to traumatize them; For example, the difficulty of publication or small-study bias has been fastidiously self-addressed alternative issues appear to have been raised separately in numerous subjects, with a scarcity of overarching agreement on a way to solve them, and individual study authors applying unexpected resolutions as they run into every issue.

Conclusion

A statistical analysis known as a meta-analysis combines the results of various scientific studies. Meta-analysis can be adopted when several scientific studies address the same question without mentioning measurements that are asked to have some degree of error. The statistical process for combining data from various surveys is called meta-analysis. Meta-analysis can be used to identify the reason for the variance when the treatment outcome (or effect size) varies from one field to the next. The use of meta-analytic technique in social science analysis is becoming increasingly important. Meta-analysis is a strong analytical tool that spans the limits of many "isms," giving an objective lens through which to combine and analyze distinct results from research. Meta-analysis may be a useful technique for assessing the influence of various "isms," such as orientalism, euro centrism, post-colonialism, academic imperialism and so on. The combination of information produces a stronger purpose and estimates a greater applied mathematical power than it is possible from the results of any one study and it is a major benefit of this approach. Existing methods for meta-analysis produce a weighted average of the results of the individual subjects regarding what varies and how these weights are distributed and how the uncertainty is calculated around the resulting point estimate. Meta-analysis has also given an estimate of the unknowable common truth. Results from a single study typically differ from one field to the next. Conclusions are, therefore, drawn that a system is needed to combine data from different subjects. For this purpose, narrative reviews have been used, but they are mostly subjective and can be applied to a variety of areas.

References

- Acharya, B.R.(2074). *Introduction to Sociology*. National Book Center
- Ammon, U. (1989). *Status and function of languages and language varieties*. De Gruyter.
- Backer, H. A. & Sanders, K. (2006). Innovations in meta-analysis and social impact analysis relevant for tech mining. *Technological Forecasting and Social Change*. 73(8), 966-980. DOI: 10.1016/j.techfore.2006.01.008
- Burawoy, M. (1998). The Extended Case Method. *Sociological Theory*. 16(1), 4-33. DOI: 10.1111/0735-2751.00040
- Corbin, J. & Strauss, A. (2015). *Basic of qualitative research: Techniques and procedure for developing ground theory* (4th ed.). Sage Publication.
- Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Transaction: A Division of Transaction Publishers.
- Glass, G. V. (1976). Primary, secondary, and meta-analysis of research. *Educational Researcher*. 5(10), 3-8. DOI:10.2307/1174772
- Gurung, H. (2007). *From Exclusion to Inclusion: Socio-political Agenda from Nepal*. Social Inclusion Research Fund
- Kuper, A. &Kuper, J. (Eds.) (1985). *The Social Science Encyclopedia*.Routledge&Kegan Paul.
- Lindo-Fuentes, H. (2009). *Educational Television in El Salvador and Modernisation Theory*. *Journal of Latin American Studies*, 41(4), 757-792. DOI: 10.1017/S0022216X09990587
- Navarro-Prieto, N., Scaife, M., & Rogers, Y. (1999). Cognitive strategies in web searching. *Computer Science*.
- Prelli, L. J. (1989). *A rhetoric of science: Inventing scientific discourse (studies in rhetoric/communication)*. University of South Carolina
- Raju, C. K. (2011). *Ending academic imperialism: A beginning*.Multiversity and Citizens International.
- Rothman, K. J., Greenland, S. & Lash, T. L. (2008). *Modern Epidemiology* (3rd ed.). Wolters Kluwer/Lippincott Williams & Wilkins.
- Sachdeva and Gupta (1948). *World Constitution*. Ajanta Prakashan
- Sardar, Z. (1999). *Orientalism: Concept in the social sciences*. Open University Press.
- Spivak, G. C. (2010). *Can the Subaltern Speak?*Columbia University Press.
- Tibaw, A. L. (1963). English-speaking orientalists: A critique of their approach to Islam and Arab nationalism. *Muslim World*, 53(4), 298-313. DOI: 10.1111/j.1478-1913.1963.tb01170.x
- Tibaw, A. L. (1979). *Second critique of English-speaking orientalists and their approach to Islam and the Arabs*.Islamic Cultural Centre.
- Vessuri, H. (2002). Ethical challenges for the social sciences on the threshold of the 21st century. *Current Sociology*, 50(1), 135-150. DOI: 10.1177/0011392102050001010
- Walker, E., Hernandez, A. V., &Kattan, M. W. (2008). Meta-analysis: Its strengths and limitations. *Cleveland Clinic Journal of Medicine*, 75(6), 431-439.
- Yarkova, T., Sanghera, B., &Amsler, S. S. (Eds.) (2007). *Theorising social change in post-soviet countries: Critical approaches*. Peter Lang.