EDITORIAL

Plagiarism, Duplication, and Similarity: Where Do We Draw the Line?

In the 1960s, the comedian Lenny Bruce expressed the sentiment that there are no truly original thoughts. My interpretation of his premise is that we are all influenced by the thoughts and actions of others (in case you are wondering, I am not a comedian). What we "know" was previously known by someone else, and we gained that knowledge through education, observation, or other forms of information gathering. Although the purpose of Bruce's monologue was to amuse the audience, the facts behind his performance were quite insightful. His premise and/or my interpretation of it are not truly original.

When scientific articles are published, the issue of originality is considered to be critical. We expect researchers to perform a literature review to identify any previous investigations related to the research question. Those literature reviews should provide the researchers with information that impacts the study design for newly proposed research. In some instances, this means that a replication study, one that duplicates the previous methods, might be valuable, while in others it is possible that new research may demand a modification of the previous materials and methods. The former occurs when the original research method appeared to be appropriate but when the study number and/or the study duration were insufficient to demonstrate confidence in the significance of outcomes. The latter approach, where the materials and methods are modified, is appropriate if there were concerns with the previous materials and methods. Concerns could be related to issues of bias in design or differences in accepted techniques that might demand alternate materials and methods.

It would be difficult to find proponents of bias in research. Instead, if I may be so bold, I think that everyone in science favors efforts to reduce bias in research. We must, however, be cautious in condemning the results of a biased or potentially biased design when identified, as this does not ensure that the results of such research are invalid. Said another way, biased studies may still be truthful. Indeed, the results may be absolutely valid, but the identification of bias might interfere with the acceptance of the study results. In this situation, a new study design, one that is less subject to bias, should be initiated.

Clinicians frequently employ different techniques to attempt to achieve similar results as those already documented in the literature. This may be a matter of personal style, individual skills, or differences in interpretation. When encountered, it would benefit the knowledge base if the alternate technique were to be evaluated to demonstrate equivalence, or perhaps superiority, to previously identified outcomes.

About now you are probably wondering what any of this has to do with Lenny Bruce. The relationship, perhaps tenuous, relates to originality of ideas. Clearly, what we do investigate is based upon pre-existing knowledge. With that in mind, originality always suffers. However, appreciating this, there must be a balance between ongoing investigation to further the breadth and depth of knowledge and the risk that we plagiarize existing material. Are we using the words or ideas of others when performing research and then representing that research as our own? Is that plagiarism? How much original material needs to be present to not be plagiarism?

My impression is that most people believe that there is no level of plagiarism allowed in any scientific article. Of course, by saying that, we eliminate the opportunity for replication studies because replication studies are performed to confirm that previous study designs can work in the hands of others. Maybe it's all a matter of how we look at the representation of "words and ideas." Indeed, if technical procedures cannot provide consistent and repeatable outcomes, these procedures fall out of the realm of science and into the realm of art. If this statement is true, science must be based upon words and ideas that have been provided by our predecessors.

Here we are, however, arguing for replication of previous studies and at the same time providing an equally compelling need to not misrepresent the origin of the material that is presented. It seems like a no-win situation; what do we do? We avoid plagiarism by quoting sources. We provide references that identify the foundational material upon which procedures are developed.

In the category of "nothing is simple," we probably recognize that this topic is fraught with ambiguity. I think that it gets even more controversial when we realize that there are accepted levels of duplication. (Please note the avoidance of the word "plagiarism"). This journal now uses a software program to evaluate every article that is submitted to determine the level of plagiarism, duplication, or similarity with previous articles. You'll probably be surprised to hear that the acceptable rate among scientific journals, including the materials and methods section and a few matches of common phrases that would register as 1%, can run higher than 25%, although JOMI is more strict using 25% as the maximum. In the materials and methods section, a higher rate of duplication or similarity is accepted. Hopefully, everything that has been said prior to this point explains why that would be the case. If not, I certainly don't want to repeat myself.

By the way, the "plagiarism, duplication, and/or similarity" factor for this editorial is 0%. I'm not sure if Lenny would be proud or embarrassed.

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