Research Journal Paper

For some time, the fields of social and personality psychology have been having on-going debates on the status, validity, reproducibility of research in these fields, and if the problems plaguing the research in the fields can be solved. This paper will examine the findings of a study titled *The State of Social and Personality Science: Rotten to the Core, Not So Bad, Getting Better, or Getting Worst* and give reactions to the findings and conclusions. The main objective of the study was to assess the quality of social and personality psychology research – and whether it is on a trajectory of improving or not from a decade ago as well as shed some light on the on-going debate.

The study was published in the *Journal of Personality and Social Psychology*, 113

Volume. The authors of the study are Matt Motyle, Alexander P. Demos, et al, and was circulated in 2017. The study is composed of two parts. The first part (called Study 1) is a survey based questionnaire that investigates social and personality psychologists and their thoughts on if the on-going debate is having any impact on the works within their field. The second part (called Study 2) supplemented the questionnaire by using statistics on selected papers to deduce if the findings in them were supported. Both methods were designed to yield insights on the status of social and personality psychology by unearthing how the field operates.

Before diving into Study 1, the four main categories that the authors used to classify the debate should be explored. The first is the "Rotten to the Core" viewpoint. This is the most pessimistic viewpoint on the state of the fields of social and personality psychology. Someone who subscribes to the "Rotten to the Core" perspective holds that social and personality research

is extremely troubled, with rampant questionable research practices (QRP) and false positives being an innate quality of the field that cannot be improved.

The second viewpoint is the "It Can Get Better" perspective. This view admits that the social and personality psychology fields do have major problems, but holds they are not systemic and can be improved. A "It Can Get Better" person thinks that the diagnosis of QRPs and false positives from discussions within the scientific community will lead to better practices in the future. These better practices will emerge from rising leaders within the social and personality psychology community who will promote and incentivize others to follow proper research procedures. The incentives for doing better research practices then would lead to improvements in the quality of research done by social and personality psychologists.

The third viewpoint is the "It's Not So Bad" perspective. Someone who subscribes to an "It's Not So Bad" view thinks that the significance of studies revealing problems with replication are not as meaningful as made out to be. This is because a failed replication of a study "does not mean that the phenomenon in question is by definition nonexistent" (Motyl et al., 2017, p. 36). How can a replication failure entail that the underlying phenomenon is still possible? Well, one explanation is that there are "hidden moderators" like context that can affect the results of a replication inquiry (p. 36). The reason why is that people's behaviors can be dependent on their current circumstances. So if something is contextually sensitive, then it will mostly likely have a high rate of replication failure. Also, high replication failures with high self-reported QRPs are flawed because they do not give any options for participants to explain why they did QRPs (Motyl et al., 2017). There might be some justifiable reasons for doing something that meets the definition of a QRP but is not in reality unreasonable. Therefore, what psychologists are reporting in their papers should not be dismissed out-of-hand initially and should be followed-up

again by other thorough trials – until such subtleties that may give incorrect replication results can be ruled out.

The fourth – and final – viewpoint is the "It's Getting Worse" perspective. This view takes the side that social and personality psychology research was better before and in fact is getting worse. An "It's Getting Worse" person thinks that the replication process itself should be revamped and that it negatively impacts the quality social and personality psychology research. The rationale is that methods for conducting replication trials are faulty; with the result being a less competent researcher may cast shadows onto legitimate studies from respected psychologists. As a result, psychologists decide to do less interesting studies as they are the best way to not be under-cut. Otherwise, they would face unwarranted ridicule from peers within a system that has negative consequences for replication failures. The unfortunate consequence of such a way of doing research would be lower quality studies being produced and the field as a whole suffering.

To sum up, there are four main types of perspectives that the authors used when researching the on-going debate within social and personality psychology. These are the perspectives that the authors looked into – in order to figure out which one accurately represents the field of social and personality psychology by conducting Study 1 and Study 2 of their paper.

Study 1 aimed to show how social and personality psychologists felt about their field of research and how they did their research. In order to do this, the survey that was deployed was built by samplings members from major psychological associations. These associations were the *Society for Personality and Social Psychology, European Society for Social Psychology*, and the *Society of Australian Social Psychologist* (Motyl et al., 2017). Exactly, 1,414 peopled opened the survey, with 1,166 of them answering most of the questions – except for roughly 20% not giving

demographic answers (Motyl et al., 2017). Some of the questions presented to the respondents asked them about QRPs and perceptions of their field – which were done in yes/no prompts and scale-pointed prompts, as well as opened ended prompts asking for justification for doing QRPs (Motyl et al., 2017). Also, the vast majority of the respondents were social psychologists.

What was found from their answers was that people believe that the overall field is better at replication that it was a decade ago. Exactly, 50% of psychologists said "yes" when asked if they believed replicability had improved over the past ten years (Motyl et al., 2017, p. 39). For some of the self-reported QRPs, 63% said yes to "not reporting all measures" for their studies (p. 39). This is an illustration of the many QRPs that were admitted to by social and personality psychologists within Study 1. However, when asked improvement questions, 70% of respondents said that they would be less likely to do QRPs when looking at their impact (Motyl et al., 2017). Overall, social and personality psychologists were pessimistic, with them being more inclined to think that field is defective because of the reproducibility of studies. This is in contrast with them likewise perceiving new studies to be better.

In addition, Study 1's results also showed that QRPs related to not reporting all measures were not all that unreasonable when explanations were given. The people who judged if one of the open-ended-responses were justified were called "coders" (Motyl et al., 2017, p. 42). The coders found that the explanations that the psychologists gave for their QRPs were "acceptable on average roughly 90% of the time" (p. 42). These open-ended-responses also revealed that psychologists mainly did QRPs because of editorial pressure. Lastly, Study 1's findings should be only seen as a suggestive analysis since it was based off of self-reporting.

Furthermore, Study 2 of the research paper meant to compliment Study 1 by using statistical methods to quantify the replicability of social and personality psychology studies – and

thereby ascertain the quality of the studies within the field. The authors decided to base the articles that they would look at in the years of 2003-2004 for the past research and 2013-2014 for their most recent published research (Motyl et al., 2017). The reason why these time periods were chosen was because 2005 was around when talking about replication really began taking off and in 2012 a special report was dedicated to the state of psychology science in the journal *Perspectives on Psychological Science* (Motyl et al., 2017). The journals that the authors chose from were reputable psychology journals like the *Journal of Personality and Social Psychology*, *Personality and Social Psychology Bulletin*, and the *Journal of Experimental Social Psychology*. Once the journals were picked, a computer was used to select at random the articles that would be used in the research – with 2,228 in total being looked at (Motyl et al., 2017).

One of the many statistical methods that were used in Study 2 was the P-curve. The P-curve was utilized to discover if any of the research had any evidence of P-hacking in them. P-hacking is the process of artificially creating a statistically significant finding from data that in fact is most likely meaningless and coincidental. To illustrate, if a distribution is skewed closer to .05 than .01, the researcher most likely used QRPs to reduce their P-value in order to create a false positive (Motyl et al., 2017). While, if the distribution is skewed closer to .01 than .05, the findings most likely "contain evidentiary value" (Motyl et al., 2017, p. 44). The results from the selection of articles and computing P-values showed that in 2003-2004, 10.53% of studies had P-values that were rounded down excessively, with 5.01% being rounded down for the articles in 2013-2014 (Motyl et al., 2017). Although the improvement is not statistically significant, there is a noticeable drop in the more recent studies. Also, the more recent research was found not to get worst with replication from the other statistical methods. To conclude, Study 2 showed that the research in 2003-2004 was not as bad as previously thought. Whereas, the more recent research

was not getting worst with replication as well as becoming more transparent from better practices.

So what does both of the studies point to as the correct perspective that represents the state of social and personality psychology? The results in Study 1 showed that the community of psychologists having a pessimistic view of their fields – even though they thought more recent research was improving – and some of the QRPs were not as unacceptable as previously thought. The results in Study 2 showed that P-values of psychology research were improving, and that the field was not getting worse with replication in recent years as well as becoming more transparent. Therefore, the "It's Getting Better" perspective or the "It's Not So Bad" perspective are the likely candidates.

As for reactions to the author's paper, given the two options, the true perspective should be the "It's Getting Better" perspective. This is because there are tangible problems within social and personality psychology; they are just not as bad as have been assumed. Improvements have been gradually happening within the social and personality psychology research fields.

Importantly, the results of Study 1 hinting that most QRPs are done at the bequest of editorial pressures can mean that they can be changed if people are motivated enough.

However, implementing critical thinking, the author's results should not be seen as a definitive answer to the on-going debate and should be taken-with-a-grain-of-salt. This is because the authors had multiple issues that can cast doubt on their findings — with more considerations needed outside of their study before one should come to a conclusion. What are some of the issues in their study? Well, the author's in their questionnaire used two different sets of measurements. The first set of measurement was a yes/no question and the other measurement was a 5-point scale going from "not at all" to "always" (Motyl et al., 2017, p. 39). The problem

from these two different measurements is that they complicate efforts to get uniform information. As a result, one should not overly read into what the information says. Also, the years that were chosen for Study 2 were selected based on arbitrary rationales. The 2003-2004 year articles were chosen because 2005 was a hot year for talking about replication and the 2013-2014 year articles were chosen based on a journal publishing a special issue on the status of psychological science. These choices in time periods for the articles were not overtly scientific and lead to questions if what was chosen has a valid basis. Other time periods could be more representative and pertinent to the authors scientific inquiry.

What should be done then with such murkiness? The current state of social and personality psychology should be seen in the lense of the concept of stability and change. In the tenth edition of *Exploring Psychology* by David G. Myers and Nathan C. Dewall, the fourth chapter of the textbook talks about a concept that offers guidance on how to proceed with some ambiguity in changing systems – like social and personality psychology. The idea of is that a person can be both stable and changing at the same time when progressing forward in their life. Qualities, like temperament, are stable characteristics of a person that remain as they were before (Myers, Dewell, 2016). An example of this would be a nice sociable person being introverted. An introverted person prefers to always socialize for some time and then rejuvenate themselves later by being in a less crowded environment. While qualities, like social attitudes, on the other hand are not as stable and can change frequently (Myers, Dewell, 2016). An example of this would be a troubled child in the present overcoming their problems and becoming successful later on in life (Myers, Dewell, 2016). To put it in another way, "the struggles of the present may be laying a foundation for a happier tomorrow" (Myers, Dewell, 2016, p. 122).

Applied to the social and personality psychology field, the field is obviously having troubles because there would not be a debate going on otherwise. However, a field that is ever changing with new research should experience ups and downs. Although an unfortunate amount of new research has failed under replication trails, the field is not useless because there are core concepts that have been proven countless of times. This is stability and change at play. Social and personality psychology research can be proud of tangible studies that have been verified and also be tarnished from new studies not being verifiable.

In conclusion, a study on the on-going debate in social and personality psychology research was examined in this paper. The study used both statistics and a survey to see if the field fit into any of the four perspectives that were used to classify the debate. The perspective that was found representative of the field was the "It's Getting Better" view. The author's findings seem reasonable and are probably the right view. However, the author's findings should not be taken without caution because there are some issues with their study. Regardless whether the author's findings are found to be true, what is happening in social and personality psychology is natural. The field has had its achievements; it's just presently having difficulties and controversy. The author's study is important because it goes at the heart of the social and personality psychology field. Any new voice on such a debate is a good development.

Works Cited

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