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The Replication Crisis in Psychology: Five Reasons why the Replication Crisis is not Only About Methods

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Abstract

The replication crisis in psychology is often framed as a methodological failure—an issue of flawed statistical practices, publication bias, and poor experimental design. While these factors undoubtedly play a role, this article argues that the replication crisis is much more than a methodological problem. Psychology’s struggle with replication is not merely a consequence of weak methodologies but a reflection of deeper epistemological, theoretical, historical, political, and institutional challenges within the discipline. In this article, I present five reasons why the replication crisis should be understood as more than just a crisis of methods.

Keywords: replication crisis, psychology, theory, history

In this article, I will discuss the replication crisis in psychology and I will outline five reasons why the replication crisis is not only about methods. The replication crisis refers to the inability to reproduce or replicate a large number of psychological studies published in prestigious psychology journals across various subfields (Biswas-Diener et al., 2020; Wiggins & Christopherson, 2019). This crisis has sparked heated debate about its causes and potential solutions. As I will outline later, the debate has primarily focused on methodological problems in psychology.

What is the replication crisis in psychology?

I will say a few words about the importance of reproducibility or replicability, how to define

it, and provide specifics about the replication crisis in psychology. Beginning with the importance of reproducibility, a quote from the journal *Science* is telling: “Reproducibility is a core principle of scientific progress. Scientific claims should not gain credence because of the status or authority of their originator but by the replicability of their supporting evidence” (Open Science Collaboration, 2015). So, reproducibility or replication is a defining feature to what it means to be scientific, according to the *Science* article. In the same article, replication is defined as “the attempt to recreate the conditions believed sufficient for obtaining a previously observed finding and is the means of establishing reproducibility of a finding with new data” (Open Science Collaboration, 2015). As can be seen from this definition, replication or reproducibility involves claims about stability and predictions.

The current replication crisis took its beginning with John Ioannidis article from 2005 titled “*Why Most Published Research Findings Are False*,” where he critically examined the reliability of scientific research. Ioannidis argues that systemic biases, methodological flaws, and absurd academic incentives make it highly likely that most published research findings are false or exaggerated (2005). The paper presents a mathematical and probabilistic framework to demonstrate why false findings are more common than most researchers assume, challenging the credibility of widely accepted scientific knowledge. It has been a foundational work in discussions about the replication crisis. Ioannidis provides a probabilistic model showing that most published research findings are false positives due to a combination of low statistical power (small sample sizes), publication bias due to journals favoring significant results, and “flexibility” in data analysis (Ioannidis, 2005). This flexibility show itself in p-hacking, where researchers manipulate statistical analyses until results are significant and HARKing meaning ‘Hypothesize After Results are Known’— changing hypotheses post hoc to fit data. Consequently, Ioannidis argues that many high profile studies in medicine, psychology, and genetics fail to replicate because their findings were never robust to begin with (Ioannidis, 2005).

If we turn to the specifics of the replication crisis in psychology, Open Science Collaboration outlined in a comprehensive analysis from 2015 that, on average, only 36% of all empirical quantitative studies can be replicated within psychology (Wiggins & Christopherson, 2019). The Open Science Collaboration primarily examined quantitative experimental studies published in high-impact factor journals (Biswas-Diener et al., 2020). There are significant differences within psychology regarding the percentage of studies that could be replicated. In quantitative social psychological experiments, it was only possible to replicate 23% of the studies, while 53% of the experimental cognitive studies could be replicated. For experimental studies investigating learning, memory, and cognition, it was possible to replicate 48% of the studies, whereas studies examining social conditions had a replication rate of only 29%¹.

The replication crisis is primarily considered to be a methodological problem, specifically focusing on the often irresponsible use of scientific methods by psychological researchers. Nobel Prize-winning psychologist Daniel Kahneman has argued that “The conduct of subtle experiments has much in common with the direction of a theatre performance” and has stated that psychological research is a “mess” that needs to “clean up its act” (Kahneman,

¹ To make matters worse, in recent years, several iconic psychological experimental studies, such as the Marshmallow experiment and the Stanford prison experiment, have also been criticized for being invalid (Wiggins & Christopherson, 2019).

2011). Similarly, Theodore Sterling's analysis has shown that psychology and psychiatry are the sciences most likely to publish positive results. In fact, 96% of all psychological experimental studies reported in scientific journals find support for the tested hypothesis. This is highest number among all sciences (Sterling et. al., 1995; Yong, 2012).

To illustrate how easy it is to publish a paper with an interesting positive result, experimental psychologist Chris Simmons conducted an experiment where he “showed” that listening to the Beatles song “*When I’m Sixty-Four*” can actually reduce the listener's age by 1.5 years. Simmons’ data were statistically significant, supported his hypothesis, and the study was published in the prestigious journal *Psychological Science*. No one questioned why one should become 1.5 years younger when listening to a Beatles song or if this should be possible at all (Simmons et al., 2011). In other words, Simmons’ study highlighted the narrow focus on methods and statistics in this line of research, and the lack of concern for the subject matter being researched. The problem as I see it of the replication crisis is that psychology focuses solely on methodological problems when aiming to overcome it. Within this line of thought, the argument is that to overcome the replication crisis, researchers need to use larger samples, provide more precise descriptions of methods to ensure transparency, or pre-register research plans to avoid p-hacking, and so on (Wiggins & Christopherson, 2019).

Theoretical considerations and the replication crisis

In what follows, I will follow Simmons’ lead, arguing that the replication crisis is not only about methods. As suggested by Simmons’ study, we need to consider the object of our study, namely human existence, as a central part of the research process, and this means considering how psychology does research in a cultural world. In other words, the replication crisis involves theoretical assumptions about human agency and how the world is constituted. I will argue that these assumptions take for granted that human agency and the social world are essentially stable, self-contained entities. These assumptions are not addressed sufficiently in the current discussion of the replication crisis.

Several scholars argue that the replication crisis in psychology reflects a deeper theoretical problem rather than merely methodological flaws. In the following, I briefly outline how these scholars conceptualize the theoretical dimension of the crisis, and how their perspectives differ from the one advanced in this article. Oberauer and Lewandowsky (2019) emphasize the need for more formalized, testable models that can generate predictions and integrate disparate findings. Gigerenzer (2010) defines theory as an explanatory framework that guides the formulation of hypotheses, specifies causal mechanisms, and organizes results into a coherent body of knowledge. Fiedler (2017) stresses the importance of a priori theoretical commitments that enable diagnostic research designs capable of critically testing and refining claims. Green (2021) highlights the necessity of precise conceptual definitions and clear operationalizations of constructs. Similarly, Muthukrishna and Henrich (2019) argue that theory should specify the boundary conditions of psychological processes, noting that many apparent universals collapse under replication because cultural variability is insufficiently theorized. The problem, as I see it, with these accounts is that they do not sufficiently engage with the question of psychology’s subject matter. They tend to assume, without critique, that human existence can be predicted if only the theoretical models are precise enough. By contrast, in this article I follow Maier’s (2022) central claim that the replication crisis arises from psychology’s lack of a

fundamental theoretical understanding of human subjectivity. In some respects, Brailas (2025) points in the same direction. He locates the root of the replication crisis in psychology to the problem in psychology's mechanistic assumptions about causality. For him, theory should reflect the dynamic, reciprocal, and emergent character of psychological processes. Yet psychology has long relied on linear, mechanistic models ill-suited to its subject matter. The replication crisis, in his account, exposes the limits of these frameworks and calls for alternative epistemologies—such as second-order cybernetics and transactional causality—that better capture the complexity of human behavior. However, unlike Maier (2022), Brailas (2025) does not situate the crisis within the broader historical conflict produced by psychology's persistent failure to develop a theoretical understanding of human subjectivity.

A study of unconscious priming as an example

If we are to understand the replication crisis, it is important that we take as our starting point some of the specific studies that have been analyzed in connection with the replication crisis. In this context, I will use Bargh's famous study from 1996 on unconscious priming. Bargh, Chen, and Burrows (1996) conducted a highly influential study in social psychology that argued social behavior can be automatically influenced by unconscious priming of stereotypes and traits. Their research suggested that mere exposure to certain words or concepts could subconsciously alter people's behaviors, supporting the idea that human actions can be triggered without conscious awareness. The study became famous for its elderly priming experiment, where participants exposed to words related to old age allegedly walked more slowly afterward. This finding contributed to the broader literature on behavioral priming, but later became a central focus of the replication crisis due to failures to reproduce the effect (Cesario, 2014; Doyen et al. 2012). The study consisting in participants completed a scrambled sentence task, in which they had to form sentences from jumbled words. 30 persons participated and they were all undergraduate students. In the experimental condition, the words included terms related to aging (e.g., "old," "retired," "wrinkled"). In the control condition, the words were neutral and unrelated to aging. After completing the task, participants were timed as they walked down a hallway leaving the experiment. According to Bargh et al. (1996) the results showed that participants primed with elderly-related words walked significantly more slowly than those in the control condition. This suggested according to Bargh et al. (1996) that exposure to the stereotype of aging unconsciously influenced physical behavior. Bargh et al. (1996)'s study has become one of the most cited papers in social psychology, forming the foundation for behavioral priming research.

In the following, I will use Bargh's study (1996) as a concrete starting point to discuss some of the problems with viewing the replication crisis solely as a methodological issue. I will outline five reasons why the replication crisis cannot be considered merely a methodological problem. The five reasons I outline for the replication crisis are neither randomly chosen nor simply placed side by side. They also represent a draft of an understanding of why the replication crisis in psychology is emerging here and now, and in the particular way that it does. From a historical perspective, psychology has been a divided discipline, where especially its pursuit of legitimizing itself as a natural science has created a fundamental conflict in relation to its subject matter—namely, human existence (Maier, 2022). In recent years, this historical conflict has been sharpened by the neoliberalization and politicization of research environments at universities.

In what follows, I will give five reasons for why the replication crisis in psychology is not merely a methodological problem but is deeply rooted in theoretical issues concerning the discipline's foundations. First, I will argue that the replication crisis emerges from psychology's reliance on an objectivist paradigm that reduces human existence to mechanistic, law-like processes, a view historically linked to the natural sciences (MacIntyre, 1985; Kvale, 1992). Second, psychology's nearly two-century-long effort to establish itself as a natural science has reinforced this reductionist orientation, privileging quantification over reflexive theorizing about subjectivity. Third, the neoliberal transformation of universities has intensified these problems by creating incentive structures that reward productivity, and statistical significance at the expense of theoretical depth and scientific integrity. Fourth, the replication crisis reveals psychology's failure to acknowledge that it is always embedded in political and social practices, producing knowledge that is never neutral but shaped by institutional and societal demands. Finally, psychology's strong presence in popular culture has reinforced its status as an ostensibly objective science, often circulating simplified findings as unquestioned truths despite their fragility. Taken together, these five reasons show that the replication crisis cannot be understood without addressing the theoretical, historical, institutional, and cultural conditions under which psychology operates.

The objectivistic paradigm simplifies human existence

In this paragraph, I will argue that the replication crisis is a consequence of a systematic and historical mismatch—or a discrepancy—between the dominant objectivistic paradigm in psychology and its subject matter, namely human existence. In his 2022 article, *"Replication Crisis – Just Another Instance of the Replication of Crises in Psychology? Historical Retrospections and Theoretical-Psychological Assessments,"* Maier examines the replication crisis within psychology through a historical and theoretical lens. Based on his analysis, Maier argues that the current replication crisis is not an isolated event but part of a recurring pattern of crises in the field of psychology. The replication crisis is essentially a theoretical problem, according to Maier (2022). The core of the problem, he asserts, is that psychology lacks a coherent theoretical elaboration of human subjectivity and existence (Maier, 2022). What characterizes humans is that we are contextual changing beings—engaged in relations of possibilities, constructing subjective grounds and meanings for action embedded in historical societal practices. This uniquely human mode of existence challenges traditional objectivistic scientific theorizing, which often assumes self-contained stabilities as outlined by MacIntyre (1985). MacIntyre has provided a persuasive historical analysis of how and why psychology and the social sciences end up assuming that human agency and the social world are stable, self-contained entities. According to MacIntyre, psychology and the social sciences emerged from a mechanistic worldview rooted in the natural science tradition, which strives to find decontextualized “facts” based on “data.” This approach, he argues, misrepresents or neglects essential aspects of human existence – notably that we, as humans, are born into a world of meaning. As outlined by MacIntyre (MacIntyre, 1985, p. 82-86), the mechanistic worldview was formulated at the beginning of the Enlightenment period, when Newton's laws of motion were seen as the paradigmatic example of exploring the general causal relations governing both nature and human nature. This ideal of mechanistic explanation was transferred from physics to the understanding of human behavior by several English and French thinkers in the seventeenth and eighteenth centuries. According to MacIntyre, this mechanistic

worldview was absorbed into the social sciences, where it became the dominant ideal for how to conduct science and understand human activities (MacIntyre, 1985). The assumptions about human agency and the social world as stable self-contained entities are problematic, and misrepresents the changing and relational nature of human existence and culture. Most notably the fact that the all-pervasive normativity of human existence is ignored. MacIntyre questions the dominance of the mechanistic worldview within the social sciences by arguing that social scientists often fail to make valid predictions based on the results of manipulating mechanics, what some would call “facts” or “data” (see Kvale, 1992): In 2008, very few economic experts predicted the financial crash. In the 2016 presidential election in USA, nearly all political experts predicted that Hillary Clinton would win by a large margin. Finally, in 2022, many military experts predicted that Russia would not invade Ukraine.

Bargh et al.'s (1996) study provides a useful example for illustrating both Maier's (2022) and MacIntyre's (1985) arguments in relation to the replication crisis. It can be argued that in Bargh et al.'s (1996) study, the fundamental understanding of human subjectivity is too simplistic and reductionistic to explain how humans change – apparently through being primed - within social practice. Cesario (2014) has critically examined the replicability of priming effects, with a special focus on studies like Bargh et al.'s (1996) research on social priming. Cesario (2014) argues that the challenges in replicating such priming effects stem from an oversimplified understanding of the underlying mechanisms. He contends that the expectation for priming effects to be robust across various contexts and populations is misguided, as it fails to account for the complex interplay of factors influencing these phenomena (Cesario, 2014). Cesario highlights that priming effects are highly context sensitive: they depend on factors such as individual differences, situational contexts, and participant goals. For example, priming someone with words associated with "elderly" might only influence behavior (e.g., walking slower) if the participant is consciously or unconsciously motivated to act in alignment with the stereotype (Cesario, 2014). Social priming research such as Bargh et al.'s (1996) assumes that exposure to a stimulus (e.g., a stereotype) automatically triggers related behaviors, regardless of an individual's current state or context. However, Cesario (2014) challenges this assumption, arguing that behavioral priming effects are not automatic. Instead, they depend on whether the primed concepts align with an individual's active goals or motivations. This makes priming effects far more complex than initially assumed and explains why replication is often elusive (Cesario, 2014). One of the key issues in social priming research lies in its reliance on spreading activation as a theoretical framework. Bargh et al.'s (1996) study suggests that exposure to one concept (e.g., "elderly") automatically activates related concepts in memory (e.g., "frail"), influencing behavior. While intuitive, Cesario (2014) critiques this mechanism as too vague and insufficient to explain how priming translates into real-world actions, especially complex ones. In this respect, according to Cesario Bargh et al.'s (1996) study makes exaggerated claims about the power of unconscious cues (Cesario, 2014). For example, Bargh et al.'s (1996) study suggests that subtle environmental primes can significantly influence behaviors such as academic performance or social interactions. These claims often appear implausible when viewed through the lens of broader psychological and cognitive theories, which emphasize the role of conscious control, goals, and external factors in shaping behavior. If we return to Maier's argument (2022), the replication crisis and critiques of social priming research reveal how human subjectivity continually disrupts the notion of psychology as an objective, mechanistic science. A large number of psychological studies are difficult to replicate because their assumptions of the

subject is reductionistic and simple. In this respect, the replication crisis makes it clear that theoretical understandings of subjectivity need to include human subjectivity, human intentions and lived meanings as part of a social practice.

Psychology's struggle to legitimize itself as a natural science

Psychology has long sought to legitimize itself as a natural science drawing historically upon a mechanistic conception of the natural sciences, which reinforced an objectivistic orientation in the discipline (Kvale, 1992). From the late nineteenth century onward, psychology pursued legitimacy by aligning itself with the methodological rigor of physics and physiology, fields grounded in mechanistic models of causality and measurement (Danziger, 1990). This orientation promoted the assumption that psychological phenomena could be decomposed into discrete, measurable variables, mirroring the presumed objectivity of the natural sciences. Such an approach not only framed human behavior as the outcome of universal causal laws but also minimized the role of subjectivity, meaning, and context in psychological explanation (Henriques, 2011). The result has been a lasting bias toward methods privileging quantification and standardization, positioning psychology as a science modeled after mechanistic objectivism rather than one attentive to the complexities of human experience. Kvale (1992) has argued that psychology's appropriation of the natural sciences rests on a fundamental misunderstanding. Instead of recognizing the diversity of approaches within the natural sciences, psychology often reduced them to a narrow, mechanistic model of causality and measurement. As Kvale observed, modern physics and biology had already moved beyond strict mechanistic frameworks, incorporating probabilistic, systemic, and interpretive perspectives. By clinging to an outdated image of the natural sciences as purely objective and mechanical, psychology legitimized a restricted view of its own subject matter and marginalized approaches that attend to meaning, context, and interpretation. This misrepresentation, it can be argued, has contributed to the discipline's replication crisis, as psychology continues to seek certainty through mechanistic designs rather than embracing the complexity and reflexivity that characterize contemporary science. Psychology's reliance on what it assumes to be "hard science" standards thus reveals less about the natural sciences themselves than about its historical struggle for legitimacy (Kvale, 1992).

Let us take a fast stroll through the history of psychology to see how the history of psychology has been a struggle to be legitimized as a natural science: Wundt established the first psychology laboratory at the University of Leipzig in 1879, marking psychology's formal separation from philosophy (Wundt, 1879). Inspired by natural science, he sought to apply experimental methods (such as reaction time studies) to investigate consciousness. In early behavioristic theory, Watson rejected introspection and subjective methods, arguing that psychology should study observable behavior using empirical, experimental, and quantifiable methods similar to the natural sciences (1913). In later behavioristic theory, Skinner further solidified psychology's claim as a natural science by using operant conditioning and rigorous experimental methods. He argued that thoughts and emotions were irrelevant and that all behavior was determined by environmental reinforcement contingencies (1953). The cognitive revolution in the 1950s and 1960s (Miller, 1956; Neisser, 1967) brought mental processes back into psychology while retaining experimental rigor as prescribed in natural science. Inspired by computational models, psychologists

likened the mind to a computer, using information-processing theories. In the 1990s, neuroscience became central to psychology. Advances in brain imaging (fMRI, EEG) allowed psychologists to link mental processes to neural activity, strengthening psychology's ties to biology and medicine (Bennett & Hacker, 2003).

Psychology has historically adopted methods and frameworks from the natural sciences in order to secure legitimacy. While this strategy has contributed to the discipline's academic credibility, it has also created a number of enduring problems. As Danziger (1990) observes, psychology's alignment with the natural sciences brought institutional benefits, including status within academia and access to financial resources. Yet the pursuit of scientific authority may have been motivated more by the quest for social legitimacy than by the intrinsic needs of psychological inquiry. The replication crisis can be understood as a consequence of psychology's longstanding commitment to an objectivistic paradigm that assumes human behavior follows predictable, law-like regularities. By adopting natural science methodologies without fully accounting for the complexities of human life, psychology has created the conditions for recurring crises of validity and reliability. In this respect, psychology suffers from a lack of a unified theoretical framework grounded in an adequate understanding of human existence (Maier, 2022). Dominant paradigms such as behaviorism, cognitive psychology, and neuropsychology have prioritized methodological rigor, but often at the expense of developing comprehensive theoretical foundations. This imbalance between method and theory contributes to unstable findings, which may lie at the heart of the replication crisis.

The neoliberal turn of academic culture and the replication crisis

The shift in academic culture towards market-driven incentives, publication pressure, and corporate funding has significantly contributed to the replication crisis in psychology (Brown, 2015). The shift in academic culture toward external funding, the "publish or perish" mentality, and increased competition is rooted in broader historical, economic, and political changes in universities and research institutions (Brown, 2015). Neoliberal economic policies, which emphasize market competition, privatization, and efficiency, began influencing universities in the 1980s. Governments reduced direct public funding for universities, forcing institutions to rely more on external grants, industry partnerships, and tuition fees. Brown (2015) conducted a critical analysis of how neoliberalism has shaped academic culture and how universities function. Brown argued that neoliberalism is not merely an economic ideology but a political and cultural project that reshapes citizens, institutions, and governance in ways that erode democratic principles. He described this as a "stealth revolution" because its effects are often invisible, operating through gradual and systemic changes rather than overt political shifts. Following the marketization of universities, institutions started competing in global rankings (e.g., QS, THE, Shanghai Rankings), which emphasize research output, citations, and grant income as key metrics. Academic careers became more competitive, leading to an increased focus on publication metrics (h-index, impact factor, citation counts, etc.) (Mirowski, 2011). In the same vein, Edwards and Roy (2017) critically examine how incentives and competition in modern academia have led to systemic problems in scientific research, including fraud, questionable research practices, and creating conditions that have contributed to the replication crisis. The authors argue that the current structure of academic research promotes quantity over quality, pushing scientists toward behaviors that prioritize career advancement rather than

scientific integrity.

Neoliberal reforms have increasingly tied research evaluation to metrics such as publication counts, citation indices, and grant income (Lorenz, 2012; Shore & Wright, 2015). In this system, what “counts” tends to be what is countable. The neoliberal university, much like the regime of mechanical objectivity, privileges impersonal procedures and quantifiable outputs over interpretive depth or theoretical richness. Scholars are incentivized to produce standardized, reproducible findings that can be easily aggregated and evaluated through performance indicators. In psychology, this has reinforced a preference for methods that yield clean, discrete effects, often at the expense of engaging with the messy, contextual dimensions of human behavior.

This strive for objectivity and neoliberal academic governance are thus connected by a shared logic: both constrain scientific practice by equating legitimacy with adherence to procedural rigor and measurable outcomes (Mirowski, 2011; Slaughter & Rhoades, 2004). The consequences are evident in debates over the replication crisis. Incentive structures select for methods that maximize publishable, statistically significant results—even when they are suboptimal—producing a kind of “natural selection of bad science” (Smaldino & McElreath, 2016) and contributing to low replication rates in flagship journals (Open Science Collaboration, 2015).

Fanelli (2010) illustrates this dynamic by outlining how academic pressure to publish influences the likelihood that scientists report positive results. Using a large-scale empirical analysis of studies from various scientific disciplines, Fanelli finds that publication pressure correlates with a higher prevalence of positive findings, suggesting that the “publish or perish” culture distorts scientific integrity and contributes to bias in published research. The “publish or perish” culture forces scientists to prioritize frequent publication to secure jobs, tenure, and grants. Fanelli (2010) analyzed 1,324 scientific papers across multiple disciplines, including biomedical sciences, psychology, and social sciences. He correlated the prevalence of positive findings with publication rates per capita in different US states. The analysis controlled for variables such as field of study, research funding, and journal impact factor. The study found a strong positive correlation between publication pressure and the frequency of positive results (Fanelli, 2010). Scientists from states with higher research output (e.g., California, Massachusetts) were more likely to report statistically significant findings than those from lower-output states. This pattern was consistent across multiple disciplines, suggesting that the effect is not limited to one field. Fanelli (2010) outlines several reasons why scientists under high publication pressure might be more likely to report positive findings. He suggests that researchers under high publication pressure might be tempted to engage in P-hacking and data manipulation, selectively analyzing data to find significant results. Fanelli (2010) also points to publication bias, in the sense that journals prefer positive results, incentivizing researchers to frame findings favorably arguing that researchers under high publication pressure might engage in HARKing (Hypothesizing After the Results are Known), where scientists adjust their hypotheses post hoc to match the data. Furthermore, Fanelli (2010) problematizes self-censorship of negative results, where researchers may avoid publishing null findings to increase their chances of publication. In other words, the neoliberal turn in academic plays a significant role in constitution the replication crisis.

The political demand for psychology and the replication crisis

A fourth reason for the current replication crisis in psychology lies in the discipline's widespread popularity. There is a strong demand for psychological knowledge, particularly forms that explain human behavior in simplified and universal terms without engaging the political, economic, and social contexts that shape human existence. This demand often comes from political stakeholders, businesses, and organizations seeking knowledge that can be operationalized for policy, management, or market purposes. Such pressures reinforce objectivistic and quantitative approaches, privileging decontextualized measurements and generalizable effects over theoretically grounded, context-sensitive understandings of human behavior (Maier, 2022).

As Rose (1996) demonstrates, psychology has historically served as a technology of governance, producing forms of knowledge that render inner states—emotions, cognitions, and motivations—visible and calculable. When framed as standardized and replicable, psychological findings acquire the appearance of neutrality and universality, making them attractive for institutions and governments seeking to manage populations at scale. In neoliberal contexts, these dynamics are intensified by audit cultures, as universities, funding bodies, and governments increasingly prioritize knowledge that can be quantified, translated into interventions, and evaluated through metrics (Shore & Wright, 2015). The replication crisis, from this perspective, is not simply a failure of scientific rigor but a symptom of psychology's embeddedness within governance systems that privilege objectivity-as quantification. By producing results that appear precise and reproducible, psychology feeds into a political rationality in which control is exercised through measurement, comparison, and optimization of behavior. Rose's *Inventing Our Selves: Psychology, Power, and Personhood* (1996) illustrates that psychology is not merely a neutral science but a field deeply entangled with political power, social norms, and institutional practices. Psychology's legitimacy has historically rested on aligning itself with the natural and biomedical sciences, adopting statistical and quantitative methods to present itself as an objective discipline. This scientific approach, however, serves political ends as well: psychological knowledge becomes a tool for shaping subjectivity, regulating institutions, and legitimizing interventions in education, criminal justice, and mental health. Rose (1996) argues that psychology does not merely describe human nature but actively constructs it through its categories and metrics, producing norms of behavior that reflect institutional and societal values. By defining what is "healthy," "intelligent," or "deviant," psychology stabilizes functional understandings of the social world while deflecting attention from underlying political, economic, and social conditions. As Kvale (1976) observed, many psychological constructs—such as intelligence, personality, and mental illness—are not fixed entities but unstable, culturally contingent categories. The crisis therefore highlights a deeper epistemological problem: psychology's claim to scientific objectivity is in conflict with its entanglement in systems of governance and power. Addressing the replication crisis requires more than methodological reform; it demands critical reflection on psychology's role in producing categories of knowledge that are simultaneously scientific and political. The replication crisis can be understood not as the failure of individual researchers but as a consequence of psychology's historical trajectory—one in which the pursuit of legitimacy through objectivity has bound the discipline to the demands of governance and social control.

Popular cultures demand for psychology and the objectivist paradigm

Just as psychology has become problematic as a science based on mechanistic assumptions, it has become a huge success as part of popular culture in late modernity, in the media, and in the way we talk about ourselves and others. Psychology provides us with a strong vocabulary for understanding ourselves in everyday life. For example, we talk about ourselves as being frustrated, having unconscious wishes, referring to our inner self, becoming reinforced, and so on. Psychological language and vocabulary are used in fluid and hybrid forms to understand ourselves in everyday life. According to Kvale (1992), it is through popular culture that psychology legitimizes itself. Psychology is a producer of knowledge commodities that circulate in a competitive economy of ideas, where value is measured not by epistemic depth but by appeal, applicability, and demand. In this framing, psychological research is shaped by consumer pressures: governments, corporations, and individuals desire psychological insights that promise to improve performance, optimize well-being, or predict behavior (Kvale, 2003). Knowledge that can be packaged into simple, quantifiable claims is particularly attractive, as it can be marketed, disseminated, and consumed quickly across institutional and public domains. The replication crisis can be interpreted as a consequence of psychology's increasing orientation toward this market logic. To maintain visibility and relevance, researchers are incentivized to produce findings that are both striking and consumable—results that lend themselves to headlines, management strategies, or policy interventions. This demand fosters a preference for methods that yield “clean” effects, framed as universal truths about human behavior, while marginalizing more context-sensitive or interpretive approaches. As Smaldino and McElreath (2016) argue, incentive structures select for methods that maximize publishable, statistically significant findings, even when they lack robustness. The drive to feed the market with novel, eye-catching results thus aligns with systemic practices—such as questionable research methods or selective reporting—that have contributed to the replication crisis (Open Science Collaboration, 2015). Kvale's analysis of psychology as a market commodity also illuminates why replication itself has become a contested practice (Kvale, 2003). Replications, by their nature, often fail to produce the kind of novelty and market value that contemporary academia rewards. In a consumer-driven knowledge economy, the worth of a study lies less in its capacity to confirm existing results than in its ability to deliver new findings that can be packaged as innovative and impactful. This creates a structural disincentive for replication studies, even though they are essential for scientific reliability. The result is a paradox: psychology presents itself as a factory producing reliable, reproducible knowledge, but in practice it operates as a market, prioritizing novelty and visibility over durability.

If we return to Bargh et al.'s study (1996), this study has become a part of popular everyday culture both through education and through the medias, and this influence how participants and researchers approach replicative studies. For example, Bargh et al.'s study (1996) has often been referenced in educational contexts to illustrate the power of unconscious priming influences behavior. The study is frequently included in psychology textbooks and university courses as a key example of automaticity of social behavior (see e.g. Schacter et. al, 2011). Bargh et al.'s study had a substantial cultural impact, particularly in how it influenced public perceptions of the power of the unconscious mind. The study was prominently featured in Malcolm Gladwell's *Blink* (2005), a best-selling book on the power

of intuition and unconscious thought processes. Gladwell used the study to illustrate how subtle cues can unconsciously shape our actions, making the findings accessible to a broad audience. This popularization helped Bargh et al.'s work become one of the most famous examples of behavioral priming. Numerous popular science magazines (e.g., *Psychology Today* and *Scientific American*) and online platforms referenced Bargh et al. as evidence of the invisible power of stereotypical cues (Chivers, 2019). Articles in popular scientific magazines often highlighted dramatic interpretations of the findings, such as the idea that simple words or subtle environmental changes could drastically influence behavior.

In other words, although Bargh et al.'s (1996) study has proven nearly impossible to replicate, it has nevertheless circulated widely in popular culture as if it were a valid and definitive scientific finding, supposedly demonstrating the power of unconscious priming. In this way, popular culture has played a crucial role in reinforcing psychology's objectivity paradigm: by uncritically legitimizing and amplifying studies that appear to deliver clear, universal, and quantifiable truths about human behavior, it sustains the belief that psychology can operate as a natural science. The cultural demand for simplified, headline-ready psychological insights thus aligns with and perpetuates the very assumptions that underlie the replication crisis—namely, that human existence can be reduced to stable, predictable mechanisms if only the right experimental design is applied.

Conclusion

The replication crisis in psychology has often been framed as a methodological failure—an issue of flawed statistical practices, publication bias, and poor experimental design. While these factors undoubtedly play a role, this article has argued that the replication crisis should be understood as much more than a methodological problem. Psychology's struggle with replication is not merely a consequence of weak methodologies but a reflection of deeper epistemological, theoretical, historical, political and institutional challenges within the discipline. By shifting the focus from methodology to epistemology, theory, history, political and institutional powers, we can begin to gain a more profound understanding of why the crisis exists and how it should be addressed. In this article, I have tried to give five reasons why we should consider the replication crisis as more than an crisis of methods. If we move beyond focusing on the methods, the replication crisis in psychology presents an opportunity for fundamental transformation within the discipline. Rather than viewing it solely as a failure—whether methodological, epistemological, or institutional—it can be seen as a moment for reflection and reform, one that could lead to a stronger, more rigorous, and theoretically grounded psychology. However, in order to do this, we need to move beyond the idea that the replication crisis is only about methods. Psychology must critically examine its theoretical foundations and the assumptions underlying its paradigms. It needs to reassess its commitment to an objectivist, natural science model and explore more context-sensitive approaches. The field's historical ambition to mirror the natural sciences has led to an overemphasis on quantification at the expense of deeper theoretical reflection. The replication crisis offers a chance to integrate diverse theoretical perspectives and develop a more comprehensive understanding of human behavior. At the same time, psychology must challenge and rethink the neoliberal shift in academia, ensuring that research is guided by genuine intellectual curiosity rather than external pressures and incentives. The field must move away from a system that rewards flashy, one-off findings and instead cultivate a research culture that prioritizes robustness, and long-term theory-building. Additionally, psychology must acknowledge its entanglement with social and

political forces and strive for greater reflexivity in how psychological knowledge is produced and applied. As Maier (2022) argues, the replication crisis is not merely an empirical failure but the latest manifestation of a recurring conflict within psychology, rooted in the discipline's lack of a coherent theoretical account of human subjectivity. From this perspective, the crisis is not only a challenge but also an opportunity. It forces psychology to confront the limits of its prevailing paradigms and brings longstanding tensions about its subject matter and scientific identity into sharper focus. By making these problems visible, the replication crisis provides a rare moment of reflexivity within the discipline: it highlights how deeply entrenched assumptions about prediction, mechanistic causality, and natural science models have shaped psychological research. Rather than being understood solely as a failure, the crisis can thus be seen as a productive disruption—one that creates space for psychology to rethink its theoretical foundations, broaden its understanding of human subjectivity, and cultivate a more self-critical and resilient scientific practice.

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