Psychological Factors – Introduction

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Why do some people believe many conspiracy theories, while other people disbelieve most of them? The question of what drives people's subjective beliefs about the world is the domain of psychology. Furthermore, given that most people who are susceptible to conspiracy theories are regular citizens who have no mental health problems, the study of what determines people's belief or disbelief in conspiracy theories is the domain of social psychology (see chapter 1.9 in this volume). Social psychology is defined as 'the branch of psychology dedicated to the study of how people think about, influence and relate to each other' (Sutton and Douglas 2013: 7). As such, social psychology is the study of how ordinary people think, feel, and act in their everyday lives.

The founder of the academic field of social psychology was Kurt Lewin (1890-1947), who argued that both individual and environmental factors jointly contribute to human behaviour. Particularly well-known is the *Lewin equation* which reads $B = f(P, E)$ (Lewin, 1936). In this formula, "B" stands for human behaviour, "P" stands for the person, and "E" stands for the environment. Put differently, behaviour is a result of both the person and the environment. The Lewin equation implies that different people are likely to behave differently in the same situation. For example, a group of people may read exactly the same governmental conspiracy theory on the Internet, yet the extent to which different group members respond to the conspiracy theory may differ: Some people may believe the theory and subsequently join a populist party or protest movement, while others may not believe the theory and not act, or perhaps even ridicule it. These behavioural differences can be rooted in a range of factors that vary between people including personality, demographic background, personal life history, education, and so on.

Objectively the same situation hence elicits different responses among different people, and therefore, to understand behaviour one needs to take individual differences into account. Besides individual differences, however, the social environment also contributes significantly to behaviour. A person may not necessarily believe conspiracy theories about the pharmaceutical industry at one point in time, yet become suspicious about the pharmaceutical industry following a disease epidemic. This environmental factor (an epidemic) may ultimately lead the person to join the anti-vaccine movement. Different situations elicit different behaviours from one and the same person; therefore, to understand behaviour one also needs to take situational factors into account.

The Lewin equation reflects how social psychologists have approached the topic of conspiracy theories since the study of this topic gained momentum across the social sciences and humanities over the past decade. While the Lewin equation was originally about explaining behaviour, in a similar manner, the combination of individual and situational factors also explains people's perceptions of, and beliefs about, the world. Psychologists have therefore extensively investigated how a tendency to believe conspiracy theories is related to structural personality variables (e.g., openness to experience; agreeableness) and other demographic or individual difference variables (e.g., education level; narcissism; authoritarianism). Furthermore, psychologists have examined how situational circumstances (e.g., distressing societal events; conflict between groups; power differences) increase or decrease people's susceptibility to conspiracy theories. Finally, given that a core feature of the Lewin equation is that individual and environmental factors jointly determine people's perceptions, beliefs, and behaviours, psychologists have investigated how situational experiences such as interpersonal rejection influence conspiracy beliefs differently depending on meaningful individual differences between people such as the fragility of one's self-worth (see Douglas, Sutton, and Cichocka 2017; van Prooijen 2018).

This section is organized around the Lewin equation. Three chapters examine the role of the person in conspiracy beliefs. What specific differences between people, and what psychological processes that take place within people's own minds, influence the likelihood of believing or disbelieving conspiracy theories? The first chapter by Lantian, Wood, and Gjoneska (2.1) provides an overview of how a wide range of individual difference variables predict belief in conspiracy theories. The second chapter by van Prooijen, Klein, and Milošević Đorđević (2.2) illuminates how two complementary mental systems to process information contribute to belief in conspiracy theories. While the second chapter focuses on "cold" cognition, the third chapter by Douglas, Cichocka, and Sutton (2.3) focuses on "hot" motivation and emotion, and addresses how various motivations and emotions that people have shape their belief in conspiracy theories.

The next three chapters of the section address the role of the situation: What specific factors in people's social environments increase or decrease the likelihood that they will believe in conspiracy theories? The fourth chapter by Imhoff and Lamberty (2.4) examines the role of power differences, and explains why people who lack power in social situations are more likely to believe conspiracy theories than people who have power. The fifth chapter by Delouvee, Wagner-Egger, and Bangerter (2.5) examines the spread of conspiracy theories: How do conspiracy theories transmit between people and within larger social or online networks? The sixth chapter by Biddlestone, Cichocka, Žeželj, and Bilewicz (2.6) examines the role of intergroup relations and conflict in conspiracy beliefs about social groups.

The final two chapters connect the psychology of conspiracy theories to societal issues. Lewin famously coined the maxim that in social psychology, 'there is nothing as practical as a good theory' (Lewin 1943: 118). With this, Lewin meant that changing human perceptions or behaviors in society will be more successful if one does so by relying on psychological theories that are supported by evidence. The last two chapters therefore focus

on the societal consequences of conspiracy theories, and possible interventions to reduce widespread belief in them, in particular when such beliefs pose some harm. The seventh chapter by Jolley, Mari, and Douglas (2.7) provides an overview of the behavioural and psychological consequences of conspiracy theories, illuminating the need for interventions in society. Finally, the eighth chapter by Kreko (2.8) addresses the question if, and how, to debunk conspiracy theories. Together, these chapters provide an overview of the accumulating insights that social psychology has hitherto contributed to the study of conspiracy theories.

The social-psychological approach, as described in these chapters, has at least two features that give the field a unique place in the study of conspiracy theories. The first feature is that the majority of social-psychological knowledge is developed via quantitative hypothesis-testing, thereby complementing some of the more qualitative approaches to this topic. These quantitative methods enable researchers to examine what personal or environmental factors predict people's conspiracy beliefs above chance level. Usually, they rely on large (sometimes nationally representative) samples and multiple testing of the same hypothesis, which increases confidence in the findings. Furthermore, some of the research designs that social psychologists employ enable them to test causality, and hence empirically establish the causes and consequences of conspiracy beliefs.

While various other disciplines also study conspiracy theories using quantitative research methods, the second defining feature of the social psychological approach is that it studies conspiracy theories at micro- and meso-levels of analysis. This means that social psychologists try to understand how peoples' conspiracy beliefs are influenced by both individual differences and their direct social environment, as reflected in the Lewin equation. These micro- and meso-levels of analysis distinguishes psychology from other quantitative approaches such as sociology or political science, which typically endorse a more macro-level

of analysis. This means that other quantitative disciplines place relatively more emphasis on examining conspiracy theories at a societal level, for instance by relating conspiracy beliefs to specific political or societal movements.

The study of conspiracy theories is a relatively new area of investigation in social psychology. Hence, there are many fruitful areas for future research in this domain. One limitation of the current state of affairs in social psychology is a strong reliance on survey-based questionnaires, in which participants indicate to what extent they agree or disagree with a range of statements. While such measures have the advantage that they provide direct information about how participants think and feel about certain topics, they are also sometimes restricted by, for instance, measurement errors (e.g., socially desirable responding) and limit the range of conclusions that a researcher can draw. Future research therefore needs to complement these measures with relatively "hard" empirical data, which may include physiological measures, big data, and real behaviours.

Physiological measures would be useful in the study of conspiracy theories because they provide information about processes that people cannot control. This complements research with rating scales in various ways, for instance by excluding the possibility that some findings are due to response bias. One example would be to study what happens in the brain while people think about conspiracy theories. Do conspiracy theories activate brain regions associated with analytic thinking (e.g., the dorsolateral prefrontal cortex), or brain regions associated with basic emotions (e.g., the anterior cingulate cortex) and threat experiences (e.g., the amygdala)? People can pretend to (not) be anxious in a questionnaire, but they cannot fake the physiological signature of such emotions. In a similar fashion, research may examine the relationship between conspiracy theories and stress, as for instance reflected in an activation of the sympathetic nervous system or the release of stress hormones (i.e., cortisol) in the body.

Modern technology provides ample opportunities to analyze big data, for instance in the form of Facebook or Twitter feeds. An emerging research approach in social psychology is to quantify (sometimes millions of) social media messages about a certain topic, and statistically relate them to, for instance, demographics (e.g., age or gender of the account holder) or political variables (e.g., how many liberal vs. conservative politicians does an account holder follow)? Such an approach has various advantages, including large sample sizes, the possibility to study social networks (e.g., do people mostly retweet conspiracy theories within their own ideological network, that is, is there an 'echo chamber' effect?), and the possibility to study people's spontaneous expressions of conspiracy beliefs (e.g., see Del Vicario et al., 2016).

Finally, although research has extensively examined the consequences of conspiracy theories (see chapter 2.7), most of these consequences have been behavioural *intentions*. This is problematic, because it is well-known that how people think they would behave often does not correspond to how people actually do behave in a given situation. Various other research domains within social psychology extensively focus on measures of actual behaviours (e.g., helping, aggression, cooperation, and so on), and the psychology of conspiracy theories would benefit from also including such behavioral measures. For instance, do conspiracy theories influence people's aggressive behaviours, or their donations to charity? Do conspiracy beliefs about the government influence people's decisions about whether or not to cheat on their tax forms?

In sum, conspiracy theories are everywhere in society, and large groups of citizens believe them. Social psychologists seek to understand conspiracy beliefs by examining the role of both individual and situational factors, and by examining the societal implications of conspiracy theories. Furthermore, although social psychologists have made significant steps in contributing to the study of conspiracy theories in recent years, there are fruitful

opportunities for the field by incorporating physiological and behavioural measures, and by analyzing big data. The chapters in this section reflect the current state of affairs in the psychology of conspiracy theories, and are based on the principles laid out in this introduction. By combining the Lewin equation as a basic conceptual framework with a methodological toolbox that utilises quantitative hypothesis testing at micro- and meso-levels of analysis, social psychology has a unique place in the study of conspiracy theories.

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