

C

Conditional Reasoning

Rustin D. Meyer and Jeremy Bowers Schoen
Georgia Institute of Technology, Atlanta, GA,
USA
Georgia Gwinnett College, Lawrenceville, GA,
USA

Synonyms

[Biased reasoning](#); [Implicit personality](#); [Justification mechanisms](#); [Motivated reasoning](#)

Definition

A large part of personality exists in the implicit domain and, therefore, is not consciously accessible via introspection. Conditional reasoning (CR) is a theoretical view of this aspect of personality, which suggests that individuals develop biases in social informational processing called justification mechanisms (JMs) that allow them to rationalize their preferred motive-driven behaviors. Conditional reasoning tests (CRTs) can, therefore, be developed to quantify the extent to which a given individual's reasoning is influenced by these motive-driven biases, thereby allowing researchers to scale respondents' standing on relevant implicit personality traits and motives.

Thus, the term conditional reasoning denotes the idea that individuals' social information reasoning processes are conditioned upon their implicit drives, needs, and personality.

Introduction

Scholars have long recognized that humans are not consciously aware of a substantial portion of their personality (Prince 1914). That is, we all have traits and motives that influence our behavior for reasons we do not recognize. As a result, we are not able to use introspection to identify our relative standing on these traits (either through narratives, interviews, or self-reported personality scales). This aspect of our psychology is often referred to as our "implicit personality" and often consists of tendencies and behaviors that would threaten one's self-image if the reasons underlying them were consciously available. As a result, the implicit personality systems hold great promise for predicting human behavior, but also provide substantial measurement challenges – namely, how can psychologists accurately assess relevant characteristics when those who possess them are not able to gauge their standing on them? The present entry outlines one attempt to solve this problem in a psychometrically rigorous manner: conditional reasoning.

Background

Generally speaking, humans want to believe that their behaviors are consistent with the self-image they hold privately and try to cultivate publically. It is also probably not controversial to state that most people generally want to believe that their behaviors are consistent with the generally accepted bounds of civil society. Yet, even a cursory viewing of the evening news regularly showcases examples of “good people” in government, business, and daily life engaging in behaviors that likely run counter to their explicitly stated self-beliefs and the image of themselves they try to cultivate in the minds of others. For example, the dentist who dedicates years of academic pursuit to earning an advanced degree because he wants to serve underprivileged youth, but ultimately spends most of his time exploiting a systemic loophole that increases his profit at the expense of his patients’ best interests; the teachers who dedicate their lives to helping children learn, only to change their students’ scores on standardized tests in order to cover up their own failures; and the athlete who trains diligently for decades, reaches the top of his field, but ultimately falls from grace after a multiyear doping scandal.

Many of the individuals highlighted above would likely not publically (or even in their own private self-evaluations) admit to engaging in destructive behaviors – instead, they often rely on “justification mechanisms” (JMs), which are “self-protective biases that implicitly shape reasoning” (James et al. 2005, p. 73) in ways that allow people to conclude that their behaviors are rational and consistent with accepted standards of decorum (e.g., “no one was hurt by my actions,” “this was what I had to do to meet my supervisor’s expectations,” “society learns important lessons about human gullibility when people are so effectively fooled,” “I have earned these alcoholic drinks because I’ve had such a bad (or good) day”). Lawrence James recognized that the routine use of these JMs creates an opportunity for psychologists to uncover otherwise inaccessible aspects of participants’ personality by quantifying their reliance on various JMs when making social judgments.

Measurement

James surmised that one way of achieving this goal is to create what appear to be traditional inductive reasoning items, wherein participants are asked to select the option that most logically follows from a description of a particular social scenario. Unbeknown to respondents, however, two of the (typically) four response options are equally logical and differ only in the extent to which they represent an extreme level of a particular JM that one might use to protect his/her self-perception as a responsible and rational human being. Thus, the tendency of individual respondents to select items that (although logical) represent a reliance on a particular JM are said to have a higher standing on the relevant underlying trait or motive.

For example, one of the first CRTs developed by James and his colleagues (James 1998; James et al. 2005) assessed participants’ standing on implicit aggression (i.e., a desire to inflict harm on others that one is not consciously aware of). James and his colleagues hypothesized that individuals with a high standing on this trait would be likely to view their behaviors as reasonable reactions to perceived oppression, justifiable forms of self-defense, or retaliation to a perceived injustice (to name a few). As a result of these tendencies, people whose behavior is driven by these implicit biases should interpret social information (i.e., the scenarios described in the stem of each conditional reasoning problem) in ways that are qualitatively different from those whose behavior is not driven by these biases. For example, James and his colleagues (2005) developed the following conditional reasoning item to assess the extent to which a given participant relies on what they called the “victimization by powerful others” bias:

The old saying, “an eye for an eye,” means that if someone hurts you, then you should hurt that person back. If you are hit, then you should hit back. If someone burns your house, then you should burn that person’s house. Which of the following is the biggest problem with the “eye for an eye” plan?

- A. It tells people to turn the other cheek.
- B. It offers no way to settle conflict in a friendly manner.
- C. It can only be used at certain times of the year.

- D. People have to wait until they are attacked before they strike.

In this item, options A and C are illogical distractors because the “eye for an eye” mentality obviously runs contrary to “turning the other cheek” and the item mentions nothing about seasonal dependence. Thus, the options of interest from a conditional reasoning perspective are options B and D. The vast majority of participants (i.e., those whose reasoning is not affected by the “victimization by powerful others” bias) selected option B because they naturally recognize that any mentality that does not provide a mechanism for peaceful resolution will inherently lead to negative outcomes for those involved and/or society as a whole. A small percentage of the population, however, selects option D because they automatically conclude that any mentality that prevents preemptive strikes is inherently flawed because, if individuals must wait to be attacked before they themselves are attacked, this contingency increases the chances that they will become the victims of the hostile actions that (they believe) powerful others will inevitably inflict upon them. Critically then, CRTs are useful instruments for assessing implicit personality because they do not require participants to reflect upon their attitudes or beliefs, but instead require them to critically evaluate presented information based on its underlying logic. Researchers then use the resulting patterns in their responses to identify the social information processing biases (i.e., JMs) that are driving their reasoning.

Validities

To date, a number of CRTs have been created and are at various stages of validation. These include, but are not necessarily limited to, tests of achievement motivation versus fear of failure (James 1998), aggression (James 1998; James et al. 2005), need for power (James and LeBreton 2012), creative personality (Schoen et al. *in press*), integrity (Schoen 2015), addiction proneness (Bowler et al.), and narcissism (Schnure 2013). Further, many of these tests have

demonstrated impressive criterion-oriented validities, with correlations regularly exceeding .30 against an array of behaviors. For example, Schoen and his colleagues (*in press*) reported validities of .27, .29, and .31 between a new CRT for creative personality and expert ratings of creative performance and .44, .37, and .30 for measures of entrepreneurial success; James (1998) reported validities between a CRT for achievement motivation and academic performance of .52 and .32; Bing and his colleagues (2007) report a validity between the CRT for achievement motivation and academic performance of .31 and performance on an in basket exercise of .39; Bowler and her colleagues (2011) report a validity for a CRT of addiction proneness and prior classification as an addict of .48; and while debate is still ongoing, the validity for the CRT for aggression as a predictor of aggressive behaviors is also in this same range when used to predict overt forms of physical violence. The magnitude of these uncorrected validities suggests that CRTs may be an effective approach for assessing the unconscious components of personality.

Conclusion

The nature of the implicit aspect of personality makes it inherently difficult to measure. When individuals are not consciously aware of the reasons why they routinely engage in specific classes of behavior (e.g., giving up on tasks, making promises they are not capable of keeping, harming those who are closest to them), this lack of knowledge precludes the use of traditional self-report personality tests (e.g., the various instruments designed to assess the Big Five). As a result, psychologists have attempted to create novel measurement methods that assess personality using surreptitious methods. Unfortunately, however, many of these methods (e.g., Rorschach Inkblots, the Thematic Apperception Test) have been shown to lack reliability, are difficult to administer/interpret, and (as a result) are impractical to use in large-scale standardized testing environments. CRTs circumvent these issues by capitalizing on

humans' implicit biases that allow them to rationalize their behaviors, while simultaneously maintaining a consistent self-image. This assessment method has been shown to result in scores that (a) do not correlate with explicit measures of personality (i.e., tap a fundamentally different aspect of personality), (b) predict valued outcomes, and (c) generally resistant participants' efforts to engage in intentional response distortion (i.e., "faking") under standard testing conditions (LeBreton et al. 2007).

Cross-References

- [Implicit Personality](#)
- [Motives](#)
- [Personality](#)
- [Trait Theory](#)

References

- Bing, M. N., LeBreton, J. M., Davison, H. K., Migetz, D. Z., & James, L. R. (2007). Integrating implicit and explicit social cognitions for enhanced personality assessment: A general framework for choosing measurement and statistical methods. *Organizational Research Methods, 10*, 346–389.
- Bowler, J. L., Bowler, M. C., & James, L. R. (2011). The cognitive underpinnings of addiction. *Substance Use & Misuse, 46*, 1060–1071.
- James, L. R. (1998). Measurement of personality via conditional reasoning. *Organizational Research Methods, 1*, 131–163.
- James, L. R., & LeBreton, J. M. (2012). Assessing the implicit personality through conditional reasoning. Washington, DC: American Psychological Association.
- James, L. R., McIntyre, M. D., Glisson, C. A., Green, P. D., Patton, T. W., LeBreton, J. M., et al. (2005). A conditional reasoning measure for aggression. *Organizational Research Methods, 8*, 69–99.
- LeBreton, J. M., Barksdale, C. D., Robin, J., & James, L. R. (2007). Measurement issues associated with conditional reasoning tests: Indirect measurement and test faking. *Journal of Applied Psychology, 92*, 1–16.
- Prince, M. (1914). *The unconscious: The fundamentals of human personality normal and abnormal*. New York: The MacMillan Company.
- Schnure, K. A. (2013). Narcissism and its measurement: A conditional reasoning measure for narcissism. (Unpublished Doctoral dissertation). Georgia Institute of Technology, Atlanta.
- Schoen, J. L. (2015). Development of an implicit measure of integrity. Presented at Latest findings in conditional reasoning: New scales and multiple motives symposium at the Society of Industrial and Organizational Psychology Annual Meeting, Philadelphia.
- Schoen, J. L., Bowler, J. L., & Schilpzand, M. C. (in press). Conditional reasoning test for creative personality: Rationale, theoretical development, and validation. *Journal of Management*.