National Science Foundation Office of Inspector General Assessing Intent in Research Misconduct Investigations

NSF's research misconduct regulation requires establishing the mental state of mind, or intent, of the subject who allegedly committed the research misconduct. The assessment of intent by institution investigation committees can be a challenge, so we developed this document to facilitate such assessments.

Degrees of Intent

NSF's research misconduct regulation identifies three degrees of intent that demonstrate culpability of a subject. Specifically, a finding requires that the research misconduct be committed recklessly, knowingly, or intentionally. These three degrees of culpable intent form a continuum describing the subject's state of mind during the alleged act of misconduct. We recommend investigation committee members consult institutional legal counsel to assist in distinguishing between the degrees of intent. As supplementary guidance, we provide the following definitions for reference.

Reckless: The subject used materials with a lack of proper caution and/or showed indifference to the risk that the materials may be false, fabricated, or plagiarized. The subject took a risk with materials without thinking or caring about the consequences of the action, even if the subject did not fully realize the risk.

Knowing: The subject had an awareness of his/her actions. Knowingly is essentially synonymous with consciously.

Intentional: The subject acted with a specific purpose in mind. Intentional is synonymous with purposeful or willful.

The regulation exempts honest error, which can be thought of as non-culpable intent. The distinction between honest error and reckless intent is the most critical because it determines whether the subject acted culpably, which is a required element of a finding of research misconduct. With reckless intent, the subject did not have a conscious awareness of the actions, while for knowing and intentional degrees of intent, the subject did. For example, the analysis might involve whether the act required any conscious physical action, such as turning a dial, pushing a button to alter data, or pasting copied text into a document, all of which are knowing acts. The distinction that elevates the degree of intent to intentional is whether the subject acted to achieve a specific purpose through the misconduct, such as altering data to demonstrate a particular outcome.

Using the degrees described above, committees should determine which one degree of intent best represents the subject's state of mind when committing the act of research misconduct. If the committee finds the subject committed multiple acts of research misconduct, we expect an assessment of intent for

¹ 45 C.F.R. § 689.2(c)(2)

² Definitions include influence from *Black's Law Dictionary* (9th ed. 2009), the *Merriam-Webster* online dictionary, and the Administrative Law Judge recommended opinion in *ORI v. Srivastava* (Decision No. CR5178; Sept. 5, 2018, p. 11-12).

each act.

The chart below illustrates the relationship between the subject's culpability, intent, and awareness of the action.

Not culpable	Culpable		
Honest Error	Reckless	Knowing	Intentional
Reasonable Person Standard No conscious awareness		Individual Standard Awareness of action	

Assessing Evidence of Intent

Intent is not the same as motive, or the inducement to an act. While a knowledge of motive can be useful, the committee does not need to prove motive. Also note, "intent to deceive" is not an element of a finding, and the committee does not have to prove the subject meant his/her actions to deceive.

Establishing a subject's intent often means assessing indirect but objective evidence about a person's statements and to infer the person's state of mind. Committees can be uncomfortable drawing inferences about someone's mental state. However, certainty is not required. Intent (like the other elements of a research misconduct finding) must be proven by a preponderance of the evidence. Preponderance of the evidence requires that committees show there is a greater than 50% likelihood of demonstrated culpability, *i.e.*, more likely than not⁴

Interviews with the subject, complainant, and other witnesses are one source of evidence of intent in any investigation. In addition to asking about the alleged acts, committees should probe statements and resist taking any single statement at face value.

Some acts are inherently unlikely to occur without the actor's awareness. A good example of such an act is verbatim plagiarism.⁵ In such cases the reasonable inference is that the acts were performed with the subject's knowledge.

³ 45 C.F.R. § 689.2(c)(3)

⁴ https://www.law.cornell.edu/wex/preponderance_of_the_evidence

⁵ Assessing Intent in Verbatim Plagiarism Investigations