## The WAGER Vol. 9(8) - Attribution, Addiction, and Gambling: Becoming What We're Told We Are

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Editor's Note: This week's WAGER was co-authored by Harvard Medical School Division on Addictions (DOA) intern, William Ilott. Bill will finish his internship at the end of the month and pursue a career in an academic setting in the Boston area.

Halfway through Ken Kesey's book, One Flew Over the Cuckoo's Nest, the audience learns that the mental patients on the ward to which the main character has been committed are there voluntarily. Even though we have learned that many of these patients have surmountable problems and do not belong in a lockup facility, they have come to believe the labels Nurse Ratchett has given them, accept their inability to function outside the walls of the ward, and behave in ways that support the Nurse's preconceptions. These labeling effects are not confined to books and movies. We hold stereotypes about the way people of different races should behave, how people with mental illness will act, and the future prospects of children who act out or have attention problems at a young age. These stereotypes affect not only our perception of their behavior (see WAGER 9(6)), but also the beliefs and behavior of those we label, a phenomenon called self-fulfilling prophecy. Research has shown that African Americans' and women's test performance are adversely affected by stereotypes about their academic ability (Steele, 1997), mentally ill people who expect to be rejected for their illness behave in ways that facilitate social rejection (Link & Cullen, 1990), and boys who are labeled as delinquent internalize that label and commit more crime in the future (Jensen, 1980). This week's WAGER reviews a study by McAllister and Davies that measured the effect of others' labeling on people's attributions for their own behavior (McAllister & Davies, 1992).

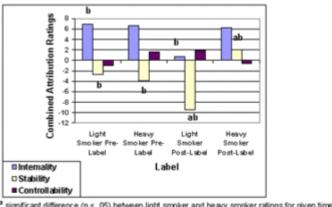
McAllister and Davies' study, and much of the research that studies people's

attributions for behavior, divides these attributions into three dimensions – locus, controllability, and stability1. That is, causes of behavior can be perceived as internal or external to the person acting, controllable or uncontrollable by that person, and permanent or temporary. For example, if a person gets very drunk one night, we (or he) might attribute his actions to his girlfriend having broken up with him that day. This attribution would be external (i.e., his girlfriend acting on him), uncontrollable (i.e., he didn't choose for his girlfriend to break up with him), and unstable (i.e., his girlfriend does not break up with him every day). Alternatively, we (or he) might attribute his drunkenness to alcoholism. This attribution would be internal (i.e., a characteristic internal to him), uncontrollable (i.e., due to a disease), and stable (i.e., alcoholism will lead to this behavior now and in the future).

McAllister and Davies recruited 20 women between the ages of 25 and 40 years old who had been smoking a minimum of five years from education programs in their local community. Initially, the participants answered questions about their smoking consumption and rated the accuracy of eight possible attributions for their smoking behavior on a scale ranging from 0 to 10. These eight items represented all possible combinations of locus, controllability, and stability (e.g., internal/stable/uncontrollable or external/unstable/controllable). The authors calculated scores for each participant on internality, controllability, and stability based on their ratings. Click here to view a table of ratings and scoring procedures.

Based on their consumption levels, the researchers divided the women into two equal groups: 10 light and 10 heavy smokers. Participants returned for a second interview five to seven weeks after the first and were informed of their group status. The front page and the top of each subsequent page of the questionnaire participants received during their second visit was imprinted with either "LIGHT SMOKER" or "HEAVY SMOKER" in large bold print. The second interview version of the questionnaire included identical attribution items. Figure 1 displays the changes in participants' attribution ratings as a function of their assigned label.

Figure 1. Attribution Ratings for Smoking from First Interview (Prelabeling) to Second Interview (Post-labeling) (Adapted from McAllister & Davies, 1992)



significant difference (p < .05) between light smoker and heavy smoker ratings for given time

significant difference (p < .05) between pre- and post-labeling ratings for given group and

There were no differences between the two groups' initial attribution ratings for their behavior, but their attribution ratings during the second interview (after being informed they were "light" or "heavy" smokers) differed significantly in terms of stability, t(18) = 2.85, p < .01. As the figure shows, the "heavy" smokers increased their endorsement of stable attributions (and/or decreased their endorsement of unstable attributions) for their behavior, whereas the "light" smokers decreased their endorsement of stable attributions (and/or increased their endorsement of unstable attributions). "Light smokers" also endorsed fewer internal attributions and/or more external attributions during the second interview than they did during the first interview.

McAllister et al.'s study shows that the simple act of labeling someone can affect their attributions for their behavior. We have seen in the last few WAGERs that those attributions can in turn affect behavior. If people see their behavior as less a reflection of internal, stable characteristics, as those labeled as "light smokers" did, they may be more willing and able to change that behavior than if they perceive themselves as "addicted." However, it is important to note that this study had several limitations. The sample was small and non-representative. In addition, participants rated attributions but did not generate their own. The participants' own attributions for their behavior might be very different from those represented in the scale. Finally, the authors assigned participants to the "light" and "heavy" categories based on their actual consumption. The results of this study would be much more powerful if they had randomly assigned the participants to these groups. As the researchers designed the study, it is possible that the light and heavy smokers' attribution changes reflected an effect of their consumption behavior, not just the label given to them. Their similar ratings at the first interview and the short amount of time between the two interviews

suggest this is not the case, but a critical evaluation of the study cannot rule out this possibility.

Despite the limitations, these research findings demonstrate the power a single label or diagnosis might have to alter the way people think about their behavior. A clinical diagnosis for an addiction problem (e.g., substance dependence or pathological gambling) can lead to better treatment, provide more access to services, and even help a patient identify his or her behavior as a problem and accept help to cure it. However, to avoid a diagnostic self-fulfilling prophecy leading to more addictive behavior, this study implies that it might be very important for clinicians and counselors to help patients with substance- and gambling-related diagnoses understand their diagnoses and behavior in ways that facilitate healthy change. How we see the world largely determines how we interact with it.

Comments on this article can be addressed to William Ilott or Sarah Nelson.

## **Notes**

1 It is important to note that attributions can vary on intentionality. This dimension is often overlooked in attribution studies (and not rated in the current study), Intentionality is similar, but not identical to controllability. For example, if a person gets very drunk, we might consider his action controllable (i.e., he chose to drink), but not intentional (i.e., he did not intend to get drunk).

## **References**

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