

Causal explanations affect judgments of the need for psychological treatment

Nancy S. Kim* and Stefanie T. LoSavio
Northeastern University

Abstract

Knowing what event precipitated a client's abnormal behaviors makes the client appear more normal than if the event is not known (Meehl, 1973). Does such knowledge also influence judgments of the need for psychological treatment, and if so, does it matter whether the precipitating event was inside or outside the client's control? We presented undergraduates with cases of hypothetical clients exhibiting abnormal behaviors and manipulated whether they were also told of a precipitating event explaining those behaviors. Knowing the precipitant significantly reduced perceptions of clients' need for treatment, but only when the precipitating event was outside the client's control. These findings call into question the notion that it need always be beneficial for an outside reasoner to uncover the root cause of a client's psychological problems, particularly when the root cause is still unknown to the client. The rationality of the effect and additional implications for decision-making are discussed.

Keywords: understanding, explanation, clinical judgment, treatment.

1 Introduction

How do lay people make judgments about another person's need for psychological treatment? Given that recent estimates suggest that approximately one out of every four Americans in any given year have a diagnosable mental disorder (Kessler, Chiu, Demler, Jin, & Walters, 2005), it is likely that a great many lay individuals have the opportunity to observe and assess others' behavioral pathology in their daily lives and to influence others' treatment-seeking decisions. Evidence suggests that the treatment-seeking strategies of people suffering from disorders are strongly influenced by lay social networks (Angermeyer, Matschinger, & Riedel-Heller, 2001). Indeed, a prospective client is most likely to first decide, with input from peers, whether treatment might be needed, and to only then make an appointment to talk with a mental health clinician. It may therefore be of critical importance to examine factors influencing lay judgments of others' need for treatment.

In particular, we are interested in whether understanding a person's behaviors influences judgments of that person's need for treatment. For instance, suppose that "Joe," a well-adjusted first-year college student, has a

roommate, "Ted," who has been exhibiting some strange behaviors. Joe notices that Ted has frequent memory lapses. These lapses lead Ted to repeat his thoughts to himself, which in turn causes difficulty interacting with others. Worried by Ted's odd behaviors, Joe is on the verge of suggesting that Ted seek out professional psychological treatment. Suppose, though, that Joe then hears through the grapevine that Ted's problems all started when his girlfriend cheated on him. Ted was so upset by this event that he started having frequent memory lapses for his usual daily events (which, in turn, launched his other problems). Will knowing the initial precipitant of Ted's problems now lead Joe to perceive Ted as being *more* or *less* in need of psychological treatment? Or, will Joe treat this new information as irrelevant to his judgment of Ted's need for treatment? The primary question in the current paper is whether, and how, knowing the initial cause of a person's abnormal behaviors influences judgments of that person's need for professional psychological treatment.

1.1 Meehl's (1973) "understanding it makes it normal" effect

We suggest that some clues to answering this question may be derived from an informal observation reported by Meehl (1973). Meehl noticed that the presence of an explanation appears to influence perceptions of the *normality* of another person's behaviors. Specifically, he suggested that, when people are able to explain an individ-

*Nancy S. Kim, Department of Psychology, Northeastern University, and Stefanie T. LoSavio, Department of Psychology, Northeastern University. We thank Woo-kyoung Ahn, Jonathan Baron, John Coley, Joanne Miller, and two anonymous reviewers for helpful feedback. Correspondence concerning this article should be directed to Nancy S. Kim, Department of Psychology, 125 Nightingale Hall, Northeastern University, 360 Huntington Avenue, Boston, Massachusetts 02115–5000, USA. E-mail: n.kim@neu.edu.

ual's clearly abnormal behaviors, the behaviors are then perceived as being more "normal" or acceptable. Meehl termed this general phenomenon the "understanding it makes it normal" effect. To illustrate, Meehl described a psychologist testifying as an expert witness at the trial of a man who murdered his wife. The psychologist argued that if he could only find out the entire set of details in the case, such as the way the man's wife talked to him in the morning, then the homicide would become "dynamically understandable" and the act would thereby become much more normal or acceptable. Meehl argued, however, that any given behavior itself remains at the same level of normality regardless of what explanations *another* person is able to mentally generate and bestow upon it. In this case, according to Meehl, the murder should not be seen as normal or acceptable, even if we can piece together exactly what precipitated its occurrence.

Although Meehl's paper (1973) did not formally stipulate what constituted understanding, Ahn, Novick, and Kim (2003) suggested that people's intuitive feelings of understanding a set of behaviors are strengthened when they have a coherent explanation of those behaviors, in keeping with Thagard's (1989; 1992) model of explanatory coherence. Thagard (1992) argued that when an initial explanatory hypothesis can be explained further by an additional explanation, it is perceived to have even greater coherence and to provide a better overall understanding of the phenomena than if it had not been further explained. (See Read and Marcus-Newhall, 1993, for experimental support.) Using our earlier example to illustrate, Joe's initial explanatory hypothesis is that Ted's memory lapses cause him to repeat thoughts to himself, which in turn causes difficulty interacting with others. Joe's understanding of Ted's behaviors is increased when Joe learns that an initial precipitating event (i.e., Ted's negative experience with infidelity) caused the chain of odd behaviors to be launched in the first place. That is, according to Thagard's (1992) model, Joe's subjective feeling of *understanding* Ted's behaviors should be stronger than if Joe had not known about the infidelity.

On the basis of this underlying logic, Ahn et al. (2003) conducted the first systematic tests of the "understanding it makes it normal" effect. In their studies, people read about hypothetical clients,¹ each exhibiting clearly abnormal behaviors. The relationships between the behaviors of each client were explained by specifying clear causal connections among them, as in our example of Ted. The coherence of that explanation was then manipulated between subjects by either providing or not pro-

viding information about a precipitating life event (e.g., being cheated on by one's significant other) that caused the abnormal behaviors to appear in the first place. That is, Ahn et al. (2003) manipulated whether or not the precipitating life event was also provided to explain the genesis of the initial symptom in the chain of strange behaviors (e.g., *was cheated on* → memory lapses → repeats thoughts to himself → difficulty interacting with others). They found that people who knew the precipitating life event judged the client to be more "normal" than did people who were not told about the precipitating life event. These results supported the existence of the "understanding it makes it normal" effect. The "understanding it makes it normal" effect speaks to the current research question insofar as judgments of the need for psychological treatment may be strongly (or even almost completely) informed by judgments of a person's "normality." That is, to the extent that a person's behaviors are deemed *abnormal*, we might generally expect to judge that person as needing psychological treatment.²

1.2 The locus of control of precipitating events

We also propose that the influence of increased understanding on need-for-treatment judgments may be differentially triggered by different types of precipitating events. Namely, in previous work, the precipitating events all had the characteristic of being outside the person's control (e.g., having been abused as a child; Ahn et al., 2003). Previous research, therefore, does not allow us to differentiate between precipitating events that are internally-controlled (performed intentionally by the client) versus those that are externally-controlled (controlled by outside factors or persons). Both internally- and externally-controlled factors are, however, likely to be generated in real life as explanations for a client's behaviors, and there is reason to believe that they could have markedly different effects on need-for-treatment judgments.

One hypothesis is that people will judge clients to be less in need of psychological treatment when externally-controlled events are provided as the cause of their behaviors, relative to when internally-controlled precipitating events are provided or when no precipitating events are provided. People might believe that an externally-controlled event, as opposed to an internally-controlled one, could happen at random to anyone and that the ensuing symptoms are therefore more understandable (e.g., "if that happened to me, I might have problems too"). Furthermore, previous decision-making studies in the legal domain have found that if crimes are explained

¹For clarity, we use the term "clients" to refer to hypothetical people showing clearly abnormal behaviors. However, note that in the current study, participants always learned about "individuals" rather than "clients." Thus, they were not influenced by terminology to respond in any particular way.

²We return to this issue in the Discussion section.

by externally-controlled events, such as being from a low socio-economic status group, more lenient punishments are issued than if they are instead explained by internally-controlled events (Grasmick & McGill, 1994; Monterosso, Royzman, & Schwartz, 2005). To the extent that both punishments and treatments are seen as interventions for abnormal behaviors, this tendency may also apply to the area of clinical judgment. That is, similarly, if a client's behaviors are attributed to externally-controlled factors, the client might appear less in need of psychological treatment than if the behaviors are attributed to internally-controlled factors.³

An alternative hypothesis is that internally-controlled precipitating events might be taken to indicate that a client is less in need of psychological treatment (relative to judgments about clients with externally-controlled events or no event). In particular, observers may conclude that clients should be responsible for overcoming their issues if they are responsible for causing them in the first place. For example, recent studies have shown that clinicians feel clients are more responsible for psychologically-caused symptoms (e.g., caused by personality) than biologically-caused symptoms (e.g., caused by changes in serotonin neurotransmitter activity; Miresco & Kirmayer, 2006). This finding may be relevant to the current case to the extent that the "psychologically-caused" symptoms in their study were perceived as more under the internal control of the client than the "biologically-caused" symptoms. Whereas psychologically-caused symptoms such as personality are not necessarily truly internally-controlled per se, lay people may nonetheless perceive them as relatively more internally-controlled than a client's biological makeup. Thus, overcoming symptoms caused by relatively more internally-controlled factors might be perceived as the responsibility of the client, and the client may therefore be seen as less in need of professional intervention. Although Miresco and Kirmayer's (2006) study is clearly an imperfect analogy to the comparison of internally-controlled versus externally-controlled causes performed in the current study, it is nonetheless suggestive of the notion that *relatively more internally-controlled* causes may reduce perceptions of the need for treatment. Furthermore, it is possible that withholding treatment, as opposed to giving it, could be perceived as a form of "punishment" for the client who has acted with internal control and intent. Being more punitive for behaviors launched by internally-controlled events, as opposed to those launched by externally-controlled events, might

³One might argue that this may in fact be rational in some cases, insofar as treatment might help a client with internally-precipitated behaviors to identify and control the precipitant. On the other hand, it is important to note that treatment should still probably be useful in both cases to help the clients themselves to discover the precipitant and address the resulting symptoms.

therefore translate to recommending less treatment.

In summary, our primary objective was to test whether increased understanding of a client's bizarre behaviors influences judgments of that client's need for psychological treatment. Our secondary objective was to examine whether the effect is dependent on the locus of control inherent in the explanatory precipitating events (whether they were within or outside the clients' control).

2 Method

2.1 Participants

A total of 128 undergraduate students participated (72 in the main study, 12 in each of two different pilot studies to pretest the stimulus materials, and 32 in a follow-up manipulation check). Participants were given either partial introductory psychology credit or \$5.

2.2 Materials

We first created 22 matched pairs of precipitating life events. (The full set of vignettes and corresponding precipitating events used in the main study is listed in Table 1.) These were designed such that one member of each pair was an event that was internally-controlled in nature; that is, it was described as having been carried out by the hypothetical client with intent. The other member of the pair was externally-controlled in nature. Members of matched pairs were written to be as similar as possible except for this critical contrast. Pairs were approximately matched for length.

Pilot 1. To check that our intuitions about the internally/externally-controlled nature of these pairs were shared more generally, we asked 12 undergraduates to rate their impressions of who or what is responsible for each event. Ratings were made on a scale of 1–9, where 1 = "the individual is completely responsible," 9 = "people or circumstances outside the individual are completely responsible," and 5 = "the individual and people or circumstances outside the individual are equally responsible." Each person provided ratings for one of two packets. Each packet contained equal numbers of internally- and externally-controlled events, but no two members of the same matched pair. The order of events in each packet was randomized. From the pilot participants' ratings for the 22 matched pairs, we selected 12 matched pairs for which ratings were significantly different from one another (all p 's < .01), and for which ratings for externally-controlled events were greater than the midpoint of 5 and ratings for internally-controlled events were less than the midpoint (all p 's < .05; internally-controlled: $M = 2.57$, range 1.67–3.33; externally-controlled: $M = 7.79$, range 6.83–9.00).

Table 1: Study stimuli: Case vignettes and precipitating events (continued on next page).

A. Plausible Vignettes		
Internally-Controlled Precipitating Event	Externally-Controlled Precipitating Event	Case Vignette
Ever since he enlisted in the army...	Ever since he was drafted into the army...	Fred has had frequent visual hallucinations that are frightening in nature. This causes him to experience unexpected episodes of chest pain and shortness of breath. These episodes, in turn, cause him to pretend that he has a medical illness to hide the real cause of his problems.
Because she joined an extreme religious organization...	Because she was raised in an extreme religious organization...	Leah believes that her thoughts are being listened to by others. This belief has caused her to give up the social activities in which she was previously engaged in favor of drinking alcohol by herself. This, in turn, causes her to be consistently irresponsible about meeting her obligations.
Because he worked hard to become wealthy despite being born to a poor family...	Because he grew up in a wealthy family in which he was given everything he asked for...	Leonard has a strong belief that he is entitled to the good things in life. This belief causes him to be unable to resist his impulses to steal the things to which he feels entitled. This, in turn, causes him to frequently lie in order to hide his behavior from his family and friends.
Because she cheated on her husband...	Because her husband cheated on her...	Leslie has lapses in her day-to-day memory that interfere with her daily activities. This problem causes her to repeat thoughts to herself over and over to remember them better. This, in turn, causes her to have a hard time interacting socially with others.
Because she had an abortion...	Because she had a miscarriage...	Sarah frequently suffers from insomnia and is in a habitual state of sleep deprivation. This deprivation causes her to have trouble remembering the names of objects. This memory problem, in turn, leads her to suffer from episodes of extreme anxiety, because she fears that it will cause her to embarrass herself in front of others.

Pilot 2. From these 12 matched pairs, we chose 10 that best fit with the 10 case study vignettes adapted from Ahn et al. (2003). Each vignette contained three abnormal behaviors based on symptoms taken from three different classes of *DSM-IV-TR* (APA, 2000) mental disorders, to minimize the influence of prior knowledge. The vignette included a description of a causal structure of the form *Symptom A causes Symptom B which in turn causes Symptom C*. The precipitating event condition also included the relation *Precipitating Event X causes Symptom A*. In this way, the precipitating event could easily be presented as the root cause of the entire set of symptoms (to produce greater understanding in accord with Thagard's model of explanatory coherence, as discussed earlier).

2.3 Procedure

We designed the study to include two different controls. First, we used a between-subjects control condition in

which people read the vignettes with no precipitating events. However, the control vignettes were unavoidably shorter than the precipitating-event vignettes, which might have affected judgments insofar as longer explanations may be perceived as more expert-like than shorter explanations (Kikas, 2003). Thus, we built in a second "control" by pre-designing five of the vignettes to be implausible in nature; that is, the overall causal structure provided was not believable. The other five were designed to be plausible.⁴ Because the influence of implausible background knowledge on reasoning is known to be greatly diminished or absent relative to the influence of plausible knowledge (Ahn et al., 2000; Ahn et al., 2003), the implausible vignettes should act as control vignettes that were equated with the plausible vignettes for length.

⁴To ensure that our plausibility manipulation was successful, we asked another 12 participants to rate the plausibility of each complete vignette (on a scale of 1–10, where 1 = very implausible and 10 = very plausible). As desired, plausibility ratings significantly differed between the Plausible ($M = 6.74$; $SE = 0.28$) and Implausible ($M = 4.51$; $SE = 0.36$) conditions ($p < .001$).

B. Implausible Vignettes

Internally-Controlled Precipitating Event	Externally-Controlled Precipitating Event	Case Vignette
Because she keeps violating restraining orders to stay away from her ex-husband. . .	Because her ex-husband keeps violating restraining orders to stay away from her. . .	Dorothy is unable to concentrate on her tasks for any length of time. This inability causes her to believe that she is being distracted by others placing thoughts into her head. This belief, in turn, has caused her to be unable to discard worthless objects, as a way of trying to maintain some control over her behavior.
Because she used to drink to the point of blacking out. . .	Because she blacked out after someone slipped something into her drink. . .	Erin is frightened of needles and of medical procedures dealing with blood that could also make her unconscious. This fear has caused her to have a constant fear of developing a terminal illness that will require her to undergo medical procedures involving the use of needles to draw blood. This illness fear, in turn, has caused her to have recurrent thoughts of suicide, because if she kills herself she will no longer have this fear.
Because he contracted HIV after using an infected needle to take heroin. . .	Because he contracted HIV from his mother as a baby. . .	Jason releases his anger by being physically cruel towards animals. This behavior gives him a sense of power which causes him to have a greatly elevated mood. This mood, in turn, causes him to believe that complete strangers are in love with him, because happy people are well-loved.
Because he bullied his classmates when he was young. . .	Because he was bullied by his classmates when he was young. . .	Jarrod always chooses solitary activities. This causes him to require excessive attention to make up for the lack of human contact. This need, in turn, causes him to be unable to remember new information, because he relies on the attention of others to remember all the important information for him.
Because she has abused her children. . .	Because she was abused by her father. . .	Pam has become unable to produce facial expressions. This deficit causes her to frequently pull out her hair in an effort to induce enough pain that it will show up in her face. This, in turn, causes her to uncontrollably shout out inappropriate words at random times because of the pain.

Equal numbers of participants were randomly assigned to view all ten vignettes (five plausible, five implausible) in exactly one of the three precipitating event conditions (Externally-controlled event, Internally-controlled event, or No event). The order of vignette presentation was randomized for each participant to minimize any influences of contamination across vignettes. Participants were asked to read the vignettes, each describing “characteristics of a person.” Before seeing the vignettes and making their own judgments, participants were given a number of examples for clarification. Specifically, they were given two examples of individuals, one male and one female, who do *not* require treatment (e.g., “Andrea,” who worries about her children’s safety, cleans the house once a week, and is not completely satisfied with her appearance) and two examples of individuals, one male and one female, who *do* require professional treatment (e.g., “Mark,” who cries every day, washes his hands every hour, and wrongly believes his arm is misshapen).

After reading these examples, participants were told to turn the page to begin reading the first vignette. For each vignette, participants were asked, “To what degree does this person require professional psychological treatment?” Ratings were made on a scale of 1–9, where 1 = “the individual does not require treatment” and 9 = “the individual greatly requires treatment.” Participants were instructed to give ratings based on their first impression of each vignette. They were told that there were no right or wrong answers per se and that the experimenters were simply interested in their judgments about the need for professional psychological treatment. They were told in advance that they would not be able to go back and change responses to earlier vignettes.

2.3.1 Follow-up manipulation check

Follow-up ratings were also obtained to ensure that any significant differences between the Internally-controlled

and Externally-controlled event conditions, if found, were due to differential effects of these two types of events rather than to any of the following plausible alternative reasons: (1) greater dissatisfaction with the explanation in one condition relative to the other, (2) increased perceived hopelessness of treatment in one condition relative to the other, or (3) increased perception of symptom severity in one condition relative to the other. An additional 32 undergraduate participants were randomly assigned to view the vignettes in either the Internally-controlled ($N=16$) or Externally-controlled ($N=16$) condition. For each vignette, they were asked the following: (1) "How satisfying or unsatisfying is this explanation of the development of [X]'s behaviors?" where 1 = "highly unsatisfying" and 9 = "highly satisfactory," (2) "How quickly or slowly do you believe these behaviors would go away with professional psychological treatment?" where 1 = "very quickly," 8 = "very slowly," and 9 = "never," and (3) "How severe or mild do you consider [X]'s overall condition to be?" where 1 = "not at all severe" and 9 = "very severe." Equal numbers of participants were randomly assigned to see these questions in either the above order or in the reverse of the above order. Vignettes were presented in a different randomized order for each participant.

3 Results

3.1 Main study

Our questions were (1) whether people who knew the precipitating events for clients' symptoms gave lower need-for-treatment ratings than people who were not given precipitating events for the same clients, and (2) whether that effect is dependent on the locus of control indicated in the precipitating event. A 3 (Event; Internally-controlled, Externally-controlled, No event) \times 2 (Plausibility; Implausible, Plausible) ANOVA revealed a main effect of Event ($F[2,69] = 6.18$; $p = .003$; $\eta^2 = .15$), and a Tukey HSD test further indicated that people who had Externally-controlled ($M = 5.77$, $SE = 0.15$) precipitating events gave lower need-for-treatment ratings than people who were not given any precipitating event ($M = 6.60$, $SE = 0.20$; $p = .006$). In contrast, people who had Internally-controlled ($M = 6.50$, $SE = 0.20$) events gave need-for-treatment ratings that did not differ from ratings by people without events ($p = .923$).⁵ Having a precipitating event reduced people's perceptions of clients' need for treatment, but only when the event was outside the

⁵People with Externally-controlled events gave lower need-for-treatment ratings than people with Internally-controlled events ($p = .016$). Because the vignettes in these two conditions were of approximately the same length, it is unlikely that vignette length factored into people's judgments.

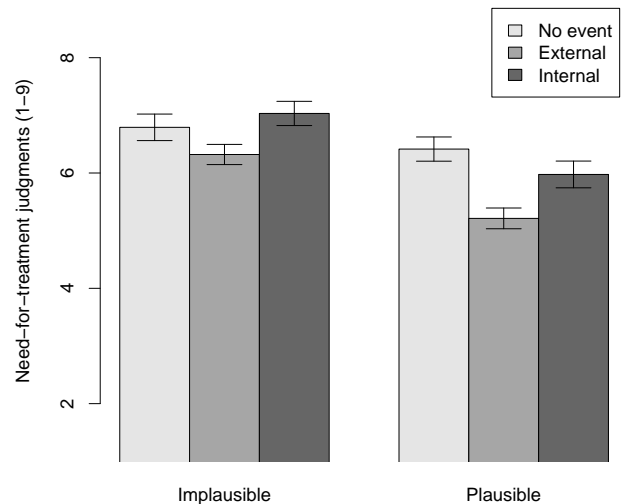


Figure 1: Results of the main study. Error bars indicate standard errors.

clients' control. The means for the Externally-controlled condition versus the Control condition ran in the same direction as the overall results for 7 of the 10 vignettes, and of those, 5 comparisons were significant at the .02 level.

We anticipated a stronger effect of Event in the Plausible than in the Implausible condition. Indeed, there was an interaction of Event and Plausibility ($F[2,69] = 4.54$; $p = .014$; $\eta^2 = .12$; see Figure 1). Separate ANOVAs on the Plausible data and on the Implausible data showed that the main effect of Event was significant in the Plausible condition ($F[2,69] = 8.52$; $p < .001$; $\eta^2 = .20$), and just marginally significant in the Implausible condition ($F[2,69] = 3.08$; $p = .052$; $\eta^2 = .08$). Tukey tests revealed that in the Plausible condition alone, the results mirrored the overall results above (see also Figure 1). In the Plausible condition, ratings were lower in the Externally-controlled than in the No-event condition ($p < .001$), but did not differ between the Internally-controlled and No-event conditions ($p = .301$). In contrast, in the Implausible condition, ratings did not differ between the Externally-controlled and No-event conditions ($p = .247$), nor between the Internally-controlled and No-event conditions ($p = .687$), all as expected.⁶

Finally, we compared how strongly externally-controlled precipitating events influenced need-for-treatment judgments as compared to normality judgments (specifically, from Study 2 of Ahn et al., 2003).⁷ A

⁶There was also a main effect of Plausibility ($F[1,69] = 58.61$; $p < .001$; $\eta^2 = .46$). Vignettes with plausible explanations ($M = 5.87$, $SE = 0.13$) were judged to be less in need of treatment than vignettes with implausible explanations ($M = 6.72$, $SE = 0.12$; $F[1,69] = 58.61$); however, strong conclusions cannot be drawn here, as the content of the plausible vignettes differs from that of the implausible vignettes.

⁷The first author had access to these data as a co-author of the Ahn et al. (2003) paper. As previously discussed, in Ahn et al. (2003),

2 (Event; Externally-controlled, No event) X 2 (Judgment; Normality, Need-for-Treatment) ANOVA showed that the strength of the main effect of Event was comparable across studies (that is, there was no interaction of Event and Judgment, $p = .467$; $\eta^2 < .01$).

3.2 Follow-up manipulation check

The Internally- and Externally-controlled vignettes did not differ on any of the follow-up ratings (all p 's $> .591$; all $\eta^2 < .01$). This suggests that the main results were likely due to the internally-controlled versus externally-controlled nature of those precipitating events, rather than to alternative factors (specifically, greater dissatisfaction with the explanations for the internally-controlled events, increased perceived hopelessness of treatment for internally-controlled events, or increased perception of symptom severity for internally-controlled events).

4 Discussion

4.1 Summary of findings

We found that people who were told how a client's behaviors were initially precipitated perceived that client as less in need of psychological treatment than did people who were not told how the behaviors were precipitated. Importantly, we also found that the influence of increased understanding on need-for-treatment judgments is differentially triggered by precipitating events with an external versus internal locus of control. Because previous work (on normality judgments) examined only the effects of events with an external locus of control, this is a novel finding in the literature.

One might argue that the length of the Externally-controlled scenarios relative to the control scenarios could have driven the difference in need-for-treatment ratings between the two. However, the results of our plausibility manipulation significantly diminish this possibility, as the implausible vignettes were just as long as the plausible yet showed no differences; furthermore, the Internally-controlled vignettes were also longer than the control vignettes, but no difference between them in need-for-treatment ratings was found.

It is also unlikely that the locus-of-control effect resulted from people perceiving each internally-controlled event as an additional (fourth) symptom. If this had been the case, then people given internally-controlled events should have made significantly higher need-for-treatment ratings than people given no precipitating events. As we have seen, however, this was not the case; ratings in the

only externally-controlled events were used, so only the Externally-controlled condition data from the present study could be included in the analysis.

Internally-controlled condition did not differ from those in the No-event condition.

One might similarly argue that the internally-controlled causes could be perceived as being at the same level of explanation as the symptoms, whereas externally-controlled causes may not. A potential consequence of this could be that people might find externally-controlled causes to constitute a more complete or satisfying explanation than the internally-controlled causes. However, the results of our manipulation check did not support this possibility; people rated the internally-controlled explanations as equally satisfying as the externally-controlled explanations.

4.2 The rationality of judgments of the need for psychological treatment

An important outstanding question has been whether it is rational to allow increased understanding to influence one's perception of another person's behaviors. We suggest that the answer to this question depends on the exact judgment being made — that is, whether the judgment being made is about the person's normality or the person's need for treatment. In the current study, we found that understanding influences need-for-treatment judgments as strongly as it does normality judgments. But, whereas it may be rational for increased understanding to affect normality judgments, it may often be less rational for increased understanding to affect judgments of the need for treatment.

With respect to normality judgments, Ahn et al. (2003) argued that people think of "normal" behaviors as those occurring frequently in the world. Note that Kahneman and Tversky's (1982) simulation heuristic suggests that an event is judged to be more likely to occur if a causal scenario for that event can be easily constructed (see also the explanation effect; Koehler, 1991). Accordingly, Ahn et al. (2003) suggested that the "understanding it makes it normal" effect may operate in a manner analogous to the simulation heuristic, whereby increased understanding of a person's behaviors may make them seem more "normal" by making them seem to occur more frequently (Ahn et al., 2003). Interestingly, by this account, it can be rational to allow increased understanding to influence judgments of normality. For example, if a person is depressed *because* he was diagnosed with cancer, that person is literally more normal in the statistical sense. In other words, it is true that people diagnosed with cancer are statistically more likely to be depressed than people who are not diagnosed with cancer (Massie, 2004). Although exceptions will occur, we surmise that, in the real world, plausible explanations will often tend to coincide with greater statistical normality in this manner.

In contrast, it may often be comparatively less rational to allow increased understanding to lower judgments of the need for treatment. Although perceptions of a client's normality may inform need-for-treatment judgments, from a practical standpoint such judgments should rationally be based upon a combination of considerations, including not only perceived normality, but also such factors as the client's levels of subjective distress and impairment in functioning. For example, people with cancer who are feeling depressed and people without cancer who are feeling depressed would both benefit from receiving treatment for depression, regardless of whether depression is more common in the first population.⁸ In such cases, it would make little sense to downplay the need for psychological treatment with greater understanding of the patient's depressive symptoms. Despite this, participants in our study seemed to behave as though only normality was taken into consideration in making need-for-treatment judgments.

It is of particular note that the effect of understanding on normality judgments was of equal magnitude as the effect of understanding on need-for-treatment judgments. One possible interpretation of this finding is that people use a very simple heuristic in making need-for-treatment judgments, such that treatment is recommended to the degree that the person seems abnormal. Future work is needed to determine whether this is the case, and whether people can break away from the use of this heuristic if other important factors are made salient (e.g., the potential benefits and purpose of therapy, such as its possible effects on relieving distress and functional impairment).

Again, we argue that allowing increased understanding to affect one's opinion about a client's normality is significantly different from allowing it to affect one's opinion about the client's need for treatment. In the first situation, the reasoner may think, "now that it is more understandable to me, it seems more normal." This can be contrasted with the second situation, in which the reasoner may think, "now that it is more understandable to me, the problem has been solved." One might speculate that if the *clients* themselves understood their own behaviors, the latter case might indeed be rational insofar as clients might better cope with psychological problems if they knew their cause or source (indeed, in some types of therapies this might itself be considered to constitute treatment). However, in this paper we have instead been concerned with the specific case in which a person *other than the client* has the explanation and is making the assessment. In this case, there is no reason why the client's behaviors should be assumed to be any less problematic simply because they are explained in another person's mind. To recall our opening example, suppose knowing

⁸In fact, depression has been shown to negatively affect disease outcome in cancer patients (Jones, 2001).

that Ted's girlfriend cheated on him leads Joe to decide that Ted doesn't need psychological treatment for his abnormal behaviors after all. Meanwhile, Ted's symptoms and (we presume) ensuing psychological distress have by no means been alleviated. Our finding that increased understanding reduces judgments of the need for treatment may thereby challenge the seemingly logical assumption that coming to a better *understanding* of another person's problems need always be beneficial for that person.

4.3 Psychological versus biological illnesses

Another outstanding question of interest is whether we should expect to see the same findings in the medical domain. Our speculation is that increased understanding will not reduce need-for-treatment judgments in medical conditions; for example, people will probably always recommend medical treatment for a broken leg, regardless of whether we know why it was broken in the first place. Why intuitions might be so different for medical conditions and mental disorders is an interesting problem for further research. One possibility is that people may believe the primary goal of psychotherapy treatment is simply to uncover the source of a person's problems. Thus, if that source has already been discovered, going to therapy may seem futile. In contrast, a medical analogue would likely be perceived differently. Suppose that a person is exhibiting abnormal physical symptoms (e.g., excessive thirst and blurry vision). People would likely say that medical intervention is required to identify the source of the problem (e.g., diabetes) but that even once the cause of the abnormal symptoms is known and their presence is more understandable, medical treatment would still be required. Thus, whereas identifying the source of the problem could be considered to be the main goal of a psychotherapy treatment, simply finding the source of a medical problem may not be perceived as sufficient.

To the extent that people believe this to be true, it may be that explanations will only affect perceptions of clients with psychological disorders, and the current findings may indeed be relatively specific to the psychological domain. Relatedly, people hold distinct sets of beliefs about mental disorders that are psychologically versus biologically caused (Ahn, Flanagan, Marsh, & Sanislow, 2006; Ahn, Proctor, & Flanagan, in press). Thus, even within the psychological domain, the effect of knowing the precipitating event might be stronger for disorders with psychological causes than for those with biological causes.

4.4 Need-for-treatment judgments and the clinical domain

Might the "understanding it makes it normal" effect for treatment judgments also be found in clinicians? Such a

finding might be of particular interest with respect to referral decisions (e.g., wherein a primary care physician decides whether or not to refer a client to a mental health care practitioner). The effect could also conceivably influence both clients' and clinicians' decisions to terminate treatment: as understanding of the client increases, they could be perceived as improving. Once again, if the client understands the problem, it is possible that this could indeed help them to cope and improve (Pistrang & Barker, 1992); however, if the clinician alone understands the source of the problems, this *by itself* has not (yet) influenced the client's condition.

The case of clinicians is all the more interesting when a clinician's approach is principally cognitive, behavioral, cognitive-behavioral, or psychopharmacological, in which case knowing about a precipitating life event explanation for a person's current abnormal behaviors should not in theory affect his or her judgments about treatment, in accord with the general philosophies of those theoretical orientations (e.g., Clark & Beck, 1999). Specifically, these approaches explicitly sidestep the issue of life-event origins of symptoms (e.g., the psychopharmacological approach does not distinguish between the effects of different types of life events, in contrast with a psychoanalytic approach). Instead, these approaches generally focus on the abnormal behaviors (and in the case of the cognitive approaches, the abnormal cognitions) themselves and treatment thereof. The question of whether the "understanding it makes it normal" effect is a fundamental cognitive tendency and is found across theoretical orientations, or whether it instead occurs most strongly in clinicians with more explanation-oriented orientations (e.g., psychoanalytic or psychodynamic), remains to be tested.

Finally, how might people be trained to avoid the effect when necessary? Previous pilot work has suggested that the effect may be attenuated by asking people to make abstract normality judgments *both* with and without reference to the explainability of the behaviors (Ahn et al, 2003). This finding raises the possibility that people might immediately see the effect as a fallacy when they are asked to do both. Furthermore, as noted earlier, inducing or encouraging people to focus on the potential benefits of treatment may counteract the appearance of the effect. Additional research will be needed to test these possibilities systematically and to discover whether they hold true for judgments of the need for treatment.

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