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The Influence of Outcome Knowledge: Hindsight Bias in the Context of a Suicide

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Abstract

Suicides are often followed by intense blame of self and others, such that those who are left behind feel they or others should have been able to see the signs. What may seem clear in hindsight, however, is often unclear in foresight. In Study 1, we investigated the effect of outcome knowledge on college students' (*N*=345) perceptions of a suicide. Students attending a public U.S. university first read a hypothetical conversation between a student and her professor. Then, they received an outcome knowledge manipulation: They either read that the student went on to die by suicide or they read a sentence that had no mention of suicide. Afterwards, participants evaluated the likelihood of suicide, the student's depression severity,

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and the student's and professor's behaviors. Analyses revealed that outcome knowledge influenced participants' judgments; most notably, participants who received outcome knowledge of the suicide viewed the professor more negatively: as doing too little, too late. In Study 2, we replicated the basic study design with an online sample of adults from the U.S. and U.K. (*N*=237). In this sample, knowledge of a suicide produced more negative evaluations of the student and resulted again in less favorable evaluations of the professor. Our findings imply that hindsight bias may lead individuals to engage in unwarranted blame of suicide survivors.

Keywords: hindsight bias, outcome knowledge, depression severity, suicide, blame, suicide risk, suicide survivors

The Influence of Outcome Knowledge: Hindsight Bias in the Context of a Suicide

Suicide has tremendous emotional impact on those who are left behind ("suicide survivors"),[1] who experience enduring guilt, shame, anger, and sadness.[2] [3] [4] [5] [6] [7] Some of this shame and guilt is rooted in feelings that suicide survivors should have been able to predict or prevent the suicide.[8] This feeling of "they should have known" is a manifestation of *hindsight bias*, the tendency to perceive an event as more likely and obvious after it has occurred.[9] As people

[1]Grad, O. (2011). The sequelae of suicide: Survivors. In R. C. O'Connor, S. Platt, & J. Gordon (Eds.), *International handbook of suicide prevention: Research, policy, and practice* (pp. 561-576). John Wiley & Sons.

[2]Bailley, S. E., Kral, M. J., & Dunham, K. (1999). Survivors of suicide do grieve differently: Empirical support for a common sense proposition. *Suicide and Life-Threatening Behavior*, *29*(3), 256-271.

[3]Botha, K., Guilfoyle, A., & Botha, D. (2009). Beyond normal grief: A critical reflection on immediate post-death experiences of survivors of suicide. *Australian e-Journal for the Advancement of Mental Health*, *8*(1), 1-11. https://doi.org/10.5172/jamh.8.1.37

[4]Supiano, K. P. (2012). Sense-making in suicide survivorship: A qualitative study of the effect of grief support group participation. *Journal of Loss and Trauma*, *17*(6), 489-507. https://doi.org/10.1080/15325024.2012.665298

[5]Testoni, I., Francescon, E., De Leo, D., Santini, A., & Zamperini, A. (2019). Forgiveness and blame among suicide survivors: A qualitative analysis on reports of 4-year self-help- group meetings. *Community Mental Health Journal*, *55*, 360-368.

[6] Cvinar, J. G. (2005). Do suicide survivors suffer social stigma: A review of the literature. *Perspectives in Psychiatric Care*, *41*(1), 14-21.

[7]Ness, D. E., & Pfeffer, C. R. (1990). Sequelae of bereavement resulting from suicide. *The American Journal of Psychiatry*, *147*(3), 279-285. https://doi.org/10.1176/ajp.147.3.279

[8]Rudestam, K. E. (1977). Physical and psychological responses to suicide in the family. *Journal of Consulting and Clinical Psychology*, *45*(2), 162-170.

[9]Fischhoff, B. (1975). Hindsight ≠ Foresight: The effect of outcome knowledge on judgment under uncertainty. *Journal of Experimental Psychology: Human Perception and Performance*, *1*(3), 288-299.

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struggle to make sense of an event, they search and update their memories, taking note of antecedent causes that fit the event, thereby modifying their recollection of what they knew before the event occurred and overestimating—in hindsight—its foreseeability.[10]

The issue with suicide, of course, is its unpredictability. Although there are identifiable factors that distinguish individuals of lower versus higher suicide risk—such as having plans of suicide,[11] a desire to die,[12] hopelessness,[13] anhedonia,[14] and perceived burdensomeness[15]—suicide is still difficult to predict at the individual level.[16] Positive prediction rates are low, and false positive rates are high.[17] Moreover, false negative rates are also high: In one study, nearly half of people who went on to die by suicide had been rated as *low* risk for suicide by both their general practitioner and mental health specialist within the 12 months prior to the suicide.[18] It appears the signals that suicide survivors attend to in *hindsight* are unlikely to have allowed for prediction of the suicide in *foresight*, and this may account for the blame they experience.

We know of just one study that has investigated this idea systematically.[19] In that study, participants read a vignette of a girl who displayed signs of suicide risk and then were either told or not told that the girl subsequently died by suicide. Those participants who were told of the suicide viewed a suicide as more expected and placed more blame on the girl's immediate

[10]Janoff-Bulman, R., Timki, C., & Carli, L. L. (1985). Cognitive biases in blaming the victim. *Journal of Experimental Social Psychology*, *21*, 161-177.

[11]Silverman, M. M., & Berman, A. L. (2014). Training for suicide risk assessment and suicide risk formulation. *Academic Psychiatry*, *38*(5), 526-537. https://doi.org/10.1007/s40596- 014-0200-1

[12]Hjelmeland, H. (1996). Repetition of parasuicide: A predictive study. *Suicide and Life- Threatening Behavior*, *26*(4), 395-404.

[13]Kuo, W., Gallo, J. J., & Eaton, W. W. (2004). Hopelessness, depression, substance disorder, and suicidality: A 13-year community-based study. *Social Psychiatry Psychiatric Epidemiology*, *39*, 497-501. https://doi.org/10.1007/s00127-004-0775-z

[14]Fawcett, J., Scheftner, W., Clark, D., Hedeker, D., Gibbons, R., & Coryell, W. (1987). Clinical predictors of suicide in patients with major affective disorders: A controlled prospective study. *The American Journal of Psychiatry*, *144*(1), 35-40. https://doi.org/10.1176/ajp.144.1.35

[15]Joiner, T. E. Jr., Pettit, J. W., Walker, R. L., Voelz, Z. R., Cruz, J., Rudd, M. D., & Lester, D. (2002). Perceived burdensomeness and suicidality: Two studies on the suicide notes of those attempting and those completing suicide. *Journal of Social and Clinical Psychology*, *21*(5), 531-545. https://doi.org/10.1521/jscp.21.5.531.22624

[16]Morriss, R., Kapur, N., & Byng, R. (2013). Assessing risk of suicide or self harm in adults. *BMJ*, 347, f4572. https://doi.org/10.1136/bmj.f4572

[17]Fowler, J. C. (2012). Suicide risk assessment in clinical practice: Pragmatic guidelines for imperfect assessments. *Psychotherapy*, *49*(1), 81-90. https://doi.org/10.1037/a0026148

[18]Saini, P., While, D., Chantler, K., Windfuhr, K., & Kapur, N. (2014). Assessment and management of suicide risk in primary care. *Crisis*, *35*(6), 415-425. https://doi.org/10.1027/0227-5910/a000277

[19]Goggin, W. C., & Range, L. M. (1985). The disadvantages of hindsight in the perception of suicide. *Journal of Social and Clinical Psychology*, *3*(2), 232-237.

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family members.[20] In the current studies, we utilize a between-subjects experimental design to elucidate the effect of suicide knowledge on outsiders' judgments of a suicide event.

STUDY 1

Method

Participants

Participants were 345 undergraduate college students (*Mage* = 19.54 ± 1.37; 210 women, 115 men, 20 other/unreported) from a public university in the Midwestern U.S., where 88% of enrollment is White. They participated voluntarily through a pencil and paper class activity devoted to obtaining "responses to symptoms of depression."

Materials and Procedure

Participants read a hypothetical conversation between a struggling student, "Jordan," and her professor. There were two manipulated variables, procuring four versions of the conversation. The first manipulation was suicide risk: at one level, Jordan's responses reflected symptoms associated with high suicide risk (such as hopelessness); at the other, her symptoms reflected low suicide risk (such as loneliness). Table 1 shows excerpts of the conversation in which Jordan's response differed as a function of suicide risk. The second manipulation, our principal variable of interest, was outcome knowledge. As shown in Table 2, some participants read a final sentence that Jordan died by suicide soon after the conversation with her professor, while other participants read a sentence that did not mention a suicide. Then, participants were asked to consider the conversation they had read and evaluate the likelihood of a suicide. They also responded to several statements about Jordan and her professor (see Table 3). Complete materials and datasets are available at https://osf.io/4ynsw/.

Results and Discussion

Table 3 shows descriptive statistics for the effects of suicide risk and outcome knowledge on participants' judgments. Table 3 also shows the inferential statistics for these effects and the interactive effect of suicide risk and outcome knowledge. Suicide risk had a prominent effect: participants who read a conversation with symptoms implying high suicide risk rated a suicide

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as more likely, more obvious, and less surprising than did those who read the conversation implying low suicide risk.

Regarding our principal research focus, there was an effect of outcome knowledge for eight of 16 primary outcome variables. Compared to participants who were not informed of the suicide, participants who *were* informed of the suicide rated a suicide as more likely. They also agreed more that Jordan's depression was severe and that she should have sought professional help sooner. As shown in Figure 1, the largest effects of outcome knowledge were in judgments of Jordan's professor: Those who learned of the suicide agreed more that the professor could have done more and should have intervened sooner, and they agreed less that the professor handled the situation well. Outcome knowledge affected judgments consistently whether Jordan's symptoms suggested low risk or high risk for suicide. We predicted that outcome knowledge would not affect responses to two validity check items that pertained to Jordan's specific behaviors as described in the scenario, and it did not (see Table 3). Across conditions, participants agreed strongly with the facts of the case, which reassures us that participants did read the conversation.

Overall, the findings of Study 1 showed that outcome knowledge affected judgments of suicide likelihood as well as judgments of the person who died by suicide and their suicide survivors (in this case, the professor). Because the study was a between-subjects design in which participants were randomly assigned to conditions, participants who learned of the suicide had no way of knowing there was another possible outcome (i.e., no suicide) and they evaluated the situation in light of the outcome knowledge they were given. In other words, with the same conversation in mind that others were given, but knowledge of a suicide at hand, the suicide seemed more likely to occur, the depression seemed more severe, and Jordan's professor was perceived as doing too little, too late. If these effects are real, they have the weighty implication that all else equal, knowledge of a suicide outcome can lead to negative evaluations of the person who died as well as their survivors, and therefore that hindsight bias may underly the guilt and shame suicide survivors face.

STUDY 2

Method

Participants

In Study 2, we collected data from middle-aged adults who were employed in education to determine if, by virtue of their age, vocation, and greater likelihood of being a parent, they would be more likely to identify with the professor than with the student. Participants were

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recruited via the online platform Prolific, which allowed us to select participants by country (U.S. and U.K.), age (30-70), and occupation (education). The final sample included 237 adults (60 men, 175 women, 1 other/unreported; 74% White; *M*age = 41.49 ± 9.40). Of the sample, 57% were parents; 57% taught primary school and 43% taught college students.

Materials and Procedure

As in Study 1, participants read a hypothetical conversation between a college student and her professor. We again manipulated outcome knowledge (No Suicide or Suicide; see Table 2), but we did not manipulate the student's suicide risk, which was presented as moderate in both conditions.

Results and Discussion

Table 4 shows descriptive and inferential statistics for the effect of outcome knowledge on participants' judgments. Outcome knowledge had a significant effect on some, but not all, judgments. Participants informed of the suicide rated suicide as *less* obvious and *more* surprising, and–perhaps as an indication of their search for explanation–they also agreed more that Jordan seemed too stable to die by suicide. Moreover, they agreed more that Jordan should have sought professional help sooner and less that she was a positive person. Results for two of the three original statements about the professor also replicated in this educator sample: Those who learned of the suicide agreed more that the professor could have done more to help, and they agreed less that the professor handled the situation well (see Figure 1).

We probed effects of parental status. Parental status did not interact with outcome knowledge to predict ratings. Instead, it was an independent predictor: averaged across outcome knowledge conditions, parents rated a suicide as more likely and less surprising than non-parents did. They also agreed more that Jordan could have taken better care of herself and tried harder to make friends, that she should have sought professional help sooner, that the professor could have done more, and that others should have tried harder to connect with Jordan. Age was correlated with parental status but not with responses to these statements. These effects of parental status deserve further study, as they imply that parents may react to a depressed college student with heightened perceptions of suicide risk and negativity.

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General Discussion

The human brain is well-designed to make sense of events and seamlessly update memory in light of new information.[21] One byproduct of that capacity is hindsight bias—the tendency to view the past differently once an outcome is known. Hindsight bias may be particularly likely when an outcome—such as suicide—is impactful and when individuals are motivated to make sense of it.[22] [23] [24] In two studies, we have documented evidence that hindsight bias occurs in this context. All else equal, those who were informed of an eventual suicide perceived the circumstances surrounding it differently and tended to place more negative judgment on those involved. Indeed, mental health practitioners might be particularly susceptible to hindsight bias because their expertise and experience may lead them to *feel* like they know when a suicide is more or less likely to occur.[25] We propose that therapists be well-trained in the current low predictive validity of various risk factors[26] [27] and be warned that, in light of a suicide, individuals are prone to reinterpret circumstances that in foresight would have been ambiguous.[28] Helping suicide survivors see that hindsight bias can induce unwarranted blame may facilitate a healthy healing process.

[21] Roese, N. J., & Vohs, K. D. (2012). Hindsight bias. *Perspectives on Psychological Science*, *7*(5), 411-426. https://doi.org/10.1177/1745691612454303

[22] #21

[23] Arkes, H. R. (2013). The consequences of the hindsight bias in medical decision making. *Current Directions in Psychological Science*, *22*(5), 356-360. https://doi.org/10.1177/0963721413489988

[24] Carli, L. L. (1999). Cognitive reconstruction, hindsight, and reactions to victims and perpetrators. *Personality & Social Psychology Bulletin*, *25*(8), 966-979.

[25] Knoll, M. A. Z., & Arkes, H. R. (2017). The effects of expertise on the hindsight bias. *Journal of Behavioral Decision Making*, *30*(2), 389-399. https://doi.org/10.1002/bdm.1950

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Table 1

Excerpts of the Conversation between Jordan and her Professor, as a Function of Suicide Risk

	Jordan's Responses in Study 1		*Jordan's Responses in Study 2*
In response to professor saying…	**Low Suicide Risk**	**High Suicide Risk**	**(Moderate Suicide Risk)**
…how is college going otherwise?	**"**I honestly have been struggling feeling a little sad here and there… I have been managing it okay I think. I still finish most of my homework on time."	**"**I honestly have been struggling with being really frustrated and sad… It is really draining so I haven't been able to do a lot of homework."	**"**Well, I have been pretty lonely and sad so far… I still finish most of my homework on time, but it's hard and I need to force myself to do it."
… Have you been able to talk to any friends from your dorm about this?	"I don't know… My family and friends from home are telling me that it will get better…but I don't know if I necessarily believe that right now."	**"…**I don't think feeling this way is ever going to get better … so why try to connect with people when I might not be around for that long anyway."	**"…**People from home are telling me that it will get better by the end of the semester, but I don't know if I necessarily believe that – so why even try to connect."
… Are you afraid you won't connect with them in the time you have left for the semester? Or would you rather just be alone because you think you are the only one feeling this way?	**"…**This is a long time for me to be in a bad mood and it is really preventing me from being social. I haven't felt like that before and I am starting to get really upset about it."	**"…**This is a long time for me to be like this and I'm done trying to fix it. I sometimes think I could just end it all, and I feel okay with that."	**"…**I haven't felt like this before and I am starting to get really upset about it. This is a long time for me to be like this and I'm done trying to fix it."
… After you finish the quiz, let's take a walk over to counseling services. I think it would be good for you to get connected to some resources to help you through this.	**"…**I'm not one to ask for help, but it might be helpful I guess."	"I guess."	**"…**I'll think about it."

Table 2

The Outcome Knowledge Manipulation Used in Study 1 and Study 2

Final segment	**No Suicide**	**Suicide**
The next day:	Jordan shows up to take her quiz. She and her professor walk over to counseling services to find help.	Jordan never shows up to take her quiz. Her professor finds out from the Dean of Students that she died by suicide the night before.

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Table 3

Study 1 Descriptive and Inferential Statistics: Effects of Suicide Risk and Outcome Knowledge on College Students' Ratings

	Suicide Risk		*Outcome Knowledge*		*Main Effect of Suicide Risk*	*Main Effect of Outcome Knowledge*	*Interactive Effect*
	Low *M* (*SD*)	*High* *M* (*SD*)	*No Suicide* *M* (*SD*)	*Suicide* *M* (*SD*)	*p* (ω^2)	*p* (ω^2)	*p* (ω^2)
***Ratings of Suicide**:*							
Suicide likelihood	32.10 (19.08)	50.46 (22.07)	38.46 (21.41)	44.99 (23.40)	<.001 (.17)	.003 (.02)	.330 (.00)
Jordan too stable to die by suicide	4.01 (1.60)	3.03 (1.42)	3.47 (1.56)	3.56 (1.61)	<.001 (.09)	.610 (.00)	.515 (.00)
Suicide would be obvious	1.78 (0.82)	2.53 (1.10)	2.15 (0.99)	2.17 (1.09)	<.001 (.13)	.799 (.00)	.605 (.00)
Suicide would be surprising	3.50 (1.00)	2.47 (0.98)	2.90 (1.09)	3.06 (1.14)	<.001 (.21)	.175 (.00)	.883 (.00)
Ratings of the Student:							
Jordan's depression was severe	3.09 (0.71)	3.74 (0.80)	3.24 (0.75)	3.60 (0.85)	<.001 (.16)	<.001 (.05)	.405 (.00)
Jordan felt hopeful	2.49 (1.35)	2.00 (1.36)	2.39 (1.31)	2.10 (1.42)	<.001 (.03)	.038 (.01)	.611 (.00)
Jordan was trying to find solutions	3.82 (1.56)	3.54 (1.52)	3.85 (1.56)	3.51 (1.52)	.095 (.01)	.044 (.01)	.988 (.00)
Jordan should have taken better care of herself	4.21 (1.34)	4.36 (1.43)	4.23 (1.39)	4.35 (1.38)	.319 (.00)	.428 (.00)	.295 (.00)

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	Suicide Risk		*Outcome Knowledge*		*Main Effect of Suicide Risk*	*Main Effect of Outcome Knowledge*	*Interactive Effect*
	Low *M* (*SD*)	*High* *M* (*SD*)	*No Suicide* *M* (*SD*)	*Suicide* *M* (*SD*)	*p* (ω^2)	*p* (ω^2)	*p* (ω^2)
Jordan should have sought professional help	4.91 (1.44)	5.38 (1.35)	4.75 (1.44)	5.54 (1.28)	<.001 (.03)	<.001 (.08)	.463 (.00)
Jordan is a positive person	3.24 (1.19)	2.81 (1.12)	3.13 (1.15)	2.91 (1.19)	<.001 (.03)	.061 (.01)	.001 (.03)
Jordan could have tried harder to make friends	4.38 (1.41)	4.31 (1.34)	4.30 (1.32)	4.39 (1.43)	.670 (.00)	.562 (.00)	.391 (.00)
Jordan had an accurate perception of her circumstances	2.91 (1.45)	3.29 (1.42)	3.20 (1.41)	3.00 (1.47)	.015 (.01)	.198 (.00)	.332 (.00)
Ratings of Others:							
Others should have tried harder to connect with Jordan	4.60 (1.43)	4.54 (1.36)	4.47 (1.35)	4.66 (1.43)	.696 (.00)	.228 (.00)	.791 (.00)
Ratings of the Professor:							
Jordan's professor could have done more to help	3.42 (1.36)	4.11 (1.60)	3.24 (1.30)	4.29 (1.55)	<.001 (.05)	<.001 (.12)	.649 (.00)
Jordan's professor should have intervened sooner	3.56 (1.34)	3.82 (1.48)	3.27 (1.28)	4.10 (1.43)	.072 (.01)	<.001 (.08)	.649 (.00)
Jordan's professor handled the situation well	5.56 (1.13)	5.09 (1.42)	5.88 (0.97)	4.78 (1.36)	<.001 (.03)	<.001 (.18)	.088 (.00)
Validity Checks (no effects predicted):							
Jordan was not sleeping well	6.45 (0.57)	6.51 (0.74)	6.47 (0.66)	6.49 (0.66)	.430 (.00)	.759 (.00)	.584 (.00)
Jordan missed class a few times	6.25 (0.96)	6.06 (1.25)	6.22 (1.01)	6.10 (1.22)	.110 (.00)	.302 (.00)	.264 (.00)

Note. ω^2 indicates variance accounted for (effect size). All items began with the phrase, "Think back to the conversation Jordan and her professor had. Based on their conversation,…" Ratings of suicide likelihood were on a 0 to 100% scale, ratings of depression, surprise, and obviousness were on a five-point scale (1=*Not at all* to 5=*Extremely*), and all other ratings were on a seven-point scale (1=*Strongly Disagree* to 7=*Strongly Agree*), where higher values represent more agreement.

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Table 4

Study 2 Descriptive and Inferential Statistics: Effects of Outcome Knowledge on Community Adults' Ratings

	Outcome Knowledge		*Main Effect of Outcome Knowledge*	
	No Suicide *M* (*SD*)	*Suicide* *M* (*SD*)	M_{diff} [95% CI]	*p* (ω^2)
Ratings of Suicide:				
Suicide likelihood	26.52 (19.33)	25.41 (17.11)	1.11 [-3.55, 5.78]	.639 (.00)
Jordan too stable to die by suicide	3.69 (1.47)	4.21 (1.27)	-0.53 [-0.88, -0.17]	.004 (.03)
Suicide would be obvious	1.63 (0.72)	1.43 (0.66)	0.21 [0.03, 0.38]	.020 (.02)
Suicide would be surprising	3.01 (1.11)	3.43 (0.97)	-0.43 [-0.69, -0.16]	.002 (.04)
Ratings of the Student:				
Jordan's depression was severe	2.93 (0.71)	3.02 (0.75)	-0.09 [-0.28, 0.09]	.324 (.00)
Jordan felt hopeful	2.41 (1.03)	2.18 (0.95)	0.23 [-0.02, 0.48]	.077 (.01)
Jordan was trying to find solutions	4.23 (1.38)	3.86 (1.59)	0.37 [-0.01, 0.76]	.054 (.01)
Jordan should have taken better care of herself	4.28 (1.25)	4.16 (1.34)	0.12 [-0.21, 0.45]	.468 (.00)
Jordan should have sought professional help	4.63 (1.24)	5.17 (1.28)	-0.54 [-0.86, -0.22]	.001 (.04)
Jordan is a positive person	3.33 (1.14)	2.83 (1.29)	0.50 [0.19, 0.81]	.002 (.04)
Jordan could have tried harder to make friends	4.43 (1.08)	4.16 (1.37)	0.28 [-0.04, 0.60]	.084 (.01)
Jordan had an accurate perception of her circumstances	3.62 (1.21)	2.91 (1.44)	0.71 [0.37, 1.05]	<.001 (.06)

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	Outcome Knowledge		*Main Effect of Outcome Knowledge*	
	No Suicide *M* (*SD*)	*Suicide* *M* (*SD*)	M_{diff} [95% CI]	*p* (ω^2)
Ratings of Others:				
Others should have tried harder to connect with Jordan	4.65 (1.06)	4.66 (1.05)	-0.01 [-0.28, 0.26]	.932 (.00)
Ratings of the Professor:				
Jordan's professor could have done more to help	2.71 (1.23)	3.18 (1.40)	-0.47 [-0.81, -0.13]	.007 (.03)
Jordan's professor should have intervened sooner	3.10 (1.33)	3.32 (1.40)	-0.22 [-0.57, 0.14]	.228 (.00)
Jordan's professor handled the situation well	6.10 (0.90)	5.50 (1.03)	0.60 [0.36, 0.85]	<.001 (.08)
Jordan's professor overstepped interpersonal boundaries	1.85 (0.80)	1.95 (0.92)	-0.10 [-0.32, 0.12]	.379 (.00)
Validity Checks (no effects predicted):				
Jordan was not sleeping well	6.63 (0.64)	6.74 (0.46)	-0.10 [-0.24, 0.04]	.165 (.00)
Jordan missed class a few times	6.28 (0.68)	6.27 (0.73)	0.01 [-0.18, 0.19]	.952 (.00)

Note. ω^2 indicates variance accounted for (effect size). All items began with the phrase, "Think back to the conversation Jordan and her professor had. Based on their conversation,…" Ratings of suicide likelihood were on a 0 to 100% scale, ratings of depression, surprise, and obviousness were on a five-point scale (1=*Not at all* to 5=*Extremely*), and all other ratings were on a seven-point scale (1=*Strongly Disagree* to 7=*Strongly Agree*), where higher values represent more agreement.

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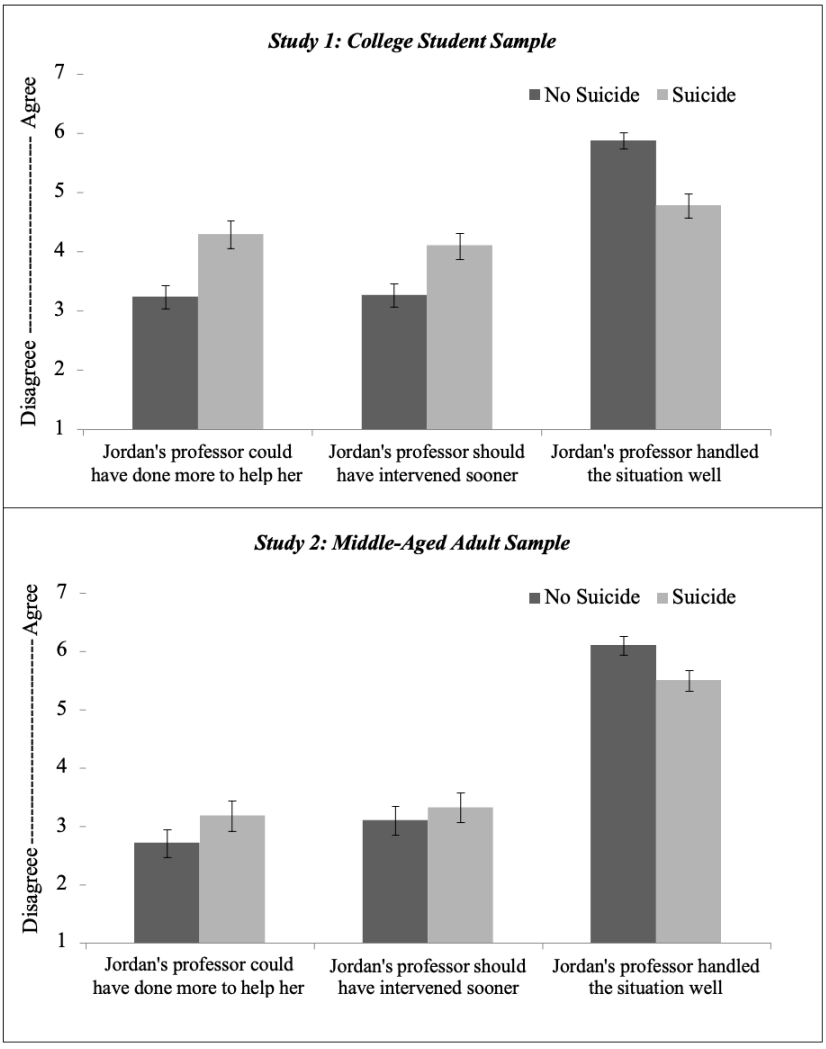
Figure 1

Judgments of Jordan's Professor (±2 SEM) as a Function of Outcome Knowledge Condition



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