Ease of Retrieval Effects on Estimates of Predicted Alcohol Use

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Metacognitive Experience of Retrieval

• Cognitive availability refers to the ease to which an outcome can be imagined or constructed.

• Information that is easy to image is generally considered more likely to be true, whereas information that is difficult to image is generally believed less likely to be true (for review see Schwarz, 1998).

• Numerous studies have supported the idea that ease of retrieval of information can influence behaviors and self-relevant judgments (e.g., Rothman and Schwarz, 1998; Schwarz, 1998; Schwarz et al., 1991).

• For example, Schwarz and colleagues (1991) had participants recall either 6 or 12 ways in which that have behaved assertively.

- Results showed that participants rated their own assertiveness lower if they were asked to recall 12 behaviors compared to 6 behaviors, presumably because the recall task was made difficult
- This result has been replicated across a range of domains: Rothman & Schwarz, 1998; Schwarz, 2004; Tormala, Falces, Brinol, & Petty, 2007; Wanke, Bless, & Biller, 1996.

• These studies suggest that the importance of meta-cognitive experience of retrieval as an influence on thoughts and judgments

Ease of retrieval effects and alcohol research

• Research on alcohol-related cognitions has primarily examined the *accessibility* of alcohol related concepts and their association with alcohol use (e.g., Krank, Wall, Stewart, Wiers, & Goldman, 2005; Ostafin, Palfai, & Wechler, 2003).

• It is unclear whether the experience of retrieving certain information also influences beliefs about the effects of alcohol.

Purpose of the Present Study

• To test whether ease of retrieval effects would influence estimates of future drinking and alcohol expectancy ratings.

Predictions

• Individuals who list few positive experiences involving alcohol will report higher rates of future alcohol consumption and more positive alcohol expectancy ratings compared to individuals who list many positive experiences involving alcohol.

• The opposite pattern of results is predicted for individuals who list negative experiences involving alcohol.

Study Design

•2 (writing topic: positive vs. negative) X 2 (difficulty: easy vs. difficult)

Method

Participants

• One hundred and sixty-five introductory to psychology students (58% women) participated in the study for course credit. Ages ranged from 18-29 (M = 18.96, SD = .91).

Materials and Procedure

• Participants completed a laboratory session in which they first completed a variety of filler measures including a demographics measure and 1 item assessing lifetime alcohol use.

Materials and Procedure (cont.)

- ***Experimental manipulation:***
- Participants were instructed:
- *Next, we are interested in understanding the different experiences college students have that involve alcohol. For the next task we would just like you to briefly describe 16 (4) typical positive (negative) experiences you have had while under the influence of alcohol. Don't worry about going into detail in your examples - we just want to know what types of positive (negative) experiences students typically have while drinking.*
- After the writing task, participants reported their intentions regarding future alcohol consumption. They reported how much alcohol they would drink in the next 3 months including:

  Frequency (M = 11.47, SD = 11.26).

  Average Quantity (M = 3.67, SD = 2.62).

  Maximum number of drinks (M = 6.18, SD = 4.52).

Plan of Analyses

- 2 (Valence) X 2 (Difficulty) ANCOVAS
- Covariates included: Gender, Greek membership, Mood, and Previous Alcohol Use.

Results

• ***Manipulation check***

• As expected, those in the "easy" conditions rated the writing task as easier compared to those in the "difficult" conditions (*p*'s < .01).

• ***Average quantity of drinks***

• Results of an ANCOVA revealed a significant Valence X Difficulty interaction predicting the average quantity of drinks consumed during a drinking episode during the next 3 months (F (1, 158) = 11.56, p < .001).

• As predicted, participants in the positive/easy condition reported intentions to drink greater average drinking episode compared to participants in the positive/difficult condition.

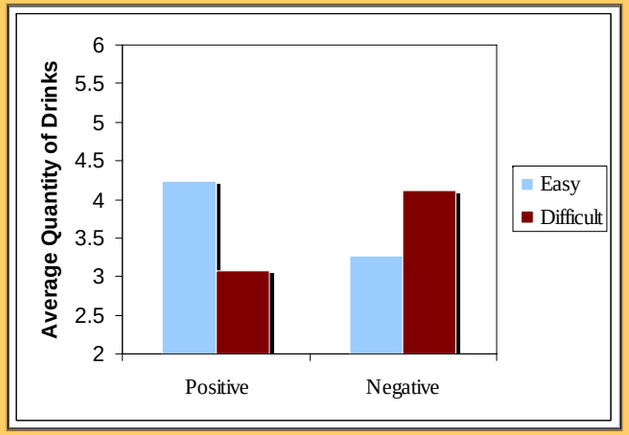
• The opposite pattern of results emerged for people who wrote about negative experiences with drinking - participants in the negative/easy condition predicted they would consume less during the average drinking episode compared to participants in the negative/difficult condition (all p's > .05).

• See Figure 1.

• ***Frequency of drinking***

• Results of an ANCOVA revealed that neither the main effects nor the interaction term significantly predicted frequency of drinking during the next 3 months (p's > .55).

Figure 1.



Results (cont.)

• ***Maximum number of drinks***

• Results of an ANCOVA revealed a significant Valence X Difficulty interaction predicting the maximum number of drinks consumed during a drinking episode during the next 3 months (F (1, 158) =8.37, p < .005).

• As predicted, participants in the positive/easy condition predicted they would have a greater maximum number of drinks compared to participants in the positive/difficult condition.

• The opposite pattern of results emerged for people who wrote about negative experiences with drinking - participants in the negative/easy condition predicted they would have a lesser maximum number of drinks compared to participants in the negative/difficult condition (all p's > .05).

• See Figure 2.

Additional Analyses

• Results revealed a similar pattern of results when abstainers (n = 14) were excluded from the analyses.

Conclusions and Future Directions

• Ease of retrieval effects appear to influence judgments related to alcohol

• When alcohol related behaviors are made accessible and available then they are most likely to influence judgments

• Future research needs to examine:

- How do ease of retrieval effects influence implicit attitudes (e.g., Gawronski & Bodenhausen, 2005)?
- Reaction time measures (e.g. Are people are faster at responding to alcohol expectancy items in the positive/easy writing condition?).
- Test whether these effects influence actual drinking behavior.

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Figure 2.