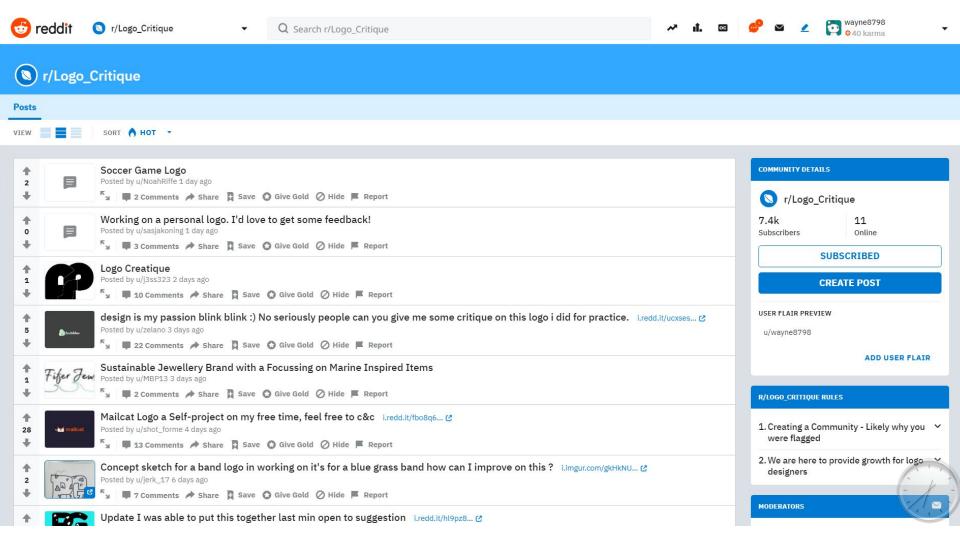
# Soften the Pain, Increase the Gain: Enhancing Users' Resilience to Negative Valence Feedback

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Imagine you are designing a logo for

your personal website...



# "The design is so bad that no one wants to critique it."

# Negative Feedback is Common Online

- Users with low-agreeable traits are more active online.
- People are more aggressive because of online disinhibition effect.
- Negative feedback snowballs.

# Online feedback collection has many benefits.

- Low cost + Fast Response
- Seek feedback from a diverse audience
- Particularly useful for novice content generators

# Three Theory-Based Coping Activities

- Self-affirmation: Critcher et al. '10; Sherman & Cohen '06; Steele '88
- Expressive Writing: Lazarus '93; Pennebaker '97;
  Duijnhouwer et al. '12
- Distraction: Baird et al. '12; Broderick '05;
  Rooij & Jones '13

# Feedback Set of Different Valence Balances

- In reality, content creators usually receive a set of feedback.
- We would like to see how effective the interventions are.
- Four levels of valence balances: all negative, mainly negative, mainly neutral, all neutral.

Structure	A stronger ending is in order. Perhaps the author can come up with more gripping and distinguished ending material.	The ending is terrible. Perhaps the author should at least come up with some less boring and plain ending material.		
Style	The first error in my opinion is the use of personal pronouns. I was taught not to use "I" or "me" in essays because it makes the essay sound less professional.	One big obvious error here is the use of personal pronouns. The first thing I learned from Writing 101 is to avoid using "I" or "me" in essays. Only newest rookie uses personal pronouns.		
Content	I pretty much agree with all of the points you have made. I would add the argument of the protection of civil liberties.	I don't really buy any of the points you have made. I would add the argument of the protection of civil liberties to make this essay closer to being convincing, if that's ever possible.		

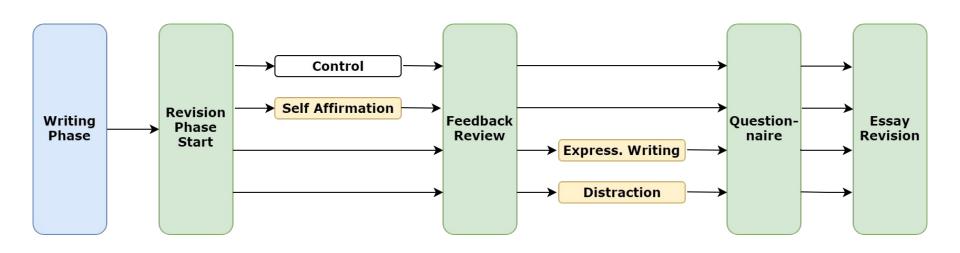
Negative

Neutral

### **Research Questions**

- How do feedback sets with different balances of valence affect participants' affective states, extents of revision, and perceptions of the feedback and its providers?
- To what degree can coping activities based on theories of self-affirmation, expressive writing, and distraction, mitigate the influence of negative feedback on these same measures?

# 4 x 4 design w/ Coping Activity and Valence Balance



# Writing Task

#### **Task Instruction**

Please write a short essay on the following topic:

Why would you support (or not) stricter gun control laws in the United States?

Your essay should be 100 words minimum and 250 words maximum. Essays that are too vague or plagiarized from other sources will be rejected. Note you may be invited to perform a HIT of similar length and payment in two days.

Check Wor	d Count

Submit

## Self-Affirmation

#### Core Values Questionnaire

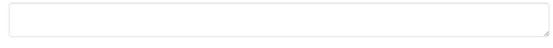
Please rank the following six values in the order of personal importance (1 = most important). Then explain why the top ranked value is most important to you.

#### Values:

- Business Science, pursuit of knowledge
- Art, music, theater
   Social life, relationships
   Government, politics



Write why your top most important value is important to you:



# **Expressive Writing**

#### **Reflective Writing**

In the following space we would like you to work on understanding your feelings regarding the feedback you received. Just take some time and feel free to experience and express your emotions in the text box. You can read the original feedback listed below.

The ending is terrible. Perhaps the author should at least come up with some less boring and plain ending material.

One big obvious error here is the use of personal pronouns. The first thing I learned from Writing 101 is to avoid using "I" or "me" in essays. Only newest rookie uses personal pronouns.

I don't really buy any of the points you have made. I would add the argument of the protection of civil liberties to make this essay closer to being convincing, if that's ever possible.

### Distraction

#### **Article Summarization**

Please read the following article and summarize the main arguments.

#### **Energy**

I think a lot about how important cheap, safe, and abundant energy is to our future. A lot of problems—economic, environmental, war, poverty, food and water availability, bad side effects of globalization, etc.—are deeply related to the energy problem.

I believe that if you could choose one single technological development to help the most people in the world, radically better energy generation is probably it. Throughout history, quality of life has gone up as the cost of energy has gone down.

### [article abbreviated for compact presentation]

your summarization:								

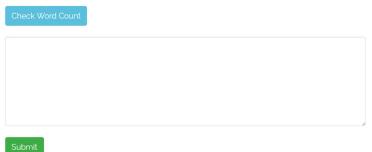


#### **Task Instruction**

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#### Core Values Questionnaire

Please rank the following six values in the order of personal importance (1 = most important). Then explain why the top ranked value is most important to you.

#### Values:

- Business

- Science, pursuit of knowledge
- Art, music, theater
- Religion, morality
- Social life, relationships
- Government, politics



Write why your top most important value is important to you:

#### **Reflective Writing**

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Next

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#### [article abbreviated for compact presentation]

your summarization:

Next

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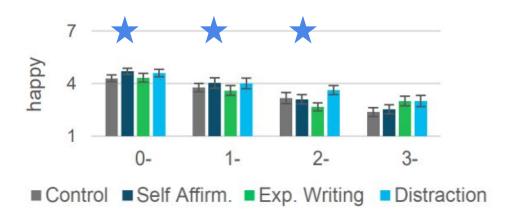
## Measures

- Affective states
- Revision extents
- Perception of the feedback and its providers

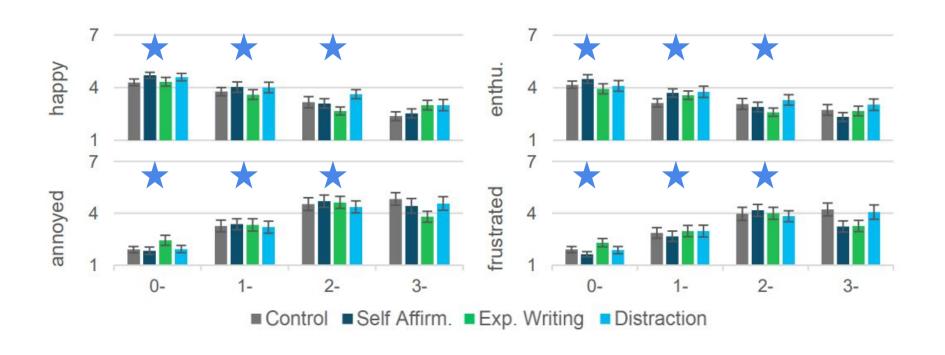
# **Affective States**



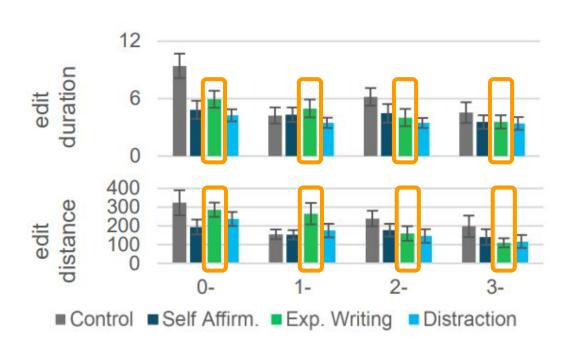
### **Affective States**



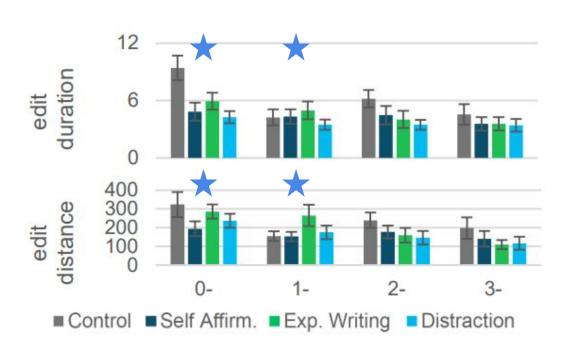
# **Affective States**



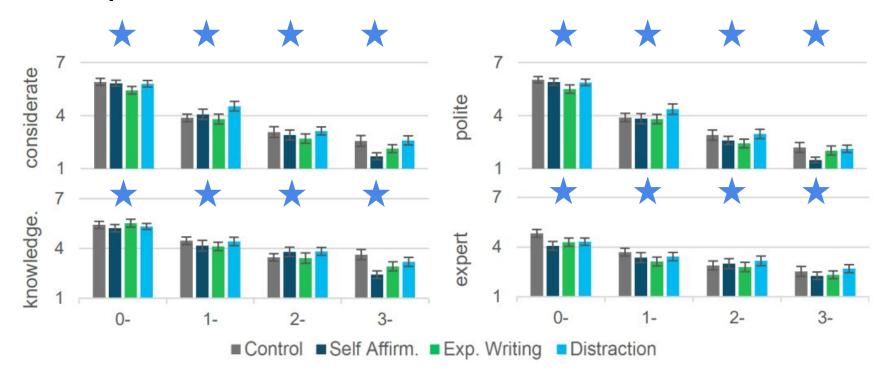
## **Revision Extents**



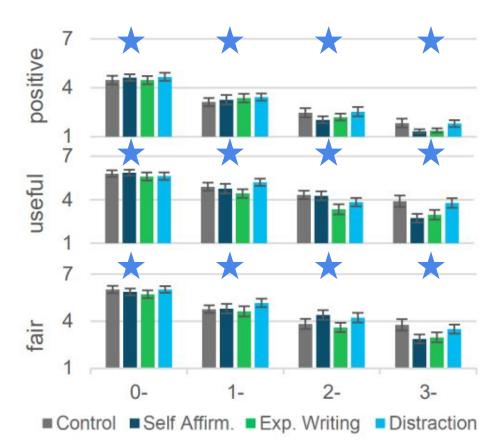
## **Revision Extents**



# Perception of Feedback Providers



# Perception of Feedback



## Discussion

- Affective states, revision extents, and perceptions have have different levels of sensitivity to negative feedback.
- Nonliteral feedback may still carry negative valence.
- Platform designers could choose which activity to use based on which measure they value most.

# Contributions to Theory

- The coping activities are not as generalizable as prior work shows.
- Mixed valence balance feedback set may be more nuanced than negative valence information.
- Participants may consider feedback to be subjective opinions instead of factual information.

### Conclusion

- Empirical knowledge of how negative feedback sets impact users' affective states, revision extents, and perception
- Deeper empirical understanding of how the coping activities mitigate the effects of negative feedback
- Practical guidelines regarding when to use what coping activity to improve users' resilience to negative feedback

# Limitations

- Participants recruited from MTurk
- Generic feedback instead of customized feedback

## **Future Work**

- Larger feedback set
- Positive valence feedback
- Expert participants