Don't Give Destructive Criticism in Code Review

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*It Will Never Work in Theory: Live! April 2022*

Software Code Review
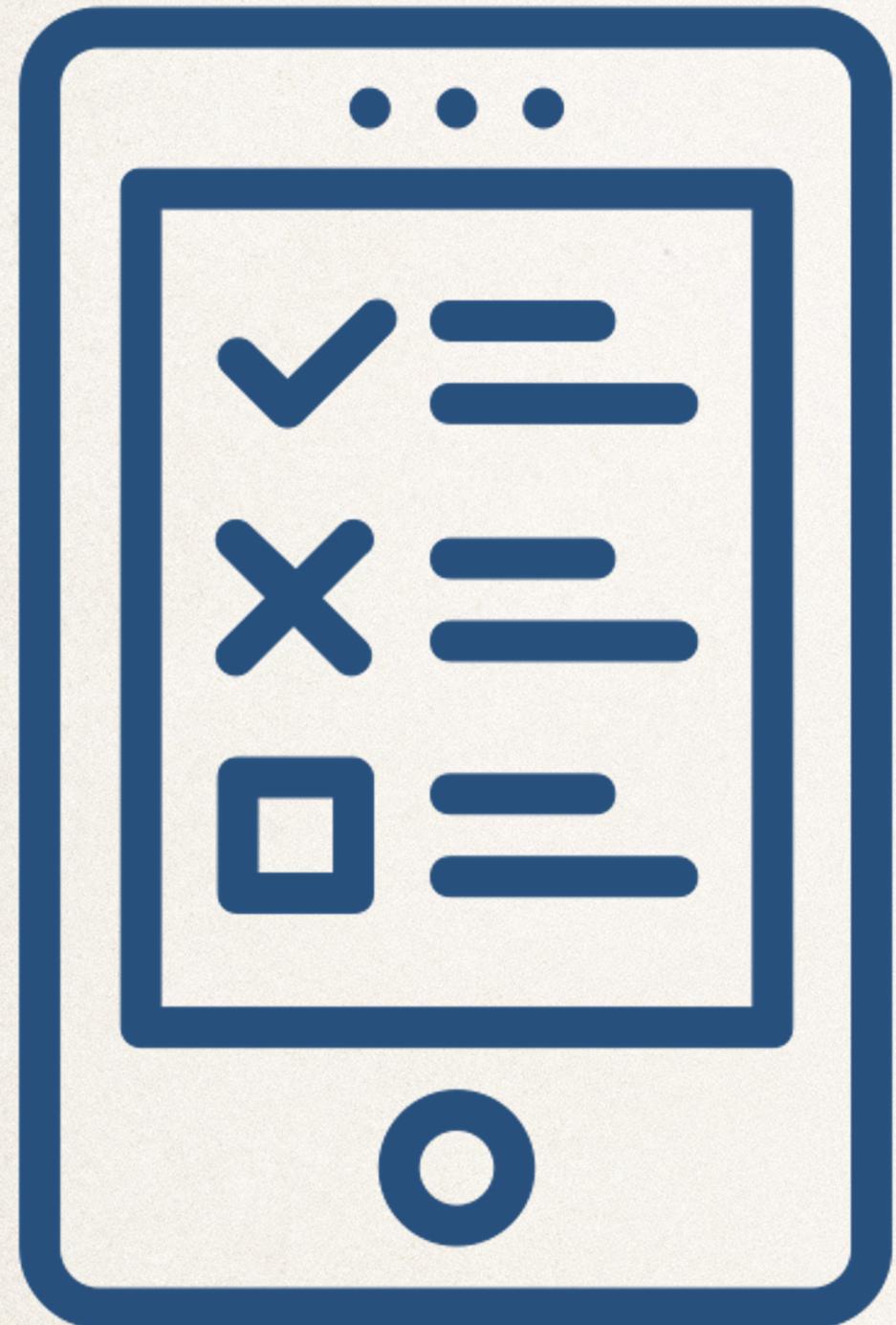
Method – Online Questionnaire

✤ Vignette style questions
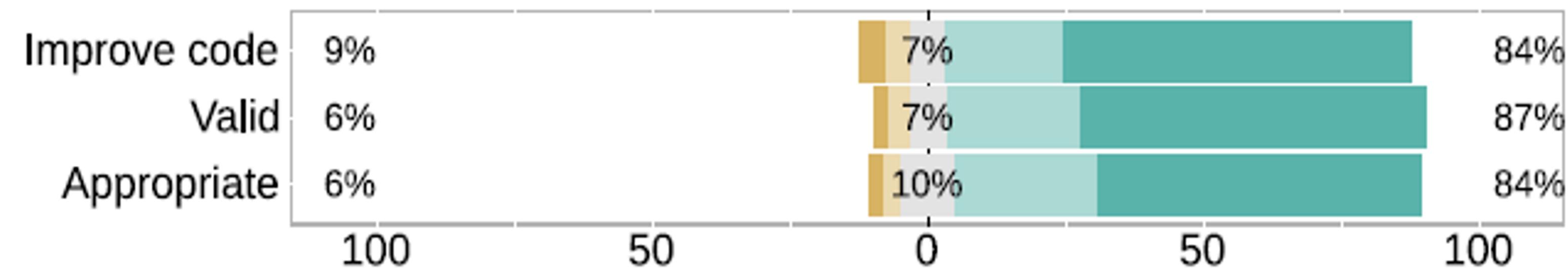
> *You don't need to protect instanceOf against null pointers*

> *What the heck is this? We don't need a null check here…*
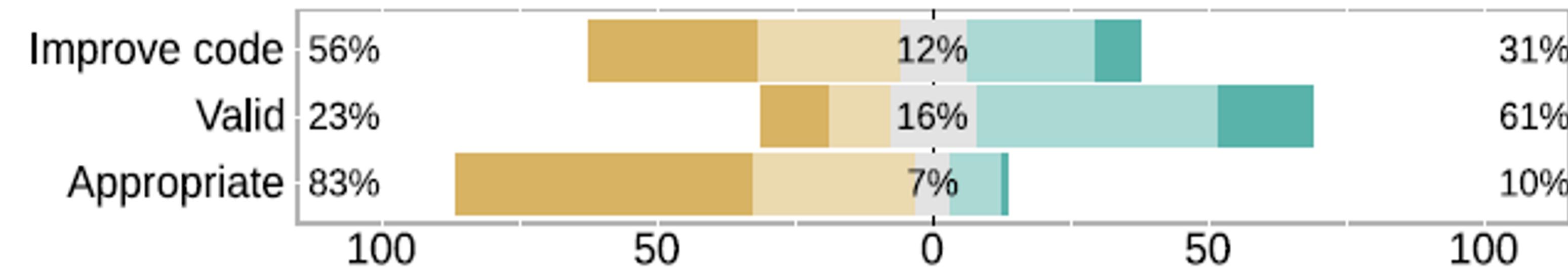
Image source: ProSymbols on NounProject.com

Sanuri Dananja Gunawardena, Peter Devine, Isabelle Beaumont, Lola Garden, Emerson Murphy-Hill, and Kelly Blincoe. 2022. Destructive Criticism in Software Code Review Impacts Inclusion. CSCW 2022.

Perceptions of criticism
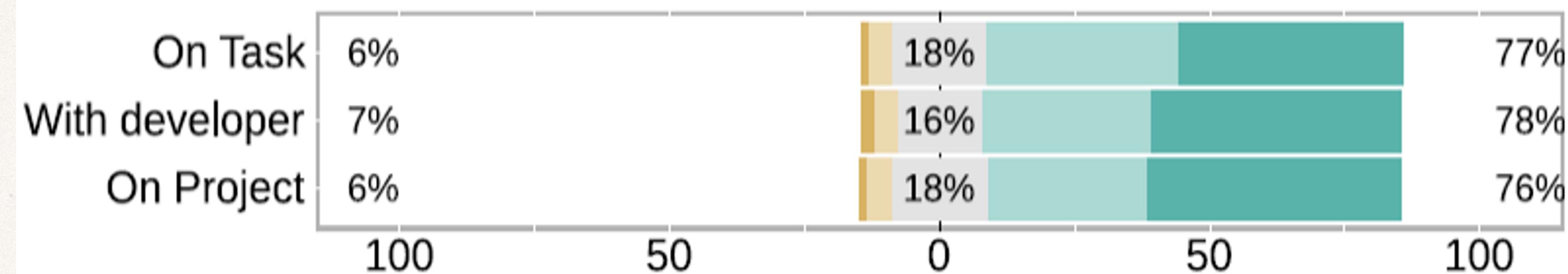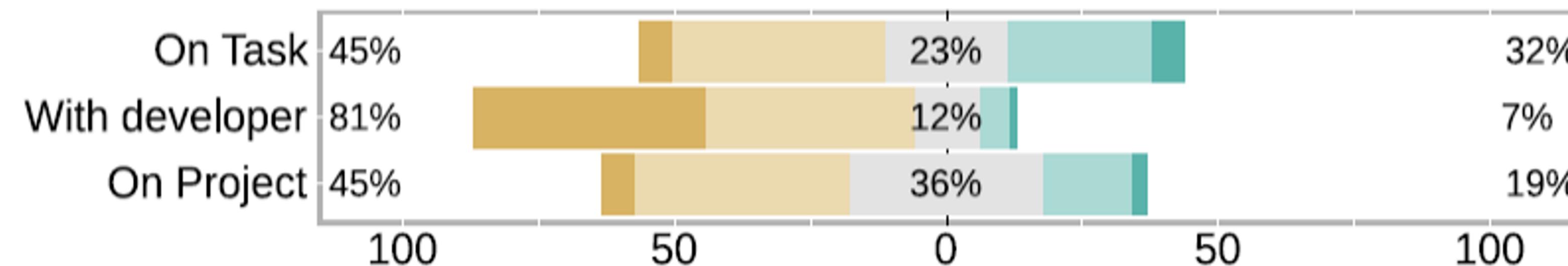
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Motivation to continue working

(a) Constructive

	Very unmotivated / Somewhat unmotivated	Neither motivated nor unmotivated	Somewhat motivated / Very motivated
On Task	6%	18%	77%
With developer	7%	16%	78%
On Project	6%	18%	76%

(b) Destructive

	Very unmotivated / Somewhat unmotivated	Neither motivated nor unmotivated	Somewhat motivated / Very motivated
On Task	45%	23%	32%
With developer	81%	12%	7%
On Project	45%	36%	19%

Legend: Very unmotivated · Somewhat unmotivated · Neither motivated nor unmotivated · Somewhat motivated · Very motivated

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Demographic differences
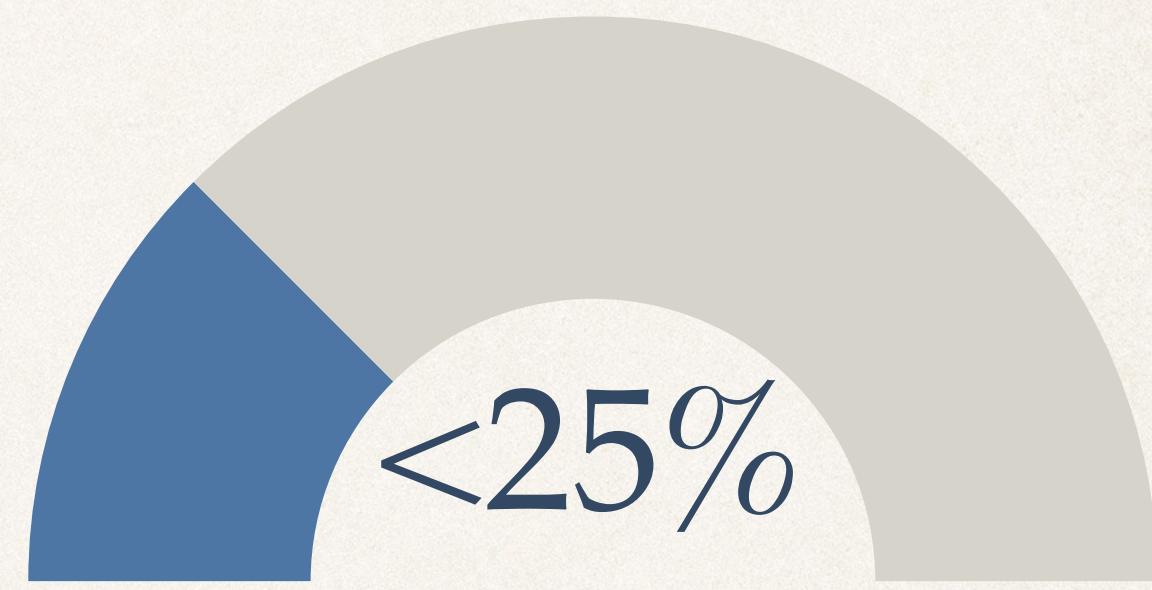
✤ # Women

    ✤ Perceive as less appropriate

    ✤ Less motivated

✤ # Less experienced developers

   ✤ Less likely to call it out

Women

<25%
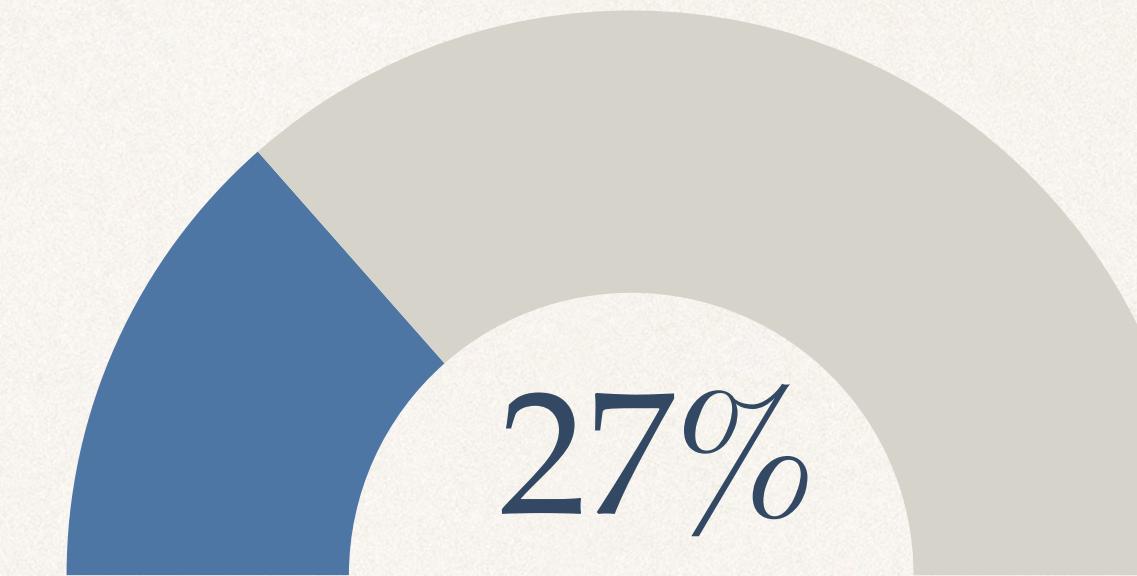
Frequency of Destructive Criticism

Nonspecific

Inconsiderate

Report to Give

27%

1%

Report to Receive

55%

22%

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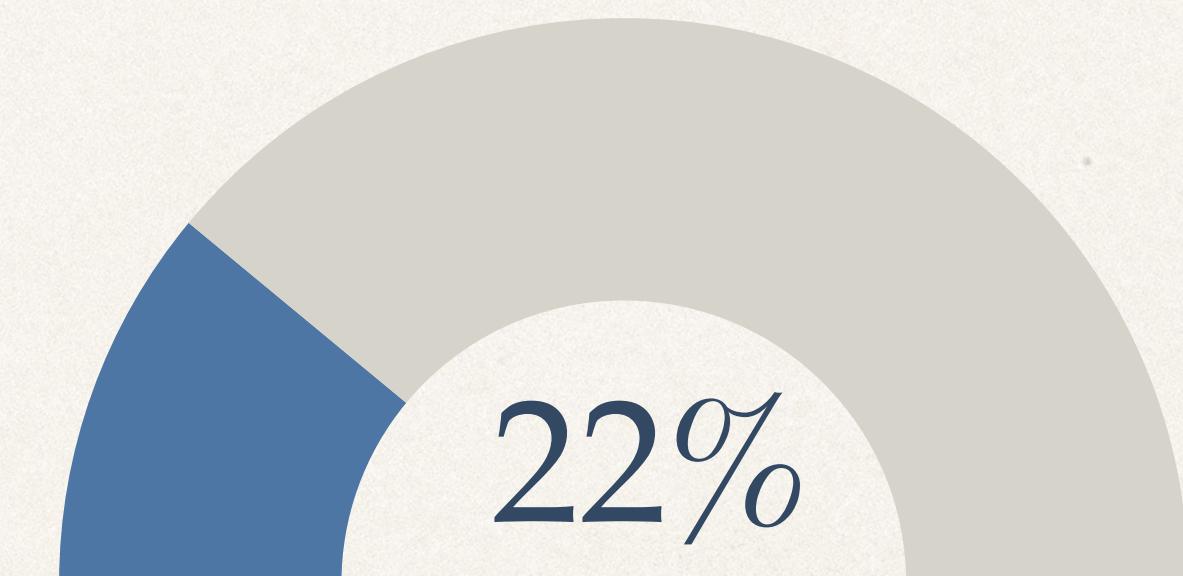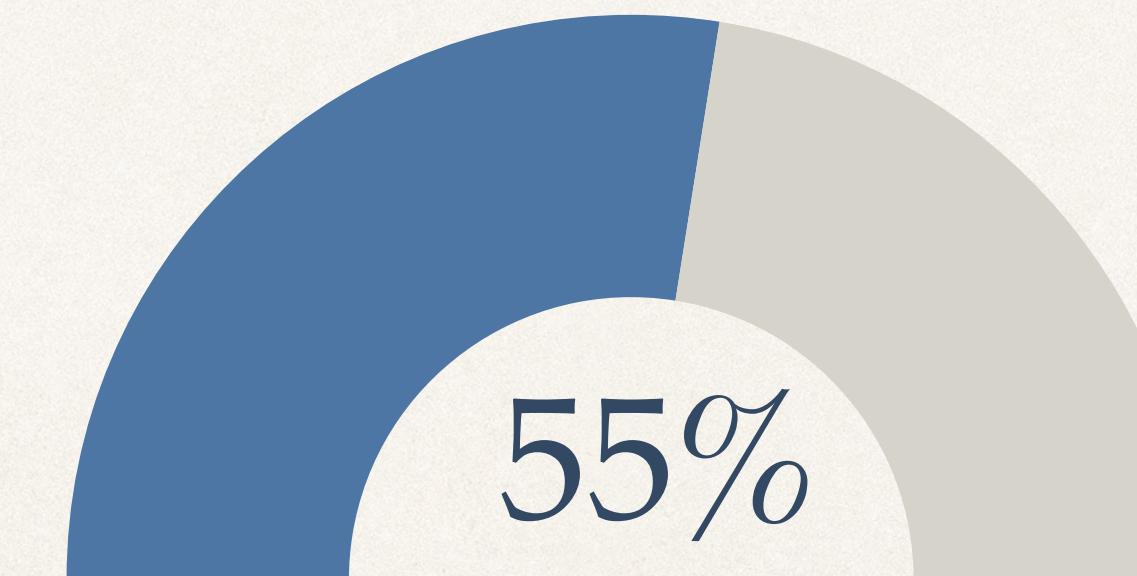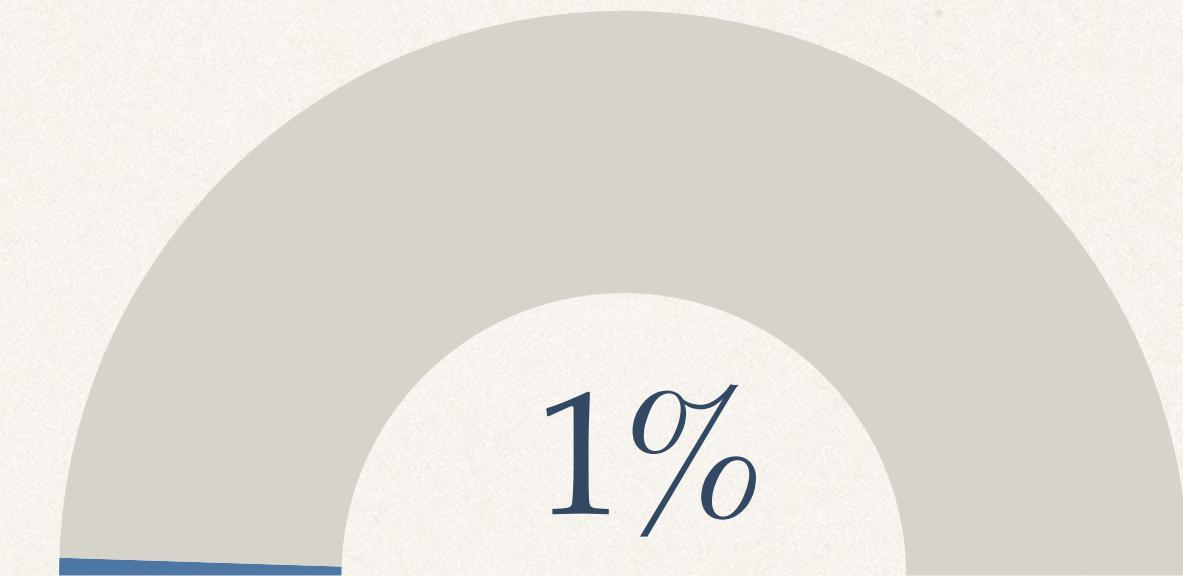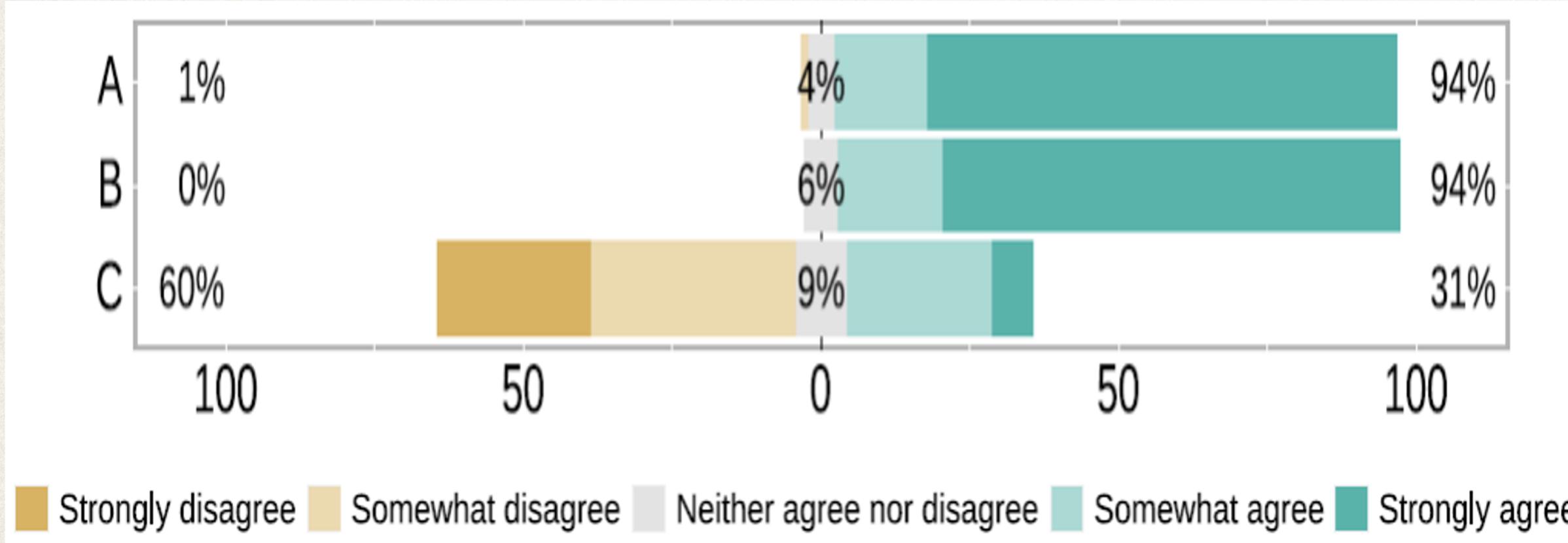
General opinions on destructive criticism

**A** - *"Destructive criticism is harmful"*

B - *"Destructive criticism will cause a negative reaction for the recipient"*

C - *"When receiving code review comments, I don't mind getting inconsiderate feedback as long as the feedback helps to improve the code quality"*
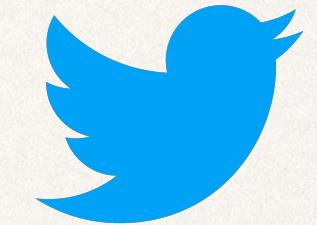
'this is a hack' is not negative at all in my books. In technical discussions, I prefer direct wording to have-a-good-day sugar-coated expressions. It's just easier to parse and act upon, though may sometimes appear harsh or inconsiderate.

"I think it's important to indicate when the code is bad, but it should be communicated in a considerate way and the reviewer should explain why the code is bad so that the person can learn.

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Implications

✤ How you treat people matters

✤ You need to have pathways for "feedback" on feedback

✤ There is not a one size fits all approach to code review

✤ You must be careful with what is made public

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Thanks to my co-authors: Sanuri Gunawardena, Peter Devine, Isabelle Beaumont, Lola Garden, and Emerson Murphy-Hill