Appendix

Can AI-generated News Reduce Hostile Media Perceptions? Findings from Two Experiments

Study 1: Example Stimulus
(AI author condition)

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JAmIe (USA Today's Artificial Intelligence, AI)

The facts of this article were researched in databases independently by JAmIe, an AI-based computer software. The article was also generated by JAmIe.

The pros and cons of gun regulation in the United States

For decades, gun policy has been debated in the United States.
What are the key facts for and against gun regulation?

Information on gun regulations is widely available. Based on analyses from research databases, 3 facts that support stricter gun regulations (i.e., anti-gun policies) and 3 facts that are against stricter gun regulations (i.e., pro-gun policies) have been collected. These facts help us in answering the question: Does America need stricter gun regulations or not?

Against stricter gun regulations

- Guns prevent deaths: Research shows 40% of felons have not committed crimes (rapes, murders) because they feared the prospective victim was armed.
- Researchers found that guns were used for self-protection between 2.1 and 2.5 million times per year.
- Fatal firearm-related accidents are at their lowest rate since 1903 and guns are involved in 0.27 percent of all accidental deaths.

For stricter gun regulations

- Guns lead to deaths: Research shows every day more than 100 Americans are killed with guns and more than 200 individuals are shot and wounded.
- Researchers found that the US gun homicide rate is 25 times higher than in other high-income countries
- Firearms are the leading cause of death for American children and teens.

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Study 1: Mean Differences by Condition

Table 1

Mean scores and mean differences of Study 1

Variables	AI-generated Means (SD)	Human Means (SD)	AI-assisted Means (SD)	Inferential
HMP	3.25(1.65) [b]	3.78(1.15) [a]	3.86(1.21) [a]	$F(405) = 8.284$, $p = .00$
Commenting	3.08(1.92) [a]	3.37(2.03) [a]	3(1.88) [a]	$F(405) = 1.277$, $p = .28$
Sharing	3.30(1.99) [a]	3.57(2.02) [a]	3.04(1.87) [a]	$F(405) = 2.353$, $p = .09$
Posting	2.79(1.89) [b]	3.07(1.99) [b]	2.40(1.62) [a]	$F(405) = 4.307$, $p = .01$

Note: means without a superscript letter in common are significantly different from one another at $p < .05$.

Study 1: Moderation Analyses

Table 2

PROCESS Macro for R moderation analyses in Study 1 (no control)

Outcome Variable	Moderator	Effect of Condition on DV (SE), [95% CI]	Effect of W on DV (SE), [95% CI]	Interaction of XW on DV (SE), [95% CI]	Conditional Effect (SE), [95% CI]		
					M-1SD (-1.086)	M (0.164)	M+1SD (1.164)
Comparing AI-generated Condition (1) to Human Condition (0)							
HMP	Attitude towards AI	b=-.53(.17), [-.86, -.21]	b=-.08(.08), [-.24, .07]	b=.24(.12), [.01, .48]	b=-.80(.21), [-1.21, -.38]	b=.49(.17), [-.82, -.17]	b=-.25(.22), [-.68, .18]
Comparing AI-assisted Condition (1) to Human Condition (0)							
HMP	Attitude towards AI	b=.07(.17), [-.26, .41]	b=.07(.07), [-.07, .21]	b=-.17(.13), [-.43, .10]			

Table 3

PROCESS Macro moderation analyses in Study 1 controlling for trust in USAToday, political orientation, news media consumption

Outcome Variable	Moderator	Effect of Condition on DV (SE), [95% CI]	Effect of W on DV (SE), [95% CI]	Interaction of XW on DV (SE), [95% CI]
Comparing AI-generated Condition (1) to Human Condition (0)				
HMP	Attitude towards AI	b=-.47(.17), [-.81, -.13]	b=-.00(.01), [-.03, .02]	b=.01(.02), [-.03, .05]
Comparing AI-assisted Condition (1) to Human Condition (0)				
HMP	Attitude towards AI	b=.11(.18), [-.24, .46]	b=.00(.01), [-.02, .03]	b=-.01(.02), [-.05, .04]

Study 1: Conditional Process Analyses

Table 4

Exploratory conditional process analysis (Moderator = Attitude towards AI), Study 1

Effect	Outcome Variable	Mediator	1 SD below Moderator Mean	Moderator Mean	1 SD above Moderator Mean	Index of Moderated Mediation
Comparing AI-generated Condition (1) to Human Condition (0)						
Indirect	Commenting	HMP	b=-.05(.06) [-.19, .06]	b=-.03(.04) [-.13, .04]	b=-.02(.03) [-.09, .03]	b=.02(.02) [-.02, .07]
	Sharing		b=-.02 (.06) [-.16, .10]	b=-.01(.04) [-.10, .07]	b=-.01(.03) [-.07, .05]	b=.01(.02) [-.03, .06]
	Posting		b=-.09(.07) [-.23, .03]	b=-.06(.04) [-.14, .02]	b=-.03(.03) [-.10, .03]	b=.03(.03) [-.01, .09]
Comparing AI-assisted Condition (1) to Human Condition (0)						
Indirect	Commenting	HMP	b=.02(.03) [-.03, .08]	b=.00(.02) [-.03, .04]	b=-.01(.02) [-.06, .03]	b=-.01(.02) [-.05, .02]
	Sharing		b=.01 (.03) [-05, .06]	b=.00(.01) [-.03, .03]	b=-.00(.02) [-.06, .03]	b=-.00(.02) [-.04, .03]
	Posting		b=.03(.03) [-.02, .11]	b=.01(.02) [-.04, .05]	b=-.01(.03) [-.09, .03]	b=-.02(.02) [-.07, .01]

Study 2: Example Stimulus
(AI author condition)

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Study 2: Mean Differences by Condition

Table 5

Mean scores and mean differences of Study 2

Variables	AI-generated Means (SD)	Human Means (SD)	AI-assisted Means (SD)	Inferential
HMP	2.47(1.38)[b]	2.82(1.43)[a]	2.68(1.34)[b]	$F(786) = 4.426$, p =.01
Commenting	3.11(1.84) [a]	2.91(1.77) [a]	3.37(1.91) [a]	$F(787)=2.094$, p = .15
Sharing	3.23(1.90) [a]	3.26(1.88) [a]	3.50(1.95) [a]	$F(787)=2.449$, p = .12
Posting	2.70(1.76) [a]	2.72(1.87) [a]	2.80(1.89) [a]	$F(787) = 0.385$, p = .53

Note: means without a superscript letter in common are significantly different from one another at $p < .05$.

Study 2: Moderation Analyses

Table 6

PROCESS Macro for R moderation analyses in Study 2 (no control)

Outcome Variable	Moderator	Effect of Condition on DV (SE), [95% CI]	Effect of W on DV (SE), [95% CI]	Interaction of XW on DV (SE), [95% CI]	Conditional Effect (SE), [95% CI]		
					M-1SD (-1.086)	M (0.164)	M+1SD (1.164)
Comparing AI-generated Condition (1) to Human Condition (0)							
HMP	Attitude towards AI	b=-.38(.12), [-.61, -.15]	b=-.28(.05), [-.39, -.18]	b=.32(.09), [.15, .49]	b=-.71(.15), [-.99, -.42]	b=-.39(.12), [-.62, -.16]	b=.01(.16), [-.30, .32]
Comparing AI-assisted Condition (1) to Human Condition (0)							
HMP	Attitude towards AI	b=-.14(.13), [-.39, .11]	b=-.06(.05), [-.17, .04]	b=-.26(.09), [-.43, -.10]	b=.13(.16), [-.18, .44]	b=-.13(.13), [-.38, .11]	b=-.46(.16), [-.78, -.15]

Table 7

PROCESS Macro mediational analyses in Study 2 controlling for trust in USAToday, political orientation, news media consumption

Outcome Variable	Moderator	Effect of Condition on DV (SE), [95% CI]	Effect of W on DV (SE), [95% CI]	Interaction of XW on DV (SE), [95% CI]
Comparing AI-generated Condition (1) to Human Condition (0)				
HMP	Attitude towards AI	b=-.33(.13), [-.57, -.08]	b=-.04(.01), [-.06, -.02]	b=.02(.01), [-.01, .05]
Comparing AI-assisted Condition (1) to Human Condition (0)				
HMP	Attitude towards AI	b=-.15(.13), [-.40, .10]	b=-.03(.01), [-.04, -.01]	b=-.02(.01), [-.04, .01]

Study 2: Conditional Process Analyses

Table 8

Exploratory conditional process analysis (Moderator = Attitude towards AI), Study 2

Effect	Outcome Variable	Mediator	1 SD below Moderator Mean	Moderator Mean	1 SD above Moderator Mean	Index of Moderated Mediation
Comparing AI-generated Condition (1) to Human Condition (0)						
Indirect	Commenting	HMP	b=-.02(.04) [-.10, .05]	b=-.01(.02) [-.06, .03]	b=.00(.01) [-.02, .03]	b=.01(.02) [-.02, .05]
	Sharing		b=.11 (.05) [.03, .21]	b=.06(.03) [.01, .13]	b=-.00(.03) [-.05, .05]	b=-.05(.02) [-.10, -.01]
	Posting		b=-.00(.04) [-.08, .08]	b=-.00(.02) [-.05, .05]	b=.00(.01) [-.02, .02]	b=.00(.02) [-.04, .04]
Comparing AI-assisted Condition (1) to Human Condition (0)						
Indirect	Commenting	HMP	b=.00(.01) [-.02, .04]	b=-.00(.01) [-.03, .04]	b=-.02(.03) [-.07, .04]	b=-.01(.02) [-.04, .02]
	Sharing		b=-.02 (.03) [-08, .03]	b=.02(.02) [-.02, .06]	b=.07(.03) [.01, .14]	b=.04(.02) [.01, .09]
	Posting		b=.00(.01) [-.03, .03]	b=.00(.01) [-.03, .02]	b=.00(.03) [-.06, .05]	b=-.00(.02) [-.03, .03]