The Influence of Auditory, Visual, and Textual Data on Choice-Based Decision-Making

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Overview of the research question

Does the mode of communication affect the way that information is perceived?

Can knowing the preferred mode help influence decisions?

Knowing the choice of modality can help determine adherence to decisions.

Mariadassou et al. (2022) : The Influence of Auditory and Visual Recommendations on Choice

Study Design

The study consists of 5 rounds of experiments.

Each experiment asked participants to rate recommenders on competence, intelligence, thoughtfulness, humanness, novelty, and uniqueness

Sample Population

The sample size of the project - 4708.

49% - Male, 49% - Female, 2% - Others

Age of participants was between 18 and 78 with average age being 31.

Variables and Results

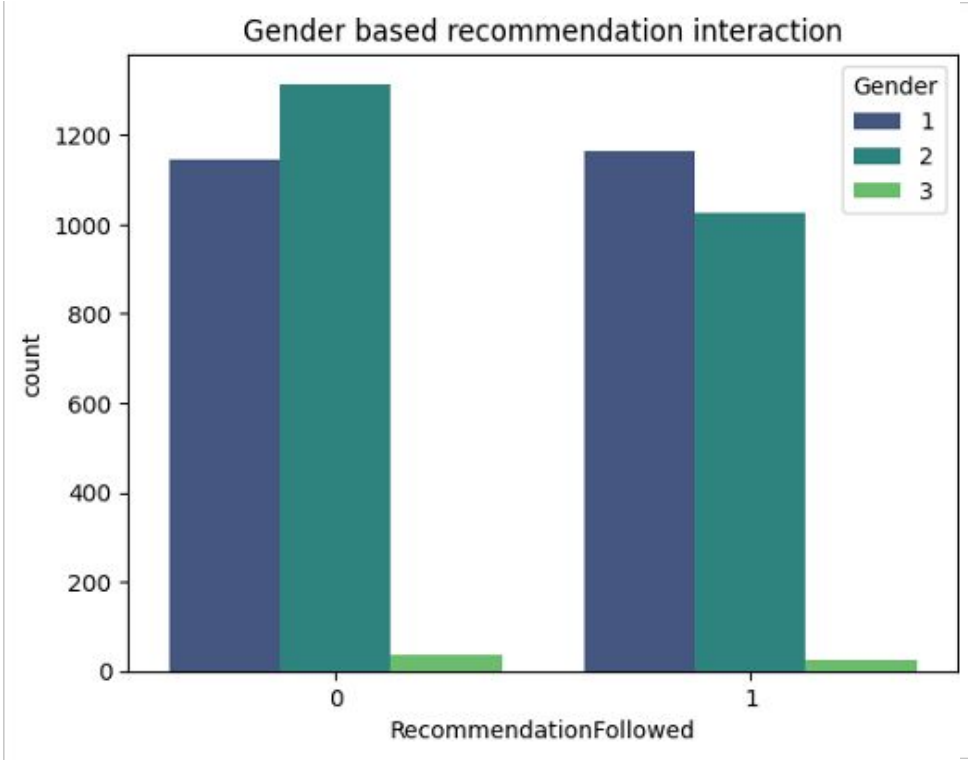
“Recommendation Followed” is the variable of interest.

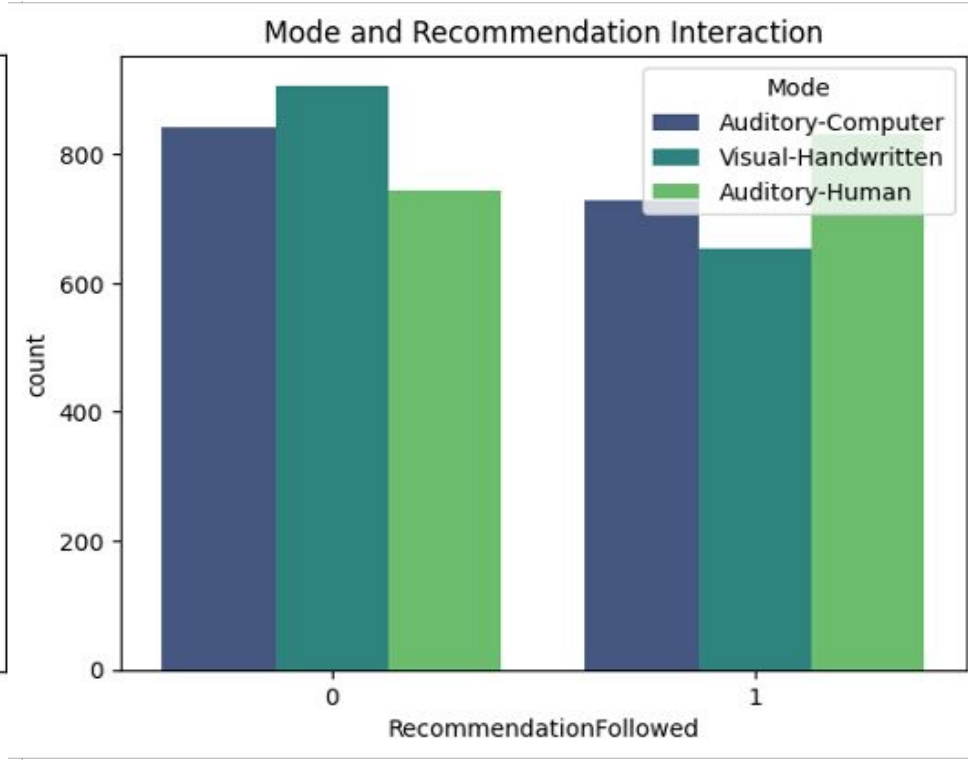
The overall results of the paper indicate that auditory mode has higher recommendations followed.

Descriptive Statistics

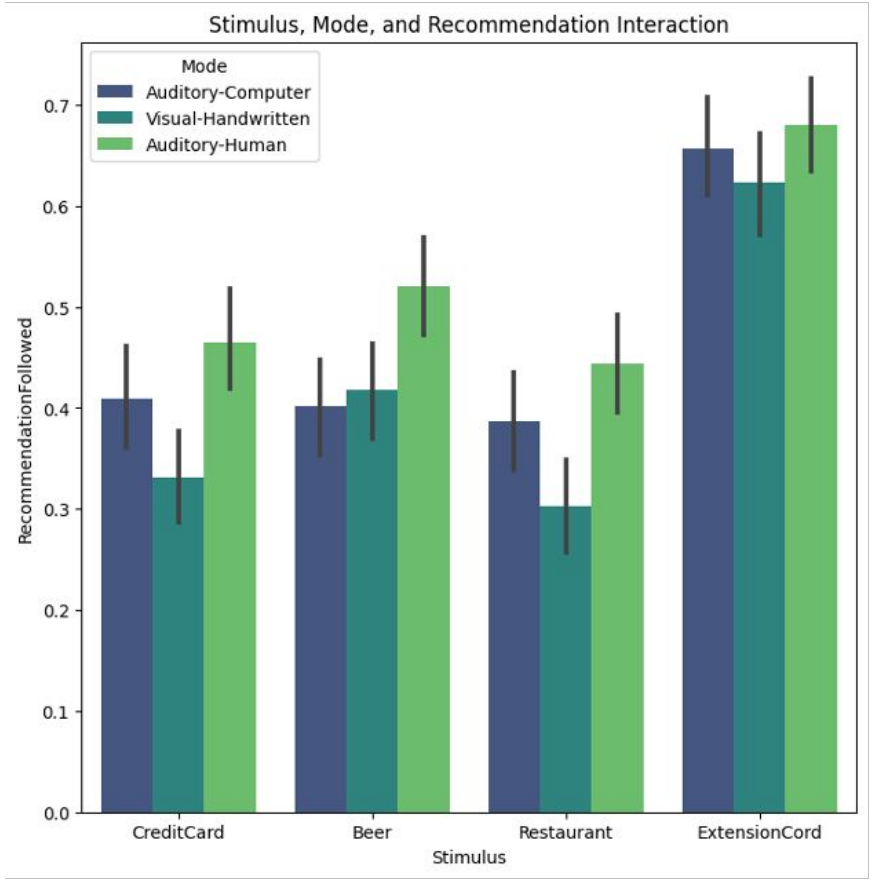
Variable	Type	Frequency (%)	Mean	Std. Dev
Composite Intellect	Numeric	-	5.61	1.80
Composite Novelty	Numeric	-	4.94	2.26
Mode	Categoric	1 = 33.47%, 2 = 33.39%, 3 = 33.13%	-	-
Stimulus	Categoric	1 = 25%, 2 = 25%, 3 = 25%, 4 = 25%	-	-
Recommendation Followed	Categoric	0 = 52.9%, 1 = 47%	-	-

Variable Interactions





Variable Interactions



Statistical Model Results

Models	Formula	AIC Score
Model 1	f = ‘RecommendationFollowed ~ 1 + Mode’	6478.16
Model 2	f = ‘RecommendationFollowed ~ 1 + Mode + Composite_Intellect + Composite_Novelty’	5885.59
Model 3	f = ‘RecommendationFollowed ~ 1 + Mode + Composite_Intellect + Composite_Novelty + Stimulus	1462.05

Statistical Model Results

Schroeder et al. (2017) : The Humanizing Voice: Speech Reveals, and Text Conceals, a More Thoughtful Mind in the Midst of Disagreement

Study Design

The study consists of 4 rounds of experiments.

Each experiment asked evaluators to indicate if the agree with communicators and to rate them on humanness and novelty.

Sample Population

Sample size of the project - 600

Male - 51.07%, Female - 48.92%

The age ranges between 18 and 73. Average age of participants is 35.21

Variables and Results

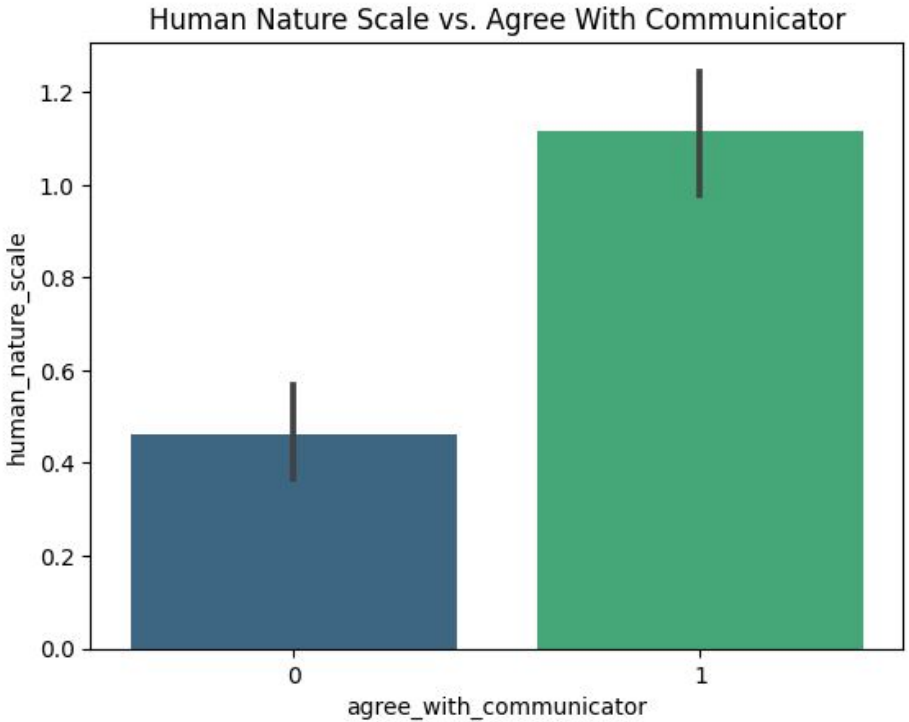
'Composite Score' is the is the variable of interest.

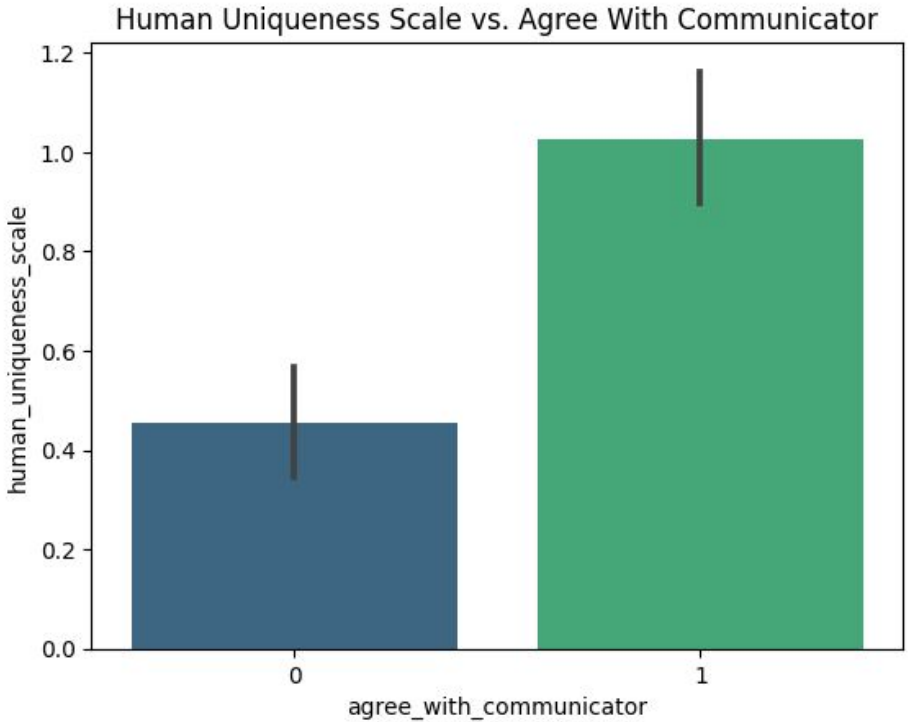
The overall results of the paper indicate that mode of communication significantly influences composite score.

Descriptive Statistics

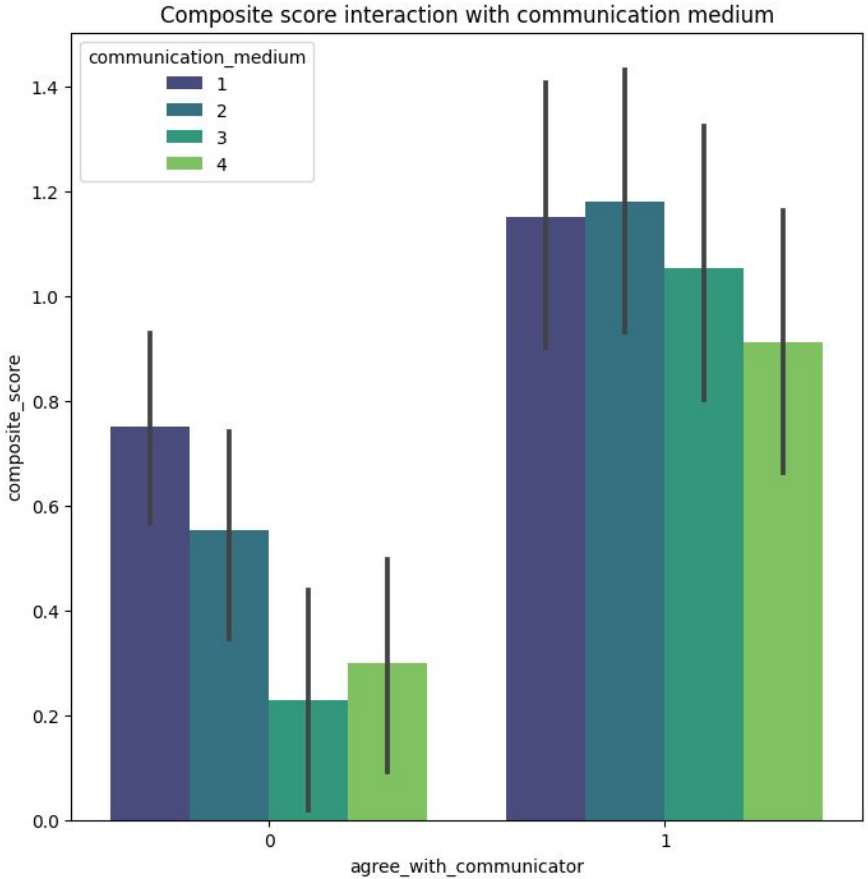
Variable	Type	Frequency (%)	Mean	Std. Dev
Human Uniqueness Scale	Numeric	-	0.653	1.151
Human Nature Scale	Numeric	-	0.688	1.045
Communication Medium	Categoric	1 =23.72%, 2 = 25.70%, 3 = 25.86%, 4 = 24.71%	-	-
Communicator Candidate	Categoric	1 = 36.57%, 2 =12.19%, 3 = 38.7%, 4 = 12.5%	-	-
Agree with Communicator	Categoric	0 = 65.07%, 1 = 34.9%	-	-

Variable Interactions





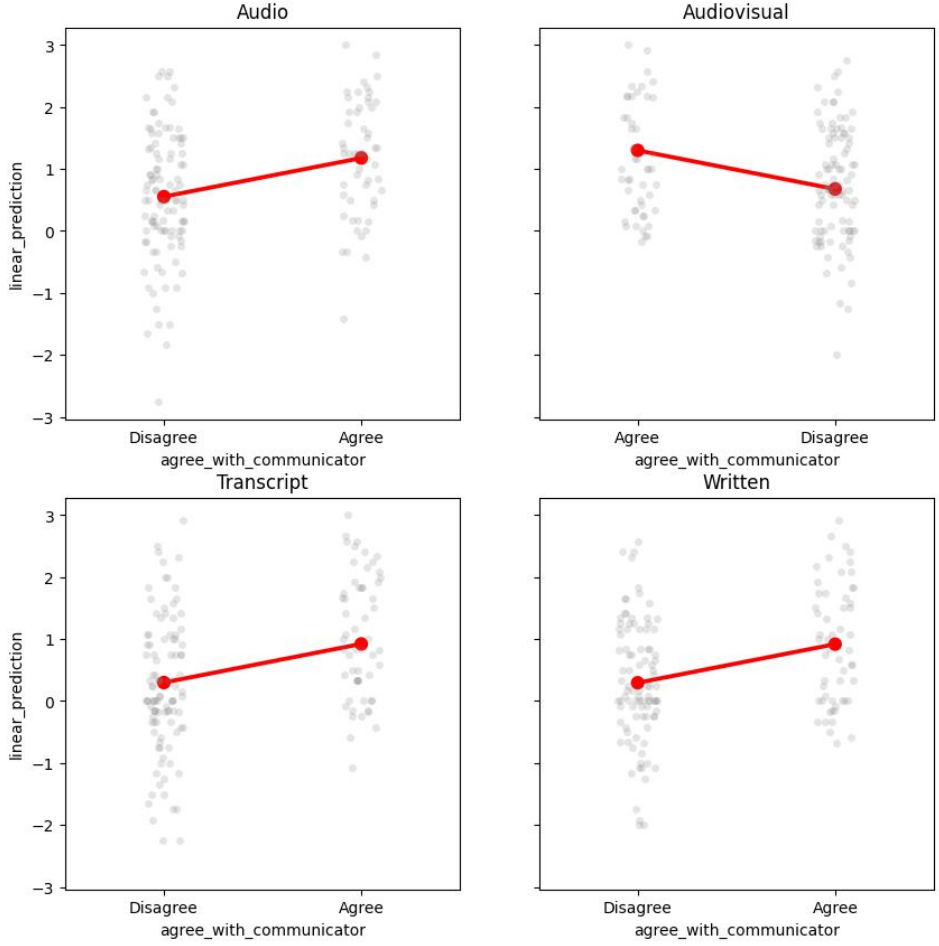
Variable Interactions



Statistical Model Results

Models	Formula	R^2 value	AIC Score
Model 1	f = 'composite_score ~ 1 + agree_with_communicator'	0.079	1723.72
Model 2	f = 'composite_score ~ agree_with_communicator + communication_medium'	0.101	1710.91
Model 3	f = 'composite_score ~ agree_with_communicator + communication_medium' (Transformed to categorical)	0.104	1713.17

Statistical Model Results



Modality is significant in resulting opinions

Auditory modes are more widely preferred and adhered to.

The sense of ephemerality with auditory mode could also be an influence

Discussions

Communication medium moderates the human uniqueness scores.

Paralinguistic cues in speech may be an important factor for auditory preferences

Opinions with voices are more likely to be accepted