|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PSYC1001 study | * 786 Female participation done 18 of ‘Need for Cognition’ measures
* They are given 250 words paragraph related to a topic from any of the three; “awareness of rips”, “fundamental attribution error”, or “personal circumstance prompt”

 |  | * They were presented with description of 2 fictional planets and asked to rate the disparities between them.
* Answers categorised as either ‘inherent/internal’ or ‘extrinsic/external’, with scale 1 to 9.
* =>Political attitude was measured focused on conservatism through  questions about tolerance of inequality and attitude towards societal change.
* The mean scores for inherent attribution (INH) were calculated for three conditions: RIPS (paragraph on rips), FAE (paragraph on fundamental attribution error), and PER (paragraph of personal story), for both HNFC and LNFC groups
 | From Political attitude measure (memo: how much conservative are you; high score-less conservative)People grouped in ‘high need for cognition’ (HNFC) are low conservative with 6.0 score than people in ‘low need for cognition’ (LNFC) with 5.7.* Statistically significant

From Inherent measure (high score -  inherent attribution)HNFC individuals tend to attribute disparities between the planets to inherent factors more than LNFC group people. Their tendency seem to be influenced by the content given(250 words paragraph). * A significant difference in political attitudes (PA) between HNFC and LNFC groups (p = .023).
* Significant differences in mean INH scores between the groups across different conditions (p = .014).
* No significant difference was found between the means of conditions D and G versus E and H (p = .816).
* Significant differences between the means of conditions C, D, and E versus F, G, and H (p = .011).
* Significant comparisons between specific conditions (p = .039)
 |
| 790-^\kl;.,/* + - how cognitive processing—particularly the tendency to prefer simpler, more inherent explanations—affects political attitudes, specifically conservative ideologies.
 | **STUDY1a : Political attitude is influenced by information processing factor****=**  how individuals' preference for inherent (vs. extrinsic) explanations of social phenomena correlates with their endorsement of conservative beliefs.Examined:→Link between sociopolitical pattern & support for two ideological pillars of conservatism – = **acceptance of stratification(階層化への需)** &**adherence to tradition(伝統への固執**)→ whether biased explanations, particularly towards attributing inequalities toinherent qualities such as intelligence or ability are associated with conservative beliefs, such acceptance of social hierarchy and adherence to traditional values(which was measured in first one).Measured* 1．the relationships between **inherent explanations** and **political conservatism**
* 2. test to see if 1’s relationship can be explained by **patient ‘s moral belief**, to see if that shape both their explanations and their political belief.
* Individuals who are more inclined to attributed inequalities to inherent qualities would also be more likely to support conservative belief about social hierarchy =　they are tend to believe the social inequalities are due to inherent qualities – they are wealthy because they are more hard-working or smarter, and social hierarchies are natural and should be accepted.

Limitation:They study usesd the hypothetical vignettes, which may not fully capture real-world decision making processes. | Conservative:保守的Inherent explanation:伝統的な価値観や社会的な秩序を重視し、変革や革新に対して保守的な考えをとる。Political conservatism:個人が行動や現象を理解するために用いる事故理論や説明。考えや心理に用いる＝無意識e.g. why this person succeeded -> because they worked hard.  | * 103 adult
* participants are randomly given one from four vignettes that describing social inequalities on fictional ‘alien planet’(in order to avid biases from real-world.); describing a difference in status between two groups
* rated **inherent explanation** (attributing the differences to inherent qualities of the groups i.e. intelligence) and e**xtrinsic explanation** (attributing the differences to external factors) regarding social inequalities situation in given vignettes, on a scale 1-9E.g. “Why Barks are richer than Orps?” → “Maybe they’re smarter or works hard”(inherent)→“Maybe they won a war”(extrinsic)
	+ - 1. **inherent explanations**
* after rating, four questions in total (2 each)given
	+ - Acceptance of socioeconomic stratification. E.g. How negative is your impression of the current inequality between the Barks and the Orps?
		- Adherence to social traditionE.g. How much of a priority should it be change the way things are on Planet Teeku?\*Higher score means they are more conservatism
1. **Inherent thinking:** general tendency to rely on inherent explanations beyond the context of the vignettes.
	* rated (on scale1-9) agreement with institutions following from low-effort inherent explanations for everyday e.g. “It seems natural that engagement rings typically have diamonds.”
	* High score -> more tend to rely on internet explanation.
	* Low score -> less tend to rely on inherent explanation
2. **moral belief :**
	* Use ‘Moral Foundations Questionnaire’ with 30 questions assessing adherence to five moral foundations(harm/care, fairness/reciprocity, ingroup/ loyalty, authority/respect, and purity/sanctity)
	* Given that MFT suggested that conservatism prioritize ingroup/loyalty, authority/respect, and purity/sanctity more in moral judgment compared to liberals, the used MFW score to understand how participants moral values relate to their conservative ideology.
* Adjusted their response in MFQ on these three morals dimensional to account for the potential influence of participants’ moral concerns on the observed relationships.
 | Hypothesis:Participants who tend to explain social and political situations based on inherent qualities (like intelligence or natural abilities) would also tend to have more conservative beliefs&attitudes, particularly regarding acceptance of social hierarchy and adherence to tradition.Results support hypothesis!!Participants who preferred inherent explanations in the vignettes (such as intelligence or hard working) have higher scores on a composite measure of conservatism. * + - Individuals who preferred inherent explanations tended to have more conservative attitude towards socioeconomic stratification and traditional social values.
		- There was a significant correlation between participants’ preference for inherent explanations (measured by the difference score between rating for inherent and extrinsic explanations in vignettes)

Also this preference for inherent explanations was also **correlated with** specific components of conservatism: **acceptance of social hierarchy & adherence to tradition.*** + - There was a relationship between how individual explain social inequalities and their conservative ideological learning. (説明の好みは、社会的階層の受容や伝統への固執といった具体的な保守的な信念とも関連している。)

**2.** Participants with high score on low-effort inherent explanation are more likely to endorse conservative ideology (more conservative) = People who tend to use social phenomena using inherent reasons are also tend to have more conservative attitude towards social hierarchy and tradition. Also, when 3.The moral beliefs 8ingroup/loyalty, authority/respect, and purity/sanctity)were correlated with conservative ideology. Individuals who have greater value on these are more likely to hold more conservative beliefs,But when these moral beliefs controlled, the tendency for individuals to prefer inherent explanations till had a strong association with holding conservative attitude. * + - While moral belief are correlate with conservative ideology, inherent thinking has a distinct influence on conservative belief beyond the influence of moral belief. (cannot be explained solely by moral)
 |
|  | **StUDY1b: motive based account of political ideology**Built on the findings of Study 1a by introducing measures of epistemic and existential motives to see if these factors could explain the relationship between a preference for inherent explanations and conservative beliefs.Examined:If The relationship between inherent explanation (attributing social inequalities to inherent qualities) and conservative attitude, observed in study 1a, can be better explained by participants’ **underlying motives** rather than their moral belief. * + - So basically, exploring the psychological factors or motivations that nay influence their endorsement of inherent explanations and their conservative ideological learning.
* Use three classes of motives hypothesized to underline conservative to underline conservative ideology:
	+ - 1. **Epistemic motives**: the desire for simplicity in judgement, preferring straightforward explanations and avoiding cognitive complexity.
			2. **Existential motive**: Feeling of threat or fear about societal stability, leading individuals to seek security and stability through conservative belief and behaviors.
			3. **Ideological motives**: A preference for the existing societal system, including beliefs in the legitimacy and fairness of the status group.

ALSOThey examined whether participants’ more general reliance on inherent explanations, as measured by inherence heuristic scale, predicted their preference for inherent explanations in the specific context of the study fictional vignettes (from study1a). Limitation:The measurement use4d foe epistemic ands existential motives did not effective tracking participants’ conservatismThe tradition-supporting dimension of conservatism was not clearly distinguished from the stratification-suporting dimention inte vignette based questions.  | More general reliance : they tend to explain things by attributing them to inherent qualities or characteristic rather than considering broader or more nuanced explanation.  | * 100 adults
	+ - 1. Epistemic motivesUsed the Need for Cognition Scale (NCS), which assesses the desire for effortful thinking. Higher scores indicate a greater preference for engaging in deep, deliberative thought.
			2. Excisional motivesUse the Belied in the Dangerous World Scale, which assess the feeling of threat or fear about the stability of society. Higher score indicates greater fear and perceived danger in the world.
			3. Ideological motives Used the General System Justification Scale which assess participants’ motivation to see existing sociopolitical conditions as justifiable and fair. Higher scores indicate a stronger belief in fairness and legitimacy of the societal system.
		- Using all three measurements, they are willing to determine if these psychological factors could provide more comprehensive explanations for the observed relationship between inherent explanation and conservative attitude
 | Participants’ preference for inherent explanations was significantly correlated with * Their endorsement of conservative views (p<0.001)
* Their endorsement of individual components of conservatism: acceptance of stratification and adherence to tradition.

USING three scale measuring motives & preferences for inherent explanation:The participants’ preference for inherent explanations emerged as a significant predictor of conservatism even when accounting for those three underlying motives. * + - The preference for inh

From inherence heuristic scale:They found a significant indirect pathway, with mediation effect size of ab= .18, SE.=.06. * + - Individuals who generally rely more on inherent explanations are also more likely to prefer inherent explanations in specific scenarios and subsequently adopt conservative attitude.
		- This indirect pathway remained significant even when controlling for underlying motives related to conservatism.
		- \*So, basically, if someone’s used to thinking in simple terms, they’re more likely to stick to simple explanations in any situation, and that makes them more likely to be conservative. And this connection stays strong even when we consider other reasons for their conservative beliefs.
* This study1b finding reinforced the study 1a finding by showing that the preference of inherent explanations predicts the adoption of conservative attitude in some contexts.
* Thus inherent thinking significantly influence on individuals’ conservative ideology, independent of other underlying motives.
 |
| - | **STUDY1c: Alternative measure**to refine the understanding of how different facets of conservatism might be influenced by different cognitive and motivational factors.Examined:If the results from study 1a&b (relationship between preference for inherent explanations and their conservatism) would remain when they use different measures.What they changed:* + - 1. Two alternative measures of epistemic and existential motives
		- Epistemic motives: the Need for Cognitive Closure Scale, assessing the need for clear, unambiguous judgements and avoiding uncertainty.
		- Existential motives: the Brief in a Competitive Jungle World Scale, assessing the belief in a competitive world where one must struggle for survival and power.

2. Revised the two vignette-based questions measuring adherence to tradition-> by removing the references to economic disparities from tradition support questions and instead adding mention of the hierarchy irrelevant aspects of those society, such as law, politics, they highlighting the support for tradition questions and acceptance of hierarchy questions.  * + - And they also measure the inherence heuristic scale
 | Note * vignette-based measure of preference for inherent explanations and their conservatism.

= they rated their preference for inherent explanations over extrinsic explanations for sociopolitical situation. * + - Then measure the acceptance of economic stratification and support for traditional practice, assessing by using specific question in vignettes regarding their attitudes towards economic disparities and the importance they placed on maintaining traditional practice
 | * 103 adults
* Participants were given the same vignette-based measure of preference for inherent explanations and their conservatism.
* Then they completed the control scales (the one measurement changed)
 | Even using * + Participants’ preference for inherent ions was still remained as significantly correlated with their endorsement of conservative positions. (= people who preferred inherent explanations tended to hold conservative belief)
	+ The inherence bias in explanations was also related to acceptance of economic stratification and support for traditional practice (both p<0.001), even wih alternative measured for epistemic and existential motives.
		- Inherent thinking contributes to conservative ideology beyond other motivational factors
		- They also found the support for an indirect pathway from participants’ general reliance on low effort inherent explanations to their conservative belief regarding the unfamiliar societies described. This indirect pathway remained significant when controlling alternative motives.
	+ Those revision of question were not successful in achieving in clarifying he distinction between adherence to tradition and acceptance of hierarchy in their response.

Limitations:Did not yi8eld a clear separation between tradition and hierarchy supporting dimention.  |
|  | **STUDY2: Extending the finding from study 1** Examined:* + - 1. Whether the relationship between the tendency to adopt inherent explanations and endorsement of conservative beliefs & attitudes is causal.
			2. Whether this tendency influences reasoning about actual familiar political topics that is happening in this real world. i.e., abodrtion, capitalism
			3. Whether can differentiate between hierarchy and tradition supporting dimensions of conservatism more clearly than study1.
		- They separate the dimension of conservatism by selecting the topics that specifically relate to either hierarchy or tradition. -> allow for more nuanced understanding of how inherent bias in explanation relates to each dimension of conservatism separately (which we cannot do in study1c)
 |  |  |  |
| Hussak & Cimpian (2018) ‘Investigating origins of political views…’ | Overall research is about measuring the relationship between the low-effort thinking and political conservatism.* + - If situations or conditions that leads to lower cognitive effort or simple cognitive processes does correlate with conservative ideology???
		- Study1

They investigated how situational factors, sepcifi8cally cognitive impairment(認知機能障害) by alcohol, can influence their conservative attitude.Hypothesis:Alcohol consumption, which impairs cognitive functions of ability to process info & respond logically, would increase the likelihood of individuals endorsing conservative attitudes.  | Conservative ideology:Set of ideas that values keeping traditions and being cautious about making the changes.  | Study1 used:* + Blood alcohol content (BAC), measured by breathalyzer as a measurement of alcohol intoxication.
	+ Eysenck's measures of political conservatism – used to identify whether they lean more towards conservative or liberal viewpoints based on their responses to a series of targeted statements. The statement include: government role in healthcare, attitudes toward environmental regulation etc

Participants (people who were at a bar before) measured the BAC with a quantitative measure of alcohol intoxication, then answered a survey that include Eysnck’s measurement on a scale 1-9. High score = more conservative (more endorsement of conservative views )* + - See the correlation of their BAC level with scores on the political conservatism scale.
		- Expected a positive leaner - people with high level of alcohol toxication would lean on higher score on conservatism ??
 | Study 1:\* demographic: college\*Ideology: Moderately politicalHigher BAC level increased = higher scores on political conservatism scale. * + - The impaired cognitive function via alcohol consumption significantly correlated with an increase in conservative attitudes.

Control variables: the relationship remained significantly even after accounting for other variable:* + - 1. Self-identification as Liberal/conservative: significant predictor thus participants’ self reported political orientation can determine conservatism level.
			2. Sex&Education: was not great predictor, thus the relationship is not confounded by this factor.
* Political attitudes can be somewhat fluid and influenced by immediate cognitive conditions.
* People might make political decisions in different states of mind.
* Even though this study offers significant finding about the link between cognitive impairment and political ideology, its conducted in a specific setting thus does not prove the causation
* .
 |
|  | Study 2 examined:how cognitive load influence political attitudes* + - testing whether reduced cognitive capacity, achieved through multitasking or distraction, would make conservative ideology more apperling.
		- Previous study suggested that low-effect cognitive processing might favor conservative ideology because it align with simpler process of thought

38 undergraduate studentsParticipants were randomly assigned to either a cognitive load condition or a no-load condition. * + - Primary task given to both group: responding to political statement.
		- Cognitive load condition: performed a secondaly task (counting tones of varying pitches) while also responding to statements about political attitudes.
		- Under cognitive load participants would lean more towards conservative responses due to their diminished capacity for complex cognitive processing??
 |  | Used:* + **Social Attitude Statement Scale (SASS),** assessing conservatism and liberalism from 13 questions each.
	+ Answered with 1-7 scale.
		- Higher score

= stronger agreement with conservatism = stronger liberal belief\*Depends on type questionHypothesis:cognitive load would lead to higher scores on conservatism due to decreased capacity for deliberation, which might not be as pronounced for liberalism.Bried Mood introspection scape + additional terms * + - Measure the frustration and annoyance

One group responded to the SASS while response times were recorded, and another group rated the complexity of each statement.Time:* + - if there's a difference in how quickly people can respond to conservative versus liberal statements. Faster responses might suggest that some statements are easier to process

Complexity:asked to rate each political statement for its complexity on a scale from 1 (easy to understand) to 9 (difficult to understand).* + - directly assess whether conservative statements are generally seen as less complex than liberal ones
 | Cognitive load increased conservative attitude & described liberal attitudes vice versa. * + Participants under cognitive load had more conservative attitude compared to those no-load condition.
		- Support the hypothesis that reduced cognitive capacity promotes conservative ideology.
	+ Under cognitive load, corresponding a decrease in liberal attitude.
		- cognitive load specifically affected the processing of political beliefs, making simpler, more traditionally conservative ideas more appealing.
	+ The complexity and ease of processing measurements confirmed that the shift in political attitudes was not due to the conservative statements being inherently simpler or easier to process compared to liberal ones.
 |
|  | Study 3 examined:How time pressure influence political attitudes* + - Does time pressure endorse the conservative attitude?

Hypothesis: Time pressure introduce lower cognitive effort, thus promote more conservative ideology36 undergraduate student randomly assigned into two group; high or low time pressure condition. * + - they responded to political/social issues given under time pressure.

Low: as much as you need to respond High:1,550ms to read and respond-> have to answer without sacrificing accuracy.* + - meant to simulate a low-effort cognitive state by limiting the time available to process information.
 |  | * + Social Referent Scale – used as measurement of political attitude. High – more conservative. Participants need to rate their agreetment from -3 to +3 for the statement inc 25 link with conservative ideology and 13 linked with liberal ideology.
	+ BMIS (Brief Mood Introspection Scale). – participants their mood on sale -3 to +3
	+ Ease of processing and complexity
		- 1. Response time – indicator of how easy or difficult each term was ro process under different condition
			2. An independent sample of 22 participants from the same population rated the complexity of "the idea behind each term" on a scale from 1 (easy to understand) to 9 (difficult to understand). This helped assess whether some terms inherently required more cognitive effort to understand, which could influence how they were processed under time pressure.
		- measuring how quickly participants responded to each term and assessing the complexity of the terms independently, how time constraints might shift political attitudes by limiting the cognitive resources available for processing information, thereby potentially skewing responses towards simpler or more familiar conservative terms.
 | Participants under time pressure showed a significant increase in their endorsement of conservative terms compared to those under low time pressure* + - when people have less time to think and process information, they tend to lean towards conservative ideologies.
		- Support the hypothesis

no significant change in the endorsement of liberal terms between high and low time pressure conditions.* + - iberal ideologies might require more cognitive effort or deliberation, which could not be adequately provided under time pressure.
		- liberal attitudes may be less influenced by immediate cognitive constraints compared to conservative attitudes.

feeling more aroused under high time pressure than those under low time pressure.* + - reflect higher cognitive stress or excitement, which might influence decision-making processes.

Response times were quicker under high time pressure, but the complexity ratings of the terms showed no significant difference* + - both conservative and liberal terms were equally complex.
 |
|  | Study 4 examined:If processing political term with lower-effort thought lead to a higher endorsement of conservative terms compared to more deliberate and thoughtful processing. * + - “is conservative ideology easier to process in brain when its less cognitive effort was available”
		- Manipulate the level of cognitive effor paricipants ised when processing the political term, to see if a more cursory(low effort processing) would increase their endorsement of conservative ideology.

Hypothesis: conservarive ideology mighrr be inherently easier to process when cognitive resources are limited. * + - Randomly assigned 34 undergraduate students into two groups
			1. High effort -> have to think carefully about each term before responding
			2. Low effort -> have to resond asap without overthinking or deliberating
 |  | * + - 1. Social referent scale
* Rated their agreetment with 30 political terms (conservative and liberal each) on scale ~3 to +3
	+ - High score = more conservative
		1. Need for closure scale and personal need for structure scale.
* 1, After political term task, participants completed a short form on scale 1-7
	+ - Measuring their desire for definite knowledge ans an aversion to ambiguity(明確な知識への欲求と曖昧さへの嫌悪感

Recognition memory * articipants were shown 66 terms (30 from the task and 36 distractors) and asked to indicate whether they had seen each term before.
	+ - Assessed by using signal detection analusis to calculate d-prime, which is an indicator of the depth of processing.
		- High accuracy = more effrtful thinking
 | * + - 1. The low effort thinking significantly endorsed conservative term than those instructed to use high-effort thought.
		- Support hypothesis : less cognitive effort leads to a greater endorsenebt of conservative ideology.

= when individuals do not deeply process information, they may default to more conservative positions, potentially because these positions are perceived as simpler or more familiar under low-effort conditions.2. The manipulation of processing effort did not significantly affect participants' needs for closure or structure, nor were these needs correlated with conservatism or liberalism.* + - Increase in conservatism under low-effort condition is NOT due to an increased need for cognitive closure, but rather than a direct rsukt of the conginitve processing style
		1. Participants had better recognition memory in the high-effort condition (Mean = 0.80) compared to the low-effort condition (Mean = -0.60)
		- they remembered terms more accurately when they thought about them more deeply.
		- High effort thinking leads to beyyer memory reteteion

= effect of cognitive effort on political attitudes is partly through how well participants remembered the terms. |