

CDR : Belief Revision : Qualitative Analysis Codebook

Nodes

Name	Description
Emergent	Emerging codes are those which were not anticipated at the beginning or are both unusual and of interest. They are developed solely based on the data collected - in this case, from survey responses and feedback.
Capacity	This node contains theme nodes pertaining to human error or confusion, and attitudes to new information. Its name comes from the idea of additional capacity in cognitive reasoning to deal with that which comes from the subjectivity of humans when dealing with information.
Cases not independent	
Conflation of cases	
Confusion regarding Yes and No	
Misunderstanding syntax	
Open-mindedness	
Order of information deemed irrelevant	
Wrong question	
Expression affects interpretation	This theme arose from responses regarding extensionality and refers to arguments for why there is a lack of extensionality in human reasoning.
Success dependent on specifics of conflict and the wording	
Known influences	This node pertains to influences that are known from literature but were not the focus of the project. The themes contained in this node also featured in the analysis of the trial survey.
Likelihood	
Real-world influence	
Bringing in own information	
Confirmation bias	

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Turning to Google	
Concept of time	
Conflict indicates exceptions	
Rejection of new information	This node contains themes identified in the reasons that respondents gave for rejecting new information.
Caution	
Confusion	
Consistency better for inference	
Distrust because cannot evaluate source of information	
Distrust because logically incorrect	
Specific belief less entrenched than general belief	
Pre-determined	From literature and theory
Postulates	The AGM properties characterising Belief Revision. Included as pre-determined codes, although not coded thoroughly throughout the data, as certain questions pertain to specific properties. Mostly used to indicate clear cases where a property's use is evident.
Closure	This implies logical omniscience on the part of the ideal agent or reasoner, including after revision of their belief set. -- the agent knows all logical consequences of the knowledge they explicitly have.
Consistency	The agent should prioritise consistency, where the only acceptable case of not doing so is if the new information, α , is inherently inconsistent - in which case, success overrules consistency.
Extensionality	This is also known as the irrelevance of syntax postulate. It effectively expresses that the content i.e. the belief represented, and not the syntax, affects the revision process, in that logically equivalent sentences or beliefs will cause logically equivalent changes to the belief set or knowledge base. This property would not hold without the notion of epistemic entrenchment (degree of resistance to change) or Katsuno and Mendelzon's treatment of integrity constraints.
Inclusion	Motivated by the principle of minimum change. Expresses that revision $K*a$ yields subset of closure of disjunction ($K \vee a$). Disjunction holds when at least one of the given conditions is true.

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Sub-expansion	Motivated by the principle of minimal change. For information b consistent with K, closure of revision disjunction $((K*a) \vee b)$ is a subset of revision $K*(\text{disjunction } (a \vee b))$
Success	This expresses that the new information should always be part of the new belief set
Super-expansion	Revision of K with B ($=ab$) is a subset of closure of (disjunction (revision $K*a$) $\vee b$).
Vacuity	Motivated by the principle of minimum change. Expresses that in the case of information a consistent with K, then the closure of disjunction $(K \vee a)$ is a subset of the revision $K*a$. Disjunction holds when at least one of the given conditions is true.
Reasoning style	This node contains themes pertaining to the style in which the respondent, also called the agent or reasoner, reasons.
Descriptive	A descriptive reasoning style makes a subjective, detail-oriented observation about a situation.
Normative	A normative reasoning style makes a claim about how something should be, passing a judgement.