

# Effects of schemes on understanding the social world



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- *With reference to relevant research studies, evaluate the extent to which our understanding of our social world is constrained by our schemas.*

Humans utilise mental structures known as schemas, which can constrain thinking and promote fixity, the extent of which will be evaluated in this essay. It will do this by first providing a brief description of schemas, it will then consider how they constrain our understanding of the social world by referring to relevant studies, discuss their benefits and drawbacks and finally draw it all together in its conclusion.

Individuals perceive the world through combining information from the senses, known as bottom up processing, with prior knowledge stored in the memory, known as top down processing. This process helps shape our perceptions and beliefs of how things *usually* happen in the social world and ultimately influences our behaviour, known as schematic processing (Buchanan et al., 2007). Different schemas are formed for different 'objects', such as 'person schemas', 'role schemas' and 'event schemas'. One theory is that schemas are needed as our brains do not have the capacity to deal with the massive amounts of information which bombard our senses, with schemas filtering out what information is relevant to aid understanding, this view of schemas as limiting control and choice and determining interpretations and judgements is known as the cognitive miser model (*ibid*, 2007).

Schemas can be extremely useful as they help us make quick decisions about the social world and reduce the brain's workload, paradoxically they can also be constraining by categorizing people in terms of their schema type, rather than their individual characteristics. This can be particularly prevalent when meeting someone for the first time and can lead to bias, discrimination and stereotyping. These schemas can also be self confirming and as such promote fixity which can be difficult to change, as if we expect someone to act in a certain way then we may interpret their actions as such. Darley and Gross' (1983, cited in Buchanan et al., 2007, p. 66) study provides evidence of this; in their study they presented US students with an introductory and exam performance video of a fictional person called Hannah. In one condition, Hannah's introductory video portrayed her as of high socio-economic status and in the other condition she was portrayed as of low socio-economic status. When shown both the introductory and exam videos, participants displayed evidence of stereotyping, categorisation and prejudice, as those who were shown the high status video judged her to have high ability and vice versa.

Another example of schemas as constraining is through the process of attributions, which are explanations we arrive at to account for our own and other people's behaviour. Heider (1958; Heider and Simmmell, 1944, *ibid* , p. 60) proposed that lay individuals act like naïve psychologists and look for regularity and predictability, building models of causality with regards to behaviour. They also argued that attributions of causality can be understood in terms of internal (dispositional) causes, and external (situational) causes, known as locus of causality. Likewise, in their study, Jones and Davis (1965,

*ibid* , p. 72) concluded that individuals have a tendency to explain others behaviour in terms of internal factors as it tells us more about the other person and helps us to predict their future behaviour. Furthermore Harold Kelley's (1967, *ibid* , p. 72) covariation mode, which studies covariation and correlation between events suggests we use complicated subconscious procedures to examine three particular types of data, consensus, consistency and distinctiveness, assigning weightings to each variable in order to attribute an internal or external locus of causality. Kelley used an experimental study method, utilising vignettes, gaining very precise and testable results to support his theory. Whilst there are a number of studies to support the theory of attributions, there is also criticism that they overstate the rationality of causal reasoning and ignore any environmental and emotive influences.

Another example of schemas as constraining is through the various biases' which can influence judgements and decision making skills and can be self serving. One such bias is known as the fundamental attribution error (FAE), which occurs when we have a tendency to explain the behaviour of others as down to internal factors. However, whilst evidence of FAE has been found in the United States, Miller (1984 , *ibid* , p. 77) found that the less individualistic culture of India showed no evidence of FAE, suggesting FAE may be a product of culture. Likewise, actor/observer effect (AOE) occurs when we explain our own behaviour as a result of external attributions. Storms (1973, *ibid* , p. 76) study provides evidence to FAE and AOE as well as suggesting that perceptual salience plays a part in our judgements, which is when one part of the perceptual field has significance to the perceiver and therefore

attracts attention. Kahneman and Tversky (1973 , *ibid* , p. 83) also found evidence of perceptual salience, utilising vignettes which gave short descriptions of individuals who could be either engineers or lawyers. They found that participants declared a 50 per cent chance of the individual being of a Lawyer, missing the fact they were informed that the room contained 70 per cent lawyers, supporting the theory of perceptual salience as the ‘ actor’ is the most salient part of the vignette. This also supplied evidence of an over reliance on ‘ representativeness heuristics’ which is the tendency to make categorisations based on whether an item represents the group to which it belongs, leading to judgemental errors. Similarly, some events can be easier to remember, particularly if recent and can lead to errors in judgements, known as ‘ availability heuristics’. In addition, Lau and Russell (1980, *ibid* , p. 77) found evidence of self serving biases’, with individuals displaying a tendency to attribute successes to internal factors and failures to external causes. They also utilised vignettes, increasing ecological validity by analysing actual sports interviews, coding explanations in terms of locus of causality. One possible explanation for a self serving bias is that it is a cognitive bias, in other words we succeed because we expect to as we have put effort in to increase our chances of success, likewise if we do not succeed we attribute this to external factors. Another potential explanation is a motivational bias, driven by a need to enhance self esteem, portray a positive self image and feel in control.

Schemas can also be constraining as they can influence our perception of risk, individuals becoming more optimistic about risks than statistics warrant, known as optimistic bias. There have been numerous studies on the subject,

including Weinstein (1987, *Ibid*, p. 88) who used questionnaires to gauge participants attitudes to health and safety risks as opposed to someone with equal exposure to that risk and found that most unfoundedly rated their risk as below average, supporting evidence of an optimistic bias. This could also be explained in terms of a lack of availability heuristics and experience of the risks. It could be argued that the optimistic bias is a self serving bias, leading to a less stressful and more productive life, reducing feelings of anxiety and promoting happiness.

In contrast to the cognitive miser model, Fiske and Taylor's (1991, *ibid*, p. 70) Motivated Tactician model argues that when motivated, humans can be less machine like and can be fully engaged thinkers, utilising strategies based on goals, motives and needs. They also suggest three levels of automaticity of schematic processing, including preconscious automaticity where stereotypes are activated by physical attributes and so on and which are outside of the perceivers awareness, and a goal dependent level, which can be likened to Ruscher et al.'s (2000, *ibid*, p. 68) workplace relations experimental study, in which participants will seek information that is not congruent with the relevant schema. They found that individuals act like motivated tacticians when the achievement of goals is reliant on another individual, seeking out extra information about individuals rather than relying on stereotypical characteristics. Whilst these studies provide evidence for the capability in humans to think consciously and analyse situations based on motivation, it can be argued that this model ignores the importance of quick decision making, and the emotive and environmental influences on judgements.

Finally, one criticism that can be attributed to the theories from within the experimental social psychology perspective discussed thus far is the lack of ecological validity. However, a number of schema related constraints can be evidenced in Joffe's (1999, *ibid*, p. 93) ecologically valid, cross cultural study of the risk perception associated with HIV/AIDS. Joffe was concerned with the social representations of risk, which are based on the shared perceptions and beliefs of groups. She conducted semi-structured interviews with 60 Individuals, comprising of an equal share of British and South Africans, blacks and whites, heterosexual and homosexuals in their early 20's. Joffe found evidence of the optimistic bias, with individuals rating their chances of contracting the diseases as below average. She also found evidence of attribution theory with participants acting like naïve scientists seeking causality and displaying the FAE when apportioning blame and attributing that to dispositional factors, forming a kind of ingroup bias and outgroup prejudice and discrimination, possibly as a form of psychological defence of the ingroup, which mirrors Tajfel's (1971, cited in Phoenix, 2007, p. 62) Social Identity Theory. Joffe's study provides ecologically valid evidence of how schema can lead to attributions, stereotyping, bias, poor judgemental skills and prejudice towards others and a possibly hazardous perception of risk to self.

This essay has evaluated the extent to which our understanding of our social world is constrained by our schemas by first giving a brief description of schema theory. It then evaluated a number of concepts related to schema theory such as categorisation, attributions, judgemental influences, biases' and perception to risk and although the majority of studies lacked ecological

validity due to laboratory settings, it concluded with an ecologically valid study which evidenced all these concepts. Ultimately it has found that although schemas can be constraining and promote fixity, it can be argued that they offer an evolutionary survival advantage by avoiding anxiety associated with the need to constantly make time consuming reasoned judgements and as such increase happiness.

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### **References:**

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