

# Prevailing Theories of Over-Imitation

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#### Background

Imitation is a naturally occurring process of human development where individuals can learn different skills and behaviors by mimicking those around them. Imitation plays a vital role in the development of cognitive and social communication behaviors such as language and joint attention. Although imitation appears to have a clear positive utilization there are instances where its utility is reduced. Over-imitation is the process of an individual imitating actions even when those actions are not causally relevant to the objective to the task. Whiten et al. (2016) said that "the occurrence of overimitation in the real world, maximizes the power of the human capacity to obtain all the practical and conventional skills that are foundational to human culture" (p.12). Over-imitation is only one way to build culture and not the most efficient. This review aimed to investigate what influences us to employ this method in social interactions.

## **Literature Review**

The current predominant theories regarding this phenomenon fall into one of the following camps of reason that explain why we are willing to sacrifice efficiency in these interactions. The first being social motivation, which states that we over-imitate because we feel an inherent desire to conform to the social situation. The second, being social cognition, which states that we overimitate because we attribute meaning to the demonstrator's actions.

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## **Social Cognition:**

Intentionality

Refers to understanding or inferring the intentions of another and using that to perceive whether those actions are necessary. In a study that varied intentionality using verbal markers, it was found that when given certain cues children will be selective in their imitative actions and are less likely to over-imitate (Gardiner et al. 2011)

Causal Relationships Children have been found to use over-imitation as an opportunity to learn about causal relationships. Children are able to learn about an object's innerworkings through observation so when they observe someone manipulating an object, they encode all actions as necessary and intentional. Over-imitation is simply a manipulation of our causal beliefs so when "purposeful" actions are not necessary children miscode them thus distorting their causal belief, hence the continued over-imitation (Lyons, 2007)

## Social Motivation:

Overjustification Effect A person's external motive has the power to decrease their internal motivation. When it comes to social interactions people engage in them no because there is a direct and tangible benefit but because their is an inherent reward (Chevallier et al. 2012)

**Chameleon Effect** 

Occurs when people unconsciously mimic the behaviors of another which could include posture, facial expressions, and speech inflections. It confirms that there is social bond that forms during an action like imitation and because of that people are more likely to over-imitate to maintain that bond (Chartrand and Bargh, 1999)

Norm Acquisition Hypothesis Kenward (2012) found that in a test of over-imitation "children have acquired an understanding that it is prescriptively normative to perform the unnecessary action" (p.197) Kenward's study supports the idea that children are influenced by what they believe to be a social norm in interactions and will over-imitate (and encourage others to) for the sake of maintaining the social norm.

#### **Future Considerations:**

Chevallier et. al (2012) presents that individuals with Autism Spectrum Disorder have deficits in social orienting and social maintaining, two levels of social motivation that play a role in imitative interactions. ASD is characterized by a disruption of motivation for social affiliation and those individuals place less emphasis on protecting their self-image. Although they don't have the same intrinsic motivation several studies such as Spengler et al., (2010), have found that these individuals still overimitate. The research is limited in its observation of this population. A study that focused on comparing how individuals with Autism Spectrum Disorders perform in an over-imitation task as they age would provide some valuable insight regarding how this population learns from others compared to typically developing counterparts.

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