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Social Neurocognition: A Brief Review of Some Aspects

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INTRODUCTION

This article review briefly, two contradicting aspects of social cognition; prejudice and stereotype, from one side; "antisocial", empathy, from the other side; (prosaically). While prejudice and stereotype involve social cognition and social behavior that being against others, including discrimination, differentiation, empathy, on contradict involves not only emotion, social cognition that go with others, but also, social behavior that join as one unity with others. What are physiological process that involved in all these aspects, within human neurons and brain? Are they common aspects in these different processes? The article reviews briefly each aspect, and then concludes for further researches.

Keywords: Empathy, Prejudice, Social cognition, Social Cognitive Neuroscience, Stereotype.

SOCIAL COGNITIVE NEUROSCIENCE

Social cognition is a subfield that bridge social and cognitive psychology, which focuses on how individuals perceive, recall, think, and interpret information about themselves and others [1].

The term "social neuroscience" coined by Cacioppo and Berntson; to describe social and physiological levels of analysis, as an interdisciplinary approach referred to as social cognitive neuroscience [2].

The methodology of social cognitive neuroscience approach depends on brain mapping, meanwhile the status, by EGG: electroencephalography and FMRI: functional magnetic resonance imaging, which measure electrical activity produced from the firing of neuron populations. To measure self-concept, romantic love, social emotions, scientists test neural process by noticing physiological changes in participants in related tests to such topics, to map significance areas through the experience, for example, by measuring the flow of oxygenated blood in the brain, which an event-related potential (ERP) [1].

PREJUDICE

Prejudice refers to an unjustifiable negative attitude toward out-group. Beliefs about the characteristics of the groups and the members of those groups known as stereotypes, Both prejudice and stereotype may create

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discrimination and they begin from social categorization-the natural cognitive process by which we place individuals into social groups [3].

Evolution and social psychologists explains this as; anxiety and intergroup bias, which includes differentiating between them and us. Because our ancestors lived in small social groups, it was evolutionary functional for them to view members of other groups as different and potentially dangerous [3].

There are theories for automatic and controlled social neuroscience process: automaticity is sequential priming tasks, without a participants' awareness or intention [1]. It hypothesized that racial bias with a focus of amygdale role, is a substrate of implicit fear association, including prejudice, stereotype [1].

Empathy, as well, in spite of being different affected more by automatic reactions. Prejudice is a complex social cognition process that seems to support by a network of neural structures. The amygdale supports threat-based associations, which though to underlie the most common form of implicit prejudice, and it is also involved in initial responses of salient positive or negative cues, including cues regarding membership [4].

Automatic prejudices often linked to habits; they appear to emerge from repeated negative experiences with out-group members, unfold without intention, and resist change. Recent FMRI researches results suggest that generalized group concepts rely on domain general circuitry associated with latent structure learning and the encoding of stimuli's functional significance [5].

STEREOTYPING

The term serotype refers to solid printing which difficult to change. Used in Social sciences to stand for: set of relatively fixed generalizations about a group or a class of people, within a culture, a set of widely shared generalizations about group or a class of people, including negative or positive attitudes towards social groups, which are often rigid and inaccurate, difficult to change, inherited through generations [1].

Limited researches explored the neural correlates of serotype as a social cognitive process, suggesting regions supporting the representation of action knowledge and evaluation processing, capture the cognitive and emotional components of stereotypical thinking. The neural circuitry underpinning stereotyping modulated by the strength of people's implicit and explicit gender related beliefs [6].

EMPATHY

The phenomenon of empathy entails the ability to share the affective experiences of others. It is a prosaically behavior. At a basic phenomenological level, empathy denotes an effective response to the directly perceived, imagined, or inferred feeling state of another being [7].

The term empathy in the parapsychological context defined as the psychical influence of emotion via experiments influence over the emotional basis of conscious and mental, physiological processes associated with a wide variety of emotional experiences. It is a dynamic, interrelated, synchronized change, in response to internal or external stimulus event [8].

It is a phenomenology of indirect knowledge of the collective emotional experience of the large group or population via nature. In some experiments children tend to score high than adolescents and adults, plus age, empathy affected also by variables, as participants' wants, needs, thoughts, gender and emotional ponds [8].

In 2002, Preston and de Waal proposed a neuroscientific model of empathy associated with automatic and somatic responses. The majority of social neuroscience studies used the observation of pain in others as a model paradigm to evoke empathic response. In 2002, Preston and de Waal model, stressed the importance of automatic and perceptually driven processes as emotional contagion and mimicry. Automatic here means process that does not require conscious and effortful processing [8].

FURTHER DIRECTIONS AND CONCLUSION

Although prejudice and stereotype seems opposite to empathy, social Neurocognition refers to their all interconnected to automatic responses, which means the same roots in unconscious mind. While prejudice and stereotype affected more by memory and learning neural circles, empathy affected more by mimic, stomach, and pain circles.

To change the formation of prosaically and/or antisocially cognition and behavior, to strength or week this formation, we need to research new methods and approaches to assess the functional significance of shared neural activations.

We may also use empathy to week prejudice and stereotype faster when it confronted by people who see it occurring, by

mimic and learning by model we activate both prosaically and antisocial circles. Confronting prejudice may embarrass, make us feel we do or do not act the right thing. By leading people focus more on their behaviors and its connections to others (empathy, somewhat), we may reduce prejudice and stereotype, as example.

We may reduce and week neuron-net for negative learned experiences caused prejudice and stereotype, by nutrition empathy through notice and learning by model, to focus consciously- instead of unconsciously- on behavior, cognition of negative results on both oneself, and others.

This may lead to change social norms by education and law, which will affect both behaviors, in good manner and vice versa.

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