Schema Theory in Personal Growth, Culture, and Social Media: A Literature Review

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Abstract. The literature review explores the application and implications of Schema Theory in diverse fields such as personal growth, cross-cultural communication, and social media. Schema Theory, a branch of cognitive psychology, suggests that individuals possess mental structures guiding their perception, processing, interpretation, and recall of information. The review highlights how schemas continue to evolve throughout an individual's life, influencing their development. It also discusses the role of cultural schemas in bridging communication gaps between different cultures. In the social media context, the review introduces the concept of 'social media platform schema' which impacts how users interpret and share information on different platforms. The review concludes by suggesting further research on the limitations of Schema Theory, including its potential to lead to cognitive biases and stereotyping.

Keywords: schema, schema theory, personal growth, cross-cultural communication, social media.

1 Introduction

Schema theory, a branch of cognitive science in cognitive psychology, underpins that individuals have mental structures or frameworks (i.e., schemas) which play a role in guiding perception, processing, interpretation, and recall of information[1][2]. Schemas are formed and developed along with time by experiencing and interacting with the outside environment[3]. They shape patterns of how individuals understand and respond to others and their surroundings[4][5]. At present, research on schema theory has majorly concentrated on how individuals apply schema to organizing and retrieving information, making judgments and decisions, and filling in missing details from incomplete stimuli[6][7][8]. As Bartlett and Burt[6] and Rumelhart and Norman[2] proposed that schema theory plays a fundamental role in information processing and that schemas are the building blocks of knowledge representation, investigating how schema theory impacts individuals' development and how individuals utilize it to process information becomes ponderable. Additionally, understanding the dynamic nature of schemas and their role in cognitive flexibility and resilience is crucial. Hence, this literature review generally focuses on summarizing extant and general research of

schema theory on individual development, followed by its applications in intercultural communication and social media behavior for a further understanding of cognitive processes. By exploring these diverse applications, deeper insights into the pervasive influence of schema theory on various aspects of human cognition and interaction will be obtained.

2   Review of Literature

2.1   Schema Theory in Personal Growth

Schema theory is essential to individuals' learning and development [9] [10] [11] [12] [13]. Based on cognitive psychological theory and research on schemas, Markus[10] developed the term self-schema and explains how it works for individuals' development. Self-schema refers to the understanding that individuals develop about themselves through interactions with the surrounding environment and other humans. This comprehension, in turn, shapes their behavior towards others and influences their personal motivations[10]. Moreover, self-schema keeps evolving throughout life[11]. Because of the ongoing influx of information from experiences and social interactions throughout one's life, the self-schema will undergo continuous development and evolution across the lifespan[11]. The dynamic nature of schemas means that they can adapt to changing circumstances and help individuals navigate complex life transitions. For instance, during significant life events such as starting a new job, moving to a different city, or experiencing personal loss, schemas provide a framework for understanding and integrating these experiences. As individuals' microsystem, mesosystem, and exosystem change, schema will continue to develop [9]. This adaptability is crucial for personal growth, as it allows individuals to build on their past experiences while simultaneously adjusting to new situations. As individuals age and retire, they would find themselves in novel situations that demand the assimilation and accommodation of fresh knowledge and experiences. Particularly during late life, when cognitive abilities gradually decline, the coping strategies and adaptive compensations derived from the existing schemas become essential[12]. The continuous interaction between new information and pre-existing schemas fosters resilience and cognitive flexibility, enabling individuals to face challenges with a more robust set of coping mechanisms. This resilience is crucial in adapting to the inevitable changes and uncertainties of life. Besides, schemas can enhance the integration of new knowledge with existing understanding, employing tools like advance organizers and memory aids to connect newly acquired information to previously stored one within schemas[13]. This process not only aids in better retention of information but also facilitates deeper comprehension and application of knowledge. Furthermore, as people encounter diverse cultures and perspectives, their schemas can expand, leading to a more comprehensive and empathetic worldview. This expansion is essential for fostering interpersonal relationships and social harmony, as it encourages openness and reduces biases. By being open to new experiences and viewpoints, individuals can cultivate more meaningful connections and a greater understanding of the world around them. In short, schema is not static and will play a significant role in facilitating individuals' development. This ongoing process of

schema development highlights its fundamental role in personal growth, emphasizing that our cognitive frameworks are not merely passive repositories of knowledge but active participants in shaping our understanding and interactions with the world. By continually updating and refining our schemas, the complexities of life can be better navigated, and more meaningful and fulfilling interactions can be achieved.

2.2   Schema Theory in Culture

Schema theory has also been applied to the realm of cross-cultural communication and understanding, as different schemas based on cultural contexts and experiences are possessed by individuals from different cultures[14]. It has been stated by Koester and Lustig[15] that culture-specific communication patterns, beliefs, and values might lead to misunderstandings among cultures. Responses to and interpretations of interactions are relatively dependent on cultural backgrounds, which can sometimes result in misunderstandings. Communication gaps between different cultures could be bridged by studying cultural schemas[14]. How different cultures view the world and how their information is communicated to others from different cultures must be understood. For instance, the interpretation of nonverbal cues, such as gestures and facial expressions, by individuals of a particular cultural group could be significant in creating benign and harmonious intercultural communication. More effective interactions and reduced potential for conflict are allowed by this understanding. Furthermore, more flexible schemas are prone to development in individuals with extensive cross-cultural experience, which would help them better adapt to different cultural contexts[16]. The adjustment of communication styles to accommodate given cultural differences is allowed by flexibility in schemas, inducing profounder comprehensions and reducing misunderstandings among members of different cultures. This adaptability is particularly beneficial in international settings where significant miscommunications can occur. Stronger, more cohesive relationships across cultural boundaries are built by this adaptability, fostering mutual respect and understanding. In brief, healthy intercultural communication is facilitated by schema theory. Additionally, the importance of developing cultural awareness and sensitivity is often emphasized by cross-cultural training programs[16]. More effective and respectful interactions are fostered by educating individuals about different cultural schemas and the potential for miscommunication. For example, navigation of conversations where implied meanings or direct messages are prevalent can be aided by understanding high-context versus low-context communication styles, as described by Hall[17]. Heavy reliance on nonverbal cues and shared knowledge is characteristic of high-context cultures, whereas explicit verbal communication is emphasized by low-context cultures. Reduction of misinterpretations is crucially achieved by recognizing these differences. Adjustment of communication approaches to be more effective and respectful can be made by becoming aware of these styles, thereby reducing potential conflicts and misunderstandings. Furthermore, the frequency of intercultural interactions has been increased by globalization, making it imperative for businesses and organizations to cultivate employees who can operate effectively in diverse environments. More success in international collaborations and negotiations is likely to

be achieved by employees who can adjust their schemas to accommodate various cultural norms. In summary, the application of schema theory to cross-cultural communication underscores its significance in fostering understanding and reducing misunderstandings between different cultural groups. As more global mobility and connectedness are experienced, the ability to navigate cultural differences through flexible and adaptive schemas becomes increasingly important. More harmonious and effective interactions in diverse settings, benefiting both individuals and organizations, can be achieved by emphasizing the development of such skills through education and training programs.

2.3   Schema Theory in Social Media

In the context of social media, studies indicate the existence of social media platform schema, reflecting users' pre-established expectations regarding the information exchange on these platforms[18]. Technological affordances of multiple social media platforms facilitate the development of distinct forms of communication, norms, and cultures within each platform[19]. For instance, Schulze et al.[20] showed that information bearing utilitarian purposes might not be effective on platforms catering to entertainment (e.g., Facebook), where hedonic messages are the mainstream. Hence, individuals' platform schema may shape their interpretation of information and influence the content they generate and share on the platform[19][20]. Moreover, the dynamic nature of social media platforms means that these schemas are constantly evolving as users adapt to new features and changes within the platforms. For example, the introduction of stories and live-streaming features on Instagram and Facebook has shifted user expectations and engagement patterns, thereby altering their platform schemas[21]. Users now anticipate more ephemeral and real-time content, which affects how they process information and interact with others online. This shift not only influences individual behavior but also drives broader trends in social media usage, as users collectively adapt to and normalize these new features. Additionally, the algorithmic curation of content on platforms like Twitter and TikTok creates personalized feeds that reinforce existing schemas by showing users content that aligns with their preferences and behaviors[22]. This can lead to echo chambers where users are exposed predominantly to information that confirms their pre-existing beliefs, potentially limiting their exposure to diverse perspectives[23]. The reinforcement of these schemas can create environments where users feel validated and supported in their views, but it also poses challenges for broadening their understanding and acceptance of differing opinions. Furthermore, the role of influencers and opinion leaders on social media has also shaped platform schemas. Influencers, with their large followings and perceived authenticity, often dictate trends and norms within platforms, impacting how users perceive and engage with content[24]. The endorsement or criticism from these figures can significantly influence public opinion and behavior, reinforcing certain schemas while challenging others. Their ability to sway public discourse underscores the power of social media schemas in shaping collective attitudes and behaviors. As such, understanding social media schemas is crucial for marketers, policymakers, and educators

aiming to effectively communicate and engage with diverse audiences. By acknowledging the unique schemas associated with different platforms, they can tailor their messages to resonate more deeply with users, fostering better communication and understanding in the digital age. Thus, for the comprehensiveness of information gathering, emphasizing the significance of a cross-platform perspective becomes evident when analyzing public perceptions derived from social media discourse[25]. This approach ensures a more nuanced understanding of user behavior and the complex interplay of factors influencing their interactions online.

3   Conclusion

In conclusion, this literature review briefly synthesizes and discusses how schema theory functions in personal growth, cross-cultural communication, and discourses in social media platforms. Based on those pristine theoretical elaborations by Bartlett[6] and Piaget[3], some further extended theories were developed in the above different scenarios. Despite its wide-ranging use and influence in many realms, schema theory still has criticisms and limitations. Concerns encompass the universality and flexibility of schemas, the potential of leading to cognitive biases and stereotyping, and the potential of being influenced by cultural differences[10][26][27]. Moreover, in terms of social media platforms, there has not been more detailed explanations about how users should manipulate their social media platform schemas to have a better user experience in gaining and processing information. Hence, more further studies on aforementioned limitations are possibly required. Addressing these areas could provide valuable insights into refining the theory and its applications. By tackling these gaps, schema theory can continue to evolve as a robust framework for understanding cognitive processes and their implications across different domains. This will ultimately contribute to a deeper comprehension of human behavior and the development of strategies to enhance learning, communication, and social interaction in a complex and interconnected world. Such advancements will enable individuals to navigate and adapt to their ever-changing environments more effectively, fostering personal and societal growth.

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