Metaemotion and Metacognition in Second Language Classrooms

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Abstract

The emphasis in second language research has generally been on the role and functions of cognitive factors. Research on the impact of emotional factors and emotion regulation in second language learning context is scant. To address this gap, as an initial attempt, this article theoretically conceptualizes the role of emotion, metaemotion, and metacognition and its impact in second language learning. The article further discusses the unity of emotion and cognition in language processing and its advanced intellectual state of emotion regulation in facilitating second language learning. The article suggests that educators and researchers need to focus their attention on emotion regulation to address the emotional challenges learners encounter in various stages of learning. The article argues that understanding the students' emotions and promoting emotion regulation in second language classroom is a move towards a learner-centred approach in the language teaching paradigm.

Keywords: Emotion, emotion regulation, metaemotion, metacognition, perezhivanie

Introduction

The process of second language learning involves an individual's emotional and cognitive states of mind. In the field of second language teaching and learning, numerous studies have examined the cognitive factors in learning/acquisition, and often ignored the emotional concepts. Research on emotion in second language learning concentrates on the constructs of 'affect' (Chastain, 1976; Lozanov, 1979), 'anxiety' (Tremblay & Gardener, 1995), and 'motivation' (Dörnyei, 2001 & 2014). Other

emotions such as pride, joy, interest, hope, sadness, anger, fear, shame, and happiness, are minimally addressed. In addition, the studies that deal with the unity of cognition and emotion in relation to metacognition and metaemotion, and its role in second language learning and teaching are relatively scant, especially in the Indian context. To address this gap, there is a drastic need for extensive empirical research in the field of emotion in second language classrooms. As an initial attempt, this paper theoretically conceptualizes the role of emotion, metaemotion, and metacognition, and its impact in second language learning.

Learner-centred Approach

Understanding students' emotions in second language classroom is a move towards learner-centred approach. The learner is central in all learning environments and his/her emotional state in that context determines his/her performance. If the teacher understands learners' emotional state and its cause, it will be helpful in adapting necessary changes in teaching methods and materials. Learners' emotional response depends on how they have sensed the learning content, teacher's response, peer activities, and benefits of the learning content. Focusing on learners' emotion in the second language environment helps to identify why some learners have less intrinsic motivation which affects their cognitive functions. This learner-centred teaching practice considers learners' emotional construct as one of the determinants of success. Pekrun and Linnenbrink-Garcia (2014) regard the classroom as an emotional place and Hargreaves (2001) treats teaching as an emotional practice where emotions are of critical importance for academic achievement. Emotions are socially and culturally derived and along with cognition, they mediate learning and outcome (Imai, 2010). Exposure to new language structure, new culture, new learning environment, peer pressure, feedback, and teacher attitude creates both positive and negative emotions. If the learners feel satisfied and are able to manage the emotional constraints in the second language environment, their intrinsic motivation becomes higher and they can channelize the negative emotional state into positive action. It is also essential to investigate how some learners are efficient in handling their emotions and the emotive strategies they employ for successful learning. Emotions influence decision-making in the learning contexts (Day, 2004); based on the occurrence of emotion, learners decide whether they can execute the task or avoid the situation. If the teacher fails to

understand and respect the learners' emotion and focuses only on the cognitive functions, it effectively makes the learners learning machines. In such a case, the learners do not feel any personal connect with the learning environment and show less interest in continuing the course. Barker (2017) argues that if we "remove people's emotional connection to their work and treat them merely as machines that produce effort, its soul killing" (p. 87). It is the need of hour in second language research to make a paradigm shift within learner-centred methods by directing concern towards learners' emotions and emotion regulation strategies for pleasant and effective learning experience.

The Construct of Emotion in the Human Brain

Neuroscientists have found that multiple areas of the brain participate in simple memory tasks. When we are exposed to or experience strong emotions, millions of neurons become active (Palombo et al., 2016). Cazolino (2013) identifies that "supportive, encouraging and caring relationships stimulate students' neural circuitry to learn, priming their brains for neuro-plastic processes" (p. 17). The processing of emotions first happens in the amygdala which is involved in the emotional computations of the brain (Bloom & Beckith, 1989). The processing of language and memory is associated with left-hemisphere and hippocampus activity (Kent-Udolf, 1984). The connection between amygdala-hippocampus controls working memory and its other related processes associated with the emotional significance of a stimulus and also decides what gets stored in the long-term memory (LeDoux, 1989).

Continuous distressing emotional experience interrupts brain function and effects the working memory (Day, 2004). Further, it disrupts thoughts and actions by sticking on that emotion alone (Gross & Thompson, 2007). Emotions activate working memory, only if they occur under right circumstances (Pekrun, 2006). In relation to this idea, Immordino-Yang (2016) postulates, "Emotions act as a kind of 'rudder' for cognition, one that drives the direction of our thinking and also alters our cognitive processes in ways that are sometimes productive and sometimes just opposite" (p. 33). Our brain can identify the emotional and non-emotional stimulus and also predicts the exact nature of the emotional stimulus before initiating the response (LeDoux, 1989).

Emotional Memories in Second Language Environment

Emotional memories influence brain functions and "motivate important regulation attempts, most of which involve communication and social interaction" (Rimé, 2007, p. 467). In the second language learning environment, learners' experiences are stored as positive or negative emotional memories in the cognitive mechanism. The constituted emotional memories influence the activities of working memory. When the learners find the present situation is similar to the previous one, these stored memories are activated, remembered, and ready to apply the same action. Such emotion transfer occurs due to prior experiences, and results in the employment of prior emotions to new situation (Parkinson & Simons, 2009; Gross & Thompson, 2007).

Metaemotion (Thinking about Emotion) in Learning Contexts

The concept of Metaemotion was first advocated by Gottman et al. (1996) in their research on family therapy. They conceptualize metaemotion as "emotion about emotion" and Metacognition as "cognition about cognition". Metaemotion in the learning environment predicts and controls the future emotions. It enables the learners to be aware of their current emotion, to monitor the emotional state, to plan for strategies to be applied, and to evaluate the outcome in order to foster the learning process. It increases learners' emotion regulation ability and helps them in understanding their own selves. Mitmansgruber et al. (2009) explain metaemotion as emotional reactions about one's 'emotional self'. Metaemotion facilitates learner autonomy in the second language classroom and enables learners to take responsibility for their success.

Metacognition (Thinking about Thinking)

Metacognition can be termed as thinking about thinking, self-regulation, self-monitoring, and self-awareness by researchers. Learners' understanding of the situation increases their cognitive function and makes them perform the language in an effective way. Their awareness of the context and its related emotions helps them to select and monitor their expressions in a positive way; because "whatever the situation, its influence depends not only on the nature of the situation itself, but also on the extent of the child's understanding and awareness of the situation" (Vygotsky, 1994, p. 343). Understanding and awareness are

metacognitive skills that are necessary for the learners to regulate their emotional responses. Metacognitive experience enables learners to choose appropriate cognitive function as a regulation strategy. Flavell (1979) states that "any conscious cognitive or affective experience that accompany and pertain to any intellectual enterprise" (p. 906) is a form of metacognitive knowledge.

Perezhivanie—Unity of Cognition and Emotion

Learners encounter different emotional experiences throughout the learning process. These emotional experiences interact with cognition and determine the cognitive function in relation to the learning context or environment. Vygotsky (1994) argues "the emotional experience *Perezhivanie* arising from any aspect of his environment determines what kind of influence the situation or the environment will have on the child" (p. 339). The word *Perezhivanie* has its root in the two Russian words *pere* (thought) and *zivat* (to live). In everyday context, Perezhivanie is explained by Vasilyuk (1992) as "the direct sensation or experience by the subject of mental states and processes" (p. 9). In relation to the unity of cognition and emotion, Vygotsky (1994) proposes "any event or situation in a child's environment will have a different effect on him depending on how far the child understands its sense and meaning" (p. 343). It can be interpreted from the above discussion that an interconnectedness exists between emotion and cognition. This integrated aspect in brain function increases self-regulation and control over how learners perform in a situation. Emotion and cognition conjointly and equally contribute to the control of thought, affect and behaviour. Vygotsky (1987) sees emotion and cognition in socio-cultural perspective and explains that we observe and internalize knowledge from the society through language and it mediates our behaviour. In second language classroom, learners' limited exposure to target language creates difficulty in understanding the language structure. It creates negative emotions and learners tend to develop anger and hate towards the language and the learning environment. The learners think that it is a great struggle for them to cope with language learning process and the emotions it creates during the process. Vygotsky (1987) suggests that without struggle there is no learning; language learning is not just a cognitive struggle, it is a united struggle of cognition and emotion.

Emotional Contexts in Second Language Classroom

Learners react to the learning environment and its emotional stimulus. Prior (2019) discusses, "any emotion can be facilitative or restrictive, motivating or demotivating, adaptive to maladaptive. To fully engage with emotion in language research and teaching requires a focus on context and a willingness to simultaneously embrace 'joy' as well as 'pain'" (p. 522). Campos et al (2004, p. 381) claim that the context is emotionally significant if:

1. It is aligned with the individual's goals

2. It will result in pleasure or pain (hedonics)

3. The reaction of others as expressed through emotional communication (facial expression, body language, reactions, language etc.) informs the individual of cultural values and expectations

4. It has relevance to past experiences, including parent child interactions and socialization and assimilation experiences

The teachers must be aware of the sources and contexts which create negative emotions in the second language classroom. Teachers can modify the situations that generate negative emotions, and try to create an atmosphere for positive emotions. In the second learning environment emotions arise due to the following reasons:

Negative Emotions

- Forceful learning atmosphere
- Limited exposure to target language
- Limited knowledge of target language
- Being afraid of being laughed at by others
- Difficulty in understanding what the teacher says
- Comparisons with proficient peers
- Negative feedback from the teacher
- New learning situation
- Constraints in transforming thoughts into words
- Performing tasks under time constraint
- Problems in recollecting ideas
- Feeling ignored in the classroom

- Too many corrections in language production

Positive Emotions

- Learning the target language with own interest
- Conducive learning atmosphere
- Encouraging words from the teacher
- Positive feedback from the teacher
- Real life tasks
- Similar learning situations
- Performing tasks without time constraint
- Feeling recognized
- Receiving acknowledgement for good performance
- Facilitating teacher action
- Peer encouragement

Shao et al. (2020) argue that negative emotions may be turned into motivational fuels, depending on how L2 learners make sense of these emotions and manage their emotionality to their advantage rather than succumbing to it (p. 4).

Metaemotion as Emotion Regulation in Second Language Classroom

In the second language classroom, both teachers and students manifest positive activating and negative deactivating emotions (Pekrun, 2006). Positive emotions facilitate teaching and learning (Dewaele & Afawazan, 2018 as cited in Richards, 2022). On the other hand, negative emotions hinder performance. Teachers and learners need to be aware of their emotions and have to learn to handle them effectively. Day (2004) opines that understanding and managing one's own and others' emotions is a central part of a teacher's work. Regulating one's own emotion is not an easy task because the same response can offer comfort in one situation and aggravate another (Gross & Thompson, 2007). Learners who are able to understand their emotions can regulate their emotional responses.

According to Gross (1998), emotion regulation is "a process of an individual's awareness of which emotions they have, when they have them, and how they experience and express it" (p. 275). He also elucidates that emotion regulation can be achieved through situation selection, situation modification, attentional deployment, cognitive

reappraisal, and response modulation. Situation selection can be defined as a person's awareness of avoiding certain people, places, or activities that may prompt negative emotions (Gross, 1998) and "it involves taking actions that make it more or less likely that we will end up in a situation if we give rise to desirable or undesirable emotions" (Gross & Thompson, 2007 p. 11). Situation selection is one of the effective strategies that acts in the preferred situation and is about making decisions regarding one's own emotions (Thuillard & Dan-Glauser, 2017). In the first process, people evaluate the available options and select the most positive and beneficial one. In the second phase, they regulate and make decisions about their own emotion and the required cognitive function that the situation demands. Situation modification on the other hand shapes and monitors the individual's situation. This strategy increases the motivation level and decreases the negative emotional impact. It regulates the emotions without actually changing the environment. This strategy modifies external characteristics of the situation that causes emotion. In the second language classroom, teacher can apply situation modification as a teaching strategy to modify the negative situation as congenial learning environment.

Attentional deployment deals with how individuals monitor their attention in a particular situation in order to manage their emotions. It is one of the first emotion regulatory processes that happen in emotion development and has to be used from infancy through adulthood, particularly when it is not possible to change or modify our situation (Rothbart et al., 1992). Borkovec et al. (1995) have argued that when attention is focused on possible future threats, it increases low-grade anxiety and decreases the strength of the negative emotional responses. Response modulation arises after the occurrence of emotion. This strategy enables individuals to modify their thoughts, behaviour, physiological expressions, feelings, and mood of the emotional construct.

Cognitive reappraisal refers to cognitive reframing of emotional stimuli that enhances the intensity, length and expression of an emotion (Gross & John, 2003). This strategy can help in modifying physiological and experiential response. Cognitive theories of emotion finds that individuals' emotional responses to specific event or situation occur in response to their appraisal of the event (Beck et al., 1983). Cognitive reappraisal or cognitive change significantly correlates with well-being and interpersonal functioning (Gross & John, 2003). Mastery of these

emotion regulation strategies promotes cognitive capacity necessary for emotion regulation.

Pedagogical Significance of Emotions

Sometimes, outwardly we connect emotion to the specific situation, but the actual root cause may be something else (Koole & Kuhl, 2008). Emotions are interactional in nature (Francis, 1997) and their relationship with the situation determines the meaning of the situation. Continuous distressing emotional experience interrupts brain function and especially affects the working memory (Day, 2004). Further, it disrupts the thoughts and actions by sticking on that emotion alone (Gross & Thompson, 2007). Sometimes, even the negative emotion of boredom may take a positive turn that shifts the learners' attention away from the task or situation and motivates them to find something interesting and increases their creativity. This is possible if the learners are aware of their own emotions and the consequences. The learners' self-concept and perception are a combination of cognitive beliefs and emotional experiences. Learners' past learning experiences greatly have an impact in creating both positive active emotions and negative deactivating emotions. Learners' emotional experiences are stored as self-concept in their memory as a result of the interaction of cognitive, affective, social and environmental factors in the learning contexts.

Jennings and Greenberg (2009) recommend that teachers promote "prosocial and cooperative behaviours through establishing warm and supportive relationships and communities" (p. 506). This article has mapped the theoretical underpinnings of metaemotion and metacognition in teaching-learning; there is need and scope for empirical research to be conducted in the area in future. Teachers should pay attention to learners' emotions, and value their emotional responses, in order to help them apply required metaemotional strategies that facilitate metacognitive functioning.

Conclusion

As suggested by Dörnyei (2009) and Dörnyei and Ryan (2015), second language research must incorporate the study of emotions and its role in attaining mastery in that language. Positive emotions promote psychological growth, intellectual development and improved well-being (Shao et al., 2020). For learning "to be effective, teachers must connect

with and care for children with warmth, respect and trust" (Bergin & Bergin, 2009, p. 150). Cultivating positive emotions and regulating its emotional responses in diverse contexts is a metaemotional activity which is essential for academic achievement and for a move towards intellectual growth. Teacher's approach to influence the learners' emotions by creating congenial learning environment decreases the possibility of negative emotions. Teachers and students must co-construct a supportive learning environment by adapting and understanding each other's emotional states. These kind of positive resonances carry "unconscious incentives that shape subsequent behaviours" (Henry & Thorson, 2018, p. 220). Emotion regulation develops academic competence and the students can be equipped to face the challenges in various social, cultural, and educational contexts.

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