The impact of Academic Emotions on Language Learning in the university context: a Narrative Review

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Abstract— Emotions affect learning in general and language learning (LL) in particular since they contain useful information that guides human cognition, behaviour and motivation. As such, emotions experienced in an academic setting affect the learner in a variety of ways. University students are frequently affected by emotions as a result of the difficulty in adjusting. This condition is observed as having impacted on LL, particularly on English, which has now become a very decisive factor in academic learning and achievement in Sri Lanka. The study aimed at identifying the wide array of emotions that are experienced in academic settings, their properties, the theoretical underpinnings, sources, functions and the impact of positive academic emotions (PAE) and negative academic emotions (NAE) on LL. It was also expected to identify the research trends in emotions and LL over the decades. This article is composed in the form a narrative review for which 30 studies on emotions and learning during the past 16 years were explored. A narrative inductive method was utilized to identify patterns across gathered data and to condense varied secondary data gathered from extensive reading into a summary format. The information found were analysed thematically in relation to the research questions. The findings suggest that, it is very difficult to set clear cut rules to prove positive emotions (PE) foster and negative emotions (NE) hinder LL for they serve different useful purposes. The impact of emotions on LL should therefore be further analyzed theoretically and investigated empirically pertaining to different contexts. There also exists a need to empirically test the existing limited theories on emotion to figure out the range of their validity within diverse contexts. The major implication derived from the study is that, language teaching in Sri Lankan universities, where English is taught as a second language (L2), is quite a mindful undertaking which should be planned and carried out with great care bearing in mind the strong relationship between emotions and learning.

Keywords— Emotions, Academic Emotions, Learning, Foreign & Second Language Learning

I. INTRODUCTION

Individual variables have widely been known and proven to have a major impact on human beings. Among them, affective variables impinge strongly on everything people do and particularly on learning. This study revolves on the idea that, “emotions are fundamental to learning” (Hinton, Miyamoto, & Della-Chiesa, 2008 as cited in Ismail, 2015, p: 30) and contain useful information that can regulate cognition and behaviour (Bless & Fiedler, 2006; Izard, 2002 as cited in Valiente, Swanson & Eisenberg, 2012). Research has demonstrated that emotions play a significant role in the process of learning and academic achievement (Randler, Glaser-Zikuda, Vollmer & Mayring, 2011 as cited in Ismail, 2015). However, research on emotions in learning is still scarce (Imai, 2010; Méndez López, 2011; Pekrun et al., 2002; Stuchliková et al., 2013). Moreover, the different approaches and empirical studies on the interplay of learning and emotions apparently correspond to each other only to a low extent (Hascher, 2010). Pertaining to LL, the research base on the impact on emotions is even lesser. Scovel (2000) (as cited in Arnold, 2009) notes that emotions might well be the factor that most influences LL, but, are the least understood by researchers in Second Language Acquisition (SLA). This might be due to the fact that affective variables are difficult to measure. Damasio (1999) wrote (as cited in Garrett & Young, 2009) emotion was too subjective, elusive, vague and not trusted in the laboratory. Nonetheless, many scholars including Arnold (2009); Dulay, Burt & Krashen, 1982 as cited in Krashen(1992); Gardner (2010); Gardner & MacIntyre (1993); Goetz & Hall (2013); Henter (2014); Ismail (2015); Méndez López (2011); Méndez López & Aguilar (2013); Pishghadam, Zabetipour, & Aminzade (2016); Siročić (2014); Stuchliková et al. (2013) have investigated that affect plays a significant role in LL.

The present study was conducted to investigate the impact of academic emotions on LL. Emotions experienced in an academic environment, for instance, enjoyment of learning, pride of success or test-related anxiety, to name a few, can be termed as ‘academic emotions’ (AE) (Pekrun et al., 2002). The term can precisely be defined as “the emotions that are directly linked to academic learning, classroom instruction, and achievement” (Pekrun et al., 2002, p: 92). As Pekrun et al. (2002) suggested, the sphere of academic emotions may include students’ achievement emotions experienced in academic settings, but goes beyond emotions relating to
success and failure by also covering other emotions relating to instruction or to the process of studying (see Table 1).

Within the university context, knowing how to regulate emotions properly helps the process of learning in general and Second Language (L2) and Foreign Language (FL) learning in particular. Learning English as a L2 or a FL has presently become a compulsory study area in the universities and knowing how to communicate appropriately in English has become a very decisive factor in academic achievements. Besides, it is commonly observed that the university students encounter a lot of difficulties when expressing themselves in English during lectures, presentations, viva voce and in written assignments and examinations as well. This is an effort to identify how these problems are affected by the range of emotions experienced by students.

Méndez López (2011) has claimed FL learners are prone to experience a range of emotions and feelings due to internal and external factors. A major problem encountered by university students is that they are frequently subjected to emotional upheaval due to the difficulty in adjusting (Pancer et al., 2000). This difficulty is caused by various reasons. Significant numbers of first-year students report moderate to high levels of loneliness (Cutrona, 1982 as cited in Pancer et al., 2000) and homesickness (Fisher & Hood, 1988 as cited in Pancer et al., 2000) and many report difficulties keeping up with their academic work (Levitz & Noel, 1989 as cited in Pancer et al., 2000). It can also be observed that students are emotionally affected as a result of personal matters such as; forming new relationships, relationship break-ups, family problems, financial issues and stress.

Hence, the review was composed exploiting the important findings of 30 previous studies on learning and emotion carried out from year 2000 to 2016 in order to explore the impact of AE on LL with a special focus on the university context. To serve this purpose, the study aimed at identifying different emotions and properties of emotions that students experience in academic settings, the theoretical underpinnings, sources, functions and the impact of PAE & NAE on LL. It was also expected to identify the research trends in emotions and LL to present suggestions for future research.

Despite the importance, in Sri Lanka and elsewhere, very limited number of research has been published on the impact of AE on LL. It is believed that this review will be an important effort that would contribute to the existing body of knowledge. It will also provide insights to language teachers in order to better assist the students by understanding and regulating learners’ emotions in fostering learner-friendly classrooms to enhance LL.

II. METHODOLOGY

Emotions in educational settings are said to be context-dependent and subjective responses to a specific situation, object or person (Do & Schallert, 2004; Hascher, 2010). Therefore, it is very unlikely that emotions are easily measurable, the causes of emotions are easily identifiable and the results of a study on emotions are easily generalizable. This nature of emotions made the present study to be based on a qualitative approach which gave new insights into the impact of AE on LL. As Jeon et al. (2010, p:02) defined, qualitative studies are those aiming to “uncover and understand a phenomenon, a process, or perspectives and worldviews of people, with or without a particular theoretical orientation, using typical qualitative methods for sampling, collecting, analysing, and interpreting data”. Besides, qualitative research is especially important in the behavioural sciences where the aim is to ascertain the underlying motives of human behaviour through which various factors that stimulate people to behave in a particular manner or that make people like or dislike a particular thing can be analysed (Kothari, 2004).

The present study takes the form of a narrative review which is a qualitative analysis of existing research on a selected topic. “Narrative is suggested as a knowledge-generating method and its underlying hermeneutic approach is defended as providing validity and theoretical structure” (Jones, 2004, p:95) and according to Pavlenko & Lantolf (2000) (as cited in Garrett & Young, 2009) in recent years narrative genre per se has gained increasing stature in Psychology, Sociology, Sociolinguistics, and Anthropology as legitimate and rich data sources for a variety of investigations including that of narrative construction of selves and realities.

A narrative inductive method was utilized to review research articles where a rigorous process of systematic reading of research articles and coding of the information gathered was done to identify patterns across gathered data. The information found were analysed thematically in relation to the research questions. Thematic approach has been demonstrated by Braun & Clarke (2006) as a flexible approach that can be used across a range of epistemologies and research questions to analyse qualitative data. The purposes for using an inductive approach were to condense extensive and varied secondary data into a summary format and to establish clear links between the research objectives and the findings derived from the data (Thomas, 2006).

Composing a narrative review on the impact of AE on LL enabled the researcher to comprehend more about the topic and to get a deeper understanding of the range of emotions that are common in academic settings. Additionally, it helped identify the methods that had been
utilized by researchers to study the impact of emotions over the past years. In connection with the research questions, the study apparently uncovered the vast array of AE experienced by the university students, the theories of emotion, the sources & functions of AE and the effects of PAE & NAE by adapting the said methodology.

III. RESULTS, DISCUSSION AND CONCLUSION

Though emotions play a major role in learning, the study revealed that, only after the acceptance of the role of affective factors in SLA, the impact of emotions on LL has been identified as an interesting area for research (Mihaljević Dijunović & Legac, 2008 as cited in Siročić, 2014). However, a majority of the recent studies related to the impact of emotions seemed to be largely found on learning a FL than a L2. For example, out of 15 studies found on affect in FL and L2 learning, 10 studies were found on FL learning, 04 were found on L2 learning and only 01 found on both. Nevertheless, all the studies witnessed that affective variables play a significant role in FL and L2 learning. Hence, it was noted that, whatever the language context it be, the impact of emotions on learning is significant.

This section of the review presents, elaborates and discusses the results of the study based on different themes: properties of emotion, theories of emotion, emotions experienced in academic settings, sources & functions of AE, the impact of PAE & NAE on LL and past research trends. It will also provide concluding remarks and a glimpse of possible areas for future research.

A. Properties of Emotion

It was found that, the major problems encountered by the researchers of emotion in learning can be attributed to the theories of emotion and the confusion about the definition of ‘emotion’ (Hascher, 2010) since over 100 different definitions of ‘emotion’ (Kleinginna & Kleinginna, 1981 as cited in Hascher, 2010) and many similar terms that are often used interchangeably like ‘feeling’, ‘mood’, ‘affect’ or ‘affective reaction’ exist (Davidson et al., 2003 as cited in Hascher, 2010). However, it is commonly believed that emotions are intense, short-lived affective states to particular stimuli and usually have a cause and clear cognitive content (Do & Schallert, 2004; Hascher, 2010; Imai, 2010). They are portrayed as ‘ways of being’ and ‘holistic episodes’ (Schutz et al., 2006, p. 345 as cited in Hascher, 2010), observed, felt in the body, and can be expressed, disguised towards others but rarely towards oneself (Hascher, 2010). It was also observed that many identify the affective component as a subjective and individual experience of a person (Do & Schallert, 2004; Fehr & Russel, 1984 as cited in Imai, 2010; Hascher, 2010), conversely, Imai (2010, p. 279) argues that “emotions are not just an individual’s private inner workings in response to external stimuli but are socially constructed acts of communication that can mediate one’s thinking, behaviour and goals”.

It had further been examined that emotions have multiple aspects and contain multiple components. The multiple aspects of emotions: physiological, psychological, behavioural (Schütz et al, 2006 as cited in Hascher, 2010) and social aspects (Imai, 2010) lead emotions to contain multiple components, usually five: the affective, cognitive, motivational and physiological components which are significant in the process of teaching and learning (Scherer, 1987; Izard, 1994 as cited in Hascher, 2010 Stuchliková et al., 2013). Additionally, there is a strong neurobiological support for the importance of affect for learning (Arnold & Fonseca, 2009). It was found that from the perspective of neuroscience, affect is a part of cognition (Schumann, 1994 as cited in Arnold, 2009) and much of the affect that humans generate is likely to be non-conscious (Davidson, 2003).

B. Theories of Emotion

The importance of the close association between learning and emotion is not at all new but was already pointed out by the early Greek philosophers, influential psychologists and by innovative educators in the history (Hascher, 2010). In spite of the obvious relationship between learning and emotion, very little is known about it. For decades, learning was mainly analysed in terms of cognitive or motivational aspects to gain a deeper insight into the complex area of learning, consequently, affective processes were ignored when forming learning theories (Hascher, 2010). However, theories and models introduced from recent research on emotions in learning such as, control-value theory of achievement emotions (Pekrun et al., 2007), socio-cognitive model of the development of academic emotions (Goetz et al., 2006), the socio-educational model (Gardner, 2010), expectancy-value theories of emotions (Turner & Schallert, 2001 as cited in Pekrun et al., 2007) bear witness to the emerging attention towards emotions associated in the process of language teaching and learning.

Nevertheless, emotional diversity implies that theory-driven approaches to students’ emotions which restrict the range of emotions considered for theoretical reasons may be in danger of missing important parts of students’ affective life (Pekrun et al., 2002). Some of those approaches to emotions like “control-value theory of achievement emotions by Pekrun (2000), models addressing the effects of emotions on learning and performance (Fredrickson, 2001; Pekrun, 1992b; Pekrun et al 2002a; Zeidner, 1998, 2007), transactional theories of stress appraisals and related emotions (Folkman & Lazarus, 1985), attributional theories of achievement emotions (Weiner, 1985) and expectancy-value theories of emotions (Pekrun, 1984, 1988, 1992a; Turner & Schallert,
also suggested that they are limited only to particular emotions” (as cited in Pekrun et al., 2007) as opposite to the wide array of emotions experienced by learners in academic settings.

C. Emotions Experienced in Academic Settings

It was found that, theoretically, students experience a rich diversity of ‘self-related, task-related, and social’ emotions in academic settings (Pekrun et al., 2002) although most other emotions except anxiety have been neglected in research. According to (Pekrun et al., 2002), emotions that are experienced in academic settings can be summarized into the list of emotions depicted in Table 1.

Table 1. The Domain of Academic Emotions: Examples

<table>
<thead>
<tr>
<th>Emotions in Academic Settings</th>
<th>Positive</th>
<th>Negative</th>
</tr>
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<tbody>
<tr>
<td>Process of studying (instruction)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prospective (Outcome expectancy)</td>
<td></td>
<td></td>
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<tr>
<td>Retrospective (when success or failure occurred)</td>
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<tr>
<td>Social</td>
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Identifying and capturing different types of emotions experienced by students has been a challenging endeavor. Those emotions engendered in educational contexts are said to be a result of the evaluation students make of particular situations while learning (Pekrun, 2000 as cited in (Méndez López, 2011). “These evaluations are influenced by previous experiences, the social context and their personal goals” (Pekrun et al., 2002; Sansone & Thoman, 2005 as cited in Méndez López & Peña Aguilar, 2013, p. 112). This is of particular relevance to the learning of a FL or L2 since students mostly come with previous positive or negative experiences; in this case, the English language learning experiences in schools or private tuition classes, which are sometimes very different from the new learning environment; pertaining to the present study, the English language learning experience in the university and students. The students in a university may also have a diversity of motives for engaging in FL learning.

The interplay of all these variables in one emotional event during classroom instruction may have different meanings for individual students and cause diverse effects on their motivation (Do & Schallert, 2004) and LL.

D. Impact of PAE and NAE on Language Learning

PE have long been perceived and proved as facilitative while NE have been considered imposing negative impact on learning. For example, as cited in Bryan, Mathur & Sullivan (1996, p: 154), “positive affective states have been found to increase memory on various tasks (Potts, Morse, Felleman, & Masters, 1986); mastery of a discrimination task (Masters, Barden, & Ford, 1979); altruism (Isen & Levine, 1972); and child compliance (Lay, Waters, & Park, 1989)” whereas negative affective states, have been found to produce “low-effort processing of information and the use of less complex semantic processing strategies (Ellis, Thomas, & Rodriguez, 1984) and lower cognitive processing effort” (Leight & Ellis, 1981 as cited in Bryan et al., 1996, p: 154). Moreover, with his metaphor of the affective filter, Krashen (1992) warned about the emotional variables that may interfere with the reception and processing of comprehensible input while learning, thereby, highlighting the importance of finding ways to establish a positive affective climate within class rooms.

Recent research findings also manifest that positive affect can provide invaluable support for learning just as negative affect can close down the mind and prevent learning from occurring altogether (Arnold, 2011). As cited in Simonton (2016), enjoyment and performance has a positive association (Chen et al., 2008; Pekrun et al., 2009) and similarly, it has been found that when students learn content that is perceived as controllable and is valued, it is likely to evoke feelings of enjoyment in the learner (Pekrun, 2006). This implies the importance of using content-based learning approach as a strategy for getting students interested in the material. As Chomsky (1988) said, about 99% of teaching has to do with getting students interested in the material (Arnold, 2009). These findings provide important implications to material developers in the Sri Lankan university context.

It had further been found that, affectively positive environment puts the brain in the optimal state for learning: minimal stress and maximum engagement with the material to be learned (Arnold, 2009). Fredricks et al., 2004; Fredrickson, 2001(as cited in Simonton, 2016, p: 09) have discovered that “experiences of positive emotions such as enjoyment trigger higher levels of student engagement whereas boredom can facilitate feelings of alienation and disengagement”. However, the findings of a study conducted by Pretz, Totz & Kaufman (2010) did not support the general conviction which was also their hypothesis; implicit learning would be enhanced by positive mood and intuitive cognitive style. Moreover, Méndez López & Peña Aguilar (2013) claim that students embraced NE as learning opportunities because they referred to these negative events in class as a way of
understanding what they were doing wrong and how to improve on that particular skill. Therefore, it is very difficult to set clear rules to prove PE foster learning and NE are detrimental (Bless & Fiedler, 1999 as cited in Hascher, 2010).

It is obvious that any classroom situation is influenced by the relationship between learning and affect but with LL this is especially crucial since the learner’s self image is more vulnerable when he or she does not have the mastery of language (Arnold, 2011). Therefore, being fully aware of the emotional state of the learner and strategically steering the classroom environment in order to enhance LL should essentially be facilitated by the language teacher. This is very important in the Sri Lankan university context where English is taught as a L2.

E. Sources and Functions of Emotions

Personality of the learner, day of the week, time of the day, weather, stress, age, sleep, exercise, social activities and gender can be generally identified as sources of emotions (Hume, 2012). However, three major proximal sources of emotions—genetic dispositions, physiological processes and cognitive appraisals, have been identified pertaining to an individual (Pekrun et al., 2002). Since AE are domain-specific variants of emotions in general, these three main sources should be applicable for this class of emotions as well. Although genetic dispositions and physiological processes of students are beyond the control of language teachers, emotionally relevant appraisals of students may be shaped by their instructional and social environments, implying that research on appraisals and their environmental antecedents may help in designing measures of prevention, therapy and optimization (Pekrun et al., 2002). With regards to LL, learning context, situation and materials also carry emotional potential (Hascher, 2010).

Emotions serve many functions in LL. Darwin (1965) argued that emotions developed over time to help humans solve problems and they motivate people to engage in actions important for survival. All emotions, both positive and negative, serve useful purposes (Hume, 2012). PE accelerate assimilation to incorporate new information into existing knowledge whereas NE accelerate accommodation to take in new information with less regard for what is currently known (Bless & Fiedler, 2006). Emotions assist accuracy and efficiency of thinking processes; help learning and recalling memory, facilitate complex cognitive functions that require flexibility, integration, and utilization of cognitive material; form perceptions and influence people to behave in particular ways (Bryan et al., 1996). Schürer-Necker (1984, 1994) (as cited in (Hascher, 2010), investigated that for persisting with a text, emotions like joy, surprise or even disgust were important, thus, content needs to be emotionally touching to be processed and remembered well, which is a major implication for the curriculum developers and material writers.

F. Research Trends in Affective Factors

When considering research trends in affective factors, anxiety; particularly test anxiety, is the only emotion that has extensively been researched and continuously attracted the researchers over the years (Hascher, 2010; Goetz & Hall, 2013; Pekrun et al., 2002; Schutz & Pekrun, 2007). It was found that out of 1514 studies conducted on emotions in learning and achievement, during 1974–2000, approximately 80% of studies were related to anxiety (Pekrun et al., 2002) (See Figure 1). Apart from test related anxiety, language anxiety has also been researched far more than the other emotions. For example, Pishghadam et al. (2016); Henter, (2014); Siroićić, (2014) have investigated on language anxiety which has been found as “negatively affects willingness to communicate and quality of performance” (MacIntyre & Gardner, 1991, 1994; MacIntyre, Noels & Clément, 1997 as cited in Siroićić, 2014, p: 07). Investigations on PE were remarkably less and examining NE has thus been more prevalent among researchers (Pekrun et al., 2002).

The findings further revealed that, at present, there is a tendency among researchers to ascribe phenomena such as individual variables, multiple intelligences, emotional intelligence, collaborative learning and student engagement into research related to emotions, which is a positive sign. Additionally, it was uncovered that both quantitative and qualitative methods were used to study emotions in academic settings. The most prevalent quantitative methods found were hypotheses testing (Pekrun, et al., 2002) and co-relational studies. Introducing different emotion scales to measure emotions was also observed as common. On the other hand, case studies were popular in qualitative studies. Personal narratives of L2 learners, either in the form of the diary studies or in the more structured form of learner memoirs,
also seemed to have recently received increased attention and a trusted source to gather qualitative data on emotional experience (Block, 2003; Kramsch, 2003; McGroarty, 1998; Pavlenko, 2001; Pavlenko & Lantolf, 2000; Schumann, 1998; Young, 1999) (as cited in Garrett & Young, 2009). Laboratory-based experimental research on mood effects also were used to measure emotions (Pekrun et al., 2002).

Grateful to the research findings in the literature, today, interest in affect has taken on even greater importance for language teaching practices. For example, the Common European Framework of Reference for Languages includes ‘Existential Competence’ which is composed of the elements of the affective domain (Arnold, 2009). Moreover, “the current concept of learner-centered teaching also links with a concern for affect in the classroom” (Arnold, 2009, p. 146).

It has been ascertained from the findings that “supporting students’ emotions in language learning classrooms can help students to cope with feelings inherent to language learning experiences and to the development of a positive attitude towards themselves as language learners” (Méndez López, 2011, p:44). Pishghadam et al. (2016) have also emphasized the necessity of helping students manage, regulate, and control their emotions and feelings in language classrooms. As it was observed, “research has neglected when and why emotion is associated with academic success” (Valiente, Swanson & Eisenberg, 2012, p: 07), further research can be carried out to investigate the phenomenon.

In conclusion, it was discovered that emotions are fundamental to learning in general and LL in particular. Findings suggest that studies on emotion and learning were largely found on FL than on L2 and anxiety was the only emotion that was extensively tested while all the other emotions including positive emotions were neglected. Taken all together, there are a handful of limited but interesting theories on emotion which need to be empirically tested to figure out the scope of their validity within different contexts. It implies that it still remains as an open question as to how these theories fit into the realities of the university education. The major implication is that, since university students are frequently subjected to emotional upheaval due to various reasons, language teaching in universities, especially where English is taught as a L2, is a mindful venture which should be planned and executed with great care acknowledging the strong relationship between emotions and learning. It was also found that, it is very difficult to set clear rules to prove PE foster and NE hinder language learning for they serve different useful purposes. Therefore, the impact of emotions on LL should further be theoretically analyzed and empirically investigated pertaining to different academic contexts in Sri Lanka rather than interpreting them in general terms. For future research, an actual study to assess the impact of emotions in the Sri Lankan university context can be done to see whether the existing theories would be qualified. Further, conducting more research on the impact of positive emotions may also reveal certain uncovered aspects.

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