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二语学习情绪研究(栏目主持人:李成陈) 积极心理学(Positive Psychology,PP)是心理学领域的一个热门分支,以促进个体或集体的发展和幸福感为目标,呼吁实现从过去一贯关注心理缺陷到关注积极心理品质的转变。在二语习得领域,积极心理学的主要目标是提高语言学习者的幸福感,而情绪是幸福感的核心维度,关乎学习者个体身心健康,亦对个体表现具有明显的预测作用。拓展—建构理论(broaden-and-build theory)对不同情绪的作用进行区分,突显各种情绪在语言学习中的不同影响,打破了以焦虑为中心的情绪观,推动了二语学习情绪研究在国外蓬勃发展。但可惜的是,相关研究却鲜见于国内外语学术期刊。为与国际学界接轨,本专栏在积极心理学视角下,探讨我国外语学习者课堂内外的情绪体验、影响/相关要素及调节策略,由一篇综述和三篇实证论文构成。Jean-Marc Dewaele 和李成陈对二语学习情绪领域的理论、研究及实践进行梳理,从理论、主题和研究方法等方面提出建议,并为未来研究指出方向。两位作者呼吁从教育心理学领域引入控制—价值理论(control-value theory),该呼吁在其后三篇实证论文中均得到有力回应。韩晔和许悦婷采用个案研究方法,以书面纠正性反馈为例探究大学生二语写作学习的情绪体验及情绪调节策略。姜艳采用焦点式写作研究方法,考察影响大学生外语课堂愉悦的教师因素。李成陈基于问卷调查和英语测评,探究高中生情绪智力、外语课堂情绪(愉悦、焦虑及倦怠)与英语成绩之间的复杂关系。三篇实证论文所涉对象群体包括高中生到大学生,研究方法多样,理论视角新颖,情绪种类丰富,能为后续相关研究提供诸多有益启示和思路。时值全国新冠肺炎疫情防控的决战决胜之际,谨向奋战在抗疫一线的医务工作者和社会各界人士致敬!众志成城,积极战疫,勇夺胜利!

## Emotions in Second Language Acquisition: A critical review and research agenda<sup>1</sup>

Jean-Marc Dewaele Chengchen Li

**Abstract:** This paper critically examines the body of literature on emotions in second language acquisition (SLA). More specifically, the following topics are discussed: (a) the three phases of emotion research in SLA and their scope and topics, (b) the main underpinnings of emotion-related theories or assumptions in SLA, and (c) the methodological and epistemological diversity of emotion research in SLA. Finally, the article offers suggestions for further research and implications for L2 teaching and learning.

**Key words:** L2 learning emotions; Positive Psychology; second language acquisition; Foreign Language Enjoyment; Foreign Language Anxiety

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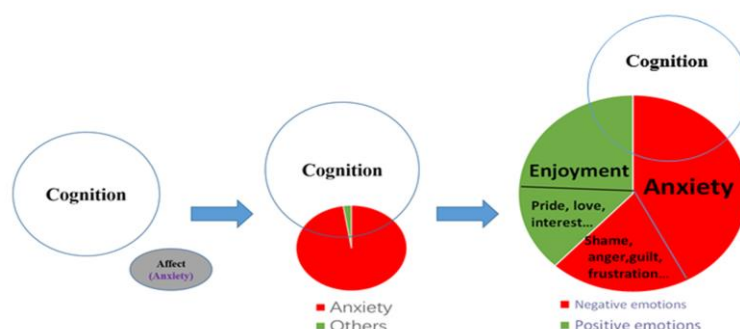
摘要: 本文从三个方面系统梳理二语学习情绪研究:(1)三个发展阶段及每个阶段的研究范围和热点;(2)主要相关理论及假设;(3)重要研究方法及不足。基于三个方面的回顾总结,文章对未来二语学习情绪研究、二语教学进行了展望,并提出相应建议。关键词: 二语学习情绪; 积极心理学; 二语习得; 外语愉悦; 外语焦虑 中图分类号: H319 文献标识码: A 文章编号: 1004-5112(2020)01-0034-16

## 1. Introduction

Scant attention had been paid to emotions in second language acquisition (SLA) research with the exception of anxiety (Dewaele & Li 2018). However, the arrival of Positive Psychology (PP) has encouraged researchers and practitioners to look beyond anxiety for a wide range of diverse L2 learning emotions. There has been an exponential increase in the number of emotion studies in the field of SLA in the past decade. The eye-catching topic of emotions could be easily found in refereed journals, books and conference proceedings, indicating that the field is reaching maturity, characterized by increased emotional granularity and methodological diversity. Its scope is also extending to language teaching from a range of epistemological positions. So far, relatively few researchers in China have adopted a PP perspective to study L2 learning emotions. Considering that China has the largest population of both L2 learners and teachers in the world, we feel the urge to draw the attention of L2 educators, practitioners and researchers in China to the fundamental role of emotions. Besides, our review of the main theoretical and methodological developments and the emerging trends in emotion research goes far beyond the Chinese context, and thus offers insights more globally. It is crucial for the emerging field of emotion research in SLA to critically discuss domain-specific concepts and methods, and to formulate future research questions on the connections between emotions on the one hand, and L2 learning and teaching on the other hand.

## 2. Three phases of emotion research in SLA

Research on emotions in SLA has moved from the periphery, with an overwhelming focus on anxiety, to a more central place, including a wide range of emotions. It could be divided into three broad phases (see Figure 1) based upon the major types of emotions studied in each phase.



**Figure 1** Three stages of emotion research in SLA literature

(Note: The figure is only meant to visualize general trends, with approximate proportions)

The first phase, roughly situated between the early 1960s and the mid 1980s, could be called **Emotion Avoidance Phase**, because the existence of emotions was not necessarily denied but it was considered as an irrational factor in language learning at a time when there was a clear preference for “scientific” cognitive factors (Prior, 2019). The second phase could be called the **Anxiety–Prevailing Phase**, situated between the mid–1980s and the early 2010s when there was growing acceptance that emotion and cognition are linked, and that emotion plays a fundamental role in language learning. However, the heavy focus on the single negative emotion of anxiety endured (MacIntyre 2017). The third phase could be called the **Positive and Negative Emotions Phase**. It emerged in the early 2010s when researchers became increasingly interested in the psychology of language learning, and the International Association for the Psychology of Language Learning was established. It heralded a new interest in both positive and negative emotions in language learning and teaching, influenced by PP (MacIntyre 2016). Learner (and teacher) emotions have been seen as the fuel of learning and teaching. Although these are slightly fuzzy chronological periods, they help to show how research on language learning emotions has developed, and how new trends in the literature of emotions in SLA have emerged.

In the Emotion Avoidance Phase, affective factors were generally considered as having only a marginal effect, while cognitive factors were seen as the engine of SLA (Prior 2019). The influence of the cognitive approach extended to L2 learning and teaching, and limited attention was paid to the affective dimension under the rubric of cover terms like “affect” or “affective variables” (e. g. Scovel 1978). Looking back at Gardner’s (1985) Socio–educational Model, the word “emotion” might be absent on the surface in this phase, but there were multiple traces of it, with the concepts “desire” to learn an L2, “attitudes” towards the L2, L2 teacher and course, and finally, L2 anxiety within and outside the classroom.

This phase was characterized by sparse and confusing foreign language anxiety studies in the so–called “Confounded Approach” (MacIntyre 2017: 11). More specifically, there was confusion surrounding the construct of “anxiety” and its measurement, which were not necessarily or consistently related to the specific domain of L2 learning. This further led to “mixed and confusing results” (Scovel 1978: 132) in the correlations between anxiety and foreign language learning, supporting the “facilitating and debilitating anxiety” distinction (Scovel 1978). In the landmark paper, Scovel (1978) reviewed the anxiety research and highlighted the need to define and measure both anxiety and anxiety–related language learning dimensions, sowing seeds for the next phase, namely the Anxiety–Prevailing Phase.

The Anxiety–Prevailing Phase roughly started with the Affective Filter Hypothesis (Krashen 1985) and the pioneering work on Foreign Language Classroom Anxiety (FLCA) (Horwitz et al. 1986). The concept “affective filter” was proposed as part of the internal processing system subconsciously screening input language based upon motivation, self–confidence and anxiety in L2 learning (Krashen 1985). It managed to remind researchers that the affective dimension played a role in SLA (Dewaele 2005),

although it remained in an underdog position in a field dominated by cognitive approaches. Horwitz et al. (1986:128) defined FLCAS as “a distinct complex of self-perceptions, beliefs, feelings and behaviours related to classroom learning arising from the uniqueness of the language learning process”. They presented the 33-item scale FLCAS that has been the most popular instrument for measuring anxiety in SLA, and marked the arrival of the “Specialized Approach” in anxiety research (MacIntyre 2017). Anxiety was extensively studied remained as the exclusive emotional focus in this phase.

The third phase, Positive and Negative Emotions Phase, where we have been in the past decade, witnesses a mounting interest in emotions (Dewaele 2019a; Prior 2019). Echoing Imai’s (2010) defense of a holistic view on diverse emotions in L2 learning, the introduction of PP in SLA research in 2012 has caused a “positive renaissance” (MacIntyre & Gregersen 2012). SLA researchers have shifted away from the exclusive preoccupation with learners’ anxiety to the inclusion of both positive and negative classroom emotions, and their complex and dynamic interactions, as well as learners’ well-being (Dewaele & MacIntyre 2016; MacIntyre 2016; Jiang & Li 2017; Dewaele & Li 2018). This is not to say that positive emotions and affect in L2 learning had not been considered before 2012, as many researchers had prepared the ground (e. g. Arnold 1999; Dewaele 2005; Imai 2010). However, the recent influence of PP has shaped and strengthened the “affective turn” (Prior 2019) or “emotional turn” in SLA research.

A great variety of emotions experienced by language learners, which have been traditionally overlooked in the literature, have attracted scholarly attention from various linguistic, educational and sociocultural contexts (Dewaele & Li 2018; Miyahara 2019). To probe the prevalence of shame and guilt among Iranian English learners, Teimouri (2018) developed a sound psychometric instrument, and found significant relationships between L2 motivation and achievement. Situated within a German-as-a-foreign-language context of Italian secondary schools, MacIntyre & Vincze (2017) identified a list of 19 basic emotions closely related to L2 motivation, namely 10 positive emotions including “joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe and love”, and 9 negative emotions including “anger, contempt, disgust, embarrassment, guilt, hate, sadness, feeling scared and being stressed”. MacIntyre et al. (2019) linked positive emotions (interest, excitement, strength, enthusiasm, pride, alertness, inspiration, determination, attention and activeness) and negative emotions (distress, upset, guilt, scare, nervousness, hostility, irritation, shame, jitter and fear) with scores on 11 Attitudes and Motivation Test Battery dimensions (Gardner 1985) in a Chinese sample and an international sample of foreign language learners. Positive emotions were found to be most strongly linked to attitudes towards the learning situation, attitudes towards the teacher and the course, desire to learn English, and attitudes towards learning English. Slight differences in the results of the Chinese and the international sample highlighted the importance of collecting data across various L2 learning contexts.

In the extending emotional spectrum, enjoyment, in tandem with anxiety, has been the most visible “colour” since Dewaele & MacIntyre (2014) first introduced Foreign

Language Enjoyment (FLE) to the field. They used an online questionnaire to collect quantitative and qualitative data from a large sample of foreign language learners around the world, and found that FLE and FLCA were independent dimensions in moderate negative correlation. FLE was defined as a complex and relatively stable emotion: “If pleasure can occur simply by performing an activity or completing an action, enjoyment takes on additional dimensions such as an intellectual focus, heightened attention and optimal challenge” (Boudreau et al. 2018: 153). FLE and FLCA have been presented as being in competition by some researchers, i. e. two wolves residing in every L2 learner and continually contending for attention (Gregersen et al. 2017), or being complementary by other researchers, i.e. “learners will find their balance when both feet, enjoyment and anxiety, are brought into equilibrium” (Dewaele & MacIntyre 2016: 234). Crucially also, FLE and FLCA are not in a see-saw relationship, suggesting that increase in one does not imply decrease in the other (Boudreau et al. 2018; Li 2018).

Piniel & Albert (2018) used Pekrun’s (2006) framework to explore the types of emotions (pride, contentment, comfort, relaxation, enjoyment and anxiety) that Hungarian English majors experienced in their general use of L2. The most frequently experienced emotions were enjoyment and anxiety, a finding confirmed by other studies (Elahi Shirvan & Taherian 2018; Li 2018). FLE has also been considered from a purely qualitative perspective. For example, Pavelescu & Petric (2018) investigated four Romanian high school EFL students’ language learning emotions, and found that enjoyment and love were the most frequently experienced positive emotions. In a follow-up qualitative study on two participants, Dewaele & Pavelescu (2019) found that FLE and FLCA developed in dynamic and idiosyncratic ways, from the first contact with English, extending into the present and the future, which had repercussions on participants’ willingness to communicate (WTC) in different contexts.

A series of empirical studies confirmed the prevalence of FLE and FLCA, examined their relationships, and revealed their correlates across different L2 contexts around the globe, including international foreign language contexts (Dewaele & MacIntyre 2014, 2016), a Canadian French-as-an-L2 context (Boudreau et al. 2018), a Japanese EFL context (Saito et al. 2018), an American Arabic-as-an-L2 context (Dewey et al. 2018), Iranian EFL contexts (Elahi Shirvan & Taherian 2018; Khajavy et al. 2018), Romanian EFL contexts (Pavelescu & Petric 2018; Dewaele & Pavelescu 2019), a Hungarian EFL context (Piniel & Albert 2018), Chinese EFL contexts (Li 2018; Li et al. 2018; Jiang & Dewaele 2019), and so on.

The growing number of studies on FLE and FLCA have catalyzed the emotional turn in applied linguistics and inspired researchers to consider diverse emotions using a variety of theories and methods. However, greater diversity is encouraged as well as closer integration of emotion theories in SLA research designs. Shao et al. (2019: 3) pointed out that: “The past three decades has witnessed important developments in research on emotion and SLA.” Indeed, a considerable number of empirical studies have highlighted the causes, effects and correlates of emotions experienced in L2

learning, while insufficient attention has been paid to the underpinning theories at work for the conceptualization of L2 emotions and their associations with other factors.

### **3. Emotion theories in SLA**

Defining and agreeing on the key theoretical concepts is challenging, especially in an emerging field. It applies equally to emotion research in SLA, hence the following brief review on the conceptualization of emotions and emotion causation (the links between emotions, their causes and effects).

#### **3.1 Theories on the conceptualization of emotions in L2 learning**

Despite a large number of emotion studies in the field of SLA, little attention has been paid to elucidating the conceptualization of emotions in L2 learning as well as the underlying theories. Aligning with the tradition in psychology, in terms of the underlying theories to conceptualize emotions in L2 learning, there are two main approaches: the basic approach and the dimensional approach. According to the basic emotion theory, there are a few basic discrete emotions that are universal. Specific behaviours and action tendencies are linked with these emotions. Traditionally, happiness, surprise, fear, disgust, anger and sadness have been labelled as the six basic emotions. This assumption arose from a large body of studies conducted in the tradition started by Ekman (1984), whose universalist perspective has long dominated the field. In contrast, according to the dimensional theory, emotions are individual constructions of three independent, bipolar dimensions: pleasure / valence, arousal / activation, and dominance (Mehrabian & Russell 1974). The basic approach dominates in SLA research. This domination is also found in the corresponding measurement of emotional constructs (see more details in the subsequent section of methodological review).

Based on the control-value theory in educational psychology (Pekrun 2006), a few SLA researchers argued that emotions in L2 learning could also be conceptualized as achievement emotions with three dimensions: (1) the object focus, the activity itself or the outcome; (2) value, positive vs. negative quality; (3) control, degree of controllability and forms of control (attributions to external and internal causes) (Li 2018; Piniel & Albert 2018). According to the three-dimensional taxonomy, enjoyment, for instance, is a positive emotion arising from highly controllable learning activities, while anxiety is a negative emotion instigated by uncontrollability or uncertainty over the attainment of success or the prevention of failure (Pekrun 2006).

Conceptualization of emotions and their dimensions is central to a better understanding of the nature of emotions and thus of richer research and pedagogical implications. For example, SLA researchers could measure emotions dimensionally, and language teachers could perceive or intervene on emotions along the dimensions (e. g. control of ongoing L2 learning tasks and value of the tasks).

### 3. 2 Theories on emotion causation

In a similar vein, empirical studies have identified possible causes and effects of emotions in L2 learning (Horwitz et al. 1986; Dewaele et al. 2018), but relatively little attention has been paid to the underlying theories. In other words, these studies are not necessarily theorized to a large extent.

Some have used Krashen's (1985) discarded Affective Filter Hypothesis, which considered the potential effects of emotions on cognition. However, the introduction of PP to SLA has brought fresh theoretical resources to empirical studies on emotions, especially on emotion causation. Two major PP theories are the broaden-and-build theory (Fredrickson 2001) and the control-value theory (Pekrun 2006). The broaden-and-build theory has played a central role in building the "emotional wave" (e. g. MacIntyre & Gregersen 2012; Dewaele & MacIntyre 2016). In contrast, only a few recent SLA studies have tentatively adopted the control-value theory of achievement emotions (Li 2018; Piniel & Albert 2018; Han & Hyland 2019; Shao et al. 2019). Li (2018) claimed that the two theories are "twin sisters" in PP, which supplement each other and can be integrated as a holistic theoretical framework for emotion studies to establish theoretical triangulation. The overlapping aspects between them are as follows. First, both theories distinguish the distinctive functions of positive and negative emotions in affecting cognitive, social and psychological processes, pointing to the necessity of taking a holistic view on emotions. Second, both address the fundamental role of positive emotions in affecting well-being as well as performance. The specific role of emotions has become the primary focus of emotion research in SLA since the inception of PP.

Despite the overlap, the two theories are distinct from each other. First, the control-value theory focuses exclusively on achievement-related emotions, while the broaden-and-build theory involves all emotions in general. This indicates that the control-value theory is more specific to educational contexts or achievement settings. Second, the control-value theory offers a three-dimensional taxonomy to conceptualize achievement emotions, while the broaden-and-build theory only differentiates emotions categorically. This shows that the broaden-and-build theory is fundamentally based upon the basic emotion approach, but the control-value theory is closer to the dimensional approach. Third, the broaden-and-build theory only addresses the fundamental effects of emotions, while the control-value theory involves both the antecedents and outcomes of achievement emotions. Fourth, the control-value theory addresses the reciprocity and bidirectionality of emotions, while the broaden-and-build theory does not do so. These suggest that the control-value theory can underpin a larger scope of empirical studies with emotions as both dependent variables and independent variables. For example, the theoretical links between emotions and other elements assumed by the control-value theory can serve as the theoretical basis for L2 learning emotion intervention studies and practice. Finally, the control-value theory does not mention the interaction between positive and negative emotions, while the broaden-and-build theory emphasizes the essential role of positive



emotions in undoing the after-effects of negative emotions, which may theoretically underpin the emotional interaction studies (Fredrickson 2001).

## **4. Methodology of emotion research in SLA**

To gain a better understanding of the way emotion research in SLA has been evolving, it is vitally important to comb through the methodological developments in the aspects of mainstream research designs, instruments for data collection, and data analysis.

### **4.1 Research designs**

Dovetailing with the research in applied linguistics, early emotion research in SLA was dominated by the etic perspective, relying on quantitative data and statistical analysis (Dewaele 2019b). However, at the beginning of the 21st century, a growing number of researchers started embracing the emic perspective, relying on qualitative data in order to hear participants' voices (Dewaele 2019b). Figures central to this shift are postmodernist researchers (Pavlenko 2013). L2 learning emotion research has moved beyond the exclusive focus of anxiety to a wide range of L2 learning emotions with increased levels of granularity, more sophisticated research designs, and more rigorous processes of data collection and analysis. The methodological trends can be summarized as overall reliance on quantitative methods and recent increasing use of mixed-methods (qualitative and quantitative).

Qualitative methods have been underused in the research on emotions in SLA (Dewaele 2019b). MacIntyre (2016: 13) has called for more methodological diversity including “longitudinal qualitative interview design, qualitative interviews on multiple timescales, qualitative comparative analysis, retrodictive qualitative modelling, and Q-methodology” as addressed in L2 motivation studies. However, this call remains largely unanswered in emotion research. Compared to the purely qualitative approach, the mixed-method approach (Creswell 2015) has been more extensively used, for it offers better insights in complex phenomena (e. g. Dewaele & MacIntyre 2014, 2016; Li et al. 2018; Teimouri 2018). Dewaele (2019b: 85) compared quantitative and qualitative research metaphorically with the left and right eyes of researchers, enabling binocular vision and “allowing them to perceive three-dimensional images of phenomena”.

In terms of the predominant quantitative approach to emotions in SLA, cross-sectional quantitative designs prevail over longitudinal ones as data are easier to collect from a larger number of participants. They do allow the calculation of inter-group differences, and can establish whether a relationship exists between independent and dependent variables. However, as MacIntyre (2016) pointed out, correlational designs do not allow researchers to pinpoint causality. Longitudinal designs are better at establishing causality but are rare. One study adopting a pseudo-longitudinal design showed that predictors of FLE and FLCA changed over time (Dewaele & Dewaele 2017). Another short-term (3 months) longitudinal study in

combination with a cross-sectional design showed that private FLE was a strong predictor of increased L2 comprehensibility over time (Saito et al. 2018). While the researchers are generally cautious about discussing causality, they might occasionally draw implicit causal inferences. The relationship between L2 classroom emotions and achievement can be reciprocal (Li et al. 2019), with the right emotions boosting performance which in turn reinforces the positive emotional states of learners. One way to reduce the common method variance bias and bolster causal inferences is to adopt experimental longitudinal research designs allowing between-subject and within-subject comparisons. Nevertheless, to the best of our knowledge, only a limited number of non-experimental longitudinal studies could be found in the literature. For example, Elahi Shirvan & Taherian (2018) explored the growth and changing trends of university learners' FLE and FLCA in a general English course. Until now the causal links connecting emotions and their correlates in L2 learning remain underexplored. Therefore, experimental longitudinal studies are needed to unveil emotion-related causal relationships.

## **4. 2 Instruments for data collection**

Resonating with increasingly sophisticated quantitative and qualitative research designs, instruments for collecting data on language learners' emotions have also become more diversified and rigorous.

### **4. 2. 1 Quantitative measurements**

Considering the importance of emotions in learners' language learning and well-being, accurate measurement of emotions is vital. Frequently used emotion measurements include self-report measures and autonomic measures.

In the past decades, emotion research has relied heavily on the verbal self-report, in which participants are required to respond verbally to open-ended questions or self-ratings on a series of emotion items in semantic differential or Likert scales. This measurement has been extensively used in emotion research in SLA (Dewaele & Li 2018). Verbal self-report measures of emotions suffer from limitations in reliability and validity due to "cognitive bias" and social desirability during the retrospection. Besides, they struggle to capture the dynamic nature of emotions. Despite these limitations, the simplicity, convenience and low cost of verbal self-reports make them very popular, especially in large scale anonymous studies. Moreover, they allow researchers to collect quantitative data (through items with Likert scales) as well as qualitative data (through open-ended questions).

In addition, a few SLA researchers have employed visual self-reports (e. g. cartoon-like figures) to measure different emotions or emotional states. Visual self-report measurement is quick, user-friendly, and less boring for children than verbal self-report measurement. Visual self-reports reduce introspection and cognitive processing, and thus are more suitable for studies in cross-cultural contexts (Li et al. in press). Self-report measures of emotions have always been well received for their

advantages of being user-friendly, quick and cheap, especially applicable to large-scale studies.

Influenced by the increasingly popular Dynamic Systems Theory (Larsen-Freeman 2007), researchers have used moment-to-moment ratings to measure the dynamics of dependent variables. MacIntyre & Legatto (2010) developed an idiodynamic method to capture the changes of WTC in L2 communication. The methodology consists of: (1) recording an L2 communication task for immediate playback, (2) students' moment-to-moment rating of WTC when viewing the videos, followed by generation of graphs showing fluctuations in WTC, (3) stimulated recall of reasons for the WTC changes with the help of the graphs. The method was effective in depicting the dynamics of WTC at a micro level of classroom interactions, and was then adapted and tentatively applied to emotion studies (e. g. Boudreau et al. 2018; Elahi Shirvan & Taherian 2018). The innovative attempt allows moment-to-moment track of spontaneous emotions and their changing effects through immediate playback of video-recorded L2 communication / learning tasks. It also reduces subjectivity by relying less on retrospection and cognitive processing, and limits the risk of interference with task performance.

Some physiological and behavioural measures have also been considered in emotion research in SLA. Scovel (1978) noted that blood pressure, heart rate, breathing rate, as well as the verbal and nonverbal actions of learners, could reflect anxiety. However, these measures are rarely used in emotion research. Dewey et al. (2018) did use a physiological measurement of anxiety (cortisol in hair), in combination with the extensively used FLCAS (Horwitz et al. 1986). Behavioural indicators, especially nonverbal behaviours including facial activity, posture, gesture and silence, were also drawn upon to detect L2 learners' anxiety in class (Gregersen et al. 2017).

Autonomic measures have a number of advantages over retrospective emotion measures. They do not rely on introspection and memory, and therefore are objective indicators of emotional experiences in real time. They are also immune to cognitive bias and social desirability. Their scarcity can be mainly attributed to the lack of funding for sophisticated technology. Concerns have also been raised that some physiological instruments such as electroencephalogram might interfere with a realistic learning condition. Besides, the problem of causality remains as explanation for variation relies on the verbal expressions of participants, while some unseen variables in the background may cause spikes and dips in measurement.

Self-report measures and autonomic measures have their own merits, with the former prevailing over the latter. However, considering the reliability and validity issues, we encourage emotion researchers to use solid research designs, and adopt more triangulation, including physiological measures and spontaneous emotion reactions in combination with self-report measures.

#### **4. 2. 2 Qualitative inquiries**

Qualitative data are particularly important in emotion research, given the highly subjective and fleeting nature of the phenomena, which couldn't be fully captured merely by quantitative approaches (Li 2018). Among the relatively few purely

qualitative studies on emotions, multiple qualitative inquiries are used including in-depth interviews (Ross & Rivers 2018), observations (Aragão 2011), and written documents like verbal reports and texts (Piniel & Albert 2018; Han & Hyland 2019). The studies by Pavelescu & Petric (2018) and Dewaele & Pavelescu (2019) distinguished themselves for their rigor. The validity was established by the longitudinal qualitative research design (one semester) including semi-structured interviews with both students and teachers, field notes, in- and out-of-classroom observations of English-related events. Araújo (2011) also showed methodological rigor with triangulated data during a semester. Diverse qualitative materials included written language learning narratives, videotaped scenes, students' notes, semi-structured interviews, field notes and visual representations. For future research, triangulation of different types (data, investigators, theories and methods) could be employed strategically to balance out the subjectivity and individuality, and thus to increase the validity, scope, depth and consistency of results.

### **4. 3 Data analysis**

With the development of research designs and instruments in emotion research, new tendencies have emerged in statistical analysis in the quantitative research. Meanwhile, the issue of reflexivity in qualitative analysis deserves more attention.

#### ***4. 3. 1 Statistical analysis***

SLA researchers are using increasingly complex statistical analysis to capture the patterns of dynamic interactive variables. The first type is for complicated relationship models or pathways of a set of variables. For example, Li (2018) used mediation analysis to reveal the direct and indirect effects of the intertwined trait emotional intelligence, classroom emotions, and (self-perceived and actual) L2 achievement. The second type deals with developmental data and pursues the trajectory or changing trends. For example, Elahi Shirvan & Taherian (2018) used latent growth curve modelling (LGCM) to explore the growth and changing trends of FLE and FLCA in a semester. Theoretically, these types of statistical analysis accommodate fully the assumptions of Dynamic Systems Theory. Dealing with multi-levelled data requires an advanced quantitative method of doubly latent multilevel analysis. Such analyses allow investigation into the complex relationships of emotions, classroom environment, and WTC at both the individual student level and class level (Khajavy et al. 2018). Future research could draw on more advanced statistics, for they would shed light on the complicated and dynamic processes of language learning.

#### ***4. 3. 2 Reflexivity in qualitative analysis***

As for qualitative data, reflexivity is also a crucial issue, especially in narrative studies, because they are fundamentally interpretive and subjective. In other words, the researchers themselves play an important role, with their complex values, identities and experiences that shape the research findings and require methodological considerations

(Miyahara 2019). For instance, Benesch (2013) noted that how emotions were theorized in her study was highly dependent on personal and professional histories. However, a quick glance at emotion studies shows a paucity of attention to the part of researchers, such as their personal and professional histories, which are bound to shape studies at all stages. Miyahara (2019) pointed out the need of reflexivity on the part of researchers adopting a constructivist perspective, i. e. researchers' self-awareness of how they position themselves in studies and how the "selves" influence studies at all stages. She made recommendations on how to deal with reflexivity in the narrative analysis (locating subjectivity and evaluating its potential effects on the entire study in the reflexive note).

The field needs more longitudinal research designs (especially longitudinal qualitative) and experimental research designs, using diverse emotion measures (especially non-self-report ones), taking advantage of more advanced statistics, employing triangulation strategically in data, investigators, theories and methods, combining different qualitative inquiries, and paying more attention to reflexivity in the use of qualitative data.

## **5. A research agenda for emotions in SLA**

The PP movement has contributed to the "emotional turn" in the field of SLA. The PP perspective embraces empirical and theoretical plurality (MacIntyre, Gregersen et al. 2019), offering emotion researchers rich research topics, tools and approaches. That is, more space is given to SLA researchers to formulate emotion-related research questions, utilizing qualitative, quantitative or mixed-method approaches. The synthesis has brought to light the interplay between emotions and L2 learning / education in terms of theory, research and practice. Therefore, it is crucial to point out some key issues that may define an agenda for emotion research in SLA.

SLA researchers could set a theoretical agenda by drawing on theories and methods from neighbouring disciplines, for instance, general psychology and PP. The well-being theory, the broaden-and-build theory and the control-value theory have provided SLA researchers with an excellent basis for the exploration of causes and effects of emotions, the interplay between emotions and their correlates, and the interaction between language learner and teacher emotions. We encourage researchers to embrace a holistic PP perspective and its well-being theory, recognizing the diversity of emotions involved in L2 learning and going beyond certain types of well-studied emotions (e. g. anxiety and enjoyment). In terms of the conceptualization and the understanding of the nature of emotions, we recommend the emotion theories drawn from the general psychology and the control-value theory in educational psychology. These enable the inclusion of increased emotional granularity without discarding useful broad categories of positive and negative emotions. Additionally, engaging with the broaden-and-build theory and the control-value theory and integrating them from a PP perspective would enhance the understanding of the underlying mechanism of causes and effects of L2 learning emotions. Future research designs could include, for example, investigation into and intervention on the

antecedents and outcomes of achievement emotions assumed by the control-value theory, and interaction between positive and negative emotions assumed by the broaden- and-build theory.

As for emotion research, we put forward the following tentative agenda. First, more attention should be paid to L2-specific emotional concepts or constructs clarification. Despite the multitude of PP-informed L2 learning emotion studies, the concepts were drawn directly from neighbouring disciplines, especially educational psychology and social psychology, and were not always well-adapted to the specific domain of L2 learning. We found only two instruments specifically designed to measure anxiety and enjoyment in L2 classrooms: different versions of the FLCAS (Horwitz et al. 1986), and the FLE Scale (Dewaele & MacIntyre 2014, 2016; Li et al. 2018). This points to some psychometric uncertainties that may add noise to empirical results. There is thus an urgent need for future research to identify, define and measure L2 learning emotions as conceptually distinct variables in L2 learning (not simply those from general psychology or other fields), and interpret them based upon existing theoretical and empirical studies on L2 learning emotions.

Second, exploration of a wider range of emotions through more rigorous and diverse research designs with triangulation is encouraged in future research. That is, further research could be extended from fully-studied emotions, FLCA and FLE in particular, to other prevalent emotions, such as boredom (Li 2018). This will help to present a more complete picture of the emotional life in L2 learning to educators, researchers and learners. Meanwhile, diverse research designs including cross-sectional and longitudinal, exploratory and experimental research are needed in both field and lab conditions. In order to validate data, future research could also employ different types of triangulation (e. g. data triangulation, investigator triangulation, theory triangulation and methodological triangulation) to minimize bias in measurement, sampling and procedure (Denzin 1973). In addition, as mentioned above, the use of more advanced statistics in quantitative approaches and increased reflexivity would benefit future research.

Third, future research could focus on the emotion transmission in L2 classrooms. Educational psychologists have demonstrated that emotions are not only perceived but also transmitted between teachers and students, guiding and shaping their interaction, thus affecting the teaching / learning effectiveness (Pekrun 2006). However, research on the reciprocal and bidirectional nature of emotion transmission in L2 teacher-student interactions is still in its infancy, with tentative efforts made in relation to the construct of “emotion contagion” (Moskowitz & Dewaele 2019). Therefore, it will be of great pedagogical value to take into account the effects of teachers’ emotions on students’ emotions (Benesch 2013) and vice versa, and explore the emotion interaction patterns between teachers and students.

Fourth, it would be desirable to conduct research into how L2 teachers improve and draw on their social-emotional competence to perceive students’ emotions by observing their verbal or nonverbal cues (Gregersen et al. 2017). Indeed, L2 teachers need to keep a close eye on students’ emotional states (Li 2018; Li & Xu 2019), which enables constant pedagogical adjustment for effective teaching. Gkonou & Mercer

(2017) suggested L2 teachers themselves develop social-emotional intelligence to perceive and recognize students' emotions more accurately. So far very few studies have looked into this.

Finally, as extramural L2 activities (e. g. mobile learning, social interactions, gaming) are increasingly popular and take a larger part in L2 learning, research on the impact of out-of-school factors is crucial. Ross & Rivers (2018) contended that the focus should be placed on both in- and out-of-classroom emotions, particularly within an ESL environment where the target L2 is even more frequently encountered beyond the classroom. Future emotion research will have to take into account the great diversity and complexity of L2 learning contexts. For example, L2 cram schooling is common across different educational levels in China. Also, mobile-assisted L2 learning is prevalent among Chinese university students, either in an instructed or autonomous way.

PP encourages L2 teachers to combine positive education and language education (Mercer et al. 2018). One practical view is embracing, capitalizing and optimizing the strengths (MacIntyre, Gregersen et al. 2019). Seligman (2011) argued that a better understanding of learner emotions could lead to the improvement of learners' well-being. Furthermore, emotion theories within PP and empirically validated PP-based interventions on emotions may also help reflexive teachers understand better PP principles before their implementation. L2 teachers could integrate PP principles to help students boost positive emotions, alleviate stress, and achieve greater well-being and more effective learning (Li 2018; Mercer et al. 2018). Mercer & Gkonou (2017) similarly suggested incorporating emotional intelligence training programs to support effective teaching. Gregersen et al. (2014) and Li & Xu (2019) have implemented effective PP-based interventions on learners' emotional intelligence and emotions in L2 learning. Unfortunately, in SLA, emotion interventions based upon PP principles are still rare (Li & Xu 2019).

In sum, a PP perspective on emotions in L2 teaching and learning will allow L2 teachers to foster learners' positive development (MacIntyre, Gregersen et al. 2019), by combining effective teaching and sound emotional practices.

## **6. Conclusion**

We realise that in presenting this critical overview of research on emotions in SLA, we might inadvertently appear as stern judges who (arrogantly) think they know it all. This is certainly not our intention, and we are simply as fallible as the colleagues whose work we have reviewed. Just as L2 learners need to be encouraged to experiment in a playful and creative manner without fearing errors or dead-ends, SLA researchers desire the same freedom to develop original research designs guided by knowledge of their field but influenced by ideas, concepts and methods from neighbouring disciplines. They also have the right to fail. Some of the best conference presentations that we witnessed were about failed experiments or designs whether the presenters speculated about what went wrong, with a sympathetic audience responding and making useful suggestions. Interdisciplinarity brings its own unique challenges.

Psychology is a rich field of inspiration for applied linguists, but it is also a field full of controversy and debate. There is no agreement on the nature or definition of “emotion”, for example. Moreover, the psychologists’ epistemological stances, methodological and analytical approaches have been developed to answer unique research questions steeped within a specific tradition. Adopting and adapting these ideas, concepts and methods for SLA purposes may cause some psychologists to balk at their unconventional use or interpretation. It inevitably implies a degree of simplification and maybe an occasional misunderstanding or omission. The same phenomenon occurs when the psychologists write about multilingualism without the nuances that we expect from fellow applied linguists. Interdisciplinarity and cross-fertilization are crucial for the development of new ideas and designs, but we are not claiming they are panaceas. Finally, we encourage researchers to join the joyful community interested in emotions in SLA, and to contribute their own original, solid and rigorous attempts at catching and describing the sometimes perplexing and complex emotions of learners and teachers. To conclude, the challenges for research on emotions in SLA are daunting, but the prospect of gaining a better understanding of the hearts and brains of L2 learners and teachers, which could improve pedagogical practices, achievement and well-being, fills us with optimism about the future.

### References

- [1] Aragão R. Beliefs and emotions in foreign language learning [J]. *System*, 2011, 39(3): 302-313.
- [2] Arnold J. *Affect in Language Learning* [C]. Cambridge: Cambridge University Press, 1999.
- [3] Benesch S. *Considering Emotions in Critical English Language Teaching: Theories and Praxis* [M]. New York: Routledge, 2013.
- [4] Boudreau C, MacIntyre P D & Dewaele J-M. Enjoyment and anxiety in second language communication: An idiodynamic approach [J]. *Studies in Second Language Learning and Teaching*, 2018, 8(1): 149-190.
- [5] Creswell J. W. *A Concise Introduction to Mixed Methods Research* [M]. Thousand Oaks, CA: Sage Publications, 2015.
- [6] Denzin N. K. *The Research Act: A Theoretical Introduction to Sociological Methods* [M]. New Jersey: Transaction Publishers, 1973.
- [7] Dewaele J.-M. Investigating the psychological and emotional dimensions in instructed language learning: Obstacles and possibilities [J]. *The Modern Language Journal*, 2005, 89(3): 367-380.
- [8] Dewaele J.-M. When elephants fly: the lift-off of emotion research in applied linguistics [J]. *The Modern Language Journal*, 2019a, 103(2): 533-536.
- [9] Dewaele J.-M. The vital need for ontological, epistemological and methodological diversity in applied linguistics [A]. In Wright C., Harvey L. & Simpson J. (eds.). *Voices and Practices in Applied Linguistics: Diversifying a Discipline* [C]. York: White Rose University Press, 2019. 71-88.
- [10] Dewaele J.-M., Chen X., Padilla A. M. & Lake J. The flowering of positive psychology in foreign language teaching and acquisition research [J]. *Frontiers in Psychology*, 2019. Doi: 10.3389/fpsyg.2019.02128.
- [11] Dewaele J.-M. & Dewaele L. The dynamic interactions in Foreign Language Classroom Anxiety and Foreign Language Enjoyment of pupils aged 12 to 18. A pseudo-longitudinal investigation [J]. *Journal of the European Second Language*



- Association*, 2017, 1: 12-22.
- [12] Dewaele J.-M. & Li C. Editorial: Special Issue Emotions in SLA [J]. *Studies in Second Language Learning and Teaching*, 2018, 8(1) : 15–20.
- [13] Dewaele J.-M. & MacIntyre, P. D. The two faces of Janus? Anxiety and Enjoyment in the Foreign Language Classroom [J]. *Studies in Second Language Learning and Teaching*, 2014, 4(2): 237-274.
- [14] Dewaele J.-M. & MacIntyre P. D. Foreign Language Enjoyment and Foreign Language Classroom Anxiety: The right and left feet of the language learner [A]. In MacIntyre P. D., Gregersen T. & Mercer S. (eds.). *Positive Psychology in SLA* [C]. Bristol: Multilingual Matters, 2016. 215-234.
- [15] Dewaele J.-M., Magdalena A. F. & Saito K. The effect of perception of teacher characteristics on Spanish EFL learners' anxiety and enjoyment [J]. *The Modern Language Journal*, 2019, 103(2): 412-427.
- [16] Dewaele J.-M., Özdemir C., Karci D., Uysal S., Özdemir E. D. & Balta N. How distinctive is the Foreign Language Enjoyment and Foreign Language Classroom Anxiety of Kazakh learners of Turkish? [J]. *Applied Linguistics Review*, 2019, Doi: 10.1515/applirev-2019-0021.
- [17] Dewaele J.-M. & Pavelescu L. The relationship between incommensurable emotions and Willingness to Communicate in English as a Foreign Language: A multiple case study [J]. *Innovation in Language Learning and Teaching*, 2019. Doi: 10.1080/17501229.2019.1675667.
- [18] Dewaele J.-M., Witney J., Saito K. & Dewaele L. Foreign language enjoyment and anxiety: The effect of teacher and learner variables [J]. *Language Teaching Research*, 2018, 22(6): 676-697.
- [19] Dewey D. P., Belnap R. K. & Steffen P. Anxiety: stress, foreign language classroom anxiety, and enjoyment during study abroad in Amman, Jordan [J]. *Annual Review of Applied Linguistics*, 2018, 38: 140-161.
- [20] Ekman P. Expression and the nature of emotion [A]. In Scherer K R & Ekman P (eds.). *Approaches to Emotion* [C]. New Jersey: Lawrence Erlbaum, 1984. 319-344.
- [21] Elahi Shirvan M. & Taherian T. Longitudinal examination of university students' foreign language enjoyment and foreign language classroom anxiety in the course of general English: latent growth curve modeling [J]. *International Journal of Bilingual Education and Bilingualism*, 2018. Doi: 10.1080/13670050.2018.1441804.
- [22] Fredrickson B. L. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotion [J]. *American Psychologist*, 2001, 56(3): 218-226.
- [23] Gardner R. C. *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation* [M]. London: Edward Arnold, 1985.
- [24] Gkonou C. & Mercer S. *Understanding Emotional and Social Intelligence Among English Language Teachers* [M]. London: British Council, 2017. Retrieved from <https://www.researchgate.net/publication/312475321>.
- [25] Gregersen T., MacIntyre P. D., Finegan K. H., Talbot K. & Claman S. Examining emotional intelligence within the context of positive psychology interventions [J]. *Studies in Second Language Learning and Teaching*, 2014, 4(2): 327-353.
- [26] Gregersen T., MacIntyre P. D. & Olsen T. Do you see what I feel? An idiodynamic assessment of expert and peer's reading of nonverbal language anxiety cues [A]. In Gkonou C., Daubney M. & Dewaele J.-M. (eds.). *New Insights into Language Anxiety: Theory, Research and Educational Implications*

- [C]. Bristol: Multilingual Matters, 2017. 110-134.
- [27] Han Y. & Hyland F. Academic emotions in written corrective feedback situations [J]. *Journal of English for Academic Purposes*, 2019, 38: 1-13.
- [28] Horwitz E. K., Horwitz M. B. & Cope J. Foreign language classroom anxiety [J]. *The Modern Language Journal*, 1986, 70(2): 125-132.
- [29] Imai Y. Emotions in SLA: New insights from collaborative learning for an EFL classroom [J]. *The Modern Language Journal*, 2010, 94(2): 278-292.
- [30] Jiang G & Li C. SLA research in the Positive Psychology perspective: Review and prospects [J]. *Foreign Language World*, 2017, (5): 32-39(江桂英, 李成陈. 积极心理学视角下的二语习得研究评述与展望 [J]. 外语界, 2017, (5): 32-39).
- [31] Jiang Y. & Dewaele J.-M. How unique is the foreign language classroom enjoyment and anxiety of Chinese EFL learners? [J]. *System*, 2019, 82(59): 13-25.
- [32] Jin Y. & Zhang L. J. The dimensions of foreign language classroom enjoyment and their effect on foreign language achievement [J]. *International Journal of Bilingual Education and Bilingualism*, 2018. Doi: 10.1080/13670050.2018.1526253.
- [33] Khajavy G. H., MacIntyre P. D. & Barabadi E. Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research [J]. *Studies in Second Language Acquisition*, 2018, 40(3): 605-624.
- [34] Krashen S. *The Input Hypothesis: Issues and Implications* [M]. London: Longman, 1985.
- [35] Larsen-Freeman D. On the complementarity of chaos/complexity theory and dynamic systems theory in understanding the second language acquisition process [J]. *Bilingualism: Language and Cognition*, 2007, 10(1): 35-37.
- [36] Li C. *A Positive Psychology Perspective on Chinese Students' Emotional Intelligence, Classroom Emotions, and EFL Learning Achievement* [D]. Xiamen: Xiamen University, 2018.
- [37] Li C. A Positive Psychology perspective on Chinese EFL students' Trait Emotional Intelligence, Foreign Language Enjoyment and EFL learning achievement [J]. *Journal of Multilingual and Multicultural Development*, 2019. Doi: 10.1080/01434632.2019.1614187.
- [38] Li C., Dewaele J.-M. & Jiang G. The complex relationship between classroom emotions and EFL achievement in China [J]. *Applied Linguistics Review*, 2019. doi: 10.1515/applirev-2018-0043.
- [39] Li C., Fan L. & Wang B. The impairing effect of post-encoding positive emotion on associative memory for English vocabulary [J]. *PLoS ONE*, to appear.
- [40] Li C. & Xu J. Trait Emotional Intelligence and Classroom Emotions: A Positive Psychology Investigation and Intervention among Chinese EFL Learners [J]. *Frontiers in Psychology*. 2019. Doi: 10.3389/fpsyg.2019.02453.
- [41] Li C., Jiang G & Dewaele J.-M. Understanding Chinese high school students' Foreign Language Enjoyment: Validation of the Chinese version of the Foreign Language Enjoyment scale [J]. *System*, 2018, 76: 183-196.
- [42] MacIntyre P. D. So Far So Good: An Overview of Positive Psychology and Its Contributions to SLA [A]. In Gałajda D. (ed.). *Positive Psychology Perspectives on Foreign Language Learning and Teaching* [C]. New York, NY: Springer, 2016. 3-20.
- [43] MacIntyre P. D. An overview of language anxiety research and trends in its

- development [A]. In Gkonou C., Daubney M. & Dewaele J.-M. (eds.). *New Insights into Language Anxiety: Theory, Research and Educational Implications* [C]. Bristol: Multilingual Matters, 2017. 11-30.
- [44] MacIntyre P. D. & Gregersen T. Emotions that facilitate language learning: The positive-broadening power of the imagination [J]. *Studies in Second Language Learning and Teaching*, 2012, 2(2): 193-213.
- [45] MacIntyre P. D., Gregersen T. & Mercer S. Setting an Agenda for Positive Psychology in SLA: Theory, Practice, and Research [J]. *The Modern Language Journal*, 2019, 103(1): 262-274.
- [46] MacIntyre P. D. & Legatto J. J. A dynamic system approach to willingness to communicate: Developing an idiodynamic method to capture rapidly changing affect [J]. *Applied Linguistics*, 2010, 32(2): 149-171.
- [47] MacIntyre P. D. & Vincze L. Positive and negative emotions underlie motivation for L2 learning [J]. *Studies in Second Language Learning and Teaching*, 2017, 7(1): 61-88.
- [48] MacIntyre P. D., Dewaele J.-M., Macmillan N. & Li C. The emotional underpinnings of Gardner's Attitudes and Motivation Test Battery [A]. In MacIntyre P. D. & Al-Hoorie A. (eds.). *Contemporary Language Motivation Theory: 60 Years Since Gardner and Lambert (1959)* [C]. Bristol: Multilingual Matters, 2019. 57-79.
- [49] Mehrabian A. & Russell J. A. *An Approach to Environmental Psychology* [M]. Cambridge, MA: The MIT Press, 1974.
- [50] Mercer S & Gkonou C. Teaching with Heart and Soul [A]. In Gregersen T. S & MacIntyre P. D. (eds.). *Innovative Practices in Language Teacher Education: Spanning the Spectrum from Intra- to Inter-Personal Professional Development* [C]. Cham: Springer International Publishing, 2017. 103-124.
- [51] Mercer S. & MacIntyre P. D. Introducing positive psychology to SLA [J]. *Studies in Second Language Learning and Teaching*, 2014, 4(2): 53-172.
- [52] Mercer S., MacIntyre P. D., Gregersen T. & Talbot K. Positive Language Education: Combining Positive Education and Language Education [J]. *Theory and Practice of Second Language Acquisition*, 2018, 4(2): 11-31.
- [53] Miyahara M. Methodological diversity in emotions research: Reflexivity and Identities [J]. *Journal for the Psychology of Language Learning*, 2019, (1): 83-105.
- [54] Moskowitz S. & Dewaele J.-M. Is teacher happiness contagious? A study of the link between perceptions of language teacher happiness and student self-reported attitudes and motivation [J]. *Innovation in Language Learning and Teaching*, 2019. Doi: 10.1080/17501229.2019.1707205.
- [55] Pavelescu L. M. & Petrić B. Love and enjoyment in context: Four case studies of adolescent EFL learners [J]. *Studies in Second Language Learning and Teaching*, 2018, 8(1): 73-102.
- [56] Pavlenko A. The affective turn in SLA: From 'affective factors' to 'language desire' and 'commodification of affect' [A]. In Gabrys-Barker D & Bielska J. (eds.). *The Affective Dimension in Second Language Acquisition* [C]. Bristol: Multilingual Matters, 2013. 3-28.
- [57] Pekrun R. The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice [J]. *Educational Psychology Review*, 2006, 18(4): 315-341.
- [58] Piniel K. & Albert A. Advanced learners' foreign language-related emotions across the four skills [J]. *Studies in Second Language Learning and Teaching*,

- 2018, 8(1): 127-147.
- [59]Prior M. T. Elephants in the room: An “affective turn,” or just feeling our way? [J]. *The Modern Language Journal*, 103(2): 516-527.
- [60]Ross A. S. & Rivers D. J. Emotional experiences beyond the classroom: Interactions with the social world [J]. *Studies in Second Language Learning and Teaching*, 2018, 8(1): 103-126.
- [61]Saito K., Dewaele J.-M., Abe M. & In’nami Y. Motivation, emotion, learning experience, and second language comprehensibility development in classroom settings : A cross-sectional and longitudinal study [J]. *Language Learning*, 2018, 68(3): 709-743.
- [62]Scovel T. The effect of affect on foreign language learning: A review of the anxiety research [J]. *Language Learning*, 1978, 28(1): 129-142.
- [63]Seligman M. E. *Flourish: A Visionary New Understanding of Happiness and Well-Being* [M]. New York: Free Press, 2011.
- [64]Shao K., Pekrun R. & Nicholson L. J. Emotions in classroom language learning: What can we learn from achievement emotion research? [J]. *System*, 2019, 86: 1-11.
- [65]Teimouri Y. Differential roles of shame and guilt in L2 learning: How bad is bad? [J]. *The Modern Language Journal*, 2018, 102(4): 632-652.

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二语习得情绪研究前沿综述及展望

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