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Shame and collaborative learning in second language classes

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Abstract

The threat that many students perceive to be present in the foreign language classroom can have a debilitating effect on their learning. The present paper identifies shame as central to this negative influence and considers the *tend-and-befriend* response as a potential remedy to such a threat. It is further argued that shame is a master emotion as the usual defensive responses to the shame that is experienced in socially threatening situations, including the second language (L2) classroom environment, are *fight*, *flight* and *fright*, which elicit other emotion responses including fear, anger and depression. The negative effects of shame and these other emotions on L2 learning are further discussed, including the particularly harmful influence that some of these emotions have on working memory capacity, which has been identified as a feature of L2 performance. *Tend-and-befriend* is presented as a more constructive response to perceived threat in the L2 classroom as it has the potential to overcome, through collaborative group work, the negative emotional effects that arise from the *fight*, *flight* and *fright* responses.

Keywords: anger; anxiety; collaborative learning; cooperative learning; depression; fear; fight; flight; foreign language learning; fright; hopelessness; L2 learning; shame; tend-and-befriend; working memory

1. Introduction

The particular form of collaboration advanced in the present paper is the cooperation that can be engendered in small groups of students in the L2 classroom to counteract the perceived threats of some students in this context that have the potential to impose a debilitating effect on successful learning. Shame is identified as a particularly destructive force underlying these perceived threats. To understand the role of collaborative learning in reducing shame in the L2 classroom environment, one must appreciate the debilitating impact this emotion can have on such learning contexts and the potential for inter-student cooperation to alleviate these possible effects. It is argued that the negative effect of shame on L2 learning is based on the *fight*, *flight*, and *fright* responses that are activated as self-protection mechanisms to the social threat of shame in the same manner as one might deploy these responses when protecting oneself from the possible harm inflicted by a physical threat. Whereas *fight* mobilizes active opposition, *flight* is characterized by withdrawal or avoidance, and *fright* is associated with inactivity or freezing. Although these defense mechanisms can offer efficient protection in the face of valid threats, a more appropriate response in the L2 classroom would be the engagement necessary to successfully complete the tasks necessary to ensure a positive learning outcome. The identification of shame as a master emotion that is central to other negative emotions, such as fear, anger, depression and anxiety, further underscores the deleterious effect that shame might have on L2 learning. The role of collaborative learning in helping students employ a more constructive strategy for dealing with perceived threats in the L2 classroom centers on the *tend-and-befriend* behavioral response, which can promote the protective interpersonal affiliations that have the potential to facilitate effective engagement.

2. The nature of shame

The features of shame make this self-conscious, moral emotion a key element of classroom interaction between the teacher and students. One of the main reasons for shame being central to classroom scenarios is that it is characterized by a negative criticism of the global self (Lewis, 1971) and is therefore related to evaluations of self-worth and self-esteem. The central features pertaining to this global self that are particularly relevant to the classroom situation include acceptance or rejection by others, self-regulation and self-evaluation. It is clear that such criticism involving the global self is more likely to be more threatening as damage to the very essence of one's being is at stake. Shame is further characterized by fear of this damage or criticism to the global self (Kam & Bond,

2008). Such involvement of the global self can be seen more clearly when one compares it with guilt, which is another self-conscious emotion, but one that is typically less hurtful than shame as the main focus is on behavior, not one's core self, and hence one's self-worth and self-esteem are less threatened (Tangney & Tracy, 2012). Ogarkova, Soriano, and Lehr (2012) observe that shame is elicited in response to the violation of an important social standard in which the transgressor is concerned with others' actual or imagined evaluations, which might lead to external sanctions. The feeling of being small and the desire to avoid being seen by others lead to avoidance and withdrawal behaviors. Shame is more of an intense emotion than guilt and is associated with feelings of weakness, powerlessness and helplessness. The tendency to hide, withdraw and disappear, and the feelings of powerlessness associated with shame are consistent with two of the four approaches to shame outlined by Fontaine, Luyten, De Boeck, Corveleyn, Fernandez, Herrera, Ittzės, and Tomcsányi (2006). Shame, unlike guilt, is also not characterized by an emphasis on reparations or penance (Ogarkova, Soriano, & Lehr, 2012). Finally, shame can lead to aggressive behavior (Scheff, 2014).

3. The presence of shame in L2 classes

Consistent with many social interactions which involve some degree of evaluation, the assessment of a student by a teacher has the potential to elicit shame in the student. However, it is interesting to note the observations of Cook (2006) in this respect: "The mention of shame has been curiously absent in the literature about second language learning. This may simply be because no one was looking for it. So, no one asked the question" (p. 74). Cook (2006) further explains that as there is a tendency to hide from experiences that elicit shame and to hide shame from ourselves, this emotion is relatively more difficult to identify in studies in this field. Despite this lack of empirical focus, shame is a particularly relevant emotion in the traditional classroom environment as it is present in the control exerted upon students following the lack of acquiescence to the wishes of the teacher (Bull, Kimball, & Stansberry, 1998). Cook (2006) also deems shame to be a likely feature of L2 learning as we are used to being able to use our native language to achieve desired outcomes in all spheres of our lives and the contrast can therefore be stark when we try to use a foreign language.

4. Shame as a master emotion

The prominence of shame as one of the most, if not *the* most, important emotion in our lives can be witnessed in its unique function in social relationships due to its psychological and social importance, which has led to it being labeled

a master emotion. This status is warranted on the basis of a number of features, not least on account of its relationship with a wide range of other emotions, including anger and aggression, fear, anxiety, sadness and depression, hurt, and compassion. Poulson (2000) additionally deems envy, jealousy, disgust, happiness, pride, relief, hope and love to be related to shame. In the present focus on classroom interaction, the emotions that seem to be the most relevant are anger, fear, anxiety, and depression.

To gain an understanding of the possible mechanisms underlying the influence of shame on emotions in its closest proximity one needs to understand how physical threats and the threat of social exclusion are both associated with affective pain. MacDonald and Leary (2005) argue that "the aversive emotional state of social pain is the same unpleasantness that is experienced in response to physical pain" (p. 203). They further propose that one is motivated to avoid possible situations that threaten social exclusion through the feelings of pain that they are often coupled with in a similar way in which one learns to avoid physical threats. The role of shame in socially threatening situations is highlighted by Dickerson, Gruenewald, and Kemeny (2004), who identify shame and the physiological activity that accompanies it as a fundamental underlying emotional response to such threats in the same way that, for example, fear and its physiological responses occur when one is physically threatened. To summarize, shame can be viewed as an emotional response to social pain that is equivalent to the unpleasant emotional states that are elicited by situations involving physical pain and threat.

The emotions that derive from the affective pain that accompanies threats to the preservation of one's social self, and hence shame, are similar to those emotions that have been widely documented to arise from the affective pain associated with physical threat. Furthermore, the social pain that underlies shame and physical pain elicit the same mechanisms to defend against such threats, namely the *fight, flight* and *fright* responses that are outlined above (Elison, Garofalo, & Velotti, 2014).[1] The role of these mechanisms in the relationship between shame and fear, anger and depression are outlined in the sections below.

4.1. Fear

Fear is a response that increases one's survival chances when faced with physical threat (Beck, Emery, & Greenberg, 2005; Öhman, 2008). The three main types of responses to fear – *fight*, *flight* and *fright* – are elicited to counteract threats that are context-specific. Whereas the *fight* response is usually utilized

[1] Elison, Garofalo, and Velotti (2014) prefer to use the term *freeze* instead of *fright*. However, these are equivalent and the term used in the present paper is *fright*.

when it is not possible to freeze or flee (Eilam, 2005), *flight* elicits an escape response from the source of threat (Eilam, 2005), and *fright* is activated in an attempt to make a predator less likely to continue their attack (Monassi, 1999) and is characterized by inhibition of bodily movement and vocalization, and analgesia (Fiszman, Mendlowicz, Marques-Portella, Volchan, Coutinho, Souza, Rocha, Lima, Salomao, Mari, & Figueira, 2008).

Returning to the equivalent affective pain underlying physical threats and the social threats that underpin shame (MacDonald & Leary, 2005), one can assess how different instances of shame might possibly be manifested in *fight*, *flight* and *fright* scenarios. In terms of the *fight* response, it is easy to see how opposition to a physical attack might be deemed equivalent to opposing the source of a threat to one's social standing or inclusion that has elicited a feeling of shame. Similarly, in the case of *flight*, one can remove oneself from a source of shame in the same manner that one might withdraw from a physical threat. As Elison et al. (2014) explain, it is natural that an individual would want to remove him or herself from any shame-inducing negative evaluations. Furthermore, just as *fright* is a response to physical threat in some situations, this is also a possible manifestation of a shame scenario.

There are a number of factors that might determine which fear response, *fight*, *flight* or *fright*, is more likely to be elicited in a certain situation. In this respect, contextual influences in the case of physical threat are likely to be equivalent to those present in the case of shame. The type of fear response elicited is determined by the proximity of threat. A moderately close threat induces fleeing, with fighting occurring in response to a more imminent danger, and *fright* deployed in cases in which the source of danger is the closest (Bracha, 2004; Gallup, 1974; Ranter, 1977). MacDonald and Leary (2005) further contend that *fight* is the least preferred option with *flight* being preferred if there is an escape route, and *fright* another alternative when escape is not possible. It is also important to note that *fright* is elicited in cases in which *fight* or *flight* are not likely to be effective (Schmidt, Richey, Zvolensky, & Maner, 2008). The fluidity that characterizes the deployment of these different types of fear in response to threat is consistent with the observation by Elison et al. (2014) that, rather than being dependent on stable neurological architecture, these action tendencies are flexible and dependent on the situation and experience of similar incidents in the past.

The close similarity between shame as a response to socially threatening situations and fear as a reaction to physically threatening contexts points to a close association between these two emotions. Evidence in favor of this relationship is advanced by McGregor and Elliot (2005), who showed that greater shame was reported by participants that experienced failure who were high in fear of failure than those low in fear of failure, highlighting the salience of shame in fear of failure.

Supporting this relationship between shame and fear, Fontaine et al. (2001) found a higher correlation between fear and the *Test of Self-Conscious Affect* (TOSCA) measuring shame than between fear and the *TOSCA scale* measuring guilt.

4.2. Anger

Assessments of the relationship between shame and anger have shown that shame precedes anger. The specific relationship between shame and anger is known as the shame-rage cycle and the type of shame characterized by elements of anger and violence is a feature of hidden shame (e.g., Lansky, 1992; Lewis, 1971; Scheff, 1987). As Scheff (2014) explains, one possible reason for this is that there is less likelihood for a solution when shame is kept hidden or unacknowledged. The normal pathway to resolve shame, namely through verbal expression and humor, is less available when shame is kept secret. It is the pain of intense humiliation in particular that is relatively more often kept hidden and more lengthy verbal discussion is therefore probably necessary before any humorous elements of the shameful event are appreciated.

Given the similarity between anger and the shame response that is characterized by *fight*, it is important to discern their individual relationships with shame. To be more specific, to what extent is the *fight* response that is elicited by shame related to anger? The fuzzy distinction between these two possible responses to shame becomes less clear when the response of anger to shame is referred to in terms of a *fight* response (Elison et al., 2014). It is clear that both *fight* and anger are characterized by a tendency to oppose. However, as the present focus is on the emotions related to shame that are potentially damaging to effective classroom learning, it is clear that anger should take centre stage rather than *fight* on account of its relatively more deleterious effects.

4.3. Depression

The relationship between shame and depression has been observed by a number of scholars (e.g., Gilbert, 2000; Lewis, 1971; Scheff, 2014; Shohar, 2001). One possible reason for the relationship between shame and depression is that depression or self-harm arises when the negative effect of shame has an inward focus on the self (Elison et al., 2014). Highlighting the link between anger and depression, Lewis (1971) similarly explains that shame-induced anger can either be directed outwards, which results in violence, or focused inwards resulting in depression.

A key feature in understanding how depression relates to shame is based on the equivalence that was outlined above between socially derived affective pain that accompanies shame and affective pain that is elicited when physical

self-preservation is threatened (MacDonald & Leary, 2005). Recall that the *fright* response is a more likely self-preservation mechanism in response to physical threat in cases when *fight* and *flight* are not possible (Schmidt et al., 2008). Considering shame in the light of this *fright* response, it is crucial to determine the correlate of such a response in socially threatening situations. The first point to note is that depression has been observed to arise in situations in which there is a suppression of one's *fight* response and one's *flight* response, the latter of which has been referred to as *entrapment* and can be thought of as being unable to remove oneself from a negative situation (Gilbert, Gilbert, & Irons, 2004). On the basis of MacDonald and Leary's (2005) proposal regarding the equivalence of physical and socially-derived affective pain, it can be surmised that the *fright* response to physical threat bears a close similarity to entrapment. It can therefore be concluded that shame, which as discussed above is elicited by threats to one's social self (Dickerson, Gruenewald, & Kemeny, 2004), can be manifested by three possible defensive coping strategies: the *fight* response or anger; *flight* or withdrawal; and, when the former two are suppressed, *fright* or entrapment. It is through *fright* or entrapment that one of the responses to shame is depression.

4.4. Anxiety

Despite their close conceptual proximity and similarity in providing responses to threat that enhance survival (Porges, 1995), there are certain important differences between anxiety and fear that point to their independent status as separate emotions. The first point to make is that whereas fear is an immediate response to a specific, certain, imminent threat, anxiety is characterized by the apprehension that arises when one approaches, and possibly overestimates, an uncertain, ill-defined, ambiguous threat (Sylvers, Lilienfeld, & LaPrairie, 2011), which possibly pertains more to future danger (Epstein, 1972). As outlined above, the response mechanisms that are elicited in the fear response to such specific threats are *fight*, *flight* and *fright*, which help the individual deal with the source of fear (McNaughton & Corr, 2004). This contrasts with the hypervigilance in anxiety contexts (Epstein, 1972), whereby an individual anticipates an uncertain threat. As the source of the threat is more diffuse (MacLeod & Rutherford, 1992), it is more difficult to initiate an active response that is effective and anxiety can therefore be deemed to be caused by unresolved fear (Epstein, 1972). As a consequence of this, anxiety is characterized by a more protracted response in comparison to the fear response, which can be relatively short-lived (Sylvers et al., 2011).

Despite the differences between fear and anxiety, most notably the absence of the *fight*, *flight* and *fright* defense responses in anxiety, these two emotions are similar with respect to their relationship with shame. Consistent with

this, unpublished research[2] has revealed a conceptual cluster comprising shame, fear and anxiety emotions in both British English and Polish. Highlighting the relationship between shame and anxiety, Matos, Pinto-Gouveia, and Gilbert (2013) showed, using self-report questionnaires, that paranoid anxiety, which focuses on the possible harmful actions of others towards the self, and social anxiety, which arises from insecurities regarding the desire for social standing and to be socially accepted, are both related to shame.

5. Shame, fear, anxiety, anger, depression and L2 student performance

The potential effect of a wide range of emotions on academic performance in the classroom setting has been the focus of previous scholarly attention. For example, Pekrun, Goetz, Titz, and Perry (2002) investigated the role of enjoyment, hope, pride, relief, anger, anxiety, shame, hopelessness, and boredom in the academic performance of students. While there is some overlap between the negative emotions in that study and the present investigation, the crucial difference is in the theoretical standpoint between these studies that centers on shame being identified in the present paper as the master emotion that influences other emotions. However, from a pragmatic perspective, the possible influence of shame, fear, anger, depression and anxiety on the performance of language students takes precedence over the importance of the possible centrality of shame as the master emotion.

5.1. Shame

It has been demonstrated that shame plays an important role in L2 learning. Cook (2006) showed that eighteen of the thirty foreign language students in his study reported at least one shame experience and that in many cases this was reported in depth. It is the specific features of shame that were outlined above that have a negative effect on L2 learning. Withdrawal, a particularly salient feature of shame, has the potential to have a particularly damaging effect on L2 learning. Apart from the inhibiting effect that it is likely to have on the willingness to ask questions (Cook, 2006), it is also likely to hinder student participation in speaking exercises that are viewed as beneficial to successful progress in achieving L2 proficiency. Cook (2006) also underscores both inability and reticence to speak as key characteristics of shame, as well as averted eye-contact, bowed head, confusion, inward orientation, avoidance of others, and the desire to hide which do not engender efficient and meaningful L2 communication practice in the classroom environment. The specific instances of avoidance, which

[2] Performed by Barbara Lewandowska-Tomaszczyk and myself.

has been identified as a major feature of shame, center on situations in which L2 is spoken, thus further highlighting the motivation to minimize L2 contact.

The negative assessment of the global self that characterizes shame is also likely to have a negative influence on L2 learning. As Cook (2006) explains, L2 students who fail in the goal of speaking a foreign language well might feel ashamed and deficient in comparison with their peers. It is clear to see how this might lead to a sense of inferiority. Such inferiority is closely related to low self-esteem, which has been identified as being a close associate of shame (Leary, Tambor, Terdal, & Downs, 1995). Viewed in this sense, failure to speak well in an L2 class can initiate a shame spiral, in which students might experience a sense of shame, inferiority and diminished self-esteem that make them less likely to be motivated to engage in necessary speaking practice, which means that they do not improve, leading to more shame and so on. It has also been reported that shame has a negative effect on the ability to perform the foreign language skills that have already been acquired. Cook (2006) observes a deleterious influence of shame on both speaking and understanding English, as well as being able to perform to the level that the student has already reached.

A major way in which shame might influence L2 learning is through its negative effects on working memory, the efficiency of which is a feature of L2 learning performance. Although it is beyond the scope of the present paper to discuss the working memory model (Baddeley, 1986, 2000) in detail, it is necessary to provide a general background. In general terms, this model describes how information is either forgotten or stored in long-term memory through its active cognitive manipulation and processing. Without such manipulation and processing information can only be held in working memory for brief periods that are usually less than one minute. An important feature of the working memory model in terms of L2 learning is working memory capacity or what is also known as working memory span. This refers to how much information can be processed and stored in a certain amount of time, and is characterized by effectiveness, that is, comprehension accuracy, and efficiency, which denotes speed of comprehension. In terms of the role of working memory in L2 performance, it has been shown that L2 learners with greater working memory spans achieve higher scores on reading, grammar and vocabulary tests (Harrington & Sawyer, 1992). However, a crucial point regarding the focal point of the present paper is the possible negative effect that shame might have on working memory. Cavalera and Pepe (2014) have shown that shame, as both an emotional experience and as a personal predisposition, impairs working memory performance. It can therefore be concluded that shame can have a negative effect on L2 performance through its impairment of working memory.

5.2. Fear

The conceptual proximity between shame and fear warrants closer inspection of their similarities and differences in order to determine their relative influence on L2 learning. The distinction that Cook (2006) makes between the focus on preserving the *self* that, as a function of the desire to escape from danger (Izard, 1991), characterizes fear and the maintenance of positive *self-image* that is the predominant concern associated with shame, is consistent with the central role of social threat that was identified for shame above. In many contexts, there is a close association between preservation of self and self-image, and therefore between fear and shame. Consistent with the relationship between fear and the status of shame as a master emotion outlined above, Cook (2006) observes that shame is often an antecedent of fear and can strengthen the experience of fear. The propinquity between these two emotions is illustrated in the fear that one might have of situations that were the cause of shame in the past. Cook (2006), for example, showed that many of his participants were afraid of shame.

As one might expect from the similarity between shame and fear, these two emotions have comparable effects on L2 learning. Cook (2006) shows how the similar features that shame and fear share influence L2 learning in similar ways. It would appear that the main features that fear shares with shame are the tendencies to avoid and withdraw. Cook (2006) further explains how these shared features of fear and shame have similar influences on L2 performance. Specifically, fear has the effect of inhibiting language learning and reducing the ability to communicate in a foreign language.

5.3. Anxiety

Observing a close association between anxiety and shame, Cook (2006) explains that "foreign language anxiety appears to somehow imperceptibly touch on shame", and that participant interviews revealed that "shame and 'anxiety', when anxiety was defined as fear, were observed as sequential elements in a causal chain" (p. 70). Consistent with the viewpoint expressed above regarding shame as a master emotion, Cook (1976) further views shame as an antecedent of anxiety.

Considering the conceptual association between anxiety, fear and shame, one would expect anxiety to have a similar effect on L2 performance as fear and shame. In this respect, Cook (2006) observes that, along with fear and shame, anxiety is characterised by its debilitating effect on language learning and communication skills in a foreign language. There is also evidence that anxiety has a negative effect on working memory (Vytal, Cornwell, Letkiewicz, Arkin., &

Grilion, 2013) and as a consequence of this can, in a similar way to shame, have a deleterious impact on L2 performance.

5.4. Anger

As a consequence of its relationship with shame that was outlined above, anger is another emotion that needs to be scrutinized in terms of its possible effect on L2 learning. Cook (2006) similarly observes that anger can eliminate shame by either attacking others or oneself and is therefore a defense against the threat of the unpleasant feelings of shame. Cook (2006) further notes that: "One thing that happens, at least to some people when they learn a foreign language, is that they find themselves getting angry in all kinds of little interactions where they would not have if they had been using their native language. This is especially true for adults, who take their linguistic competence for granted" (p. 260).

Of all the emotions analyzed in the present paper, anger would appear to be the most ambivalent with respect to its effect on L2 learning. The destructive nature of this emotion needs to be balanced with the relationship improvement that it can offer, which is particularly relevant to the relations between students or between the teacher and students in the classroom setting. Kam and Bond (2008) show that improvement in relationships is possible if such angry retaliation leads to an apology or more discussion. One should also not forget the possible role of anger as a motivating factor in L2 improvement, especially if anger is directed towards the self.

5.5. Depression

It is clear that the *fright* and entrapment that were underscored above as key features of depression are not conducive to L2 learning. Being immobilized mentally in the classroom environment means that one is less able to apply one's intellectual resources to the required task. From a cluster-based viewpoint of emotions, it is important to take into account other, similar emotions that are members of the same cluster. In the case of depression, an emotion in the depression cluster that is relevant to the classroom setting is hopelessness. Pekrun et al. (2002) argue that hopelessness is particularly harmful to motivation in the academic setting. Finally, it has also been shown that depression has a detrimental effect on working memory performance (Hubbard, Hutchison, Hambrick, & Rypma, 2016) and therefore depression can be deemed similar to shame and anxiety in its effects on L2 performance in this regard.

6. Tend-and-befriend

One of the possible ways to overcome the threat posed by emotions such as shame, anger, fear, anxiety and depression is through the *tend-and-befriend* response advanced by Taylor, Klein, Lewis, Gruenewald, Gurung, & Updegraff (2000). This is a stress regulatory system that offers a more constructive response to threat than *fight*, *flight* or *fright*. As a self-protective, survival mechanism utilized by females to protect offspring, the *tend-and-befriend* theory specifically proposes that *tending* to children in a caring way allows one to blend into the environment and is an effective defense against many threats. The accompanying action of *befriending* also enhances survival as it facilitates the formation of interpersonal bonds in the social group and offers the possibility that females and their offspring will be protected more through this affiliation. It is further argued by Taylor et al. (2000) that the *tend-and-befriend* action tendency is based on the attachment-caregiving system. Essentially, it is argued that the *tend-and-befriend* response extends the attachment–caregiving system, which influences infants' development, to the role that the mother plays in tending behavior. To conclude, *tend-and-befriend* is a self-protection mechanism that has been identified as a female response to protect offspring and to form protective interpersonal affiliations in the social group.

Considering that *tend-and-befriend* appears to be a maternal survival response that facilitates the protection of offspring, one might question its relevance to L2 learning. To understand this, one needs to realize that *tend-and-befriend* is not exclusive to the female gender and is relevant to contexts other than child rearing. Regarding the former, Geary and Flinn (2002) argue that in some situations men exhibit similar tending and befriending behaviors as women. Providing evidence in support of this, von Dawans, Fischbacher, Kirschbaum, Fehr, and Heinrichs (2012) showed that trust, trustworthiness, and sharing behavior increases in males who experienced relatively more psychosocial stress in interactive games with real monetary stakes. This demonstrates that the *tend-and-befriend* coping behavior is not restricted to females and that it represents a more general tendency for the presence of protection within groups in threatening contexts rather than being specific to the relationship between mother and offspring.

The tendency to engage in protective interpersonal relationships within groups in threatening contexts that are based on the human *tend-and-befriend* response can clearly lead to more constructive outcomes than the *fight*, *flight* and *fright* responses outlined above that have a much less social perspective. We have seen how shame, fear, anger and depression, which are associated with these responses, have a destructive effect on L2 learning. It is clear that the employment

of a *tend-and-befriend* response in a learning situation that is perceived to be threatening would achieve a more beneficial outcome than any of the emotions associated with *fight, flight* or *fright*. Rather than withdrawing from engagement in a scholastic exercise or suffering from reduced working memory span, the student would possibly receive the social support that might bolster their confidence to enable them to make an attempt at what had hitherto been a source of opposition, avoidance or inactivity.

There are clear benefits to instilling *tend-and-befriend* support networks in the L2 classroom, but how can this be instigated? Collaborative learning groups would appear to have the potential to harness the benefits of *tend-and-befriend*. This is evident when one compares, for example, an L2 writing assignment that students might perform individually and in small groups. In an individual context a student who is unsure of his or her skills is relatively more likely to indulge in the *fight, flight* or *fright* defence responses that, as outlined above, are related to the elicitation of emotions (i.e., shame, but also fear, anger and depression) identified as harmful to L2 performance. Consistent with the harmful elements of shame that might be relatively more present in non-cooperative learning, Johnson and Johnson (2003) highlight that the criticism and failure that tend to be more prevalent in such competitive environments can lead to not trying and procrastination in attempts to void shame and humiliation. As outlined above, such negative effects might be exacerbated by a reduction in working memory span that diminishes the cognitive resources necessary to perform to the upper limits of one's ability. In contrast, cooperative work in small groups in the L2 classroom presents an opportunity to *befriend* other students, which allows the development of affiliative bonds within such groups that, consistent with the *tend-and-befriend* model, offers a more constructive response to threat than *fight, flight* or *fright*. The benefits of such possible *tend-and-befriend* are shown by Yastibaş and Yastibaş (2015), who conclude that Turkish EFL students in their study "believed using peer feedback in writing classes decreased their writing anxiety, increased their confidence, and improved their writing by collaborating with and learning from each other" (p. 530). To conclude, it would appear that implementing collaborative group work in the L2 classroom might facilitate a more constructive *tend-and-befriend* response to perceived threat in such environments than the *fight, flight* or *fright* responses that engender the elicitation of negative emotions, which are harmful to L2 learning.

6. Conclusions

Being able to defend oneself from a source of threat, whether it is more physical or more social in nature, is an important ability that is clearly relevant to survival.

The social threat that manifests itself in the experience of shame is associated with a number of responses. The *fight, flight* and *fright* defense responses that are manifested in fearful situations have a long history in psychological research. However, these defensive behaviours are also present when we experience shame in response to social threat. Although the primary physiological response to threat is *fight, flight* and *fright*, a more constructive, measured response to threatening situations is the *tend-and-befriend* pattern (Taylor et al., 2000).

Fight, flight and *fright* are inappropriate responses in the L2 classroom context as they are associated with emotions that are not compatible with efficient L2 learning. From an evolutionary perspective, such responses enhance survival prospects in the face of real threat. However, the perceived threat on the part of students in the classroom environment is not an appropriate response as it leads to emotions associated with action tendencies and cognitive deficits that impair L2 performance and therefore does not allow the full engagement of one's L2 skills to the specific task. Specifically, it is argued that the shame elicited in response to perceived threat in the L2 classroom is responded to in terms of *fight, flight* and *fright* that are at the heart of fear, anger and depression. In this sense, shame can be regarded as a master emotion as it is an antecedent of these other emotions, all of which have a deleterious effect on L2 performance. In terms of the harmful effects on L2 learning, shame and fear most notably cause withdrawal and avoidance, anger is associated with destructive elements, depression leads to mental immobility, and hopelessness, a member of the depression emotion cluster, is particularly harmful to motivation. Anxiety also has a negative effect on L2 learning and communication skills. In addition, shame, anxiety and depression have been shown to reduce working memory capacity, which is a function of L2 performance.

The *tend-and-befriend* model is a more recent discovery that offers an alternative perspective on how humans utilize interpersonal relationships within social groups to respond to threat. It offers a more constructive means of responding to threat than the potentially more destructive *fight, flight* and *fright*. The L2 classroom has the necessary means to utilize and foster the potential benefits of *tend-and befriend*, namely students who can be divided into small study groups. Such groups have the potential to help students to respond to their perceived threats in a more constructive manner. It is beyond the scope of the present paper to determine how the benefits of *tend-and-befriend* can be harnessed in such group dynamics. However, further scholarly investigation into the benefits that can be gained from the identification of the key procedures that are most likely to exploit the potential of cooperative group work in the L2 classroom promises to be a very rewarding endeavor.

References

Baddeley, A. D. (1986). *Working memory*. New York: Oxford University Press.
Baddeley, A. D. (2000). The episodic buffer: A new component of working memory? *Trends in Cognitive Sciences*, *4*, 417-423.
Beck, A. T., Emery, G., & Greenberg, R. L. (2005). *Anxiety disorders and phobias: A cognitive perspective*. New York: Basic Books.
Bracha, H. S. (2004). Freeze, flight, fight, fright, faint: Adaptationist perspectives on the acute stress response spectrum. *CNS Spectrums*, *9*, 679-685.
Bull, K., Kimball, S. L., & Stansberry, S. (1998). Developing interaction in computer mediated learning. In *Coming together: Preparing for rural special education in the 21st century. Conference proceedings of the American Council on Rural Special Education* (pp. 210-217). Charlston, SC.
Cavalera, C., & Pepe, A. (2014). Social emotions and cognition: Shame, guilt and working memory. *Social and Behavioral Sciences*, *112*, 457-464.
Cook, T. (2006). An investigation of shame and anxiety in learning English as a second language. Unpublished doctoral dissertation. University of Southern California, Los Angeles.
Dickerson, S. S., Gruenewald, T. L., & Kemeny, M. E. (2004). Psychobiological responses to social self threat: Functional or detrimental. *Self and Identity*, *8*, 270-285.
Eilam, D. (2005). Die hard: A blend of freezing and fleeing as a dynamic defense–implications for the control of defensive behavior. *Neuroscience & Biobehavioral Reviews*, *29*, 1181-1191.
Elison, J., Garofalo, C., & Velotti, P. (2014). Shame and aggression: Theoretical considerations. *Aggression and Violent Behavior*, *19*, 447-453.
Epstein, S. (1972). The nature of anxiety with emphasis upon its relationship to expectancy. In C. D. Spielberger (Ed.), *Anxiety: Current trends in theory and research. Volume 2*. (pp. 291-337). New York: Academic Press.
Fiszman, A., Mendlowicz, M. V., Marques-Portella, C., Volchan, E., Coutinho, E. S., Souza, W. F., Rocha, V., Lima, A. A., Salomao, F. P., Mari, J. J., & Figueira, I. (2008). Peritraumatic tonic immobility predicts a poor response to pharmacological treatment in victims of urban violence with PTSD. *Journal of Affective Disorders*, *107*, 193-197.
Fontaine, J. R. J., Luyten, P., De Boeck, P., & Corveleyn, J. (2001). The test of self-conscious affect: Internal structure, differential scales and relationships with long-term effects. *European Journal of Personality*, *15*, 449-463.
Fontaine, J. R. J., Luyten, P., De Boeck, P., Corveleyn, J., Fernandez., M., Herrera, D., Ittzės, A., & Tomcsányi, T. (2006). Untying the Gordian Knot of guilt and shame: The structure of guilt and shame reactions based on situation and

person variation in Belgium, Hungary, and Peru. *Journal of Cross-Cultural Psychology*, *37*(3), 273-292.

Gallup, G. G. (1974). Animal hypnosis: Factual status of a fictional concept. *Psychological Bulletin*, *81*, 836-853.

Geary, D. C., & Flinn, M. V. (2002). Sex differences in behavioral and hormonal response to social threat: Commentary on Taylor et al. (2000). *Psychological Review*, *109*(4), 745-750.

Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology and Psychotherapy*, *7*, 174-189.

Gilbert, P., Gilbert, J., & Irons, C. (2004). Life events, entrapments and arrested anger in depression. *Journal of Affective Disorders*, *79*(1-3), 149-160.

Harrington, M., & Sawyer, M. (1992). L2 working memory capacity and L2 reading skill. *Studies in Second Language Acquisition*, *14*, 25-38.

Hubbard, N. A., Hutchison, J. L., Hambrick., D. Z., & Rypma, B. (2016). The enduring effects of depressive thoughts on working memory. *Journal of Affective Disorders*, *190*, 208-213.

Izard, C. E. (1991). *The psychology of emotions*. New York: Plenum.

Johnson, D. W., & Johnson, F. (2003). *Joining together: Group theory and group skills* (7th ed.). Boston: Allyn & Bacon.

Kam, C. C-S., & Bond, M. H. (2008). Role of emotions and behavioral responses in mediating the impact of face loss on relationship deterioration: Are Chinese more face-sensitive than Americans? *Asian Journal of Social Psychology, 11*, 175-184.

Lansky, M. R. (1992). *Fathers who fail: Shame and psychopathology in the family system*. Hillsdale, NH: The Analytic Press.

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, *68*(3), 518-530.

Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press.

MacDonald, G., & Leary, M. R. (2005). Why does social exclusion hurt? The relationship between social and physical pain. *Psychological Bulletin*, *131*(2), 202-223.

MacLeod, C., & Rutherford, E. M. (1992). Anxiety and the selective processing of emotional information: Mediating roles of awareness, trait and state variables, and personal relevance of stimulus materials. *Behavior Research and Therapy*, *30*, 479-491.

Matos, M., Pinto-Gouveia, J., & Gilbert, P. (2013). The effect of shame and shame memories on paranoid ideation and social anxiety. *Clinical Psychology and Psychotherapy*, *20*, 334-349.

McGregor, H. A., & Elliot, A. J. (2005). The shame of failure: Examining the link between fear of failure and shame. *Personality and Social Psychology Bulletin*, *31*, 218-231.

McNaughton, N., & Corr, P. J. (2004). A two-dimensional neuropsychology of defense: Fear/anxiety and defensive distance. *Neuroscience & Biobehavioral Review*, *28*, 285-305.

Monassi, C. R., Leite-Panissi, C. R., Menescal-de-Oliveira, L., (1999). Ventrolateral periaqueductal gray matter and the control of tonic immobility. *Brain Research Buletin*, *50*, 201-208.

Ogarkova, A., Soriano, C., & Lehr, C. (2012). Naming feeling: Exploring the equivalence of emotion terms in five European languages. In P. A. Wilson (Ed.), *Dynamicity in emotion concepts. Łódź studies in language* (Vol. 27, pp. 253-284). Frankfurt a. Main: Peter Lang.

Öhman, A. (2008). Fear and anxiety: Overlaps and dissociations. In M. Lewis, J. M. Haviland-Jones & L. F. Barrett (Eds.), *Handbook of emotions* (pp. 709-729). New York: The Guildford Press.

Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, *37*(2), 91-106.

Porges, S. W. (1995). Orienting in a defensive world: Mammalian modifications to our evolutionary heritage. A polyvagal theory. *Psychophysiology*, *32*, 301-318.

Poulson, C. (2000). Shame: The master emotion? University of Tasmania.

Ranter, S. C. (1977). Immobility in invertebrates: What can we learn? *Psychological Review, 1*, 1-14.

Scheff, T. J. (1987). The shame/rage spiral: Case study of an interminable quarrel. In H. B. Lewis (Ed.), *The role of shame in symptom formation* (pp. 109-150). Hillsdale, NJ: Lawrence Erlbaum.

Scheff, T. J. (2014). The ubiquity of hidden shame in modernity. *Cultural Sociology*, *8*(2), 129-141.

Schmidt, N. B., Richey, J. A., Zvolensky, M. J., & Maner, J. K. (2008). Exploring human freeze responses to a threat stressor. *Journal of Behavior Therapy and Experimental Psychiatry*, *39*(3), 292-304.

Shohar¸ G. (2001). Personality, shame, and the breakdown of social bonds: The voice of quantitative depression research. *Psychiatry*, *64*(3), 228-239.

Sylvers, P., Lilienfeld, S. O., & LaPrairie, J. L. (2011). Differences between trait fear and trait anxiety: Implications for psychopathology. *Clinical Psychology Review*, *31*, 122-137.

Tangney, J. P., & Tracy, J. L. (2012). Self-conscious emotions. In M. R. Leary & J. P. Price (Eds.), *Handbook of self and identity* (2nd ed., pp. 446-478). New York: The Guilford Press.

Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, *107*(3), 411-429.

von Dawans, B., Fischbacher, U., Kirschbaum, C., Fehr, E., & Heinrichs, M. (2012). The social dimension of stress reactivity: Acute stress increases prosocial behavior in humans. *Psychological Science*, *23*(6), 651-660.

Vytal, K. E., Cornwell, B. R., Letkiewicz, A. M., Arkin., N. E., & Grilion, C. (2013). The complex interaction between anxiety and cognition: Insight from spatial and verbal working memory. *Frontiers in Neuroscience*, *7*, 1-11.

Yastibaş, G. Ç., & Yastibaş, A. E. (2015). The effect of peer feedback on writing anxiety in Turkish EFL (English as a foreign language) students. *Social and Behavioral Sciences*, *199*, 530-538.