

# Proper Losers and Sore Losers: Analysis of Soccer Coaches' Nonverbal Behaviour after Losing a Match

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## Abstract

People who are embarrassed can be characterized by the nonverbal cues gaze direction, head movements downward and rigid, slouched and forward leaning posture. In order to investigate whether there are differences in the nonverbal cues of disappointment between soccer coaches that lose a game while expecting to lose and soccer coaches that lose a game while expecting to win, these nonverbal cues are applied in the current study as measurement standards of disappointment. Using an Ethological Coding System of Interviewing-scale and a perception study, the flight and displacement behaviour of 30 Dutch soccer coaches were measured. Our analysis shows that the expectation of winning or losing a game, based on the current Dutch ranking system, does not have an effect on the amount of nonverbal cues of displacement and flight one reveals. However, disappointment was rated significantly higher in the condition of expected to win rather than expected to lose in participants' observations.

**Keywords:** Nonverbal behaviour; ECSI; Losing; Disappointment

## Introduction

How do we perceive information from others about their emotional intent in a given context? Nonverbal behaviour or nonverbal display components such as facial expressions and body language have served as a prominent subject in the study of emotions. Human beings almost automatically pick up on nonverbal gestures to indicate the presence of emotion. For instance, a smile is universally related to a positive emotion and a frown will most definitely indicate the presence of a negative emotion (Ekman, Friesen, & Wallace, 1971). This is an example of facial expressions as a component of nonverbal behaviour that detects emotions. The use of body posture along with facial expressions also adds to the detection of emotions. For example, slumped shoulders are widely recognized as defeat, whereas broad shoulders and widened chest are mostly related to dominance and pride (Tracy & Robins, 2007).

However, in what way does the study of nonverbal behaviour add value to the understanding of emotions? The very first and widely studied emotions for their apparent nonverbal display cues include happiness, sadness, fear, anger, disgust and surprise (Ekman, 1984). One cannot help to distress

how narrow the present body of research is when the focus solely lies on these six basic emotions. The existing knowledge of other emotions such as guilt, shame, embarrassment and pride is less pervasive than the existing knowledge of basic emotions, simply because nonverbal display cues of emotions, other than the basic emotions, are not as evident (Adams & Kleck, 2005). Emotions such as guilt, shame, embarrassment and pride are also known as the self-conscious emotions. In his research, Keltner (1995) discusses the appeasement function of embarrassment as a self-conscious emotion. Embarrassment is an emotion that is caused by the awareness of one's own actions as perceived by others. When one violates a social norm, one is vulnerable to embarrassment, which causes one to make amendments to one's actions as a means to apologize or correct the previous behaviour. Previous research has identified the possible nonverbal display components that indicate the presence of embarrassment. These components are: gaze direction, head movements downward and rigid, slouched, and forward leaning posture (Keltner, 1995). As a facial cue, blushing is mostly apparent in the expression of embarrassment, but since it also appears in other types of emotions (shame and anger), it has not been clearly assigned to indicate the presence of embarrassment.

One can also argue that the existing knowledge of self-conscious emotions is less voluminous, because it relates to social awareness, which does not develop at an early life stadium. The nonverbal display of self-conscious emotions is more complicated to detect than the basic emotions, because they are less universal. Aside from cultural differences that influence the amount of nonverbal cues displayed for self-conscious emotions, the nonverbal expression of the self-conscious emotions makes use of blended nonverbal components that are also apparent within the spectrum of basic emotions (Tracy & Matsumoto, 2008). For example, slumped shoulders can both be related to defeat as well as sadness and fear. Negative emotions such as sadness and fear are however more distinctive than positive emotions, because positive emotions involve a shared key component of nonverbal behaviour: the smile (Tracy & Robins, 2007). The shared component of nonverbal behaviour in positive emotions makes it more difficult for one to distinguish a positive emotion from the other, which is why the aim of this study is to introduce a new dimension to the self-conscious emotions involving a negative taint of emotion.

## **Expectations lead to Disappointment**

As a means to expand upon the knowledge of nonverbal behaviour components for the self-conscious emotions of pride and shame, Tracy and Matsumoto (2008) have attempted to measure the initial nonverbal display of pride and shame as shown by athletes. The corresponding contexts to the measured self-conscious emotions (failure to shame versus success to pride) were translated for the purpose of the research by observing the athletes in the conditions of winning versus losing a Judo match of the Olympic and Paralympic games. The nonverbal display features that indicate the presence of shame were slumped shoulders, narrowed chest, face covering and head-tilt down. As a result of the study, shame-relevant components of nonverbal display were greater in the context of losing a game than in the context of winning a game. Although this only accounts for the nonverbal display components of slumped shoulders and narrowed chest as caused by the experience of shame (Tracy & Matsumoto, 2008).

However, it is interesting to see if there are also differences present in the degree of shame-relevant components of nonverbal display between different kinds of losing games. One can eventually state that one lost game is not equal to the other. A lost game against a considerably stronger opponent may feel different than a lost game against a weaker opponent. This notion raises the question of whether signals of shame and disappointment might differ, depending upon on the expectations of the athlete. Therefore, in the current study, we aim to introduce expectation as a new factor that might influence the extent to which shame and disappointment relevant components will be more conspicuous. We will measure the difference in nonverbal cues of disappointment and shame between people that lost when they expected to lose and people that lost when they expected to win. The research question is therefore: Are there differences in the nonverbal cues of disappointment between people that lost when they expected to lose and people that lost while they expected to win? The hypothesis is that nonverbal display cues of disappointment will be more conspicuous when someone expects to win than when someone expects to lose.

## **Method**

### **Experiment 1: Analysing Nonverbal Behaviour of Soccer Coaches**

#### **Participants**

Participants were six Communication and Information Sciences students of the Faculty of Humanities at Tilburg University (three men, three women).

## **Materials**

The material consisted of a video that showed 30 clips, with five second-breaks breaks between these clips. Each clip showed a commentary of a soccer coach directly after a lost match. Each clip started directly after the interviewer had asked a question. The original recording time for each clip was 15 seconds, but in the video, each clip was slowed down to 60 percent of the original speed. All sounds were removed from the original clips. These clips were selected from Dutch television news websites, on which the interviews could be traced. The selected soccer coaches could all be found in two conditions, divided over two clips for each selected coach. The conditions were determined as followed:

1. A soccer coach of a specific soccer club expects to win a game based on the current ranking of the team, but in reality loses the game.
2. A soccer coach of a specific soccer club expects to lose a game, based on the current ranking of the team and in reality loses the game.

The clips in the video were randomized. The soccer coaches were all Dutch. The soccer coaches' teams all competed in the Dutch premier or first division, and differed at least 2 spots on the ranking list from the opponent. To identify nonverbal signs of shame and disappointment, the ECSI scale was used. The ECSI scale, also known as the Ethnological Coding System for Interviewing, consisted of 8 items that each contain behavioural features to indicate patterns in one's overall behaviour (Troisi & Moles, 1999). The ECSI scale based items of flight and displacement have been purposefully chosen to detect the presence of disappointment, because nonverbal display cues that include avoidance behaviour are more accurately recognized in the context congruent to avoidance-oriented or negative emotions (Adams Jr & Kleck, 2005). Moreover, the choice for ECSI scale based items such as flight and displacement behaviour to measure disappointment, captures a wide range of nonverbal components that are specified in both body postures as well as facial activity.

#### **Procedure**

The six participants watched a slowed down version of the video (60% of original speed), containing all coaches in both conditions. Every participant was assigned four signs of flight and behaviour, as found on the ECSI scale. Hence, each sign was observed by two participants independently of one another, and was given an average score so that the influence of individual differences was reduced.

## Experiment 2: Perception Study

For the extension of the study and to ensure the validity of our data, a perception study was designed whereby participants were asked to judge the nonverbal behaviour of the soccer coaches on disappointment.

### Participants

In total, 30 people participated in the perception study. Participants consisted of 17 men and 13 women aged between 16 and 60 (*Mean Age* = 34.5; *SD* = 16.4).

### Materials

The material consisted of the same video mentioned in the description of experiment 1, although this version was not slowed down. There was also a form, on which participants could indicate how disappointed they thought each coach was on a 7 point scale, ranging from 1 (not disappointed at all) to 7 (very disappointed).

### Procedure

All 30 participants watched the video individually. After each clip they had to decide on how disappointed they thought the coach was. In this way, every clip was assigned a mean disappointment score, based on 30 evaluations.

## Results

### Paired T-test ECSI-Scale Flight & Displacement Averages

A paired-samples t-test was conducted to compare the average amount of non-verbal cues of flight and displacement in *expect to win* and *expect to lose* conditions. Only the items that were indeed observed by coders were included in the analysis. There was no significant difference between the scores for expect to win ( $M=1.16$ ,  $SD=.43$ ) and expect to lose conditions ( $M=1.19$ ,  $SD=.30$ ) for flight;  $t(14) = -.36$ ,  $p=.73$ . For displacement, there was no significant difference between the scores for expect to win ( $M=.12$ ,  $SD=.20$ ) and expect to lose conditions ( $M=.13$ ,  $SD=.16$ ) either;  $t(14)=-.22$ ,  $p=.83$ . These results suggest that the expectation to win or lose a match does not have an effect on the amount of non-verbal cues of flight and displacement one reveals.

### Paired T-test Individual ECSI-Items

To investigate if there were significant differences within individual cues, which were vanished in the total flight and displacement averages, a second paired samples t-test was conducted. This t-test compared each ECSI scale item of flight and displacement in the *expect to win* and *expect to lose* conditions. Again, only the items that were indeed observed by coders were included in the analysis. Although there were no significant differences

found for the individual cues, a slight trend toward significance was shown for *Twistmouth*;  $t(14)=1.83$ ,  $p=.09$ . These results suggest that the expectation to win or lose a match does not have an effect on any particular item of the ECSI scale. Descriptive statistics of the individual scores per ECSI item can be found in Table 1. Figure 1 visualizes the means per condition.

Table 1: Descriptive statistics per ECSI item.

ECSI Scale	Expected to Win	Expected to Win Std.	Expected to Lose Mean	Expected to Lose Std. Deviation
Flight_look_down	1,4	1,4	1,13	1,3
Flight_shut	0,6	0,74	0,8	0,86
Flight_Lookaway	3,27	1,53	3,6	1,24
Flight_Chin	0,2	0,41	0,13	0,52
Flight_still	0	0	0,07	0,26
Disp-Groom	0	0	0,07	0,26
Disp_Handface	0,07	0,26	0,13	0,35
Disp-Scratch	0,07	0,26	0,2	0,41
Disp_fumble	0,27	0,59	0,2	0,56
Disp_twistmouth	0,23	0,5	0	0
Disp_Bitelips	0,17	0,41	0,07	0,26
Disp_licklips	0,03	0,13	0	0

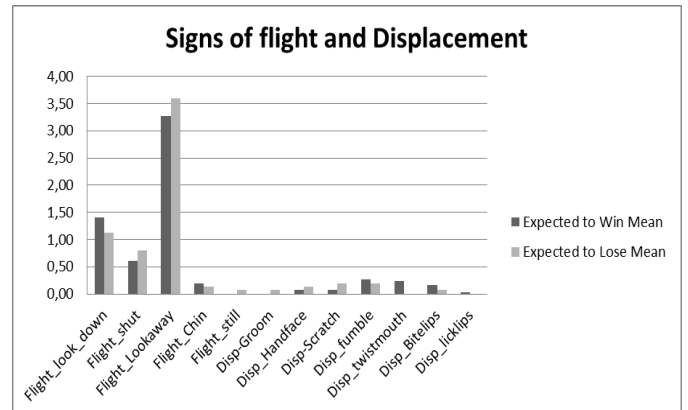


Figure 1: Means for both conditions of expectation per ECSI item.

### Perception Study

To investigate potential differences in perception of disappointment over the two conditions of loss, a repeated measures ANOVA was performed with condition (*expect to win*, *expect to lose*) as within-subjects factor and the average perceived disappointment score as dependent variable. The repeated measures ANOVA showed a main effect of condition;  $F(1,29) = 13.41$ ,  $p = .001$ ,  $\eta^2_p = .316$ ; reflecting the better identification of non-verbal cues of disappointment in the *expect to win* condition ( $M = 4.04$ ,  $SD = .62$ ) over the *expect to lose* condition ( $M = 3.76$ ,  $SD = .65$ ).

### Conclusion

No differences were found between the amount of nonverbal cues of flight and displacement (according to the ECSI scale) in the *expect to win* and *expect to lose* conditions. The flight and displacement behaviour of the soccer coaches was

not influenced by expectation. This result was found when comparing every item of the ECSI scale in both conditions as well. However, the results of the perception study showed that the coaches seemed more disappointed in the *expect to win* condition, than in the *expect to lose* condition.

## Discussion

Based on the conclusions of this research, it is difficult to determine whether expectations have an effect on the nonverbal cues that people directly express after a lost game. The ECSI scale measurements indicate that an effect of pervasiveness in nonverbal display cues of disappointment does not exist in the *expected to win* condition. Nonetheless, the perception study has revealed the contrary, namely that nonverbal display cues were classified as more pervasive in the *expected to win* condition rather than in the *expected to lose* condition. If the effect of expectation on conspicuousness of the nonverbal cues of disappointment is valid, the effect seems hard to measure by means of the ECSI scale. It can therefore be assumed that an ECSI scale is at least not an appropriate way to measure this type of effect. Participants in the perception test might have used different cues to determine the level of disappointment, than the behaviour that is addressed by ECSI scale items.

There are several possible explanations theretofore. The first possible explanation involves the procedure in which the ECSI scale items were measured. In this research, the occurrences of cues were counted, however the duration of each individual cue was not included in the measurements. A “look away” of a fraction of a second, for example, was therefore given the same weight as a “look away” of five seconds. Hence, these differences were not included in the ECSI scale results, even though the duration of ECSI scale items might have had a significant influence on the manner in which participants observed the soccer coaches during the perception test.

A second possible explanation is that the ECSI scale is not perfectly suitable for measuring *disappointment*, as it has been designed to detect psychological malfunctions on psychiatric patients during an interview. An assumption in this research was that the connection between feelings of shame, embarrassment and disappointment is a suitable foundation to use the ECSI scale for measuring disappointment. The nonverbal cues of shame and embarrassment that have been studied in prior research were in line with the features of flight and displacement. In a study by Tracy and Matsumoto (2008), the nonverbal display cues of shame were described as slumped shoulders, narrowed chest, face covering and head-tilt down. The nonverbal components of embarrassment have meanwhile

been previously described by Keltner (1995) as gaze direction, head movements downward and rigid, slouched, and forward leaning posture. The ECSI scale items flight and displacement have been able to address gaze direction and facial muscular movements to indicate the occurrence of disappointment as caused by expectation, however body posture and facial expressions have not been addressed. This may have had a limitation to the truthfulness of our assumption. Future research can be conducted to test to what extent the ECSI scale is useful for measuring negative self-conscious emotions, keeping in mind the nonverbal cues of shame and embarrassment that have not been addressed by means of the ECSI scale.

A third possible explanation can be found in the nature of the research materials (interviews with soccer coaches). In general, professional athletes and coaches have received professional media training and are experienced in giving interviews. It might be possible that the non-verbal cues of these interviewed professionals differ from untrained individuals, which the ECSI scale was originally designed for. The displayed non-verbal cues may therefore be too discrete to be counted on a scale, merely salient enough to be unconsciously perceived by human senses.

Finally, a considerable amount of ECSI features are invisible in the used materials. *Fumble* (twisting finger movement) and *scratch* (using fingernails to scratch part of the body) may be displayed more frequently outside the scope of the camera, where they couldn't be observed. It is possible that these missing factors have had an effect on the ECSI scores and not on the perception test.

An overall restriction of this research can be found in the factor *expectation*. It is possible that the expectation of a coach is influenced by other factors than solely the position on the ranking list. The matches prior to the current match and the process of scorings during the match may for example have influence likewise. When included in the analysis, however, these factors would have influenced both tests. As a consequence to the current study, the range of other possible influential factors (process of scorings during the match, state of mind as caused by prior matches) cannot be an explanation for the difference in outcome. Nevertheless, it would be interesting to gain more insights in the factors influencing the expectations of professional sport players and coaches and the effects of these expectations in the pervasiveness of nonverbal cues of disappointment.

A future study with more focus on these aspects is therefore suggested.

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