DISSERTATION FROM THE
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Erik Hofseth

Stress, emotions, and coping in elite football players

A study of negative emotions, defensive self-presentation strategies, and their relationships to skill and performance level

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Summary

This thesis investigated potential relationships between stress emotions, the use of defensive self-presentation strategies as coping strategies, accuracy of self-perceptions, and skill and performance level in elite soccer players. These potential relationships were examined using the Cognitive-Motivational-Relational Theory of Emotion (Lazarus, 1991) as the overarching theoretical framework. Specifically, the emotions of anxiety, shame, and guilt were assessed as well as the self-presentation strategies of self-handicapping and sandbagging. The thesis includes three quantitative studies **(Paper 1-3)** and one qualitative study **(Paper 4)**.

Results suggest that elite youth football players use sandbagging to cope with sport competitive anxiety (**Paper 1**). Although the prevalence of sandbagging was relatively low, there seems to be a relationship with age: the older the players, the fewer of them who use sandbagging. Sport competition anxiety was found to be negatively related to players' skill level and future performance level, while sandbagging and self-handicapping were unrelated to skill and performance level (**Paper 3**). Shame and guilt were found to be indirectly related to elite youth players' skill level through the use of self-handicapping; shame negatively and guilt positively **(Paper 2)**. In a qualitative interview study, professional football players stated that they were fearful of performance failures, and indicated that they were likely to experience shame but not guilt in response to performance failures **(Paper 4)**. They also indicated that one by experience learns how to deal with shame related to performance failures. The results further showed that most of the youth elite players had inaccurate self-perceptions, in that they tended to overestimate their skill level in comparison to their coaches' evaluations. This tendency was negatively related to players' future performance level. Possible explanations for this finding may be found in various cognitive biases **(Paper 3)**.

In conclusion, this dissertation suggests that that elite football players use both sandbagging and self-handicapping to deal with emotions such as anxiety and shame although the prevalence of both strategies is relatively low. Anxiety and shame were found to be negatively related to skill and/or performance level, while guilt may have a positive effect (through a negative effect on self-handicapping). In addition, the accuracy of self-perceptions relative to the coach's perceptions of players' skill seems to be related to youth players' future performance level. It was also found that players learn by experience how to properly deal with stress emotions. This implies that coaches should be aware of the behaviors related to maladaptive coping strategies in order to correct players and help them live up to their potential.

Sammendrag

Denne avhandlingen undersøker mulige sammenhenger mellom stressemosjoner, bruk av defensive selvpresentasjonsstrategier som stressmestringsstrategier, nøyaktigheten av selvoppfatning og ferdigheter og prestasjonsnivå hos elitefotballspillere. Sammenhengen mellom disse faktorene ble undersøkt i lys av «Cognitive-Motivational-Relational Theory of Emotion» (Lazarus, 1991), som et overordnet teoretisk rammeverk. Spesielt ble emosjonene angst, skam og skyld undersøkt, samt selvpresentasjonsstrategiene selvhandikapping og «sandbagging». Avhandlingen omfatter tre kvantitative studier **(Artikkel 1-3)** og én kvalitativ studie **(Artikkel 4)**. Resultatene tyder på at unge elitefotballspillere benytter «sandbagging» for å takle prestasjonsangst i idrett **(Artikkel 1)**. Selv om utbredelsen av «sandbagging» var relativt lav, var et interessant funn alder: jo eldre spillere var, jo mindre var sannsynligheten for å «sandbagge».

Prestasjonsangst ble funnet å være negativt relatert til spillernes ferdighetsnivå og fremtidig prestasjonsnivå, mens «sandbagging» og selvhandikapping i mindre grad synes å være relatert til ferdigheter og prestasjonsnivå **(Artikkel 3)**. Skam og skyld ble funnet å være indirekte knyttet til elite ungdomsspilleres ferdighetsnivå gjennom bruk av selvhandikapping; skam negativt og skyld positivt **(Artikkel 2)**. I en kvalitativ intervjustudie, uttalte profesjonelle fotballspillere at de var redde for å gjøre prestasjonsfeil, og indikerte at de ved store prestasjonsfeil sannsynligvis opplevde skam, men ikke skyld **(Artikkel 4)**. De viste også at man av erfaring lærer hvordan man skal håndtere skam knyttet til prestasjonsfeil. Resultatene tydet videre på at de fleste av de unge elitespillerne hadde unøyaktige selvoppfatninger, ved at de tenderte til å overvurdere eget ferdighetsnivå i forhold til sine treneres evalueringer. Denne tendensen ble negativt relatert til spillernes fremtidige prestasjonsnivå. Mulige forklaringer på dette funnet kan forklares i lys av ulike typer forutinntatthet **(Artikkel 3)**.

For å konkludere, funnene i denne avhandlingen tyder på at elitefotballspillere bruker både «sandbagging» og selvhandikapping for å takle emosjoner som angst og skam, selv om utbredelsen av begge strategiene er relativt lav. Angst og skam ble funnet å være negativt relatert til ferdigheter og / eller prestasjonsnivå, mens skyld kan ha en positiv effekt (gjennom en negativ effekt på selvhandikapping). I tillegg synes ferdighet å være knyttet til ungdomsspillernes nøyaktighet i sin selvoppfatning i forhold til trenerens oppfatninger av spillernes ferdighetsnivå og deres fremtidige prestasjonsnivå. Det ble også funnet at spillerne lærer av erfaring om hvordan de bør håndtere stressemosjoner. Dette innebærer at trenere bør være klar over atferd knyttet til maladaptive stressmestringsstrategier for å korrigere spillerne og hjelpe dem med å leve opp til sitt potensial.

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List of Papers

Paper 1:

Hofseth, E., Toering, T., & Jordet, G. (Submitted). Sandbagging as a media coping strategy in elite youth soccer players: The influence of age and trait sport competition anxiety.

Paper 2:

Hofseth, E., Toering., T., & Jordet, G. (2015). Shame proneness, guilt proneness, behavioral self-handicapping, and skill level: A mediational analysis. *Journal of Applied Sport Psychology, 27,* 359-370.

Paper 3:

Hofseth, E., Toering., T., Jordet, G., & Ivarsson, A. (In review). Perception of skills and performance level in youth elite soccer: Are positive self-perceptions always positive?

Paper 4:

Hofseth, E., Pedersen, J. V., Toering., T., & Jordet, G. (Submitted) Shame-coping in professional soccer players: An exploratory interview analysis.

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Chapter 1: Introduction and Framework

The topic of the current thesis is stress emotions, defensive self-presentation strategies, and their relationship to skill and performance level in elite youth football players. In this chapter I first argue for why an examination of these constructs within this population is of interest. Then, I present and clarify the concepts and the framework the current thesis builds upon, while also indicating its potential contribution to the current literature. Finally I put forth the specific research questions the thesis aims to answer.

Introduction

Research on the role of emotions in human functioning (broadly) suggests that positive emotions have a reinforcing effect on *adaptive* behavior and are triggered by events that meet our goals. Negative emotions have an inhibiting effect on *maladaptive* behavior and are triggered by events that thwart our goals (Lazarus, 1991; Tracy & Robins, 2004). In sport, previous behavioral studies have demonstrated that athletes experience empowering and hedonically positive emotions in response to winning and successful task execution; while in response to losing and failed attempts, in contrast, athletes are likely to experience disempowering and hedonically negative emotions (e.g., Moll, Pepping, & Jordet, 2010; Tracy & Matsumoto, 2008).

One can argue that winning is contingent on losing in the sense that numerous failed attempts are required before developing a high enough skill level to win (Nicholls, 1989; Roberts, 2012), as is the case with becoming an expert, which also comes from many failed attempts (Ericsson, Krampe, Tesch-Römer, 1993). Negative emotions and how they are coped

with may therefore play an important role in the development of a high skill level (Bond, 2009; Dweck & Legget, 1988,).

In professional football (association football or football), the rewards for success (e.g., salary and status) and negative consequences for failure (e.g., being criticized in the media) are higher than in most sports (Forde, 2010; Kristiansen, 2011; Roderick, 2006). Knowing that rewards and punishments amplify emotions (Lazarus, 1991), negative emotions and how they are coped with may play a particular important role in the development of a skill level high enough to compete at a professional level in football. Previously, several in-depth qualitative studies have been done with youth elite football players and their pathways to becoming professional players concerning failure, distress, and coping (e.g., Reeves, Nicholls, & McKenna, 2009; Sagar, Busch, & Jowett, 2010). Such studies have shown that players experience a high level of pressure from themselves as well as from others to perform at a high level and conform to the ideals of what is required of a youth elite football player. When they fail to live up to these ideals and standards, or anticipate they might not, they are likely to experience negative emotional distress in the form of anxiety, shame, or guilt. Due to maladaptive coping, such distress often has a negative influence on their subsequent performance and training engagement (Pain & Harwood, 2007; Sagar et al., 2010; Sagar, Lavallee, & Spray, 2007).

What currently seem to be missing from this body of research are quantitative studies disclosing the prevalence of such responses and their relationship to players' skill and performance level. Related to this, football players may use defensive self-presentational strategies such as self-handicapping and sandbagging to cope with emotional distress associated with performance pressure and performance failures (Jordet, 2009; 2010). There is also a need to investigate the relationship of these strategies with athletes' skill and performance level to

determine if such coping is adaptive or maladaptive with respect to attaining a high performance level (Jordet, 2010). The general purpose of the current thesis was to investigate links between negative emotions associated with performance failure, defensive self-presentational strategies, and how these links relate to youth elite football players' skill and performance level.

Conceptual and Theoretical Framework

Emotions

For most people it is intuitive what the term emotion means (Hanin, 2007). For those who study emotions it is not intuitive at all, it is an issue of muddy water, metaphorically speaking. To simplify the matter, several researchers have broadly stated that an emotion is a coordinated psychophysiological stimulus response to events of significant relevance for a person's well-being that is constituted by the three components: the subjective experience, physiological changes, and action tendencies (e.g., Deci, 1980; Gross, 2008; Hanin, 2007; Lazarus, 1991).

Although emotions are a debated theme among researchers, it seems all agree that their *purpose* is to promote adaption and survival in humans (Prinz, 2004). Historically there have been two traditional views, those who view emotions as a product of evolution (e.g., Plutchik, 1980), and those who view emotions as a product of learning (e.g., Averill, 1980). The contemporary view, however, leans towards a hybrid perspective on emotions; advocating that emotions are encompassed by both a biological and social component (e.g., Griffiths, 1997). Accordingly, research suggests that some emotions might be particularly biological hardwired and likely to be evoked by the same stimuli and expressed in the same manners across cultures (Tracy & Robins 2004). Such emotions are often referred to as basic emotions, or primary emotions. Happiness, sadness, fear, surprise, anger, and disgust have typically been coined as

such emotions (e.g., Ekman, Sorensen, & Friesen, 1969). Research also indicates that some emotions might be particular sensitive to socio-cultural processes and not contingent on the same stimulus across cultures. These are often referred to as complex, secondary, social, existential, or self-conscious emotions. Shame, guilt, pride, and social anxiety are typically argued to be such emotions (e.g., Leary, 2007; Tracy & Robins 2004).

In sum, humans have two emotion systems working together. One is the physio-biological system, meaning the capacity humans have to experience and regulate emotions, that itself adapts in tune with evolution. This system is for example constituted by different parts of the brain (e.g., amygdala), the peripheral nervous system, and the hormones that have a regulatory function (e.g., cortisol) in the metabolic system (Prinz, 2004). The second system concerns the socialization processes humans are exposed to, from which values, beliefs, and aspirations are internalized—which the biological system becomes contingent on. Through these processes, humans become biologically and socially primed to respond adaptively to the right stimuli within the specific environment they operate within (Prinz, 2004).

The previous paragraph has described the underlying basic emotional process in humans, which illustrates how humans are regulated *by* emotions to function adaptively (Gross, 2008). Although emotions in many cases can be regarded as an adaptive behavioral compass (Nathanson, 1992) humans are not "emotional slaves." In most cases, humans need to regulate their emotions (cope) in order to function adaptively. This has two reasons. First, we often encounter situations that hold a conflict of interest for us, and it is impossible for the biological system (evolution) and the social system (e.g., parents) to predict and provide unidimensional emotional guidance for all possible encounters. Ultimately, it is up to the person to regulate and endure those emotions that are decisive in situations where there is a conflict of interest (Lazarus,

1991; Paulus & Yo, 2012). Second, although the intended function of the action tendency factor in emotions is to stimulate adaptive behavior, it also a prerequisite from when humans were facing more physical threats and lived in less complex social and normative systems than modern people do. This means that the behaviors many emotions imply are no longer needed, although the information they provide still is valid (Lazarus, 1991). In such cases it essential that emotions are regulated—we cannot simply go with the emotional flow, it can often be self-destructive (Baumeister, 1997).

Importantly, there are also individual differences in emotional responses analogues to any other psychological trait; reflecting a person's relatively stable tendency to respond in a given manner to a stimulus. Thus, some people are more likely to experience a specific emotion in a given situation at certain intensity than others. This tendency is referred to as an emotional trait (John, Chaplin, & Goldberg, 1988). Humans vary on this dimension because all have experienced a unique socialization process and have a unique biological heritage (Lewis, 1995). In contrast, an emotional state refers to a brief-time constrained response, which more heavily relies on the nature of the stimuli than on the individual itself, like any other psychological state (John et al., 1988).

Sport psychology is, as general psychology, plagued with inconsistent use of terms and definitions concerning the emotional aspect of phenomena's (Hanin, 2007). It is therefore prudent to do work from one theoretical perspective in order to ensure consistent use of terminology and concepts. In this regard several researchers have argued The *Cognitive-Motivational-Relational Theory of Emotion* (CMR: Lazarus, 1991; 1999; 2000) is a particularly apt framework for investigating how athletes cope with emotional distress because it integrates emotions and coping into one dynamic process (Crocker et al., 2004; Jones & Uphill 2012;

Uphill & Jones 2012). In the current thesis CMR was therefore chosen as a general backdrop from which the relationship between the emotions anxiety, shame, and guilt; defensive self-presentational strategies; and skill and performance level in football players are discussed.

The Cognitive-Motivational-Relational Theory of Emotion

The Cognitive-Motivational-Relational Theory of Emotion (CMR: Lazarus, 1991; 1999; 2000) is a cognitive (appraisal) focused theory, which often is used in the field of sport and exercise psychology. Within the framework of CMR, an emotion is regarded as an organized psychophysiological response to a stimulus event, constituted by three components: 1) affect (a person's subjective experience), 2) physiological changes, and 3) action tendencies.

CMR is a hybrid theory in the sense that it postulates that emotions have a biological inherent basis and that their contingencies to a large extent are products of learning. Further, each emotion reflects a specific person-environment relationship indicating what a person has at stake in a given situation (core relational theme/meaning). Anxiety, shame, and guilt are referred to as stress emotions because they typically result from perceived threats, harms, or losses relevant to a persons' ego-identity. Lazarus (1991) uses and prefers term ego-identity (Ericsson, 1950), over the term self because he argues that ego-identity to a larger extent reflects that a person, and his or here's mind, operate within the boundaries of their environment, while the term self to a larger extend indicates that a person, and his or here's mind operate within the boundaries within themselves. Furthermore, each emotion is regarded as a process, constituted by three components: *antecedents*, *the mediating process*, and the *outcome*. These components are seen as working together in a reciprocal relationship (see, Figure 1).

Antecedents: Personal factors situational factors

Antecedent variables include personality, personal factors such as goals, values, beliefs, and commitments, and the specific environmental demands, constraints and resources provided within a specific situation. The interaction between these is referred to as a situational construal, which determines the potential and the boundaries for the emotion process. The most relevant factors a person brings to this interaction are her or his goal commitment, his or her beliefs about her or himself, and how much previous knowledge she or he has about the situation. The interaction between these factors plays an important role in the mediating process. For example, a strong goal commitment accompanied with the belief that one has the resource to be efficient leads to different coping than if one beliefs one have insufficient resources. Similarly, a person with much experience and knowledge with a particular situation sees many more ways to operate within that situation than one who is a novice in this regard, which affects both appraisal and coping.

The mediating process: Appraisals, emotions and coping

The mediating process concerns the person's appraisals within a specific situation and how he or she copes with the situation. In sum the appraisal process is a synthesis of six appraisals, categorized into *primary* and *secondary appraisals*. The primary appraisal consists of judgments of *goal relevance, goal congruency*, and *ego-involvement*. Goal relevance involves an evaluation of whether an event is significant for a person's goal or interest. If it is, an emotion is elucidated. Goal congruency concerns the consideration whether a situation is perceived as goal congruent or incongruent with respect to a person's goals. Goal congruent appraisals are challenge (anticipated gain) and benefit (gain has occurred); while goal incongruent appraisals

are threat (anticipated loss) and harm (loss has occurred). Anxiety, shame, and guilt all result from goal incongruent appraisals.

Further, ego-involvement refers to the judgment of which part of a person's ego-identity is involved in the situation. Anxiety is contingent on the possibility of a threat against any type of ego-involvement, and does not rely on the secondary appraisals, which shame and guilt do. For shame to potentially be elicited, the person's ego-ideal must be at stake. In short, ego-ideals concern ideals a person tries to conform to, and evaluates him or herself up-against as a person (Laplanche & Pontalis, 1967). For guilt to be elucidated, the person must have a moral sense of obligation or interest in the situation. Shame and guilt may be interrelated in the sense that an ego-ideal might concern being a person with high moral standards.

The secondary appraisal process involves determining blame or credit, *coping potential*, and *future expectations* for the situation. Given that relevant information is available, blame or credit for the desirable or undesirable event is distributed. For shame or guilt to be elicited, blame for the undesirable event must be assigned to one's self. Importantly, the attributional appraisals do somewhat differ in shame and guilt and these emotions therefore denote a different experience (affect). In shame blame is assigned to the person as a whole, meaning that failure implies a character flaw. In guilt, blame is assigned merely to a specific controllable action. Consequently, shame is a considerable more distressing emotion than guilt.

Further at this stage, coping potential is determined. This is an evaluation of how and if the person has the sufficient resources to adapt to the demand, suggested by the core relational theme. Related to this, each emotion generates an action tendency, which is experienced as a motivational desire, this desire is supposed to help the person to initiate adaptive coping and ensure well-being. In the case of anxiety, a person is likely to experience a desire to objectify the

source of threat, suggesting that the person should cope proactively by escaping from or eliminating potential sources of harm. Concerning shame, a person is likely to experience desire to abstain from displaying a behavior or characteristic if it concerns an anticipatory event (threat), and even in some cases completely avoid the situation. If the event has occurred (harm), meaning that a person has violated an ego-ideal, the person is likely to experience a desire to hide within the situation or escape from the situation so others cannot see one's shortcomings. Shame is unique because determining coping potential involves if the person can direct efforts do live up to the ego-ideal, while the associated desire indicates that this can only be accommodated by avoiding negative behaviors. This implies in the case of learning a skill through failing that one must cope *with* this desire. In the case of guilt, in an anticipatory state, persons are likely to experience an agitating concern, inspiring people to follow their moral obligations. In the event where they have transgressed their moral standards, they experience a desire to atone their mistake, and if other people have suffered in that regard they are likely to apologize and try to compensate their loss. The final component of secondary appraisals, future expectations, is a judgment concerning if the state of the event is likely to change in time, which either may increase or decrease the intensity of the emotion. Importantly, through this appraisal process new information is often made available for the person, so the first outlook on the situations may change. Thus, meaning that the appraisal process should be regarded as dynamic process. Nevertheless, the six appraisals previously described should be regarded as a person's first impression, and they may occur more or less simultaneously. Appraisals made after this first impression are referred to as reappraisals.

Overlapping with the appraisal process, coping attempts are initiated whenever the person locates sufficient resources to alter a troublesome or maintain a desirable person-environment

relationship. Within the CMR framework, coping is typically defined as “any cognitive and behavioral efforts to manage specific external or internal demands (and conflicts between them) that are appraised as taxing or exceeding the resources of the person” (Lazarus, 1999, p. 112). Further, coping strategies are usually classified into *problem-focused coping* and *emotion-focused coping strategies*. Problem-focused strategies are those that change the source of the emotional distress. Emotion-focused strategies on the other hand manipulate the emotional distress by changing how the person attends to the source, or the meaning of it (Lazarus, 1991: 1999). For example, two players might be worried (anxious) about an injury. One player immediately sees the doctor who prescribes adequate medicine and restitution so the injury is healed (problem-focused coping). The other player avoids thinking about the injury, talking about the injury, and engaging in painful activity (emotion-focused coping). In both cases the emotional distress is reduced, but for different reasons. The former due to a state of a fact (injury is healed) the latter due to manipulation of mind (existence of injury is not acknowledged).

As in the latter case, the emotion process may be short-circuited, in the sense that a person copes (avoids the stimuli) at such an early stage in the process that an emotion never will arise. This is specifically likely to occur when people have so much knowledge and experience with a certain situation that they can make a decision on how to cope purely based on primary appraisals (threat) and secondary appraisals (e.g., highly confident they will manage to cope). In some cases such coping even become implicit, meaning that people automatically avoid certain events as previously described or they deploy an ego-defensive reappraisal (e.g., denial or externalization of cause or avoidance of event) in response to primary appraisals (threat) (Lazarus, 1991).

The outcome

The outcome of one emotion process affects the next. Specifically, through one process the person has either changed how he or she relates to situation (emotion focused) or the situation itself has been changed (problem-focused coping). In principle, this means that no emotion process is the same. However, with gained experience and repetition with the same situation, people tend to develop habitual appraisals, emotional responses, and coping patterns, which is adaption (Lazarus, 1991). What constitutes an adaptive emotion process depends on the person's goals. In the case of football players, an adaptive emotion process is likely to result in a high skill and performance level.

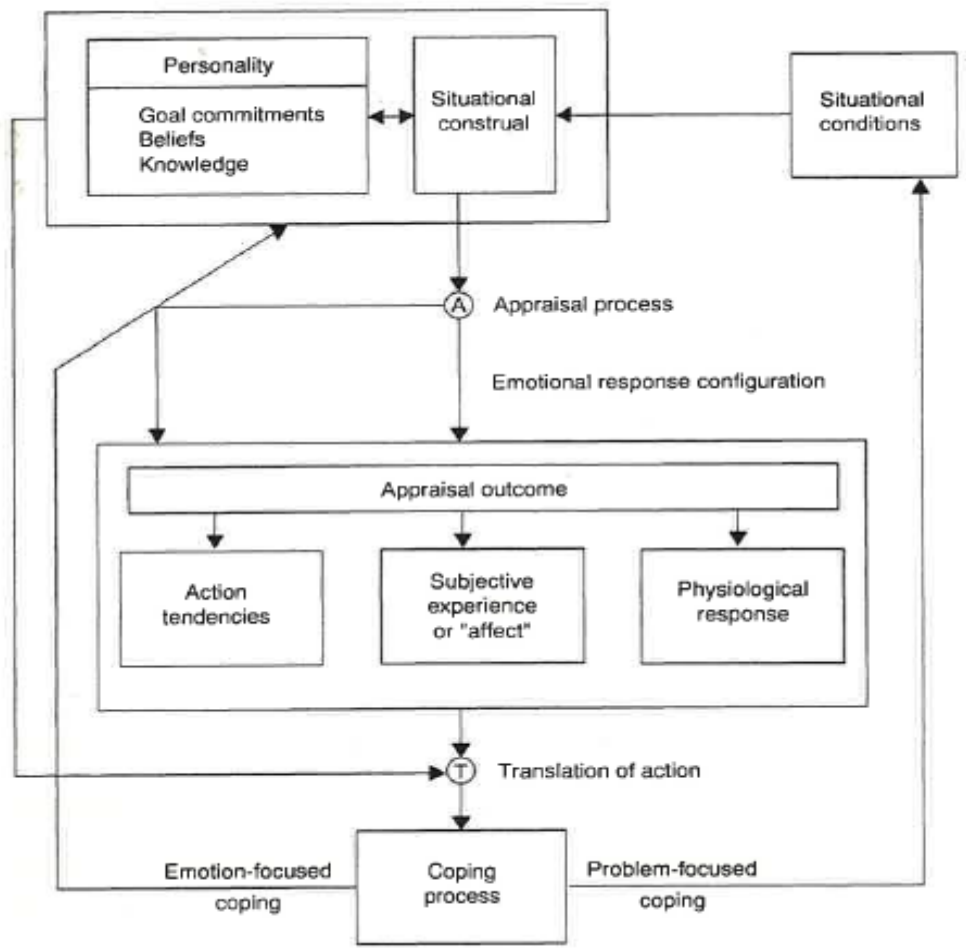

Figure 1. The emotion process according to CMR.
Note. Retrieved from Lazarus (1991) p. 210

Anxiety, shame and guilt in sport

In sport, anxiety has received a vast amount of inquiry. As a product and reflection of this research, there have been developed several sport specific anxiety-performance models (for an overview, see Gould. Greenleaf, & Krane, 2002). In sum, these propose that there is a complex

relationship between anxiety and sport performance, and that the performance outcome often depends on how athletes cope with their anxiety (Nicholls & Polman, 2007). Nevertheless, two issues seem to be clear: athletes with a higher performance and skill level tend to interpret their symptoms of anxiety as more facilitating than their lesser skilful and lower performing peers do (e.g., Jones, Hanton, & Swein, 1995; Perry & Williams, 1998). In addition, under high levels of performance pressure, research across disciplines suggests that elevated levels of anxiety *tend* to have a detrimental effect on performance or task execution, in particular in individuals who are highly trait anxious (for review see, Beilock & Gray, 2007). This tendency has also been reported in football players in high pressure situations; such as taking a penalty (Horikawa & Yagi, 2012).

Youth elite players experience high levels of performance pressure on a daily basis while competing with their peers to gain a pro-contract (Sagar, Busch, & Jowett, 2010). This performance pressure only gets higher as players get older because only the best players progress through to the next stage in their clubs' talent development pyramid (Mills, Butt, Maynard & Harwood, 2012; Nesti & Sulley, 2014). Seeing this pathway with continuous increased levels of performance pressure, trait anxiety is an emotional trait that may negatively affect youth elite football players' likelihood of becoming professional players – depending on how to cope with this performance pressure.

Motivational theorists have for a long time argued that shame plays a vital role in achievement behavior (e.g., Atkinson, 1957). The empirical study of shame (and guilt) is still a relatively *new* theme on the sport performance scene. To date, what we do know is that athletes are likely to experience shame in response to failure and display of weakness of their skills (Elison & Partridge, 2012; Furley, Moll, & Memmert, 2015; Massey & Partridge; 2010;

Partridge & Wiggens, 2009; Sagar & Stober, 2009; Tracy & Matsumoto, 2008). This also seems to be the case in elite youth football players (Passer, 1983; Sagar, Busch, & Jowett, 2010), where there has been one study showing that guilt may occur (Sagar, Lavallee, & Spray, 2007). In sum, these researchers seem to argue that shame and guilt are likely to have an inhibiting effect on players' skill and performance level. Interestingly, in a more recent study it was disclosed in a group of youth elite football players in professional clubs, concerning motivation for playing football, that older players in comparison to younger players where to a larger extent found to be motivated by shame and guilt (Hendry, Crocker, &, Hodges, 2014). Assuming that age reflects a higher skill and performance level, relatively speaking, this finding indicates that shame and guilt may have an adaptive function in football players.

Importantly, all these previous studies concerning shame and guilt have a methodological shortcoming—they have either only measured shame or guilt (e.g., Sagar et al., 2010) or they have combined them into one factor (e.g., Hendry et al., 2014). This is an issue of concern because much research from general psychology has demonstrated that shame and guilt share variance but promote contrasting motivation, behaviors, and coping strategies (for a review, see Tangney & Tracy, 2012). For example, in students it has been found that shame and guilt proneness have contrasting relationships to self-handicapping and exhorted effort after performance failure (Cowman & Ferrari, 2002; Thompson, Altman, & Davidson, 2002). This indicates that shame and guilt each may exert a unique influence on football players' skill and performance level—possibly through the use of self-handicapping and how they respond to performance failures.

Coping with emotional distress

Within the two of categories: problem-focused coping and emotion-focused coping, some researchers also identified subtypes of coping such as planning, setting goals, and assertive confrontation (problem focused), emotional support, relaxation, wishful thinking, and avoidance (emotional-focused coping) (Carver, Scheier, & Weintraub, 1989; Compas, Connor-Smith, Saltzman, Harding, Thomsen, & Wadsworth, 2001; Roth & Cohen, 1986). As with anxiety, most coping research in sport primarily seems to revolve around competition. In this regard, the effectiveness of problem-focused and emotional focused strategies seems to depend on whether athletes may exert control over the situation or are constrained to only cope with their emotions (for review see, Nicholls & Polman, 2007). Interestingly, few studies have investigated the influence of how athletes cope with the daily emotional distress associated with being in high performance environments.

One notable exception is a study conducted on Dutch youth elite football players, where it was found that players with an emotional-focused coping style were less likely to become professional players than their peers with a problem-focused coping style (Van Yperen, 2009). Coping style refers to people's preferred way of coping (Carver et al., 1989). What remains unclear is which specific types of emotion-focused coping strategies contribute to future success in football players. In this regard, it has been suggested that self-handicapping and sandbagging may have a negative influence on future performance level (Jordet, 2010).

Self-presentation as coping

Self-handicapping and sandbagging are better known as self-presentation strategies than coping strategies (Prapavessis, Grove, & Eklund, 2004). The study of self-presentation stems

from the work of sociologist Irwin Goffman (1959), suggesting that people in all social situations are *on stage putting on a performance* to create a social identity to accommodate their own goals in everyday life (Leary & Kowalski, 1990). Self-presentation involves the process where people manipulate and control how they are perceived by others. Self-presentation strategies concern the *strategies* that are used as a means to manipulate the desired impressions of ourselves in others). Both self-handicapping and sandbagging are classified as *defensive* self-presentation strategies, and are used to preserve a desired perception of self by avoiding the occurrence of any threats to its current status, and shred them of in case they occur (Aikin, 1981; Leary & Kowalski, 1990).

Self-handicapping

Self-handicapping, involves conveying the impression one is high in abilities, regardless of how one actually performs. This is achieved by construction of a real hindrance to performance, or a claim thereof, unrelated to competence, which would be expected to reduce one's chances of successful performance (Aiken, 1981; Snyder, 1990).

The concept of self-handicapping has been scrutinized thoroughly by sport psychology researchers (Prapavessis et al., 2004). For example, investigations show that athletes primarily engage in two types of self-handicapping (Prapavessis et al., 2004). One type concerns the construction of a performance barrier, such as not practicing, which has been labeled "behavioral self-handicapping." The other type concerns verbal assertions of having a barrier, such as claiming to not have practiced, this has been called "claimed self-handicapping" (Arkin & Baumgardner, 1985; Leary & Shepperd, 1986). Both types of self-handicapping have been positively linked to competitive anxiety (Prapavessis et al., 2004). This suggests that athletes may use self-handicapping as a strategy to cope with competitive anxiety.

Related to this, in a commentary article on the first self-handicapping study (Berglas & Jones, 1978)[1] it was suggested that people used self-handicapping as a strategy to distance themselves from reality, in order sustain and indulge in their "fantasies of glorified competence" (Jones & Berglas, p.203, 1978). In this regard, a *self-handicapping coping-style* might promote an inaccurate and overestimated perception of one's capabilities. This is an issue of relevance for elite football players' skill and performance level because studies from general psychology, with experimental or longitudinal designs, have demonstrated that self-efficacy in some cases is negatively related to subsequent performance; in those participants who overestimate themselves (Moores & Chang, 2009; Stone, 1994; Vancouver, Thompson, Tischner, & Putka, 2002). In addition, it has also been reported that lowering participants' confidence enhanced their performance on a rope skipping task (Woodman, Akehurst, Hardy, & Beattie, 2010). Furthermore, in a decision-making task experiment it was found that overestimating one's skills facilitated performance at low and moderate competitive levels, but debilitated performance at the highest competitive levels because margin for error was so small (Johnson & Fowler, 2011).

Having in mind that level of competitiveness increases progressively in elite youth football (Mills et al., 2012), an accurate perception of skill level might be preferable over an overestimated perception of skill level. Related to this, it has been reported that football players who overestimate their skills are more likely to become injured than other players (Kantos, 2004). However, we do not know through which mechanisms an overestimation of skill level might occur and how overestimation relates to players' performance level. Concerning the potential influence of self-handicapping in this regard, only behavioral self-handicapping has

[1] This study disclosed that (male) participants, prior to a performance task that was held as personal meaningful, counterintuitively, choose to take a performance-debilitating rather than a performance-enhancing drug—arguably so they gained the opportunity to externalize potential failure and protect their desired perception of self (Berglas & Jones, 1978).

been found to have an effect on sport performance (e.g., Coudevylle et al., 2008a; Elliot, Cury, Fryer, & Huguet, 2006). Therefore the current thesis focused on behavioral self-handicapping.

Sandbagging

Sandbagging is a self-presentation strategy that involves manipulating others to believe that one is relatively low in abilities by understating abilities or falsely demonstrating inability (Aikin, 1981; Leary & Kowalski, 1990). Previous studies and anecdotal evidence suggest that athletes use sandbagging to ascribe competitive advantages such as luring opponents to reduce their level of effort or to manipulate tournament seeding systems to provide them with less competent opponents (Evans, 2013; Sachau, Simmering, Adler, Ryan, 2014; Sheppard & Socherman, 1997). In relation to high pressure penalty shootouts in football, it has been suggested that football players may apply sandbagging to reduce external expectations when these are perceived as to high (Jordet, 2009). It has been reported that especially gifted students sandbag when being concerned about others having too high expectations to them, as in being especially talented (Luus & Watters, 2006). Furthermore, social psychology experiments have also demonstrated that added performance pressure in terms of being seen as a favourite is likely to result in sandbagging, and that trait anxiety is positively related to self-reported use of sandbagging (Gibson & Sachau, 1997; 2000; Gibson, Sachau, Doll, & Shumate, 2002).

Interestingly, in response to the finding that sandbagging prior to an achievement task was associated with poorer performance than prior performance warranted, it was suggested that people, by sandbagging, implicitly may prime their perceptions of themselves negatively, and thus create a negative self-fulfilling prophecy (Gibson, Sachau, Doll & Shumate, 2002). Thus, in contrast to self-handicapping, sandbagging, as a coping style in response to anxiety, might

generate an underestimated perception of skills, and possibly therefore affect performance level negatively.

Purpose of the Thesis

The overreaching purpose of the current thesis was to investigate potential relationships between stress emotions, the use of defensive self-presentation strategies as coping strategies, and skill and performance level in youth elite football players. Three specific research questions were formulated:

1. Do elite youth football players use self-handicapping and sandbagging as strategies to cope with competitive anxiety, and how is such emotion-coping related to their skill and performance level? (Study 1 and 3)

2. Are shame and guilt differently related to skill and performance level in elite football players, and does self-handicapping play a role in these relationships? (Study 2 and 4)

3. Is the use of self-handicapping and sandbagging as emotion-coping strategies linked to the accuracy of self-perceptions in elite youth football players, and is the accuracy of self-perceptions related to performance level? (Study 3)

Chapter 2: Methodology

In this chapter, the specific methods used in the different papers that are a part of this thesis are described. In some cases the reader is referred to the specific papers for additional information.

Background

The current thesis is one out of several projects that are a product of the collaboration between The Norwegian Centre of Football Excellence (TFS) and the Norwegian School of Sport Sciences (NSSS), concerning an overreaching aim of generating knowledge that may facilitate player development in Norwegian football. As basis for that main project, two national surveys conducted on Norwegian football players in 2011 and 2012 were undertaken—"Tippeligaen 14-21" and the "A-stall project." All Norwegian Premier League and Second League clubs (32), including the 12 female Premier League clubs participated in these projects. All data used in this thesis are based on these two projects.

Design

Paper 1 and 2. As the aims of Paper 1 and 2 concerned investigating associations among variables previously not examined in athletes before, a cost effective cross-sectional design was used in both studies (Mann, 2003).

Paper 3. In Paper 3 a central aim was to investigate how the variables related to players' future performance level; therefore a prospective design was used.

Paper 4. In order to gain in-depth insight into the emotion-coping processes, and possible associations to players' skill and performance level, a (retrospective) qualitative design was used.

Procedures, Participants, and Data Collection

Paper 1, 2 and 3. Data for the three first studies come from "Tippeligan 14-21." In this project, the aim was to recruit every single youth elite football player aged 14 to 21, playing for a team within the Norwegian Premier League clubs, resulting in more than 700 players participating (N = 732; M_{age} = 16.58, SD = 1.8). All participants received written information (Appendix A) about the project and submitted written consent before participating (Appendix B). Players under 16 years of age required parental consent (Appendix C). In these consents, players also marked if they agreed upon participating in future studies and storage of their data for years to come. Data were collected with a self-report questionnaire package within the first three months of the season (spring). In Study 3 a post-hoc data collection was completed, only involving those players who had agreed to future participation.

The questionnaires were completed in a group setting (within each club separately). In order to promote reliability, this process was administered by two test leaders, following a standardized protocol. Further, the test leaders were assisted by the teams' staff, in order to create a safe and familiar environment for the participants. Players were encouraged to answer the questionnaires as honestly as possible, and were assured that identities and answers would remain anonymous. Players were also informed that there were no right or wrong answers, that they had no time constraint, that they were free to pull back from the study at any moment (in which case any data gathered on them would be deleted), and that individual assistance was available whenever they were in need of help or clarification. The specific number of players reported in Studies 1, 2, and 3, respectively, differs due to use of different variables and study design (see the specific studies for detailed information).

Paper 4. Data and participants were recruited from a pool of players participating in the "A-stall project." In this survey all first team players in the Norwegian Premier (N = 322) and Second League clubs (N = 317) participated. From this pool of players, six male professional football players, with an age range from 21 to 36 years (M_{age} = 25.33, SD = 4.44) were randomly selected to participate and requested to participate in this study 4 (see manuscript for detailed information concerning the selection procedure). All players received written information (Appendix D) and signed and submitted a written consent (Appendix E) before the study was undertaken.

Measurements

As previously indicated, in the current thesis a trait (style) perspective was chosen over a state perspective. This choice was based on two considerations. First, previous comparative quantitative studies have used trait measures, which means that evidence deducted from the current study are of higher comparative value for the research literature if a trait perspective is applied. Second, previous research has demonstrated that trait measures tap both state and trait emotion variance while state measures only tap state variance (Clark, Vittengl, Kraft, & Barret, 2003), meaning that links between emotional traits and coping styles (dispositions) provide a better estimate of the accumulated effects of emotional and coping responses on players' skill and performance level than state measures does. In other words, traits reflect reactions over a wider range of situations, while states only reflect reactions in a very specific situation.

As the studies included both native Norwegian participants and foreign participants who in some cases did not speak or read Norwegian, all questionnaires were subjected to back translation concerning English and Norwegian (Kim & Lim, 1999). In addition, the

questionnaires were piloted on a youth sub-elite team (n = 19) in order to check the whether the wording and phrasing used in the questions were understandable for youth football players. No adjustments to the questionnaires were made following this process. Furthermore, in order to reduce the likelihood that the order of the questionnaires manipulated players' responses, two versions of questionnaire packages were used. Both packages had a different order of questionnaires and both versions were randomly distributed among the participants. The psychometrics concerning all scales were satisfactory, and readers are referred to the specific Papers (1, 2, and 3) for specific calculations and numbers.

Paper 1, 2, and 3

Emotional traits.

Trait Anxiety. Trait anxiety was measured using the Sport Anxiety Scale-2, which is a trait measure (SAS-2; Smith, Smoll, Cumming, & Grossbard, 2006). The SAS-2 includes three factors of performance anxiety: somatic symptoms, worry symptoms, and concentration disruption symptoms. Each factor consists of five items that are rated on 4-point Likert scale, ranging from 1 (not at all) to 4 (very much). This scale was selected because it was especially developed for adolescents, and has been shown to have good psychometrics in previous studies. (See appendix A for the questionnaire).

Trait shame and guilt. Trait shame and guilt was measured using the Test of Self-Conscious Affect for Adolescents (TOSCA-A; Tangney, Wagner, Gavlas, & Gramzow, 1991). The TOSCA-A consists of 15 scenarios that reflect the everyday experiences of an adolescent. The shame and guilt subscales each contain 15 items. An example of a scenario in the TOSCA-A is, "At school, you wait until the last minute to plan a project, and it turns out badly."

Participants are presented with a list of responses that correspond to different self-conscious emotions; for example, “I would feel useless and incompetent” (shame). Participants then respond to how likely it would be for them to react in the manners described on a Likert scale ranging from 1 (“not at all likely”) to 5 (“very likely”). This scale was also chosen because it is specifically developed for adolescents, and the adult version has been successfully applied in sport studies (e.g., Mosewich, Kowalski, Sabiston, Sedgwik, & Tracy, 2011) (See appendix A for the questionnaire).

Coping styles.

Disposition to self-handicap. Disposition to self-handicap was measured using a football specific scale designed to measure behavioral self-handicapping (Ommundsen, Roberts, Lemyre, & Abrahamsen, 2007). The scale consists of six items asking about proactive strategies that football players use to influence self-presentation. The items were introduced with this sentence in the heading: “Below are examples of things most football players do at one time or another. Please tell how true each of these is for you.” One example of an item is, “Some players deliberately choose not to give their best effort in training so that if they don’t do as well as they had hoped, they can say that is the reason.” Responses were indicated on 5-point scales, ranging from 1 (very much like me) to 5 (very much unlike me). This scale was also chosen because the original version of this scale was developed for adolescents (Midgley, Arunkumar, & Urdan, 1996), and this is a scale highly recommended to use for assessing self-handicapping in athletes (Prapavessis et al., 2004) (See appendix A for the questionnaire).

***Disposition to sandbag*.** Disposition to sandbag was measured using the Sandbagging Scale (Gibson & Sachau, 2000). This originally scale consists of 12 items distributed on three factors: 1) a desire to avoid pressure, 2) desire to exceed others’ expectations, and 3)

sandbagging behavior. Guided by previous studies using this scale in athletes, our analysis indicated that a redistribution of items yielded better psychometrics and that “sandbagging behavior” was the best predictor of sandbagging (Sachau, Simmering, Adler, Ryan, 2014). Thus in the current thesis only the behavior was included. and sandbagging behaviour (three items, e.g.; "I understate my skills, ability, or knowledge”). The items were introduced with the following sentence: “Below are examples of what soccer players think, feel, and do at one time or another. Please indicate how true each of these statements is for you, on a scale ranging from 1 (disagree very much) to 6 (agree very much). This instrument was selected as a measure of sandbagging because at the time of the data collection this was the only published validated instrument (See appendix A for the questionnaire).

Skill and performance level.

Skill level. Skill level was measured with an instrument specifically developed for “Tippeligaen 14-21”, inspired by other studies that aimed at evaluating skills in sports with emergent skills across playing positions (e.g., Felson, 1981; VanYperen, 2009). Specifically, an evaluator was asked to rate a player’s attacking skills, defending skills, mental skills, and physical skills. Each skill was presented as a single item with a short description indicating what should be evaluated. For example, attacking skills were described as; ball control, passing/receiving, and decision-making. In the heading, the evaluator was asked to rate the player’s current skill level in reference in to best players in the same age group in Norway using on a scale of 0 (*lowest*) to 10 (*highest*) (see Manuscripts 1 and 3 for more information concerning this instrument). In addition, this measure was used as an indication of players’ accuracy in estimating their own skills by comparing their evaluation with their coaches’ evaluation concerning their skills (See appendix A for the questionnaire).

Performance level. Based on the assumption that only the best players are selected to represent their country, the players' track record of representing Norway was used as an indication of their performance level.

Accuracy of self-perceived skill level. Accuracy of self-perceived skill level was measured by comparing players' ratings of their own skill level with coaches' ratings of players' skill level (see, analyses: Paper 3).

Paper 4

Interview guide. From the perspective of shame, a thematic semi-structured interview guide was used in order to elicit rich in-depth qualitative data concerning how professional football players: a) experienced and coped with performance failures during match activity; and b) experienced and coped with working on their weaknesses during training activity. Participants were asked a series of open ended questions concerning their thoughts, feelings, impulses, behaviors and coping styles and strategies with respect to the theme. Participants' answers were probed whenever they were unclear or contrasted their previous responses (Rubin & Rubin, 2005). The interview guide did not include questions or phrases directly referring to shame, as this can be shame-inducing in itself, and thus potentially evoke ego-defensive responses (Dearing & Tangney, 2011). In other words, shame was approached indirectly and very delicately. The interview guide was piloted on two professional football players playing in the Norwegian Second League. The interviews took approximately one hour, and were conducted at participants' club location, prior to or after a training session (See appendix A for the questionnaire).

Analysis

Paper 1, 2 and 3. Data was manually transferred from questionnaires into SPSS[2]. When this process was complete, every fifth of the first 100 questionnaires were checked and corrected for typing errors. The raw data file was also checked for minimum and maximum values, and if there were noted any comments by the test leaders or those who transferred the questionnaire into SPSS, these were taken into account as well. As there were less than 5% errors in the 100 first questionnaires, every 10^{th} of the remaining questioners were checked and corrected for typing errors. Then, as all main analyses were based on an ordinary least squares regression framework, the first step in all analysis processes was screening the data with respect to independence of observations, linearity, homoscedasticity, multicollinearity, and missing values (see each Paper 1, 2, and 3 for more detailed information). Data was analyzed using SPSS (Paper1, 2 and 3), and Mplus 7.1[3] (Paper 3). In all three Papers a significance level of $\alpha < .05$, and a confidence interval level of 95% was applied.

Paper 1. In the first Paper a moderated moderation bootstrapping procedure (Hayes, 2013; Model 3 of the PROCESS SPSS macro) was applied to test the influence of media exposure on the relationship between trait anxiety and sandbagging tendencies, and how this influence was distributed across age. Specifically, this analysis indicates if a moderator's (*M: media exposure*) influence on an independent variable (*X: trait anxiety*)'s effect on an outcome variable (*sandbagging tendencies*) is conditional on a secondary moderator (*W*: *age*). In addition, the Johnson-Neyman technique was applied to more accurately determine where the conditional interaction effect transitioned from being statistical significant along the distribution of age/performance level (for details on this approach see Paper 1). In sum these analyses provide

[2] Version 18 (IBM Corp., Somers, New York, USA).
[3] Muthén and Muthén (1998-2012).

insight into how the relationship between trait anxiety, media exposure, and sandbagging is distributed across the various age and performance levels. The reason we chose these specific analyses was that they provide results that may possibly indicate adaptive and maladaptive emotional-coping patterns in response to media exposure with respect to progressing thought the performance levels, indicated by age.

Paper 2. In the study reported in Paper 2 we applied Preacher and Hayes' (2008) multiple mediation macro to examine the relationship between: a) shame proneness, self-handicapping, and skill level, and the relationship between guilt proneness, behavioral self-handicapping, and skill level. In both cases, emotions were defined as the independent variable (*X*) behavioral self-handicapping was defined in the mediating variable (*M*), and skill level as the outcome variable (*Y*). In both analyses age was included as covariate. The reason we preferred to use this specific mediational analysis to other mediation procedures (e.g., Barron & Kenny, 1986) is that it is regarded to have high statistical power and be particularly robust (Preacher & Hayes, 2008).

Paper 3. In order to examine the relationship between accuracy of self-perceived skill level, self-handicapping, sandbagging, trait anxiety, and performance level, we conducted a two-step analytic procedure. First we performed a latent class analysis (LCA) in order to identify subgroups within the population based on the players' and the coaches´ ratings of the players' skills using the maximum likelihood estimator. Then we conducted a multinomial logistic regression analysis, predicting class adherence based on players' performance level (past, current, and future), trait competitive anxiety, disposition to self-handicapping, and disposition to sandbag. Age was included as a covariate. Class Number 3 was selected as the reference category as this was the only class not characterized by players overestimating their skills in reference to their coach. The reason we choose a person-centered approach rather than a

variable-centered approach (e.g., structural equation modeling) is that it provides a more ecologically valid description of the discrepancies between players' and coaches' perceptions of players' skill level, as players' and coaches' evaluations based on the tendencies in this sample rather than a pre-set statistical model.

Paper 4. The aim of the analysis was to provide a plausible process understanding of the role of shame and shame-coping with respect to performance failures and improvement of weaknesses of skills. Data was analyzed through four steps of coding. During the first step, using direct content analysis (Hsieh & Shannon, 2005), data was analyzed deductively, and categorized into two main categories—match and practice activity. During the second step of coding, using conventional content analysis (Hsieh & Shannon, 2005), lower-order themes within each main category, respectively, were first inductively derived from the data and tagged as meaning units. Then, higher-order themes were created across those lower order themes symbolizing the same meaning. A fourth step of coding was conducted on the sections that concerned identifying participants' reported shame inducing events, shame responses, shame-coping strategies, and other shame related factors. This coding was done deductively using direct content analysis (Hsieh & Shannon, 2005), guided by Lazarus' conceptualization of shame and coping (Lazarus; 1991; 1999; 2000). Finally, using composite sequential analysis (CSA; Miles & Huberman, 1994), the main themes were group together into two process-models, one concerning performance failure, and one concerning working on weakness of skill, capturing the interactions and the temporal relationships between the themes.

Ethics

Both “Tippeligaen 14-21” and the “A-stall project” gained ethical approval from the Norwegian Data Protection Authority. In “Tippeligaen 14-21” anonymity of participants was protected by assigning a number to each questionnaire package and removing any names prior to completed the packages. Concerning the players from the “A-stall project” all information concerning names, clubs, or specific incidents was cleared from the transcripts during the analytic procedure and tape-recordings were deleted (see Appendix B).

Chapter 3: Results

In this chapter, a summary of the results from each paper is presented. For more detailed information concerning the results, I refer to the papers at the end of the thesis.

Paper 1

Aim. The aim of this paper was to examine the potential function of sandbagging as a coping strategy in elite youth football players, and the relationship to players' level of trait sport competition anxiety distributed across performance levels (indicated by age) (N = 681, M_{age} = 16.5, SD = 1.8).

Results. Correlational analysis showed that trait performance anxiety was positively associated to sandbagging (r = .27, p < .01). In addition, age was weakly negatively correlated to trait competitive anxiety (r = -.10, p < .05) and sandbagging (r = -.10, p < .01). Further, descriptive statistics showed that media exposure becomes more common as players get older. Players indicated that from the media itself, they experienced relatively low performance expectations (M = 3.25), but there seems to be a relatively high variation among the players (SD = 3.31). In the vast majority of cases, players perceived that they had been portrayed positively by the media. Moderation analyses indicated that media exposure only in terms of being portrayed on TV had an influence on the relationship between trait sport competition anxiety and sandbagging in players at or below 16 years of age [W = 16.09, $\theta_{XM\ 16.}$ = .62, t(560) = 1.96, p = .05, 95% CI = .00, – 1.24].

These results imply that football players who are relatively young, and relatively highly trait sport competition anxious may be prone to be distressed by media exposure on TV, and that such players may use sandbagging as a strategy to cope with their distress.

Paper 2

Aim. The aim of this paper was to investigate the potential unique roles of shame and guilt in football players' achievement behavior, by testing the direct and indirect relationship between players' shame and guilt proneness on their skill level, with use of behavioral self-handicapping in a mediating role (N = 589, M_{age} = 16.8, SD = 1.8).

Results. Correlation analysis showed that shame and guilt proneness were positively correlated (r = .34, p < .01), and neither emotional dispositions were found to be related to age. The mediational analyses demonstrated that shame proneness had a direct positive relationship to behavioral self-handicapping (β = .22, SE = .05, p < .001), but had no direct relationship to skill level (β = -.13, SE = .04, p < .01). Shame proneness and skill level was found to be weakly and indirectly related through self-handicapping, β = -.03, 95% [CI = -.06, -.01]. Concerning guilt, the mediational analysis demonstrated a direct negative relationship between guilt proneness and behavioral self-handicapping (β = -.23, SE = .05, p < .001). Like shame proneness, guilt proneness was found to only be indirectly related, through behavioral self-handicapping, to skill level, β = .03, 95% CI [.01, .06]. Age was also in both analyses found to be a significant covariate in skill level (Shame: β = .20, SE = .05, p < .001, guilt; β = .23, SE = .05, p < .001).

These results show that shame proneness, through behavioral self-handicapping was negatively related to the players' skill level, while guilt proneness in was positively related to players skill level through behavioral self-handicapping.

Paper 3

Aim. The aim of this paper was to examine if the use of self-handicapping and sandbagging as emotion-coping strategies was related to accuracy of self-perceptions in football players, and examine how inaccurate self-perceptions were related to football players' performance level (N = 267, M_{age} = 17.6, SD = 1.1).

Results. Based on the players' and coachers' ratings of the players' skill level, a cluster (latent class) analysis suggested that there were three subpopulations in the sample (entropy = .76, likelihood ratio test p =.02). Class 1 was characterized by low player and low coach ratings, players' ratings exceeded coaches' ratings moderately. Class 2 was characterized by high player ratings and moderate coach ratings, and players' ratings exceeded coaches' ratings strongly. Class 3 was characterized by moderate player ratings and high coach ratings, coaches' ratings exceeded players' rating, strongly. A multinomial regression analysis (X^2 14, N = 233) = 69.26, p < .01) indicated that in comparison to players in Class 3, the players in class 1 reported a higher level of competitive anxiety (95% CI = 1.28 – 6.79). Players belonging to Class 2 were distinguished from players belonging to Class 3 in terms of them being less likely to play international matches the next two years (95% CI = 0.59 – 0.97). Self-handicapping and sandbagging were not found to be associated with an inaccurate perception of skill level, nor playing national team matches. Both self-handicapping (r = .27, p < .01) and sandbagging (r = .28, p < .01) were found to be positively correlated with trait sport competitive anxiety, which was negatively correlated to age (r = .19, p < .01) and future national team matches (r = .13, p < .05).

These results imply that inaccurate self-perception, in terms of an overestimated skill level is negatively related to future performance level. The same seems to be the case with trait

competitive anxiety. In neither of the cases do use of sandbagging or self-handicapping seem to appear to play a role.

Paper 4

Aim. The aim of this paper was to gain in depth insight into the shame-coping process associated with performance failures during matches, and while working on weaknesses during training. In this paper in-depth interviews were used to explore the ways in which professional football players (N = 6, M_{age} = 25.33, SD = 4.44) coped with shame, to possibly shed new light on the findings from Papers 1, 2, and 3.

Results. Data was analysed inductively and deductively using direct and conventional content analysis guided by the concept of shame and coping suggested by The Cognitive-Motivational-Relational Theory of Emotion (Lazarus, 1991). Results showed that players were particularly likely to experience shame in response to performance failures during match activity. Herein, they typically reported experiencing desire to escape, often by disappearing into the ground (e.g., "To put it like this, had there been a black hole in the ground, or a well, I would have felt like jumping in" [P4]). Others also reported that they could experience a fear of failure. Several players indicated that social support could have a strong buffering effect on their experience of shame. In addition, most players indicated that they experienced symptoms of shame as more distressing when they were younger. Players were found to employ specific problem-focused (learning) and emotion-focused coping strategies ("hiding"). At an intra-personal level, players' shame-coping style seemed to have an influence on their performance and skill development, in some positively others more negatively. Players with ego-ideals who primarily focused on displaying competence and performing up to a high standard seemed

susceptible to experience shame and engage in possibly maladaptive coping in this regard. For example one player stated:

> As a football player you are not the best at everything, if you were then you are Cristiano Ronaldo. So it is natural to have weaknesses, and I understand this. But still, I want to be the best in all drills that I participate in. In those drills I'm not the best, I kind of shy away rather than focus on improving. I hate… I fear…I want to win so bad that I almost dread them because I do not want to lose. (P6)

Chapter 4: Discussion

The purpose of the thesis was to investigate potential relationships between stress emotions, defensive self-presentational strategies, and skill and performance level in youth elite football players. The concepts of emotion and coping were grounded within the framework of The Cognitive-Motivational-Relational Theory of Emotion (CMR: Lazarus, 1991). First, each research question is discussed separately. Thereafter, some of the methodological strengths and weaknesses of the thesis are highlighted, followed by a discussion on possible theoretical and practical implications. Finally some concluding statements are made, from which suggestions for future research are drawn.

Research question 1:

Do elite youth football players use self-handicapping and sandbagging as strategies to cope with competitive anxiety, and how is such emotion-coping related to their skill and performance level? (Paper 1 and 3)

The results suggest that trait competitive anxiety is positively related to both self-handicapping and sandbagging (Paper 1 and 3), with a small to moderate strength (Paper 3). This implies that relatively high trait anxious football players are more likely to self-handicap and sandbag than their lesser trait anxious peers. This finding is in line with previous studies showing that both sandbagging and self-handicapping are positively linked to trait anxiety (e.g., Gibson & Sachau, 2000; Ryska, Yin, & Cooley, 1998).

Concerning why and how self-handicapping and sandbagging may have a coping function in anxiety, one can make some relevant inferences from the perspective of CMR.

According to this theory, an important function of an emotion is to clarify what a person has at stake in a given situation (core relational theme). Competitive anxiety signals to athletes that it is uncertain whether or not they will display competence or achieve what is desired or expected from them (Lazarus, 2000). These desires or expectations may be actual or imagined and they may come from the athletes themselves or the environment (Lazarus, 1991). Regardless, both self-handicapping and sandbagging may serve a coping function by lowering display of competence and achievement expectations because both strategies signal that one has a poor chance to display competence or perform up to a very high level. These strategies thus manipulate a relatively low performance and competence expectancy benchmark, which others and self-evaluate subsequent performance and display of competence up-against. The likelihood of displaying competence and performing up to low expectations is higher than living up to relatively high competence and performance expectations. By using any of these two strategies, players may reduce their experience of uncertainty (anxiety) concerning display of competence or achievement as others and they themselves may expect a lower standard.

In Paper 1, the influence of media exposure on the relationship between trait sport competition anxiety and sandbagging was tested (Paper 1). Media exposure—being on TV during the last 12 months—was found to have a positive conditional interaction effect on the relationship between trait sport competitive anxiety and sandbagging tendencies. Players reported that they very rarely received negative media attention. Previous research has disclosed that young players at an early stage in their career are prone to respond to media exposure with perceiving increased performance expectations and become distressed, in comparison to older more experienced players (Kristiansen & Roberts, 2012). This is because the media on the one hand tend to exaggerate talented players' abilities and significance – as a means of creating interesting news,

while such players previously have little experience with media exposure (Kristiansen, 2011). In light of CMR it has been argued that the major source of competitive anxiety in sport is that public competition reveals athletes' comparative competence to everyone, something that the athletes' themselves have little control over, and thus, they experience anxiety (Lazarus, 2000). Further, knowing that this theoretical notion that coping is initiated when external demands are appraised as taxing or exceeding the resources of the person (Lazarus, 1999), it is reason to believe that relatively highly trait sport competition anxious players may appraise that media exposure heightens expectations to them or that their comparative competence is broadcasted to others. This may subsequently result in anxiety, that in turn may stimulate them to use sandbagging as a coping strategy – to create a balance between their perception of their competence (resources) and their perception of external expectations to their competence (external demands).

The positive effect of TV exposure on the trait anxiety sandbagging relationship was contingent on players being approximately 16 years of age or younger. This implies that older players that have progressed longer in the system do not typically respond this way to media exposure and possible high expectations, meaning that it is a characteristic that may distinguish younger versus older more proficient players. Sandbagging as coping strategy to deal with increased expectations, in terms of competitive anxiety generated by media exposure seems thus to be negatively related to performance level. This notion is further supported by that sandbagging also was found to be negatively correlated with age in Paper 3.

Concerning the potential role of self-handicapping in the relationship between trait anxiety and skill and performance level, self-handicapping was found to have a negative relationship to players' skill level in Paper 3. As trait competitive anxiety was also negatively

correlated to skill level, this implies that self-handicapping may have a mediating role in the relationship between players' level of trait anxiety and skill level, and thus to some extent explain why trait anxiety was negatively related to players' skill and performance level. This is a purely hypothetical speculation as the mediating function of self-handicapping in the relationship between trait anxiety skill level was not explicitly tested in any of the studies.

Trait sport competition anxiety was, in addition to negatively related to age (indicator of performance level) and skill level, negatively related to future national team experience (Paper 3). Previous research has also revealed that trait sport competition anxiety often discriminates between performance levels among athletes, where the better athletes score lower on trait competition anxiety than less successful athletes (e.g., Jones, Hanton, & Swain, 1994; Jones & Swain, 1995; Eubank, Collins & Smethurst, 1995). In relation to such findings has it been argued that increased competitive experience makes athletes familiar to the competitive aspect of the sport—meaning that competition is appraised as less threatening (Mellalieu, Hanton & Fletcher, 2009). Knowing that progressing through a competitive talent development system involves accumulated competitive experience (Mills et al., 2012; Nesti & Sulley, 2014), such an explanation can account for why trait anxiety seems to decrease in parallel to increased age, skill, and performance level in the current thesis. This is an explanation that also is valid in light of CMR, as accumulated experience with certain tasks and situations provides knowledge and facilitates coping abilities, and thus reduces the likelihood of experiencing prolonged states of emotional distress (Lazarus, 1991). As players with age and experience gain knowledge of factors involved in successful task and performance outcomes, while also developing the means to achieve successful outcomes (skills), it makes intuitive sense that players who are older,

relatively more skillful, and who play at higher performance levels score relatively low on trait anxiety.

Nevertheless, in light of CMR one could also turn the table. Given that youth elite football is a highly competitive environment where only the best progress from one level to the next, a young player with a relatively low skill level might be particularly likely to be relatively anxious because it is particularly ambiguous and uncertain if he or she will exhibit a skill and performance level qualifying her or him for entering the next level. In addition, knowing that highly trait anxious athletes tend to fail under pressure (Hill, Hanton, Matthews, & Fleming, 2010), highly trait anxious players may progressively become deselected through stages of selection – because they are less skillful and less likely to exhibit a high performance level under pressure than many of their peers.

Importantly, in this paragraph, with respect to trait anxiety, skill and performance level, I have used the terms relatively low, and relatively high: as the descriptive statistics show that the levels of trait anxiety generally are very low; and to highlight that all players have a very high skill and performance level (among the very best players in Norway) within their age groups (see Paper 1 and 3).

Research question 2:

Are shame and guilt differently related to skill and performance level in football players, and does self-handicapping play a role in these relationships? (Paper 2 and 4)

In the current thesis shame proneness was found to be negatively linked to players' skill level, through self-handicapping, while guilt proneness was found to be positively related to players' skill level, through self-handicapping (Paper 2). This finding indicates that shame and guilt each may exert a unique influence on football players' skill and performance level—possibly through the use of self-handicapping. According to CMR, shame is elucidated by failing to live up to an ego-ideal while guilt is elucidated by failing to live up to a moral ideal, often socially related (Lazarus, 1991). An ego-ideal is an ideal a person conforms to, highly values, and evaluates him or herself against (Laplanche & Pantalis, 1967; Lazarus, 1991). As ego and moral ideals are internalized standards from significant others, these ideals are likely to become contingent on context-specific standards. Given the competitive ethos in sport, it is likely that football players' ego-ideals are to a large extent likely to be based on their display of competence and performance (Lazarus, 2000), and when they fail or perform sub-standard—or think they are going to—they might experience shame. In sports, guilt is likely to be contingent on actions that impair others well-being (Lazarus, 2000). It has previously been argued that athletes in many cases cope with negative emotions in a manner so they never arise – as a means of avoiding distress (Uphill & Jones 2012). Concerning the use of self-handicapping, this seems to be the case with shame and guilt. In CMR this way of coping with emotional distress is called short-circuiting the emotion process (Lazarus, 1991). Such coping occur when people cope purely based on primary appraisals (threat) and secondary appraisals (highly confident they will manage to cope). The results of Paper 2 indicate that players that are especially susceptible for experiencing shame in response to failure (shame prone players) may use behavioral self-handicapping as a proactive means of coping with avoiding shame when they anticipate failure or display of incompetence. In other words, players may use self-handicapping as a proactive

coping strategy to avoid experiencing shame in response to failure or display of incompetence – as in the case of failure or display of incompetence cause may be attributed to the feigned handicap rather than their own inability.

This way of coping with shame can be understood as emotion-focused coping as it does nothing to the source of the threat (i.e, incompetence and failure). Problem-focused coping in this case would concern improving competence or skill related to failure. The results of Paper 2 also show that players that are especially susceptible for experiencing guilt, were unlikely to engage in self-handicapping. An explanation of this result is that self-handicapping may impair a group's interest in team sports like football, because typical self-handicapping strategies involve reduction of practice quantity or effort (e.g., Rhodewalt, Saltzman, & Wittmer, 1984), which may impair group—not only individual—performance. More specifically, it seems as guilt-prone players abstain from self-handicapping in order to avoid experiencing guilt that might arise because self-handicapping may impair team performance. In this sense, players also short-circuit the emotion process, by avoiding the source of distress (emotion-focused). Should players use a problem-focused strategy to cope with their guilt associated with self-handicapping – they would have needed to eliminate the source of distress – which in this case, arguably, would be their desire to self-handicap. Thus, in cases where players anticipate failure they may experience a desire to self-handicap in order to avoid shame, at the same time, they may feel guilty about the desire, because giving into the desire may subsequently impair team performance. Accordingly, Paper 2 showed that shame and guilt proneness was positively correlated with small to moderate strength.

The study on professional players (Paper 4) indicated that that players experienced shame to a lesser extent with age, and some of them seemed to use several coping strategies, some

intuitively positively related to skill and performance level, such as learning and goalsetting – thus indicating that the football specific contingencies of these emotions may change over time (Lazarus, 1991). As an example, a young shame-prone player may feel ashamed whenever he fails a dribble, because he wants to be like Cristiano Ronaldo, who is a very good dribbler. In training and matches this player may abstain from dribbling because he is uncertain if he will succeed, and he does not want to experience shame. Seeing this maladaptive behavior, his coach consequently starts manipulating his ego-ideal concerning dribbling through positive feedback and by reinforcing the fact that Cristiano Ronaldo has become a good dribbler through failed attempts, and by giving negative feedback when he disengages in practicing it. Consequently, the player may become less likely to feel shame in response to failed dribbles, and more ashamed if he fails to practice and develop his dribbling skills. Although the player's football specific ego-ideals may be manipulated through such processes, his general shame-proneness may remain the same concerning other domains and situations (Lazarus, 1991).

Previous investigations in elite youth football players have shown that they may experience guilt in response to performance failures in matches because of the negative implications it has for their teammates. In this thesis no evidence was found among professional players that they experienced guilt when they failed during matches, it seemed above all to be an issue of shame (Paper 4). In this regard, CMR postulates that ego-ideals may be contingent on social moral issues. Given that football players depend on their teammates' efforts and abilities in order to be successful (Nesti, 2010), one explanation for this finding might be that professional football players are socialized by coaches and their peers to believe that a high standard football player is a player who puts his team's interest before his own. In this perspective, the issue of letting others down or impairing their well-being by performance

failures may transform from being a moral ideal to become an ego-ideal, or potentially merge to integrated construct. In other words, behaviors that might compromise the cooperative venture of group performance that at one point elucidated guilt, may elucidate shame if the underlying ideals transcends from moral standards to become contingent on ego-ideals.

Another interesting finding in the study with professional players concerned the experience of shame in response to performance failures. Several players indicated they became anxious or fearful of future failures. In CMR this is referred as shame-anxiety (Lazarus, 1991; Levin, 1971). The term shame-anxiety reflects the emotional distressing pre-state of an anticipated shame-inducing event. This implies that shame-inducing failures may make players fear future failures, potentially as in precompetitive anxiety. In relation to this, previous research has shown that trait anxiety and shame are positively correlated football players included (Passer, 1983). In addition, several studies have revealed that youth elite football players are likely to experience shame in response to performance failures, and experiencing shame is what they are most fearful of concerning failing (Sagar, Busch, & Jowett, 2010; Sagar, Stoeber, & Kent, 2009).

Anxiety and fear are related emotions in the sense that they share the same neuroanatomy (Öhman, 2008), and they mainly differ in that anxiety lacks a specific object of threat—we do not know exactly what we are anxious about, while in fear the threat is more explicit (Lazarus, 1991). For example, when walking alone in the woods during the middle of the night when it is pitch black, you are likely to experience *anxiety* in the sense that you anticipate that *something might* strike out of the dark and cause you *harm*. Further, when lying in bed suddenly hearing a window braking, many of us are likely to *fear* that *a criminal* is breaking in and might cause us harm.

Concerning football players, I therefore speculate that anxiety, fear, and shame may reflect a players' aversive relationship to failure – in a temporal perspective. For example, prior to a match a player may experience competitive anxiety because he is uncertain about how he will perform. As such, he might experience anxiety about missing an important scoring opportunity or meeting an opponent who is better than he is – making him perform poorly in any given way (*many possible sources of harm*). During the match he might be appointed to take a penalty kick, and possibly fear the experience of shame associated with failure (*harm*). If he then misses the penalty the he may *experience* shame for failing to living up to the performance standards suggested by any ego-ideal related to football performance and competence.

Research question 3:

Is the use of self-handicapping and sandbagging as emotion-coping strategies linked to the accuracy of self-perceptions in elite youth football players, and is the accuracy of self-perceptions related to performance level? (Study 3)

The results of Paper 3 showed that most players tended to overestimate their skill level in comparison to their coach—some to a moderate extend and others to a strong extent. This finding is in line with previous research showing that athletes tend to overestimate their skills in comparison to evaluations provided by their coach (Felson, 1981). In the current thesis, some players also underestimated their skill level in comparison to their coach's evaluation. These players were rated the highest by coaches and most likely to exhibit a high performance level and play national games. In comparison to players who underestimated themselves, the players who

most overestimated themselves where found to have smaller chances of playing national team matches in the future.

Neither self-handicapping nor sandbagging was found to be related to over- or underestimation of skill level. The players who overestimated themselves, but still rated themselves lowest in relation to their peers and were rated the lowest by their coach, had relatively high levels of trait sport competition anxiety. This finding indicates that trait sport competition anxiety primarily is associated with a relatively low skill level and does not seem to be related to an overestimated skill level.

According to CMR people are often unwilling to acknowledge their potential short-comings because this may involve negative emotional distress in the form of anxiety and shame. In such cases people often develop automatic ego-defensive reappraisals, somewhat similar to classic defence strategies first advocated by Freud (Lazarus, 1991). This implies that some players may have overestimated their skill level because they deploy ego-defensive reappraisals automatically and possible unconsciously – whenever they encounter events that may involve negative self-evaluation, such as an evaluation their skill level might be. However, the classic critique against ego-defensive unconscious processes is that they are not falsifiable, and they therefore should not be considered valid as a scientific explanation (Greenwald, 1980).

As an alternative, and perhaps more valid scientific explanation the “Dunning-Krüger effect” might shed light on why some players overestimate themselves, and overestimated skills were negatively related to performance level (Krüger & Dunning, 1999). The “Dunning-Krüger effect” was discovered through a series of experiments showing that low-skilled people tend to overestimate their skill and performance level, whereas high-skilled people tend to underestimate their skills and performance level (Kruger & Dunning, 1999). An explanation for this finding, in

complex and abstract tasks particularly, is argued to be that the skills required for recognizing incompetence to some extent are the same skills necessary for producing competence. For example, it is difficult for a person to identify the flaws in his writing and write correctly – if he does not know the rules of the written language (Dunning, 2005). In football, decision-making is an integrated part of most skills (Williams, 2000), this implies that a football player needs to be aware of what the optimal choice – and timing of a skill execution in a given situation is, in order to both recognize a suboptimal action and produce the adequate action. A low-skilled player may therefore execute a skill sub-optimally, but believe he was relatively successful, while a better player may execute the same action but believe he was relatively unsuccessful – because he evaluates his performance following a different standard.

Concerning the mechanism of how inaccurate self-perceptions may influence performance level in football, I have a couple of suggestions. First, it has previously been demonstrated in an experimental study (simple decision making game), that the relationship between accuracy of self-perceived abilities and skills and in situ performance seem to be moderated by a benefit/cost ratio (Johnson & Fowler, 2011). Specifically, people who overestimated themselves tended to claim opportunities which people with a more realistic or negative view of their skills abstained from taking. Those people who overestimated themselves were mostly successful when the benefit for taking risks was high and when consequences of failure were small. However, when the benefit for taking risks was low, and consequences of failure were high, the tables turned. That is, people who overestimated themselves took costly chances, while people with a more realistic or negative self-view only claimed opportunities they were likely to succeed in—ultimately leading to success.

I therefore speculate that in football players at an elite level, overestimated self-perceived skill level might impair performance by leading to faulty decision-making, possibly resulting in costly mistakes. An alternative explanation that might account for the negative relationship between overestimated skills and performance level, might concern a motivational constraint. Several sport psychology researchers have suggested that unrealistic positive self-views may result in complacency, meaning that the athlete sees little meaning and is thus unwilling to put forth the training effort needed and become proficient (e.g., Martens, 1987; Weinberg & Gould, 2011; Wood & Feltz, 2013; Woodman et al., 2010). In support of this hypothesis, it has in experiments been demonstrated that task effort is negatively related to self-confidence and self-efficacy (Woodman et al., 2010; Wood & Feltz, 2013).

Methodological Considerations

The current thesis has some methodological weaknesses and strengths that should be addressed. Starting with the weaknesses, in Paper 1, 2, and partly Paper 3, a cross-sectional design in combination with correlational analyses was applied. The combination this type of design and analysis is a weakness because it only provides a "snap-shot" of the relationship between the variables; and estimates of how relationships may change over time in terms of strength and direction cannot be concluded from such an approach, it can only be inferred (Hayes, 2013; Selig & Preacher, 2009). Ideally, to frame the potential dynamic interactions between variables over time to determine causality, the appropriate design is longitudinal, with repeated measures at standardized time points (Shadish, Cook, & Campell, 2002). Consequently, the causal associations between the variables examined in the current thesis could to a larger extent have been claimed had a longitudinal design with repeated measures been applied.

Another shortcoming of the thesis is that all data, besides indicators of skill and performance level, are self-reported from the players. This is a limitation because there often is a discrepancy between people's self-reported behavior and actual behavior (e.g., Ajzen & Fishbein, 1977), and people are often somewhat reluctant and unwilling to share their true inner experience concerning stress emotions and potential shortcomings (Lazarus, 1991; Tangney & Dearing, 2002). In this regard, the reliability and validity of players' emotion experience, use of coping strategies and behaviors could have been enhanced by observing their behavior and testing their physiological responses to anxiety, shame and guilt inducing stimuli (Lazarus, 1991).

Although all psychometric instruments yielded satisfactory properties, it is noteworthy that the self-handicapping instrument used in the current study had twice the number of items as the sandbagging instrument that was used. This means that the sensitivity in the current thesis with respect to variations in behavioral self-handicapping strategies is higher than it is to sandbagging strategies. Moreover, The Sandbagging Scale only measures verbal sandbagging, presenting claims of being less competent than one is. This means that the current thesis cannot account for the potential role of behavioral sandbagging (demonstrations of competence and skills at level below actual capabilities) for trait sport competition anxiety, skill and performance level in youth elite players.

In all the quantitative Papers (1, 2 and 3), the statistical effects were small. This means that there are many other personality and environmental factors that were not examined and addressed in the current study, which account for players' skill and performance level. Nevertheless, small statistical differences should be considered meaningful when found in homogeneous elite groups, because in these groups success is contingent on small margins

(Abernethy, Thomas, & Thomas, 1993). In addition, it is important to remember that statistics are numeric representations of the real-world, and this does not necessarily represent the potential impact of the finding for the participants in the given context (Ivarsson, Andersen, Johnson, & Lindwall, 2013). In this regard, it is a strength that the thesis included a qualitative retrospective study shedding light on how players may experience and cope with stress emotions in relations to performance failures and pressure, even though the sample size in that study is a limitation (Paper 4). However, one cannot conclude on issues of causality based on qualitative studies, but they do increase chance of discovering new knowledge and deeper insight into the phenomena of interest (Yin, 2009). Another methodological strength of the current thesis is the sample of elite youth players that constitutes the total population of elite youth players playing in the Norwegian Premier League clubs. This means that the degree of generalization of the findings reported in the current thesis is high concerning *Norwegian* players, playing at an *elite* level for a *Premier league* club in Norway.

Theoretical Considerations and Implications

Thorough this thesis The Cognitive-Motivational-Relational Theory of Emotion has been used as a framework for the concept of emotions and coping. The strengths of this theory is that it builds on a vast amount of empirical evidence demonstrating that the coping process is a dynamic interaction between the individual and the environment; illustrating that how people cope (adapt) with stressful events has consequences for their effectiveness and their well-being in the environment they operate in. It has previously been argued that there is a need for research that tests the validity of the core relational themes concerning the various discrete emotions advocated by this theory. In this regard, the findings in the current thesis are supportive of the

core relational themes of anxiety, shame, and guilt and related coping specifically suggested to concern athletes (Lazarus, 2000). Moreover, the findings related to shame and guilt might be of relevance to research with respect to the motivation theories Self-Determination-Theory (SDT; Deci & Ryan, 2002) and Achievement Goal Theory (AGT: Nicholls, 1989; Roberts, 2012). Concerning AGT, the findings about shame and guilt may have some implications for those who are interested in the approach-avoidance dichotomy of achievement goals: predicting that people will go to great lengths to avoid displaying incompetence in order to avoid the distress of shame (e.g., Elliot, 1999). In this regard, my findings suggest that guilt might also play a role, potentially inducing approach motivation in situations where athletes usually experience avoidance motivation (e.g., desire to self-handicap might be buffered by guilt). Related to this it has been argued that it order to further develop CMR and the specific motivational function of each emotion in a given situation, there is a need to conduct research that focuses on people's goal hierarchy (Lazarus, 1991). In this regard it might be relevant to conduct research combining constructs from AGT (e.g., goal orientations) and CMR (e.g., core relational themes) and examine athletes' emotional and behavioral responses in potent learning and achievement situations.

From the perspective of SDT, it has previously been highlighted that there is a need to develop instruments that are sensitive to the potential unique role of shame and guilt in introjected motivation regulation, in order to better estimate psychological and behavioral outcomes in athletes due to introjected motivation regulation (Hendry et al., 2014). In this regard the results suggest that shame and guilt can exert a unique influence on athletes with respect to self-handicapping, which supports the notion that it would be beneficial to develop an SDT-instrument that is sensitive to the unique influence of shame and guilt.

Regarding the finding that youth elite players tended to overestimate their skill level in comparison to their coaches' evaluations, and that this tendency is negatively related to performance level, this might be of relevance for those theories used by researchers to examine achievement in athletes in light of their self-perceptions (e.g., Achievement Goal Theory: Nicholls, 1984; Roberts, 2012, Self-Concept; Fox, 1997; Marsh, 1993, Self-Determination Theory; Deci & Ryan, 2002, The Sport-Confidence Model; Vealey, 1986, Self-Efficacy Theory; Bandura, 1977; 1997, Self-Worth; Harter, 1988). Specifically, the findings of this thesis indicate that researchers working with these theories may benefit from focusing more explicitly on accuracy of self-views, and not just level of self-views, in their models and theoretical accounts.

Practical Implications

This study has shed light on emotion-coping processes that are relevant for both football players and football coaches. Although somewhat speculative, I will here suggest some areas where my results may have implications for practice. First, in cases where a player exhibits self-handicapping or sandbagging behavior, it seems likely that the player may be experiencing emotional distress in the form of anxiety or shame. In response, it might be advised to provide the player with social support as previous football specific research has shown that social support has a strong buffering effect on emotional distress (e.g., Jordet & Elferink-Gemser, 2011; Kristiansen & Roberts, 2012), which also was indicated by some of the professional players in the current thesis (Paper 4). Although strengthening players' belief in themselves is an important part of coaching and/or consulting when working with young players (e.g., self-efficacy; Feltz, Short, & Sullivan, 2007), the findings also indicate that overestimated skills were negatively related to performance level. Thus, perhaps, it is important that coaches also instruct and give

feedback that foster realism in the players' self-views – In order to prevent too overstated self-views. In this regard, other researchers have suggested that it might be useful to focus on controllable behavioral factors rather than uncontrollable personal factors when giving feedback in potentially shame-inducing situations. That way, the person then feels more flexible to adjust and cope in manner that does not involve disengagement from the situation (Tangney & Dearing, 2002).

Finally, for football players it seems important that they become accustomed to the idea that participating in youth elite football, on the pathway towards becoming a professional player, is likely to evoke emotional distress such as anxiety and shame, and thus, that this is a very natural part of being a football player. Further, it seems possible that how they cope with this distress might have an influence on their skill and performance development, and coaches and sport psychology consultants are recommended to help their players identify and use appropriate coping strategies.

Conclusions and Future research

The purpose of the present thesis was to investigate potential relationships between stress emotions, the use of defensive self-presentational strategies as coping strategies, and skill and performance level in youth elite soccer players. Trait sport competition anxiety was found to be positively related to self-handicapping and sandbagging, thus indicating that elite youth football players use these strategies to cope with sport competitive anxiety. However, trait sport competition anxiety was found to be negatively related to players' skill level and future performance level while self-handicapping and sandbagging was found to be unrelated to skill and performance level (Paper 3). This indicates that the use of these strategies cannot account for

why trait sport competition anxiety was negatively related to players' skill and performance level. I therefore suggest that players who progress through stages of performance levels either decreases their levels of trait sport competition anxiety as they gain competitive experience, and develop their skills as well, or that those players who are relatively high on trait anxiety are deselected through stages of selection, possibly because they may be less skillful than their peers and or more inclined to choke under pressure.

The results of the current thesis further suggest that neither the use of self-handicapping nor the use of sandbagging is related to the accuracy of players' self-perceived skill level. Most players had inaccurate self-perceptions in the sense that they tended to overestimate their skill level in comparison to their coaches evaluations. Possible explanations for this might be that certain ego-defensive reappraisals have been automatized, or the cognitive bias known as the "Dunning-Krüger effect".

Concerning shame and guilt, the results indicated that shame proneness may stimulate behavioral self-handicapping, whereas guilt proneness may discourage behavioral self-handicapping. Further, and through the use of behavioral-self-handicapping these emotions were found to be contrastingly related to players' skill level, shame negatively and guilt positively. However, the results also showed that shame and guilt proneness was positively correlated to each other. Given that professional players interviewed in the current thesis, indicated that they experienced shame but not guilt in response to performance failures, and contingencies of guilt theoretically can become contingencies of shame, it seems that shame and guilt are interrelated emotions that may exert a unique influence on players' skill level. Furthermore, based on the findings that professional players may experience shame-anxiety, I speculate that shame might be an underlying factor in competitive anxiety. In sum it thus seems as shame is the emotion that

may play the main role in football players' skill and performance level. Accordingly, some researchers refer to shame as "the master emotion" because it seems to be an emotion that underlies many other emotions and can have a strong, direct, and indirect influence on human behavior (Elias, 2004; Paulson, 2000). In order to determine if shame is "the master emotion" in sport generally and football particularly much research in this area is needed.

The findings in the current thesis suggest that it might be fruitful for football researchers to further investigate the following two issues in order to enhance our understanding of the emotional basis for football players' skill and performance level.

First, as previously pointed out players may bias the assessment of the emotion-coping process themselves, I suggest that researchers try to examine players' behavioral and physiological responses to shame-inducing events relevant for performance and skill level (e.g., practicing on weaknesses or responses to performance failures). As football practitioners and researchers are becoming more and more familiar with match analysis and bio-physiological measurement to monitor football behaviors, progress, and the physiological state of players, and shame is known to induce certain behavioral, neural, and hormonal patterns, I suggest that match analysts and sport psychology researchers experimental psychologists join forces and scrutinize the relationship between players psycho-physiological state and behavior in relation to shame-inducing performance and learning scenarios. Insight into such processes might be gained from combining data from on pitch movement (real game scenarios), virtual reality (constructed scenarios), and bio/neural-feedback data.

Second I suggest that football researchers further investigate if the finding concerning overestimation is a product of ego-defensive reappraisals, or a case of the "Dunning-Krüger effect". Regardless of outcome to this basic question, I recommend researchers to investigate the

implications of this overestimation on players' training motivation and their on-pitch decision-making characteristics in high risk situations. In conclusion, I hope this dissertation has contributed to highlight the manner in which some of the processes involved in stress, emotions, and coping, are meaningful and potentially important processes to study and work with in practice, with respect to the development of youth elite football players.

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Paper 1

Hofseth, E., Toering, T., & Jordet, G. (Submitted). Sandbagging as a media coping strategy in elite youth soccer players: The influence of age and trait sport competition anxiety.

Paper 2

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Shame Proneness, Guilt Proneness, Behavioral Self-Handicapping, and Skill Level: A Mediational Analysis

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In this study, the relationship between shame proneness, guilt proneness, behavioral self-handicapping, and skill level was examined in elite youth soccer players ($N = 589$, $M_{age} = 16.8$, $SD = 1.8$). Mediation analyses showed that shame proneness had a positive direct relationship with self-handicapping and a weak negative indirect relationship with skill level. Guilt proneness was shown to have a negative direct relationship to self-handicapping and a positive weak indirect relationship to skill level. Shame proneness may, thus, stimulate behavioral self-handicapping, whereas guilt proneness may discourage behavioral self-handicapping in soccer players.

Self-handicapping is a self-presentational strategy that involves presenting a hindrance to performance, which would be expected to reduce one's chances of successful performance (Snyder, 1990). Self-handicapping is particularly predominant in settings such as that of sport, in which achievement and ability are highly valued (Jones & Berglas, 1978; Self, 1990). Previous research has demonstrated that self-handicapping can impair the performance of athletes (Coudevylle, Martin Ginis, Famose, & Gernigon, 2008a). Therefore, it is useful to investigate factors that might influence athletes' self-handicapping tendencies. Some athletes self-handicap because it provides them with a valid excuse that may carry the blame for potential failure (Prapavessis, Grove, & Eklund, 2004). Conversely, when athletes carry the blame for failure themselves, they are likely to feel shame or guilt about their shortcoming (Weiner, 1985). These are emotional states that people generally seek to avoid because they are particularly distressing (Lazarus, 1991). In this respect, it has been found that shame-prone students (those who are predisposed to feel shame in response to failure) report higher self-handicapping tendencies than their guilt-prone peers (those who are predisposed to feel guilt in response to failure; Cowman & Ferrari, 2002). Hence, shame proneness and guilt proneness might play a role in athletes self-handicapping tendencies.

Self-handicapping can be manifested in the construction or claims of any external barrier to successful performance. The construction of a barrier, such as not practicing, has been labeled "behavioral self-handicapping," whereas verbal assertions of having a barrier, such as claiming to not have practiced, have been labeled "claimed self-handicapping" (Arkin & Baumgardner, 1985; Leary & Shepperd, 1986). In their seminal research paper on self-handicapping, Berglas

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and Jones (1978) proposed that people might self-handicap in order to reduce emotional distress.

More recently, it was advocated that self-handicapping is likely to reduce the negative emotional responses associated with anticipated failure, because it weakens the causal link between person and failure, meaning that the task or situation is perceived as less threatening (Leary & Shepperd, 1986; Snyder, 1990). In support of this notion, numerous studies have demonstrated that anxiety and self-handicapping are positively correlated (Coudevylle, Martin Ginis, Famose, & Gernigon, 2008b; Ferrand, Champely, & Brunel, 2005; Prappavessis, Grove, Maddison, & Zillmann, 2003; Ryska, Yin, & Cooley, 1998). This clearly implies that emotional distress is a factor in athletes' self-handicapping tendencies (Prapavessis et al., 2004). In particular shame and guilt is likely to play a role in athlete's self-handicapping tendencies, because these emotions are only elicited when the person attributes the cause of failure to him- or herself (Weiner, 1985).

Shame and guilt are both self-conscious emotions of negative valence elicited by perceived, or anticipated, self-inflicted failure in reference to ideals that has been internalized (learned) through social interaction (M. Lewis, 1995, 2007, 2008). Although shame and guilt may be experienced simultaneously, they are different emotions with distinct features (H. B. Lewis, 1971). When feeling shameful, the person believes failure is due to a stable personal characteristic, denoting the feeling of being worthless and a desire to escape the shaming situation. In contrast, when feeling guilty, the person's self-concept is not intervened with the failure, and blame is assigned to a controllable behavior, denoting an agitating apprehension and a desire to atone the situation (Tangney, 1990). Hence, shame involves a negative evaluation of the self ("I am bad"), whereas guilt involves a negative evaluation of a specific behavior ("I did a bad thing"; Tangney & Dearing, 2002; Weiner, 1985). Guilt therefore leaves the person with a certain flexibility to adjust and correct for his/her failure, whereas shame to a larger extent constrain the person, because no action would remedy the bad self (Janoff-Bulman, 1979; Sheikh & Janoff-Bulman, 2010). In this regard, the research literature clearly demonstrates that shame, and shame proneness, promote dysfunctional self-protective behaviors, whereas guilt, and guilt proneness, promote adaptive prosocial behaviors (for a review, see Tangney & Tracy, 2012). In line with such findings, several researchers have argued that shame and guilt are contingent on different type of failures (e.g., Lazarus, 1991).

In athletes specifically, it has been argued that as shame is generated by failing to be the person one would ideally like to be—according to his/her ego-ideal—and as an athlete's ego-ideal may be based on his/her performance to a large extent, shame is likely to be evoked by performance failures and display of incompetence. Whereas as guilt is generated by failing to adhere to social moral values one believes in, guilt is likely to be evoked by behaviors that impair other athletes' well-being (Lazarus, 2000). Thus, self-handicapping might be used as a means by which to avoid shame in the event of failure. Conversely, because self-handicapping is considered to be deviant behavior according to the social moral code characterizing most sport performance groups (Munroe, Estabrooks, Dennis, & Carron, 1999), self-handicapping might elicit feelings of guilt in athletes. Consequently, a motive for self-handicapping in athletes might be the evasion of the distress of shame, whereas a motive for abstaining from self-handicapping might be to avoid the distress of guilt. This rationale further implies that shame proneness might be a psychological disposition that might stimulate athletes' self-handicapping tendencies, whereas guilt proneness might be psychological disposition that buffers athletes' self-handicapping tendencies.

Regarding the consequences on performance, only behavioral self-handicapping has been found to have a negative effect (Coudevylle et al., 2008a; Elliot, Cury, Fryer, & Huguet, 2006). This may be explained by the notion that making excuses by, for example, claiming to not have

practiced enough does not directly affect the chances of success, whereas creating an obstacle, such as abstaining from practice, objectively does (Baumeister & Scher, 1988). For athletes, behavioral self-handicapping typically manifests in a reduction of practice quantity or effort (Bailis, 2001; Deppe & Harackiewicz, 1996; Rhodewalt, Saltzman, & Wittmer, 1984). This implies that behavioral self-handicapping can affect not only athletes' performance but perhaps also their skill level, because a high skill level requires many years of practice characterized by high levels of effort and quality (Ericsson, Krampe, & Tesch-Römer, 1993; Haugaasen, Toering, & Jordet, 2014). In regard to shame and guilt, this further implies that shame proneness may, by potentially promoting behavioral self-handicapping, indirectly debilitate athletes' skill level, whereas guilt proneness, by potentially buffering behavioral self-handicapping, may indirectly facilitate the skill level of athletes.

Hence, the purpose of the present research was to investigate the relationship between elite youth soccer players' proneness to experiencing shame and guilt, behavioral self-handicapping tendencies, and skill level. We expected that shame proneness would be positively related to behavioral self-handicapping and negatively related to skill level. In contrast, we expected that guilt proneness would be negatively related to behavioral self-handicapping and positively related to skill level.

METHOD

Participants

The participants consisted of 589 elite youth soccer players 14 to 21 years of age ($M = 16.8$, $SD = 1.8$). Each player reported engaging in soccer activities for a minimum of 1 hr each day ($M = 2.5$, $SD = 1.6$). All players played for a team within the 16 Norwegian Premier League clubs. These teams compete in regional leagues, which are organized in age-specific levels. However, players with a particularly high skill level often played or trained with a team at a level, or several levels, above their corresponding age level. In sum, with regard to skill and performance level, this population of players was considered among the best and most talented players within Norway. In addition to playing elite soccer, most of the players (89, or 9%) attended school or the university at a regular basis as school is mandatory until age 16 in Norway.

Procedure

After having obtained project and ethical approval from the Norwegian Data Protection Authority, participant clubs were recruited during an off-season coaching seminar. Participants received written information about the project and submitted written consent before participating; those younger than 16 needed parental consent. Data were collected using a questionnaire within the first 3 months at the start of the season (in the spring). The players filled in the questionnaire in group settings within their teams, in or near their club facilities. This process was administered by two test leaders, following a standardized protocol. The test leaders were assisted by the teams' staff, in order to create a safe and familiar environment for the participants. According to the test protocol, the questionnaires were presented to the players as a survey that might provide knowledge concerning performance development in elite youth soccer. Furthermore, players were encouraged to answer the questionnaires as honestly as possible. They were also informed that there was no right or wrong answers and that they had no time constraint. To facilitate the players' interpretation of the

questionnaires, players were encouraged to ask for individual assistance if they had any questions.

Measures

Shame proneness and guilt proneness

Proneness to experiencing shame and guilt was measured using the Test of Self-Conscious Affect for Adolescents (TOSCA-A; Tangney, Wagner, Gavlas, & Gramzow, 1991). The TOSCA-A consists of 15 scenarios that reflect the everyday experiences of an adolescent. The Shame and Guilt subscales each contain 15 items. An example of a scenario in the TOSCA-A is as follows: "At school, you wait until the last minute to plan a project, and it turns out badly." Participants are presented with a list of responses that correspond to different self-conscious emotions, for example, "I would feel useless and incompetent" (shame). Participants then respond to how likely it would be for them to react in the manners described on a Likert scale ranging from 1 (*not at all likely*) to 5 (*very likely*).

The TOSCA-A has been used successfully in clinical psychiatric settings and social psychological research (Kronmüller et al., 2008), and the adult version has been successfully applied in sport studies (Mosewich, Kowalski, Sabiston, Sedgwik, & Tracy, 2011; Sabiston, Brunet, Kowalski, Mack, & Crocker, 2010). The alpha values for both the Shame Proneness and Guilt Proneness subscales were satisfactory in the current study (shame, $\alpha = .77$; guilt, $\alpha = .73$).

Behavioral self-handicapping

Behavioral self-handicapping was measured using a scale first developed to measure self-handicapping in academic contexts (Midgley, Arunkumar, & Urdan, 1996), which has subsequently been successfully adopted and adapted to measure self-handicapping in physical education (Ommundsen, 2001, 2004), and in youth soccer (Ommundsen, Roberts, Lemyre, & Abrahamsen, 2007). The scale consists of six items asking about proactive strategies that soccer players use to influence self-presentation. The items were introduced with this sentence in the heading: "Below are examples of things most football players do at one time or another. Please tell how true each of these is for you." One example of an item is, "Some players deliberately choose not to give their best effort in training so that if they don't do as well as they had hoped, they can say that is the reason.*"*

Responses were indicated on a Likert-type scale ranging from 1 (*very much like me*) to 5 (*very much unlike me*). The soccer-specific version of this scale has not previously been validated in any published article, so a principle component analysis was conducted to test the factor structure of the scale. The analysis revealed that all items loaded (.56–.85) on one factor, with an eigenvalue of 3.58, accounting for 59.7% of the variance. Cronbach's alpha for this scale was .86.

Skill level

The players' skill level was assessed by having their coaches rate their skills using a Likert scale with four football-relevant dimensions: offensive, defensive, mental, and physical skills on a scale of 0 (*lowest*) to 10 (*highest*), in reference to national skill level in corresponding age groups. This is a type of measure that has also been applied successfully in other football performance studies (Van Yperen, 2009; Van Yperen & Duda, 1999). To explore the factor structure of this measure, a principal component analysis was performed. The analysis demonstrated that all items loaded (.71–.86) on one factor with an eigenvalue of 2.6, accounting for 65.3% of the variance. Cronbach's alpha for this scale was .82.

Table 1
Means, Standard Deviations, and Correlations Among All Variables

Variable	*M*	*SD*	1.	2.	3.	4.	5.
1. Shame proneness	2.43	.50	—	.34**	.21**	–.08	–.07
2. Guilt proneness	3.43	.50		—	-.22**	–.01	.05
3. Behavioral self-handicapping	1.64	.64			—	–.15**	–.05
4. Skill level	6.53	1.32				—	.23**
5. Age	16.22	1.81					—

Note. $N = 589$.
**Significant at $p < .01$.

Data Analysis

Preliminary analysis

The first step in the analysis process was screening the data. During this process, 156 participants were identified as either being younger than the age of our focus population ($n = 14$), having incorrectly filled in their questionnaires ($n = 64$), or not having been ranked by their coach ($n = 92$), and were therefore removed from the data set. The final sample consisted of 589 players. Of these, 452 players had no missing values, whereas 137 players had one or more missing values. In players with missing values, Little's MCAR test implied that values were completely missing at random, $\chi^2(2540, N = 140) = 2569.69$, $p = .34$. Furthermore, a one-way analysis of variance showed that these two groups of players did not differ significantly on any of the variables. For these two reasons, missing values were not replaced. Mean scores of shame proneness, guilt proneness, self-handicapping, and skill level were used to compute descriptive statistics and Pearson correlations among the variables (see Table 1).

Main analysis

To examine the relationship between behavioral self-handicapping, shame proneness, and skill level, and the relationship between behavioral self-handicapping, guilt proneness, and skill level, Preacher and Hayes's (2008) multiple mediation macro was applied. Preacher and Hayes's regression-based SPSS multiple mediation macro uses bootstrapping and examines direct effects and indirect effects, going through mediators, between the independent and dependent variable. This mediation analysis is regarded as superior to the more commonly used Baron and Kenny (1986) approach to mediation analysis, not only because it has better statistical power and better control over Type 1 error, but also because it does not require parametric assumptions (Preacher & Hayes, 2008). Given that this macro produces unstandardized coefficients, *Z* scores—as opposed to mean scores—were included in the analyses to get the macro to generate standardized coefficients. Two analyses were conducted. In the first analysis, shame proneness was included as an independent variable; in the second analysis, guilt proneness was included as an independent variable. In both analyses, behavioral self-handicapping was included as the mediator and skill level as the dependent variable. Due to the wide range of age in the sample, age was included as a control variable. Resampling was set to 20,000 and bias corrected; a significance level of $\alpha < .05$ and a confidence interval level of 95% were applied in both analyses.

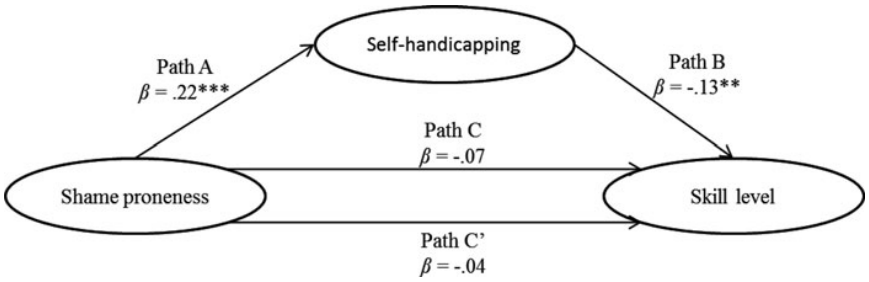

Figure 1. Mediation test of the relationship between shame proneness and skill level. *Note. Point estimate* for indirect effect of shame proneness, via self-handicapping, on skill level was $\beta = .03$, 95% CI [−.06, −.01]. **Significant at $p < .01$. ***Significant at $p < .001$.

RESULTS

The descriptive statistics and Pearson correlations for all variables are presented in Table 1. Two mediational analyses were applied to test the relationship between emotional dispositions, with regard to shame and guilt, behavioral self-handicapping, and skill level. The first analysis yielded a significant overall model, $F(3, 481) = 10.56$, $p < .001$, $R^2 = .06$ (Figure 1), and revealed that shame proneness had a direct positive relationship to behavioral self-handicapping ($\beta = .22$, $SE = .05$, $p < .001$). Furthermore, self-handicapping was found to have a direct negative relationship to skill level ($\beta = -.13$, $SE = .04$, $p < .01$). Shame proneness and skill level was not found to be directly linked together ($\beta = -.07$, $SE = .04$, $p > .05$), albeit indirectly through behavioral self-handicapping ($\beta = -.03$), 95% confidence interval (CI) [−.06, −.01]. Moreover, age was found to be a significant covariate in skill level ($\beta = .20$, $SE = .05$, $p < .001$).

The second analysis also yielded a significant overall model, $F(3, 481) = 11.44$, $p < .001$, $R^2 = .07$ (Figure 2). This analysis demonstrated a direct negative relationship between guilt proneness and behavioral self-handicapping ($\beta = -.23$, $SE = .05$, $p < .001$). In line with the first analysis, the relationship between behavioral self-handicapping and skill level was found to be negative ($\beta = -.13$, $SE = .05$, $p < .01$). Like shame proneness, guilt proneness was found to only be indirectly related, through behavioral self-handicapping, to skill level

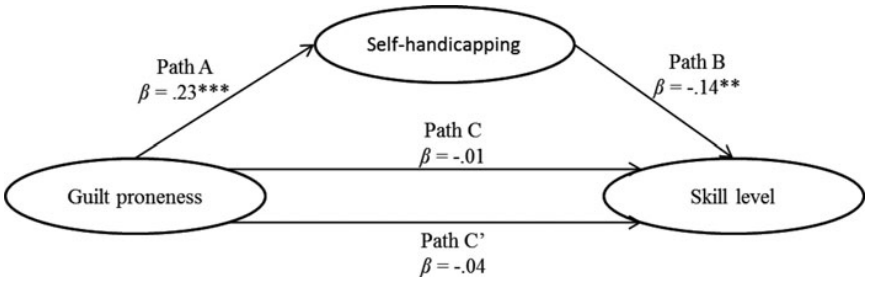

Figure 2. Mediation test of the relationship between guilt proneness and skill level. *Note. Point estimate* for indirect effect of guilt proneness, via self-handicapping, on skill level was $\beta = .03$, 95% CI [.01, .06]. **Significant at $p < .01$. ***Significant at $p < .001$.

($\beta = .03$), 95% CI [.01, .06]. Age was also in this analysis found to be a significant covariate in skill level ($\beta = .23$, $SE = .05$, $p < .001$).

To summarize, shame proneness was found to have a positive relationship to behavioral self-handicapping, whereas guilt proneness was found to have a negative relationship to behavioral self-handicapping. Behavioral self-handicapping was the only construct found to have a direct (negative) relationship to skill level. Hence, athletes' proneness to experience shame and guilt seems to be indirectly linked to their skill level through behavioral-self handicapping.

DISCUSSION

In this study, we investigated the relationship between elite youth soccer players' proneness to experiencing shame and guilt, along with their proneness to behavioral self-handicapping tendencies and level of skill. The results demonstrated that shame proneness had a positive and direct relationship with behavioral self-handicapping, and negative indirect relationship with skill level. Furthermore, guilt proneness had a negative direct relationship to behavioral self-handicapping and positive indirect relationship to skill level. These results imply that shame proneness and guilt proneness might play a role in young soccer players' behavioral self-handicapping tendencies, and might therefore play an indirect role in their skill level.

Previous research has demonstrated that shame proneness and self-handicapping are positively related in students (Cowman & Ferrari, 2002). Concerning behavioral self-handicapping, the results of the current study demonstrated that this also may apply for young soccer players. Knowing that shame is "one of the most powerful, painful, and potentially destructive experiences known to humans" (Gilbert, 1997, p. 113), one explanation for this result is that players that are especially susceptible for this emotion in response to failure (shame-prone players) may use behavioral self-handicapping as a proactive means of avoiding shame. More specifically, because behavioral self-handicapping provides an external hindrance to performance, football players enhance their opportunity to externalize the cause of failure by employing this strategy. This means that in cases where players fail, and take the opportunity created by self-handicapping to externalize cause of failure, shame is likely to be avoided, because shame is elicited only when the cause of failure is assigned to a stable uncontrollable personal characteristic (Sheikh & Janoff-Bulman, 2010; Tangney, 1990; Weiner, 1985).

Concerning the relationship between shame proneness and skill level, the results showed that shame proneness was, through behavioral self-handicapping, negatively related to skill level. In relation to this, Jordet (2010) proposed that behavioral self-handicapping is an emotional trade-off, and might be a self-destructive strategy for athletes. More specifically, he asserted that some athletes might engage in behaviors that relieve them of unpleasant emotions but that ultimately bring about delayed costs that far outweigh the initial short gain, such as poor performance or arrested development. In this regard, the results of the current study imply that shame-prone soccer players may engage in behavioral self-handicapping in pursuit of avoiding shame but, because this strategy typically involves reducing practice effort (Prapavessis et al., 2004), these behaviors may constrain their skill level.

In the current study, guilt proneness was found to be negatively associated with behavioral self-handicapping, and through behavioral self-handicapping, positively related to skill level. To our knowledge, these findings have not previously been found in the research literature. In respect to this, Baumeister, Stillwell, and Heatherton (1994), in their extensive review on guilt, concluded that "guilt patterns appear to be strongest, most common, and consistent in the context of communal relationships, which are characterized by expectations of mutual concern" (p. 243). Expectations of mutual concern are an important factor in team sports

such as soccer, because in team sports the ultimate goal is to beat the opposition, which only happens when individual efforts and abilities come together in a joint force (Täuber & Sassenberg, 2012). In other words, soccer players are dependent on their teammates' efforts and abilities in order to be successful (Nesti, 2010). In addition, knowing that guilt-prone people are particularly concerned about how their shortcomings may affect others negatively (Tangney, Stuewig, & Mashek, 2007), the negative relationship between behavioral self-handicapping and guilt proneness found in the current study might come into play, because behavioral self-handicapping, such as withholding effort, might compromise the cooperative venture of group performance. Thus, guilt-prone soccer players might abstain from behavioral self-handicapping, as this is a strategy that might debilitate team performance and therefore make them feel guilty. Moreover, in respecting team performance and seeking to avoid guilt, such players may potentially also indirectly promote their individual performance, that is to say their skill level. In further support of this explanation, it has been reported that guilt proneness in employees is positively related to organizational affective commitment and individual work effort (Flynn & Schaumberg, 2012).

With respect to behavioral self-handicapping and skill level, the results of the current study imply that shame proneness may be a maladaptive psychological disposition, whereas guilt proneness may represent an adaptive psychological disposition in athletes. However, there is research that implies that when guilt becomes contingent on factors beyond people's control, or feelings of guilt rise to a very high level, this can foster overcommitment, posttraumatic stress disorder, and depression (De Hoog, Zeelenberg, & Breugelmans, 2010; Nelissen & Zeelenberg, 2009; O'Connor, Berry, & Weiss, 2002). In this sense, guilt proneness might have a Janus-faced quality in athletes' psychological makeup. In other words, on one hand guilt might promote adherence to social norms, thus, potentially offsetting maladaptive behaviors, whereas on the other hand, guilt might potentially promote overcommitment, which could potentially result in maladaptive performance states.

The results of the current study may seem somewhat counterintuitive as shame proneness and guilt proneness, on one hand, were found to have contrasting relationships with behavioral self-handicapping and skill level, whereas on the other hand they showed to be positively correlated. However, as shame and guilt are learned dispositions, some people may become equally prone to experience shame as they are prone to experience guilt (Tangney & Dearing, 2002). Thus, shame proneness and guilt proneness are orthogonal not dichotomous constructs. This implies that some soccer players may become equally susceptive to feel shame in response to performance failure as they become susceptive to feel guilt in response to violating team norms. In regards to behavioral self-handicapping, this further implies that in cases where players anticipate failure they may experience a desire to self-handicap in order to avoid shame. However, at the same time, they may feel guilty about the desire, because giving into the desire may subsequently impair team performance.

Limitations and Future Research

In the current study, neither shame proneness nor guilt proneness was directly related to players' skill level, and the statistical contribution of these emotions to the skill level was very small. This implies that athletes' proneness to experiencing these emotions plays only a minor indirect role in their skill level. Furthermore, as the factor extracted in the principle component analysis, did not account for a substantial part of the variance in the behavioral self-handicapping instrument, and as the mean score on this instrument was low, behavioral self-handicapping seems to be an untypical and ambiguous behavior for elite youth soccer players. Moreover, given that behavioral self-handicapping was negatively related to skill

level, this behavior might be more prominent in grassroots players, potentially constraining them from becoming elite players. Future research should therefore examine if elite players might use alternative strategies for coping with shame associated with failure without feeling guilty, such as claimed self-handicapping or defensive pessimism. In addition, we encourage researchers to apply experimental designs with state measures, and include social factors, when they investigate the relationship between shame, guilt, and self-presentation in a performance perspective.

Applied Implications

The results of the current study imply that practitioners may decrease the use of behavioral self-handicapping in athletes through two pathways. First, practitioners may reduce athletes' desire for self-handicapping by decreasing their perceived threat of shame in failure. Second, and in team sports particularly, practitioners may create an affective moral barrier buffering athletes' desire for self-handicapping by clarifying that such behavior compromises team performance.

CONCLUSION

In this study, we investigated the relationship between elite youth soccer players' proneness to experiencing shame and guilt, along with their proneness to behavioral self-handicapping tendencies and level of skill. The results imply that shame proneness may stimulate behavioral self-handicapping, whereas guilt proneness may discourage behavioral self-handicapping in soccer players. Furthermore, the results imply that shame proneness, by stimulating behavioral self-handicapping, might endorse a constraining factor on their skill level. In contrast, by constituting an affective barrier against behavioral self-handicapping, guilt proneness might remove a constraint factor from their skill level. Future research is needed to replicate these findings, particularly to examine the causal links between these constructs and the potential Janus-faced quality of guilt. In addition, given that shame and guilt are learned responses, cross-cultural research is needed to achieve a more comprehensive understanding of shame and guilt in the context of sport.

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Paper 3

Hofseth, E., Toering., T., Jordet, G., & Ivarsson, A. (In review). Perception of skills and performance level in youth elite soccer: Are positive self-perceptions always positive?

Perception of Skills and Future Performance Level in Youth Elite Soccer: Are Positive Self-Perceptions Always Positive?

This study compared youth elite soccer players' and their coaches' perceptions of players' skill level, and examined how this comparison was related to player's performance level; concerning national team experience. Results showed that the players (N = 267, M_{age} = 17.6, SD = 1.1), in reference to their coach, tend to overestimate their skills. This tendency was negatively related to players' future performance level. Specifically, while controlling for age, past performance level, and current performance level, a multinomial regression analysis (X^2 14, N = 233) = 69.26, p < .01) revealed that the players that to the largest extent overestimated their skills, compared to players that underestimated their skills, were found to be less likely to produce a high performance level in the future (OR = .77, 95% CI = .61 – .97). Unrealistically positive self-perceptions might thus have negative effects in terms of performance development. Coaches should therefore promote realistic, rather than unrealistic positive self-perceptions concerning skills in athletes.

Introduction

The tendency to overestimate one's abilities and skills is one of the most powerful and widespread human psychological biases (Johnson & Fowler, 2011). This bias has been associated with a low performance level across a wide array of domains (for review, see Dunning, 2005). In fact, research shows that other peoples' estimates of our skills tend to be more realistic then our own estimates (Mabe & West, 1982). In athletes specifically, past research has disclosed that athletes tend to overestimate their sport specific skills (Felson, 1981). However, to our knowledge, researchers have previously not investigated what this overestimation means with respect to athletes' performance. Hence, in the current study we explored the relation between self-perceived soccer skills and performance level in youth elite players.

Positive perceptions of one's own capabilities are by many theorists, researchers, and practitioners held to be one of the most facilitating psychological characteristics affecting athletes' performance (Vealey, Hayashi, Garner-Holman, & Giacobbi, 1998). Research on the role of self-perceptions of one's capabilities in sport performance has mainly been based on the theoretical perspectives of self-efficacy theory (Bandura, 1997) and the sport confidence model (Vealey et al., 1998). These perspectives postulate that there is a positive reciprocal relation between self-perceptions and performance, thus suggesting that a positive interaction between these factors promotes performance development in athletes.

However, several meta-analyses indicate that self-confidence and self-efficacy are only weakly positively correlated with athletes' performance (for an overview, see Feltz, Short, & Sullivan, 2007). Further, investigations have also disclosed that baseball players who perform exceptionally well during their first year as professional players are more likely than other players to experience a performance drop during their second year as professional players (Taylor & Cuave, 1994), while soccer players having a past history of international merits have been found to be more likely than their lesser successful counterparts to perform poor under pressure (Jordet, 2009). Hence, given that past success most likely generates positive self-perceptions, these latter findings might indicate that positive self-perceptions can have a negative effect on athletes' performance development. In support of this notion, studies from general psychology, with experimental or longitudinal designs, have demonstrated that self-efficacy in some cases are negatively related to subsequent performance; in those

participants who overestimate themselves (Moores & Chang, 2009; Stone, 1994; Vancouver, Thompson, Tischner, & Putka, 2002). We therefore speculate that positive self-perceptions might have a negative effect on athletes' performance development – if they overestimate themselves.

Concerning the mechanism of how overly positive self-perceptions develop and sustain, the most used explanation in cognitive psychology is the self-serving bias (Heider, 1958). The self-serving bias refers to humans' latent tendency to internalize successes and externalize shortcomings (for review see, Campbell & Sedikides, 1999). In this perspective, athletes may develop and maintain overly positive self-perceptions because they overemphasis their past successes and downplay their shortcomings. Interestingly, the self-serving bias tends to be amplified by negative self-relevant information concerning valued attributes. Specifically, when people face information that challenges their self-perception negatively, they are likely to feel threatened and experience negative affect. In this uncomfortable state, people seem to be prone to make self-serving attributions and engage in self-serving behaviors –as means of escaping their distress (Baumeister, 1997; Campbell & Sedikides, 1999).

Drawing on these perspectives, it has been argued that when athletes encounter a situation that challenges their self-perceptions, with respect to performance or skills, negatively, they are likely to experience competitive anxiety – in reference to the relative discrepancy between the two views of self. In order to maintain their favorable self-perception, and thus as a means of coping with their distress, athletes are likely to employ counter-productive self-protective strategies (e.g., self-handicapping) to externalize their shortcomings (Jordet, 2010).

In contrast to this mechanism, there is a considerable amount of evidence suggesting that ongoing performance development requires that shortcomings are confronted with deliberate efforts directed at improving them (e.g., Ericsson, Krampe, & Tesch-Römer, 1993). In sum, we therefore propose that past success may generate self-perceptions that exceed athletes' actual capabilities, which in turn may constrain their future performance level. Because, during competition and training activities, athletes who overestimate themselves are likely to receive threatening feedback which implies that they should lower their favorable self-perception from failed attempts and other people (Baumeister, 1997). Consequently, such feedback might onset the previously described self-serving self-protective mechanism - potentially inhibiting them from confronting and improving their shortcomings.

The purpose of the current study was to compare youth elite players' and coaches' perceptions of players' skill level, and relate this to players' past and future performance level. In addition, self-reported competitive anxiety, and self-reported use of self-protection strategies were taken into account. We predicted that players who overestimated their skill level relative to their coaches' judgment, compared to those who either similarly estimated or underestimated their skills, would be characterized by a high performance level in the past and a relative low future performance level. Furthermore, we expected them to report a relatively high level of performance anxiety and a frequent use of self-protection strategies.

METHOD

Participants

The participants in the current study were all the soccer players (N = 338) from 16 to 21 years (M = 16.8, SD = 1.8) who played for an elite team within a Premier League club in [COUNTRY BLINDED]. Hence, this sample consisted of the most skillful and talented soccer players in [COUNTRY BLINDED].

Procedures

Before data were collected, ethical approval for the study was obtained from the [COUNTRY BLINDED] Data Protection Authority. Before the start of the study, participants received written information about the project and submitted a written consent. Data were collected on two occasions. First, using a questionnaire, players and coaches filled in an assessment of the players' skill level. Players also reported their usual playing position, and filled in self-report measures regarding their level of competitive anxiety and use of self-protective strategies. This assessment was done in a group setting, within their respective team, in or near their club facilities, administered by two test leaders assisted by the teams' staff. The second data collection took place two years after the first assessment. At this time, players' track record of international national team games was obtained from the [COUNTRY BLINDED] national soccer association official database (REFERANCE BLINDED) (see Figure.1 for illustration).

Measures

Skill evaluation

Our measure of skill evaluation was based on the approach applied in other studies aiming at evaluating skills in sports with emergent skills (e.g., Felson, 1981; VanYperen, 2009). Specifically, we consulted with two professional soccer coaches to disclose the most relevant soccer skills for soccer performance. Based on this consultation, an instrument asking an evaluator to rate a player's attacking skills, defending skills, mental skills, and physical skills was created. Each skill was presented as a single item underlined with a short description indicating more specifically what should be evaluated. For example, attacking skills were underlined by; ball control, passing/receiving, and decision-making. In the heading of the instrument, the evaluator was asked to rate the player's current skill level in reference to the age corresponding players within [COUNTRY BLINDED] using on a scale of 0 (*lowest*) to 10 (*highest*).

Sport competition anxiety

Sport competition anxiety was measured using the Sport Anxiety Scale-2 (SAS-2; Smith, Smoll, Cumming, & Grossbard, 2006). The SAS-2 includes three dimensions of performance anxiety: somatic symptoms; worry symptoms, and; concentration disruption symptoms. Each dimension consists of five items that are rated on a 4-point scale, ranging from 1 (*not at all*) to 4 (*very much*). Each item is rated anchored in the stem: "Before or while I compete in sports . . ." Example items reflecting the different anxiety dimensions are: "my body feels tense" (somatic), "I worry I will not play well" (worry), "it is hard for me to focus on what I am supposed to do" (concentration disruption). The reliability for this scale was good in the current study ($\alpha = .90$).

Self-protection strategies

We measured two types of self-protection strategies; self-handicapping and sandbagging (Petersen, 2013). Self-handicapping was measured using the soccer specific self-handicapping scale developed by Ommundsen, Roberts, Lemyre, and Abrahamsen (2007). This instrument consists of six items, distributed on one factor, asking about strategies that soccer players may use for self-handicapping. The items are introduced with this sentence in the heading: "Below are examples of things most soccer players do at one time or another. Please tell how true each of these is for you. One example of an item is, "Some players deliberately choose not to give their best effort in training so that if they don't do as well as they had hoped, they can say that is the reason." Responses were indicated on 5-point scales,

ranging from 1 (*very much like me*) to 5 (*very much unlike me*). The reliability for this scale was good in the current study (α = .86).

Sandbagging was measured using the behavioural sandbagging tendency factor of the Sandbagging Scale (Gibson & Sachau, 2000; Sachau, Simmering, Adler & Ryan, 2014). This factor consists of three items indicating a person's propensity to downplay his abilities; "I may understate my abilities to take some of the pressure off ".The items were introduced with the following sentence: "Below are examples of what soccer players think, feel, and do at one time or another." Responses were indicated on a scale ranging from 1 (*disagree very much*) to 6 (*agree very much*). The reliability for this scale was adequate in the current study (α = .79).

Performance level

Performance level was indicated by players' track record of international games representing [COUNTRY BLINDED]. Given the range of age in the sample (16-21 years), all players had at least been eligible for playing international matches (U16, U17, U18, U19, U20, U21, U23, first team) for one and a half years (youngest players) prior to assessing their skill level, and two years after (oldest) this assessment was conducted. Given that only the best players are selected for international matches representing their country, it was assumed that number of national team games represented their performance level. Specifically, number of accumulated matches prior assessment of skill perception, indicated players' past performance level, while participation on last national team gathering (yes/no) indicated current performance level, and number of matches after assessment of skill perception, indicated players' future performance level (see Figure.1 for illustration).

Data analysis

Preliminary analysis

The first step in the analysis process was screening the data. During this process, 71 participants were removed from the sample because they either had incorrectly filled in their questionnaires (n = 15), or had not been ranked by their coach (n = 56). Among the remaining 267 participants, 239 (89.5%) participants had no missing values, whereas 28 (10.5%) participants had one or more missing values. In players with missing values, Little's MCAR test suggested that values were completely missing at random, X^2 (504, N = 28) = 425.38, p = .99. Furthermore, a one-way ANOVA analysis showed that these two groups of players did not differ significantly from each other on any of the variables, and power estimates between these two groups on these variables was very small ($\phi < .01$). Thus, missing values were not replaced.

Main analysis

A latent class analysis (LCA) was performed in order to identify subgroups within the population based on the players' and the coaches´ ratings of the players' skills using the maximum likelihood estimator in Mplus 7.1 (Muthén & Muthén, 1998-2012). More specifically, players were divided into different groups based on these two sources of skill evaluation. The advantage with this approach is that it is a more ecologically valid description of the discrepancies between players' and coaches' perceptions of players' skill level, as players' and coaches' evaluations group together based on the tendencies in this sample rather than a pre-set statistical model. Further, the LCA is a person-centered approach that is based on an underlying latent variable that determines and individual´s class membership. In comparison to using traditional cluster analyses the LCA offers several advantages, such as allowing for more flexible model specification (Sterba & Bauer, 2010). Effect sizes reflecting

differences between players and coaches perception of players' skill level within the different classes were calculated based on Cohen's d (1988).

Finally, we conducted a multinomial logistic regression analysis, predicting class adherence, based on players' past performance level, current performance level, future performance level, and self-reported trait competitive anxiety, self-handicapping, and sandbagging tendencies. Due to the wide range of age in the sample, age was included as a covariate. Class number 3 was selected as the reference category – as this was the only class not characterized by players overestimating their skills in reference to their coach.

RESULTS

The descriptive statistics and Pearson correlations are presented in Table 1. Concerning the CLA analysis, we tested three models based on the players' as well as coachers' ratings; one with two, three, and four classes, respectively. The model with three classes was decided as the best choice (entropy = .76, likelihood ratio test p =.02, Class 1, n = 77; class 2, n = 90; class 3, n = 100).

Each class showed unique features. Class 1 was characterized by low player and low coach ratings. In this class, players' ratings exceeded coaches' ratings moderately. Class 2 was characterized by high player ratings and moderate coach ratings, and players' ratings exceeded coaches' ratings strongly. Class 3 was characterized by an opposite pattern of class 1 and 2; showing moderate player ratings and high coach ratings, where coaches' ratings exceeded players' rating, strongly. The ratings from both players and coaches, across and within classes, are displayed in Figure 2.

The multinomial logistic regression analysis yielded a significant overall model [X^2 (14, N = 233) = 69.26, p < .001], which explained 28% (Neqelkerke) of the variance in group adherence. However, only competitive anxiety [X^2 (2, N = 233) = 10.58, p < .01], and future performance level [X^2 (2, N = 233) = 23.57, p < .001] made a unique statistical contribution to the model. Specifically, in comparison to players in class 3, the players in class 1 reported a higher level of competitive anxiety, by an odds ratio of 2.95 (95% CI = 1.28 – 6.79). This implies that for each point a player scored higher on competitive anxiety, his chance for belonging to class 1, in comparison to belonging to class 3, increased by 2.95 times. Players belonging to class 2, was distinguished from players belonging to class 3 by being less likely to play international matches the next two years, indicating by an odds ratio of 0.76 (95% CI = 0.59 – 0.97). Thus suggesting that for each international match players had played in the two forthcoming years, since the assessment of skills was obtained, their chance of belonging to class 2 decreased by approximately 24% - in comparison to belonging to class 3.

DISCUSSION

In the current study, we compared youth elite players' and coaches' perceptions of players' skill level, and examined the relation between this comparison and players' performance development. We hypothesized that past success, in terms of high performance level, may cause players to overestimate their skills, and subsequently impair their performance development through a self-serving mechanism characterized by elevated levels of competitive anxiety and frequent use of self-protection strategies (self-handicapping and sandbagging). Our exploratory analysis identified three subpopulations in the sample, where players in two subpopulations overestimated their skills in reference to their coach, one moderately and the other strongly. In contrast, the players in the third subpopulation

underestimated their skills in reference to their coach, to a strong extent. The results showed that, in comparison to the players who underestimated their skills, the players that strongly overestimated their skills were more likely to exhibit a low performance level in the future, whereas the players that overestimated their skills moderately were more likely to experience elevated levels of competitive anxiety. The results, however, also demonstrated that the use of self-protection strategies did not discriminate between the groups, thus indicating that the negative relation between overestimated skills and performance level is not generated by self-protective self-serving mechanism.

In an extensive review on the validity of perception of abilities and skills it was reported that people, in reference to their supervisor, tend to overestimate their skills (Mabe & West, 1982). This tendency has also been found in college football players in relation to the ratings from their coach (Felson, 1981). The results of the current study are in line with these previous findings, as our results suggested that 63 % of the players belonged to the classes that overestimated their skill level in reference to their coach's perception. It thus seems like overestimated skills is a relative widespread psychological bias in athletes, including youth elite soccer players.

Past research clearly indicates that positive self-perceptions are adaptive characteristics in athletes, as perceived ability, self-esteem, self-concept, self-confidence, and self-efficacy typically have been positively related to desirable factors such as flow, effort, a preference for challenging tasks, well-being, enjoyment, persistence, and performance (e.g., Chase, 2001; Escarti & Guzman, 1999; Koehn, 2013; Marsh & Perry, 2005; Reinboth & Duda, 2004; Scanlan, Carpenter, Lobel, & Simons, 1993). Nevertheless, the results of the current study showed that the players that held the highest perception of their skills, in reference to their peers, were not the players that were associated with the highest performance level by their coach. As these players also were the ones that yielded the largest discrepancy to their coaches' estimate of their skills, our study indicates that positive self-perceptions can have negative effects, with respect to performance development – if they become overly positive.

Unfortunately, the current study cannot account for the mechanism through which overestimated skills were associated with a low performance level - as the use of self-protection strategies was not related to performance. Although the results indicated that players that overestimated their skills moderately, in comparison to players who underestimated their skills, were more likely to experience competitive anxiety, the specific subpopulation associated with an elevated level of competitive anxiety were also those players that rated themselves lowest in relation to their peers, and those players that were rated the lowest by their coach. We therefore favor the explanation that competitive anxiety is linked to a low skill level rather than overestimated skills per see. In addition, the correlational analysis indicated that overestimation of skills was unrelated to competitive anxiety. In this perspective, the results confirm previous research showing that competitive anxiety discriminates the very best athletes from the second best athletes (e.g., Jones, Hanton, & Swain, 1994). In addition, and unfortunately, as the use of self-protection strategies was not related to competitive anxiety or performance level, the current study cannot account for the mechanism through which overestimated skills were associated with a low performance level. Hence, overestimated skills seem to be a "cold cognitive" bias, rather than a bias driven by a "hot emotional self-protective mechanism".

In relevance to this, experimental research has demonstrated that low skilled people tend to overestimate their skill and performance level, whereas highly skilled people tend to underestimate their skills and performance level (Kruger & Dunning, 1999). This finding has been explained by that, in complex and abstract tasks particularly, the skills required for recognizing incompetence to some extent are the same skills necessary for producing

competence. For example, it is difficult for a person to identify the flaws in his writing and write correctly – if he does not know the rules of the written language (Dunning, 2005). Analogously, a soccer player needs to be aware of what the optimal choice – and timing of a skill execution in a given situation is, in order to both recognize a suboptimal action and produce the adequate action. A lowly skilled player may therefore execute a skill suboptimally, but believe he was relatively proficient, while a more skillful player may execute the same action in the same situation but believe he was relatively unsuccessful – because he evaluates his performance to a higher standard. In this light, underestimated skills may be a sign of expertise.

The tendency that top performers underestimate their skills, is a characteristic evident across domains (for an overview, see Dunning, 2005), and has been labeled as "the burden of expertise" (Kruger & Dunning, 1999). Interestingly, the results of the current study indicate that players who underestimated their skills relative to the coach's evaluation, in comparison to players that overestimated their skills relative to the coach's evaluation had a higher likelihood of producing a high performance level in the future. And, the correlational analysis indicated that overestimated skills were more negatively associated to future performance level, than to past performance level. In sum, this implies that underestimated skills might be a characteristic of the top performers to come, and that "the burden of expertise" may explain results of the current study to some extent.

With respect to practical implications, as our findings indicated that overestimated skills are negatively related to players' performance level, unrealistically positive self-perceptions concerning skills should be recalibrated towards being more realistic (Moores & Chang, 2009). Consequently, coaches should guide players to gain insight into the requirements of the level that players want to get to, which may help them to produce a higher performance level – as they more effectively can direct their training efforts (Toering, Jordet, & Ripegutu, 2013). Related to this, it has been found that youth elite players that are given the opportunity to practice and play matches with players at a higher level, consider this a valuable learning experience, because it benchmarks their current performance and skill level in regards to the standard they need to attain in the future (Christensen, Laursen, & Sørensen, 2011). Furthermore, it has also been reported that top performing youth soccer players in comparison to lower performing players, to a larger extent reflect on their strengths and weaknesses (Toering, Elferink-Gemser, Jordet, Pepping, & Visscher, 2012). Given as the amount of training in both groups was equal, the researchers suggested that the metacognitive process of self-reflection may promote a higher performance level in soccer players, because it enables them to identify which aspects of their skills need improvement – in order to produce a higher performance level. In this light, we propose that coaches help players develop realistic self-perceptions, and insight into requirements for top performance, by letting them practice with older and more skillful players and by stimulating them to critically self-reflect on their current status relative to top players' skill level. Accordingly, we furthermore propose that researchers should examine the effect of self-reflection, and practice activity levels on the relation between self-perceptions and performance development. However, more importantly, we urge researchers should aim to identify and examine mechanisms concerning how overly positive self-perceptions may influence performance development in athletes negatively.

The current study is not without limitations. Players and coaches may have interpreted the skill evaluation questionnaire differently as they have different experience and knowledge concerning soccer. This implies that we cannot exclude the possibility that the discrepancies between players' and coaches' perception of players skill level to some extend reflect a response bias. Further, because the players' coach, at their club, report players' status with respect to performance to the national team coach, players' track record of national team

experience may be product of the coaches' assessment of the players, indicating that the discrepancy between the players and the coaches' skill assessment may be unrelated to players' national team experience. However, if this was the case we would expect that the predictive analysis would demonstrate that players' past national team experience would discriminate between the classes – which it did not.

CONCLUSION

The results indicated that overestimated skills were negatively related to soccer players' future performance level, while underestimated skills were positively related to players' future performance level. Based on previous research, we suggested that this finding may to some extent be explained by the "burden of expertise"; meaning that the skills required for recognizing incompetence, among soccer players, may to some extent depend on their ability to produce competence.

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Table 1

Means, Standard Deviations, and Correlations among all Variables (N = 267).

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Age	17.63	1.04	.	.06	.16**	-.10	-.19**	-.02	-.14*	.15*	-.08
2. Player rating	7.06	1.09		.	.26**	.53**	-.24**	-.17**	-.04	.21**	.16**
3. Coach rating	6.81	1.25			.	-.68**	-.27**	-.07	-.08	.33**	.37**
4. Discrepancy (pl. - co.)	0.25	1.43				.	.05	-.07	.04	-.14*	-.20**
5. Competition anxiety	1.73	0.47					.	.27**	.28**	-.04	-.13*
6. Self-handicapping	1.62	0.65						.	.15*	.01	-.09
7. Sandbagging	2.76	1.17							.	-,01	.01
8. Past national t. games	2.81	7.62								.	.54**
9. Future national t. games	1.45	4.68									.

Note: * Significant at $p < .05$, ** significant at $p < .01$

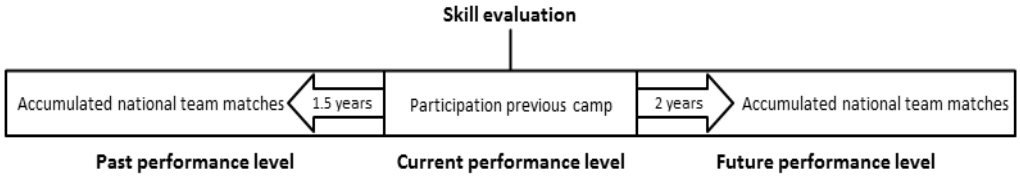

Figure 1. Illustration of reserch design.

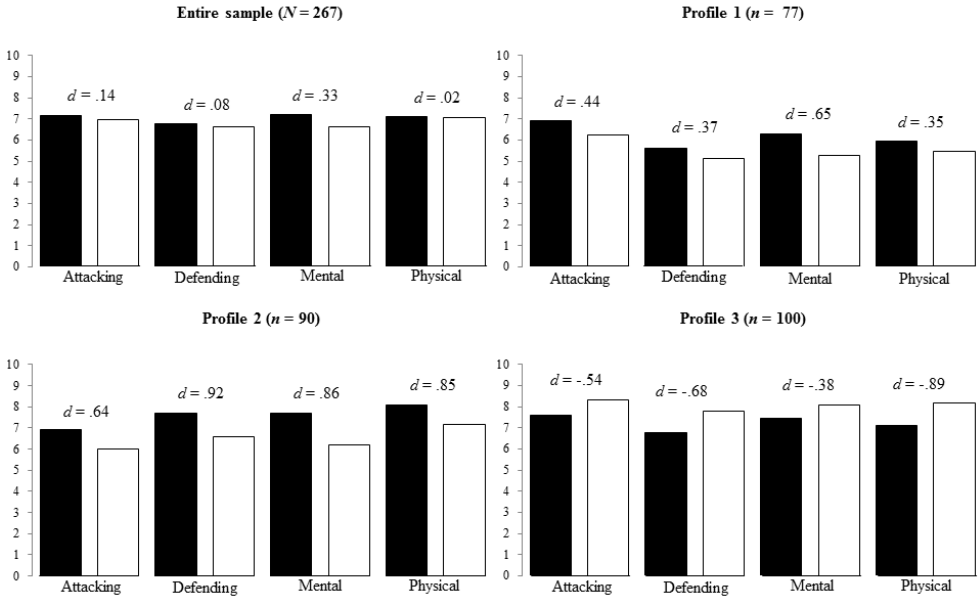

Figure 2. Description of the profiles; black bars represent players' ratings of their own skill level, and white bars represent coaches' ratings of players' skill level. *d* = cohen's estimated effect size between players' and coaches' ratings.

Paper 4

Hofseth, E., Pedersen, J. V., Toering., T., & Jordet, G. (Submitted) Shame-coping in professional soccer players: An exploratory interview analysis.

Shame-Coping in Professional Soccer Players:

An Exploratory Interview Analysis

This study explored, using in-depth interviews, ways in which professional soccer players (N = 6, M_{age} = 25.33, SD = 4.44) experience and cope with shame following performance failures during matches, and while working on their weaknesses during training. Data was analyzed inductively and deductively using direct and conventional content analysis. Results showed that players were particularly likely to experience shame in response to performance failures during matches. They were found to employ specific problem-focused (learning) and emotion-focused coping strategies ("hiding"). At an intra-personal level, players' shame-coping style seemed to have an influence on their performance and skill development.

Shame has been called the Cinderella of unpleasant emotions as it, historically speaking, did not receive attention of researchers and psychologists, although it has a strong effect on human behavior (Rycroft, 1968). In sport this is especially true (Partridge & Elison, 2010). According to the cognitive-motivational-relational theory of emotion (CMR: Lazarus, 1991; 2000), shame is generated by perceived, or anticipated, failure to meet an ego-ideal. An ego-ideal is an ideal that a person conforms to, highly values, and evaluates him or herself against (Laplanche & Pantalis, 1967). Given the competitive ethos in sport, athletes' ego-ideals are to a large extent likely to be based on their display of competence and performance (Lazarus, 2000), and when they fail or perform sub-standard—or think they are going to—they might feel ashamed. Moreover, following CMR, each emotion generates a biologically anchored desire (motivation) that facilitates peoples' functioning in the given situation. For shame, this desire is to hide, meaning that this emotion stimulates people to avoid displaying undesirable behaviors. Rather than avoiding and suppressing one's weaknesses, acquiring expertise relies on the ability to face such shortcomings and direct efforts towards improving them (Ericsson, Krampe, & Tesch-Römer, 1993). In this light, adaptive shame-coping may constitute a pre-requisite for developing expertise. To our knowledge, the relationship between shame-coping and expertise has not explicitly been investigated yet. The purpose of this study was to explore the relationship between shame-coping and soccer expertise.

In general, the interest for the role of shame in sport seems to be growing and previous research has demonstrated that shame is negatively linked to constructs such as self-compassion and self-concept (Eusanio, Thomson, & Jaque, 2014; Mosewich, Kowalski, Sabiston, Sedgwik, & Tracy, 2011), and positively related to competitive anxiety, fear of failure, and perfectionism (Conroy, Coatsworth, & Kaye, 2007; Sagar, Lavallee, & Spray, 2009; Sagar & Stoeber, 2009). An exploratory study on youth athletes' shame-coping styles across sport and gender, disclosed that in response to shame evoked by failure or by weaknesses during training or competition, athletes tended to cope by externalizing their shortcomings or by psycho-socially withdrawing from the activity (Massey & Partridge; 2010). Similar shame-coping patterns have been confirmed by other studies, also conducted on youth athletes (Partridge & Elison, 2012; Partridge & Wiggens, 2009).Thus, it seems that youth athletes cope with shame by giving in to the desire to hide their shortcomings for others as well as themselves.

The same shame-coping pattern seems to be evident in elite youth soccer players—previous studies have shown that after shame-inducing failures they tend to disengage from the match and avoid the ball (Sagar, Busch, & Jowett, 2010). Some players avoid talking about their failures and avoid similar situations during the following training sessions (Sagar et al., 2010). It has also been reported that shame prone youth elite players (highly susceptible

to feel shameful in response to failure) are more inclined to engage in behavioral self-handicapping during practice activity than their lesser shame-prone peers, and that this seem to constrain the improvement of their skill level (Hofseth, Toering, & Jordet, 2015). Behavioral self-handicapping involves behaviors, or lack of behaviors, that compromise the quantity or quality of practice or performance so potential display of poor skill or performance level can be blamed on the circumstances rather than the self (Prapavessis, Grove, & Eklund, 2004). It thus seems that youth elite soccer players are reluctant to confront their shortcomings during match and training activity, and that this may have a negative influence on their skill and performance development.

In contrast, there is an increasing number of studies indicating that players at an expert level through self-regulation processes actively try to identify the weaknesses of their skills and deliberately improve these during practice and match activity (e.g., Gledhill & Harwood, 2014; Horrocks, Taylor, & Morley, in press; Mills, Butt, Maynard, & Harwood, 2012; Toering, Elferink-Gemser, Jordet, & Visscher, 2009). Such practice and match involvement is likely to be shame-inducing for soccer players because by thinking of their weaknesses in reference to their goals and subsequently deliberately trying to improve these, they are confronted with the negative discrepancy between whom they are, and who they aim to be as a soccer player in terms of performance and skill level. What remains unclear, however, is how players cope with shame during such processes.

In professional soccer the punishments and consequences of performance failures can be extremely harsh (Forde, 2010). Professional soccer players may be yelled at by their coach and teammates, criticized by the media and fans, or benched (e.g., Kristiansen, 2011). Careers may be ruined (Roderick, 2006) as after severe failures (e.g., scoring an own goal) with severe costs (e.g., team relegation) some players lose, and never regain, the confidence and motivation needed to compete at the top level (Roderick, 2006). Knowing that severe consequences and punishments worsen the shame-response (Tangney & Dearing, 2002), the shame-coping strategies that potentially may facilitate the development of skill level high enough to play at a professional level might not be sufficient for coping with performance failures at the professional level.

To our knowledge, no previous studies have investigated what constitutes adaptive shame-coping concerning the development of a high enough skill level to play at a professional level in soccer or any other sport. Neither have there been any studies aimed at investigating which adaptive shame-coping are efficient in professional soccer. In order to shed light on adaptive shame coping for soccer players, the aim of this study was to gain insight into how professional soccer players experienced and coped with shame during match and training activity. More specifically, we conducted in-depth interviews with six current professional players concerning their experiences with performance failures during match activity, and their experience with working on their weaknesses during training activity.

METHOD

Procedures and participants

Ethical approval for the study was obtained from the [COUNTRY BLINDED] Data Protection Authority. Given the difficulty of recruiting professional athletes for scientific research (Mikecz, 2012), the participants were selected through a two-step randomized stratification procedure identified through their participation in a previous study conducted by the third and fourth author [REFERANCE BLINDED]. First, in order to ensure heterogeneity with respect to shame proneness across the sample, these players (N = XXX) were screened on a football-specific version of the Test of Self-Conscious affect -3 (Tangney, Dearing, &

Wagner, 2000, in; Tangney & Dearing, 2002). Second, 20 players scoring within the 20th, 40th, 60th, 80th, and above the 80th percentile on shame-proneness, respectively, were randomly selected. Among these players, a convenience sample was identified, consisting of two players within each percentile (n = 20) playing at a club near the research team's location. Then, we requested approval from the clubs to contact the players. With consent given by the clubs, six players were contacted with the request for participation and all players accepted. The interviews were conducted within one week after participants agreed to participate. These six male professional soccer players ranged in age from 21 to 36 years (M_{age} = 25.33, SD = 4.44). Four of the players played in the [COUNTRY BLINDED] Premier League, while two of them played in the [COUNTRY BLINDED] Second League. In combined experience, the players had played 397 matches in the [COUNTRY BLINDED] Premier League, 136 matches in the Second League, and 63 youth national team games (see Table 1).

Interview guide and the interviews

A thematic semi-structured interview guide was developed in order to elicit rich in-depth qualitative data (Patton, 2002; Yin, 2009). The guide was structured into three main sections. The first section was a general introduction where players were asked to describe themselves as a soccer player and to share their likes and dislikes about being professional players. The aim in this section was to build rapport so the interview setting felt safe and natural. The following section was entitled "The coping process of shame-inducing performance failures," and the final section was entitled "The coping process of shame-inducing practice activities." In the second and third section, participants were asked a series of open ended questions concerning their thoughts, feelings, impulses, behaviors, and coping styles and strategies with respect to the theme. Participants' answers were probed whenever they were unclear or contrasted previous responses (Rubin & Rubin, 2005).

The second section "The coping process of shame-inducing performance failures" started with the question; "Most players have experienced making a big mistake; most recently when did this happen to you?" In order to ensure that we gained insight also from those players who could not remember or may have been unwilling to discuss their failures, we presented each player with three hypothetical scenarios describing a performance failure relevant for their playing position to open (e.g., defender; "Imagine that you receive the ball from a teammate and you pass the ball along to your goal keeper, but your pass is to loose, so the opposition's striker intercepts and scores). Players' hypothetical responses were discussed and probed.

The third section, "The coping process of shame-inducing practice activities" started with the question "what are your strengths and weaknesses as a soccer player?" followed up with questions concerning if, how, why (not), and when they worked on improving their weaknesses. Their answers were probed with respect to their thoughts, feelings, impulses, behaviors, and coping strategies in regards to when the weaknesses of their skills were exposed.

The interview guide did not include questions or phrases directly referring to shame, as this can be shame-inducing in itself and thus prime ego-defensive responses (Dearing & Tangney, 2011). Rather, the questions were designed to target specific frames against which potential cases of shame could be elicited, and subsequently be explored between the participant and the interviewer. In other words, shame was approached indirectly and carefully. The interview guide was piloted on two professional soccer players playing in the [COUNTRY BLINDED] Second League. Based on these experiences, the guide was refined with respect to phrasing of questions. In this process, two questions were deleted from the

guide as the players found them abstract and difficult to answer. In order to build rapport, the interviews were conducted by the second author as she herself was a professional soccer player. All the interviews took approximately one hour, and were conducted at players' club location, prior to or after a training session.

Data Analysis

The aim of the analysis was to provide a plausible processual understanding of how professional football experienced and coped with shame with respect to performance failures during match activity and improvement of weaknesses of their skills during training activity. Interviews were tape-recorded and transcribed verbatim, yielding 57 pages of single spaced raw text. The text was analyzed through four steps of coding before it was put together into two process models (one concerning performance failures, and the other concerning working on weaknesses).

During the first step of coding, using direct content analysis (Hsieh & Shannon, 2005), data was analyzed deductively and categorized into two main categories; "The coping process of shame-inducing performance failures", and "The coping process of shame-inducing practice activities." During the second step of coding, using conventional content analysis (Hsieh & Shannon, 2005), lower-order themes within each main category, respectively, were first inductively derived from the data and tagged as meaning units. Then, the third step concerned creating higher order themes across those lower order themes symbolizing the same meaning. The fourth step of coding concerned determining if and how players experienced shame, and identifying their coping efforts and shame related factors. This coding was done deductively using direct content analysis (Hsieh & Shannon, 2005), guided by Lazarus' conceptualization of shame and coping (Lazarus; 1991; 1999; 2000). The final step of the analytic procedure concerned structuring the results of the coding, within the two main sections, respectively into process-models capturing the interactions and the temporal relationships between the coded themes. This was done using composite sequential analysis (CSA; Miles & Huberman, 1994).

The analytical procedure was conducted by the first author. In order to enhance trustworthiness, all steps of the procedure were reviewed by the second author. Several alternate coding of text was proposed by the second author (less than 5% of the meaning units). Through critical discussion, agreement was achieved and some of the text concerning the first step of the coding was recoded. For example, match analysis concerning performance failures had at first been coded as a practice activity; however, as the failure actually occurs in a match, it was recoded to match activity. In addition, another researcher in the field, with extensive training and experience in qualitative methods, unrelated to the research team, also reviewed the analytic procedure and results. No coding or results were changed as a result of this process. Finally, the participants were sent the first draft of the manuscript, so they could comment on our interpretation of their statements and provide additional relevant information. The participants did not add information or indicate that we had misinterpreted their statements, therefore no changes to the coding or the manuscript were made. Furthermore, as the interviews were conducted in [COUNTRY BLINDED], the quotes presented in the present article and themes were subjected to back-translation in order to control and enhance the validity of the statements.

RESULTS

The current study sought to gain insight into the shame-coping process of professional soccer during match and training activity. The results are presented in the same structure as

the interview guide, starting with the results concerning the coping process of shame-inducing performance failures, and then the coping process of shame-inducing practice activities is presented.

The coping process of shame-inducing performance failures. The analytic procedure concerning the content analysis, revealed 15 lower-order themes and seven higher-order themes within the section "the shame-coping process of committing a performance failure during match activity." The presentation of these results follow the process-model derived from CSA analysis (see Figure 1).

Shame inducing failure, negative consequences, ego-ideals, and devaluation. All participants reported having experienced shame in response to performance failures. It is interestingly that most players had experienced all the scenarios concerning performance failures we presented to them, although many of them did not mention these on their own initiative. One example of such was the scenario where the player lost the ball to the opposition, resulting in a goal against. Further, players also described other types of failure that potentially could lead to shame, such as scoring an own goal. Interestingly, all players indicated that it was not necessarily the type of failure that generated shame. Rather, the likelihood of experiencing shame seemed to be contingent on situational or personal factors. Specifically, if the failure led to severe negative consequences, all players reported indicators of shame (e.g., "If it leads to a goal against, what you really want to do is dig a hole in the ground and jump in." P1). Some of the players also indicated that shame was more likely to be elicited if the failure, or the consequence of the failure, suggested they were not as good as they aimed to be as a soccer player, which may be understood as a failure to meet an ego-ideal from the perspective of CMR (Lazarus. 1991). As such, one player explained:

> You have an image of who you want to be as a soccer player . . . you want to be the best, a unique player who is able to do things others can't . . . and then you don't . . . so that is the issue, you are in conflict, between . . . the image you want to create for yourself the image that is true, or with the feedback you get. (P2)

Furthermore, one player also indicated that his ego-ideals were interrelated with his playing position, by stating:

> For me it is not a big mistake [missing a big scoring opportunity]. What affects me . . . when I play winger . . . so an important aspect is to challenge and pass the full-back, and I am a fast player, so I . . . I don't like, what gives me a bad feeling, is if I challenge, and strike the ball past him and . . . he is as fast as me, and he wins the ball—that I do not like. So . . . I am more of a facilitator. Had I been a goal-getter and my job was to score, I might have thought differently about this. (P6)

All players indicated that being devaluated, or imagining it, was the mediating factor in the relationship between their performance failures and their shame response, meaning why failure may induce shame. One player described a particular stressful encounter where he received negative feedback from his coach;

> What he said is that my understanding of the game is poor, as I in some situations was not mindful enough, or too late. I understood this as him saying that as a player I do not understand soccer (. . .) [*how was this in relation to that you perceive this to be one of your strong sides*] Exactly, it has to do with my self-perceptions and what he said . . . when you feel you know something about yourself, and someone says something different that is what is the most painful. (P2)

Shame buffers. Several players emphasized that others, by providing social support, may have a strong buffering effect on their shame response. One player for example stated:

> We are there to support each other, so I seem to recall that someone backed me then, by giving me a pat on the back and such, and that helped a lot. There is a [big] difference between that when they yelled at me. (P4)

Furthermore, most of the players (n = 4) explained that committing performance failures was more distressing when they were younger, thus indicating that age and experience also may have a buffering effect on the shame response in regards to performance failures. For example, the oldest and most experienced player stated that: "You want to jump down a well, if it leads to something bad, and then you carry it around, probably more so when you are younger than when you are older. Because it affects you more" (P4).

Facets of shame. When players' distress responses were probed, all referred to one or several facets of shame as defined by CRM. For example, most of them reported that they had experienced a strong desire to escape from the situation (e.g., "At that moment I just wanted to hide . . . the issue was . . . everything was bad, I just wanted out." P2).

A consistent finding across players was that they rarely used the term "shame." Only one player mentioned shame: "Embarrassment . . . shame . . . that sounds wrong because it is kind of not shame . . . neither a feeling of being inferior but . . . it is a really unpleasant feeling." Rather than shameful, several players described the distressing aspect of performance failures as feeling ridiculous or embarrassed (e.g., "It is a bit embarrassing. Not embarrassing . . . those who are there understand that one cannot play well every time . . . however it is kind of . . . it is embarrassing, really." P3). In addition, most of the players also described that another distressing aspect of committing performance failures was that they may develop a fear of failure. In this regard, one player stated that:

> If you miss a pass or something like that, and someone gives you a scolding, you become a bit anxious [how?] When you get a scolding (. . .) you become more fearful of failing the next time around because it is not enjoyable to be yelled at. (P3)

Shame-coping strategies. With respect to coping with performance failures with negative consequences for the team (loss of points or goals against), all players reported that one way they coped was to apologize to their teammates. One player described in detail what the proper code of conduct for a player who had failed in such a case was: "One should totally submit, raise the arm, and say sorry – this was stupid and shall not be repeated. You should totally submit"! (P5). In the perspective of CRM, there are two categories of coping—problem-focused coping and emotion-focused coping strategies. Problem-focused strategies may concern any strategies that change the source of the emotional distress. Emotion-focused strategies on the other hand manipulate the emotional distress by changing how the person attends to the source, or the meaning of it (Lazarus, 1991). Apologizing may be understood as both emotional and problem-focused coping—depending on level of analysis. Assuming that the failure is the source of distress, apologizing appears to be an emotion-focused coping strategy because this way of coping does not directly change the score of the game. On the other hand, assuming that being devaluated by others is the stressor, apologizing may be defined as a problem-focused strategy in the sense that it might atone the relationship between the player who has failed and his teammates. We choose to code apologizing as an as emotion focused coping strategy given that the failure in both cases was the initial stressor.

Most players also seemed to use cognitive and behavioral emotion-focused strategies. For example, one player tried to focus on himself when he failed: "You need to focus on your own image of yourself that is important. If you don't do that . . . what it does to me is that I start thinking about what everybody else thinks about me, and that sucks." In light of CRM, this can be understood as suppression, as it represents an attempt to avoid the distressing thoughts associated with the failure. Another player described that he primarily coped by changing his style of playing, and stated that:

> I might then choose, call it a secure solution, where I just hide a bit, avoid getting the ball, so I avoid making mistakes . . . instead of approaching [player with the ball] and asking for the ball, I rather stretch [run away]. (P6)

Several of the players also engaged in problem-focused coping, in the sense that they tried to improve the (lack of) skill or awareness leading to the failure. For example, one player stated:

> I tried to be more mindful before receiving the ball, even though this is something I always try to be mindful about (. . .) You grab yourself by the neck, meaning that you do not repeat that failure (. . .) when it results in a goal against, you learn quickly. (P5)

In this regard, one of the players explained that by focusing on learning he was able to endure the distress of shame, even when the spotlight was put on his failures:

> As I previously stated, you feel like you want to jump down in a black hole, it's not pleasant but it passes . . . the most important thing is that you learn. Nowadays, they [failures] are very visible in soccer. For example, we have match analysis and such. It is usually for in-house use. But still, you are sitting there with your teammates . . . you fail and it is very visible, but I choose to believe that there is something to learn from this. So, it bothers me briefly. At the moment it is embarrassing, but then you kind of move on. (P4)

Furthermore, this player seemed to be extremely learning-oriented, and reported some rather unorthodox strategies for seeking information that could potentially contribute to the development of his skills. For instance, he scanned media reports and fan forums after matches for relevant information that could provide new insight into his weaknesses, in pursuit of improvement. He stated:

> I have read and monitored everything that has been written about me, all these years . . . the reason I have read all this is to check if it is of any value, if there is anything to extract. I feel I am able to separate what are personal attacks and what I can use . . . [*for improving?*] . . . Yes. (P4)

The coping process of shame-inducing practice activities. The analytic procedure concerning the steps of content analysis, revealed six higher-order themes and nine lower-order themes within the section "The shame coping-process of shame-inducing practice activity." The presentation of these results chronologically follows the process model derived from CSA analysis (see Figure 2).

Shame inducing practice, ego-ideals, and age. All players reported that they deliberately worked on improving the weaknesses of their skills, and had always done so. They all, also, stated that it was less enjoyable to work on their weaknesses than their strengths, and that exposing their weakness to others played a significant part in this "unenjoyable." When the players' responses were probed, those players who disclosed that they experienced shame when working on their weaknesses indicated that that they always wanted to be good and "the best" while those who did not experience shame in response to working on their weaknesses did not indicate such. In this regard a player who did not disclose any facets of shame stated that:

> That is no fun, no it is not. But at the same time, it is something you get used to. It is no secret to me or anyone else who has seen me play that this is something I need to work on. So . . . of course there is no fun having your weaknesses exposed, but it is just something one needs to get used to. (P5)

In contrast, a player who indicated that he did experience shame in response to exposing his weakness stated that:

> As a soccer player you are not the best at everything, then you are Cristiano Ronaldo. So it is natural to have weaknesses, and I understand this. But still, I want to be the

> best in all drills that I participate in. In those drills I'm not the best, I kind of shy away rather than focus on improving. I hate . . . I fear . . . I want to win so bad that I almost dread them, because I do not want to lose. (P6)

Both players who reported they experienced shame when working on their weaknesses, stated that dynamic drills corresponding with their weaknesses led by the coach was the activity that was most shame-inducing because during such activity their weaknesses became very visible (see Figure 2 for illustration of the process).

Furthermore, both players who experienced shame in response to exposing their weaknesses indicated that being devaluated was the mediating factor (why). One player expressed that he was especially sensitive to being devalued concerning a specific weakness, and stated:

> When you are told that you . . . physically don't measure up . . . [*how do you feel then?*] . . . I feel . . . since I have heard this every week since I was 13, I feel that this is something that is never going to be good enough . . . you feel kind of worthless. (P2)

The other player expressed his concern of being devalued using general terms:

> You want to show you are good, let's say rather than you are a poor . . . [*being poor is bad because?*] It is not because I am concerned about being re-signed next year or things like that. It has nothing to with such, it is all about self-esteem. (P6)

Nevertheless, both players indicated that they were less sensitive to this issue now than when they were younger (e.g., Although it might sound weird coming from a person who is only 21 . . . it has become better over the years . . . P2)

Facets of shame and shame-coping strategies. As previously indicated, one of the symptoms of shame reported by these players was reduced self-worth. Additionally, both players indicated that they experienced a desire to escape and hide when their weaknesses were exposed, which also seemed to be how they coped with shame. As such, and also indicating that he experienced fear of failure, one of the players explained:

> I am mostly concerned about not failing and therefore I hide and avoid getting involved . . . [*do you practice your weaknesses in hiding then?*] Yes . . . last year when I had to practice finishing in XXXX, I preferred to use a goal of my own, rather standing there and shooting together with four other guys. So I rather go on for myself, and work on myself. Then, I feel I can try and fail. So it is a bit typical that I go to a different place. (P6).

Reflecting on what this way of coping has meant for his development, the same players stated that:

> If I could turn time backwards, I should have been tougher in regards to being outside the comfort zone, dared to be there . . . dared to fail. I think, "daring to fail" in the past could have been better if I had learned to do so. I need to improve this in the future . . . [*had you known about this issue when you were younger, do you think you had done something about it?*] I think, I have known about this problem for some years now, but I think it is difficult to do something about. So I do not know if I could have done things differently. But if . . . you have any insight, tips, literature, or something . . . because I mean that this is my biggest challenge as a soccer player . . . not fear failing. That is my . . . yes – challenge. (P6)[1]

The other player described a similar, but yet, slightly differently coping style, where he initially hid but at some point tried to break this pattern. He for instance described an incident during a preseason training camp when he was really struggling:

[1] Player was offered relevant literature and psychological counselling.

> The ball was my worst enemy . . . complete crises. Training after training . . . the first 10 days, two sessions a day . . . I could not do anything right. I stayed away from the ball . . . I did not want to be involved and such (. . .) Finally, I said [to myself] I need to kill the ball . . . and then I decided to do so . . . I had the idea that I needed to attack rather than [avoid it] . . . and then it switched like that [snaps his fingers]. (P2)

When doing drills specifically targeting his weakness—stamina—he explained that, by changing his achievement goal from "optimal performance" to "doing his best," he was able to stay engaged and thus work on improving his weakness:

> I thought now, I have no expectations with respect to performing my best, I expect that I press my body as far as possible and work on the simple things (. . .) when I was at my most exhausted, I was very mindful in this regard. (P2)

This player also put a lot of effort into improving his stamina when he was younger, using various problem-focused strategies such as dieting and training extra running sessions. With respect the efficiency of these strategies he stated that:

> That [stamina] I have put a lot of effort into improving . . . I have been on low-carb diets and what not, and I l lost [XXXX] within three months and I trained . . . ran 24, 4 by 4 intervals each month, it was crazy . . . but I did not become a better player . . . [*were you at risk for becoming over-trained?*] . . . you might say that . . . there was no "juice" in the body . . . I also need to be a bit explosive . . . the most important thing for me has to avoid injuries over long periods of time, then I train well and eventually become very fit. (P6)

DISCUSSION

The aim of this study was to explore how professional soccer players experienced and coped with shame in regard to performance failures and weaknesses. Results indicated that soccer players may experience shame in response to both performance failures and working on their weaknesses. In this regard, they support Lazarus' conceptualization of shame and the shame-coping as described in his cognitive-motivational-relational theory (Lazarus; 1991; 1999; 2000).

With respect to previous research, our results imply that shame and shame coping play a role in the development of soccer expertise. More specifically, the results support previous studies that suggest that soccer players may experience shame during match and training activity, and that shame is distressing for soccer players (Hofseth, Toering, & Jordet, 2015; Sagar, Busch & Jowett, 2010). Our analysis indicated that the perception of being devaluated or the imagination of being devaluated (e.g., negative feedback) by others was the underlying reason why performance failures can lead to shame. For some players shame was likely to be evoked whenever they failed to perform up to the standard of their ego-ideal (e.g., succeed at dribbling). For all players, however, shame was elicited when their failure led to negative consequences for the team—subsequently leading to some sort of actual devaluation such as being yelled at by a teammate.

This finding might seem counterintuitive, given that CRM postulates that shame is contingent on violation of an ego-ideal. However, CRM also postulates that ego-ideals are internalized standards from significant others (Lazarus, 1991). This implies that shame may be evoked when a soccer player himself perceives that he has performed below the standard reflecting his ego-ideals. It also implies that he may feel shameful when others he values the opinion of suggest that he has performed below the standards they expect of him because the player's ego-ideals may be based on these external standards.

Teammates, coaches, and parents can mitigate players' experience of shame by providing social support. Related to this, Lazarus (1991) implies that the root of shame is fear of rejection. In this light, social support may symbolize the opposite—social inclusion—and therefore possibly reduce shame when provided in response to failure. Although highly speculative, the players' apologizing behavior may in this light possibly be understood as a coping attempt directed at maintaining social inclusion.

With respect to previous research, these findings support many studies indicating that social support can have a strong stress buffering effect on athletes in general (for review see, Rees, 2007), and in soccer players specifically (e.g., Jordet, Elferink-Gemser, 2012; Kristiansen, Roberts, & Sisjord, 2011). Furthermore our results suggested that age seemed to have buffering effect on players' shame experience with respect to intensity. This concerned both performance failures during match activity and display of weakness during training activity. According to CRM (Lazarus, 1991), the intensity of an emotion is related to the person's future expectations concerning the specific situation. More specifically, if one expects the situation to change for the better, emotional distress is likely to lessen—the opposite if true if one has a negative outlook. Given that players over time have experienced similar situations and know that the sense of shame will pass, it makes sense that their emotional response to it became less intense with age.

Concerning players' shame responses, the current study implies that soccer players may experience multiple facets of shame. In accordance with CRM (1991, 2000), players reported feeling a desire to hide or escape after performance failures, which constitutes the motivational aspect of shame. Furthermore, rather than using the term shame, most of the players described that performance failures as making them feel ridiculous or embarrassed. According to Lazarus (Lazarus, 1991), these terms reflect the low end of the shame distress intensity scale, while feeling humiliated or mortified represents the high end of the same scale. In other words, many players seemed to experience shame at a low intensity. Another prominent facet of shame reported by the players was fear of failure. Lazarus does not use the term fear of failure, he refers to the work of Levin (1971), and uses the term shame-anxiety; reflecting the emotional distressing pre-state of an anticipated shame-inducing event. Consequently, it appears that shame-inducing performance failures may make players fear future failures because they potentially may involve shame. In relation to this, previous research has shown that what youth elite soccer players are most fear the most concerning failure is shame (Sagar, Busch & Jowett, 2010).

In response to shame induced by performance failures, players reported using both emotion and problem focused coping. As previously reported, all players apologized to their teammates after performance failures. This coping behavior might actually be an indication of guilt. That is because as a substantial amount of research suggests that shame primarily stimulates antisocial behaviors, while guilt primarily stimulates prosocial behaviors, such as apologizing (for review see, Tangney & Tracy, 2012). A counter argument to this suggestion is that our data did not reveal any other traces of guilt. In addition, some players also indicated that apologizing was a sign of submission. Interestingly, evolutionary psychologists argue that in groups where participants invest their individual resource in a cooperative venture, which football performance is (Nesti, 2010), the role of shame is to make the person who has violated the groups interest appear submissive. By appearing submissive, the person signals that she or he (still) has the group's cooperative venture at heart, and therefore should not be excluded from the group (Fessler, 2007). Thus, we are in favor of considering apologizing a shame coping strategy. Given that apologizing stimulates group functioning there is no intuitive coping by apologizing holds any negative consequences.

The most frequently reported emotion focused coping strategy concerned disengaging from the game by hiding and avoiding the ball. Whether this should be considered an

adaptive way of coping may rely on the state of the player when feeling shameful. Specifically, experimental studies have demonstrated that in "the state of shame" the task specific streams of consciousness are disrupted and levels of cortisone are heightened (Fredrickson et al, 1998; Dickerson, 2008; Tops et al, 2006). Related to this, a substantial amount of performance and sport psychology studies suggest that people during such states are likely to choke (for review see Beilock, 2010; Beilock & Grey, 2007). Hence, hiding could be an adaptive way of coping if the player is in reduced performance state when experiencing shame. However, if the player is in a state where he is capable of performance such coping should be regarded as maladaptive. Possibly related to this, some of the players also indicated that they tried to suppress thoughts concerning the failure and move on, which could possibly be a functional strategy for buffering the previously indicated physiological symptoms of distress. Nevertheless, some players also indicated that they were able to stay engaged in the game, even in a state of shame. What characterized these players was that they reported coping by deliberately focusing on learning and improvement. This indicates that focusing on improvement and learning might mitigate the distress of shame, or help players endure this distress to the extent they do don't cope by avoiding the ball and play sequences.

Given that only those players who indicated that it was very important for them to *perform* well during practice reported experiencing shame when failing or performing poorly during practice activity their ego-ideals may primarily be contingent on displaying competence by the means of performing well, regardless of context, while those who did not experience shame in the training context, had ego-ideals primarily contingent on learning and improvement during practice activity. In this regard, ego-ideals might be understood as an overreaching psychological structure that may encompass goal-orientations (ego-orientation and task-orientation) as defined within achievement goal theory (Nicholls, 1989; Roberts, 2012). Furthermore, one could argue that ego-ideals, primarily relying on display of high performance, may reflect a sort of shame-proneness. This could possibly stimulate emotion focused coping, involving disengagement from match play and coach-led training activities, and therefore potentially inhibiting performance and skill development. However, it is noteworthy that the players who experienced shame during coach-led training activity were more merited than many of those who did not. In addition, all players reported that they directed deliberate efforts towards improving the weaknesses of their skills. Thus, the possible downside of ego-ideals primarily being contingent a high performance level first and foremost becomes an intra-personal hypothetical question: Could these players potentially have become better had their ego-ideal had different contingencies or had they used different coping strategies?

Limitations and future research. The main weakness of this study concerns the generalizability of our findings and our inferences concerning these. The main focus of future research concerning shame-coping in a performance or expertise perspective should concern testing the findings of the current study.

With respect to coping effectiveness, it is important that researchers investigate the effects of emotion-focused coping, such as hiding and suppression on players' performance.

Applied implications. The results of the current study offer several insights concerning the role of shame in soccer expertise that practitioners may find useful. First, the results suggest that devaluation may play an important role in elucidating shame. Coaches should therefore be mindful concerning how they provide players with feedback, particularly those players who are young, as the players indicated that they experienced shame more intensely when they were younger.

In this regard, it has been suggested that is useful to focus on controllable behavioral factors rather than uncontrollable personal factors when giving feedback in potentially shame-inducing situations. That is because the person then feels more flexible to adjust and

cope in manner that does not involve disengagement from the situation (Tangney & Dearing, 2002).

Furthermore, it might be important that players be provided with the opportunity to engage in individual training activities in order to develop the skills inhibited by potential maladaptive shame-coping during coach-led practice. On the same note, as all players in the current study indicated that they did experience shame, it seems important that players also become accustomed to the idea of shame and dare face this distress because it might be unavoidable on their pathway towards becoming professional players (Jordet, 2015). In this regard, sport psychologists might play an important role facilitating such processes by providing players with insight concerning the relationship between shame and a high skill and performance level. Based on the results of the current study, it might be adaptive to use coping strategies that focus on learning and development when experiencing shame.

CONCLUSION

From the perspective of CMR, the current study explored professional soccer players' experience of shame, and how they coped with shame in response to performance failures during match activity, and while working on weaknesses during training activity. The results indicated that soccer players may be particularly likely to experience shame in response to performance failures during match activity. In response to shame, players were found to employ both problem-focused (learning) and emotion-focused coping strategies (avoidance). Given that shame-coping is an understudied phenomenon in athletes at the highest level, it is important that researchers continue to investigate shame-coping high level athletes.

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Table 1

Players' track record of top level matches until interviews were conducted

Participants	Games [Blinded] Premier League	Games [Blinded] Premier League	Youth national team games [Blinded]
Player 1 (P1)	0	20	0
Player 2 (P2)	38	25	40
Player 3 (P3)	46	0	2
Player 4 (P4)	265	51	21
Player 5 (P5)	0	12	0
Player 6 (P6)	52	28	0

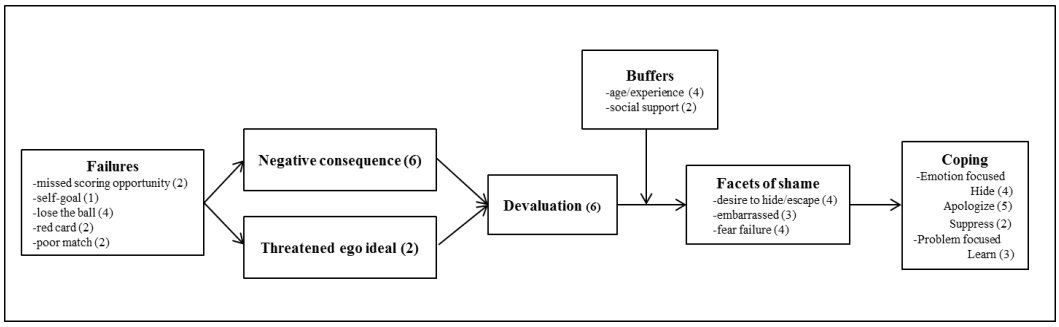


Figure 1. The process model based on the CSA analysis illustrating the shame-coping process of performance failures. Higher-order themes are highlighted in bold writing, while associated lower-order themes are presented below. Numbers, indicate how many players expressed the meaning of the theme.

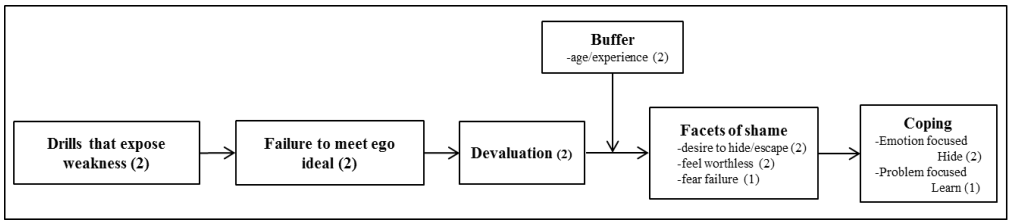


Figure 2. The process model based on the CSA analysis illustrating the shame-coping process of concerning working on weaknesses during coach-led practice activity. Higher-order themes are highlighted in bold writing, while associated lower-order themes are presented below. Numbers, indicate how many players expressed the meaning of the theme.

Appendix A

Intervjuguide

Ønske velkommen. Lese igjennom samtykkeerklæring, og be respondenten underskrive.
Forklare kort om studien. Husk å si at jeg har taushetsplikt!
Gjøre oppmerksom på at de vil være anonyme i oppgaven. Fortelle at det ikke er noe fasitsvar på spørsmålene, men at de skal svare det som stemmer for dem.

Tema	**Hovedspørsmål**	**Oppfølgingsspørsmål/Annet**
Bakgrunn Intro	1. Hvordan vil du beskrive deg som fotballspiller? *Temaet for oppgaven er «Ulike opplevelser preger og skaper Toppfotballspillere»* Hva synes du er spesielt bra og vanskelig ved å være fotballspiller	På banen, utenfor banen, som lagkamerat
Prestasjon	Nå skal jeg gå gjennom en del situasjoner som det er ganske vanlig at fotballspillere opplever, og det jeg er interessert i er hva du tenker om disse situasjonene og tilsvarende opplevelser du har hatt. 1. Alle spillere har som oftest opplevd å gjøre en stor feil på fotballbanen, når gjorde du det sist? - Hvordan har denne situasjonen påvirket deg i ettertid? <u>Scenarioer</u> Keeper: - Se for deg at du skal ta en 5.meter. Du treffer feil på ballen og den går rett til motstanderlagets spiss. Det blir en farlig situasjon som ender med mål i mot. - Se for deg at det er corner til motstanderlaget, du skulle holdt deg på streken men går ut for å bokse. Du timer helt feil, og motstanderne scorer. - Se for deg at det kommer er nokså enkelt skudd mot deg, men du glipper ballen mellom hendene og det blir mål. Forsvar: - Se for deg at du får ballen fra keeper, du velger å forsøke å gå forbi/drible en mann (motstanderlagets kant). Du blir brutt og motspillerne kommer i overtall mot deres	*I neste del:* *Få spilleren til å snakke om temaet først, deretter stille de oppfølgingsspørsmålene som passer til hvert spørsmål.* Beskriv hvilke følelser du sitter igjen med etter slike situasjoner. *Hvordan opplevde du det?* *Hvordan føltes det?* *Hva tenkte du?* *Hva følte du for å gjøre?* *Hva gjorde du?* 1. Fortell. Beskriv hvordan du følte deg. *Hvordan opplevde du det?* *Hvordan føltes det?* *Hva tenkte du?* *Hva følte du for å gjøre?* *Hva gjorde du?* 1. Fortell. Beskriv hvordan du følte deg. *Hvordan opplevde du det?* *Hvordan føltes det?*

	forsvarere, og scorer. - Se for deg at du glipper i markeringen på en corner, spilleren din får stå alene og score. - Se for deg at du får ballen fra en medspiller, deretter velger du å slå en pasning tilbake til keeper. Pasningen blir for dårlig, og motstanderlagets spiss plukker den opp og scorer. Midtbane: - Se for deg at du avanserer fremover med ballen, du har mulighet til å slå ballen ut til en av kantene, men velger å drible selv. Du blir brutt og motstanderlaget overtar ballen og kommer i overtall, noe som ender med scoring mot dere. - Se for deg at du slår en stygg tversoverpasning som blir brutt av motspiller, det blir en farlig overgang for motstanderlaget som medspillerne dine rydder opp i. - Se for deg at du får en pasning fra midtstopper på ditt eget lag. Du vender opp rett inn i en motspiller og blir brutt. Det ender med mål imot etter at motspillernes angripere kommer i overtal mot deres forsvarsspillere. Angrep: - Se for deg at du og en medspiller kommer alene med keeper, medspiller har åpent mål hvis du sentrer, men du velger å skyte selv fra en litt skrå vinkel, - og bommer. - Se for deg at du og medspiller kommer alene med keeper, medspilleren din legger ballen til side for keeper og den er på tur å gå i mål. Du stikker frem en tå og når ballen før den går i mål. Dere blir avblåst for offside. - Se for deg at du kommer alene med keeper, men bommer. (Dere taper med ett mål).	*Hva tenkte du?* *Hva følte du for å gjøre?* *Hva gjorde du?* Fortell. Beskriv hvordan du følte deg. *Hvordan opplevde du det?* *Hvordan føltes det?* *Hva tenkte du?* *Hva følte du for å gjøre?* *Hva gjorde du?* Fortell. Beskriv hvordan du følte deg. *Hvordan opplevde du det?* *Hvordan føltes det?* *Hva tenkte du?* *Hva følte du for å gjøre?* *Hva gjorde du?*
Utvikling	Nå ønsker jeg at vi skal prate litt om det du opplever som dine sterke og svake sider som fotballspiller. 1. Hva er dine sterke og svake sider som fotballspiller 2. Jobber du med de sterke sidene dine? 3. Jobber du med svakhetene dine? Hvis ikke har det alltid vært slik? 3b.. Er det noen grunn til at du ikke har jobbet	 På hvilken måte har du jobbet med de svake sidene? (På hvilken måte har du jobbet med de sterke sidene?)

	med de svake sidene dine?	
	3. I hvilke situasjoner kommer de svake sidene frem på trening?	Hvordan takler du det?
	4. Hva føler du når dine svake sider blir eksponert for andre? - Når føler du at de blir eksponert for andre?	Spillere, trenere, osv.
	5. Er det situasjoner på trening hvor du har følt en trang til å gjemme deg, bli mindre synlig?	Fortell om situasjonen. Beskriv. Har du noen tanker om hvorfor du føler det slik?
	6. Har det vært situasjoner på trening du har opplevd og hvor du har hatt et ønske om å komme deg bort/stikke av?	Forlate treningen, medspillerne, trenerne.
	7. Treninger inneholder ofte flere forskjellige elementer, alt fra rene tekniske øvelser til spill på full bane. Er det noen av disse elementene du liker bedre enn andre? - Hvilke elementer er det du liker minst? (Er det noen sammenheng mellom dette og de svake sidene dine*?)*	(Om han svarer spill. Spør hvorfor.) Hvorfor tror du at du liker disse elementene best?(minst)
	8. Hva tenker/føler du når det er andre som konkurrerer om samme plass som deg er bedre enn deg i diverse elementer på trening og i kamp. - Har dette vært et fokus for deg? - Har du jobbet for å unngå dette?	Hva føler du i slike situasjoner? Hva har du tenkt om slike situasjoner. Har du gjort noe med det?
	9. Er det noen situasjoner du kan sette fingeren på, som har hindret deg i forhold til utviklingen din som fotballspiller?	Fortell. Forklar. Situasjoner du har opplevd på eller utenfor fotballbanen.

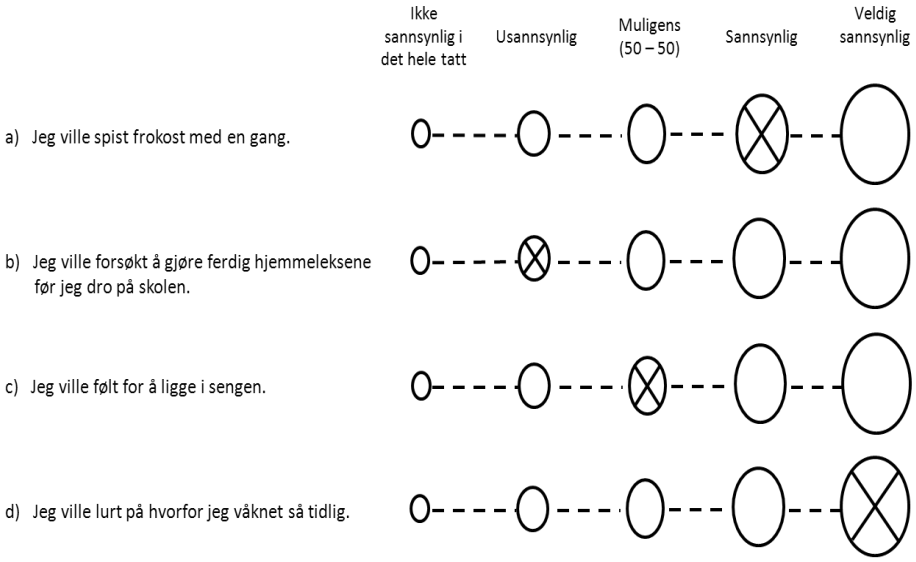
Tosca-A

På de kommende sidene, vil du finne beskrivelser av en rekke ulike situasjoner. Etter hver beskrivelse, vil du bli presentert for flere utsagn som beskriver hva personer muligens ville ha følt og tenkt.

Når du leser om de ulike situasjonene, forestill deg at du befinner deg i den aktuelle situasjonen. Forestill deg hva du ville følt og tenkt. Deretter les hvert utsagn. Sett en X i den sirkelen som best beskrives hvor godt dette utsagnet beskriver deg. Den største sirkelen betyr at det er veldig sannsynlig at du ville tenkt og følt på den måten, og den minste sirkelen betyr at det ikke er sannsynlig i det hele tatt at du ville tenkt og følt på den måten.

Eksempel

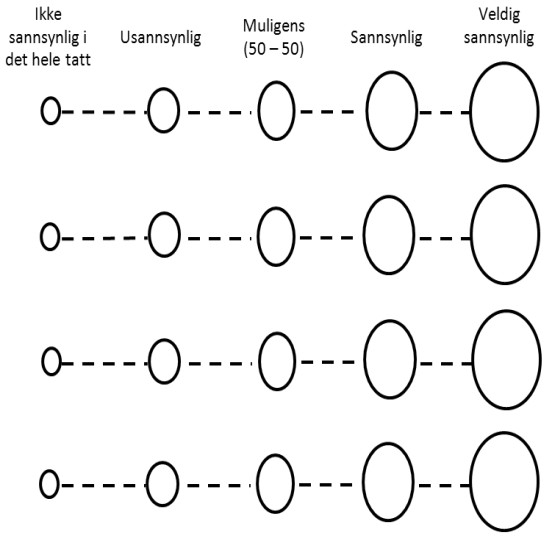
A. Du våkner veldig tidlig en morgen på en skoledag.



Det er ingen riktige eller gale svar på disse spørsmålene. Vi er bare interessert i dine tanker og oppfatninger om disse situasjonene.

Tosca-A

1. Du snubler i kantina og søler drikken til kompisen din.



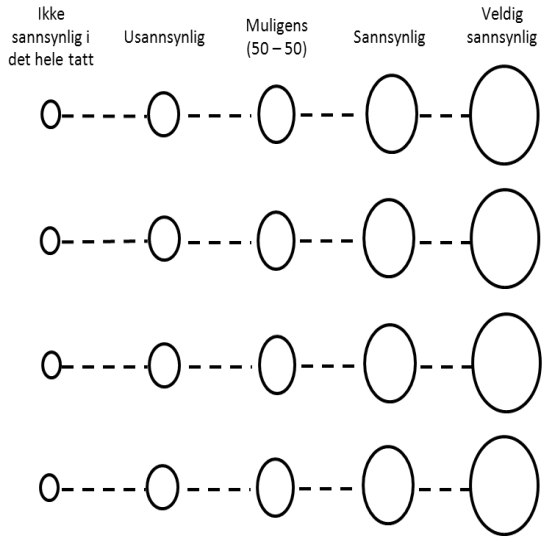
a) Jeg ville tenkt at alle så på meg og lo.

b) Jeg ville blitt veldig lei meg. Jeg burde ha sett meg for hvor jeg gikk.

c) Jeg ville ikke følt meg dårlig fordi den kostet ikke spesielt mye.

d) Jeg ville ha tenkt: "jeg kunne ikke noe for at gulvet var glatt."

2. I flere dager utsetter du å prate med læreren om en oppgave som du skulle ha levert. I siste sekund prater du med læreren om det, og det hele ordner seg.



a) Jeg ville ha tenkt "jeg er visst mer overbevisende enn jeg trodde."

b) Jeg ville ha angret på at jeg utsatte det.

c) Jeg ville ha følt meg som en pyse.

d) Jeg ville ha tenkt "dette håndterte jeg bra."

e) Jeg ville ha tenkt: "læreren burde ha henvendt seg til meg først. Det er jobben hennes."

Tosca-A

3. I gymtimen kaster du en ball og den treffer kompisen din i ansiktet .

	Ikke sannsynlig i det hele tatt	Usannsynlig	Muligens (50 – 50)	Sannsynlig	Veldig sannsynlig
a) Jeg ville ha følt meg dum siden jeg ikke kan kaste en ball engang.					
b) Jeg ville ha tenkt: "kanskje kompisen min trenger å trene mer på å ta i mot."					
c) Jeg ville ha tenkt: " det var bare et uhell."					
d) Jeg ville ha bedt om unnskyldning og sørget for at det gikk bra med kompisen min.					

4. Du og en gruppe medelever jobbet veldig hardt med et prosjekt. Læreren din gir deg bedre karakter enn alle de andre.

	Ikke sannsynlig i det hele tatt	Usannsynlig	Muligens (50 – 50)	Sannsynlig	Veldig sannsynlig
a) Jeg ville ha tenkt: "jeg er lærerens favoritt."					
b) Jeg ville følt meg ensom og fraskilt fra resten av medelevene.					
c) Jeg ville ha følt at det harde arbeidet jeg la ned lønte seg.					
d) Jeg ville følt meg flink og vært stolt av meg selv.					
e) Jeg ville sagt til læreren at alle burde fått samme karakter.					

Tosca-A

5. Hjemme hos en kompis ødelegger du noe og så gjemmer du det.

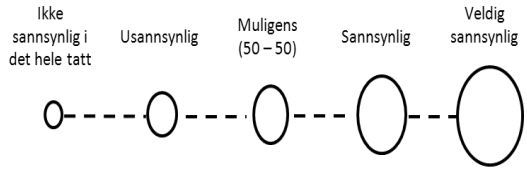
	Ikke sannsynlig i det hele tatt	Usannsynlig	Muligens (50 – 50)	Sannsynlig	Veldig sannsynlig
a) Jeg ville ha tenkt: ''dette gjør meg nervøs. Jeg må enten fikse den eller erstatte den.''					
b) Jeg ville ha unngått denne kompisen for en stund.					
c) Jeg ville ha tenkt: '' det er mange ting som har dårlig kvalitet.''					
d) Jeg ville ha tenkt: ''det var bare et uhell.''					

6. På skolen venter du til siste liten med å planlegge et prosjekt, og det ender dårlig.

	Ikke sannsynlig i det hele tatt	Usannsynlig	Muligens (50 – 50)	Sannsynlig	Veldig sannsynlig
a) Jeg ville ha følt meg ubrukelig og udyktig.					
b) Jeg ville ha tenkt: ''det er aldri nok timer i døgnet.''					
c) Jeg ville ha følt at jeg fortjente en dårlig karakter.					
d) Jeg ville ha tenkt: ''gjort er gjort.''					

Tosca-A

7. Du våkner en morgen og du husker at det er din mor sin bursdag. Du glemte å kjøpe gave til henne.



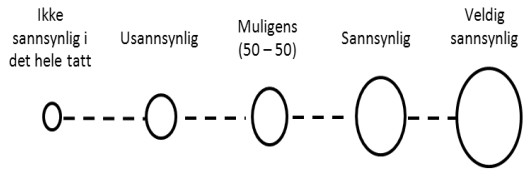
a) Jeg ville ha tenkt: ''det er ikke gaven som betyr noe. Det som virkelig betyr noe er at jeg bryr meg.''

b) Jeg ville ha tenkt: '' etter alt hun har gjort for meg, hvordan kunne jeg glemme bursdagen hennes.''

c) Jeg ville følt meg uansvarlig og lite omtenksom.

d) Jeg ville ha tenkt: ''noen burde ha minnet meg på det.''

8. Etter en prøve tror du det har gått veldig bra. Men så finner du ut at det har gått dårlig.



a) Jeg ville ha følt at jeg kunne ha gjort det bedre. Jeg burde ha øvd mer.

b) Jeg ville ha følt meg dum.

c) Jeg ville ha tenkt: ''det er bare en prøve''.

d) Jeg ville ha tenkt: '' læreren må ha gitt meg feil karakter.''

Tosca-A

9. Du gjør noe galt på skolen og medeleven din får skylden.

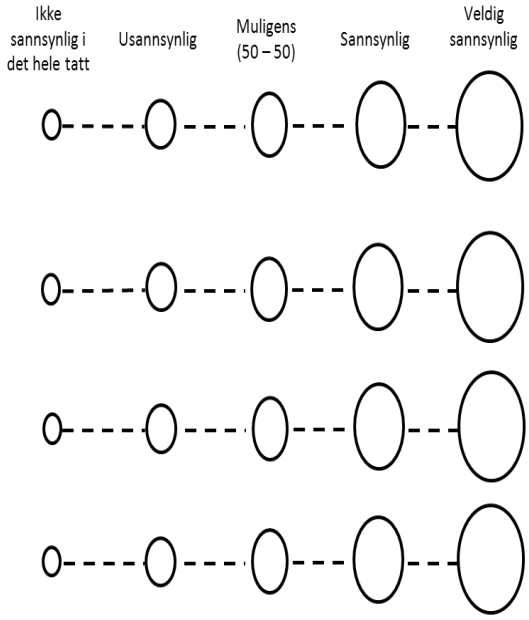
	Ikke sannsynlig i det hele tatt	Usannsynlig	Muligens (50 – 50)	Sannsynlig	Veldig sannsynlig
a) Jeg ville ha tenkt: ''læreren liker ikke medeleven.''					
b) Jeg ville ha tenkt: '' livet er ikke rettferdig.''					
c) Jeg ville ikke ha sagt noe og holdt meg unna medeleven.					
d) Jeg ville ha vært trist og vært ivrig etter å rette opp i situasjonen.					

10. Du pratet i timen og kompis din får skylden. Du går til læreren og forteller ham sannheten.

	Ikke sannsynlig i det hele tatt	Usannsynlig	Muligens (50 – 50)	Sannsynlig	Veldig sannsynlig
a) Jeg ville ha tenkt: ''læreren burde ha fått faktaene på bordet før han ga kompisen min skylden.''					
b) Jeg ville ha følt som om at jeg alltid får folk i trøbbel.					
c) Jeg ville ha følt meg bra for å ha ordnet opp.					
d) Jeg ville ha vært stolt av meg selv for å være en ærlig person.					
e) Jeg ville ha tenkt: ''jeg er den som skulle ha fått skylden. Jeg skulle ikke ha pratet til å begynne med.''					

Tosca-A

11. Du og kompisen din prater i timen og dere blir oppdaget.



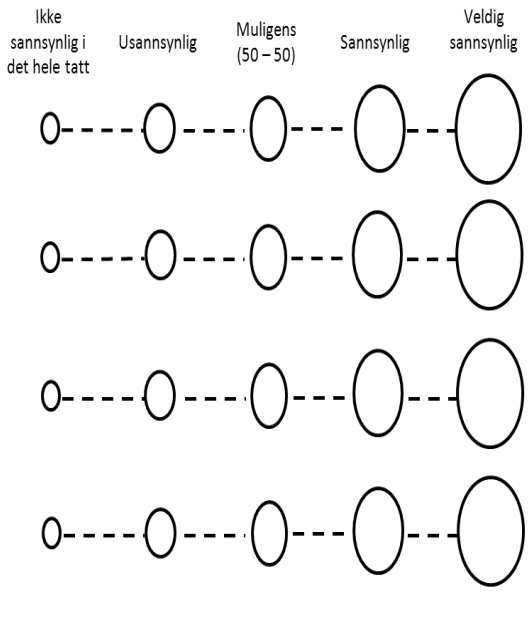
a) Jeg ville ha tenkt: ''jeg burde ha visst bedre. Jeg fortjener å komme i trøbbel''.

b) Jeg ville ha tenkt: ''vi hvisket jo bare.''

c) Jeg ville ha tenkt: ''læreren er urettferdig.''

d) Jeg ville ha følt det som om alle i klassen så på meg og skulle til å begynne å le av meg.

12. Du planlegger å møte en kompis. Senere oppdager du at du har glemt avtalen deres.



a) Jeg ville ha tenkt: ''jeg er lite omtenksom .''

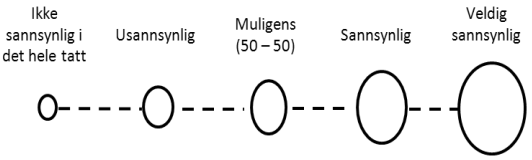
b) Jeg ville ha tenkt: ''de kommer til å forstå.''

c) Jeg ville ha forsøkt å gjøre det det godt igjen så fort som mulig.

d) Jeg ville ha tenkt: ''noen forstyrret meg rett før jeg skulle møte kompisen min.''

Tosca-A

13. Du deltar på en innsamlingsaksjon som frivillig for en god sak. Etter en stund ønsker du å slutte, men du vet at ditt bidrag er viktig.



a) Jeg ville ha følt meg egoistisk og tenkt at jeg egentlig bare var lat.

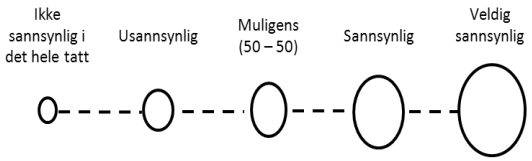
b) Jeg ville ha tenkt: ''jeg ble presset til å hjelpe til.''

c) Jeg ville ha tenkt: ''jeg burde være mer opptatt av hva jeg kan gjøre for å hjelpe til.''

d) Jeg ville ha følt meg kjempebra siden jeg hadde hjulpet til.

e) Jeg ville ha følt meg veldig fornøyd med meg selv.

14. Karakterene dine er ikke så gode som du hadde ønsket. Du viser dem til foreldrene dine når du kommer hjem.



a) Jeg ville ha tenkt: ''alle får dårlige karakterer av og til.''

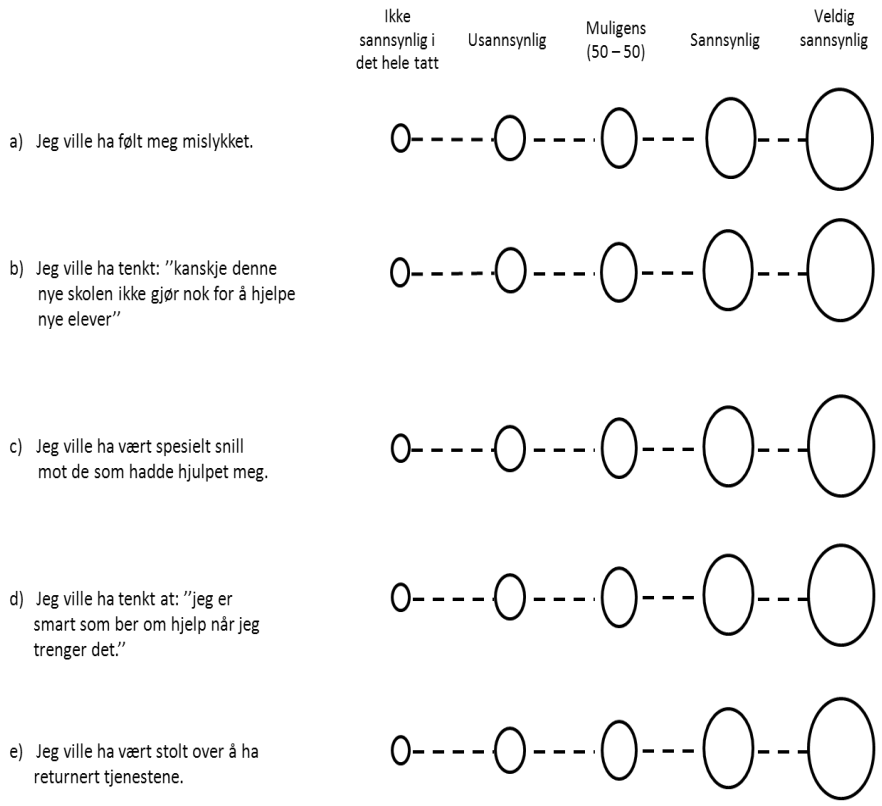
b) Jeg ville ha tenkt: ''jeg fortjener virkelig ikke disse karakterene, det var ikke min feil.''

c) Nå som jeg har fått dårlige karakterer. Ville jeg ha følt meg verdiløs

d) Jeg ville ha tenkt: ''jeg burde høre på alt læreren sier og jobbe hardere.

Tosca-A

15. Du har nylig skiftet skole og alle har vært veldig hjelpsomme. Ved et par anledninger har du vært nødt om å be om noen ganske store tjenester, men du har gjengjeldt tjenestene ved første anledning.



The Sandbagging Scale

Instruksjoner: Nedenfor finner du en rekke utsagn som beskriver hva spillere tenker, føler og gjør fra tid til annen. Vær så snill å ta stilling til hvert av utsagnene ved å sirkle rundt det tallet på skalaen "1 = Helt uenig " til "6 = Helt enig".

	Helt uenig	Uenig	Litt uenig	Litt enig	Enig	Helt enig
1. Det er bedre at folk forventer lite av deg selv om du vet at du kan prestere bra.	1	2	3	4	5	6
2. Jo mindre andre forventer av meg jo bedre liker jeg det.	1	2	3	4	5	6
3. Hvis jeg forteller andre hvor god jeg virkelig er, føler jeg mer prestasjonspress.	1	2	3	4	5	6
4. Jo mindre andre forventer av meg jo mer komfortabel føler jeg meg.	1	2	3	4	5	6
5. Det hender jeg underdriver ferdighetene mine for å redusere presset.	1	2	3	4	5	6
6. Når noen har høye forventninger til meg føler jeg meg ukomfortabel.	1	2	3	4	5	6
7. Jeg forsøker å prestere over andres forventninger.	1	2	3	4	5	6
8. Det er viktig at jeg overgår andres forventninger.	1	2	3	4	5	6
9. Jeg liker når andre blir overrasket over prestasjonen min.	1	2	3	4	5	6
10. Det gleder meg å se at andre blir overrasket over ferdighetene mine.	1	2	3	4	5	6
11. Foran motstanderen (e) mine underdriver jeg ferdighetene mine.	1	2	3	4	5	6
12. Jeg underdriver ferdighetene mine eller kunnskapen min.	1	2	3	4	5	6

Selv-handicapping

Instruksjoner: Nedenfor finner du en rekke utsagn som beskriver ting spillere gjør fra tid til annen, ta stilling til hvor likt dette er deg.

		Veldig likt meg	Likt meg	Verken likt eller ulikt meg	Ulikt meg	Veldig ulikt meg
1.	Noen fotballspillere lar seg forstyrre på trening av andre spillere. Hvis de ikke får til øvelsene eller gjør det så bra, kan de skylde på at de andre hindrer dem i å konsentrere seg og følge med.	☐	☐	☐	☐	☐
2.	Noen fotballspillere finner på unnskyldninger for ikke å komme på trening (skade eller ikke føle seg så bra). Hvis de ikke gjør det så bra på kamper, kan de skylde på at skade eller ubehag hindrer dem i å gjøre det bra i kamp.	☐	☐	☐	☐	☐
3.	Noen fotballspillere velger bevisst å ikke stå på for fullt på treningene. Dersom det ikke går så bra i kampene, kan de skylde på dette.	☐	☐	☐	☐	☐
4.	Noen fotballspillere tar ikke på alvor oppladning og forberedelse før serie- og cup kamper. Dersom det ikke går så bra i kampene, kan de skylde på dette.	☐	☐	☐	☐	☐
5.	Noen fotballspillere tar ikke treningskamper før sesongen skikkelig på alvor. Dersom de ikke blir med i første 11'eren eller ikke får spille så mye i løpet av sesongen, kan de skylde på dette.	☐	☐	☐	☐	☐
6.	Noen fotballspillere lar være å lade opp og sørge for at de er godt forberedt før en viktig fysisk test på trening. Dersom det ikke går så bra på testen, kan de skylde på dette.	☐	☐	☐	☐	☐

SAS-2

Instruksjoner: Mange spillere blir anspente eller nervøse før eller under kamper og samlinger. Dette skjer også med profesjonelle spillere. Les hvert spørsmål nøye. Deretter sett en ring rundt det tallet som best symboliserer hvordan du VANLIGVIS føler deg før og mens du spiller fotball. Det er ingen rette eller gale svar.

Før eller under kamp:	Ikke i det hele tatt	Litt	Ganske mye	Veldig mye
1. Er det vanskelig å konsentrere meg om kampen.	1	2	3	4
2. Føles kroppen min anspent.	1	2	3	4
3. Bekymrer jeg meg for at jeg ikke vil spille bra.	1	2	3	4
4. Er det vanskelig for meg å konsentrere meg om det jeg burde.	1	2	3	4
5. Bekymrer jeg meg for at jeg vil skuffe andre.	1	2	3	4

Før eller under kamp:	Ikke i det hele tatt	Litt	Ganske mye	Veldig mye
6. Føles magen min spent.	1	2	3	4
7. Vil jeg miste fokus på kampen.	1	2	3	4
8. Bekymrer jeg meg for at jeg ikke vil spille mitt beste.	1	2	3	4
9. Bekymrer jeg meg for at jeg vil spille dårlig.	1	2	3	4
10. Føles musklene mine “shaky”.	1	2	3	4

Før eller under kamp:	Ikke i det hele tatt	Litt	Ganske mye	Veldig mye
11. Bekymrer jeg meg for at jeg vil rote det til under kampen.	1	2	3	4
12. Føles magen min urolig.	1	2	3	4
13. Klarer jeg ikke å tenke klart under kampen.	1	2	3	4
14. Føles musklene mine anspente fordi jeg er nervøs.	1	2	3	4
15. Er det vanskelig å fokusere på det treneren min sier jeg skal gjøre.	1	2	3	4

Appendix B

Forespørsel om deltagelse som deltagerklubb i prosjektet:

”Tippeligaen 14-21”

Norsk Toppfotballsenter (NTFS) jobber kontinuerlig for å utvikle Norsk fotball. I den forbindelse har NTFS og Norges idrettshøgskole (NIH) innledet et tett samarbeid omkring et prosjekt som vil skaffe verdifull informasjon om elitefotballspillere i aldersgruppen 14-21 år.

I dette prosjektet er kun Tippeligaklubber invitert til å delta. NIH vil gjennomføre prosjektet, samle inn, behandle og ivareta dataene konfidensielt og i henhold til gjeldende etiske retningslinjer. Prosjektleder er Geir Jordet, fagansvarlig for fotballmentalitet i NTFS og 1. amanuensis ved seksjon for coaching og psykologi ved NIH. Prosjektet har tilknyttet seg tre doktorgradsstudenter og to masterstudenter ved NIH som i praksis skal gjennomføre prosjektet.

Dette prosjektet retter et fokus på hvordan man bedre kan identifisere utviklingspotensialet og hente ut prestasjonspotensialet blant unge elitespillere i Norge. Dette gjøres ved å kartlegge treningshistorikk, treningshverdag, læringsstrategier, motivasjon og presshåndtering blant samtlige “elitespillere” i gruppen 14-21 år og deres trenere gjennom bruk av spørreskjema.

Prosjektdeltagelse innebærer at det innledningsvis opprettes kontakt mellom prosjektleder (Geir Jordet) og utviklingssjef/toppspiller utvikler i din klubb for å identifisere aktuelle lag, spillere og det avtale dato for gjennomføring. Påfølgende avtales det logistiske vedrørende innhenting av tillatelse fra spillere om prosjektdeltagelse (de under 16 år trenger tillatelse fra foresatte) og gjennomføringen av spørreundersøkelsen.

Det er estimert 2 timer til utfylling av spørreskjemaet hvor vi sponser pizza til prosjektdeltagerne. Ved gjennomføring av spørreundersøkelsen vil en representant fra forskningstemaet administrere prosessen i klubbens fasiliteter.

Som deltagerklubb blir det anledning til å melde inn inntil tre lukkede spørsmål eller et åpent spørsmål som vil bli distribuert sammen med resten av spørreskjemaet. Basert på spørreskjemaet vil din klubb motta en skreddersydd rapport, innen august 2011, som beskriver resultatet av undersøkelsen for deres spillere på sentrale prestasjons- og utviklings variabler på de ulike aldersnivå opp mot resultatene i de andre klubbene (anonymisert). Enkelte lag, trenere og spillere vil bli bedt om fortsatt deltagelse og oppfølging senere i 2011 sesongen.

Prosjektet er søkt godkjent av Regional Etisk Komité, avd Sør Øst, datatilsynet. Som deltagerklubb får din klubb muligheten å drive kunnskapsbasert spillerutvikling sammen med TFS og drive Norsk fotball videre.

Prosjektet vil gjennomføres i perioden 14 mars til 15 april 2011. Når passer det for din klubb å gjennomføre spørreundersøkelsen?

NORGES IDRETTSHØGSKOLE

FORESPØRSEL OM DELTAGELSE I PROSJEKTET:

Tippeligaen 14-21

Til foreldre og foresatte

Norsk Toppfotballsenter (NTFS) har sammen med Norges idrettshøgskole (NIH) startet et prosjekt som vil skaffe verdifull informasjon om unge elitefotballspillere i aldersgruppen 14-21 år.

Gjennom prosjektet søker vi å finne hvordan man bedre kan hente ut prestasjonspotensialet blant unge elitespillere i Norge. Dette gjøres ved blant annet å kartlegge spillernes treningshistorikk, treningshverdag, læringsstrategier, motivasjon, samt håndtering av med- og motgang.

Vi vil samle inn denne informasjonen gjennom et spørreskjema, der vi kommer ut til den enkelte klubb for å administrere dette.

Prosjektdeltagelsefor din sønn innebærer deltagelse i en 2 timers samling hvor han skal fylle ut et spørreskjema. Etter en time blir det en pause hvor vi sponser pizza og brus. Dette vil skje i klubbens lokaler på ettermiddagstid hvor treneren vil være tilstede. En representant fra forskningstemaet vil administrere prosessen i sin helhet.

Vi ønsker også at treneren til din sønn skal fylle ut et spørreskjema hvor de skal gi deres anbefaling av din sønns posisjon på banen samt gi en rangering (skala 1-5) av din sønns fysiske og mentale egenskaper, hans tekniske/taktiske ferdigheter og hans livsstil. Opplysninger treneren gir vil bli sammenstilt med de opplysninger sønnen din gir i spørreskjemaet. For at vi kan be treneren om å gi disse vurderingene må du/dere samtykke til dette. Dette gjøres ved at du/dere på samtykkeerklæringen og skriver navnet på treneren til din sønn.

Enkelte lag, trenere og spillere vil bli bedt om fortsatt deltagelse og oppfølging senere i 2011 sesongen.

Utfyllingen av spørreskjemaet og eventuelle oppfølgingsundersøkelser er frivillig.
Alle data vil behandlet fullstendig konfidensielt der kun forskerteamet vil ha innsyn i spilleres/treneres identitet.

Utfyllingen av spørreskjemaet og eventuelle oppfølgingsundersøkelser er frivillig. Du/dere kan trekke deg fra prosjektet når som helst uten å måtte begrunne det. Allerede innsamlete opplysninger om deg vil så fall bli anonymisert.
Prosjektet forventes å være avsluttet til utgangen av 2012, men vi ønsker å oppbevare innsamlete opplysninger foreløpig frem til utgangen av 2025 for å ha mulighet for å foreta oppfølgningsundersøkelser. Senest ved utgangen av 2025 vil alle innsamlete opplysninger bli anonymisert. Ved en oppfølgningsundersøkelse vil du motta ny informasjon og ny forespørsel om å deltakelse. Datamaterialet vil bli oppbevart på en sikker server på NIH hvor kun prosjektleder har tilgang.

Resultatene av studien vil bli publisert i en rapport uten at den enkelte kan gjenkjennes.

NTFS og klubben din vil motta en rapport, som beskriver resultatet av undersøkelsen på sentrale variabler, men heller ikke her kan den enkelte spiller gjenkjennes.

Prosjektet er tilrådd av Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S.

Dersom du/dere ønsker at din/deres sønn skal delta i undersøkelsen signer den vedlagte samtykkeerklæringen og returner den til klubben så fort som mulig.

Alle resultater til NTFS og de respektive klubber vil være anonyme.

Med vennlig hilsen

Geir Jordet
Prosjektleder

Fagansvarlig fotballmentalitet Norsk Toppfotball Senter

Førsteamanuensis ved seksjon for coaching og psykologi Norges idrettshøgskole

Spørsmål?

Ta gjerne kontakt hvis du har spørsmål omkring prosjektet:

Erik Hofseth: 95 92 17 78 / erik.hofseth@nih.no
Mathias Haugaasen: 90 58 91 88 / mathias.haugaasen@nih.no

NORGES IDRETTSHØGSKOLE

Utviklingen av unge elitespillere i fotball

SAMTYKKEERKLÆRING

Jeg/vi har mottatt skriftlig informasjon om studien *Tippeligaen 14-21*. Ved å signere samtykkeerklæringen bekrefter jeg/vi at min/vår sønn har tillatelse til å delta i prosjektet og til at treneren kan fylle ut et spørreskjema om min/vår sønn.

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NORGES IDRETTSHØGSKOLE

FORESPØRSEL OM DELTAGELSE I PROSJEKTET:

Tippeligaen 14-21

Til trener

Norsk Toppfotballsenter (NTFS) har sammen med Norges idrettshøgskole (NIH) startet et prosjekt som vil skaffe verdifull informasjon om unge elitefotballspillere i aldersgruppen 14-21 år.

Gjennom prosjektet søker vi å finne hvordan man bedre kan identifisere utviklingspotensial og hente ut prestasjonspotensialet blant unge elitespillere i Norge. Dette gjøres ved blant annet å kartlegge spillernes treningshistorikk, treningshverdag, læringsstrategier, motivasjon, samt håndtering av med- og motgang.

Vi vil samle inn denne informasjonen gjennom et spørreskjema, der vi kommer ut til den enkelte klubb for å administrere dette.

Prosjektdeltagelsefor deg innebærer tilstedeværelsen ved en 2 timers samling hvor du og spillerne dine skal fylle ut et spørreskjema. Etter en time blir det en pause hvor vi sponser pizza og brus. Dette vil skje i klubbens lokaler på ettermiddagstid. En representant fra forskningstemaet vil administrere prosessen i sin helhet.

Basert på spørreskjemaet (treneres og spilleres) vil klubben motta en rapport, som beskriver resultatet av undersøkelsen på sentrale variabler.

Enkelte lag, trenere og spillere vil bli bedt om fortsatt deltagelse og oppfølging senere i 2011 sesongen.

Dataen som samles inn vil lagres inntil 20 år anonymt på en sikker server på NIH hvor kun prosjektleder har tilgang.

Prosjektet er tilrådd av Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S. Alle data vil behandlet fullstendig konfidensielt der kun forskerteamet vil ha innsyn i spilleres/treneres identitet.

Utfyllingen av spørreskjemaet og eventuelle oppfølgingsundersøkelser er frivillig. Du kan selvsagt trekke deg fra forsøket når som helst. Du trenger ingen grunn for å gjøre dette. Alle data vil i så fall bli slettet.

Alle resultater til NTFS og de respektive klubber vil være anonyme.

Har du spørsmål til oss om dette?

Med vennlig hilsen

Geir Jordet
Prosjektleder

Fagansvarlig fotballmentalitet Norsk Toppfotball Senter

Førsteamanuensis ved seksjon for coaching og psykologi Norges idrettshøgskole

Spørsmål?

Ta gjerne kontakt hvis du har spørsmål omkring prosjektet:

Erik Hofseth: 95 92 17 78 / erik.hofseth@nih.no

Mathias Haugaasen: 90 58 91 88 / mathias.haugaasen@nih.no

NORGES IDRETTSHØGSKOLE

Utviklingen av unge elitespillere i fotball

SAMTYKKEERKLÆRING

Jeg har mottatt skriftlig informasjon om studien *Tippeligaen 14-21*. Ved å signere samtykkeerklæringen bekrefter jeg at jeg vil delta i prosjektet.

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FORESPØRSEL OM DELTAGELSE I PROSJEKTET:

Tippeligaen 14-21

Til spiller

Norsk Toppfotballsenter (NTFS) har sammen med Norges idrettshøgskole (NIH) startet et prosjekt som vil skaffe verdifull informasjon om unge elitefotballspillere i aldersgruppen 14-21 år.

Gjennom prosjektet søker vi å finne hvordan man bedre kan hente ut prestasjonspotensialet blant unge elitespillere i Norge. Dette gjøres ved blant annet å kartlegge spillernes treningshistorikk, treningshverdag, læringsstrategier, motivasjon, samt håndtering av med- og motgang.

Vi vil samle inn denne informasjonen gjennom et spørreskjema, der vi kommer ut til den enkelte klubb for å administrere dette.

Prosjektdeltagelse for deg innebærer deltagelse i en 2 timers samling hvor du skal fylle ut et spørreskjema. Etter en time blir det en pause hvor vi sponser pizza og brus. Dette vil skje i klubbens lokaler på ettermiddagstid hvor treneren din vil være tilstede. En representant fra forskningsteamet vil administrere prosessen i sin helhet.

Vi ønsker også at treneren din skal fylle ut et spørreskjema hvor de skal gi deres anbefaling av din posisjon på banen samt gi en rangering (skala 1-5) av deg i forhold til dine fysiske og mentale egenskaper, dine tekniske/taktiske ferdigheter og din livsstil. Opplysninger din trener gir vil bli sammenstilt med de opplysninger du gir i spørreskjemaet. For at vi kan levere skjema til din trener må du samtykke til dette. Dette gjøres ved at du på samtykkeerklæringen skriver navnet på treneren din.

Enkelte lag, trenere og spillere vil bli bedt om fortsatt deltagelse og oppfølging senere i 2011 sesongen.

Alle data vil behandlet fullstendig konfidensielt der kun forskerteamet vil ha innsyn i spilleres/treneres identitet.

Utfyllingen av spørreskjemaet og eventuelle oppfølgingsundersøkelser er frivillig. Du kan trekke deg fra prosjektet når som helst uten å måtte begrunne det. Allerede innsamlete opplysninger om deg vil i så fall bli anonymisert.

Prosjektet forventes å være avsluttet til utgangen av 2012, men vi ønsker å oppbevare innsamlede opplysninger foreløpig frem til utgangen av 2025 for å ha mulighet for å foreta oppfølgningsundersøkelser. Senest ved utgangen av 2025 vil alle innsamlede opplysninger bli anonymisert. Ved en oppfølgningsundersøkelse vil du motta ny informasjon og ny forespørsel om å deltakelse. Datamaterialet vil bli oppbevart på en sikker server på NIH hvor kun prosjektleder har tilgang.

Resultatene av studien vil bli publisert i en rapport uten at den enkelte kan gjenkjennes.

NTFS og klubben din vil motta en rapport, som beskriver resultatet av undersøkelsen på sentrale variabler, men heller ikke her kan den enkelte spiller gjenkjennes.

Prosjektet er tilrådd av Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S.

Dersom du ønsker å delta i undersøkelsen signerer den vedlagte samtykkeerklæringen. Alle resultater til NTFS og de respektive klubber vil være anonyme.

Med vennlig hilsen

Geir Jordet
Prosjektleder

Fagansvarlig fotballmentalitet Norsk Toppfotball Senter

Førsteamanuensis ved seksjon for coaching og psykologi Norges idrettshøgskole

Spørsmål?

Ta gjerne kontakt hvis du har spørsmål omkring prosjektet:

Erik Hofseth: 95 92 17 78 / erik.hofseth@nih.no
Mathias Haugaasen: 90 58 91 88 / mathias.haugaasen@nih.no

NORGES IDRETTSHØGSKOLE

Utvikling av unge elitespillere i fotball

SAMTYKKEERKLÆRING

Jeg har mottatt skriftlig informasjon om prosjektet *Tippeligaen 14-21.* Ved å signere samtykkeerklæringen bekrefter jeg at jeg vil delta i prosjektet og til at min trener kan fylle ut et spørreskjema om meg.

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FORESPØRSEL OM INTERVJU AV TOPPFOTBALLSPILLERE

Norsk Toppfotballsenter (NTFS) gjennomførte sammen med Norges idrettshøgskole (NIH) et spørreskjemabasert prosjekt som skaffet til veie verdifull informasjon om treningsprosessen i norsk elite fotball våren 2012.

Prosjektet undersøkte blant annet hvilken treningsbakgrunn norske seniorspillere i tippe-, og adeccoliga har, hvordan spillerne opplever idrettens fysiske og psykiske krav, hvordan spillerne responderer på å gjøre feil på trening og i kamp.

Innenfor disse temaene ble det gjort flere relevante funn som NTFS ønsker å følge opp videre og frembringe mer kunnskap om. I den forbindelse skal det gjennomføres flere intervjuer hvor flere av deres spillere er plukket ut som intervjuobjekter gjennom randomisert seleksjon.

Prosjektdeltagelse for deres spillere innebærer at de stiller til et intervju som varer i ca 1 time og som gjennomføres i klubbens lokaler.

Deltagelse er helt frivillig og spillerne har mulighet til å trekke seg når som helst underveis, uten å begrunne dette nærmere. Alle opplysninger vil bli behandlet konfidensielt. Intervjuet vil bli tatt opp på lydbånd og disse opptakene vil bli slettet innen utgangen av 2013.

Svar og spørsmål knyttet til denne forespørselen rettes til Julie Voktor Pedersen på telefon: 95758168, eller mail: Voktor4@hotmail.com.

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S.

Med vennlig hilsen

Julie Voktor Pedersen
Masterstudent NIH

Geir Jordet
Prosjektleder
Fagansvarlig fotballmentalitet ved Norsk Toppfotballsenter
Professor ved seksjon for coaching og psykologi Norges idrettshøgskole

Norsk Toppfotballsenter (NTFS) gjennomførte sammen med Norges idrettshøgskole (NIH) et spørreskjemabasert prosjekt som skaffet til veie verdifull informasjon om treningsprosessen i norsk elite fotball våren 2012.

Prosjektet undersøkte blant annet hvilken treningsbakgrunn norske seniorspillere i tippe-, og adeccoliga har, hvordan spillerne opplever idrettens fysiske og psykiske krav, hvordan spillerne responderer på å gjøre feil på trening og i kamp.

Innenfor disse temaene ble det gjort flere relevante funn som NTFS ønsker å følge opp videre og frembringe mer kunnskap om. I den forbindelse skal det gjennomføres flere intervjuer hvor du er plukket ut som intervjuobjekt gjennom randomisert seleksjon.

Prosjektdeltagelse for deg innebærer at du stiller til et intervju som varer i ca 1 time og som gjennomføres i klubbens lokaler.

Deltagelse er helt frivillig og du har mulighet til å trekke deg når som helst underveis, uten å begrunne dette nærmere. Alle opplysninger vil bli behandlet konfidensielt. Intervjuet vil bli tatt opp på lydbånd og disse opptakene vil bli slettet innen utgangen av 2013.

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S.

Med vennlig hilsen

Julie Voktor Pedersen
Masterstudent NIH

Geir Jordet
Prosjektleder
Fagansvarlig fotballmentalitet ved Norsk Toppfotballsenter
Professor ved seksjon for coaching og psykologi Norges idrettshøgskole

Samtykkeerklæring:

Jeg har mottatt informasjon om studien om toppfotballspillere og hvordan de responderer på situasjoner som oppstår på trening og i kamp, og ønsker å stille på intervju.

Signatur……..

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Harald Hårfagres gate 29
N-5007 Bergen
Norway
Tel: +47-55 58 21 17
Fax: +47-55 58 96 50
nsd@nsd.uib.no
www.nsd.uib.no
Org.nr. 985 321 884

Geir Jordet
Seksjon for coaching og psykologi
Norges idrettshøgskole
Postboks 4014 Ullevål Stadion
0806 OSLO

Vår dato: 27.04.2011 Vår ref: 26657 / 3 / LT Deres dato: Deres ref:

TILRÅDING AV BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 09.03.2011. All nødvendig informasjon om prosjektet forelå i sin helhet 19.04.2011. Meldingen gjelder prosjektet:

26657	*Tippeligaen 14-21*
Behandlingsansvarlig	*Norges idrettshøgskole, ved institusjonens øverste leder*
Daglig ansvarlig	*Geir Jordet*

Personvernombudet har vurdert prosjektet, og finner at behandlingen av personopplysninger vil være regulert av § 7-27 i personopplysningsforskriften. Personvernombudet tilrår at prosjektet gjennomføres.

Personvernombudets tilråding forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, eventuelle kommentarer samt personopplysningsloven/-helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://www.nsd.uib.no/personvern/prosjektoversikt.jsp.

Personvernombudet vil ved prosjektets avslutning, 31.12.2025, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Bjørn Henrichsen Lis Tenold

Kontaktperson:Lis Tenold tlf: 55 58 33 77
Vedlegg: Prosjektvurdering

Personvernombudet for forskning

Prosjektvurdering - Kommentar

Prosjektnr: 26657

Utvalget omfatter alle mannlige unge elitefotballspillere i alderen 14-21 år, og trenerne deres, som er en del av en elitesatsing i en tippeligaklubb i 2011, totalt ca. 1200 personer.

Førstegangskontakten til klubbene opprettes av prosjektleder, mens førstegangskontakten til spillere, foresatte og trenere skjer gjennom den enkelte klubb.

Opplysningene samles inn gjennom spørreskjemaer til spillere og trenere.

Det gis skriftlig informasjon og innhentes skriftlig samtykke for alle deler av prosjektet. For barn/ungdom under 16 år innhentes samtykke fra foresatte.

Personvernombudet finner skrivene mottatt 19.04.2011 tilfredsstillende.

Personvernombudet finner at det samles inn og registreres sensitive personopplysninger om helseforhold, jf. personopplysningsloven § 2 nr. 8 bokstav c.

Prosjektslutt er angitt til 31.12.2011 men prosjektleder ønsker å oppbevare datamaterialet frem til utgangen av 2025 for å ha mulighet for å gjennomføre oppfølgningsundersøkelser. Utvalget blir informert om dette og samtykker skriftlig til oppbevaring av innsamlede opplysninger.

Ved publisering vil ingen enkeltpersoner kunne gjenkjennes.

Personvernombudet minner om at en eventuell oppfølgningsundersøkelse må meldes i god tid før oppstart.

UNIVERSITETET I OSLO
DET MEDISINSKE FAKULTET

Førsteamanuensis Geir Jordet
Seksjon for coaching og psykologi
Norges idrettshøgskole
Postboks 4014 Ullevål Stadion
0806 Oslo

Regional komité for medisinsk og helsefaglig forskningsetikk sør-øst B (REK sør-øst B)
Postboks 1130 Blindern
NO-0318 Oslo

Telefon: 22 84 46 24

E-post: post@helseforskning.etikkom.no
Nettadresse: http://helseforskning.etikkom.no

Dato: 10.03.11
Deres ref.:
Vår ref.: 2011/119-1

2011/119b Utvilking av unge elite fotball spillere

Prosjektleder: Geir Jordet
Forskningsansvarlig: Norges Idretthøgskole, ved øverste ledelse

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk, REK sør-øst B, i møte 09.02.2011.

Saksfremstilling:
Prosjektet er et ph.d-prosjekt. Formålet er å utvikle kunnskap om hvordan unge norskc elite- fotballspillere utvikler sine fotballmessige ferdigheter under psykisk press. Målgruppen for studien er 800 unge gutter og menn i aldersgruppen14 – 21 år som skal rekrutteres gjennom elitesatsingen i norske tippeligklubber pr. 2011.

Forskningsspørsmålene fokuserer på hvordan de unge spillerne takler psykisk press og hvordan dette presset påvirker deres utvikling, hva som kan identifiseres som risikofaktorer og hvordan de opplever å takle stresset. Dataskaping skal skje gjennom ulike internasjonale og nasjonale selvrapporterende deskriptive spørreskjemaer. Spørreskjemaene kartlegger deres sosiale bakgrunn, treningsprofil, prestasjonsnivå, selvoppfatning, emosjonelt stress og selvregulering. Studien er samtykkebasert. Opplysningene som registreres i prosjektet er direkte personidentifiserende med navn, adresse og fødselsdato. Alle data i studien er planlagt lagret på Norges idrettshøgskoles forskningsserver i prosjektperioden.

Forskningsetisk vurdering
Formålet med studien er å studere stress og selvregulering i læringsprosesser hos unge elitefotballspillere, basert på egenrapporterte data via spørreskjema.

Komiteen oppfatter prosjektet til å være samfunnsvitenskapelig idrettsforskning som ikke vil gi ny kunnskap om helse eller sykdom. Det faller dermed utenfor lovens virkeområde jf.

helseforskningsloven § 4 a sammenholdt med § 2 første ledd og er derfor ikke fremleggelsespliktig.

Vedtak
Prosjektet faller utenfor helseforskningslovens virkeområde jf. helseforskningsloven § 2 og er dermed ikke fremleggelsespliktig, jf. helseforskningsloven § 10 jf. forskningsetikkloven § 4 annet ledd.

Prosjektleder anbefales å ta kontakt med NSD for en eventuell gjennomføring av prosjektet etter regelverket som gjelder for behandling av personopplysninger i samfunnsvitenskapelige forskningsprosjekter.

Komiteens vedtak kan påklages til Den nasjonale forskningsetiske komité for medisin og helsefag, jfr. Helseforskningsloven § 10, 3 ledd og forvaltningsloven § 28. En eventuell klage sendes til REK sør-øst B. Klagefristen er 3 uker fra mottak av dette brevet, jfr. Forvaltningsloven § 29.

Vi ber om at alle henvendelser sendes inn via vår saksportal:
http://helseforskning.etikkom.no eller på e-post til post@helseforskning.etikkom.no.

Vennligst oppgi vårt referansenummer i korrespondansen.

Med vennlig hilsen,

Stein Opjordsmoen Ilner (sign.)
Professor dr. med
Komitéleder

Katrine Ore
Katrine Ore
Komitésekretær/Rådgiver

Kopi:
- Pierre-Nicolas Lemyre, Seksjonsleder, Norges Idrettshøgskole, nicolas.lemyre@nih.no

REK
REGIONALE KOMITEER FOR MEDISINSK OG HELSEFAGLIG FORSKNINGSETIKK

Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK sør-øst	Emil Lahlum	22845523	05.03.2012	2012/61/REK sør-øst D
			Deres dato:	**Deres referanse:**
			17.01.2012	

Vår referanse må oppgis ved alle henvendelser

Att: Geir Jordet

2012/61 D Elite fotballspilleres psykologi og utvikling

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk i møtet 09.02.2012.

Prosjektleder: Geir Jordet
Forskningsansvarlig: Norges idrettshøgskole

Prosjektomtale
Fotballspillets krav til spillerne er i følge søker i stadig endring. Forskning på området blir beskrevet som hovedsakelig å ha fokusert på hvor mye profesjonelle fotballspillere har trent, mens treningskvalitet og mestring av prestasjonspress ikke har fått samme oppmerksomhet.

Prosjektets formål er beskrevet som å finne ut hva som kjennetegner seniorspillerne i Tippeligaen og Adeccoligaen for å fremme norsk spillerutvikling. Dette skal gjøres ved blant annet å kartlegge spillernes treningshistorikk, treningshverdag, læringsstrategier samt håndtering av med- og motgang på banen.

Forskergruppen ønsker å finne ut følgende om norske senior profesjonelle fotball spillere:

1) Hvilken treningsbakgrunn har de?

2) Hvor mye trener de?

3) Hvordan er treningene deres strukturert?

4) Hvordan opplever spillerne idrettens krav?

5) Hva kjennetegner optimal selvregulering i fotball?

6) Hvordan responderer spillerne på å gjøre feil?

7) Hvordan respondere spillerne på å lykkes?

I forhold til innsamling av forskningsdata gjennom spørreskjema, opplyses det om at deltakerne skal besvare spørsmål knyttet til helse og sykdom.

Vurdering
Slik prosjektet er fremstilt i søknad med vedlegg fremstår det som et forskningsprosjekt hvor formålet ikke

Besøksadresse:
Gullhaug torg 4A,
Nydalen, 0484 Oslo

Telefon: 22845511
E-post:
post@helseforskning.etikkom.no

Web:

har til hensikt å skaffe til veie ny kunnskap om helse og sykdom. Fordi om det skal benyttes opplysninger som kan betraktes som helseopplysninger er ikke dette alene noe som gjør at forskningsprosjektet er fremleggelsespliktig for REK. Komiteen finner at prosjektet faller utenfor REKs mandat.

For å gjennomføre prosjekter av denne typen trenges det ingen særskilt godkjenning fra REK. Det er institusjonens ansvar å sørge for på vanlig måte at tiltaket følger gjeldende reguleringer for behandling av helseopplysninger.

Ettersom prosjektet forutsettes gjennomført i samsvar med gjeldende reguleringer vil det ikke være noe til hinder for at resultatene kan publiseres. Hvis det er behov for dokumentasjon fra REK vil dette brevet bekrefte at prosjektet ikke er fremleggelsespliktig.

Vedtak
Slik prosjektet er fremstilt i søknad, fremstår det som et forskningsprosjekt hvor formålet ikke har til hensikt å skaffe til veie ny kunnskap om helse og sykdom. Det faller derfor utenfor komiteens mandat, jf. helseforskningsloven § 2. Prosjektet kan gjennomføres uten godkjenning av REK.

Komiteens vedtak kan påklages til Den nasjonale forskningsetiske komité for medisin og helsefag, jfr. helseforskningsloven § 10, 3 ledd og forvaltningsloven § 28. En eventuell klage sendes til REK Sørøst D. Klagefristen er tre uker fra mottak av dette brevet, jfr. forvaltningsloven § 29.

Med vennlig hilsen,

Stein A. Evensen (sign.)
dr. med.
leder

Emil Lahlum
Førstekonsulent

Kopi til: postmottak@nih.no