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Athletes' Body Talk: The Role of Contextual Body Image in Eating Disorders as Seen Through the Eyes of Elite Women Athletes

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The aim of the study was to investigate if and how body image, taken from a contextual perspective, contributes to the eating disorder history. This qualitative study investigated the process of eating disorder development in eight elite women athletes in at-risk sports. The results showed that the relationship between eating disorder symptomatology and the sports environment was clearly recognized by the elite women athletes. Contextual body image, more specifically negative body-evaluations and upward body comparisons, appeared as an important factor in the development of eating disorders, particularly in the athletic context. It became clear that the two aesthetic and two endurance athletes as well as the two weight-class athletes in rowing described quite negative body evaluations in the context of sport, while some of them also recognized an impact of body image experiences in daily life. However, for both judokas, their eating disorder had nothing to do with their body image but was attributed to the weight-classes in their sport and accompanying weight making. Several unique trajectories and individual eating disorder histories were distinguished which confirms the value of taking a qualitative approach in investigating eating disorders in sport. We also discovered links between what the athletes had reported as contributors to their eating disorder history and how they told their stories by combining content analysis and narrative inquiry. Furthermore, the present study also highlights several critical aspects for prevention and treatment that should support sport

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federations and clinical sport psychologists in taking appropriate actions to deal more effectively with eating disorders in athletes.

Keywords: athletes, body comparisons, body evaluation, body satisfaction, eating disorders

Recent studies have shown that a contextual body image approach seems to be a promising framework for a better understanding of athletes' disordered eating (Anderson, Reilly, Gorrell, & Anderson, 2016; De Bruin, Oudejans, Bakker, & Woertman, 2011; Kong & Harris, 2015; Krentz & Warschburger, 2013). This contextual framework perceives body image as a multifaceted, dynamic and reactive concept (Tiggemann, 2001) and assumes changing body evaluations in relation to the context in which someone is situated (Haimovitz, Lansky, & O'Reilly, 1992; Krane, Waldron, Michalenok, & Stiles-ShIPLEY, 2001). Several studies have demonstrated that elite male and female athletes reported to have multiple body images, namely, an athletic and a social body image (Follo, 2007; Krane et al., 2001; Loland, 1999; Russell, 2004). Whereas athletic body image could be defined as the "internal image one has of his or her body and the evaluation of that image within an athletic context" (Greenleaf, 2002, p. 64), the social body image refers to body evaluation in the context of daily life (De Bruin et al., 2011). Furthermore, the contextual framework poses that athletes measure themselves in relation to both the predominant athletic body ideals and the body ideals in general society (Loland, 1999).

Qualitative studies into contextual body image have shown that athletes often experience different levels of body satisfaction in the athletic and social contexts, also referred to as the transiency of body satisfaction (Krane et al., 2001; Loland, 1999; Russell, 2004). Russell (2004) interviewed women athletes, such as female rugby players, who displayed positive interpretations of body size and shape in their games as a tool for successful performance, while their body satisfaction did not transfer outside the sport location, as their athletic bodies did not meet the feminine beauty demands of western society. Krane et al. (2001) reported similar feelings of ambivalence related to a discrepancy between athletes' perceptions of their body as an athlete and as culturally female in their focus group interviews with 18 female exercisers and college athletes. The elasticity of body satisfaction may be associated with perceived physical requirements of the specific context as well as the perception of being observed by others within that environment (Russell, 2004).

De Bruin et al. (2011) developed the Contextual Body Image Questionnaire for Athletes to study athletes' evaluations of different body image aspects in the athletic and daily life contexts. In their study into the contextual body image of 52 high performance women athletes from aesthetic and endurance sports, they found that these athletes had a more negative athletic body image than daily life body image, contrary to the results of Krane et al. (2001) and Russell (2004). It was suggested that the bodies of athletes in leanness sports generally fit within our socially constructed definitions of femininity and western cultural body ideals, which might have led to relatively more body satisfaction in daily life. In contrast, these athletes might be more negative about their athletic body image due to stricter bodily demands in their sport (De Bruin et al., 2011). Athletes in leanness sports

that are considered more objectified (e.g., gymnastics and diving) appeared to experience greater thin-ideal idealization and body shame (Varnes et al., 2015). In addition, athletes seem to desire an athletic ideal (Varnes et al., 2013), characterized by a toned abdomen, firmer lower body and muscular upper body (Bell, Donovan, & Ramme, 2016). So far, it has not been studied whether the internalization of an athletic ideal contributes positively or negatively to athletes' body image.

In leanness sports, weight-related strains and “thin is going to win” beliefs rather than general body dissatisfaction seemed to drive athletes towards dieting and pathogenic weight control (De Bruin et al., 2007; Sundgot-Borgen, 1994a; Torstveit, Rosenvinge, & Sundgot-Borgen, 2008). In a qualitative study on elite sportsmen's attitudes towards their bodies, Loland (1999) reported that the desire for weight loss of certain participants seemed to be linked to their identity as elite athletes, not as men. Some male ski jumpers were concerned with their weight and dieting, “not because they wanted to look good, but to be able to make longer jumps” (p. 295). De Bruin et al. (2011) confirmed that it was the athletic rather than the social body image that contributed uniquely and significantly to eating disorder (ED) symptomatology. Yet, the athletes with disordered eating were generally more negative on multiple body image aspects in both the athletic and daily life context than the ones without it, showing more congruence between the contexts and tending towards a cross-situational consistency in their body image. This led to the conclusion that further investigation of body images in sport and daily life, particularly in athletes with disordered eating, is warranted (De Bruin et al., 2011).

The aim of the present study is to explore the role of contextual body image in the development of EDs in female athletes participating in at-risk sports, i.e., aesthetic, endurance, and weight-class sports. In a qualitative study, our understanding of the processes through which athletes have developed their ED patterns will be deepened (Byrne & McLean, 2002). Using interviews, we studied which experiences in the contexts of daily life and sport, specifically the ones related to body image, contributed to their ED history, as seen through the eyes of elite women athletes. An underlying question is whether athletes with EDs would also have gotten their eating problems when they would not have had their sporting career or whether it is the sport participation that somehow caused their problems (Sundgot-Borgen, Skarderud, & Rodgers, 2003). In other words, does athletes' ED symptomatology mainly originate from the context of sport, the context of daily life, or both? It is not unlikely that both contexts contribute to the development of EDs in athletes (De Bruin et al., 2011). In addition, the distinction between predisposing, precipitating, and perpetuating factors (De Cuyper, 2006; Sundgot-Borgen et al., 2003) was incorporated in the theoretical framework and interview guide.

Because of the sensitive nature of the topic, we used an ethnographical approach. According to Krane and Baird (2005), studies into sensitive issues in sport, such as unhealthy eating behaviors, would benefit greatly from doing research within an ethnographical framework. Close interactions with people in their everyday lives create a better understanding of the beliefs, motivations and behaviors of their participants.

In addition to the content analysis, we also concentrated on how the stories were told following a narrative practice approach (Sparkes & Partington, 2003).

A narrative approach “is concerned with subjectivity and experience, that is, with coming to grips with how a person thinks or feels about what is happening to him or her” (Crossley, 2000, p. 531). Using both the content-analysis and the narratives we created an encompassing picture of the why and how of EDs as seen through the eyes of athletes themselves.

Method

Procedure

In the present study, an ethnographic approach was used in the sense that the first author approached women athletes with (a history of) an ED whom she had met or worked with during sport psychological activities over the past years. Only athletes from aesthetic, weight-class, and endurance sports participated, that is, sports known for their elevated risk of EDs (De Cuyper, 2006).

All women athletes were asked by email to participate in an interview about their eating, dieting and weight making habits during their life and the factors that had influenced these habits. They were told that participation was strictly confidential and voluntary. All women agreed and subsequently a date and place were set for each interview, conducted by the first author. Before the interview started, the women received an oral explanation of the purpose of the study. The voluntary and confidential character of the study was repeated, and it was explained that they could resign from the study at any time without any consequences. They were asked permission for recording the interview and they were told that all details that would possibly lead to exposure of their identity would be excluded from the results. In addition, the possibility of consulting the first author or another psychologist after participation was explicitly mentioned in case the participants had any questions or needed professional support. All the above-mentioned information was written down in the informed consent form that all participants signed. The interviews lasted between 60 and 90 minutes. The research design was approved by the Ethics Committee of the research institute.

Participants

Following Sundgot-Borgen et al. (2003), only athletes who had received ED treatment were included, leaving eight athletes in the present sample. Participants were elite women athletes between 18 and 33 years of age, who participated during their active sports career at the (inter)national level in their respective sport. More specifically, they participated in gymnastics ($n = 1$), dance ($n = 1$), track-and-field athletics ($n = 1$), cycling ($n = 1$), heavyweight and lightweight rowing ($n = 2$), and judo ($n = 2$). The gymnast, track-and-field athlete, lightweight rower, and one judoka, from now on referred to as former rower and former judoka, had terminated their active elite career one to nine years before this study.

Most athletes were recognized as talents at a relatively young age and specialized in their sport when they were between 10 and 14 years old. All athletes developed their ED between the ages 11 and 21 years. At the time of the interviews, the dancer, track-and-field athlete, both judokas, and the (heavy) rower were no longer in treatment and self-reported to be currently free of ED symptomatology.

As all their treatments started before May 2013, the ED diagnoses are described in terms of DSM-IV-tr. The dancer was previously diagnosed with an ED not otherwise specified (EDNOS) (anorectic, not meeting the underweight criterion), while the track-and-field athlete suffered from bulimia nervosa (BN) and the judoka from anorexia nervosa (AN). Both the former judoka and rower were previously diagnosed with EDNOS (bulimic, only compensating with dieting and exercise). The dancer, former rower, cyclist, and track-and-field athlete previously received therapy from the first author. The gymnast, former rower, and cyclist were still in treatment at the time of the interview, albeit not with the first author. While the gymnast currently suffered from BN (purging type), the former rower was diagnosed with BN (non-purging type), and the cyclist with EDNOS (bulimic, not meeting the frequency criterion).

Materials

A general interview guide approach was used for which the interviewer (first author) planned to discuss several topics but did not have an a priori format for doing so. The themes in this interview guide reflected the theoretical frameworks of the present study. The interview guide contained a predetermined list of topics and questions that were not necessarily discussed in the prespecified order but based on the respondent's discussion, following a phenomenological interview method (Dale, 1996). Phenomenological inquiry "uses qualitative and naturalistic approaches to inductively and holistically understand human experience in context-specific settings" (Patton, 1990, p. 37). In the present study, this experience concerned the development of athletes' EDs in daily life and sport contexts. The phenomenological inquiry is particularly appropriate to address meanings and perspectives of research participants (Creswell, 2007). Whenever participants seemed to hold back or gave noncommittal answers, probing and detail oriented questions (Patton, 1990) were asked that would help in identifying the influences on their eating, particularly the influence of contextual body image. To assess impact and to stimulate closure, after the interview, the respondents were asked how they looked back on it.

Data Analysis

The interviews were recorded with a digital audio recording device. Right after conducting all interviews, these recordings were transcribed verbatim by the first author or a co-researcher. The transcriptions were read by both the authors and the co-researchers to reflect on the daily life and athletic influences in the athletes' narratives. After reading the transcripts several times to obtain an overall feeling for them, significant statements that directly pertained to the topics being studied were extracted and the so called "meaning units" that emerged from these statements were then manually put into clusters of themes (Dale, 1996). Both case analysis (analyzing one entire interview script) and cross-case analysis (analyzing a theme throughout all interviews) were conducted to illuminate key issues and contextual body image influences on EDs in sport. These analyses were inductive as patterns, themes, and categories of analyses came from the data, while the daily life/athletic distinction was also deductively imposed on the data prior to

data analysis. To enhance the quality of analysis, we also looked for negative cases, in which the key issues were not present or in which no influence of contextual body image in the ED development were found. To increase the credibility of the data, investigator triangulation was used (Patton, 1990): the researchers discussed the identification and structuring of emerging themes, subthemes, and quotes, along with the use of a “critical friend,” until consensus was reached (Sparkes & Partington, 2003). As mentioned, in addition to content analysis of *what* was told, we also concentrated on *how* the stories were told following a narrative approach.

Results

The results are presented in two different sections. First, the content analysis is presented, followed by the narrative analysis. In the content analysis, three subsections are distinguished. The first subsection covers whether a contextual body image was recognized in the athletes’ interviews. Second, we focus on experiences that influenced the contextual body image. Finally, we discuss how contextual body image contributes to ED symptomatology according to the athletes.

Content Analysis of the Interviews on ED History

Does contextual body image exist? All athletes, when speaking about their body, distinguished their body in daily life and their athletic body. For example, the former rower explained: “I know that I valued my body more in sport than in daily life” which seems to confirm the existence of both athletic and social body images. Furthermore, the rower stated: “The bodies that I compare myself with are not the bodies of models but those in the sport arena.” These quotes confirm the existence and relevance of the contextual body image framework.

The body-related experiences in daily life and sport. In discussing the contextual body image, we first focus on body-related experiences in the daily life context, and afterwards elaborate on those in the athletic context.

Daily life body image experiences: Some athletes explicitly mentioned *body transitions* and pubertal growth as moments in time when they became more aware of their body and started to evaluate and compare it with others. “The image of my body changed when I entered puberty and my body started to alter; I began to compare myself with others: ‘Perhaps the girls around me are thinner?’” (rower).

This quote also illustrates that *body comparisons* are a part of the athletes’ body experiences. Only few athletes (i.e., the former rower and cyclist) reported that body comparisons in daily life were important to them:

“Yes, I always look if someone is thinner or fatter than me, I have always looked at that. [Interviewer: Do you compare yourself at that point?] “Yes, I think so”. [Interviewer: and what is the outcome?] “Not very positive. I feel that I am fatter than the average school friends, who are also quite thin.” (cyclist).

In some athletes, an *unrealistic* body image occurred that could also manifest itself in daily life situations. “On bad days, I can look at a chair and worry if it

will hold me and I feel relieved when it doesn't crack after I sat down". (rower). It was difficult for her to distinguish between how she actually looked and how she felt:

"When I was skinny, I always felt too skinny. I liked that, I saw a skinny girl in the mirror. The last few years I found myself too fat, truly too fat. It is difficult as people around me say I am not. I had the impression that the image of myself was realistic when I was too skinny but also now that I am firm. The turning point was when I started to binge, and I felt huge afterwards because I didn't use laxatives and I didn't vomit. You feel your clothes tightening of course. I went from 56 to 75 kilos in 3 years, and that is a lot to cope with and it is difficult to adapt that image of yourself". (rower)

The quotes above also make clear that in daily life a so-called *thin-idealization* is present. For several athletes, this thin-idealization was quite common in their upbringing. The track-and-field athlete, former rower, and cyclist recognized their mother as unhealthy role model in this respect:

"My mother has an outstanding eating pattern, she eats almost the same every day and doesn't think about it, or at least I think she doesn't. We never have sweets or candy; my mother never wants that because 'that is not necessary'. If she would just take a biscuit or something, then it wouldn't be so terrible for me to eat that. Perhaps I wouldn't have thought about what I ate all the time then." (cyclist).

For the track-and-field athlete, her mothers' weight-related pressure also extended to the sport context:

"My mother is very competitive, she invested a lot in my athletic career and she expected something in return. She expected me to perform, to train hard, which also included having a certain body type. She made the connection between my body, eating, and sport. I couldn't live up to her expectations, and my performances deteriorated when I was about 17 years old. In everything she said, I felt rejection. 'Is it sensible to eat that?' for me meant: 'See, I am too fat, I am not doing the things I ought to'."

For others, such as the rower, this was not the case at all: "My mother worried a lot about us; she wanted to serve as a good example, ate chocolate at night. She is fat, quite chubby. She kept her own eating style and kept on serving various dishes." (rower).

Both rowers mentioned having an older sister suffering from an ED and acknowledged the negative influence of their sisters' presence on their lives. The rower refers to *competitive thinness* when mentioning the rivalry between her and her sister, who was also an athlete: "We were sisters but rivals too. When she lost weight, I really liked her looks and the attention she received. At a certain point, I joined her. [. . .] I could really annoy her by eating even less than she did." The former rower, on the other hand, stated: "It is not that there was some kind of competition, me consciously imitating her or so, it was just that because of her, everything in our home always revolved around food."

Thus, for the rower, former rower, cyclist and track-and-field athlete, *the influence of family members* acted as a key factor in the development of their ED. For other athletes, such as the gymnast, dancer and both judokas, family influences appeared to be entirely absent. The dancer explained: "There was always enough food, it was cozy, something we did together. I can't remember that they complicated things around candy or so. It was just normal in our house and everyone had an average attitude towards food".

The *peer influence* from school friends in daily life was perceived as rather limited among the respondents. The gymnast, for example, expressed to be quite amazed by the fact that dieting, food preoccupation, and body image issues did not play a very significant role among their peers at high school. "[Interviewer: 'How did dieting etc. play a role among your friends?'] "No. That was also so strange for me to notice. It did not play a role in their lives, not at all, no. They were just kids". Some examples of school friends or acquaintances suffering from anorexia or bulimia were given, but these influences did not seem to affect the athletes. Another reply was that there were no friends in daily life, just friends (and influence) in the context of sport: "I did not have many friends, because I spent all my time in sports. I did not really take part in college life too. Of course, we were together with a group of girls at the track, and there was rivalry everywhere." (track-and-field athlete).

Sport body image experiences: Regarding athletic body image, the respondents recognized an *increased body awareness* in the elite sport arena. "Before I went to that elite gymnastics club, I already heard things like 'you cannot eat candy anymore' and so on. When I started there, suddenly, I felt fatter because the other girls were so occupied with that, and, at that point, I was not." (gymnast). The increased body focus generally led to very *negative body evaluations* and *disturbed body image* in sport:

"What I still recognize, is that I still feel like a very fat cow. The past two weeks, I noticed that I felt like the fattest girl in our boat. I look around and look for comparisons, 'Am I looking like her?' If I see myself at photos or video, I see that I have nothing to worry about. But if I listen to how I feel about myself, the image is still not okay." (rower).

"I always felt fatter than I really was. I was also extremely focused on that. When I looked back at our competition videos, I just saw my legs; I was only occupied with that, not with what I did but with my appearance, or being thin or fat, and comparing myself with other gymnasts." (gymnast).

For most athletes, however, body evaluations and ideal were not only related to aesthetics and appearance, but also or particularly to performance: "I did have a certain ideal weight, but never reached it. I was, and still am, convinced that if I would weigh 56 kilos, everything on the track would turn out for the better. In my mind, training was merely for compensating my eating or a way to lose weight but not to enhance my performances. My weight determined my performance; that was the driving force. Interviewer: "What happened if you failed?" Athlete: "Then I attributed that to being too heavy". Interviewer: "What happened if you succeeded?" Athlete: "That acted as a kind of confirmation for myself, who I was and

how I looked, more than the amount of training I had put into it.” (track-and-field athlete). This athlete displayed so called *weight-related causal attributions* here. In addition, her interview was also interspersed with *thin is going to win beliefs*: “Due to the body comparisons with other athletes, I did not feel good enough, because in my experience, I could not live up to that, as everyone was thinner, stronger and more beautiful than me. I was always occupied with the others, watching how thin they were. Before the start, I was thinking things like: ‘If she is competing against me, I definitely cannot win. I don’t have such a thin body’.” (track-and-field athlete).

Her quote also refers to *body comparisons* with peer athletes that were also present in several of the other athletes. The rower, for example, explains: “A lot of my social life is with people from my sport”. She continues: “the bodies that I compare myself with are not the bodies of models but those of fellow athletes. I realize now that the power I have and what I do, asks for a whole different body and demands different things of your body than having skinny legs. So, I look at the bodies of women who can row very hard but, despite that, have a feminine and beautiful body. That is more my ideal now and what I am jealous of. Not the girls in a magazine.”

According to the athletes, their negative body evaluations were also related to the general weight-related sports culture and the inherent lean body ideal that is common in sport: “The image was just always that gymnasts had to be small, thin and not too heavy, and that image got a hold of me too... Just how it was told, also among each other ... It’s simply the culture.”

In the athletic culture, *thin-idealization and athletic idealization* seemed to go hand in hand. The judoka, for example, explained: “Just because I want to perform optimally in my sport, I settle with being muscular for now, because I know in a few more years I want to phase out my judo career, but no, I really don’t want. . .won’t be happy with staying this large. But if it is necessary for my sport, and I need to build more strength, I would be willing to do so, even though it is not my ideal [daily life] body.”

In the athletes’ stories, it also became apparent that their attitudes towards weight were strongly related to the *behaviors and remarks of others*, as described below. The weight-related pressures in sport came from coaches, other staff members, and/or peers.

Coach influence: Some athletes identified a positive influence from their coach. One clear positive example comes from the judoka: “No, it didn’t come from me, it was the coach who addressed it. He told me: ‘you are performing very bad currently, you can see that don’t you? You know where it comes from, can’t you see that yourself’ . . .but I didn’t want to acknowledge and admit it. But that coach was firm, he said ‘this is not going well, this is not how we are going to continue, I do not want to be responsible for this’. So that was good. ‘I do not want to coach you like this or allow you to compete. Make sure you are ok and safe’” (judoka). In the case of the cyclist, it becomes clear that her coach wants to have a positive influence but seems to struggle how to achieve this: “Our team manager rather prefers not to talk about it, he has seen so much trouble in cycling, that he wants everyone to act normal. There is a girl who is also very thin, and he tells her that she has no energy supply that way, he rather encourages you to eat more than less” (cyclist).

Although half of the athletes also mentioned the presence of positive coach influences on their ED during their athletic careers, mainly negative examples were given. Several athletes explained that coaches used to normalize and reinforce their dieting behaviors, which maintained their ED, according to them. All athletes could recall several negative experiences with coaches who put too much one-sided pressure on the athletes' weight, shape, or appearance. Frequently, the weight-related coach pressure manifested itself in comments on their weight, which certainly triggered their disordered eating and had far-reaching consequences for the athletes. The most extreme examples are given below:

“When the other trainers came, it became even worse. During an international practice abroad, we were not allowed to have contact with our parents. We were hardly allowed to eat anything and were so hungry. Since then, I was always focused on it and I got even more messed up. I was 11 years old, weighed 33 kilos and was still told that we were too heavy. It was so brutal, I got a whole different self-image and I kept this until now actually.” (gymnast)

“Off-season I went on holiday with a friend and we ate and drank, I let myself go entirely. Just like normal people of my age did. Yes, I became fat then, 60 kilos, a lot for my doing. Well, when I came back to the training, everyone made chubby cheeks, and pinched my cheeks, and then the trainer said to me in front of the group: “Yee, you look like Miss Piggy”. Those things stay with you forever. You think: “see, they only value and like me when I am skinny, and well, then you simply don't eat anymore. You go into the rhythm that you like, nah dislike, the weight making rhythm”. (former judoka)

“When I started to concentrate on the wrong things, my appearance and my body, I must say that that was triggered by my ballet teacher. Five lessons in a row, he clamped my waist, touching my fat, saying: “What's this, I am not used to that from you”. At first, I replied: “That is just skin, look around you, I am really not the one who should be reminded of that”. But he kept on doing it, five lessons in a row. Perhaps, because I was already insecure, I started focusing on my body.” (dancer)

Influence by other staff-members: In addition to the influence of coaches, some athletes, such as the cyclist and track-and-field athlete, also mentioned weight-related pressures or comments of other members of the staff, in their case of the sports physician, albeit that the influence of other staff-members seemed very limited and in most cases even absent: “The first time I visited a sports physician, I was advised to lose 5 kilos. I had to weigh 60 kilos. . . At that time, I was quite satisfied with myself. I did eat too much candy though. At first, I was indignant, didn't agree. But it stays with you, you know, and in the end, you want to weigh 60 kilos. Because he is your physician, and he did tell you that, and everyone weighs 60 kilos, so you want that too.” (cyclist). The quotes of the judokas show little influence of the sports dietician: “Yes, I did receive help from two dieticians, but I fully ignored their recommendations, because ‘I am not going to lose weight with their diet, I will stay at the same weight, I am not going to eat all of that’”. (former judoka). “The dietician was not of much help to me personally, although for others she might have been. I felt she was not focused enough on the sports and

the individual person. The advice was too general, and I didn't feel that that was helpful." (judoka). The gymnast truly missed some corrective influence of someone other than the coach: "I just couldn't tell anyone because I felt checked. I was always afraid that everything would reach him [the trainer] . . . If there would have been someone I could have talked with openly, that would have been nice" (gymnast). According to the athletes, a more important influence, next to the coach, was that of peer athletes.

Influence by peer athletes: Peer influence in sport seemed present in a number of different ways, either explicit or implicit. There were examples of sports environments, for example in cycling and rowing, in which there was much weight-related talk and fat-talk among the athletes. The track-and-field athlete talked about implicit peer influence because of *competitive thinness* and comparisons regarding food-intake:

"At international practices, I recognized things, such as that during training if I did not eat then my teammate did not eat either. That was an unspoken rule: "I eat what you eat and preferably less". It was also a kind of rivalry, on birthday parties et cetera; there are so many examples of that. Later on, we discussed it, but not at that time. It was so unhealthy when I look back. But I don't think that we really contaminated each other, we were struggling on separate islands." (track-and-field athlete)

In addition to the influence of others, the athletes also mentioned many sport-specific *environmental influences*, for example, that of sports attire, an issue that was of great impact to all athletes, except the judokas. The tight and revealing *sports clothing* in cycling, rowing, athletics, gymnastics, and dance heightened the athletes' body awareness, deepened their negative self-evaluations, and affected their eating behaviors. The athletes were highly aware of their body and of the (perceived) opinions of others:

"I really do not want to be too fat when I am sitting on my bike, because it looks disgusting when the clothes I wear are too tight. When I feel too fat, I try to eat less that day. Particularly at the cycling track, it is not relaxed. . .because there the audience can take a close look at you." (cyclist)

"Sport attire is so revealing. It was a drama for me; I didn't sleep the night before competition. It only made me more insecure. [. . .] It was hell for me. [Interviewer: what made it so hard for you?] That I was too heavy of course, at the track and you need to run 400 meters, along the entire audience and everyone can see you. That kind of exposure was killing me. Then I couldn't hide my weight struggle anymore, I couldn't prevent others to see me, to see me fail. That's why I tore up my pictures. Once, one was placed on the head page, and I felt so ashamed. If I look back at that now, I don't understand that I was so worried because I looked just like any girl." (track-and-field athlete)

Another negative influence were the *weigh-ins*, which were forced upon the athletes and inherent even to weigh-class sports such as judo or rowing:

"For indoor competitions, they will add time to your results if you are above 75 kilos and below that you have advantage. After the competition, your time

and weight is put on the internet. That was so stressful for me. I had not weighed myself for a half year, because that is better for me, and now I had to weigh myself again. While others were worried about the competition, I just worried about being weighed again and my weight being published for the whole country. It just gives you stress, but also establishes a certain order in the team. It was an issue for two weeks for all women.” (rower)

Weigh-ins were also common outside weight-class sports. According to the track-and-field athlete, weigh-ins did occur and were horrible for her, but as it was not a widespread phenomenon, its influence on her eating problems was rather limited: “In athletics, it is mainly the athletes who are focused on their weight”. For the gymnast, however, the impact was much bigger when weigh-ins started after the trainers noticed pubertal body transitions:

“When they got the feeling that we started to grow, we had to weigh ourselves four times a day: before and after morning training, and before and after afternoon training. Then many things happened with me. I started to experiment when I weighed the least. I ate very little in the morning, did not drink anything, and of course I didn’t drink during the training, because if you gained weight during the training, the trainer got the impression that you didn’t train hard enough, so you had to lose weight. Then I went to school; at ten o’clock I had finished all my food and didn’t eat the whole day anymore. At night I started to drink, because I presumed that the fluids would have left my body the next morning. Very strange thoughts got a hold of me then. [. . .] When someone was too heavy, they had to run or cycle to lose weight and were only allowed to train if they had the appropriate weight again.” (gymnast)

The judokas and rowers pointed specifically at the existence of the *weight-classes* as a negative influence on their body image and ED symptomatology. “There were enough people around me who told me: ‘why do you need to lose weight? You are not too fat at all!’ Then I replied: ‘I don’t say I am too fat, I am simply too heavy for my weight class’.” She adds: “There was a time when I became obsessed with my weight and carried on with it as I wanted to be as light as possible and at that time I hardly ate anything [. . .] It was a competition against the scale. When I weighed myself, I noticed: ‘hey, I can lose even more weight’. I didn’t need to reach the weight class anymore, I went far beyond, I just wanted to be lighter and lighter” (judoka).

In rowing, only two weight classes exist, a heavyweight and lightweight class. The heavyweight class rower expressed: “We are ‘heavy rowers’. The idea wanders that we are clumsy and less feminine. And there is a kind of humor concerning weight. We talk about that a lot. [. . .] Light rowers only talk about weight and food. The past two weeks we accompanied them at the dinner table and that is difficult because they only eat a plate with white cabbage and I must talk to myself ‘they need to make weight and I don’t, I have to perform, so make sure you eat bread and do normal things’. In that way, there are many influences. Everyone has an opinion about it”. The former rower acknowledged that when she turned into light rowing, she got preoccupied with food again and her disordered eating symptomatology returned at that point.

The contribution of contextual body image to EDs. For both judokas, it seemed as if body image did not contribute to their ED symptomatology. They attributed their ED entirely to the existence of weight classes and weight making. “No, my ED had nothing to do with body image, it was just due to the weight making. In the beginning, I could easily reach the necessary weight but in the end, it was getting harder and harder. Because you do strength training and you become more muscular and then your body fits in a higher weight class. But, there was a lot to lose of course, because you had to fight all those tournaments and I was number one in the weight class until 48 kilos and that goes on and on and you get stuck in that. That developed into one big ED.” (former judoka). Similarly, the judoka stated: “No, it was truly just the figure on the scale, I have never thought of myself as too fat. That wasn’t the cause, I never looked at my body or in the mirror or something, not at all. It was simply the scale, . . . I wasn’t focusing on my appearance, really just on the digits on the scale”.

To the other athletes, body image did matter. The former rower, for example, explains: “I know that I valued my body more in my sport than in daily life, but on the other hand the athletic context also had a big influence on my food, so I think that both contexts contributed to my disordered eating.” She also mentioned making “upward body comparisons” with better-off individuals in both daily life and sport:

“I am not constantly looking at other people, but if we are with a group of friends and we meet someone else who is overweight, I am noticing that ‘she has a fat ass and I don’t hope that I have one too’ . . . In fact, I am constantly comparing and thinking what others would think of me. But I don’t know if it really influences my eating behavior at this point in my life, but it is what’s going on if I am around other people.” (former rower)

Most athletes, however, explained that their athletic body image was most influential. They expressed they had a more positive body image in daily life while their body evaluations in the athletic context were more negative and of far more importance. The track-and-field athlete, for example, indicated: “This was so much more important in the sport arena. In daily life, I was not so insecure, I was very sure about myself even, presumably because I wanted to compensate for the lack of confidence in sport”. For others, their daily life body image did not seem to play any role in their ED: [Interviewer: “Did you also compare yourself with others in daily life?”] Gymnast: “No, no, that didn’t exist for me. My whole world was gymnastics. I still have the idea that I simply have to be below average. I cannot compare myself with average people, so I keep on comparing myself with athletes. Then it is very hard to feel good about yourself. I am working hard now to get that right”.

It can be concluded that in most athletes, body image is important to their ED history with athletes mainly acknowledging the impact of their athletic body image, and sometimes attributing their ED to body image experiences in daily life. For most athletes, however, the ED symptomatology was particularly related to the athletic context. It also became apparent that while some athletes were very certain about what influenced their ED history, others were clearly more hesitant. The narrative analysis will further clarify these conclusions.

Athletes' Narratives on EDs

We distinguished several story types concerning how the athletes presented themselves as ED patient; more specifically, *recovery*, *chaos*, and *quest* stories were told (see Widdershoven, 2000). A *recovery* story was told by the track-and-field athlete who fully recovered and performed even more successfully afterwards. Similar stories were told by the judoka and dancer:

“Then [after therapy] I just felt like a different person, I really felt reborn. Hey, I am back again. I could be happy about the smallest things. I could appreciate everything again. Especially myself”. (dancer)

A *chaos* story, in contrast, does not consist of a clear story line from bad to good, from diagnosis and treatment to recovery, but the situation could best be characterized as rudderless. Such a story type was told by the cyclist and gymnast:

“It is difficult that I don't have it all clear to myself. So much has happened, I cannot understand it all yet. Why did things happen? How was that for me? I want to get it clear, so that it falls into place and I can understand myself better. How can I explain? Just concrete things, being yelled at, being ignored, painful things, so to speak. But also, that you have already experienced so much as a child, big competitions, all those impressions, feelings, living separated from others, . . . so much goes through your mind that you cannot handle it. That's why it is all so unclear to me.” (gymnast)

Several times during the interview, her chaos story returned: “That is what I am learning now, I lost myself and I can't handle problems so well. You flee into eating, but I cannot determine how it used to be or how that originated. Whether it was purely appearance or if it also had to do with something inside me, that I couldn't understand things and searched for a solution in food. That is not entirely clear to myself.”

The chaos stories were told by athletes who were still suffering from ED symptomatology. The symptomatic athletes also appeared to be less certain about possible influences on their ED.

The third story type that was recorded, was that of a *quest*, told by the former judoka, rower, and former rower. The story of the former rower contained a true search after she terminated her rowing career: “I am still working towards my goal of eating what I feel like rather than what I think or should do, or relating it to the amount of exercise that I did that day.” This quest embraced both her relationship towards food and exercise:

“I am still struggling, searching; it is difficult for me to exercise without a specific goal. Participating in sport to me means competition. I begin to realize now that it would be different, healthier, if I would do sport in a different way, not focusing on the endurance performance but just on the game itself.” She continues: “I still find it very difficult to determine if I exercise because I feel like exercising or because I have to, so to speak.” [Interviewer: have to?] “Yah, just because I feel like I have to move.” (former rower)

A quest is also noticeable in the interview of the rower. Several times she mentions that although she recovered from her ED, she still feels that it is a weakness. “The past 2 weeks, the trainer made an annoying remark. Our boat had to be 50 kilos, and it was 48, so we had to put two kilos on the side. He said: “We’d better not put it on X’s seat (the rower’s name) as there are enough fats there already”. I think it was meant as a joke, but at that time it really got to me. I was upset for half a day and didn’t dare to tell him. That is apparently my weakness, and I have to get over that, but I need half a day to turn it right in my head and get over it. At that point, I notice everything [the ED] is only skin deep.” It seems as if some athletes feel that a full recovery is possible, while others believe it is not and are convinced that one stays vulnerable.

In addition to these eating disorder narratives, we also distinguished several story types concerning daily life versus sport influences. In the interviews, some athletes put forward themselves that they questioned how their sport participation exactly influenced their ED history. We discovered a ‘I might have gotten it anyway’ narrative, that they either embraced, rejected or had doubts about.

“I sometimes wonder how my sport influenced my eating. If there is a connection between them. I don’t know. . . Sport has always been my life. If I go on holiday, my eating pattern normalizes, and I get very calm. Sport makes that I have to pay attention to food, that I need to plan [. . .], but I think I might have gotten it anyway. . . because I possess certain characteristics [perfectionism and competitiveness] that I now know are risk factors for EDs.” (rower)

“I don’t think that I would have gotten an eating problem if I wouldn’t have joined gymnastics, because I wasn’t like this at all when I was young. Perhaps problems in another area, but I don’t think with food.” (gymnast)

“Possibly, if I had done a different kind of study that also pressurized me, the same thing might have happened. But, I wouldn’t have gotten remarks about my body. . . that is so typical for a Dance Academy.” (dancer)

While some athletes (i.e., the former rower, rower, cyclist, track-and-field athlete) believed that it was also daily life from which their ED originated, other athletes (i.e., the gymnast, dancer, judoka, and former judoka) specifically pointed to the sport context as the origin of their ED. In either case, the athletes believed that the sport context maintained or even increased their eating problems:

“Sport determined my eating problem for 80%; the rest didn’t really bother me. Funny, as sport was also what caused the most frustrations, conflicts, stress, and problems. [. . .] Sport really maintained my eating problems.” (track-and-field athlete)

The sport context in general was taken as a context in which it was quite easy to lose weight, as explained by the cyclist:

“One added to another. When I was home alone, I started to eat. Cycling gave me a solution because then I could skip meals. Through the exercising I lost calories and that was a solution. . . .Not a good solution of course, because

without sport I wouldn't have skipped meals. It is caused in daily life, and the influence of cycling elaborated on that.”

Of the ones who attributed the development of their ED to the athletic context, several athletes (e.g., the gymnast and dancer) believed their elite performance context represented a high-risk culture that overemphasized body and nutrition. In a way, this was also the case for the judo environment due to the impact of weight classes on weight and food concerns.

“Well, the dance environment, . . . of course it comes down to how difficult you make it for yourself, because I was very difficult to myself, and not everyone at the academy was having an eating problem, yet it pressures you. They do want to see you perform well. That is just how it is. Naturally, you want to see yourself perform too, but that [performance pressure at school] made it worse.” (dancer)

For others, such as the track-and-field athlete, ED symptoms were partly related to stressful performing at the elite level.

“For a long time, I didn't enjoy athletics, it was one big frustration. By choosing what I truly enjoyed, I could face my eating problems. When I thought “I simply quit”, it was such a relief. When I quit elite sport, my eating problem was over too. Fortunately, after quitting I ran new personal records and I could let go of my ideal weight and eating lists. Then I could release the weight-performance link.” (track-and-field athlete)

For the gymnast, the athletic pressure also added a negative influence: “If I didn't feel well, the eating went bad too. [Interviewer: were there special moments?]. Often just before competitions. Then the pressure came. You had to prove yourself and show yourself, you had to be ready. I really found that very difficult. Really, extremely much pressure”.

The relationship between sport-related stress and increased ED symptoms also appeared in recurrent doubts about career continuation and actual career termination.

“When I moved to the elite sport environment, the bingeing increased. At that point, I realized I had to quit because the pressure didn't serve me at all”. (rower)

“I did enjoy my sport, but the aftertaste. . . and why I really quitted was because of the dieting. That weight class. . . you can continue, because the sport is really fun, but the weight class is just very heavy [. . .] My normal weight is 60 to 62 kilos and having to lose weight to 48, and then to 52 and then to 57 kilos, is not normal. You go till the edge every time.”. Later in the interview, she speaks out: “That is why I terminated my career, I couldn't do it anymore, I was entirely broken. Mentally, physically. What a waste, because I could have won some more nice medals I think.” (former judoka)

For other athletes, the ED became a way to wriggle themselves out of the pressures and in this way the eating problem became both a self-handicapping and self-serving strategy:

“When I had an important competition, I had eaten so much the days before because I dreaded it so much. You had worsened yourself to a great extent. But on the other side you could think “I know the reason if the competition turns out wrong”, you have an explanation for why it could turn out badly. You don’t want it on the other hand, but you are so afraid of what lays before you that you eat away the stress. [Interviewer: stress, about what?]” That everyone cycles much faster and leaves me behind, that there will be women falling and that I will lay under 80 riders. That I cannot live up to the expectations of other people. Everyone says: “You are so good” and I am thinking “you can say that, but it is absolutely not true”. It is almost as if you have proof that it is not true if it is not going well.” (cyclist)

The previous quote also refers to the function the ED has to this athlete. For some athletes, overeating was related to feelings of anxiety, insecurity, boredom, confusions, and acted as kind of coping style. “Well, you are very much seen as a gymnast, you do not have your own identity. ‘Who am I, how do I truly think about things?’ It was all very confusing to me. Food provided a solution for this opacity” (gymnast).

Dieting, on the other hand, could also have the function of providing them with the feelings of success and control that were absent in their life at that time:

“It was just the general insecurity, the feeling that I did not have control over the situation, for example in dancing and singing. The food I could control and that’s why I focused on that. I kept doing it, because it felt so good to be in control. When I noticed I started to lose weight, it made me feel successful. “There is at least something I am good at”. And that was the reason to continue, to want more and to keep in control.” (dancer)

Furthermore, we found that most athletes struggled with attributing their EDs to significant others or people in their environment. Some athletes specifically mentioned this when we reflected on the interview at the end. The track-and-field athlete and cyclist found it difficult to point at their mother and the former rower and rower were hesitant in identifying the role of their sister with an ED. Internalizing seemed easier than externalizing the cause and blame of their disease: “I do not claim that it was his [the teacher’s] fault, as I decided to lose weight all by myself. But it definitely started something” (dancer).

“My mother always eats very healthy and that is why I also ate very healthy. [. . .] That was a positive influence but in the end, it turned out negative because I got too focused on healthy food and if I ever eat something bad, it feels like a total failure . . . But I talk myself into this, of course.” (cyclist)

Some athletes explicitly mentioned that their own mental vulnerability was partly responsible for their eating problem: “I think that I simply have everything that makes you vulnerable for it.” (gymnast). The track-and-field athlete: “For elite sport, I was a bit too vulnerable; I wasn’t assertive enough, couldn’t point out what I wanted, and didn’t have any clear ideas about what I didn’t want.” Because of that, they could not stand the performance pressure or weight-related remarks of their coach or mother.

In addition, a more general taboo to talk about EDs was discussed by some athletes. “Sure, I heard that there were other gymnasts who vomited to lose weight. It was too difficult to talk about that with them. It is already such a huge problem for me, let alone the problems of others.” (gymnast). The track-and-field athlete explained: “X, who is still a friend from athletics, also had difficulties with it, but I noticed in my environment that nobody wanted to talk about it. It was a ‘no go’ to discuss it [EDs] and I was not assertive enough, so I never started a conversation about it.”

We also noticed feelings of shame and uneasiness in the athletes in talking about the topic in general. Some athletes (e.g., the gymnast and judoka) had hidden their ED during their career and were still not very open about it. Additionally, some athletes that were fully recovered were a bit reluctant at first to go back to this dark period of their lives. After the interview, the respondents told us that they appreciated to reflect on their lives and that it had given more insights in themselves and more clarity about their ED history.

Discussion

The purpose of the present study was to deepen our understanding of the processes through which elite athletes have developed disordered eating patterns and to identify how the contexts of daily life and sport contributed to their eating disorder as seen through the eyes of (former) elite women athletes. The results showed that the relationship between ED symptomatology and the sports environment was clearly recognized by the elite women athletes, consistent with findings of Byrne and McLean (2002), De Bruin et al. (2011), and Sherman and Thompson (1999). All athletes in the present study viewed the sport context as an environment that increased or at least maintained their ED symptomatology. Some athletes even identified elite sport as the origin of their ED. To them, elite sport represented a high-risk culture that overemphasized body and weight. For others, ED symptoms were strongly related to the stress of performing at the elite level, and sometimes provided a way out. In contrast, there were also athletes who believed that it was daily life from which their ED originated and that ‘they might have gotten it anyhow’. These findings are in line with the narrative study results concerning EDs in Norwegian athletes (Sundgot-Borgen et al., 2003).

The present study also showed that contextual body image, more specifically negative body-evaluations and upward body comparisons, appeared as an important factor in the development of EDs. It became clear that athletes described quite negative body evaluations in the context of sport, which were expressed by aesthetic, endurance as well as weight-class athletes. These qualitative results seem to confirm the quantitative results from previous studies pointing towards athletic body image as an important factor in athletes’ disordered eating (Anderson et al., 2016; De Bruin et al., 2011; Follo, 2007; Kong & Harris, 2015; Krentz & Warschburger, 2013; Loland, 1999). In the present study, for some athletes, negative body evaluations only existed in the sport context, while they expressed to be quite satisfied with their body in daily life or not to compare themselves with others in daily life at all. Others exhibited negative self-evaluations and upward body comparisons in daily life too and had developed negative body images in both sport and daily life. Therefore, it could be concluded that body images in both

contexts contributed to the development of EDs in athletes. However, for both judokas, their ED had nothing to do with their body image and was just revolved around food and weight concerns because of the weigh-classes and subsequent weight making. Both rowers, on the other hand, also pointed to other influences than weight classes in their ED history, which might have to do with the fact that rowers started at a higher age with their sport than judokas. In conclusion, several unique trajectories and individual ED histories were distinguished which confirms the value of taking a qualitative approach in investigating EDs in sport.

Yet, we could also distinguish several common themes in the athletes' stories. Some quotes made clear that the awareness of pubertal body changes often coincided with the specialization phase in the sport and the transition to elite sport. Subsequent inadequate responses to these biological changes, either by the athletes themselves or by their parents or coaches, acted as cumulative triggers for developing a negative body image and disordered eating patterns. Early sport specialization has been identified as an independent risk factor for the occurrence of the female athlete triad (Sundgot-Borgen, 1994b). Particularly in sports such as gymnastics and dance, in which athletes specialize at an early age (Malina, Bouchard, & Bar-Or, 2004), the goodness-of-fit between an athlete and her sport becomes challenged in puberty, subsequently increasing the risk for developing EDs (Monsma & Malina, 2003).

In addition, the women athletes brought forward several factors that elicited disordered eating patterns, which were related to environmental weigh-related pressures, such as revealing sports attire, public weigh-ins, and comments by coaches or family, in line with the work of Sundgot-Borgen (1994b), Reel and Gill (1996), and Thompson and Sherman (2010). Furthermore, the present findings seem to corroborate the qualitative evidence related to body-related and weight-related comments, behaviors, and pressures by significant others (Jones, Glimtmeier, & McKenzie, 2005; Krane, Greenleaf, & Snow, 1997). Moreover, peer pressure mainly existed within the athletic context and seemed related to previously noted phenomena such as competitive thinness (Thompson & Sherman, 2010) and fat talk (Smith & Ogle, 2006), and upward body comparisons with better of [thinner] peers were widespread, according to the athletes.

Practical Implications

Several issues arise from this qualitative study concerning practical implications for prevention and early identification. Overall, the overwhelming support for the contribution of sport to the development of athletes' EDs, puts a responsibility on sport federations and organizations to take measures, for example concerning weight-classes. We argue that the weight-classes, intended to create fair competition, turned out to be an extra competitor and insurmountable challenge for some judokas. Additionally, one could advocate an entire abandonment of public weigh-ins, given the damaging effects of these body measurements in some athletes' ED history, and existing long-lasting negative physical and mental effects after retirement (Saarni, Rissanen, Sarna, Koskenvuo, & Kaprio, 2006). The athletes' stories also made clear that legislation should perhaps be considered regarding the issue of revealing sports clothing, which seems to influence women athletes' disordered eating very negatively.

Second, given that weight-related coach pressure seems to play an important role in the ED, it is important to recognize the power coaches have over athletes. They should be aware of their possible influence, both positive and negative, and the impact of their comments and behaviors. Moreover, coaches should be stimulated to take their responsibility in identifying EDs and be taught how to discuss these topics with athletes effectively (Jones et al., 2005; Sherman, DeHass, Thompson, & Wilfert, 2005), rather than ignoring the issue out of fear to make it worse or to approach the athletes in a wrong way. Adopting a positive and democratic coach style in which athletes are involved in decision making would support the shaping of conscious and resilient athletes (Warriner & Lavalley, 2008). Likewise, creating a mastery climate with its focus on personal development and cooperation could stimulate more realistic body evaluations and refraining from body comparisons (De Bruin, Bakker, & Oudejans, 2009).

Third, more positive involvement by other staff members beside the coach could empower coaches to work towards a healthier elite sports climate. The present findings showed that the influence of other staff members was largely absent in the athletes' stories. Some athletes also mentioned that they were often too afraid or ashamed to share their problem; they successfully hid it, or, if they tried to come forward, their signals were not picked up properly. This is in line with the results of Papatomas and Lavalley (2010) who also reported a struggle to disclose problems. Sport psychologists could step forward as the confidential person, that so many athletes seem to need, and they should turn to more proactive questioning on possible side effects of elite sport participation. These interventions would be beneficial to all athletes, of course, not just the ones who are vulnerable to EDs.

The present study also highlights several critical aspects that should be addressed in treatment, such as the so-called function of the ED, maintaining factors that perpetuate the disorder, and debilitating beliefs. These themes were also found in the present study, for example that the dieting seemed to have the function of providing the athletes with the feelings of success and control that were absent in their life at that time. Also in previous studies it was found that athletes' disordered eating is often framed by a performance narrative, in which only achievement leads to self-worth and self-identity (Busanich, McGannon, & Schinke, 2014; Papatomas & Lavalley, 2014). When elite athletic identity becomes threatened by moments of perceived failure, disordered eating may emerge (Busanich et al., 2014). Therefore, beliefs of athletes (and coaches) that "thin is going to win" and that bad performance are attributed to (alleged) overweight should be a therapy target (De Bruin, Oudejans, & Bakker, 2007). Clinical sport psychologists should also teach athletes a healthier stress-coping style that helps them in dealing with pressures more effectively, and they should also address how to handle the lack of control and feelings of insecurity, that might be compensated through dieting. Moreover, the athletes expressed the tendency towards self-blame and internalizing of the problem. Finding one's voice and learning to be assertive need to be a vital part of recovery. Given that athletes are often rewarded for being compliant and "coachable" (Sherman & Thompson, 1999), assertiveness might be particularly salient in their treatment. Furthermore, therapists should not underestimate the difficulty of athletes finding the middle ground with food and exercise after retirement and should assist them with these challenging career transitions.

Study Limitations

We should bear in mind that it may be the case that these relevant factors came forward in the interviews as a derivative of the first authors' narratives and the themes that she thinks are important in therapy. Moreover, only athletes who had received treatment for their ED were included, which might have been a limitation of the present study. Possibly, the therapists' psychoeducation could have made them more acquainted with certain theories about disordered eating, which might be the reason that their eating histories fit within culturally and scientifically constructed opinions.

A strength of this study was that the interviewer used to be the former sport psychologist (of some athletes), and it was thought that participants would be more likely to provide open and accurate answers to someone they had worked with so closely, rather than to an "outsider". Yet, this familiarity could also bring about certain disadvantages, such as social desirability or the participants' inclination to be consistent with what had been told during treatment. Prior knowledge of the interviewer could also have led to insufficient questioning (because you think you know what is meant since it was discussed in therapy) or to raising questions in a certain direction as related issues were previously discussed. To minimize possible interference, these aspects were addressed in the preparation of the actual interview, the participants' instructions and informed consent, and the closing of the interview. Moreover, these topics were subjected to the interviewers' self-reflection throughout the entire research process. There might have been some interfering influence due to the participants' initial restraint to self-disclosure because they did not want to be remembered of their past or because it felt difficult to accuse their coach or mother. Yet, these factors were noticed and discussed during the interviews.

It turned out to be quite a challenge for some participants to distinguish the different influences on their ED history as revealed by the narrative analysis. In this sample, five from the eight athletes self-reported to be recovered from their eating disorder. Athletes who were still symptomatic and told a chaos story were less sure about what contributed to their ED history than others, which might have been partly related to cognitive issues due to the long-lasting malnourishment of their body and brain. We also discovered a strong link between *what* the athletes had reported as contributors to their ED history and *how* they told the stories of their illness: the athletes with an 'I might have gotten anyway narrative' also distinguished more daily life influences, for example. In the present study, we combined a content analysis and narrative inquiry, which seems quite uncommon compared to other qualitative studies, and might also be taken as undesirable from a methodological point of view. One could also plea that one cannot go without the other in order to establish reliable interpretations of the data.

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