

Coming of Age: Towards Best Practice in Women's Artistic Gymnastics

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Chapter 1

Introduction

Since the performances of famous gymnasts such as Olga Korbut and Nadia Comaneci in the 1970s, women's artistic gymnastics (WAG) has been characterised as a problematic child sport. Numerous studies have identified medical and psychological issues associated with competing at a high level at a young age, such as stunted growth, bone deformity and distorted body image (see for example, Caine et. al., 2001; Cassas & Cassettari-Wayhs, 2006; Daly, Bass & Finch, 2001; Dresler et. al., 1997; Lindholm, Hagenfeldt & Hagmann, 1995; Martinsen et. al., 2010; Mellercowicz, et. al., 2000; Tofler et. al., 1996). However, recently there have been several gymnasts appearing at the highest international level of considerably older age, the most famous being Oksana Chusovitina who has competed at a remarkable six Olympic Games including the London Olympics at age 37. To date, while there has been extensive research on the problems experienced by younger gymnasts, there has been no research examining older gymnasts and the effects of seeing 'older' bodies on the gymnastics competition floor. This research proposes to remedy this deficiency through a study of the experiences of older gymnasts and the factors that have led to the prolonging of their careers, together with an examination of how the existence of older gymnasts affects the perception of the sport.

The three specific research objectives are: 1) to identify the factors that have contributed to gymnasts' prolonging their athletic careers, 2) to gain understanding as to whether the older age of some gymnasts has affected the perceptions held and practices employed by relevant stakeholders (especially coaches and officials) and 3) to identify ways through which the change in age can be employed to transform WAG so that stakeholders (gymnasts, coaches, officials) and importantly, its social image, can benefit.

1.1 Literature Review

Several studies have raised the issue of age as important and significant in WAG (Anderson 1997; Leglise, 2007, 1999; Claessens et. al. 2005). It has been noted that since the advent of Korbut and Comaneci in the 1970s, gymnasts have become younger and smaller (Barker-Ruchti, 2009; Blue, 1987; Claessens et. al., 2005; Kerr, 2006; Ryan, 1995) and that in response, the International Gymnastics Federation (FIG) has initiated several age increases, the latest of which was an increase to the age of 16 in 1997 in order to compete in the elite level of World and Olympic competitions (Anderson, 1997; Leglise, 1999; Kerr, 2006). The raising of the age limit was initiated by concerns from medical research that intensive training at a young age was causing a range of physical and psychological problems for WAG gymnasts (FIMS/WHO, 1998). For example, evidence has been found of WAG gymnasts developing stunted growth, bone deformity and a delayed onset of menarche (Caine et. al., 2001; Cassas & Cassettari-Wayhs, 2006; Daly, Bass & Finch, 2001; Dresler et. al., 1997; Lindholm, Hagenfeldt & Hagmann, 1995; Mellercowicz, et. al., 2000; Tofler, 1996). Psychological research has closely examined gymnasts' psycho-social well-being and has found links between commonly adopted coaching practices and distorted body-image, self-confidence and dietary habits (Lindholm, et al., 1995; Martinsen, Bratland-Sanda, Eriksson, & Sundgot-Borgen, 2010).

Research from a sociological and pedagogical perspective has considered WAG's socio-cultural climate. Ryan's book *Little Girls in Pretty Boxes* provides an account of American WAG; Barker-Ruchti (2008, 2011) and Barker-Ruchti and Tinning (2010) examines Australia, Kerr and Stirling (2012; 2013) focus on Canada, Kerr (2010, 2012) investigates New Zealand, Pinheiro et. al. covers (2012) Portugal and Stier (2012) discusses Sweden. These findings confirm that the often authoritative coach-gymnast relationship, and abusive coaching/training standards that have infiltrated this sport, are not conducive to gymnasts' learning and indeed, may be harmful (Barker-Ruchti & Schubring, in press;

Schubring and Thiel, 2011; 2014). Changes to training climate, coaching practices, coaching education, medical and psychological support, as well as ethical guidelines, have been urgently requested by researchers and governing bodies(e.g. Brackenridge & Rhind, 2010; Stier, 2012; Weber, 2009).

Cohen (2013) is one of the few researchers who examines the phenomenon of the older gymnast. In his article about Beth Tweddle, aged 27 at the 2012 Olympic Games, he asks why she received so little media coverage despite being a multiple medal winner at World Championships and winning bronze at the London Olympics. He speculates that Tweddle does not fit the WAG ideal through being too old and does not fit the feminine ideal commonly associated with WAG through being insufficiently attractive. The WAG ideal consisting of a combination of youth, cuteness and femininity is confirmed by several researchers (see for example Blue, 1987; Chisholm, 1999; 2002). However, Cohen's research examined the media coverage of an older athlete, no research has examined the recent developments with regard to gymnasts' age and the consequences, and indeed benefits, this might have for gymnasts' performance, well-being and retention; coaches and coaching practices; governmental funding; and the societal image of the sport.

Dionigi (2005) argues that there has been a dearth of qualitative research into the experiences of older athletes, commenting that research into older athletes has been dominated by those working from a sports science or exercise psychology perspective. He argues that such research does not shed light on the meanings that competitive sport can have for older athletes. Similarly, Tulle (2008) argues that there is a paucity of theoretical work addressing the place of the older body in sport, while Lavalley and Robinson (2007) argue that issues around retirement need more attention in the sport of WAG, particularly in relation to the support systems around athletes and different national systems.

The proposed research will build on existing literature in several ways. Firstly, the experiences of gymnasts who have had longer careers will shed light on ways for adult women to compete in WAG. This insight has the potential to allow the sport to improve its behaviours away from the damaging practices involving child athletes that have been identified in the literature. Secondly, it will build on the work of Barker-Ruchti (2009), Cohen (2013) and Chisholm (1999, 2002) in adding to understandings of the WAG ideal corporeality and performance, specifically in relation to challenging the child-like image that has dominated WAG since the 1970s. Finally, it will address the gaps identified by Dionigi (2005), Tulle (2008) and Lavalley and Robinson (2007) in being a piece of qualitative research that examines older competitive athletes both during competition and post-retirement.

Chapter 2 Methods

To understand how the older age of gymnasts relates to perceptions and practices, various actors from within the gymnastics community were recruited. In particular, individuals from the following populations were recruited:

- Active high-performance gymnasts who are at least 20 years old;
- Former high-performance gymnasts who were at least 20 years old at the time of their active career;
- Coaches of currently active or former high-performance gymnasts who were at least 20 years old;
- Judges who act at the highest international level (e.g. European and World Championships, Olympic Games).

Participants were recruited through the researchers' personal connections and through snowball sampling. Each of the five researchers made contact by email with anyone they knew who fitted one or more of the above descriptions and conducted interviews with those who were agreeable. At the conclusion of the interview, participants were then asked to recommend further participants for the study, which they were often very willing to do.

There were fourteen participants in this study from ten different countries. They consisted of five currently competing gymnasts, four retired gymnasts, three coaches and two judges. One interview was conducted with each recruited participant, of approximately one hour in length. Each interview was split into three sections:

- a) The first section adopted an oral history approach (Denzin & Lincoln, 2005) to produce biographical information on athletic/coaching/officiating/judging career pathways;
- b) The second section involved a thematic approach (Flick 2005) that focused on ideals relating to age, body and training in high-performance WAG. The interviewees were asked to describe situations and instances where these ideals were of significance for their gymnastics careers and/or training, or work as coaches, officials or judges;
- c) The third section involved a reflective approach (Miethling & Krieger 2004). Interviewees were shown one image of a young and sexually immature and one image of an older and sexually mature gymnast to reflect and comment upon.

In all interviews, a creative interviewing style was adopted that allowed interviewees to speak freely and stimulate dialogue (Douglas 1985). Interviews were recorded digitally, transcribed verbatim and where necessary, translated into English¹. A free and axial coding procedure (Hammersley & Atkinson, 1995) was employed to draw out common themes and differences with regard to a) improving WAG training with particular attention drawn to the coach-gymnast relationship b) perceptions about the body c) factors that prolonged gymnasts' careers.

¹ Interviews were conducted in English, German and Japanese. For some participants, English was not their first language and occasionally grammatical inconsistencies in the interview quotations reflect this.

Chapter 3

Results and Discussion

3.1 The coach-athlete relationship

Previous research in WAG has identified abusive coaching practices as normative (see for example, Pinheiro et. al. 2012; Ryan, 1995) and in this study, several of the interviewed gymnasts referred to coaches they had experienced at some point who had exhibited abusive behaviour, mainly in the form of verbal abuse. However, every gymnast in the study had, during the latter part of their career, been coached in a manner that did not conform to the normative authoritarian relationship that previous researchers have identified. Instead, without exception, gymnasts said that as they grew older, they experienced (or in many cases demanded) a change in coaching style where the coach worked in partnership with the gymnast. As one gymnast summed it up: "First, it was coach and gymnast, he told me something and I had to do it. Now it's like a relationship, it's a partnership."

The move towards this relationship was particularly well demonstrated in the case of one gymnast who had attended her first Olympic Games at age 16 and her second at age 20. In this gymnast's case, both the gymnast and coach were interviewed and spoke separately about their experiences of the stylistic coaching changes that took place between these two Olympic Games:

I think it goes from great dependence on the coach [as a child] to an inter-dependent relationship [as a teenager] to an independent relationship [as an adult] where the role you play with an adult athlete is... much more psychological versus a domineering personality way of doing this. In (gymnast's) case, when she came back to do a second Olympic Games we talked about 'well, what's going to get in the way of the success?' and she was afraid that I would keep treating her like a child to which my response was to her then you have to help me not to do that. So we just redirected the relationship, the way that we got through that. (Coach)

... it became much more of a mutual relationship, it was fun. We both planned the whole thing, he would check in with me all the time, like ok what do you think you need, how's everything feeling? Where are we going to go this week... he really let both of us dictate how it went, so that was definitely an adjustment. (Gymnast)

In these quotes, it is apparent that working "in a mutual relationship" was new to both of them, and required learning and adjustment on both sides in order for the new arrangement to work. As such, it is clear that neither the gymnast nor the coach considered this a normal way for training to take place in WAG, but a deviation from how both considered gymnastics training would typically occur.

Similarly, another coach described how he had to learn to coach in this manner when he changed jobs and found himself working with a squad of gymnasts all aged 18 or over, which was new to him:

I treated them more like adults. That was the difference. I gave them more space for their own ideas and own, not ideas, opinions and feedback from them as well. So basically, you have to treat them as a responsible adult not like a little child who doesn't know what she wants to do and just told to do this and this, that's it.

In this quote, the coach reveals how he respected the knowledge held by the gymnasts and welcomed their input into their training. The theme of the gymnasts learning far more about training process and understanding the reasons behind their training was similarly dominant amongst all the gymnasts. One gymnast summed it up by describing how as an older gymnast:

You understand why you are doing this and you are working actually on your mistakes, not just repeating thing after thing over and over again. You've pretty much been thinking what are you doing and what needs to improve and that kind of stuff.

Other gymnasts attributed their changing relationship with their coach to their increased knowledge:

I think the main difference is that younger gymnasts do what the coach tells them to do while older gymnasts also think for themselves. Maybe because I was older and I was understanding all I am doing and he was just helping with that, he wasn't like pushy, he was just helping.

...rather than the coach is standing back going you must do this and that "blah blah", I feel like because I'm older I know kind of exactly what I need to do and what they expect of me and it's kind of more a partnership and I feel like I can talk to them a bit more...

3.2 Older gymnasts as leaders

The increased knowledge held by older gymnasts was seen not only as a factor influencing coaching style, but as something that could potentially be utilised for assisting younger gymnasts. Some of the older gymnasts described how they filled a very definite leadership or caring role within their teams which the younger gymnasts benefitted from. For example, one gymnast described how her coach encouraged the younger gymnasts in the team to follow her example and expected her to take on a defined leadership role:

We had a final discussion at the European Championship, where the head coach said to the younger ones: "Follow (gymnast who was speaking's) example. She knows what she is doing, she knows what she wants. She is experienced."... I already have the role of the active spokeswoman within the national team. When there are things to decide on, they [younger gymnasts] come to me...They need somebody who tells them sometimes, okay, now we do it like this. To give them a guideline. Sometimes they are just so naïve and don't really think about what they're doing. That's when I say stop, first think, then do.

This gymnast was clearly very proud of her role in the team and very comfortable taking on a leadership role. By contrast, another older gymnast felt that although she knew she was expected to be the leader of the team: "I did feel nervous and a lot of pressure from being in that role and wanting to try and provide what was needed for the team but I don't really think I did a good job of it." While this quote reveals that not all older gymnasts take on a leadership role easily, the previous quote suggests that utilising an older gymnast in this role can be very beneficial for assisting young gymnasts to perform more effectively at a higher level. However, not all federations or coaches appreciated this. For example, one gymnast described how she was required by her federation to retire at age 18:

It [retirement at age 18] wasn't my opinion, I didn't choose it. There were a rule, not exactly a rule, for our country when you are more than 18 you have to stop because you are old. I don't know why! And then the Federation said to me 'ok it's time to retire because you are old, thank you very much' and I said 'why?' I was third in my country so I couldn't understand why.

This gymnast's experience suggests that while other gymnasts received some positive feedback from their Federations or coaches who appreciated the increased knowledge that older age gave them, her national Federation clung to the ideal that gymnasts need to be young in order to be successful.²

² Our data suggest some national and even continental differences in the prominence of the ideal of youthfulness in WAG, however we also find commonalities within coaches from different national/cultural backgrounds (e.g.

However, in this gymnast's case, her coaches did not agree with the Federation, suggesting the ideal is contested. She described how her female coach found a way for her to return to gymnastics at around age 21 and when she placed second at the National Championships, the Federation accepted her because of her success.

3.3 Training capacities of older gymnastics bodies

The role of the older gymnast also differed from the younger gymnast in terms of the amount of training completed. In many cases, older gymnasts trained significantly less than when they were younger or less than their younger teammates. There were two dominant reasons provided for this difference. Firstly, gymnasts argued that their increased knowledge meant they did know exactly what they needed to do when training and so did not waste any time on any unnecessary movements, skills or exercises. For example, the oldest gymnast in the study described training "a maximum of two hours per day" because she knew exactly what she needed to be doing, whereas most elite gymnasts would usually train around five hours per day. Another gymnast similarly described the transition from training more when younger to a lot less when older, due to greater awareness of what needed to be done:

I think you can train more when you are younger but in the end you realise that quality matters more than quantity. I knew exactly what I had to practise and how much I had to train for each event before a competition. So I went to the gym, did what I had to do and was done after 1.5 – 2 hours. That was a lot more important than spending 3 hours practicing random elements on the bars without getting anywhere.

This quote reveals the belief that the longer training hours completed when younger were very inefficient in comparison with training when older. However, another reason for training less when older was simply the demands on the body. There was a strong belief held by all the participants that an older gymnastics body cannot complete as many repetitions as a younger body. For example, one gymnast described the difference between a younger teenage gymnast compared with her age of 23 during the interview:

You train with younger gymnasts. You are not that energetic, your legs are slower, you need more breaks, and the younger ones just keep going. You have to deal with that every day. When I was younger I did not understand the older gymnasts but now I do. They used to say 'I have no energy left in my legs', and I always had plenty of energy so I did not understand that. But you change.

It is possibly a surprising finding that gymnasts in their 20s can be described as slow and needing breaks given that in many sports, the mid-20s is often the age of peak performance. For example, in athletics, a recent study found that the peak age of performance is between 23 – 28 +/- 2.5 years (Hollings et al., 2014). The phrasing used by the gymnast above would be more expected of an athlete in her 30s or 40s, rather than 20s. This suggests that the prevailing ideal of gymnasts needing to be in their teens in order to be at their best is still agreed upon within the gymnastics community and confirmed by the gymnasts' individual experiences of their bodies.

Related to lack of energy was a higher perceived risk of injury for older bodies. One coach described how she did not particularly enjoy working with older gymnasts because of this factor: "I enjoy working with younger girls, a lot easier than working with senior gymnasts, when you have to decide on a daily basis what to do and how to do it, and consider their injuries." However, another coach's comments suggest that he found working with older gymnasts interesting and challenging because of the need to

Japan and Canada). Thus further data is needed to define the role national/continental differences play for the maintenance or transformation of the paradigm of youthfulness in WAG.

think carefully about how to train less robust bodies: "I'm a big believer in providing drills and other alternative landing situations to be able to do the numbers that you need without breaking the athlete. It is possible but it is difficult." Through his interview, this coach revealed impressive technical knowledge about the exact physical forces placed on the body during particular movements and described the way that he would adapt training for older gymnasts in order to ensure they should still compete successfully. He was particularly careful about the number of repetitions completed and strove to ensure a gymnast never overtaxed herself. A similar attitude was also remarked upon by a judge, who commented that she observed how older gymnasts never performed any unnecessary difficult movements in competition warm-ups in order to avoid risking their bodies.

3.4 Puberty

In these comments, older age is understood as a risky time for a gymnast, with the body described as tired and more vulnerable to injury. However, interestingly, all gymnasts and coaches spoke of puberty as holding the greatest level of risk, and regarded this risk as one of the dominant reasons for gymnasts not continuing competing until their 20s. Identifying puberty as so immensely problematic confirms the argument by previous researchers that a pre-pubescent body is the ideal for WAG. This is also understandable given that gymnasts generally go through puberty much later than the norm. For example, one gymnast in this study described how she did not go through puberty until she was 19, so while she personally chose to continue her career beyond that time, it would have been quite easy for her to have a full gymnastics career right up until age 19 with a pre-pubescent body. Caine et al. (2003) and Georgopoulos et al. (2012) both argue that later puberty is an effect of long hours of training, while Malina et al. (2013) explain this by noting the selection of "short, normal, late-maturing individuals".

There were three different ways that puberty was seen as potentially affecting a gymnast. Firstly, the rapid changes in the body that occurred with puberty were described as making the completion of even basic gymnastic elements very difficult. One gymnast described:

If you get over it you're fine, that's the hardest period when you just kind of start to grow and you can't feel your body, you come in and you can't do anything. You feel like your body is completely different, you can't do kip cast handstand or something and as long as you get over this time everything gets to normal.

This gymnast's choice of the word "hardest" is indicative of the views of most of the participants in this study, who similarly felt that puberty provided the largest challenge for the WAG gymnast. The element "kip cast handstand" that this gymnast refers to is a basic foundational skill that all elite gymnasts would have mastered to perfection long before age 10, so the gymnast deliberately chooses to refer to this 'easy' element as a way of demonstrating the severe effect that puberty had on her ability to perform gymnastics.

A second issue identified with puberty was the effect on the gymnast's temperament. One gymnast described this as a fairly typical teenage response by stating that she "started to rebel, to disagree" and one of the coaches described how extremely difficult it is to work through this period:

You know the nine and ten year old will do anything that you ask of them and the teenage athlete is often more reluctant, has questions that can be perceived as challenging or disrespectful, it takes a lot of patience and certainly on my part it took a lot of patience. Particularly with an athlete like (gymnast name)... if I said look you need to go and do 500 of these, she wouldn't question that, she'd just go ahead and do it and then around [age] 15 or 16 there was a lot of why do I have to do this? And why am I here doing this stuff when I can already do it... it's hard not to take that stuff personally when you're working with an athlete

30 hours a week, you've watched them grow, you've watched them evolve, it is challenging but I'm believer in that you can never stop learning so no matter how painful, and at times it was painful.

This coach provides significant detail about the WAG coach athlete relationship from the point of view of a coach. Furthermore, the quote gives unique insight into the particular challenges this relationship can create when a teenage gymnast questions not only routinised drills but also the coach's authority and well established relational patterns. The critical potential this bears for the coach may best be understood in the light of existing research that describes particular close coaching relationships as widespread in WAG (Rose, 1991). Such coach-athlete relationships can result in high emotional involvement of the coaches and an overlapping of coaching and parental roles. As the quote highlights, such narrow relationships implicate an increased vulnerability of the coach and provide gymnasts (even unknowingly) with a certain form of relational power. While we argue that the challenging of the coaches authority by an adolescent athlete constitutes a 'normal' and even 'healthy' developmental step, it can be experienced as a crisis by the coach, and thus needs to be taken seriously in, for example, coaching education. The above quote suggests that for coaches who learn to approach the teenage years of their gymnasts with the attitude of a learner, puberty may actually become a chance to both develop their coaching style and a more mutual relationship with their athletes.

The final issue with puberty is perhaps the one most commonly associated with WAG: the impact on body size. While Ryan (1995) conceptualises risk in puberty as primarily consisting of the growth of breasts and hips that interfere with the performance of gymnastics, this study instead revealed a frustration with a temporary period of bodily fluctuation that later stabilised. Gymnasts used phrases such as: "if you can continue after teenager it's more easy" and "when you're past that age the things are easier for gymnasts." But during that period, they described dissatisfaction with body size. For example: "you think you do not really eat that much but you gain weight all the time so something must be wrong".

3.5 Body size

The gymnasts' concern with body size can only be understood through considering the normative understandings of appropriate body size. Previous studies have suggested that the WAG ideal body is young, cute and feminine (Blue, 1987; Chisholm, 1999, 2002; Cohen, 2013) however, this study suggests that within the sport, there is only some agreement about what makes up an ideal body, with participants discussing multiple types of bodies as appropriate for the sport.

In the photo elicitation section of the interview, participants were asked to discuss their views about a younger, slimmer, pre-pubescent body in comparison with an older, muscular, more developed body. Several of the participants saw the younger and slimmer body as ideal and qualified their answers with a range of explanations:

She has what I would call the typical physique of a gymnast. You can see the muscles, she is a graceful gymnast. I think her body is perfect for artistic gymnastics. Rather small, slight, muscular, graceful. (Gymnast)

She has a nice line, she is obviously doing ballet preparation, she has extended knees, pointed toes, nice push, I like her, I like her body line. Typical gymnast, wide shoulders, small hips. (Gymnast)

The lady in Image 1 has a typical gymnast's body figure. (Coach)

Interestingly, while all of these participants appreciated the young, slim body, none of them commented on her age or identified youth as a factor in their appreciation of her body. But at the same time, their positive responses to this pre-pubescent physique suggest that the ideal body as identified by other researchers is still very much alive. Similarly, Cohen (2013) argues that one of the reasons the successful British gymnast, Beth Tweddle, has not received attention from the media is due to her appearance not meeting this pre-pubescent ideal. Participants in this study confirmed the preference for a young, slim body through the larger, older, muscular body receiving criticism, though the critiques were often qualified by other comments. For example, one gymnast commented that her "weight is too big" but in her next sentence, explained that body size and shape was not a good indicator of gymnastics success so despite her weight, the gymnast could be very successful. Similarly, a coach felt that her size meant she would risk injury "unless she has power". This comment was interesting in comparison with others, as several others commented on this gymnasts' large muscles as an indication of having immense power. For example, one gymnast had no doubt that she would be powerful but personally would not want a body that looked that way:

It is a lot more stockier compared to the other gymnast but I think that stockiness also helps when you need to throw those big skills. But I think if it was me personally, I wouldn't like getting into leotards looking that stocky.

This quote perhaps sums up the contradictory nature of the comments. On the one hand, participants are aware that a muscular body can be beneficial for success, but on the other hand, the participants do not want to have bodies that appear muscular. One judge differentiated between these bodies by arguing that a more muscular, and potentially larger, body is more effective for performing gymnastics, but a slimmer, more graceful body is preferable to watch. Using a similar binary, one gymnast argued that a more muscular, powerful body is able to perform a greater number of tricks and therefore appeals more to the masses who are not educated about gymnastics, whereas aficionados of the sport are more likely to appreciate a graceful body with significant dance training. Finally, one coach argued that both these types of bodies, the muscular/powerful and the slim/graceful are extremes within the sport and there are examples of successful Olympic champions with both types of bodies, which indicates that there is no definitive ideal.

The range of responses suggest that the dominant discourse of gymnasts requiring a small, slim physique still exists, and this was confirmed by many of the gymnasts who described significant pressure experienced by themselves or other gymnasts to remain very slim. At the same time, it is apparent that alternative discourses about bodies do exist, with some acknowledging advantages of muscular, powerful bodies.

3.6 Types of bodies

There was also discussion around bodies in terms of what types of gymnastic bodies are capable of reaching older ages. Participants identified two traits that they believed were necessary for a body to compete successfully at an older age, with the two being strongly linked. They firstly described how a body that was not prone to injury was necessary, and secondary to this was a need for the body to be able to remain slim in order to avoid injury.

The majority of participants argued that in order for a gymnast to continue competing until an older age, she must not have a body that was prone to injury. One gymnast explained:

Bodies that are less injury-prone also withstand it longer. Meaning, somebody who is always injured doesn't last long. And be it some bone-muscle structure; that is the anatomy of the body, for some reason it is not so resilient for gymnastics. In that case you won't be able to do

it for a long time. Also, when you're injured all the time, after some time you lose your motivation.

This was a belief held by many of the participants. One coach even categorically argued: "If you look back to those gymnasts who stayed long in the sport, they didn't have injuries, they didn't have big injuries, you know, career ending or bigger setbacks." However, the experiences of the older gymnasts in this study do not bear this out. Five of the eight gymnasts in the study experienced injuries that prevented them from training for significant periods of time, such as six months or more, and in some cases, these experiences served as highly motivating for them to continue gymnastics. For example, two gymnasts explained:

I had a big back injury in 2002 when I was 17 and I had surgery and then came back from that and... I think that during that period, it's kind of cliché, athletes always say that but when you're off you kind of find this new fire and new love for the sport while you're not able to do it.

...the injury occurred, which is not necessarily a bad thing. Because then I had some time to come down a bit. I dedicated that time to my studies. For me it was a completely new experience, because I have never been injured before. It was the only major thing I had so far. I did get something new out of this...problem...finding ways to get in shape again. Of course it is a challenge, too. Well, I was injured and I thought to myself, no, I want to come back, maybe even better than before.

Similarly, a coach spoke about a highly successful 27-year old gymnast as having: "...a hell of a lot of injuries with her legs and she had 13 or 14 operations on her feet and still she managed to do the floor and she was quite good..." These quotes suggest that older gymnasts can have significant injuries that do not end their career and that being injury prone and experiencing injury is not necessarily a problem for a gymnast to continue their career longer than the norm.

However, this study had the opposite conclusion with regard to the body. Not one participant argued that having a naturally slim body was necessary for a long career, yet most of the participants described themselves as having naturally suitable gymnastics bodies. This indicates that the gymnasts have adopted the commonly assumed ideal of a thin WAG body and that in their opinion, their circumstance of not having had weight problems aided them in remaining in WAG for a prolonged period of time. The gymnasts did not, in contrast, comment on their physical abilities (i.e., strength, flexibility, kinaesthetic awareness), nor relate these to their decisions to stay in WAG, although one commented that she felt her body was not prone to injury and that facilitated her staying in the sport. Four different gymnasts all used the word "lucky" in describing their small, slim bodies:

I was quite lucky with my weight, all my family is very tiny.

I was lucky enough to have a good body type for gymnastics and I've never really struggled with that kind of thing, with gaining weight and fluctuating and everything.

I was a lucky one... I never had a big problem... all my family is very tiny.

I was very lucky with good genetics... really didn't develop much as many others.

These gymnasts felt that their appropriately sized bodies were a factor in why they continued their careers longer than the norm. However this was only really a benefit in allowing them to be successful rather than a deliberate reason for continuing training. By contrast, the most commonly provided deliberate reason for continuing training was simply their love of the sport. Gymnasts commented that "gymnastics is my life", "I do it because I love it" and "I still have much fun in my training and

competition.” Similarly, a retired gymnast commented that: “even if it was hard life I probably would do it again, you know I wouldn't miss that, it's a really interesting life, yeah, I miss it a lot!” At the same time, not all the gymnasts were in a position to choose to indulge their love of the sport because of financial reasons.

3.7 Financial support

All of the gymnasts in the study received some form of stipend or financial reward for competing at the elite level. In most cases this consisted of a small salary from their national gymnastics Federation, which, combined with living with their parents or other ways of saving money, made it possible to live as an adult. In two cases, their earnings were more lucrative, for two reasons. Firstly, both these gymnasts began training in the Soviet system before the collapse of the Soviet Union and consequently benefitted financially from the very generous payments provided to high level athletes during that era. Secondly, both these athletes were successful enough that they were able to take advantage of the significant prize money available at World Cup or Grand Prix events. For these two gymnasts, gymnastics was essentially a job, with one of them describing herself as an “employee” from the age of 12, yet both also said that they loved their job. At the other end of the spectrum was an athlete who received very little as payment from her Federation and had managed to pay for her career through the support of family friends. In the case of the latter gymnast, while she would have liked to continue her career longer than she did, she did not feel it was financially possible for her to do so.

3.8 Competitive success

As discussed above, success played a part in securing financial stability for some of the gymnasts. Similarly, competitive success was another factor that some participants raised as influencing their decision to continue their career. Two coaches felt this was particularly important, arguing that “mostly those girls stay longer in their career in the sport who are successful” and “I think it is very important to be successful from an early age.” Similarly, one gymnast described how she was motivated to continue after winning a medal at European Championships, while another discussed how she would continue to compete as long as she could “keep up” with the top gymnasts in her country. The notion of “keeping up” was discussed by both this gymnast and the coaches in the context of the threat posed by younger gymnasts appearing on the scene and eclipsing the older gymnasts. There was an awareness that there were only limited places on a national team and so there was always a risk that an older gymnast may not be able to retain her place should sufficient younger gymnasts appear who were superior. Certainly, the statistics at the 2014 World Championships regarding age showed that the two most successful WAG national teams, USA and China, were two of only three countries who did not have gymnasts over 20 on the team. One judge argued a change in rules regarding the composition of national teams has played a part in decreasing the number of older gymnasts, specifically citing the rule that in the team final, only three members of a team are permitted to compete on any apparatus and all three of their scores count in the final total:

I think the ‘three up three to count’³ has probably caused the most difficulty in keeping older kids because the three up three to count you can't make a mistake so you need to have people that can do 100 beam routines without falling.

As previously discussed, older gymnasts typically do not complete the number of repetitions that younger gymnasts do, and this judge uses the rationale that selectors in countries with a large number

³ This phrase refers to the rule that in the team finals for the Olympic Games, only three gymnasts from each nation are permitted to compete and all three of their scores count for the final total. This was a change from previous rules that allowed four or more gymnasts to compete with only three scores counted.

of good gymnasts will be less likely to select older gymnasts for their national teams owing to not having faith in their abilities due to the lower number of repetitions they can see performed. This argument is confirmed by a coach, who explained that one of the challenges of coaching older gymnasts is balancing the number of repetitions their bodies can cope with performing with the requirements laid out by national coaches:

It's difficult when you're say, let's say 23 years old and your body can only deliver let's say, 20 Yurchenko double twists a week of which probably five you could do a hard landing and you're in a national team situation where the national coach is demanding that you could do twice that number, so that's where it gets tricky.

While this coach and judge raised this as a potential issue for older gymnasts, none of the gymnasts themselves raised any concerns around selection criteria or requirements set out by national coaches. By contrast, while the above judge commented that the rules have made it harder to be an older gymnast, other participants instead argued that rule changes outlined in the Code of Points have been beneficial for older gymnasts.

3.9 The Code of Points

The rule book in gymnastics is known as the "Code of Points". The Code of Points outlines the requirements that gymnasts need to fulfil in their routines and it is updated every four years, in the year following the Olympic Games. It is produced by the FIG, who use the Code of Points to encourage particular movements or gymnastics styles.

In this study, participants commented on the strong emphasis on artistry that came with the 2013 Code of Points, as one judge summed up:

It has changed in favour of older gymnasts. For example, the maximum number of acrobatic elements included in the floor exercise is four, and artistry is more important for balance beam and floor exercises...The increased emphasis on artistry is again a plus for older gymnasts.

This quote draws on the idea that older gymnasts are superior artistically as the ability to express themselves is considered to improve with maturity. Similarly, two gymnasts commented that the artistry and dance skills emphasised in the 2013 Code of Points were easier for them as older gymnasts than the greater tumbling requirements that existed in 2008. At the same time, there is some ambivalence about the effect of the Code of Points, as many argue that the difficulty requirements have become higher and it is difficult to know how this effects older gymnasts. On the one hand, the longer time they have in the gymnasium could allow them the time to master more difficult elements, but on the other hand, they cannot perform as many repetitions and their bodies are not as robust, which could potentially limit skill acquisition.

3.10 Skill learning

The dominant discourse within WAG is that skills are best taught when a gymnast is very young, with older gymnasts primarily consolidating or adding small improvements to their work rather than learning new skills. This discourse is illustrated by one gymnast who described her career as progressing in this way:

...in young days you still learn a lot of new things. A lot is done with the scope. You learn new things. Now, I don't learn many new things. I don't learn five new elements to incorporate them. But at a young age you try everything, you have to try everything to be able to see whether the element... works well or if it doesn't work well.

This gymnasts' experience involved learning many new skills when younger, but not so many when older. However, all of the coaches in the study argued that it was highly possible for gymnasts to learn new skills at an older age. One described how he learnt this when working with older gymnasts for the first time, and that it was a surprise to him:

....went to [country name] and worked with the national team members, they were all grown up girls, all 17/18 and still I found that they still had ground for improvement, not only just in the skills they used to know but to put new skills and stuff and it was a kind of a surprise to me and I really like it. Because I found it really challenging to prove again that with all the girls you can step forward.

This coach emphasises his surprise at this discovery, indicating that the concept of teaching new skills to older gymnasts is not considered the norm in WAG. A judge similarly noted how she had seen a 24 year old gymnast learn a new dismount at a recent competition, though she felt that in general it was not the norm to see older gymnasts learn new skills.

Chapter 4

Recommendations

The findings of this study suggest that there are a number of ways that WAG could improve in order to facilitate longer careers for gymnasts. These are:

1. Increased education about coaching older gymnasts.

This study has found that coaches who have significant experience coaching older gymnasts have developed a different “partnership” style of coaching that the gymnasts and coaches found very rewarding. We suggest that it could be beneficial for all coaches to increase their knowledge about coaching in an athlete-centred way.

2. Increased education about the transition through puberty

This study revealed that puberty was perceived to be a “risky” phase in a gymnast’s career and very difficult for both gymnasts and coaches to work through. In particular, the results highlight that with appropriate support, gymnasts can be assisted through this phase in order to continue their WAG careers. It is thus important to highlight that puberty can be a potential phase of positive transition, rather than purely as a risk phase.

3. Raising awareness of the abilities of gymnasts to learn new skills into adulthood

The participants in this study demonstrated that it is possible for gymnasts to keep learning new skills into adulthood, but that this goes against the norms of gymnastic practice. It is thus important for stakeholders to understand that learning gymnastics skills is not limited to childhood. Instead, if the timeframe for learning gymnastics skills includes adulthood, the pressure to specialise early and train intensely during childhood can be eased. Gymnasts’ career development can be given more time, which has the potential to positively affect gymnasts’ health and wellbeing and performance, and reduce early drop-out rates.

Chapter 5 Conclusion

This study found a range of six interrelated factors that contributed to gymnasts continuing their elite careers beyond their teenage years, including coaching, body size, finance, love of the sport, continued success and the Code of Points. While all of these factors are significant in their own right, they also connect in a variety of ways to contribute to decisions made by gymnasts to continue their careers into their 20s.

The accounts of the coach-gymnast relationship presented in this study vary markedly from the authoritarian relationship that has traditionally dominated WAG (see for example, Barker-Ruchti, 2011; Pinheiro et. al. 2012; Ryan, 1995). While many of the gymnasts had experienced the authoritarian relationship when younger, all the gymnasts in the study described a distinct change towards working with their coaches in partnership and partly directing their own training. Such an approach provides gymnasts with a greater level of empowerment than identified in previous research, where abusive relationships were found to be more common. This finding confirms Kerr and Stirling and Kerr's (2009, p. 237) speculation that "the power differential between a coach and athlete may be diminished with older athletes" in demonstrating that at an older age, the coach no longer holds the power to direct so much of the athletes' life. By contrast, the gymnasts described themselves as powerfully directing their own training, working together with a coach who provided advice but did not control every aspect of their own life. This also has implications for greater wellbeing in retirement, given that it has been found that gymnasts who only experience the traditional authoritarian relationship struggle to feel empowered once retired from gymnastics (Barker-Ruchti & Schubring, in press; Kerr and Dacyshyn, 2000). Further, this research found that older gymnasts can also alleviate the power imbalance between younger gymnasts and coaches in cases where older gymnasts took on a leadership role within the team. In these cases, the older gymnasts also provided advice and direction to younger gymnasts rather than the coach holding sole power and authority.

In terms of their bodies, several gymnasts in this study chose to highlight that they were lucky to have naturally slim bodies as one of their dominant reasons for explaining their long careers. This finding is understandable in the light of previous research, and from the results of the photo elicitation section of the interview, where participants showed a stronger appreciation for the younger, thinner body than the older, developed body. In describing their preferences, participants particularly chose to focus on body size for their main reason for preferring one type of body over the other.

These results speak to a feminist discourse that argues that female bodies remain subjugated within an ideal of thinness, even if participants also acknowledged that a more muscular body may be more successful in the sport. None of the participants stated that the muscularity of their bodies was significant for their success, instead always focusing on thinness. Similarly, participants recalled numerous instances where they were judged in terms of thinness by coaches or judges, or were aware of coaches who pressured gymnasts into remaining thin. While such practices are couched within a discourse of injury prevention, with coaches arguing that a heavier gymnast may become injured, coaches also acknowledged that injury would not be a problem if a gymnast was strong enough to carry her weight. Yet not one participant recalled a coach demanding increased strength to account for weight, with the emphasis instead always being on a desire for thinness.

It is not at all surprising that in transitioning to adults, the gymnasts in this study needed to find a way to fund their careers beyond simply relying on parental support as they may have done as children. All of the gymnasts in the study managed to find a solution for financial survival, with national Federations supplying some form of funding for every gymnast that was in many cases supplemented by

sponsorship or other support from family or friends. Only one gymnast stated that lack of finance served as part of her decision to retire. The potential for prize money in some international competitions was also raised by two participants as significant for increasing their income, suggesting that the FIG is also aware of the necessity of providing financial incentives for elite gymnasts.

A very strong love of WAG came through from many of the participants. Again, this is not a surprising finding and indeed several athlete development models argue for the necessity of teaching children to develop a love of sport before making the transition to elite training (see for example, the Long Term Athlete Development Model, Balyi and Hamilton, 2004). However, this study highlights that enjoyment is not necessarily something that is developed in childhood that remains with the gymnasts throughout but rather can be cultivated throughout an athlete's career through sensitive coaching. Gymnasts in this study found their enjoyment in their activity grew as they aged, with many experiencing their deepest level of satisfaction in their later years when they described understanding why they should train in a particular way and enjoyed an arrangement of an equal partnership with their coach/es. The ability of the coach to work with a gymnast as a teenager and then adult is clearly particularly important for facilitating gymnast longevity and can deliver challenges but also extensive rewards for a coach willing to adopt this kind of arrangement. Yet none of the researchers of this study are aware of any coach education programmes that include an element of teaching coaches how to make the transition towards coaching older gymnasts, despite the significant positive implications for gymnast empowerment as discussed above.

Part of the satisfaction of remaining involved in WAG also stemmed from the continued success that some of the gymnasts described as important to them. Particular successes, such as winning medals, served as motivation for continuing. But so too did injuries, where gymnasts described that while injured, they re-evaluated their relationship with the sport and realised how much they enjoyed competing and wanted to continue. This finding is somewhat surprising given that it was argued by other coaches that injury can be a significant reason to retire from the sport.

Gymnasts were also able to be successful due to their ability to learn new skills, which goes against the dominant gymnastics discourse that assumes younger gymnasts are best placed to learn new gymnastics elements. By contrast, in this study, several gymnasts, coaches and judges cited cases of gymnasts in their 20s learning completely new elements that were integrated successfully into their routines. While this was not necessarily the norm for all these gymnasts, it was evident that coaches working with gymnasts of this age had a firm understanding of this being very possible and were aware of strategies to teach older gymnasts new skills.

Finally, participants raised the importance the influence of the Code of Points in facilitating the move towards older gymnasts continuing to compete longer. There was agreement that the 2013 Code of Points was beneficial for older gymnasts due to the increased emphasis on artistry, but that the increased difficulty requirements that have existed since 2004 or thereabouts, make it harder for all gymnasts and particularly for older gymnasts.

The data produced through this project is comprehensive and will be used to compose various scientific and non-scientific publications. The results will also be transferred to the WAG community, through written and oral presentations to gymnastics organisations (e.g., Swedish Gymnastics Federation, FIG). It is envisaged that the transferral of the gained knowledge will be significant to the scientific and WAG community in their attempts to understand WAG, and sport in general.

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