

SELECT YOUR PARENTS WITH CARE! – THE ROLE OF PARENTS IN THE RECRUITMENT AND DEVELOPMENT OF ATHLETES

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INTRODUCTION

“You must have been lucky in your choice of parents”, a TV-reporter once asked ski-legend, Bjørn Dæhli jokingly, but with a fumbling seriousness in trying to establish what was behind his success. “Yes, I must have been” was the answer after some pondering, and with a knowing smile. Bjørn Dæhli is well known as the most winning winter Olympic athlete in history. He is, however, not alone in his accord, more or less, with his provocative statement. Many other successful athletes have, after some musing, nodded to this in confirmation that they could not be fully sure that this was not also their recipe. Expressions in this direction can be viewed as a consequence of athletes being confronted with perspectives and expectations that they fully alone should have control over their success-factors. The inherited characteristics really do not fit into this self-controlled picture. In a package wrapped in humour, however, this self-control mythology can be sustained. Thereby is it possible to achieve a dim confirmation that the right genes must be in place. Then, an advantage over the competitors can already be present from the start, and it may very well be just this that competitive sport is mainly about. The remaining advantages, many believe, are still within the individual’s control, cultivating further the myth of the athletic talent.

The consequence of this recognition is that the problem area of the relationship between genetic inheritance and cultural factors emerges,

including the fact that no-one can have influence over their genetic make-up. It follows, therefore, that it is not possible for the individual to have full control over athletic achievements. Parents represent both dimensions of performance, but parents are not up for selection. Even though genes compose very specific points of departure for athletic achievements, there are probably so far only largely random events that orchestrated their selection and fusion within the apparent “cosmic chaos”. The question then remains to what degree and in which ways parents are also formative participants in the development of talent through their socio-cultural contributions.

A great deal of mythology has been spun about talent in sport. Generally the understanding of “talent” has been linked with genetic sources, much related to the idea of identifying talent already in childhood. Even today it is still argued that talents have been identified among children, as a forecast of future elite performers in sport. Despite the fact that some do succeed, the foundation for this prediction is thin. Neither personality nor identity are strongly anchored in the child as the basis for motivation and commitment, and neither is anything known of future resources for development in the interaction between personality and external access to resources. If the concept of talent is to be of use in serious dialogue and communication, then it is paramount that those involved have some commonality in their understanding of the term. In an attempt to clarify the issue, the following definition of talent is offered; a definition that guides the present work:

An athletic talent is characterized by the sporting achievements the individual has demonstrated as possessing the potential to reach, dependent on sufficient associated motivation, effort, and resources of varying type, size, and quality on an open-ended scale.

This means that there will always be discussion about the degree of talent. An unknown part of the talent’s potential lies in the genes, whereof in many sports a number of concrete physiological parameters are known.

A highly talented performance level is, however, not only a result of inborn characteristics, but to the greatest degree a product of voluminous goal-directed training [16]. An optimization of this training is conditional on good motivation, great effort, and large resources of many kinds. The closely associated question then is how such motivation, effort, and resource-base emerges? While motivation

and will to apply effort lie within the athlete, the resources needed are both of internal character in the athlete's personality, and of external character such as economy, knowledge, infrastructure, access to transport, equipment and materials of various types, etc. All these interact in dynamic fashion.

The absolutely fundamental condition for development of talent in sport is that the athlete – to-be is recruited to the athletic setting. This takes place in a social context composed of the family and possibly a coach, in addition to the child [36]. The family's importance for the achievement of high performance-capacity has been in the spotlight in several studies. However, the search is still on for the specific family-behaviour that has the greatest socialization-impact on children's participation in sport throughout their development [12]. The influence of siblings in the dynamics of the family is also a field that to a great extent has been overlooked in the study of sport. Although the same cannot be said of friends, even here there is a continued lack of a clear unraveling of their role.

On this foundation the following problem is addressed in this investigation:

What role and consequence have parents in the recruitment and development of talents in the sport of cross country skiing?

The impetus for this query was the juxtaposition of several decades of intense experience by the authors with cross country skiing in Scandinavia and North America. How Scandinavia, in spite of its modest population, has historically dominated this sport, was a question that needed resolution. That it was not a lack, in North America, of science-based knowledge of human performance variables, or a deficiency in technological competence or resources, was clear. *Au contraire*, reflection led to the socio-cultural arena in the search for answers, and in particular to that most *significant other* context of family. In Norway, success on the ski-trail has commonly been seen as an expression of socio-cultural forces [24].

REVIEW OF THE LITERATURE

Parents as Role-models in the Socialization to Sport

If parents are experienced as good role-models, then children prefer to identify with them. Through observation and acting like them, the

children go through a process of socialization towards a more established identity as an individual. Simultaneously can parents contribute to a reinforcement of a desired identity-development through rewarding and encouraging behaviour. These relationships were indicated through the inquiries which shaped the foundation of the social-cognitive perspectives of Bandura [3]. The sum of habits, expectations, and interpretations of social contexts informed Bourdieu toward the concept of “*habitus*” (2002). This implies that all that contributes to form the daily life of a family, such as social inheritance, education, occupation, income and capital, social environment, residence, relatives, and friends, will in sum connect the family to a culture or subculture. This is expressed through a familiar lifestyle of some form, and carries consequences for the relatively malleable children. It is therefore close at hand to expect a relationship between parental athletic activities and the recruitment of their children to sport. This is the first element in the foundation for the further development of athletic talent.

A confirmation of this is found in the investigation of elite sport in Norway, “*Why did the best become best?*” [6]. It was based on in-depth interviews of the 18 most successful Norwegian athletes in Olympics, World Championships, and World Cup in 10 different sports. The subjects were anonymized, but in a ski-nation such as Norway, they would perforce have included some skiers. The results showed that 72.2% indicated that both parents were involved in some form of sport or physical activity. A full 58.8% took part in competition at a regional or national level, or 42.5% of all parents in the study. In comparison, only 4 of 10 in the Norwegian population at large are regularly physically active. Concerning the specific socialization effects, it is to be noted that as much as 57.7% of the athletically active parents were engaged in the same sport that their children would become world class in. In-depth interviews by Côté [12] in Canada of top junior athletes and their families showed that all parents were involved in organized sport at the recreational level. However, in that study, only 25% had at least one parent with competition background.

Further confirmation in this direction has been gained from two other Norwegian studies. In Bergsland’s (2003) investigation of 250 young talented cross country skiers and soccer players, it was concluded that the family was the most important factor in the athletic

development. The second study, by Mjaavatn and Gundersen [28] was a 4-year longitudinal investigation of 100 children from first to fourth grades, and their families. The focus was on the degree of physical activation, and its consequences. They concluded that children of this age-range are primarily products of their families, and that family lifestyles to a very high degree affect child physical activity levels.

Other investigations have also set the spotlight on the importance of parents shaping their children's positive values, attitudes, and behaviour directed to sport and physical activity. Some of these studies show that parents as role-models can also be gender-influenced [11, 19, 32]. Still other inquiries have found that parents of sport-engaged children in varying degrees support values related to learning, hard work, activity, endurance, and success [13, 29, 38, 39, 41].

There is also documented a positive relationship between encouragement from parents and physical competence of children [8]. Play and athletic activity by parents *with their children* is a characteristic trait in the positive parental role all the way up to the children's age of 15 [5, 12, 40].

Parental Support

Several studies have reported the significance of the parental supportive role for children who are involved in sport. Hellstedt [21] conceptualized parents' involvement in child participation in sport on a graduated scale from under-involved, via moderate-, to over-involved. The moderate level he describes as the best for promoting the child's interest, even though it meant that parents must sacrifice personal interests. Bloom [5] emphasized the considerable influence of the family in the different stages of child development in science, art, and sport. In the early years of child engagement in an activity, the parents tended to be supportive while simultaneously the child experienced freedom. This phase was followed by a period of devotion to the activity for both child and parents. Finally, the later years were characterized by the participant's fulltime commitment to performance-capacity improvement, with a parental role more restricted to primarily providing economic support. Bloom indicated with this a developmental perspective for the family's influence on evolving talent. This view has been supported by Hellstedt [20]. In this regard, Van Yperen [47] reported further that parental support

also has a buffering function, dampening the stress of competition for the child.

Côté [12] suggested the existence of three defined stages in sport-participation; the “sampling years” (6–13), the “specializing years” (14–15), and the “investment years” (over 15). His studies showed that the parental role changed from a leadership role in the “sampling years” to a support and follow-up role in the “investment years”. An important condition for taking care of recruited children and preventing their dropping out from sport during their first development phase has been the joy and fun of sport, and the experience of growing skill-mastery through minimizing competition-stress [12, 20]. In the “specializing years”, Côté [12] notes that the parents became committed supporters of their children’s decision of involvement in a restricted number of sports. The parents exert no pressure on their children concerning which sport they should specialize in. They also stress that priority be placed on school and sport, and do not expect that the child should have part-time work in the years of specialization. The extra pressure of part-time work they wished their children to avoid, since this life-phase is to be regarded as a one-time opportunity in relation to athletic development. The consequence of this was that parents took responsibility for both the necessary financial resources as well as the time needed. Often they were obliged to make sacrifices in their own social life and time for recreation.

In the “investment years” the child would connect to only one sport. Training loads grew to be extreme and disciplined, with performance at the elite level as the objective. The role of the parents as infrastructure and supporters became more clear during this period, and they sacrificed both family and personal life in order to ensure optimal training conditions for the child. Parents responded to the fluctuating demands and expectations their children were exposed to by shaping an optimal learning setting instead of exerting new demands and pressures. They entered into a number of roles that strengthened the setting for their child’s sport participation, and became important career advisors. A vital characteristic for this period is the significance of the emotional support from parents in periods where downturns and problems have curbed the progression of training. Injuries, exhaustion, stress, fiasco, or wavering of motivation may from time to time be characteristic of any athlete’s existence.

Soberlak [40] followed up Côté's study by investigating how the formal role of parents changed in tune with the athlete's progression from the "sampling years", via the "specialization years" to the "investment years". Differences among the three periods are that parents in the "sampling years" function as coaches where they structure children's deliberate play, and where transport to training areas constitutes a concrete form of support. During the "specialization years" the parental coaching role ceases while they simultaneously assist with structuring deliberate practice instead of play. These activities they then follow up in the "investment years". Common to all three periods is that they are observers and provide feedback. Similar for the first two periods is that the parents participate together with their children as play- and training-partners. In this way they also function as role-models during two of the athletic talents' important development phases.

A common feature of the studies of Bloom [5], Côté [12], and Soberlak [40], is how the role of parents changes through the three defined developmental stages. Through the "sampling years" the engagement of parents is generally more direct, and consists primarily of play and training *together with the children*. These changes to become more indirect as the children move through the "investment years". During this last phase, the parental role consists largely of being an audience, an economic supporter, and a facilitator for goal-directed training at home such as, for example, a room for strength training.

Parental Expectations

The expectation-concept may for many be a simple and concrete term to be directly related to, and limited to, actual words that parents have spoken. Often this can be correct, meaning that verbal expression and word choice should be carefully chosen in expectation-contexts. Still, there are grounds for a critical stance in this regard, and a reflection if it all is as simple as this. In reality the concept should be subsumed, to a large degree, under the rubric of motivation psychology, the consequence of which leads to greater complexity. Behaviour and other non-verbal signals from the social environment can create higher expectations than those simply verbally expressed. Many more or less hidden signals may be interpreted in ways connected in variable fashion compared to the intentions of the sender. Unintentional/

unconscious signals may also be sent, to complicate the situation yet further. Personal expectations by the athlete emerge through an interaction with this environmental communication repertoire, and can result in expectations greater than those from the social environment *per se*.

On a step-less scale from small-, via moderate-, and large expectations, to possibly significant expectational pressures, there can be motivational consequences of considerable variability. In the scholastic arena, extensive pedagogical research confirms quite unequivocally that expectations and requirements of parents generally contribute to child achievement. Children's decisions to engage in a particular activity, their effort, and the actual performance level reached, were all strongly influenced by parental expectations in a study by Eccles & Harold [15]. These findings received support in investigations indicating that the actual level of children's participation in physical activity is related to the expectations of parents and their belief in their children's physical competence [9, 14, 23]. In a study by Author, Olympic and World medallist cross country skiers expressed that they enjoyed their parents' interest in their skiing efforts and that they had not experienced pressure from them to justify their involvement in the sport.

A study by Brustad [8] showed the relationship between a high degree of encouragement and stimulation from parents, and greater achieved physical competence by children. Several earlier studies have also shown positive relations between expectations of parents and the success of children in sport [27, 35]. However, there are also studies that indicate that expectations can also have a diametrically opposite and negative effect. This can occur when the parental expectations grow so strong that one can speak of great expectation-pressure. The expectations of parents, then, can become a source of stress which may hamper child participation in sport [7, 37, 48]. But here the spectrum of investigation is limited to the participation of children in sport as such, and not to the development of high performance levels through piercing the barriers that this implies in the years of childhood and youth. Nevertheless, the participation in sport *per se* is still the first precondition for later high achievements.

In another study [32] a curvilinear relationship between parental expectation and their children's enthusiasm for swimming was found. High and low expectations were associated with low child enthusiasm,

while a middle expectation level was related to the highest enthusiasm. Although this deals only with the issue of enthusiasm, and not specifically of motivation which leads to a high performance level as an adult, it nevertheless is an important condition for further development. Moreover, swimming is a sport where the elite level can be reached at a young age in comparison with many other sports. The Norwegian study by Breivik & Gilberg [6] of top world class performers in several sports showed that a clear majority had experienced that their parents had small or no expectations of them. The picture of the parental expectation phenomenon that has emerged in sport research appears, thus, both contradictory and unclear.

The issue of expectations as a dimension of motivation psychology comes into force in many fields of life. In the pedagogical research of school and education in general, inquiries into the motivation field are extensive, but without the degree of expectations or demands having received significant attention. However, in the leadership research within the business world, the theme has a central place. An effect that has long been recognized by researchers of learning and behaviour has shown itself applicable to leadership: -the employee's behaviour is shaped by the superior's expectations. If the superior has *great expectations* of an employee it is likely that the latter will work hard to meet these expectations. In the opposite case; -if the superior has *low expectations*, then the employee is likely, over time, to respond with weaker performance. This is described as *self-fulfilling prophecies*, meaning that leaders' expectations of their subordinates shape performance [26]. This relationship he has documented through a series of case-studies of large industrial enterprises.

These studies, then, have revealed dynamics that to a large degree can determine individuals' performance and career development. Valuable characteristics of good leaders are their capacity to shape high expectations of their co-workers, who must stretch themselves in order to fulfil them. Moreover, Livingston has drawn attention to the dramatic consequences that self-fulfilling prophecies can have if they build on negative expectations of performance.

The results of leadership research in business are relevant, however, mainly for adults, and are not to be uncritically applied to children and youth in sporting contexts. Motivation factors for participation or development of high performance capacity in such different arenas may not necessarily be identical.

The question, then, becomes: Can it be that the effect of expectations has something to do with the achievement level that the athlete has reached at given points on their development curve? If so, which degrees of expectations are optimal at what performance levels and developmental phases? An important question, then, is to uncover how different expectations are transmitted and how the athlete perceives them.

Parental Relations, Major Responsibilities, and Socioeconomic Status in the Athlete's Developmental Years

Security and stability in life, as a foundation for a challenging and successful existence, is well documented in developmental psychology. As a consequence of the steadily increasing volume of divorces and dissolved families, significant research attention has been directed to effects this has had for the children involved. Conclusions vary, and may be conditioned by underlying gender-political interests. Less investigated is the degree to which the relationship between parents, responsibility for upbringing, and status, have had for degree of success at the higher levels in sport.

An extensive Norwegian investigation [28], "*Children – Movement – Growing-up Years*" followed a sample of 100 children from the first to the fourth grade in the years 2000 – 2004. Children of single parents were somewhat less physically active, were in somewhat lower physical condition (VO₂ max), and had somewhat poorer motor capacity than children living with both parents. It was also found that fewer single parents were regularly physically active. An explanation for this was that less time may have been available for personal activity compared with parents living together.

In the Norwegian elite athlete study by Breivik & Gilberg [6] referred to earlier, 100% of the subjects lived with both their parents throughout their growing-up period, and 90% experienced a middle-class or higher family economy. Similar findings emerged from Côté's [12] Canadian in-depth interview investigation of successful juniors of national team level, and their families. He found that all came from "intact families" at the middle-class socio-economic level. An extensive study of Swedish national team athletes in several sports by Eriksson [17] showed similar results, ca. 90% having grown up with both parents.

An intact family does not only meet the need for security and stability. There is also good reason to assume that an intact family is also in possession of a larger resource potential. The requirement for resources appears to increase proportionately and often exponentially with the level of performance, this referring to both the athlete's internal and external resources. In this regard then, the dimensions of knowledge as well as economy grow steadily in prominence.

A Norwegian quantitative study [45] investigated the relationship between exercise and sport on the one hand, and economic status and educational level, on the other. A direct and linear relationship was found between household income and the use of money for physical activity. Those who earn the most also use the greatest amount of money for this purpose, in the age-group from 45 years and up. Younger age-groups, of course, have child-rearing costs to deal with. Students with low income, however, spend significant money on physical activity.

There was also found a clear relationship between education and money spent on physical exercise. Individuals with higher education used more resources for this type of activity. A not unexpected relation was also found between the degree of activity and the amount of money spent on them. However, there were not found clear distinctions within most sports, with some important and defined exceptions: Membership in outdoor recreation/education organizations and degree of activation in cross country and alpine skiing was greatest among those with the highest education and income; up to twice that of those at the lowest socio-economic level. Similar relationships were found also for such outdoor activities as cycling and hiking/trekking. The commonality for both is the need for individual equipment and for the somewhat facilitated- or free nature as the activity- and experiential arena. There were no such connections for those using training- or fitness-centres.

METHODS

Quantitative Method

A quantitative method through the use of questionnaire was employed. The use of qualitative methodology such as interview or observation

was ruled out due to the large number of subjects and their dispersed, international location.

Selection of Respondents

The 350 highest ranked cross country skiers (gender not a factor) representing the Norwegian Ski Association (NSF), as well as of the United States Ski and Snowboard Association (USSA), were selected for the study, ca. half from each country. The selection criterion was placement on the International Ski Federation's (FIS) point list.

Access to Respondents

Personal relationship with the administrative head of the NSF and National Team coach was instrumental in gaining access to contact information for the Norwegian athletes. In the United States, the contact information for the skiers was gained through the National Team coach (known from Norway). In addition, the USSA required a written contract stipulating access to the United States portion of the investigation results. In Canada, despite personal contact there, Cross Country Canada declined participation in the study.

Questionnaire Construction

The questionnaire was constructed according to a Likert format [2, 25]. The content had its foundation in the more than 40 years of experience in cross country skiing from each of the authors of the study. The elements of this background were master in sport education, personal competition experience as well as extensive work in the coaching role and in providing technical expertise; from the local to the international level. Personal research background contributing to the study's questionnaire development included the development of the Behavior Inventories for Cross Country Skiers [34].

The questionnaire content was organized according to the following themes:

- Family and Friends
- Supportive Functions
- Childhood Activities
- Environment and Surroundings

- Infrastructure
- Knowledge and Skills
- Barriers
- Control
- Health and Training
- Demographic Aspects

One half of the questionnaire items or indicators were presented as statements or assertions.

The response alternatives were scored on a scale of zero to five, depending on the degree of agreement:

- 5. Yes, I agree completely
- 4. Yes, I agree
- 3. I neither agree nor disagree
- 2. No, I disagree
- 1. No, I disagree completely
- 0. Not relevant for me

It was decided to include a neutral response alternative (nr.3) despite a possible “pole-effect” [30] whereby some respondents may have a disposition to choose the first or last alternative in Likert-type questionnaires. A neutral alternative can enhance study validity in that some subjects may, in fact, not be able to respond any other way. In addition, the inclusion of a neutral alternative makes it possible to score questionnaires where respondents have left some items unanswered. In such cases, these items are scored according to the neutral response alternative.

The sequence of questionnaire items was designed so as to disperse items that could have an interactive effect. Several sequencing variations were pre-tested prior to a final satisfactory solution. Original language was Norwegian, and translation into American English was carried out according to established research practice. Effort was made to achieve short, simple, direct, and grammatically uncomplicated formulations without dialectical, colloquial, or scientific intricacies. The total number of questionnaire items was 100, including 7 underlying theme questions. The questionnaire was largely composed of items from the “Family and Friends” theme, a segment of a broader cross country ski investigation.

Questions Specific to Family

Twelve measures on the socialization-dimension of family were used to compare Norwegian and American skiers. Of the twelve items nine were from the theme “Family and Friends”, one from “Environment and Surroundings”, and three from “Demographic Aspects”.

Pilot Study

The questionnaire was administered to cross country ski coaches and elite athletes, as well as researchers familiar with the sport, in Northwestern USA, Canada, and Norway. As a consequence of constructive feedback, changes were made in question formulations. The revised edition of the questionnaire was sent out again to the coaches and researchers for comment. These were then taken into account, and the final version was successfully tested on a university cross country ski team. Final layout modifications were suggested, and implemented.

Collection of Data

The questionnaire was distributed to 185 skiers in the USA and 165 skiers in Norway. After two weeks, a follow-up letter was sent to those who had not yet responded. Throughout the data collection period there was regular telephone and e-mail contact with the national team coaches in the two countries. This contributed to the high response-percentage from the National Team skiers.

Response Rate

The response rate in the USA was 57.8% (107 out of 185), and 65.5% in Norway (108 out of 165). Included among the respondents was 100% of the National Team in both countries.

Analysis of the Data

The respondents were classified into three performance levels based on the best self reported results from ski races on different levels in their ski career so far. Group 1 was composed of present and former National Team members with international high level performances. Group 2 skiers were lower level performers, while Group 3 was the lowest performance group.

The ranking process for USA was based on the following competition levels:

- National Team member (present or past); but for the year of the study, only elite men’s team.
- Results from key competitions (Winter Olympics, World Championships, World Cup, Under 23 World Championships, National Senior or Junior Championships)
- National Collegiate Athletic Association (NCAA) Nordic ski rankings

The ranking process for Norway was based on the following competition levels:

- National Team member (present or past), including elite all-round and sprint teams for the year of the study.
- Results from key competitions (Winter Olympics, World Championships, World Cup, Under 23 World Championships, Scandinavian Cup, National Senior and Junior Championships, Norway Cup).

This classification system resulted in the following number of athlete distribution among the three performance groups in the two countries:

Group 1 Group 2 Group 3

USA 20 68 19

Norway 37 46 25

In the analysis of the data it was found to be appropriate for the purpose of clarity of result presentation and discussion to combine the response categories “Yes, I agree” with “Yes, I agree completely”, as well as “No, I disagree” with “No, I disagree completely”.

Quality Evaluation of the Study

Reliability and validity were enhanced by the careful process of instrument construction through authors’ long-term experience assisted by expert advice from practitioner and scientific personnel. The multi-phase pilot testing of the questionnaire ensured thorough assessment on an empirical basis.

Reliability and Validity

In contrast to so-called differentiated scales, which say something about the strength of a respondent's attitude, in the Likert scale a given declaration is monotone. Attitude strength in the Likert format is expressed by summing scores on similar items, a procedure which finds its basis in classical test theory [42]. Random errors, where observed scores do not reflect true scores, are reduced in such additive scales, thereby strengthening reliability. Attitudes, perceptions, or "orientations" imply a very explicit definition of what Sudman & Bradburn [44] call "attitude objects", which in the present study consists of elements of the socialization process to high level cross country ski performance. The expertise of the authors in the field of study, in conjunction with the multitude of test items covering every sphere of investigation (each item in itself is an expression of expertise), merge to further enhance the reliability of the investigation. Reliability was ensured as well through the careful pre-testing of the questionnaire.

In relation to validity, there is no assurance that all items in additive scales in fact measure what they are designed to measure. The cancelling-out tendency of random errors in additive scales partially addresses this issue; however, systematic errors, or bias, is a serious challenge to validity. In the present study, systematic misunderstanding of items was unlikely in view of the meticulous instrument pre-testing procedure. A "social desirability" bias [31], on the other hand, could have affected the findings. This broadly recognized bias problem, today often termed the "politically correct" bias, was met partially by the nature of the research theme, and partially by thorough methodology. First, the study did not deal with matters which might be perceived as delicate, sensitive, or very private by the respondents; thus there was little reason to distort responses. Secondly, anonymity was, nevertheless, ensured by written information guaranteeing this through sealed questionnaire envelopes, assurance of no identity registration, and an analysis of the research data wherein all information was depersonalized. Taken together, these aspects of the investigation indicate robust validity.

RESULTS

The results of the study are presented under headings replicating item formulations in the questionnaire. In addition to the presentation of data in table form, there is associated textual commentary and graphic representations which show the results from those responding to the statements and questions.

1) “In my childhood I was often together with my family skiing”.

Table 1a: Norway

		Frequency	Valid Percent	Cumulative Percent
Valid	3	8	7,4	7,4
	4	16	14,8	22,2
	5	84	77,8	100,0
	Total	1018	100,0	
Missing System		109		
Total				

Percentage agree (14,8 %) and completely agree (77,8 %) = 92,6 % (bold script)

Table 1 b: USA

		Frequency	Valid Percent	Cumulative Percent
Valid	1	7	6,4	6,4
	2	13	11,9	18,3
	3	9	8,3	26,6
	4	1	0,9	27,5
	4	29	26,6	54,1
	5	50	45,9	100,0
	Total	109	100,0	

Percentage agree (27,5 %) completely agree (45,9 %) = 73,4 % (bold script)

In the Norwegian segment of the study, fully 92.6% of the respondents agreed, or completely agreed, with this statement. The USA comparison was 73.4%, also quite a high figure, although the 19.2% difference could be viewed as considerable.

2) “One or both of my parents have been competing in cross-country skiing”

Table 2 a: Norway

			1	2	3	4	5	
Group	1	Count	18	3	3	3	10	37
		% within group	48,6%	8,1%	8,1%	8,1%	27,0%	100,0%
	2	Count	18	5	1	8	14	46
	% within group	39,1%	10,9%	2,2%	17,4%	30,4%	100,0%	
	3	Count	8	2	3	3	9	25
	% within group	32,0%	8,0%	12,0%	12,0%	36,0%	100,0%	
Total	Count	44	10	7	14	33	108	
	% within group	40,7%	9,3%	6,5%	13,0%	30,6%	100,0%	

Percentage agree and completely agree (bold script) are combined for each group and for the total

Table 2 b: USA

			Question 2					Total	
			1	2	3	3	4	5	
Group	1	Count	5	3	2	0	5	5	20
		% within group	25,0%	15,0%	10,0%	0,0%	25,0%	25,0%	100,0%
	2	Count	22	7	4	1	20	14	68
	% within group	32,4%	10,3%	5,9%	1,5%	29,4%	20,6%	100,0%	
	3	Count	8	1	1	1	4	4	19
	% within group	42,1%	5,3%	5,3%	5,3%	21,1%	21,1%	100,0%	
Total	Count	35	11	7	2	29	23	107	
	% within group	32,7%	10,3%	6,5%	1,9%	27,1%	21,5%	100,0%	

Percentage agree and completely agree (bold script) are combined for each group and for the total

The results from the two countries are relatively similar. While in the United States, 48.6% agreed or completely agreed with the statement, the figure for Norway was 43.6%. A more detailed analysis according to performance level showed a corresponding pattern, with one clear exception. In the United States, 50.0% of the top performance group had parent background in competitive skiing, while in Norway the figure was as low as 35.1%. The relative pattern of the groupings in the two countries was also striking. In the U.S.A., the Group 2 and 3 figures were 50.0% and 42.2%, respectively, while in Norway these were 47.8% and 48.0%. In other words, all taken together, 4 of the 6 groups were very similar, with only the lowest U.S. group and, in particular, the highest Norwegian group, deviating (both in the same, low, direction).

3) “My parents have supported me in my cross-country skiing”

Table 3 a: Norway

			Question 7			Total
			3	4	5	
Group 1	Count	1	4	32	37	
	% within group	2,7%	10,8%	86,5%	100,0%	
2	Count	1	4	41	46	
	% within group	2,2%	8,7%	89,1%	100,0%	
3	Count	0	5	20	25	
	% within group	0,0%	20,0%	80,0%	100,0%	
Total	Count	2	13	93	108	
	% within group	1,9%	12,0%	86,1%	100,0%	

Percentage agree (12.0 %) and completely agree (86.1 %) = 98.1 % (bold script)

Table 3 b: USA

			Question 7				Total
			3	4	5	5	
Group	1	Count % within group	3 15,0%	4 20,0%	0 0,0%	13 65,0%	20 100,0%
	2	Count % within group	2 2,9%	7 10,3%	1 1,5%	58 85,3%	68 100,0%
	3	Count % within group	1 4,8%	3 14,3%	0 0,0%	17 81,0%	21 100,0%
Total		Count % within group	6 5,5%	14 12,8%	1 0,9%	88 80,7%	109 100,0%

Percentage agree and completely agree are combined in bold script for each group and for the total

Here the concurrence in both countries is nearly unanimous. In Norway, 98.1% of the respondents agree or completely agree, while in the United States the figure is 94.4%. In the performance group analysis, one deviation was found; the U.S. top group, where the figure was as low as 85.0%. All other groups score over 95%.

4) “My parents were driving me to most of the ski workouts”

Table 4 a: Norway

		Frequency	Valid Percent	Cumulative Percent
Valid	1	5	4,6	4,6
	2	3	2,8	7,4
	3	3	2,8	10,2
	4	21	19,4	29,6
	5	76	70,4	100,0
Total		108	100,0	
Missing	System	1		
Total		109		

Percentage agree (19.4 %) and completely agree (70.4 %) = 89.8 % (bold script)

Table 4 b: USA

		Frequency	Valid Percent	Cumulative Percent
Valid	1	7	6,4	6,4
	2	15	13,8	20,2
	3	17	15,6	35,8
	4	3	2,8	38,5
	4	23	21,1	59,6
	5	44	40,4	100,0
	Total	109	100,0	

Percentage agree (23.9 %) and completely agree (40.4 %) = 64.3 % (bold script)

Nine of ten (89.8%) of the Norwegian skiers agreed or completely agreed that their parents had driven them to most workouts. The comparative data from U.S. showed 64.3%, a full 25.5 percentage points below Norway.

5) How long a distance from home were the cross-country ski trails you used after you started with regular cross-country training?

Table 5 a: Norway

		Frequency	Valid Percent	Cumulative Percent
Valid	< 1km	32	29,6	29,6
	1–5km	33	30,6	60,2
	6–10km	19	17,6	77,8
	11–20km	11	10,2	88,0
	> 20km	7	6,5	94,4
	Highly variable	6	5,6	100,0
	Total	108	100,0	
Missing System		1		
Total		109		

Table 5 b: USA

	Frequency	Valid Percent	Cumulative Percent
Valid < 1km	13	11,9	11,9
1–5km	14	12,8	24,8
6–10km	18	16,5	41,3
11–20km		22,0	63,3
> 20km	35	32,1	95,4
Highly variable	5	4,6	100,0
Total	109	100,0	

Among the Norwegian skiers, 29.6% had under 1 km. to the trails, while 60.2% had fewer than 5 km. This was dramatically different from the United States where only 11.9% had under 1 km. and 24.8% had fewer than 5 km. For distances over 5 km. and up to 10 km. the two countries were quite similar, with figures of 17.6% for Norway and 16.5% for the U.S.A. Finally, for distances to trails over 10 km. the national differences are, again, momentuous with only 16.7% of the Norwegian skiers having such a long transportation distance, while for the U.S. skiers the figure was 54.1%.

Little variation in this regard among the different performance groups was found in the United States. However, this was not the case for Norway, where fewer than half as many (16.0%) in Group 3 lived under 1 km. from the trails, as compared to Group 2 (34.8%), and Group 1 (32.4%). This variation among the Norwegian groups changed quickly and consequentially in the opposite direction with increased travel distance. Already at the next distance category (over 1, and up to 5 km.), Group 3 was up to 40.0%, while Group 2 was at a moderate 30.4%, and Group 1, a low 24.3%.

6) “My parents had big expectations for my cross-country ski performances”

Table 6 a: Norway

		Question 8					Total	
		1	2	3	4	5		
Group	1	Count % within group	10 27,0%	10 27,0%	10 27,0%	6 16,2%	1 2,7%	37 100,0%
	2	Count % within group	8 17,4%	11 23,9%	22 47,8%	4 8,7%	1 2,2%	46 100,0%
	3	Count % within group	1 4,0%	5 20,0%	19 76,0%	0 0,0%	0 0,0%	25 100,0%
Total	Count % within group	19 17,6%	26 24,1%	51 47,2%	10 9,3%	2 1,9%	108 100,0%	

Percentages in bold script for agree/completely agree, neither agree/nor disagree and disagree/completely disagree respectively are pair-wise combined

Table 6 b: USA

		Question 8					Total		
		1	2	3	3	4		5	
Group	1	Count % within group	3 15,0%	2 10,0%	9 45,0%	0 0,0%	3 15,0%	3 15,0%	20 100,0%
	2	Count % within group	6 8,8%	14 20,6%	28 41,2%	1 1,5%	13 19,1%	6 8,8%	68 100,0%
	3	Count % within group	2 10,5%	3 15,8%	3 15,8%	0 0,0%	10 52,6%	1 5,3%	19 100,0%
Total	Count % within group	11 10,3%	19 17,8%	40 37,4%	1 0,9%	26 24,3%	10 9,3%	107 100,0%	

Percentages in bold script for agree/completely agree, neither agree/nor disagree and disagree/completely disagree respectively are pair-wise combined

In Norway, only 11.2% of the skiers agreed or agreed completely with this statement, whereas in the United States, three times as many, or 33.1% concurred. Those disagreeing or completely disagreeing were as many as 41.7% in Norway, compared with only 28.1% in the U.S. That this question effected a wide spread of responses is underlined by the fact that as many as 47.2% of the Norwegian skiers and 38.3% of their U.S. counterparts neither agreed nor disagreed.

The great variability of response was reinforced when a performance group analysis was undertaken. On the Group 1 level, 18.9% in Norway agreed or completely agreed, while of Group 3, none (0.0%) did so. For the United States, the situation was converse; 30.0% in Group 1 agreed or completely agreed, while as many as 57.9% in Group 3 did so. For those who neither agreed nor disagreed, it was Group 3 that was the largest in Norway, with fully 76.0%, whereas in the United States Groups 1 and 2 predominated, with 45.0% and 42.7%, respectively.

7) Who had the main responsibility for you in childhood?

Table 7 a: Norway

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Both parents	101	92,7	94,4	94,4
	Mother	4	3,7	3,7	98,1
	Father	2	1,8	1,9	100,0
	Total	107	98,2	100,0	
Missing	System	2	1,8		
Total		109	100,0		

Percentages from the text are shown in the table in bold script

Table 7 b: USA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Both parents	98	89,9	91,6	91,6
	Mother	9	8,3	8,4	100,0
	Total	107	98,2	100,0	
Missing	System	2	1,8		
Total		109	100,0		

Percentages from the text are shown in table in bold script

In Norway, 94.4% of the respondent skiers grew up with both parents. For those who did not, the mother had the main responsibility for 3.7 percentage points of the cases, while the father stood for 1.9. For the United States skiers the situation was not very different, with 91.6% growing up with both parents. In all the remaining 8.4%, it was the mother who had the responsibility for upbringing.

8) Which of the following categories describes the socioeconomic status of the household you were raised in as a child between 5 – 18 years of age?

Table 8 a: Norway

	Frequency	Valid Percent	Cumulative Percent
Valid Highest level	8	7,4	7,4
Upper middle level	31	28,7	36,1
Middle level	62	57,4	93,5
Lower middle level	7	6,5	100,0
Total	108	100,0	
Missing System	1		
Total	109		

Percentages from the text are shown in table in bold script

Table 8 b: USA

	Frequency	Valid Percent	Cumulative Percent
Valid Upper middle level	31	29,0	29,0
Middle level	63	58,9	87,9
Lower middle level	13	12,1	100,0
Total	107	100,0	
Missing System	2		
Total	109		

Percentages from the text are shown in the table in bold script

In Norway, 57.4% of the athletes placed themselves in the middle level, with 28.7% in the upper middle level. In the United States, the figures were strikingly similar; 58.9% and 29.0%. A growing-up period at the highest socio-economic level was found only among Norwegian skiers, who reported a proportion of 7.4%. The lower middle level, as well, is not extensively represented among the skiers of either country; 6.5% in Norway, and 12.1% in the United States. These latter figures still represent a clear difference between the nations. At the lowest level there are no skiers in either country reporting.

DISCUSSION

Parents as Role Models in the Socialization to Sport

1) Considerable time together with the family on skis

This study shows that significant amount of time spent with the family appears to be a foundation for shaping an identity and lifestyle leading to high performance levels in cross country skiing. For more than 9 of 10 top Norwegian cross country skiers, this was the family dynamic in the formative years. This represents a specific socialization process which supports the findings of Soberlak [40], Côté [12], and Bloom [5] and their characterization of the “sampling years” up until age 15. In the United States, that fewer than 3 of 4 of the skiers had a similar growing-up experience, can be an expression of cross country skiing being less of a cultural phenomenon than in Norway. This finding of more ski-specific family dynamics in Norway leads to a suggestion that this factor provides part of the explanation why Norway, despite its low population, is highly prominent in the sport. The large population and often favourable topography in the areas of the U.S. with reliable snow, has not engendered a similarly deep anchoring of skiing in the culture, and consequently, then, of parenting patterns reflecting this.

That, notwithstanding the less supportive U.S. context for cross country ski development, still nearly 3 of 4 of the best skiers of that country did grow up under similar family conditions as the best Norwegian skiers, indicates that the point of departure for parents interested in the skiing potential of their children could be formulated

as: *“If you wish your children to see how good they can become in cross country skiing, then you should be with them often on skis during their formative years.”*

2) The competition background of parents in cross country skiing.

The proportion of parents with competition experience in cross country skiing is somewhat higher in the United States (48.6%) than in Norway (43.6%). The performance group analysis of the two countries exhibits one striking exception to the 42.2–50.0% range of five of the groupings; that of the Norwegian Group 1, at 35.1%. In this top group are found many of the world’s best skiers. This suggests that specific parental ski background may not be as important for elite performance development in a country with a strong cultural tradition in the sport, as in a country where cross country skiing is a more peripheral, subcultural phenomenon, and where parents with such personal background become significant bearers of the subcultural tradition. However, though a 15 percentage point difference between the top groups in the two countries in parental cross country ski experience, may appear large, it should be noted that even in Norway more than one in three world class skiers were likely to have been positively affected by their competition-experienced parents. This contention gains support from the Breivik & Gilberg [6] study where 42.5% of their Norwegian world elite sample had competition background and nearly all of them in the sport that their offspring would later reach the top in.

3) Parental support

Parental engagement and support has in both countries been nearly maximal. This confirms the findings of the multitude of studies on this topic [5, 12, 17, 20, 21, 40, 47]. Attention should, nevertheless, be drawn to an element of difference in the between-group data. Contrary to the small differences between the Norwegian groups, the U.S. top group only evidenced an 85.0% figure of parental support whereas Group 2 and 3 showed 97.1% and 95.3%. A possible interpretation of this is that the commitment required to reach the very top level is such that parents question this within the broader material/cultural imperatives of American life. In Norway, a name in skiing is a name in the nation and can lead to post-career opportunities, while in the United States such expectations are more uncertain. However, a

critical view of the strong results in the present study raises the question whether the Norwegian and American cross country skiers interpreted the support issue similarly. The difference in frequency of skiing with the children would lead to an expectation that this should be reflected in the support figures. However, this factor could be outweighed by greater economic support or other factors in the United States.

4) Parental transport related to distance between home and ski-trails.

While 9 of 10 in Norway were driven by parents to most ski-training, this was the case for only 6 of 10 in the United States. Higher parental motivation could be a reason for the Norwegian figure. The structure of work could be another factor, whereby parental accessibility in Norway could be greater due to shorter working hours, with consequent greater matching between end of classes at school and the time of work-day finish. The very large difference between the two countries in the number of skiers living less than 1 km. from trails (Norway, 29.6%, and the U.S., 11.9%) would lead to an expectation that parental driving would be less prominent in Norway; -walking to training carrying skis, poles, and a backpack with extra clothing and ski waxes, would be feasible for this short distance. However, contrary to the relative commonness of such a situation, Norwegian parents still drove their skiing offspring more, perhaps more for reasons of psycho/social support, or simply to facilitate more ski-specific training. By driving even short distances, time could be saved for greater amounts of ski-training, compared with the general, more uncertain training benefits accruing from walking/carrying gear to and from the skiing-site.

A reason for lower parental transport support in the United States may be found in the lower age for gaining a driving license, generally at age 16, compared with 18 in Norway. The accessibility to vehicles may be yet another factor, where costs for acquiring and operating cars by young people are considerably lower in the United States. Organized collective transport (such as car-pooling) to trails, particularly those more distant from home, may also be more common in the U.S.

In general, it does not appear that transport costs have been a significant barrier to skier development in either country. However,

they may have blocked the recruitment to skiing for some who otherwise could have made their mark.

The question remains of the extent of alternative or organized group transport of skiers in the United States. Perhaps skiers who live further away from the trails ski less and compensate for this by more extensive alternative training? In this case, such an adaptation would lead in the direction of a lack of sufficient specific training to enable the athlete to reach the highest performance levels. A further consideration is that extensive, organized group transport would add yet another demand to the already voluminous requirements for planning and structure in the athlete's life. Consequences may be increased stress and a diminution of the energy resources in a sport which presumes a careful accumulation of all possible energy beyond the boundaries of that expended in training and competition. Individual, family-based transport opens for greater freedom and flexibility, with reduced routine stress for the athlete, although it is more costly both in money and time for parents. This is the daily, routinized toil that it appears parents must be motivated to tackle. An often unrecognized additional positive factor of family transport to training and competition is the motivation- and cohesion-building process of ski-related conversation during the drive.

The findings in the present investigation reveal clearly that the distance between home and ski-trails is a more powerful barrier for skiers in the United States and their parents, than it is in Norway, not only in the sense of the driving conundrum, but also in the distance *per se*. Not only do far more of the Norwegian skiers live close to the trails, but this factor is amplified by the direct relationship between performance level and home distance from trails, the top group having the shortest distance.

The general phenomenon of considerable transportation for Norwegian cross country skiers, however, contributes to putting an end to the myth that this diminishes the development of endurance and high performance capacity. On the contrary, quick, comfortable, predictable, and flexible transport to the ski-trails is advantageous in that it provides more time and energy for ski-specific training. Worthy of note is that only 3 athletes in the Norwegian sample were unsure in their response in this area, and could therefore have used alternative transport regularly.

The findings of the study give associations to established recognition that a long way to school or training site was the foun-

dition for the elite cross country skiers of old, as well as, for example, American World Cup champion, Bill Koch in more modern times; and moreover, for today's African distance runners' international dominance. The stories may well have been/are at least partially true. However, whether this is the optimal basis for the development of elite level performance today, is at best uncertain.

5) Parental expectations

Only approximately one in ten in Norway and three of ten in the USA agree with the statement that "my parents' expectations of my cross country ski performances were great". These responses are to a surprising degree diametrically opposite to what would be expected on the basis of the unequivocally large parental engagement and the support the parents have shown. Such parental behaviour can represent signals of a variety of meanings that can point in one or another direction. At the most extreme lies expectation-pressure, which in any case can be eliminated here. In the light of that 4 of 10 of the US skiers and nearly 5 of 10 in Norway are not able to take position on the question, this opens up for a number of interpretations.

The problematic response picture reveals considerable uncertainty as to which psychological mechanisms the self has been exposed to, as well as what meaning is actually assigned to the concept of "great expectations".

One immediate, near at hand, though simplified conclusion to the findings here, is that low or no parental expectations must be a significant success-factor in cross country skiing, something that is in contradiction to, but also in agreement with earlier research. On the other hand, such a conclusion would be more clearly in opposition to child rearing- as well as leadership-research on this dimension. In this regard the most startling finding here is the large proportion of skiers who are unsure of how to deal with this question. Are there some hidden taboos in operation, or is it a matter of unclear or simply different understandings of the concept of expectations? The taboo-rationale can, in Norway at least, be a reasonable interpretation in that a long and well publicized national debate has taken place on the issues of expectations-pressure, drop-out rates, and recruitment problems. A consequence of this may be that many skiers more or less consciously wish to distance themselves from the risk of being immersed in this turbulence. Many may be enticed to assume that the

expectation-area is more of a failure- than a success-factor, as was concluded in the Breivik & Gilberg [6] study. In this way it is not possible to avoid surmising that some respondents could be more or less conscious “victims” of expressing “politically correct” answers. Seen in the light of today’s high knowledge- and education-level, this constitutes a steadily growing methodological problem in this type of research [4].

It is difficult to imagine that children and youth do not perceive the engagement of parents as an expression of expectations. The probability is large that parental engagement can end with substantial self-inflicted expectations which in the next round will be experienced as general pressure as such. In such a process the conjunction with expectations of parents is near. The question in the present investigation, however, concerned solely the degree of parental expectations.

Perhaps it would have been more appropriate to have limited the question to whether parents had expectations *per se* instead of asking if they were *great*? By examining more closely the response-percentage for those who disagreed, or completely disagreed, separately, the picture becomes more nuanced. Of the Norwegians, 24.1% disagreed with expectations having been great, while for the US skiers the percentage was 17.4. Nevertheless, this does not mean that expectations did not exist. Only 17.6% of the Norwegians and 8.3% in the US completely disagreed, and even these could have felt some, and up to a medium degree, of expectations from their parents.

Moving such an analysis into the response-arena of “agreed” and “completely agreed”, then the 11.2% in Norway and the 33.1% in the US may be viewed as larger proportions than originally anticipated, particularly in the USA. The substantially greater experience of parental expectations among the US skiers could point to this as a negative factor in relation to success. This interpretation is near at hand in view of the performance differential between Norway and the USA. However, when account is taken of Norway as a world leader in cross country skiing, and that their highest level skiers were included in the study, then the findings for them should be the most telling. In this top group, nearly one in five felt great expectations from their parents, while no-one expressed this in the lowest performance group. The middle performance group figure fell approximately mid-way. Simultaneously, the top group showed the lowest degree of

uncertainty (27.0%), while the middle group figure was 47.8%, and the low group was fully 76.0% uncertain.

These results should speak loudly enough, but are, however, weakened by the internal state of affairs being directly opposite in the USA. Here there may lie tacit cultural differences that are problematic to unravel. A possible explanation could be that the generally larger proportion of great expectations in the US may be an expression of a hidden, even more elevated level of expectation; a level that may have tipped over to performance-impeding pressures. This would then be an illustration of the “no pain, no gain” processes embedded in the cultural history of American sport as expressed by Taylor [45] in his trenchant analysis of competitive cross country skiing in America.

6) Parental relations, main responsibility, and socio-economic status in the formative years.

More than 9 of 10 skiers in the study, both in Norway and the United States, grew up with both parents. This is illuminating in that the divorce rate in these two countries is high, and that child custody after divorce is rarely shared. What, then, does the divergent skier family-context mean?

The family in both countries has been viewed as an important condition for the child’s experience of security and stability, and as decisive for positive growth and development. In Norway, the centrality of cross country skiing as a deep phenomenon of cultural tradition has meant that this element has also been a valued element of family life. As such, it has not needed any defense or justification; energy-demanding processes that subcultural patterns often require. That the findings of the present study are not unusual is corroborated by other investigations where 90 – 100% of athletes grew up with both parents present [6, 12, 17].

In the modern family, with increased pressures for gender equality and enhanced material resources, both parents tend to be occupationally active. This appears to be a necessary condition for a family economy at the middle class level, which, in turn, shapes the pre-condition for an active engagement in sport for both generations in the family [6, 12, 46]. Without exception, all skiers in the study illustrate this, growing up in families from the lower middle-class socio-economic level and up. In Norway, as many as 93.5% of the skiers came from families in the middle of the three sub-categories of

middle class, and upward. For the United States, this proportion was somewhat less; 87.9%; perhaps a modest contributory factor to the performance level difference between the two countries. In this regard, it should be noted that 7.4% of the Norwegian skiers came from an upper class background, whereas there were no American skiers from this socio-economic level. That no skiers in either country came from a lower class background was not unexpected; cross country skiing, with its material culture under constant development, requires considerable financial resources.

CONCLUSIONS

When more than 9 of 10 of the best cross country skiers in Norway and nearly 3 of 4 in the United States were **often together with the family on skis in childhood**, then this stands out as an important and basic condition for reaching the high levels of this sport. The action of the parents in this highly formative period of their children's life is a convincing expression of parental engagement and socio-cultural position. The difference in the national figures may, however, reveal part of the rationale for the general lack of U.S. international success in cross country skiing. The 19.2 percentage points lower figure for the United States skiers indicates a lesser parental involvement. On the other hand, a more general condition for parent influence is that more than 9 of 10 in both countries **grew up with both parents**. The strong family relations implied in an intact family setting may, then, be viewed as the foundation for the committed development process behind the high achieving skiers in the study.

Continued security and stability throughout the lengthy childhood phase appear to be decisive contributions facilitating the personality growth and development so necessary for success in this unusually complex Olympic sport. Part of this security and stability has found its source in the **skiing-families' socio-economic status** which has been sufficiently high to meet the requirements for costly ski-equipment and transport. Yearly model-changes in skis related to different techniques and snow conditions should be noted as a particular economic burden. Approximately 2 of 3 of the skiers in the study have grown up in medium category of the three levels of middle class used

in the investigation, with 1 of 3 in the upper middle class. Here there were no significant differences between the two countries.

The social and economic structure of the family of the successful skier confirms the findings of the broader study of the background of elite Swedish athletes by Carlsson [10].

The strongest confirmation of the importance of the parental role was found in the response to **“(m)y parents have supported me in my efforts in cross country skiing**. When virtually all the Norwegian skiers and 9 of 10 American skiers concurred, then this feature shows itself as one of essence. The parental role can hardly be more powerful in its contribution to facilitating optimal conditions for the development of high skiing achievements. However, a general perception, such as is generated by the questionnaire statement above, needs to be complemented by skier reference to concrete actions by parents. Other investigations in sport indicate that transportation to and from training and competition compose one of the most important parental support functions. In the present study, this is concretized in the response to the statement: **“My parents drove me to most training sessions”**. As many as 9 of 10 (89.8%) of the Norwegian skiers are in agreement, whereas the numbers in the United States fall to below 2 out of 3 (64.3%). This 25.5 percentage point difference in favour of Norway is further reinforced by that nearly three times as many Norwegian skiers as American, lived under 5 km from the ski trails. But this is not the entire story. In the categories of the longest distance of trails from home (more than 10 and 20 km.), the relationship is converse; more than three times as many U.S. as Norwegian skiers had these long distances to travel in order to ski-train. In addition, all Norwegian skiers were driven by their parents these long distances, while this was the case for only 1 of 4 American skiers. Here it is possible that in the United States parents in the ski-group shared driving tasks, providing a mixed group-situation where skier interaction could lead to positive anchoring effects in the sport, as an alternative to the bonding possibilities of family driving.

Parents as role- and culture-carriers of an achievement culture was mapped partially by the responses to the statement: **“One or both parents have been competitors in cross country skiing”**. A more specific performance-oriented query could hardly be posed. Close to half the respondent skiers in both countries answered affirmatively, confirming the weight of this contribution to shaping an identity of

striving, specifically for cross country skiing. The experience-based knowledge and insight of parents with racing background would not only have been of benefit to their family, but also to others in the sport with whom they unquestionably would have come into contact. It was, however, unexpected that the highest level group in Norway had the lowest proportion with such parents, with just over 1 in 3. Other factors, then, must be brought into the explanation for the extreme success that this group has achieved. In reference to the Breivik & Gilberg [6] study, their figures showed the Norwegian world elite group placed about midway between Group 1 (35.1%) and the overall figure (48.6%) for the Norwegian skiers in the present investigation. In other words, there appears to be a pattern whereby the very best in Norwegian sport are somewhat less likely than those close to the top, to have parents with competition background in their specific sport.

It could be expected that the sizeable parental engagement would be experienced as an expression of great parental expectations by the athletes. This, however, does not appear to be the case; the contrary is more evident. Only approximately 1 in 10 (11.2%) in Norway, and 1 in 3 (33.6%) of the U.S. skiers agreed with the statement: **“My parents’ expectations of my cross country ski performances were high”**. However, the picture is not as clear as it seems in that nearly half (47.2%) of the Norwegian athletes, and close to 4 of 10 (38.3%) of the American skiers were not sure how to respond to this statement. Simultaneously, though, it is seen that among the Norwegians, it is Group 1 that by far displays the highest concurrence with the statement, at nearly 2 in 10 (18.9%), whereas no-one in Group 3 does. This suggests that for extreme performance, skier perception of high parental expectations may, in some cases, be part of the developmental foundation.

In the United States, the pattern is quite the opposite. The distribution of responses appears such that it leads to a suggestion that the concept of expectations may have been experienced as too complex for many. In any case, that 57.9% of Group 3 pointed to parental high expectations, while only 30.0% of Group 1 did, merits further investigation.

The results of the parents’ status, role, and engagement are that they have in decisive terms contributed to the creation of what has been termed *“athlete families”*. The confirmation of this is not only the high level skiers in the study, but also the general sport- and ski-

specific involvement of siblings; not to speak of the foundation of athletic parents.

The total role of the family and its importance in the recruitment and development of the young appears decisive in the process of becoming an outstanding cross country ski competitor. Primary significance here in the present study, as in others referred to, is ascribed to the parents. It may well be that this is generally applicable to high level sport as such. Although the connection between family dynamics and the child's general life conditions as a foundation for the development of high athletic performance in the youth years, appears unmistakable, it must, nevertheless, be recognized that the family alone cannot fully facilitate the process to elite performance. For the tower of peak achievement, the enhancement of the expertise of sport-specific organizations and their coaches is needed.

Norway's international dominance by the generation of skiers under purview in the present study coincides with the recognition of the parental role and its significance, as here documented. The Norwegian parents have had, broadly viewed, a considerable greater involvement than those of the American skiers. This has been confirmed through the varied angles of approach taken in the study.

The broad consequences of the recognitions of the present study direct attention to the necessity of viewing sport as a result of societal contexts. More specifically, athletic performances may largely be seen as mirroring the total family condition and life situation, and as such can be a measuring rod for a society's policies directed to the family. With a well-organized and family-friendly political and economic system, a society will facilitate both broad athletic participation as well as performances at the very highest levels.

Although the present investigation corroborates the findings of other studies referred to and thus strengthens its generalizability concerning the parental role in sport, future inquiries in this realm could with advantage focus on yet other sports with a variety of hypothetical parental demands in order to delineate possible nuances of value in the parenting process of aspiring youngsters. An additional and complementary approach would be to extend the international comparative perspective to uncover further cultural underpinnings that may be of importance in the developmental voyage of ambitious young athletes.

REFERENCES

1. Abernethy B., Wood J. M., Parks S. (1999) Can anticipatory skills of experts be learned by novices? *Res. Q. Exerc. Sport.* 70 (3): 313–318
2. Babbie E. (1973) *Survey Research Methods*. Florence, KY: Wadsworth
3. Bandura A. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Upper Saddle River, NJ: Prentice-Hall
4. Bergsgard N. A. (2003) *Fornuft og Følelser. Unge, Lovende Idrettsutøvere på Spranget til En Toppidrettskarriere*. Bø, Norway: Telemarksforskning
5. Bloom B. S. (1985) *Developing Talent in Young People*. Ballantine, New York
6. Breivik G., Gilberg R. (1999) *Hvorfor de Beste Ble Best?* Oslo: Norges Idrettshøgskole, Institutt for Samfunnsvitenskap
7. Brustad R. J. (1988) Affective outcomes in competitive youth sport: The influence of intrapersonal and socialization factors. *J. Sport Exerc. Psychol.* 10: 307–321
8. Brustad R. J. (1993) Who will go out and play? Parental and psychological influences on children's attraction to physical activity. *Pediatr. Sci.* 5: 210–223
9. Brustad R. J. (1996) Attraction to physical activity in urban school children: Parental socialization and gender influences. *Res. Q. Exerc. Sport.* 67: 316–323
10. Carlsson R. (1991) *The Path to the National Level in Sport*. Stockholm Institute of Education, Department of Educational Research
11. Colley A., Elington E., Elliot, E. (1992) Sport participation in middle childhood: Association with styles of play and parental participation. *Int. J. Sport Psychol.* 23: 193–206
12. Côté J. (1999) The influence of the family in the development of talent in sport. *The Sport Psychologist.* 13: 395–417
13. Csikszentmihalyi M., Rathunde K., Whalen S. (1993) *Talented Teenagers: The Roots of Success and Failure*. New York: Cambridge
14. Dempsey J. M., Kimiecik J. C., Horn T. S. (1993) Parental influence on children's moderate to vigorous physical activity participation: An expectancy-value approach. *Pediatr. Exerc. Sci.* 5 (3): 151–167
15. Eccles J. S., Harold R. D. (1991) Gender differences in sport involvement: Applying the Eccles Expectancy-Value Model. *J. Appl. Sport Psychol.* 3: 7–35

16. Ericsson K. A., Krampe R. T., Tesch-Römer C. (1993) The role of deliberate practice in the acquisition of expert performance. *Psychol Rev.* 3, 363–406.
17. Eriksson S. (2001) *Vägen til A-landslaget*. Sweden: SVEBI:S Årsbok, Aktuell Beteende- och Samhällsvetenskaplig Idrottsforskning
18. Fry E. (1977) Fry's readability graph: Clarifications, validity, and extension to level 17. *Journal of Reading.* 21: 249
19. Gregson J. F., Colley A. (1986) Concomitants of sport participation in male and female adolescents. *Int. J. Sport Psychol.* 17: 10–22
20. Hellstedt J. S. (1995) Invisible players: A family system model. In: *Sport Psychology Interventions*. S. M. Murphy (ed). Champaign, IL: Human Kinetics. 117–146
21. Hellstedt J. C. (1987) The coach /parent /athlete relationship. *The Sport Psychologist.* 1: 151–160
22. Howe M. J. A. (1990) *The Origins of Exceptional Abilities*. Cambridge: Basil Blackwell
23. Kimiecik J. C., Horn T. S., Shurin C. S. (1996) Relationships among children's beliefs, perceptions of their parents' beliefs, and their moderate-to-vigorous physical activity. *Res. Q. Exerc. Sport.* 67: 324–336
24. Larsen T. B. (1993) *Den Evige Sne: En Skihistorie om Norge*. Oslo: Cappelen
25. Likert R. (1932) A technique for the measurement of attitudes. *Archives of Psychology.* 22 (140): 1932
26. Livingston J. S. (1999) *Harvard business review on managing people*. The Harvard Business Review Paperback Series, Boston, MA.: Harvard Business School Press
27. McElroy M. A., Kirkendall D. R. (1980) Significant others and professionalized sport attitudes. *Res. Q. Exerc. Sport.* 51: 645–653
28. Mjaavatn P. E., Gundersen K. A. (2005) *Barn – Bevegelse – Oppvekst*. Norway: Norges Idrettsforbund og Olympiske Komite og Høgskolen i Agder
29. Monsaas J. A. (1985) Learning to be a world – class tennis player. In B. S. Bloom (Ed.), *Developing Talent in Young People*. New York: Ballantine. 211–269
30. Mordal T. (1989) *Som Man Spør Får Man Svar*. Oslo: Tano
31. Nunnally J. C. (1978) *Psychometric Theory*. 2.ed. New York: McGraw
32. Power T. G., Woolger C. (1994) Parenting practices and age-group swimming: A correlational study. *Res. Q. Exerc. Sport.* 65 (1): 56–66

33. Rosenthal R. Jacobsen L. (1977) *Pygmalion i klasseværelset*. Copenhagen: Gyldendal
34. Rushall B. S., Vikander N. O. (1987) *Behavioral Inventories for Cross Country Skiers*. Spring Valley, CA
35. Scanlan T. K. Lewthwaite R. (1985) Social psychological aspects of competition for male youth sport participants: III. Determinants of personal performance expectancies. *J. Sport Psychol.* 7: 389–399
36. Scanlan T. K., Lewthwaite R. (1988) From stress to enjoyment: Parental and coach influences on young participants. In: *Competitive Sports for Children and Youth: An Overview of Research and Issues*. E. W. Brown, C. F. Branta (eds). Champaign, IL: Human Kinetics. 47–58
37. Scanlan T. K., Stein G. L., Ravizza K. (1991) An in-depth study of former elite figure Skaters: III. Sources of stress. *J. Sport Exerc. Psychol.* 13: 103–120
38. Sloan L. A. (1985) Phases of learning. In: *Developing Talent in Young People*. B. S. Bloom (ed). New York: Ballantine
39. Sloboda J. A., Howe M. J. A. (1991) Biographical precursors of musical excellence: An interview study. *Psychology of Music.* 19: 3–21
40. Soberlak P. (2001) *A Retrospective Analysis of the Development and Motivation of Professional Ice Hockey Players*. Kingston, ON: Queens University.
41. Sosniak L. A. (1985) A long-term commitment to learning. In: *Developing Talent in Young People*. B. S. Bloom (ed). New York: Ballantine
42. Spector P. E. (1992) *Summated Rating Scale Construction*. London: Sage
43. Stevenson C. L. (1990) The early careers of international athletes. *Sociol. Sport J.* 7: 238–253
44. Sudman S. Bradburn N. (1983) *Asking Questions*. Hoboken, NJ: Jossey-Bass
45. Taylor R. (2002) *No Pain, No Gain? Athletes, Parents and Coaches Can Reshape American Sports Culture*. Bethel, ME: Mechanic Street Press
46. Vaage O. D. (2004) *Rapporter 2004/13*, Norway: Statistisk Sentralbyrå
47. VanYperen N. W. (1995) Interpersonal stress, performance level, and parental support: A longitudinal study among highly skilled soccer players. *The Sport Psychologist.* 9: 225–241
48. Weiss M. R., Wiese D. M., Klint K. A. (1989) Head over heels with success: The relationship between self-efficacy and performance in competitive gymnastics. *J. Sport Exerc. Psychol.* 11: 444–451.