The Influence of Sport-Identity Formation on the Life Skill Ability Perceptions of Female Adolescent Figure Skaters

by

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We accept this thesis as conforming to the required standard

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Abstract

For some athletes, making the transition from competitive athletics to other life domains can prove to be difficult. This may be because they fail to recognize that the skills they learn within the sport domain are sometimes generalizable to other life domains. In this study, figure skaters' abilities to recognize generalizable life skills within the context of figure skating skills were tested, and it was found that their abilities were somewhat lacking. When asked to rate themselves on a life skills inventory, and then again on an inventory that listed the same life skills contextualized within skating language to look like figure skating skills, they rated themselves significantly higher on the figure skating skills. The more they were figure skating-identified, the more they tended to do this. It was also found that certain skills were significantly more recognizable than others for the skaters. Finally, research and practical implications, limitations, and suggestions for the future development of instruments devised in this study were discussed.

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To Marie with love,

I couldn't have done it without you!

CHAPTER ONE

Introduction

Successful participation in competitive sport may be described as requiring a long-term commitment to many hours of practice per day, and as sometimes requiring athletes to begin at an early age. It is generally believed among sport researchers that participation in competitive sport has an effect on the psychosocial development of children into adulthood (i.e., Baillie, 1993; and Danish, Petitpas, & Hale, 1993). More specifically, it is generally believed that sport participation has an effect on identity formation (i.e., McPherson, 1984). Further, sport researchers also believe that some skills athletes learn in the area of competitive sport are generalizable to other present or future life domains such as the classroom or the boardroom (Danish, Petitpas, & Hale, 1993; and Pravitz, 1982).

These beliefs are of interest to career counsellors and sport psychologists who are working with athletes leaving competitive sport, athletes who are in career transition. If these practitioners are going to work effectively with this population, they must keep themselves current on information regarding the influence of sport on athletes as they develop within the sport domain. They must be aware of the specific problems, needs and concerns athletes have when they make their transitions out of competitive sport.

The particular problem of interest to this study, and which is related to both psychosocial development and the generalizability of life skills, is that athletes who experience difficulties while making the transition out of competitive sport frequently claim they have do not have the skills necessary to be effective outside the sport domain. For example, their perceptions are that they have no generalizable life skills to bring with them into the classroom or boardroom (Sinclair & Orlick, 1993).

A contextualized description of the process for how athletes might get to this point can be illustrated by the following anecdotal example: Competitive figure skaters sometimes spend from age seven years onward focused on and committed to their skating career goals (for example making the Olympic team). Because these skaters sacrifice the experience of having a typical childhood in that they subordinate their social and educational needs to those of reaching their skating goals, some find that when they are finished they can only define themselves and their abilities in terms of being skaters. In other words, they become figure skating-identified. When they are forced out of their element, they feel like the proverbial "fish out of water" in that they think they have no skills to cope with their new lives, lives that demand they become more socially, vocationally, and/or educationally identified.

If skills the skaters learned by participating in

competitive skating are generalizable to other life domains, then it is unclear why they come to the end of their competitive careers thinking they have no generalizable life skills. What may be a concern here is that they may not always recognize a specific skill they learn in figure skating as being a more general skill that is transferable to other life domains. A further concern is that this inability to recognise the generalizabilty of skills may be brought on by over-identifying with their sport, that is by participating in their sport to the point where they cannot differentiate themselves from it. If practitioners are going to help figure skaters, or any other athletes who experience skill transfer difficulties, they may first have to determine what their abilities are in regard to recognition of skill generalizability.

Although it has been acknowledged that athletes must be able to recognize the generalizability of life skills (Danish, Petitpas, & Hale, 1993), so far no studies have been conducted that explore the abilities of sport-identified athletes to actually recognize life skills among those they have learned in competitive sport. Chapter two reveals what is to be found in the literature thus far that supports the idea of conducting a study that explores relationships between the sport-identification of athletes and their life skill recognition abilities.

CHAPTER TWO

Literature Review

The literature pertaining to sport-identification and how it relates to issues of transition from sport is sparse. However, an examination of the literature in these areas provides an understanding for the research hypotheses developed for this study. The following areas of the literature are presented in this chapter: (a) Identity formation, and how it is affected by participation in competitive sport, (b) problematic career transitions out of competitive sport, and how they can be related to athletes over-identifying with their sports, and (c) generalizable life skills, and how they are related to transitional difficulties for strongly sport-identified athletes like competitive figure skaters (the sport from which this study will draw its subjects).

Identity Formation and Competitive Sport

Identity has been defined by Waterman (1985) as "a self-definition comprised of those goals, values and beliefs which a person finds personally expressive, and to which he or she is unequivocally committed". (p.6) The assumption that sport can be a factor in identity formation has been supported by many researchers (Baillie & Danish, 1992; Danish, 1983; Danish, Petitpas, & Hale, 1990; Heyman, 1987; Kleiber & Kirshnit, 1991), and these same researchers seem to have little doubt that competitive sport has a major

influence on the development of one's identity across the life span, especially in childhood and adolescence (i.e., Kleiber & Kirshnit, 1991). Counselling practitioners working with athletes need to be aware of this influence as being different from what their other clients may have experienced during identity formation.

Part of this major influence is that commitment to competitive sport can begin quite early in life. For instance, Baillie (1992) has found that 80% of professional baseball and hockey players, and nearly half of the Olympic athletes who participate in less-mainstream sports start under the age of ten years. There are many reasons why children get involved in sports at such an early age, and among them is the idea that sport provides positive role models for children (Long, 1991). Athletes who display the characteristics of good sportsmanship, skill excellence, and being the recipient of many positive reinforcers all make attractive role models for aspiring young athletes.

Reinforcers play an especially strong part in attracting children to competitive sport. At first children are motivated to become involved in sport because they like to improve skills, have fun, play with friends, experience certain thrills and pleasures, achieve and maintain a level of fitness, and achieve success in a socially desirable activity (Gould & Horn, 1984). In short, they are motivated to participate because they are reinforced by successful

attempts to master their environments. Given this, it makes sense that they come to admire the competence of their sports heros (role models).

Eventually, as they move into adolescence, they begin a quest for a personal identity (Erikson, as cited in Danish, Petitpas, & Hale, 1993). They begin to notice how sports heroes of all ages are reinforced by significant others, personal successes, and other extrinsic rewards like prestige, the expectation of privileges and opportunities, money, and praise (Carron, 1980). As a result, adolescent athletes continue to admire sports heroes, but only because it is possible they experience the allure of attaining these rewards for themselves (Baillie & Danish, 1992). It is conceivable that if adolescents actually do attain intrinsic and extrinsic rewards for being an athlete, they may form well-defined, narrowly based identities.

Alongside the fact that sport identity formation may begin with an early age commitment to sport, and that reinforcers play a big part in it, there are several other concerns practitioners who work with competitive athletes must be aware of. In competitive sport, and especially in competitive figure skating, the sport of choice for this study, achieving proficiency requires much dedication to practise. Because figure skating is both an athletically demanding and artistically rigorous sport, skaters who choose to become skilled at what they do must also choose to

invest an enormous amount of time and energy (both psychological and physical) in their sport. Because children only have so much time and energy to spend, those who choose to go into competitive skating do so at the risk of hampering progress in regard to important adolescent and early adulthood developmental tasks that lead to forming a personal identity. These include achieving intellectual, physical and social competence, managing emotions, becoming autonomous, establishing relationships, developing more mature interpersonal relationships, clarifying purpose, and developing integrity (Chickering, 1969).

Since the nature of competitive figure skating requires skaters to spend an excess of time and energy on practising, and it therefore inadvertently hampers accomplishment of some of these developmental tasks, the consequence to these skaters may be foreclosure of the search for an identity (Marcia, 1966). Marcia's concept of identity foreclosure as applied to skaters may be described as happening when skaters commit to their sport prematurely (for example under 10 years of age as in Baillie's study), and without adequate exploration of their needs or values. Skaters choosing to defer this exploration might do so because of the demands of skating, and/or because they have been strongly reinforced by their skating. In other words, they have no reason to look outside the skating world for new activities on which to focus.

Identity foreclosure and commitment to a rewarding activity are not behaviours harmful in themselves. What is harmful is the lack of exploration that may be a result of these behaviours. For instance, the damage done by a lack of exploration into domains other than the skating world might result in skaters being unidimensional people who label themselves as "skaters" instead of "people who skate". For example a skater may fuse with her skating environment such that she no longer recognizes the boundary between where skating ends and her sense of self begins. Despite the fact that skaters may have learned many skills necessary for success in other domains, when they find themselves in a context outside of skating (like "fish out of water"), they lose confidence in their abilities.

This, of course, has major implications for when they are at the point of having to make the inevitable transition out of competitive skating (Danish, Petitpas, & Hale, 1993). In fact, this type of consequence due to over-identification with sport has been cited as a cause for trauma when many athletes leave competitive sport, and this will be covered more fully in the next section (Werthner and Orlick, 1982).

Problematic Career Transitions Due to Over-Identification With Sport

Before examining the evidence found in the literature for this topic, it is necessary to clarify the definition of "career" that was adopted for this study. This definition

is one that reflects how career counsellors have recently begun to look at it. For instance, Gysbers and Moore (1987) have defined career as being, "...self-development over the life span through the integration of roles, settings, and events in a person's life.". (p. 3) Because this lifespan approach to career is the preferred one for this study, athletes making transitions out of competitive sport will not be referred to as "terminating" or "retiring" from their careers. Rather, they will be described as making changes to, and transformations of their existing ones.

Although most athletes experience successful transitions out of competitive sport, some do not. Although there are many reasons for this, only those that serve the purposes of this study will be listed. First, some skaters and other athletes have been shown to have difficulties in making transitions out of sport because of identity foreclosure and other such processes related to identity formation (Allison & Meyer, 1988; McPherson, 1980; Werthner & Orlick, 1982) during their athletic careers. Because they choose to devote time and energy to sport, and not to exploring non-sport roles and activities, they sometimes end up feeling years behind their age cohorts in learning vocational skills, and, as a result, lack confidence that they have any skills marketable in non-sport settings.

Evidence for this lack of exploration of non-sport roles and activities has been found by several researchers

in that they have shown that many athletes fail to prepare adequately for life after competitive sport. For example, in a study by Haerle (1975) it was found that 75% of professional baseball players surveyed did not even begin to consider post-competitive life until they were in their thirties. Another study conducted with professional hockey players by Blann and Zaichkowsky (1987) indicated that more than half of the players surveyed delayed planning for their post-hockey careers even though they believed that these preparations for career transition were critical to their life satisfaction levels after hockey.

Further, 48% of college athletes surveyed by Kennedy and Dimick (1987) expected that they will have professional sport careers even though realistically speaking only 2% actually do have such careers. The athletes surveyed were so sport-identified that they did not see themselves outside of sport even though they were attending college, a place generally thought to provide training for many vocations beside sport.

This can happen for figure skaters too. They can be so totally committed to being a skater that they do not define themselves within the context of any other domain. Many fully expect they will eventually become professionals either in ice shows, as coaches, or, in the case of successful elite competitors, competitors in professional competitions. Because of this, some decide they do not need

a formal education (or any other type of vocational training), and give up exploring and planning for any future outside of skating. Although one cannot be sure this is the exact process the athletes in the Kennedy and Dimick study experienced, it is reasonable to assume that having sport identities had something to do with their lack of exploration around non-sport roles and activities.

Evidence that further reinforces the above notions can be found in a study by Greendorfer and Blinde (1985). The findings from this study indicated that as athletes move through the collegiate system, and become aware that they may not become professional athletes (for example, begin to let go of their sport identities), the significance of education increases for them while the significance of sports decreases. In other words, as they become less sport-identified, they become more willing to explore the educational domain. This of course implies that as identification with sport decreases, the willingness to explore other roles and activities like that in education increases.

At any rate, not all competitive athletes are currently getting some form of education. Due to the situational demands of their sports (for example, time and energy needed to achieve excellence), many choose to forgo college, university or other vocational training until they have stopped competing. This delay in training until a more

advanced age means that they will have even more of their identities tied up in sport. This is because the limited amount of knowledge they will have due to curtailing their educations will make it less likely that they will explore new roles and activities. Unfortunately this limited tendency to explore will make it more difficult for them to successfully make transitions out of sport (Danish, Petitpas & Hale, 1993).

Fortunately, national sport organizations (NSOs) are beginning to recognize how pressure exerted by them becomes part of the situational demands that cause their athletes to forgo exploration in other career domains (Ogilvie, 1987). Consequently they are beginning to take more responsibility for helping athletes make easier transitions out of competition (Thomas & Ermler, 1988). For example, the Canadian Figure Skating Association's Director General openly acknowledged this responsibility during a televised broadcast of the World Figure Skating Championships in March, 1994. This and other events are timely because Sinclair & Orlick (1993) recently demonstrated that athletes want and expect NSO help with their transitions.

At the same time, coaches and sport psychologists are beginning to recognize that they too must contribute to the actual process of helping in this growing area of concern (see Ogilvie, 1987). Although it is not within the scope of this study to outline all the ways in which they might help,

it is appropriate to outline the role of generalizable life skills in making transitions from competitive sport, and how practitioners might gain insight into how they can help athletes to recognize them.

Generalizable Life Skills: Recognizable Within the Sport Domain?

Before a discussion on the recognizability of generalizable life skills within the sport domain is presented, it is appropriate to first present an operational definition of the term "generalizable life skill" as will be adhered to in this study. Keeping in mind that Bolles (1981) has shown that skills acquired in one domain do not automatically transfer to other domains, Bolles states that a skill is transferable, and hence "generalizable", when it describes "how people act on information, people and things". (p. 43)

To further this definition of terms, the second word, "life", is synonymous with the word "career" (as previously defined in the last section), and the last word, "skills", can be clarified by Bartsch & Sandmeyer's (1979) description of what they think a skill is. They have looked at a skill as being something that can be learned, that varies in levels of attainability, is functional, builds confidence, and requires practice.

Also necessary for a further definition of terms is a clarification regarding the phrase "life skill." Smith

(1985) believes that life skills are those that enable a person "to become a balanced self-determined person" (p. 1), and he has developed an elaborate life skills taxonomy. Examples of skills which can be found in the taxonomy, and which further enhance understanding of the operational definition of the term "generalizable life skills" include: performance skills, goal-setting skills, application of learning skills, organizational skills, and time management skills.

Many studies have emphasized the identification of generalizable life skills as being important to any successful career transition regardless of domain (for example Pickman, 1987, in a study on ballet dancers, and Stump, 1986, in a study on skills required for tomorrow's jobs). More specifically, many studies have also emphasized the inclusion of generalizable life skills for consideration when choosing interventions for athletes in transition (for example Danish, Petitpas, & Hale, 1993).

Danish, et al. (1993) have recommended many interventions for helping athletes make transitions from competitive sport careers. They distinguish among these interventions by determining when they should be employed. Interventions that happen before transition from sport are called "enhancement strategies". Those that happen during transition are called "supportive strategies", and those that happen after are called "counselling strategies".

The enhancement strategies Danish et al. have described include those that help athletes to transfer skills from one domain to another. They describe seven factors that must be present for skills to be transferable, or generalizable across various life domains. The one that is of most use to this study is the first one:

> "Athletes must believe they have skills that are valuable in other situations, and understand that they are transferable.". (p. 368)

Danish, et al. (1993), fail to address one important issue regarding athletes and their beliefs and understanding about skills. As already suggested, for athletes to believe they possess valuable, transferable skills, they must first be able to recognize the similarity between what they see as sport-specific skills and what they see as generalizable skills required in other life domains. Because many athletes are strongly sport-identified and do not explore many situations outside the concrete realities of their specific sport worlds, they may not easily recognize patterns common to all situations, athletic or otherwise. Consequently they may sometimes come to view the skills they learn in their specific sports as being idiosyncratic to these sports.

This is one possible explanation for why some athletes perceive they lack generalizable life skills; they are unable to recognize that many of the sport-specific skills they have learned are really specific versions of general

skills that may be applied to many settings. It follows that if they cannot see the parallel between sport skills and these generalizable life skills, they will fail to see sport skills as being valuable in other settings, and will therefore not see them as being transferable to other life domains. This lack of skill recognition is significant because it may cause athletes to lack confidence, or feel inadequate when they attempt to move from competitive sport to another domain.

Something to note is that athletes who do recognize that they have generalizable skills appear willing to actually transfer these skills (Sinclair & Orlick, 1993). In fact, Sinclair and Orlick (1993) have shown that most athletes would like to have access to services that include opportunities to learn how to transfer mental skills training to new career interests, and suggestions for how to feel more confident and competent in new situations.

Further, it appears that many athletes actually have the ability to transfer the skills they recognize themselves as having. Forty-nine percent of the individuals in Sinclair and Orlick's (1993) study who were already engaged in mental skills training for their sport were able to apply this training to their new focus of interest. The question of interest here is, why were the other fifty-one percent unable to apply their training? The possibility exists that although some athletes may be willing and/or able to

transfer skills, they may have skill recognition disabilities that hamper interventions designed to help them do this. Athletes with skill recognition disabilities would not experience easier transitions from sport simply by creating in them a willingness or an ability to transfer skills.

In summary, what appears to be missing in the literature regarding intervention or enhancement strategies designed to help athletes transfer generalizable life skills, is the acknowledgement that there may be a problem for some athletes regarding their abilities to recognize these life skills within the context of sport-specific skills. It is this gap in the literature that this study was designed to address.

Rationale for the Study

Given the apparent lack of research regarding sport-identified athletes' abilities to recognize generalizable life skills among the skills they learn within their sport domains, there is an obvious need for studies to begin exploring this topic. One possible procedure for beginning this exploration is to (a) target a specific group of athletes who identify with, or are committed to a certain sport, (b) measure their perceptions concerning what levels of ability they possess in regard to certain generalizable life skills, (c) measure the same in regard to certain

sport-specific skills that could be interpreted as specific examples of generalizable life skills, and, (d) test these measured perceptions for significant differences.

The present study attempts to implement this procedure in that it examines the influence sport-identification has on the ability perceptions that adolescent female figure skaters hold regarding both certain generalizable life skills and these same skills as they exist within the figure skating domain.

It is hoped that this examination will provide a springboard for further exploration of the generalizable life skill recognition ability of athletes. It is also hoped that it will stimulate discussion among coaches, parents, and sport administrators regarding who should be responsible for cultivating these abilities in athletes so they may avoid future career transition difficulty.

Research Hypotheses

Two hypotheses are tested in this study. First, it is hypothesized that there will be a significant difference between how figure skaters perceive their abilities regarding generalizable life skills, and how they perceive these same skill abilities when they are contextualized within the figure skating domain.

Second, it is hypothesized that differences in skill ability perceptions will vary significantly with the degree to which the skaters are figure skating-identified, and/or committed to figure skating.

CHAPTER 3

Method

Subjects

The subjects were sixty-three 13 to 18 year old female figure skaters training in the Vancouver Island region. To ensure that subjects included those skaters who were at least minimally figure-skating identified, they had to meet the following criteria: They had to, 1) have passed their First Figure and Preliminary Freeskate tests (i.e. attainment of a proficiency level as set by the Canadian Figure Skating Association only those who are dedicated to figure skating can attain), 2) be training a minimum of 5 hours per week (the minimum amount of time most coaches require their students to spend in order to achieve positive results), and 7 months per year (the length of most winter season schools), and, 3) have been involved in figure skating for at least 2 years (i.e., long enough to show commitment and/or adherence).

Procedure: Creation of Instruments

It was thought that a workable proposal for testing research hypothesis #1 would be to compare the skaters' perceived abilities via self-ratings on a questionnaire containing items using generic language to describe generalizable life skills, to their perceived abilities via self-ratings on a similar questionnaire containing items using skating-specific language to describe the same skills. The rationale for this comparison was to make possible an exploration of the subjects' skill recognition abilities by examining the degree of match, or relationship between their self-ratings on each questionnaire.

At the time this study was designed, there were no locatable sport psychology or career counselling questionnaires that would do the specific kind of testing necessary for making the above comparison. Because of this, the first thing that needed to be done was to create these instruments. Ultimately the instruments that were created were two 21-item questionnaires that requested subjects to rate their skill abilities on a 5-point Likert-type scale.

The first instrument, which is called the "Generalizable Life Skills Ability Inventory" (GLSAI), was written in language that would be easily understandable to 13 to 18 year olds. It asked the skaters to rate themselves on generalizable life skills commonly believed to be necessary for success in most life domains. Table 1 lists

all of the generalizable life skills that were used for creating the rating questions. They were chosen from a list of life skills Danish et al. (1993) have put forward as being valuable across settings such as those found at work, school, or the sports arena. They have also been located in the taxonomy of life skills compiled by Smith (1985). Smith developed his taxonomy in order to aid students in determining which skills they must learn and/or improve, to help life skill coaches sequence their lesson plans, and to assist practitioners in evaluating their life skill interventions and/or programmes. The taxonomy lists 222 elementary skills which can be combined into more complex skills. All life skills used in the rating questions are examples of these complex skills.

Sample 1 shows what an item from the GLSAI looks like (see Appendix A for a complete sample copy of the GLSAI).

Sample 1

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
A. Perform well under any pressure you may put on yourself	1	2	3	4	5

The second questionnaire, called the "Figure Skating Skills Ability Inventory" (FSSAI), asked the subjects to rate themselves on exactly the same life skills as those

TABLE 1

List of Generalizable Life Skills Used as Models for Items on the GLSAI

1. Time Management
2. Goalsetting
3. Handling Pressure
4. Commitment-making
5. Self-evaluation
6. Problem Solving
7. Concentration
8. Self-organization
9. Handling Failure and Success
10. Determination
11. Risk-taking
12. Flexibility
13. Application of Learning
14. Decision-making
15. Tolerance
16. Cooperation
17. Creativity
18. Persistence
19. Positive Thinking
20. Self-discipline
21. Responsibility

found on the GLSAI (i.e., the items matched those on the GLSAI). However, these skills were framed and presented within easily understandable language taken from the figure skating world so that subjects would not necessarily recognize them as being the same skills they were exposed to on the GLSAI.

Sample 2 shows the FSSAI matched item for the GLSAI item in Sample 1 (see Appendix B for a complete sample copy of the FSSAI. The order of the items in the FSSAI are reversed from those in the GLSAI).

Sample 2

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
U. Skate your program well in a competition that is really important to you	1	2	3	4	5

The overall wording of the questionnaires was carefully scrutinized in order to avoid any language artifacts that would confound the results obtained after administering the questionnaires. An example of this carefulness is observable in Samples 1 and 2. The words used for the rating scale ("Excellent", "Good", etc.) were chosen because they are exactly the same rating words (with the exception of the words "No Skill") that skating judges use to evaluate skaters taking skating tests.

The same type of caution was used in wording the skill items in that they were worded using terms commonly found in both the life and the figure skating domains. It was hoped that this type of scrutiny would make the rating procedure more easily managed by the subjects.

In order to test research hypothesis #2 (which stated that skill ability perceptions would vary with how much skaters were figure skating-identified) an instrument was needed that could reliably measure how much a skater is figure skating-identified. It was thought that asking skaters to report information regarding their length of involvement in figure skating, their starting ages, how much time they spend training, the percentage of their friends within the sport, and the sport's perceived importance to them would be sufficient for estimating how figure skating-identified the skaters were. (See Appendix C for a sample copy of the Sloat Figure Skating Inventory, i.e., SFSI).

Also, in order to collect some ideas for use in revision of the SFSI for future studies, a question was added to it that requested skaters to do the following:

> "Please write a paragraph about what it means to you and your family that you are a figure skater."

The same scrutiny of language was needed for finalizing this questionnaire, and again, language that would be

familiar to the skaters was used wherever possible. After creation of the GLSAI, FSSAI and the SFSI was finalized, they were checked for language clarity, construct validity, and similarity between the matched items. They were checked for language clarity and construct validity by asking six or seven skaters who met the subject criteria to read items from these questionnaires and to give feedback on what they thought the questions were asking (i.e., their perceptions regarding meaning).

The matched items for the GLSAI and FSSAI were checked for similarity by comparing obtained feedback from thesis committee members, fellow students and coaches, and the above mentioned skaters. If there was not a high degree of perceived similarity between the meaning for each GLSAI item and its matching FSSAI item, the items were revised until there was no further ambiguity regarding meaning. Some items were discarded because of difficulty in developing matched items.

Procedure: Administration of Instruments

Once the questionnaires were adequately checked, and permission had been obtained from all appropriate organizations (i.e., the university's human subjects committee, and the Vancouver Island Regional Committee for figure skating), a trial administration of the instruments was conducted using a similar procedure to that outlined

below for testing procedure. This was done in order to identify any need for correction in procedure before starting the actual testing.

For the actual testing procedure in the study, I played the main role, and it went like the following: First, I repeatedly visited three out of four possible spring training sites on Vancouver Island and handed out consent forms which included an introduction to the study (see Appendix D for a sample copy) to any skater who met the criteria for participation in this study (i.e., the skater must have passed her First Figure and Preliminary Freeskate tests, must be training a minimum of 5 hours per week, 7 months per year, and must have been involved in figure skating for at least two years). I accompanied the handing out of each form with a verbal request that the skater take it home, consider participating in the study, and bring it back with both her own and a parent's signature if she wished to participate when I returned.

This was done after having made prior arrangements with the club coaches so they would not think I was in any way soliciting their skaters as pupils for myself. (I was also a figure skating coach at the time of this study.)

When I arrived back at the training sites to administer questionnaires to anyone who wished to participate, I did so by setting up a private place for the subjects to fill out their questionnaires (i.e., the coaches room, a quiet

dressing room, etc.). Next, while reminding them that they still had a right to refuse participation, I collected consent forms from, and gave test packages to, the subjects as they came in for testing. Each subject was given a test package containing three questionnaires in the following order for completion: GLSAI, FSSAI, and SFSI.

To ensure anonymity, and therefore confidentiality, subjects did not place their names on the questionnaires. Each test package article was marked with the same number for the purpose of reassembling each subject's package, and each package had a different number known only to the subject.

To control for order and/or other confounding effects, the subjects were asked to fill in the questionnaires in the order they received them, to make sure they did not consult others while filling them out, and to be as honest about their ratings as they could be. When subjects were finished filling out their questionnaires, they were asked to drop them in a box. The packages were reassembled later by matching up the numbers on the questionnaires. The scores were then entered into a data file and prepared for data analysis.

CHAPTER FOUR

Results

Research Hypothesis 1

In order to test what was predicted in the first hypothesis, a Student's *t* test for paired samples was conducted using SPSS (as was all statistical testing in this study) to assess if there was a significant difference between mean scores obtained for subjects' self-ratings on the GLSAI, and those on the FSSAI. (Alpha levels were set at $.05_{2\text{-tail}}$ for all testing in this study.) It was found that there was indeed a significant statistical difference between GLSAI and FSSAI mean scores, $t(62) = 3.7$, $p < 001$.

Directionality of this significant result is easily determined by looking at Figure 1 which shows how, on average, the subjects rated themselves lower on generalizable life skills as described in generic, everyday terms, ($M_{GLSAI} = 3.7$), than they did on these skills when they were contextualized within figure skating-specific language, ($M_{FSSAI} = 3.82$).

Several post-hoc analyses were conducted using the GLSAI and FSSAI data. For instance, *t* tests and bivariate correlations (Pearson *r*) were carried out to determine specifically on which skills the skaters were more likely to rate themselves differently.

Figure 1

Mean Scores for Self-Ratings on the GLSAI and FSSAI

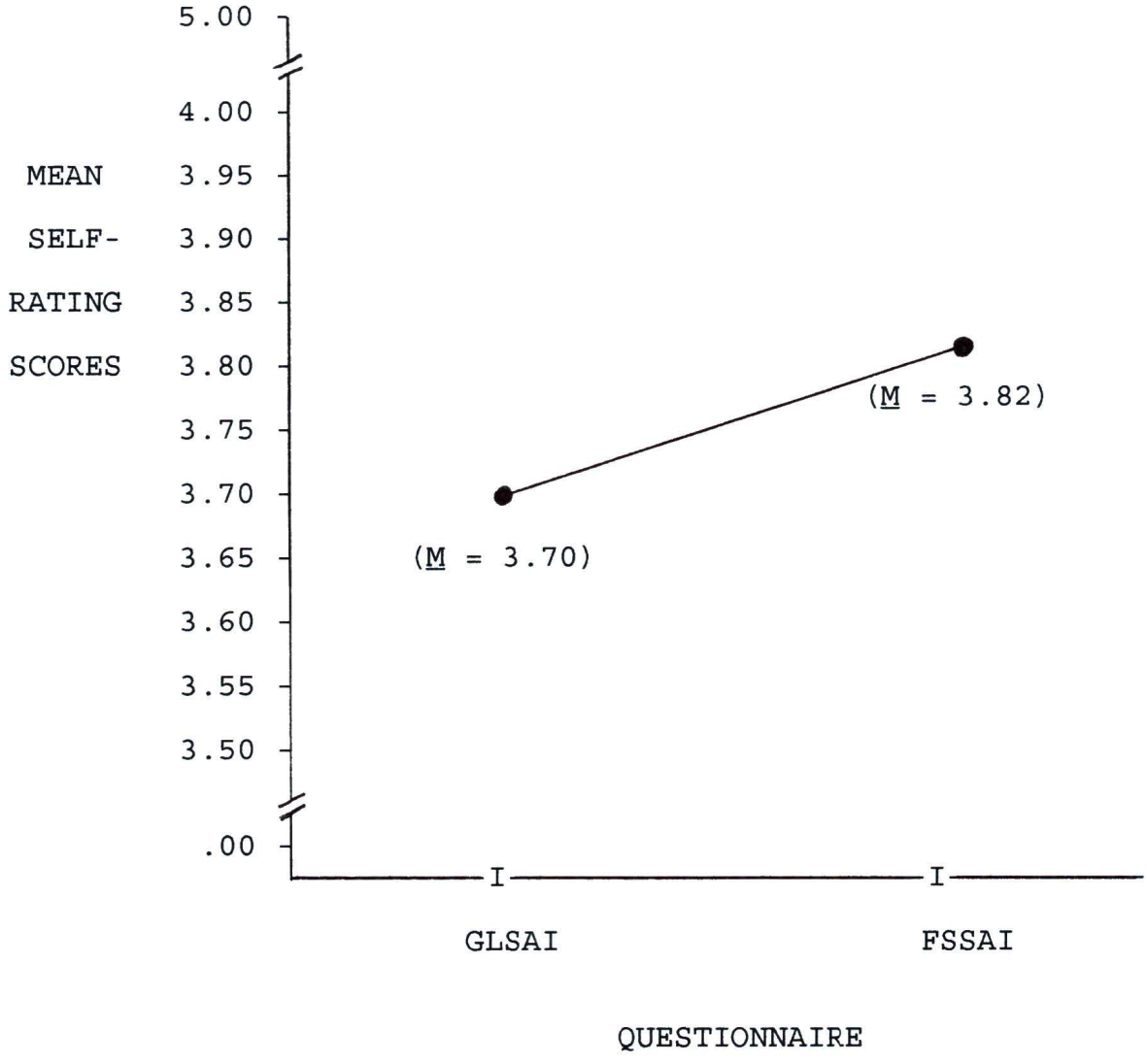


Table 2 contains the mean and correlational results for each of the 21 generalizable life skill questions as compared with their figure skating matched counterpart items. It reveals that there were 6 life skills that were perceived as generalizable from the skating world to life in general. These were the following: ability to apply learning, $t(62) = 3.09$, $p = .003$, ability to make a commitment, $t(62) = 2.25$, $p = .028$, ability to be determined, $t(62) = 2.77$, $p = .007$, ability to handle pressure, $t(62) = 2.97$, $p = .004$, ability to manage time, $t(62) = 2.2$, $p = .032$, and ability to be tolerant, $t(62) = 2.14$, $p = .036$.

Table 2 also reveals that all correlations among ratings for each of the generalizable life skill questions and their figure skating counterparts were significant except the following items: ability to apply learning, $r_{aplearn} = .22$, $p = .09$, ability to make a commitment, $r_{commit} = .2$, $p = .11$, ability to problem-solve, $r_{probslv} = .22$, $p = .08$, and the ability to be responsible, $r_{respons} = .22$, $p = .09$.

Another set of post-hoc analyses were conducted after the skaters were split into two groups. They were either assigned to a "figure skating-identified" group (Group 1), or a "figure skating-semi-identified" group (Group 2). A large majority of the skaters were assigned to group 1 (48 skaters), and those that had barely met the participant selection criteria for the study were assigned to group 2 (15 skaters).

TABLE 2

Means, Mean Comparisons, and Intercorrelations for Each Generalizable Life Skill as Compared with the Figure Skating Counterpart

	GLSAI	FSSAI	t	r
1. Time Management	3.92	4.15	2.20*	.56***
2. Goalsetting	3.60	3.64	.42	.49***
3. Handling Pressure	3.56	4.00	2.97**	.20
4. Commitment-making	4.08	4.32	2.25*	.34**
5. Self-evaluation	3.71	3.68	.24	.49***
6. Problem Solving	3.79	3.67	1.01	.22
7. Concentration	3.44	3.45	.15	.53***
8. Self-organization	3.73	3.91	1.52	.39**
9. Handling Fail. & Succ.	3.71	3.87	1.60	.71***
10. Determination	3.79	3.47	2.77**	.37**
11. Risk-taking	3.79	3.77	.14	.51***
12. Flexibility	3.79	3.84	.47	.54***
13. Applying Learning	3.77	4.12	3.09**	.22
14. Decision-making	3.56	3.67	.91	.43***
15. Tolerance	2.96	3.17	2.14*	.67***
16. Cooperation	4.28	4.22	.60	.45***
17. Creativity	3.87	3.79	.64	.49***
18. Persistence	4.02	3.90	1.33	.67***
19. Positive Thinking	3.53	3.58	.42	.50***
20. Self-discipline	3.69	3.86	1.45	.33**
21. Responsibility	3.92	3.70	1.87	.22

N = 63

* = Significant at p <.05
** = Significant at p <.01
*** = Significant at p <.001

In order to ensure that this was an accurate way to make the grouping split, a discriminant function analysis was conducted using the information reported on the SFSIs as predictors. One highly significant discriminant function was found, $\chi^2(6) = 53.05$, $p < .0001$. To put this in more understandable terms it means that approximately 94% of the skaters were correctly classified into groups based on both differences in the way the skaters met the selection criteria, and on the information they reported on their SFSIs.

Once the skaters were successfully assigned to their groups, a one-way MANOVA (utilizing Wilks' criterion) was used to test whether there was an overall difference on mean scores for the GLSAI and the FSSAI according to group membership. There was a large overall group effect, $F(2, 60) = 22.31$, $p < .001$. Univariate F-tests showed that much of this effect was due to a significant group difference in scoring on the FSSAI as opposed to that on the GLSAI, $F_{FSSAI}(1, 61) = 4.89$, $p = .031$, $F_{GLSAI}(1, 61) = .57$, $p = .454$ (see Table 3 for summary of all F-tests).

To further illuminate the effect that being figure skating-identified may have on skill recognition, more t-tests were conducted to more specifically illustrate what the differences in scoring looked like within the groups (i.e., mean differences, and directionality). Figure 2 shows that Group 1, the more figure skating-identified

TABLE 3

Multivariate and Univariate Differences on Mean Scores for the GLSAI and FSSAI as Determined by Group Membership

Multivariate

Test	Value	F	Hypothesis DF	Error DF	p
Wilks	.574	22.31	2	60	<.001

Univariate - GLSAI

Source	DF	SS	MS	F	p
Hypothesis	1	.105	.105	.569	.454
Error	61	11.226	.184		

Univariate - FSSAI

Source	DF	SS	MS	F	p
Hypothesis	1	.769	.769	4.88	.031
Error	61	9.618	.158		

group, rated themselves significantly higher on the FSSAI (i.e., on figure skating skills) than on the GLSAI (i.e., on generalizable life skills), $t(47) = 3.83$, $p < .001$. It also shows that Group 2, the less figure skating-identified group, did the opposite in that they rated themselves significantly higher on the GLSAI, $t(14) = 2.36$, $p = .033$.

Research Hypothesis 2

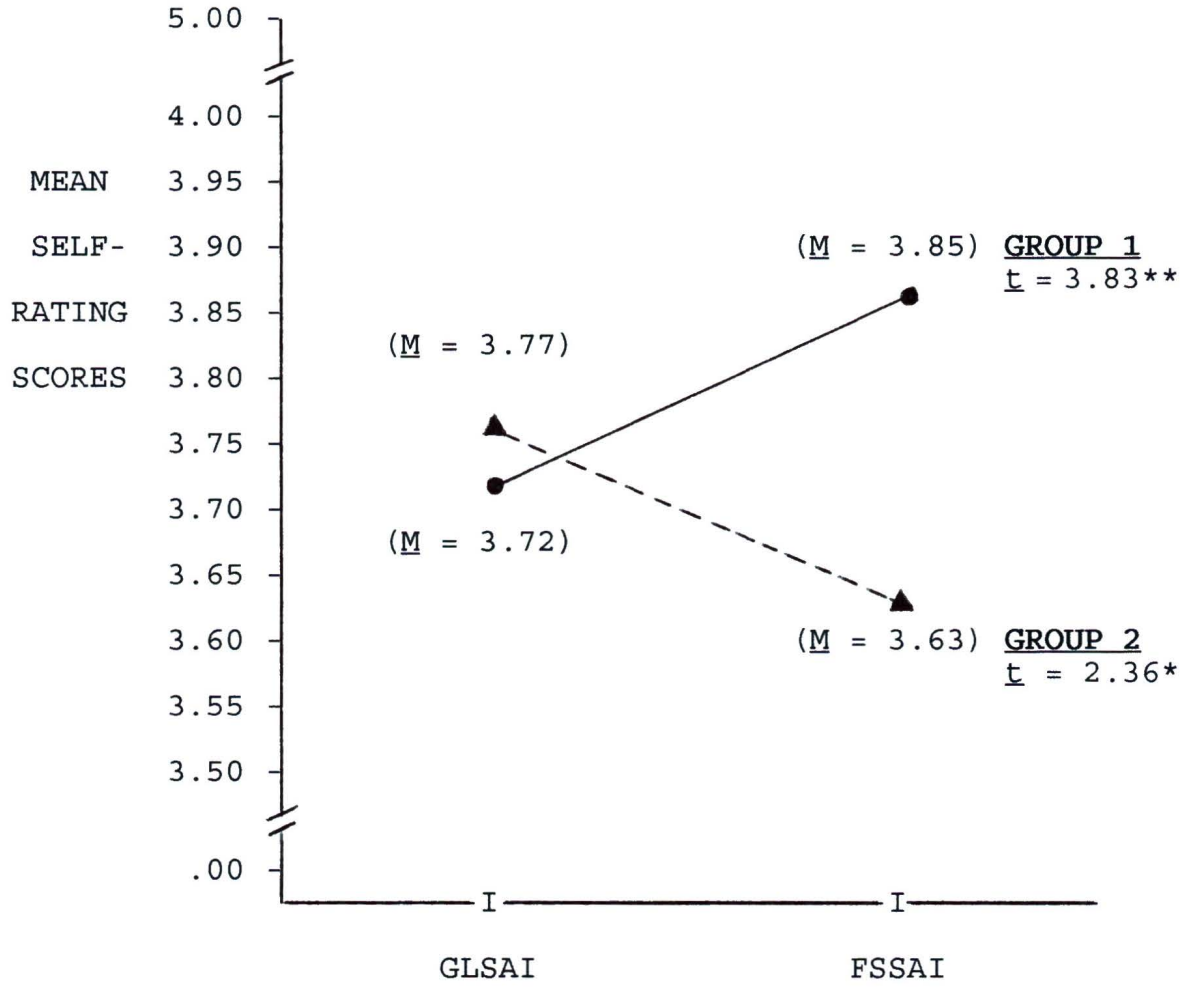
To analyze the data in terms of the second hypothesis, the first step was to determine a rating difference score for each subject by comparing her mean rating score on the GLSAI to that on the FSSAI. To give a couple of examples, if a skater got a mean rating score of 3.5 on the GLSAI, and a mean rating score of 4.3 on the FSSAI, then her difference score was .9. Conversely, if she got a 4.3 on the GLSAI, and a 3.5 on the FSSAI, then her score was -.9.

Practically speaking, these difference scores were to represent subjects' supposed abilities to recognize similarities between generalizable life skills and figure skating-specific skills. They were also to represent which direction these abilities manifested themselves, for example, did the skaters tend to recognize generalizable life skills within their skating skills, or vice versa?

The second step was to pair the subjects rating difference scores with their scores on each of the 6 predictor variables on the SFSI (i.e., age started, years

Figure 2

Mean Scores and *t* scores for Self-Ratings on the GLSAI and FSSAI According to Group Membership



n(Group 1) = 48 n(Group 2) = 15

* = Significant at *p* =.033
** = Significant at *p* <.001

involved, hours per week spent training, months per year spent training, percentage of friends involved in skating, and figure skating's importance in their lives), and then run a multiple regression test to see if there was a significant overall relationship between them. A significant relationship was indeed found between differences in self-ratings on the GLSAI and FSSAI, and the 6 predictor variables, $R = .46$, $F(6, 57) = 2.57$, $p < .03$.

The predictor variable which carried the most weight (approximately half) in establishing the above relationship was the one representing months per year spent training. However, when post-hoc bivariate correlations were carried out between the difference scores and each of the predictor variables, besides finding a significant relationship between the difference scores and months per year spent training ($r = .43$, $p < .001$), weak but significant relationships were also found for hours per week spent training ($r = .27$, $p < .03$), and the importance of figure skating in the skaters' lives ($r = .29$, $p = .02$).

CHAPTER FIVE

Discussion

Research Hypothesis 1

In support of the first research hypothesis, the results suggest that there may be a practical difference between how Vancouver Island's young female figure skaters perceive their abilities regarding generalizable life skills, and how they perceive these same skill abilities when they are contextualized within their specific sport domains. More specifically, and in support of the work done by Danish et al. (1993) on life development interventions for athletes, the results of this study indicate that sport-identified athletes may have less of an ability to recognize generalizable life skills within the sport-specific skills they learn while participating in their specific sport domains.

For instance, on average, the skaters in this study tended to rate themselves higher on figure skating skills than on life skills. Also, the skaters who were less figure skating-identified tended to rate themselves higher on life skills. These are findings that would be expected regarding rating differences and their directionality if the skaters really did have a lack of skill recognition ability due to their participation in figure skating.

The results of this study also suggest that there might

be some generalizable life skills that are more easily recognized within the figure skating domain (i.e., cooperation, concentration, positive thinking, flexibility, goalsetting, self-evaluation, and risk-taking), and some that are less recognizable (i.e., commitment making, applying learning, determination, handling pressure, responsibility, time management, and tolerance). Conversely, it could be that all the skills are equally recognizable but some are viewed as being more generalizable or transferable than others. This has potential for guiding future research.

One finding of this study that may shed light on whether or not skill recognizability did influence the skaters' responses is one that shows there are no high correlations between any of the life skill ratings and their matched figure skating counterparts (see Table 2). Although many of the correlations were high enough to be statistically significant, they are probably not practically significant. For instance, if the skaters had consistently recognized any one of the skills on the GLSAI as being the same as its match on the FSSAI, they would have rated themselves very similarly on each of those skills. In other words, a strong correlation of .8 or higher would have been expected between ratings on the two matched items. As most correlations among life skill ratings and their matched figure skating counterparts did not even approach .8 (they

ranged from .2 to .71), it is possible that rating differences among them were due to a lack of skill recognition ability rather than due to other factors such as non-belief in the transferability of certain skills.

What could be a practically significant finding of this study is that not one of the skaters indicated recognition that they were rating themselves twice on exactly the same skills. In other words, when the pairs of skill rating questionnaires were checked to see if anyone answered them in approximately the same way, none were found. It appears possible that no one recognized the general skills as corresponding to the specific skills. Obviously this is a finding that needs further exploration, and any results that could clarify what may be going on here will have implications for the treatment of those who may be experiencing problematic transitions due to skill transfer and/or recognition difficulties.

Research Hypothesis 2

In partial support of the second hypothesis, differences in skill ability perceptions did vary somewhat with the degree to which the skaters were figure skating-identified. More specifically, the degree to which skaters rated themselves higher on figure skating skills over life skills varied with how much focus, and especially with how much time they invest in figure skating. Although these

results show moderate support for this hypothesis, and it is therefore not appropriate to draw any firm conclusions, they did suggest that there may have been an identity formation factor such as identity foreclosure at work in influencing how the skaters perceived their skill abilities.

For example, if it had been somehow possible to determine that a skater who participated in this study possessed a high degree of identity foreclosure (Marcia, 1966) because of her commitment to figure skating, the expectation would have been that she show a large difference between her self-ratings on life skills, and her self-ratings on figure skating skills. The expectation would have been the opposite for a participant who was less figure skating-identified, or committed to skating, and who may have explored other activities and non-skating roles. As Greendorfer and Blinde (1985) have indicated, as sport-identification decreases, willingness to explore other domains increases. The relationship found in this study between figure skating-identification and rating differences does follow a pattern that aligns itself with these expectations, hence the suggestion that there may have been processes related to identity formation already at work among the skaters in this study.

Because the possibility exists for skaters to become over-identified with their sport due to identity foreclosure and other such processes, it is also possible that they too

may develop the problematic attitudes described earlier. For instance, because they do not want to admit the possibility of failure, and/or because they may expect to have professional skating careers (Kennedy and Dimick 1987), they may delay into adulthood consideration of post-competitive life, or planning they see as important for their post-competitive careers (Haerle 1975; Blann and Zaichowsky 1987). Alongside the possibility of developing problematic attitudes there is also the possibility they may develop behaviours (for example impatience, or negative thinking) which are not positively transferable to other domains (Parker 1994).

Research Implications

Although this study needs to be replicated, its results suggest that there is an increasing theoretical need to look at career transition as an ongoing process as opposed to an event, and as something that begins long before actual transitions are necessary. In other words, career transition must start before the necessity of making a transition comes into conscious awareness. For instance, although Sinclair and Orlick (1993) have found that not all athletes have difficulty making transitions into the "real world", many do. Of those who do, many have difficulty because, as Danish et al. (1993) have pointed out, even though most athletes do have the skills necessary to

successfully participate in other domains, they sometimes do not perceive themselves as having these skills.

How is it that athletes can come to the end of their competitive careers not knowing they possess skills that are generalizable to other areas in their lives? As suggested repeatedly in this study, one possible answer to this question is that they do not recognize some of the skills they learn in sport as being specific versions of more general skills they will need throughout their lives. In other words, because the elements of the specific skills are not identical to those of the general skills, they cannot recognise the generalizability of their sport-specific skills.

As the present study provides evidence that there may indeed be a lack of skill generalizability recognition ability in female athletes who are relatively young (the average age of the subjects was 14 years old), the need for an awareness of career transition as an early-onset process becomes salient. This comes back full circle to the research implication suggested originally, that encouraging anyone concerned to view career transition as an ongoing process that must start before the necessity for making a transition comes into an athlete's conscious awareness.

Unfortunately, for those athletes who may potentially experience transition difficulties because of poor skill recognition abilities, it appears probable that this will

indeed happen unless they can properly develop these abilities as young adolescents.

Research studies viewing career transition as an early-onset process might address the following questions:

1) Is there any preparation for career transition out of sport being attempted with young athletes? If so, what is being done, and is it being done in a manner that will eventually make transitions smoother and less traumatic?

2) If preparation for career transition is being attempted with young athletes, are they being prepared at a young enough age? What is a young enough age?

3) It seems that preparation for transition may be especially important for those who have committed themselves to sport at a very young age. Is this true? If so, is this also a problem in domains other than sport wherein children have to focus their identities at an early age, for example, as in music or dance?

4) Does age co-vary with the ability to recognize life skills? If not, is this ability something that needs to be learned because it is not an automatic bi-product of maturity?

5) What sporting and/or therapeutic alternatives for preparing these athletes can we conceive of and/or test?

6) Who is responsible for making sure that athletes are prepared for their transitions out of sport (especially if career transition may be a partially unconscious process)?

Coaches? Parents? Teachers? Sport administrators? (See Ogilvie, 1987 for further discussion.)

It seems that the answers to these questions would require that many short-term and long-term studies be conducted, and that both qualitative and quantitative techniques be used as methods of inquiry. For example, short-term qualitative studies could be conducted to get an idea of what today's issues are, and long-term quantitative studies could be conducted to test therapeutic alternatives that would acknowledge career transition as an ongoing process. Moreover, a further refinement of the reliability and validity of the instruments used in this study would make it possible to conduct more studies on skill recognition ability, and its role in the process of career transition.

Practical Implications

Given that career transition should probably be viewed as an ongoing process, and, eventually given further evidence that the findings of this study really do say something about the importance of skill recognition ability, the most obvious practical implication gleaned from this study is that young athletes should be taught how to recognize and transfer generalizable life skills.

In other words, when they finish their sporting careers they should be able to view the skills they have learned in

their sport domains as specific versions of life skills, and they should also be able to view them as transferable to other domains. To give concrete examples, when skaters are taught to set performance goals, or are being encouraged to push as hard as they can during stroking class, it should be pointed out to them that they are learning the life skills of goalsetting and determination. It should also be pointed out that these skills can be used in other areas of their lives now, and in the future at school, and eventually at university and/or their workplaces.

Of course many coaches would argue that they cannot afford to spend training time on this sort of thing. However, is participation in sport supposed to produce better athletes, or better people? If the answer is better people, coaches cannot afford to save the time.

For those skaters who are currently experiencing difficulties making career transitions, the implications of regarding career transition as a process are not too helpful. Because it is apparent that when counselling practitioners work with athletes in transition the most desirable approach would probably be to use what Danish, et al. (1993) have called "enhancement strategies" (interventions that are proactive versus those that are reactive), it is already too late to prevent any skill recognition problems for those now in transition. Also, because of the paucity of studies on this topic, and because

the results from this study are not yet conclusive, practitioners dealing with these athletes are faced with not really knowing why some of their athletes see themselves as having skill deficits.

Despite that some implications of this study are not helpful for athletes already in transition, other implications may indeed be helpful. For instance, this study could stimulate ideas for further research on practical solutions regarding skill recognition and generalizability. One such idea would be to develop what Danish et al. (1993) have called "supportive strategies" (interventions that happen during the actual move from a competitive sport domain to a new domain). Doing exploratory therapeutic work around reframing sport-specific skills as generalizable life skills would be one way of developing a supportive strategy. These strategies would be especially helpful for athletes in transition when they have not been exposed to enhancement strategies earlier in their careers.

Limitations of the Present Study

The biggest limitation of this study is that it is a prototype for studies to come. Because it was an exploratory study, and especially because it involved the creation of three new instruments, its methodology is still up for scrutiny. For instance, it is not clear how much

influence sport over-identification and/or a lack of skill recognition ability actually had on the results. Other variables such as those noted in the following paragraphs may also have been influential.

1) Language artifacts. The subjects may have been responding to the way in which the items were worded on the GLSAI and FSSAI, and not to actual differences in their abilities to recognize life skills.

2) Reliability. The information subjects reported on the SFSI may have been inaccurate because their responses were based on subjective perceptions, not on objective measures of what was actually going on for them.

3) Specificity. Related to reliability is specificity. The SFSI did not encourage the subjects to be specific enough about how much training they have done, and about what kind of timespan they have trained within. Because the SFSI only asks skaters what they are doing currently, there was no way to determine what the intensity of their experience with figure skating has been over time. Having this information would have been helpful in making more accurate determinations regarding how figure skating-identified subjects were.

4) Sampling. The sizes of the two ad hoc groups were quite unequal ($n_{group\ 1} = 48$, $n_{group\ 2} = 15$), and the subjects within them mostly came from the Victoria area. It would have been better to have a more symmetrical, possibly random

sample that represented a larger area like all of British Columbia or Western Canada.

5) Validity. There is no concurrent validity for the instruments developed in this study. To produce this validity in the future it would be necessary to replicate this study using the instruments in their present and/or modified forms. It may also be useful to magnify the scope of this study by creating expanded versions of the GLSAI and FSSAI using items incorporating life skills different from those already included.

Suggestions for Future Research

Two more suggestions are offered for future research. First, it seems possible that some of the error inherent in the results could be eliminated by further refining the measures administered to the skaters. A proposal for improving the matchability of the GLSAI and FSSAI items is to present a test sample of skaters who are familiar with the underlying postulates of the study with both the GLSAI and the FSSAI, and to have them choose which items from the FSSAI match those on the GLSAI and vice versa. This would be a useful process for checking the reliability and construct validity of the supposed matches, because any items that were constantly mismatched would be candidates for revision or elimination.

Although, as pointed out earlier, the SFSI would have been more useful if it had gathered more specific, and objective information regarding training intensity, it would be even more useful if it had broader uses in sport. For example, it could be used to survey athletes other than skaters. This would involve developing it such that it could measure more subjective processes within the area of sport-identity formation. For instance, there may be other indicators besides those that are purely objective that will reveal the degree of identification an athlete feels with his or her sport. Perhaps these indicators could be revealed by interviewing athletes, and then looking for commonalities among their responses by using a qualitative methodology to tease out common factors.

The second, and final suggestion for future research is to replicate the current study using different types of subjects, and/or by using control groups. For example, elite athletes, already retired athletes, athletes from sports other than figure skating, male athletes, athletes of both sexes, younger or older athletes, and handicapped athletes could be studied or used as participants in a control group.

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APPENDIX A

Rate Your Life Skills! (GLSAI)

INSTRUCTIONS: Please give yourself a score on the following skills by circling a number from 1 to 5. The numbers represent the following ratings:

1 = I do not have this skill

2 = I have this skill but it needs improvement

3 = I am satisfactory at performing this skill

4 = I am good at performing this skill

5 = I am excellent at performing this skill

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
A. Manage your time effectively (ie. fit your activities into your schedule)	1	2	3	4	5
B. Achieve goals you've set for a given time period	1	2	3	4	5
C. Perform well under any pressure you may put on yourself	1	2	3	4	5
D. Meet commitments you have made even when you'd rather break them	1	2	3	4	5
E. Evaluate accurately how well you are performing different skills	1	2	3	4	5

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
F. Successfully solve problems that come up during any of your activities	1	2	3	4	5
G. Concentrate or focus on what you are doing even when there are distractions in your environment	1	2	3	4	5
H. Be organized so that you are prepared for what's coming in the future	1	2	3	4	5
I. Handle failure along with success	1	2	3	4	5
J. Push yourself further even when you think you've pushed as hard as you can	1	2	3	4	5
K. Take a risk and face a difficult challenge even when you are fearful or you might look foolish	1	2	3	4	5
L. Be flexible and open about trying new ways to do things	1	2	3	4	5
M. Take what you learn about life and apply it to your activities whenever you can	1	2	3	4	5
N. Make good decisions even when you are forced to make snap (i.e. quick) decisions	1	2	3	4	5

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
O. Be patient and understanding with yourself even when things aren't going as you'd like	1	2	3	4	5
P. Cooperatively work with your teachers and the other students	1	2	3	4	5
Q. Be creative in your activities (How easy is it for you to find new ways of doing things?)	1	2	3	4	5
R. Persistently work on something until you are satisfied with the results	1	2	3	4	5
S. Stay positive and confident even when you have lots of major events coming up	1	2	3	4	5
T. Be self-disciplined about doing things properly even when nobody is checking up on you	1	2	3	4	5
U. Be responsible for your behaviour (i.e. take a look at yourself and what you might do to change how things turn out)	1	2	3	4	5

APPENDIX B

Rate Your Figure Skating Skills! (FSSAI)

INSTRUCTIONS: Please give yourself a score on the following figure skating skills by circling a number from 1 to 5. The numbers represent the following ratings:

1 = I do not have this skating skill

2 = I have this skating skill but it needs improvement

3 = I am satisfactory at performing this skating skill

4 = I am good at performing this skating skill

5 = I am excellent at performing this skating skill

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
A. take responsibility when you don't skate well due to lack of practise or bad habits during practise	1	2	3	4	5
B. push yourself to perform your skating moves correctly even when your coaches are not looking	1	2	3	4	5
C. stay optimistic and sure of yourself even when you have several important skating events coming up	1	2	3	4	5
D. work on a skating move until it's as good as you would like it to be	1	2	3	4	5

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
E. be creative with your skating (How easy is it for you to make up new ways of doing your skating moves?)	1	2	3	4	5
F. work as a team with your coach and the other skaters	1	2	3	4	5
G. be tolerant of yourself even when your skating is not progressing as you'd like	1	2	3	4	5
H. make good decisions even when you are in the middle of skating a figure or program in a competition or test	1	2	3	4	5
I. take what you learn from your coaches about figure skating, and use it in practice or performance	1	2	3	4	5
J. be open-minded about trying different ways to perform your skating moves	1	2	3	4	5
K. take a gamble and do your hardest skating moves even when you are afraid of falling or looking silly	1	2	3	4	5
L. squeeze out your best effort during skating practice even when you don't think you have any more to give (i.e near the end of stroking class)	1	2	3	4	5

Please rate yourself on your ability to:

	No Skill	Needs Improvement	Satisfactory	Good	Excellent
M. deal with losing as well as winning competitions, or failing as well as passing tests	1	2	3	4	5
N. arrange your skating sessions so you practice all the elements necessary for competitions or tests	1	2	3	4	5
O. pay strict attention to your skating even when there are many distractions in the rink	1	2	3	4	5
P. solve problems with your technique while you are working on a skating move	1	2	3	4	5
Q. correctly determine how well you are performing different skating skills	1	2	3	4	5
R. go to skating practise even when there is something else you would rather be doing	1	2	3	4	5
S. skate your program well in a competition that is really important to you	1	2	3	4	5
T. accomplish the goals you set for each skating season	1	2	3	4	5
U. your ability to fit skating into your schedule along with school, friends, and family	1	2	3	4	5

APPENDIX C

Sloat Figure Skating Inventory (SFSI)

Please proceed with answering the following questions:

1. *How many years have you been involved in figure skating?*

_____ years

2. *How old were you when you started figure skating?*

_____ years old

3. *How many months in the year are you involved in training for tests and competitions?*

_____ months of the year

4. *When training, how many hours of practise do you average per week (including off-ice skating activities)?*

_____ hours per week

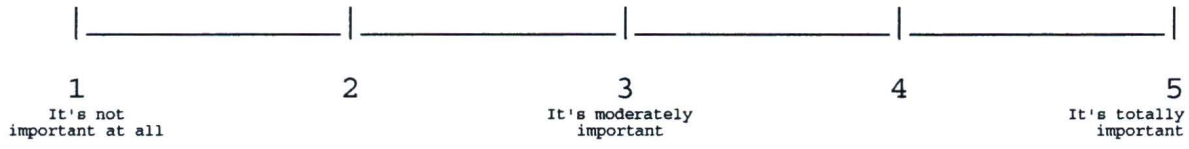
Please circle the point along the line that best answers the following question:

5. *Using a scale from 1 to 5, estimate what percentage of your friends are skaters.*

|_____|_____|_____|_____|_____|
1 2 3 4 5
0% - 20% 21% - 40% 41% - 60% 61% - 80% 81% - 100%

Again, please <u>circle</u> the point along the line that best answers the following question:

6. *On a scale from 1 to 5, how important is skating to you? (For example, how big a part of your life is it?)*



8. Please write a short paragraph about how being a figure skater affects you and your family.

THANK YOU!

APPENDIX D

Dear Skater,

Hello! I am doing a research study on career changes for athletes, and I would really appreciate it if you would participate. I can't tell you much more right now about the purpose of my study because it might affect how you respond to my questions. However, what I can tell you is that your participation will take about 15 - 20 minutes, that it involves filling out three short questionnaires which are harmless to your well-being, and that your participation might possibly help you and other skaters to make smoother transitions out of figure skating when you are at the end of your skating careers.

I would like to inform you that:

1) Your participation is voluntary, and you can stop at any time (no explanation required).

2) Your responses to the questionnaires will be anonymous.

3) I will be keeping your completed questionnaires in a locked place where no one but me can look at them.

4) If you choose not to participate, it will not be held against you in any way.

I would like to thank you in advance if you choose to participate, and to show my appreciation I would like to offer you a free candy bar after you finish filling out your questionnaires. You may also enter my free draw for an A & B Sound gift certificate if you like!

NOTE: If you would like more information on what my study is about, or you would like to know how my results turn out, sign your name and address on my mailing list after you finish.

I hereby give my consent to participate in this study;

Name:_____ Date:_____ Age:_____

Signature:_____

Parent's signature:_____

Sharolyn Sloat,
M.A. Candidate & Coach

VITA

Surname: Sloat Given Names: Sharolyn Gertrud

Place of Birth: Terrace, British Columbia, Canada

Educational Institutions Attended:

University of Victoria	1993 to 1995
University of Victoria	1984 to 1989

Degrees awarded:

B.A. (Honours)	University of Victoria	1988

Honours and Awards:

University of Victoria President's Scholarship	1985
University of Victoria President's Scholarship	1986
British Columbia Post-Secondary Scholarship	1986
Hugh E. Farquhar Memorial Scholarship (Summer)	1986
University of Victoria President's Scholarship	1987
British Columbia Post-Secondary Scholarship	1987
The University Challenge Scholarship	1987
University of Victoria Fellowship	1993
University of Victoria Fellowship	1994

Publications:

Sloat, S.G. & Hoppe, R.A. (1991). Discourse and leadership: Which is best for morale and productivity a monologue or a dialogue? Educational Resources Information Centre (ERIC), 26(10), ED 332 240.

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Title of Thesis:

The Influence of Sport-Identity Formation on the Life Skill Ability Perceptions of Female Adolescent Figure Skaters

Author [redacted]

Sharolyn Gertrud Sloat
September 1, 1995