

Actively Engaging Women and Girls

Addressing the Psycho-Social Factors



A SUPPLEMENT TO CANADIAN SPORT FOR LIFE



Canadian Association for the
Advancement of Women
and Sport and Physical Activity

Association canadienne pour
l'avancement des femmes
du sport et de l'activité physique



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Introduction

Actively Engaging Women and Girls: Addressing the Psycho-Social Factors is a supplement to the Canadian Sport for Life (CS4L) foundation documents, and complements other Long-Term Athlete Development (LTAD) resources.

CS4L is a movement to improve the quality of sport and physical activity in Canada. CS4L links the sport, physical activity, recreation, education and health systems, and aligns community, provincial/territorial and national programming. LTAD is a seven-stage training, competition, and recovery pathway that guides an individual's experience in sport and physical activity from infancy through all phases of adulthood. CS4L, with LTAD, represents a paradigm shift in the delivery of sport and physical activity in Canada. CS4L and LTAD are intentionally organic movements — as the concepts evolve, so do the resources that describe and support them.

PURPOSE OF THIS RESOURCE

The purpose of this resource is to increase awareness about the experiences of women and girls, and provide recommendations to address the psycho-social factors that influence female athlete development, leadership and life-long participation in sport and physical activity.

Women and girls, who account for more than 50 percent of the population of Canada, continue to be underrepresented in the sport and physical activity system. Awareness about biomechanical and physiological considerations unique to women and girls has increased, providing a foundation to improve training methods and competition programs for athletes. However, large gaps persist in knowledge and practice relating to the psycho-social factors that influence women and girls as participants, athletes, coaches, officials, leaders or administrators (described in more detail in Section III).

It is time to create optimal conditions and systems that support women and girls to be active at all stages of participation and competition, and in all roles.

As a catalyst for change, CS4L offers an opportunity to address the recognized shortcomings of conventional sport and physical activity programming, and the LTAD framework, to adequately address

gender differences. It is time to create optimal conditions and systems that support women and girls to be active at all stages of participation and competition, as coaches, officials, leaders and in other roles related to sport and physical activity.

TOWARDS GENDER EQUITY FOR WOMEN AND GIRLS

To create a sport and physical activity system where all women and girls lead healthy lives and have opportunities to contribute in meaningful ways, it is necessary to embrace the importance of treating people equitably, rather than equally. The concept of “equality” often results in programs and services for one group simply being made available to another. In contrast, “equity” requires consideration of the unique needs, interests and experiences of a target group when developing and delivering services and allocating resources. Therefore, some services may be the same, while others may be completely different.

Equality focuses on creating the same starting line for everyone. Equity has the goal of providing everyone with a full range of opportunities and benefits . . . the same finish line.
— DR. BRUCE KIDD

This resource provides practical tips to help to shift the focus from creating “equal” opportunities to determining how best to support women and girls so they have equitable opportunities and outcomes.

THIS RESOURCE IS FOR EVERYONE

Information in this resource will support national, provincial/territorial and community sport and physical activity organizations in enhancing their CS4L/LTAD implementation strategies. It will guide sport and physical activity leaders, coaches, educators and health promoters in developing and implementing quality

The health and well-being of women and girls, and the medals won by women at major Games, are simple by-products of an effective sport and physical activity system that values diversity and creates and supports gender-specific approaches for women and girls.

programs and providing equitable support for women and girls as a priority. Parents and family members will find this resource helpful when making decisions about how to encourage and support the full and active participation of their daughters and female family members.

A number of complementary resources for parents and family members, coaches, physical educators and organizations are available to download from the CAAWS and CS4L websites, providing practical information to influence policy and practice. Presentations and workshops to support action are available from CAAWS.

This resource’s intentional focus on women and girls is not meant to diminish gender-specific issues influencing men or boys, an area requiring further attention. Nor does this resource intend to simplify the diverse experiences of women and girls in sport and physical activity. As much as possible, the diverse experiences of women and girls have been described; however some generalizations have been used. Only through talking with women and girls to learn about their unique needs, interests and experiences can parents, coaches, educators, officials, leaders and other decision makers create optimal conditions and systems.

RESOURCE OVERVIEW

With the previous content in mind, this introductory section ends with a vision for women and girls as participants and leaders in Canada, describing the optimal conditions and outcomes. The remainder of the resource is divided into five sections:

- **SECTION I: Setting the Context: Canadian Sport for Life & the Long-Term Athlete Development Model** — this section provides a brief overview of CS4L, the LTAD model, and the concepts of Physical Literacy and Active for Life.
- **SECTION II: The Benefits and Barriers of Sport and Physical Activity for Women and Girls** — the benefits of and barriers to being engaged for women and girls, as participants and leaders, are presented, and the need for a comprehensive approach is explained through a social-ecological model.
- **SECTION III: The Psycho-Social Factors that Influence Women’s and Girls’ Involvement in Sport and Physical Activity** — this section provides information on the psycho-social factors that influence women’s and girls’ participation and leadership in sport and physical activity.
- **SECTION IV: CS4L / LTAD Through the Gender Lens** — general and specific observations linking psycho-social factors with the LTAD model are provided in this section, using an analysis based on the needs, interests and experiences of women and girls.
- **SECTION V: Recommendations for Action** — this section provides general recommendations to positively influence the environments where women and girls practice, play, compete, coach, officiate, learn and lead. Everyone has a role to play when actively engaging women and girls.

Following concluding remarks, targeted recommendations, a glossary of terms, and a list of resources are provided in the appendices.

A vision for women and girls as participants and leaders in sport and physical activity

In an ideal world, girls would have positive sport and physical activity experiences as young children (ages 0-6 years). Families would have sufficient resources to provide basic needs and integrate healthy living into their daily lives. Girls would explore being active and expressing themselves through movement, developing the skills needed to be involved in sport and physical activity through accessible opportunities and early childhood education. The messages they receive would be positive and empowering and emphasize their competence and decision-making abilities. Their first experiences with organized sport and physical education would be developmentally appropriate, supportive, inclusive and fun. [ACTIVE START]

In an ideal world, by the time girls become young women, they would have learned to correctly execute fundamental movement skills during the best possible period in their physical development. They would be encouraged to continue developing their physical literacy, and supported in choosing a pathway to Active for Life, or Competition and Excellence. Well-designed physical education programs would provide opportunities for all girls and young women to learn the skills they need. School-based physical education, sport and recreation programs would be connected with community-based recreation and high performance sport programs. Young women would feel confident and enjoy the overall health and social benefits from their participation.

[FUNDAMENTALS, LEARN TO TRAIN, TRAIN TO TRAIN, TRAIN TO COMPETE]

Imagine all Canadian women and girls engaged in active and healthy lifestyles, pursuing their participation and performance goals through recreational activities and sport, and becoming leaders in the Canadian sport and physical activity system as volunteers, coaches, instructors, officials, administrators, etc. Their involvement might ebb and flow as the demands of their families, careers and personal lives change. Real and objectively portrayed role models would have positively impacted their lives, whether in person or through the media. Imagine life-long participation and involvement; satisfying, rewarding experiences; social networks; and successful careers in sport and physical activity for women. [TRAIN TO COMPETE, TRAIN TO WIN, ACTIVE FOR LIFE]

Now let's imagine this vision becoming the reality — right here, right now . . . in Canada. Those of us committed to realizing this vision ask "If not us, who? If not now, when?" This resource is designed to enhance CS4L as a vehicle for change, so this vision can be achieved.



SECTION I

Setting the Context: Canadian Sport for Life and the Long-Term Athlete Development Model

CANADIAN SPORT FOR LIFE (CS4L) is a movement to improve the quality of sport and physical activity in Canada (see Figure 1). It links the sport, physical activity, recreation, education, and health sectors, and aligns national, provincial/territorial and community programming. CS4L's vision is quality programs for all Canadians based on developmentally appropriate sport and physical activity. CS4L's mission is to improve the health, wellness, and sporting experiences of all Canadians by advancing physical literacy, improving performance and increasing life-long participation in physical activity. When implemented, CS4L's values and principles link and integrate programs delivered by health, recreation, education and sport, and align programming in community clubs, and provincial/territorial and national sport and multisport organizations. CS4L addresses the overarching system and structure of sport and physical activity in Canada, including the relationship between physical education, school sport, and organized sport at all levels, from policy to program delivery.

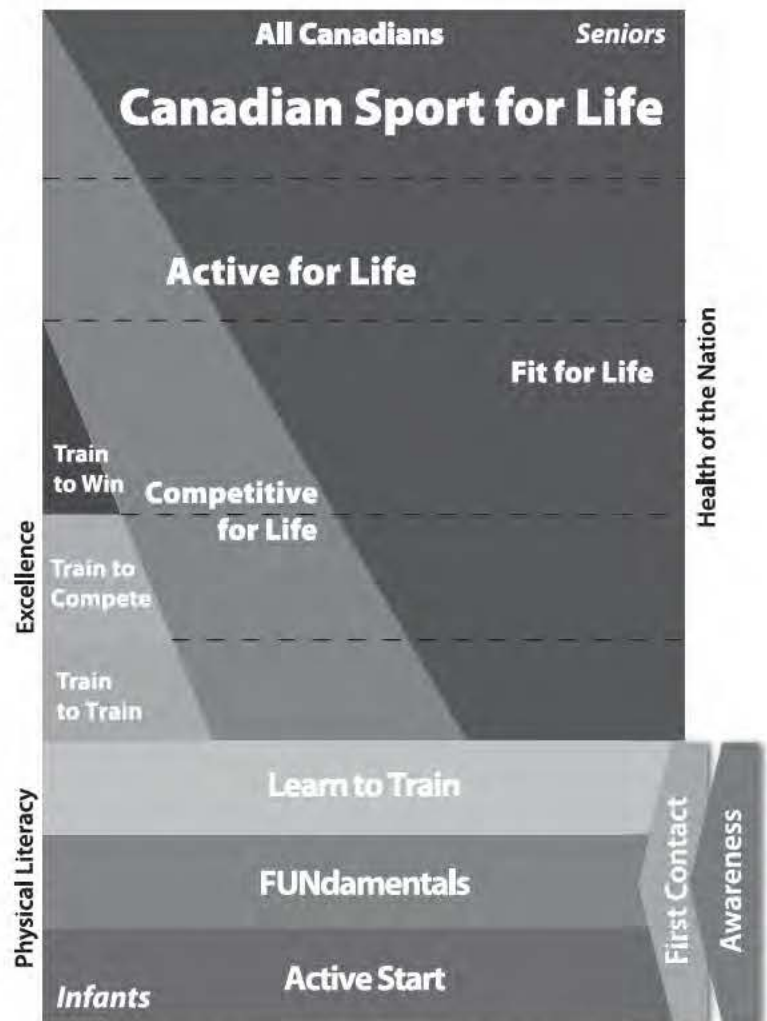


FIGURE 1: CANADIAN SPORT FOR LIFE MODEL

LONG-TERM ATHLETE DEVELOPMENT (LTAD) resides within the CS4L model. It is a seven-stage training, competition, and recovery pathway guiding an individual's experience in sport and physical activity from infancy through all phases of adulthood (see Figure 2). LTAD is athlete centered, coach driven, and supported by administration, sport science, and sponsors. Sequential stages in the LTAD pathway provide developmentally appropriate programs for all ages to increase participation and optimize performance. The key to LTAD is a holistic approach that considers mental, cognitive and emotional development in addition to physical development, so each athlete is treated as a complete person. Based on CS4L principles, LTAD, in a sport-specific context, promotes system alignment and integration between national, provincial/territorial and community sport organizations.

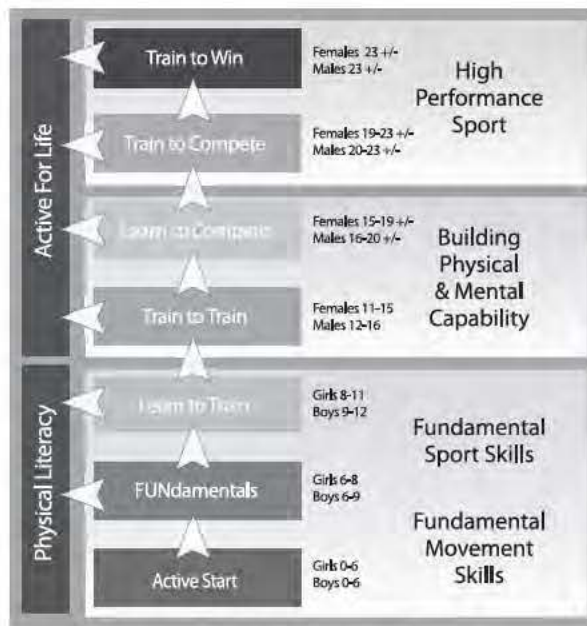


FIGURE 2: LONG-TERM ATHLETE DEVELOPMENT MODEL

PHYSICAL LITERACY has been adopted as the foundation of the CS4L concept (see Figure 3). It is the cornerstone of both participation and excellence in sport and physical activity. Physical literacy is the mastering of fundamental movement skills and fundamental sport skills that permit a child (or adult) to interact with their environment and make appropriate decisions, allowing them to move confidently and with control in a wide range of physical activity situations. Becoming physically literate is vital for those under the age of 12 years. The focus of the Active Start, FUNDamentals and Learn to Train stages is to develop physical literacy.

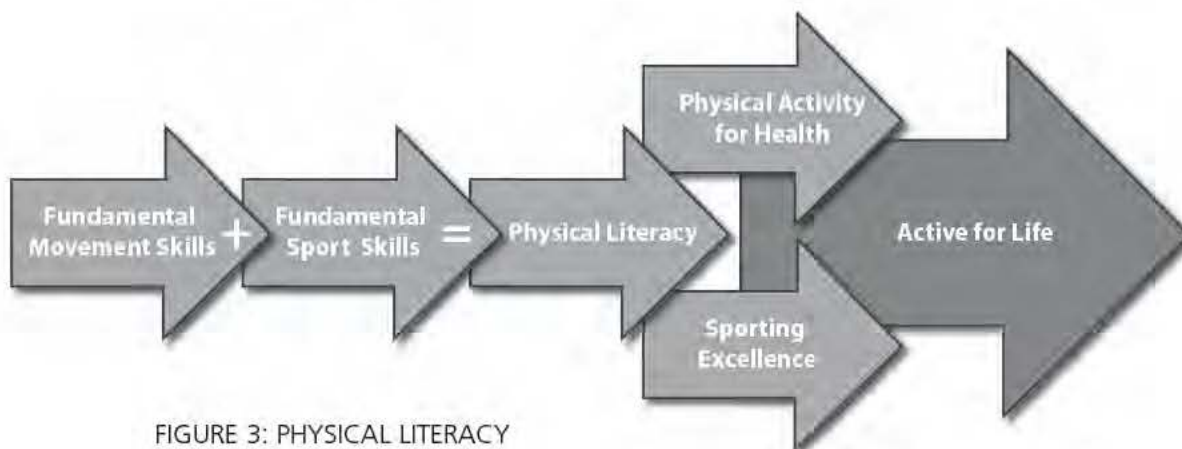


FIGURE 3: PHYSICAL LITERACY

Ensuring girls become physically literate opens up more opportunities and allows them to have more freedom to choose how they wish to use physical activity throughout their lives — to be competitive in sport, to be recreationally engaged, to simply enjoy moving, etc. Physically literate women and girls have the confidence and competence to successfully engage in sport and physical activity that enhances their physical and psychological wellbeing, and are able to pursue a level of sport excellence in line with their ability and motivation.

Individuals who are physically literate move with competence and confidence in a wide variety of physical activities that benefit the healthy development of the whole person.

(PHE CANADA, 2011)

ACTIVE FOR LIFE is an important objective within CS4L, in which Canadians build up the capacity to engage in life-long activity by developing physical literacy. Along with physical literacy and sport excellence, Active for Life is one of CS4L's three key outcomes. This stage can be entered at any age, beginning with developing physical literacy in early childhood, and supports *Competitive for Life* and/or *Fit for Life* through all phases of adulthood. Ensuring quality and diverse opportunities to be active and engaged across the lifespan is important to support this objective.

The needs of **ATHLETES WITH A DISABILITY** are also addressed by CS4L/LTAD. Persons with physical, sensory and intellectual disabilities confront both individual challenges as well as special opportunities in pursuing sport and physical activity. CS4L/LTAD describe how the Canadian sport system can best accommodate their needs for increased activity and sporting achievement. While not all athletes with disabilities will pursue competition, everyone should have the opportunity to develop physical literacy and become Active for Life.

Actively Engaging Women and Girls: Addressing the Psycho-Social Factors complements these resources and enhances efforts to improve the quality of sport and physical activity for all women and girls in Canada. For more information about CS4L and LTAD, visit www.canadiansportforlife.ca.



SECTION II

The Benefits and Barriers of Sport and Physical Activity for Women and Girls

This section provides a summary of the benefits of sport and physical activity involvement for women and girls, and discusses the barriers to involvement they confront, particularly from a psycho-social perspective.

BENEFITS OF INVOLVEMENT

Participation in sport and physical activity can provide a wide range of physical, psychological and social benefits for women and girls. Table 1 summarizes the range of benefits which have been cited and described over the past decade.

Positive sport experiences can contribute to the full inclusion of girls and women by enhancing their health and well-being; fostering their self-esteem and empowerment; facilitating their social inclusion and integration; changing gender norms; and providing opportunities for female leadership and achievement.

(CANADIAN CENTRE FOR ETHICS IN SPORT, 2008, P.25)

Studies of women's and girls' experiences of sport suggest that positive experiences can contribute to a sense of empowerment for participants and the development of a sense of ownership of their bodies. As self-esteem and self-direction are improved, participants begin to function more openly and equally in community life. In doing so, women's and girls' participation in sport challenges and changes social norms with regards to their roles and capabilities within society (World Health Organization, 2005).

It is important to understand that the benefits and positive outcomes gained from participation in sport and physical activity are most likely to be experienced when there are optimal opportunities and climates, appropriate challenges, and minimum barriers, for the participants. In these ideal circumstances, women and girls are committed participants

who value sport and physical activity, using their leisure time for activities they find enjoyable. They cross train, commit to deliberate practice for talent development, and train at optimal intensity (Tucker Center, 2007).

TABLE 1: BENEFITS OF INVOLVEMENT IN SPORT AND PHYSICAL ACTIVITY

PHYSICAL HEALTH BENEFITS	PSYCHOLOGICAL AND EMOTIONAL BENEFITS
<ul style="list-style-type: none"> • Longer and better quality of life • Cardio respiratory fitness • Muscular strength and endurance • Bone health, osteoporosis prevention • Cardiovascular health • Healthy body composition and body weight management • Healthy menstrual function • Chronic disease risk reduction • Obesity prevention • Pain management associated with both fibromyalgia and chronic fatigue syndrome 	<ul style="list-style-type: none"> • Positive psychological well-being • Enjoyment and positive affect • Positive self-perceptions and self-concept • Empowerment • Motivation for continued activity • Mature moral development • Goal setting • Optimal cognitive functioning • Stress management and mental health • Decreased levels of anxiety, depression, neuroticism and various kinds of stress • Maintenance of functional capacity and quality of life into old age
SOCIAL AND CULTURAL BENEFITS	MOTOR SKILL BENEFITS
<ul style="list-style-type: none"> • Positive gender construction • Positive and healthy body image • Social inclusion • Positive relationships with adults and peers • Teamwork • Community involvement • Social capital and networks • Risk behavior prevention / reduction • Improved academic outcomes (aspirations and achievements) • Diversity of perspectives 	<ul style="list-style-type: none"> • Performance-related physical fitness • Basic motor skill competencies • Physical literacy <ul style="list-style-type: none"> – Fundamental movement skills – Fundamental sport skills • Physical activity competencies • Physically active lifestyles • Talent development

(Adapted from BC Centre for Excellence in Women’s Health, 2000; Tucker Center, 2007; World Health Organization, 2005).

BARRIERS TO INVOLVEMENT

Despite the known benefits, the participation and leadership of women and girls in the Canadian sport and physical activity system remains very low.

Participation Snapshot

CHILDREN AND YOUTH

- Only 4% of girls (compared to 9% of boys) achieved the recommended levels of daily physical activity (Colley et al., 2011).
- Boys aged 5 to 19 took more daily steps than girls (about 1,300 more daily steps) (CFLRI, 2010a).
- Only 70% of girls participated regularly in sport during the previous 12 months, compared to 81% of boys. Fewer girls (27%) than boys (35%) participated in sport four or more times a week (CFLRI, 2011).

ADULTS

- Only 19% of Canadian women participated in sport, compared to 35% of men (CFLRI, 2010b).
- Females comprised only 39% of registered competitors and 38% of recreational members with summer sport National Sport Organizations (Sport Canada, 2010).
- Women and girls from diverse racial backgrounds are the most underrepresented in the Canadian sport and recreation system (Sport Canada, 2005).
- Women in all income groups report 5 to 10% lower levels of physical leisure-time activity than men and the gap between high- and low-income women is greater than it is for men (Chief Public Health Officer, 2008).

Leadership Snapshot

COACHING AND TECHNICAL OFFICIALS

- Women occupy 19% of the head coach positions and 17% of the athletic director positions in Canadian university sport (Donnelly & Kidd, 2011).
- 20% of the coaches of carded athletes are female (Coaching Association of Canada, 2009).
- Women comprise 25% of reported coaches and 29% of reported technical officials (Sport Canada, 2009).

SENIOR ADMINISTRATIVE STAFF & GOVERNANCE LEADERS

- Only 17% of NSOs and 27% of Multi-Sport Organizations (MSOs) have a woman as the President or Chair of their Board of Directors (Sydney Scorecard, 2011; CAAWS, 2011).
- Women hold 24% of NSO board of director positions, 34% of MSO board of director positions and 45% of National Physical Activity Organization board of director positions (Sydney Scorecard, 2011; CAAWS, 2011).
- Women Executive Directors or CEOs lead 33% of NSOs and 40% of MSOs (Sydney Scorecard, 2011; CAAWS, 2011).

Barriers

Significant gender differences persist in participation and leadership in the Canadian sport and physical activity system. Women and girls typically report more barriers to sport and physical activity participation across the lifespan than men and boys, affecting their involvement as participants, athletes, coaches, officials and leaders (Tucker Center, 2007; Werthner, Culver & Mercier, 2010). There are a variety of barriers including:

- **PHYSICAL BARRIERS** e.g., low physical fitness; presence of illness/disease; lack of physical literacy (knowledge of fundamental movement skills/fundamental sport skills).
- **PSYCHOLOGICAL BARRIERS** e.g., limited confidence in their physical abilities or knowledge about physical activity and sport; low perceived behavioural control; low physical self efficacy. There may be feelings of fatigue, fear, lack of confidence or negative attitudes; concerns about body weight, poor body image and low self-esteem.
- **TIME-BASED BARRIERS** e.g., too much work or school work; responsibilities to care for younger siblings, children, or elderly parents; housework or chores; parental or family expectations for women and girls to be at home. Women often report feelings of guilt or experience difficulty prioritizing sport and physical activity participation over other responsibilities and interests.

- **INTERPERSONAL BARRIERS** e.g., low family or partner or caregiver motivation to support women's and girls' physical activity engagement; family or partner or parental belief that sport is not as important for females as for males; lack of social support including a lack of peer support; limited positive feedback; limited role models; concerns about being perceived as unfeminine or a lesbian; and contradictory marketing messages and strategies.
- **ACCESS AND OPPORTUNITY BARRIERS** e.g., cost; access to appropriate equipment; transportation; access to quality facilities; lack of culturally relevant activities; language and literacy barriers; experiences of discrimination or racism; accessibility issues for women and girls with a disability. For females with care-giving responsibilities, there may be limited access to alternative care or respite from such roles. The built environment and/or climate may pose additional challenges, both directly and indirectly.
- **PROGRAMMING BARRIERS** e.g., lack of choice and variety, no female-only opportunities; low quality/untrained instructors and coaches; undesired focus on competition or specialization; commitment requirements.

Some women and girls excel at sport and physical activity despite a variety of complex barriers affecting their participation and performance. A combination of factors allow them to cope with and overcome the barriers.

(CAAWS, 2009)

These barriers are complex and affect participation and performance in a variety of ways, from preventing any type of participation, to limiting skill development and negatively impacting advancement, pay, access, support, and future prospects. The seriousness of these issues cannot be overstated when one considers the benefits of involvement for women and girls and the negative consequences of their disengagement. Generally speaking, women and girls who are able to excel do so despite the barriers through a combination of conditions that allow them to cope and overcome. These include supportive family and community structures, positive encouragement and feedback, dedicated educators and coaches, the presence of role models, and personal drive and motivation.

CS4L is generating new ways of thinking, encouraging new approaches for sport, physical activity, recreation, education, and health sectors, and aligning national, provincial/territorial and community programming to ensure life-long involvement. It is essential that we increase and improve practices to positively influence women's and girls' engagement in sport and physical activity, and enhance environments that contribute to them reaching their potential and thriving as healthy participants, athletes, coaches, officials, leaders and in other roles.

In order for women and girls to begin, maintain, and increase their sport and physical activity participation, communities, professionals, sport clubs and parents must work together to reduce the barriers that stand in their way.

(TUCKER CENTER, 2007)

THE NEED FOR A COMPREHENSIVE APPROACH

Increasing the active engagement of women and girls throughout the sport and physical activity system requires a variety of strategies that contribute to a comprehensive approach — there is no one “magic” solution.

A social-ecological model (see Figure 4) can help improve understanding of the complex and multidimensional factors that facilitate and constrain women’s and girls’ sport and physical activity decisions and behaviour (Froehlich Chow, 2010; Gyurcsik, Spink, Bray, Chad, & Kwan, 2006; Humbert et al., 2006; Nahas et al., 2003; Needham et al., 2007). This approach recognizes the impact of intrapersonal, interpersonal, environmental, and policy factors on women’s and girls’ involvement. A key concept to keep in mind is that women and girls influence and are influenced by those around them. A social-ecological model encourages a shift from a “focus on single issues, risk factors and linear causality, towards an holistic concern to develop supportive contexts in the places that people live their lives” (Dooris et al., 2007, p. 331).

[A social-ecological] model is useful in aiding and understanding physical activity opportunities for women [and girls] because it recognises that potential constraints come from many influences.

(NORTHCOTT, 2009, P.24)

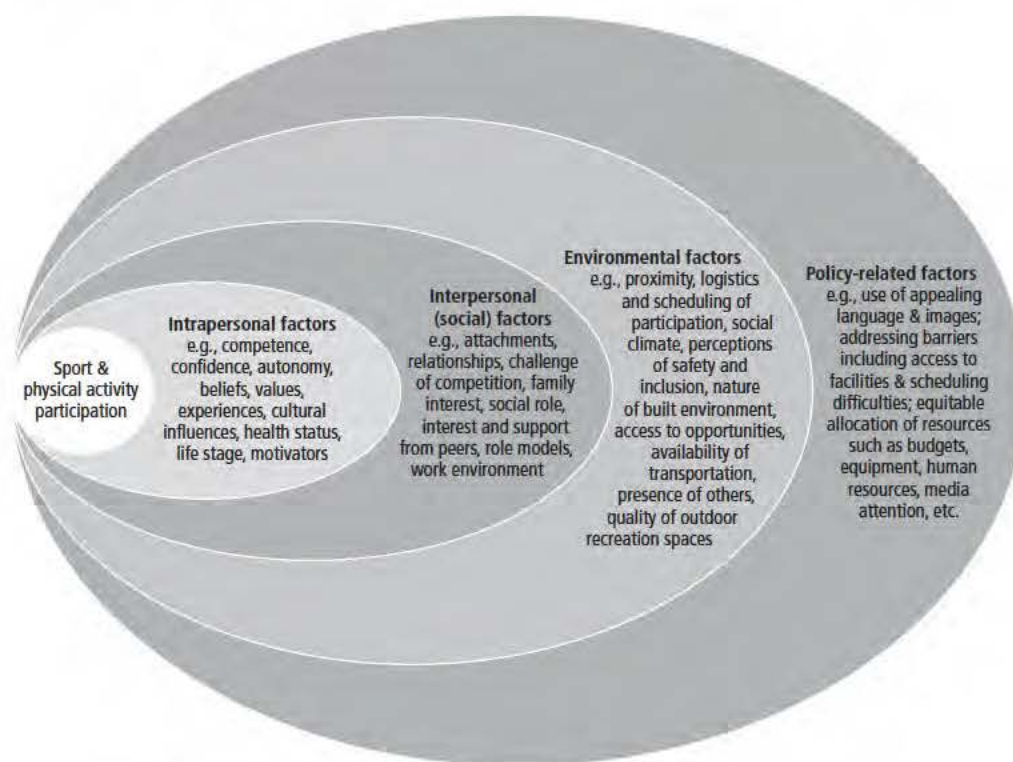


FIGURE 4: SOCIAL-ECOLOGICAL MODEL OF INFLUENCES ON PHYSICAL ACTIVITY AND SPORT PARTICIPATION FOR WOMEN AND GIRLS

There are many layers of influence on women and girls, contributing to or detracting from their ability to reach their full potential and thrive in sport and physical activity. Numerous factors are at play within and between each layer of influence.

Classifying these factors into categories makes them easier to understand and identify their interactions (Bauman, Sallis, Dzewaltowski, & Owen, 2002). They include:

1. **INTRAPERSONAL FACTORS** reflect characteristics of the individual, such as confidence (standing out, fitting in, feeling emotionally secure or vulnerable), competence (the skills), and autonomy (sense of choice). Other examples include knowledge, attitudes, beliefs, values, behaviour, experiences, cultural influences, health status, life stage, motivators.
2. **INTERPERSONAL (SOCIAL) FACTORS** relate to formal and informal social networks, including the quality and nature of interactions with family, friends and other adults. Other examples include family interest, social role, interest and support from peers, role models, and work environment. The “challenge of competition” is a significant factor in that some women and girls tend to place a lot of importance on relationships and perceive that competition jeopardizes relationships — someone can be hurt emotionally (through defeat, poor performance, not being selected, etc.) or physically (a ball in the face, pushed, shoved, etc.) (Humbert, 2005).
3. **ENVIRONMENTAL FACTORS** exist within and between organizations, social institutions and groups, such as where and when one is active (proximity, scheduling, logistics of participation), and whether the social climate is welcoming and conducive to engagement and addresses needs for personal safety and security. The provision of “safe” spaces is particularly important for women and girls, so that they are emotionally secure and comfortable and protected from physical harm (including preventable injuries and any form of abuse). Other examples include the nature of the built environment (e.g. street lighting; quality of roads, sidewalks, trails), access to opportunities (being genuinely accessible, practical), availability of transportation, type of neighbourhood, timing of opportunities, presence of other people, and land use.
4. **POLICY-RELATED FACTORS** relate to local, provincial, and federal level policies, guidelines, regulations and laws that regulate or support actions and practices in sport, physical activity, physical education, etc. Creating environments through policy development, implementation, analysis and advocacy impacts whether programs are attractive to women and girls (e.g., in activity, promotional language and images), if barriers are addressed (e.g., access to facilities, scheduling difficulties), and how to ensure equitable allocation of resources (whether referring to budgets, equipment, human resources, or media attention, etc.). Organisations and institutions that may affect the social and physical environments (through their decisions, policies, programming) include international, national, provincial/territorial and community governments and sport governing organizations, community groups, urban planners, facility planners and owners, ethnic and religious communities, health promotion organizations, education organizations, workplaces.

(Adapted from Glanz & Rimer, 2005; McLeroy, Bibeau, Steckler, & Glanz, 1988; Northcott, 2009; Wharf Higgins, Begoray, & MacDonald, 2009)

The social-ecological model enables leaders, coaches, educators, academics, parents and others to better understand the factors and the complex dynamics affecting women’s and girls’ involvement in sport and physical activity. With this model in mind, the next section of this document focuses specifically on the psycho-social factors that influence women and girls.



SECTION III

The Psycho-Social Factors that Influence Women's and Girls' Involvement in Sport and Physical Activity

In general terms, psycho-social factors affect an individual psychologically or socially. The definitions and use of psycho-social concepts are varied, but Egan, Tannahill, Petticrew, and Thomas (2008), based on a meta-review of the literature, identified seven main themes that nicely summarize a broad range of psycho-social factors. If one thinks of psycho-social factors as an interaction between people and their social environment involving psychological processes, those factors likely relate to:

1. autonomy and control
2. involvement, participation and empowerment
3. social capital, social cohesion, trust and belonging
4. social support (including specific types of support, e.g. emotional), social networks and receiving positive feedback
5. social diversity and tolerance
6. vulnerability, security or safety
7. demands, role conflicts or role imbalance

Psycho-social factors affect women and girls of all ages, influencing their health and well-being, and their participation, athletic development, performance and leadership in sport and physical activity. Building on the social-ecological model's four categories introduced in Section II (intrapersonal, interpersonal, environmental, and policy-related), the following are examples of psycho-social factors that influence women's and girls' participation and leadership in sport and physical activity (CAAWS, 2009; Egan et al., 2008; Tucker Center, 2007). Some factors may fit in more than one category, but replication has been avoided for the purposes of this resource.

EXAMPLES OF PSYCHO-SOCIAL FACTORS

INTRAPERSONAL

- Internalized gender-based and stereo-typed beliefs and values about the (in)appropriateness of female participation in sport
- Perceived enjoyment, fun and satisfaction related to sport and physical activity (whether as a participant/athlete or leader)

- Self-perceptions of sport or physical activity competence
- Gender differences in decision-making skills, motivation and goal setting
- Motivation
- Confidence to try new things
- Body image and physical appearance (e.g., body weight issues — underweight, overweight and obesity; disordered eating; issues related to feeling comfortable or exposed in workout apparel)
- Priority of personal sport and physical activity pursuit

INTERPERSONAL

- Encouragement and provision of appropriate opportunities for participation (social support), from family members and peers (the “cool factor”)
- Positive feedback or commentary from family members, peers, teachers, physical activity leaders, sport coaches, spectators, society, etc.
- The nature of interpersonal relationships (e.g., cooperative, competitive, respectful, power distribution) and group atmosphere (the dynamics between participants, peers, colleagues)
- Social influence exerted by teachers, leaders and coaches during activities and talent identification processes (e.g., during classes, practices, games, assessments, etc.)
- Presence (or absence) of active role models, both female and male

ENVIRONMENTAL

- The social climates (both positive and negative) surrounding physical activity and sport, as established by parents, coaches, leaders, educators and peers (e.g., promoting cooperation, addressing conflicts, approaches to managing intra-team competition)
- Presence of stress or anxiety provoking conditions (e.g., social physique anxiety / body on display; selection procedures and assessments; stress related to trying to overcome participation barriers)
- Moral reasoning and attitudes towards fair play
- Extent to which a family, educational, physical activity or sport environment is linked to gender identity, addresses homophobia, respects diversity, and is welcoming
- Vulnerability, security or safety (real and perceived)
- Links between physical activity and sexuality (e.g. suggestive uniforms and training/workout apparel; culturally stereotyped media coverage of active and athletic women that emphasize femininity and heterosexuality, including sexually suggestive poses in sport settings)
- Value of gender equity within society

POLICY-RELATED

- (In)appropriate or low quality programming
- Instructor, coach and teacher training
- Physical education curricula
- Portrayal of (un)realistic and (un)healthy body images in promotional or marketing materials and the media, and mixed messages about the importance of physical activity and sport (e.g., to look “fit” for appearance-focused reasons rather than for overall health and well-being, lack of diversity in images)
- Resource allocation (financial, facility and human resources)
- Policies that are cognizant of the complexities of women’s and girls’ lives, which include societal/cultural stereotypes, family demands, role conflicts or role imbalances (whether as a participant, athlete, coach or volunteer)
- Canadian sport and physical activity system structure
- Presence and implementation of gender equity policies

These psycho-social factors can either contribute to or hinder the involvement of women and girls in sport and physical activity (see Table 2). Participation in sport and physical activity can be facilitated or discouraged through the direct and indirect decisions and actions taken by parents and family members, coaches, educators, officials, leaders and peers. Decision makers in both the public and private sectors, communities (both in the sense of a geographic community and faith, interest or ethnicity based groups), and the media can affect the psycho-social and physical environments (Tucker Centre, 2007).

TABLE 2: PSYCHO-SOCIAL FACTORS THAT CONTRIBUTE TO AND HINDER PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY

CONTRIBUTING TO ENGAGEMENT AND PARTICIPATION:	HINDERING ENGAGEMENT AND PARTICIPATION:
<ul style="list-style-type: none"> • Perceived and demonstrated value, interest and importance of physical activity and sport • Positive perception of one’s own physical abilities, progress and potential for future success or mastery • Developed and refined skills • Motivation • High self-esteem • Positive self-perceptions of physical competence • Positive self-perceptions of physical appearance • Experiences of enjoyment, fun, satisfaction and pride • Acceptance, tolerance and respect for one’s actual or perceived sex, gender identity and/or gender expression, sexual orientation, socio-economic status, disability, language, race, culture, faith, etc. • Feelings of cohesion and belongingness, self-esteem enhancement, loyalty and intimacy, companionship and emotional support • Effective conflict resolution • Positive intra-team competition environments • A sense of security and comfort • Healthy body image • Healthy behaviours that contribute to one’s wellness including being mentally fit & resilient, eating healthily, being physically active and avoidance of risk behaviours • Acceptance of diverse body sizes • Freedom and independence to pursue interests, with few burdens or limitations imposed by family, cultural norms and conditions 	<ul style="list-style-type: none"> • Lack of perceived and demonstrated value, interest and importance of physical activity and sport • Negative perception of own physical abilities, progress and potential for future success or mastery • Under-developed and unrefined skills • Lack of motivation • Low self-esteem • Negative self-perceptions of physical competence • Negative self-perceptions of physical appearance • Feelings of dissatisfaction, shame, disinterest and disengagement • Discrimination based on one’s actual or perceived sex, gender identity and/or gender expression, sexual orientation, socio-economic status, disability, language, race, culture, faith, etc. • Homophobic and transphobic attitudes and intolerance of sexual and gender diversity which impact on an individual’s emotional well-being • Social isolation, bullying • Persistent and/or unresolved conflict • Negative intra-team competition environments • A sense of vulnerability, discomfort, fear • Disordered eating behaviours • Diminished physical and/or sexual health • Involvement or pressure to be involved in risk behaviours • Struggles with the feminine ideal <p style="text-align: right;"><i>(con’t)</i></p>

CONTRIBUTING TO ENGAGEMENT AND PARTICIPATION (con't):	HINDERING ENGAGEMENT AND PARTICIPATION (con't):
<ul style="list-style-type: none"> • Increased or enhanced involvement through effectively addressing barriers to participation (e.g., balancing personal, family and professional responsibilities) • Performance increments and continuation • Appropriate opportunities for on ramps and off ramps to support participation across the transitions in women's and girls' lives • Physical activity and sport participation, active for life 	<ul style="list-style-type: none"> • Sexualization, objectification and surveillance of female bodies • Stress, anxiety, reduced cognitive functioning, burnout, depression, reduced interest and positive affect • Internalization of stereotypes that place physical attractiveness at the center of women's and girls' value • Reduced independence and less freedom, curtailed by cultural norms and conditions • Reduced or compromised involvement due to stress and challenges in overcoming barriers to participation (e.g., time-based and interpersonal barriers, etc.) • Reduced performance and/or discontinued participation • A lack of appropriate opportunities for on ramps and off ramps to support participation across the transitions in women's and girls' lives • Physical inactivity and/or sedentary behaviour

THE IMPACT OF PSYCHO-SOCIAL FACTORS ON LEADERS

Psycho-social factors affect the participation of women and girls as leaders, coaches and officials in a variety of other ways. Intrapersonal factors include perfectionism (being too self-critical), lack of assertiveness, and inhibition in promoting their accomplishments (Werthner & Callary, 2010). Misconceptions and the undervaluing of women's sport skills and knowledge (including an unequal assumption of competence, for example where a male coach is assumed to be more competent than a female coach); negative stereotypes about women as leaders; a resistance to the style of women's leadership; and continued wage discrepancies, are additional factors that hinder engagement and participation (Werthner & Callary, 2010). Women's experiences and involvement can be further impacted by hiring from a principle of similarity (individuals tend to hire someone like themselves); a lack of female mentors; and homophobia. Within sport organizations (whether sport-specific or multi-sport), there are too few female leaders, mentors, role models and colleagues in leadership roles. A recent study reported that women occupy only 19% of the head coach positions in Canadian universities, and only 17% of the athletic director positions (Donnelly & Kidd, 2011).

For women coaches who are lesbians, there are additional factors at play. Research consistently reveals that there are very few "out" coaches due to fears or concerns about the employer's or organization's reaction; of athletes not wanting to play for a coach who is lesbian or gay; and of being considered a sexual predator, especially if coaching at the youth level. Coaches believe that coming out will cause more problems and pose more risks than concealing their sexual orientation (Brackenridge, et al., 2008;

Demers, 2006; Griffin, 1998; Symons, et al., 2010). However, this same research indicates that hiding one's sexual orientation can have a significant personal toll that may negatively impact an individual's emotional well-being and their performance, whether they are coaches, athletes or other sport leaders.

PULLING IT ALL TOGETHER

Those responsible for policies and programs influencing women's and girls' participation, performance and leadership in sport and physical activity need to understand the impact of psycho-social factors. Whether a decision-maker or programmer at the national, provincial/territorial or community level, or an influencer/supporter (i.e., parents and family members, peers, coaches, physical educators, instructors, media), it is imperative that they comprehend and address these issues:

1. Participation in or avoidance of sport and physical activity is linked to the social and cultural structures of society. Gender has been socially constructed in a way that discourages or prevents many women and girls from becoming physically literate (competent), pursuing their interests as a participant or athlete, or engaging as a coach, official, volunteer or leader.
2. Early perceptions and experiences formed in family, early childhood care, school and community settings have a profound influence on life-long involvement. "Conventional" or culturally dominant ideas about gender, instructional and coaching methods, curricula, and programming often reinforce stereotypical ideas about femininity and masculinity and disadvantage women and girls while privileging men and boys.
3. Women and girls who overcome the barriers to pursue sport and physical activity (as participants, and also as coaches, leaders, officials, etc.) must defy long-standing social norms against sport engagement. Some will use various strategies to reaffirm their femininity (i.e., how they dress, act, express themselves through sport and in life) — struggling to define their own femininity and overcompensate to either conform or rebel. Women's and girls' sexual orientation may be questioned and they may be subjected to homophobic behaviour or comments. They may feel alienated and withdraw if the environment is not welcoming or respectful. Supportive networks and environments contribute to full and authentic participation and engagement, regardless of sexual orientation or gender identification.
4. As athletes, women and girls may be subjected to training programs and interpersonal situations that are not suited to their needs and do not support optimal preparation or performance. This will be described in more detail in Section IV.
5. Adolescent girls and young women are under a great deal of emotional pressure and scrutiny as they cope with their changing bodies during physical maturation. This continues as adult women experience physical changes associated with childbearing, lifestyle changes, aging and menopause. At all ages, women and girls are at risk of feeling insecure and vulnerable when wearing gym clothes or swim suits. They are likely to compare their appearances unfavourably with sexualized and idealized images portrayed in the media. In a culture where even accomplished female athletes are trivialized and sexually objectified, it is difficult to find images of healthy role models. Weight, height and physical appearance are potential sources of scrutiny and attention. Women and girls may receive unwanted and inappropriate sexual attention. They may be teased, humiliated and/or ignored if they are underweight, overweight or obese. Throughout their lives, self-esteem and competence issues may exist in relation to body image and link to participation.

Addressing psycho-social factors contributes to an environment that supports the development of physically literate, active, healthy women and girls. Separating the links between femininity and participation in sport and physical activity, and creating a supportive environment for optimal participation and performance, are critically important to achieve the sustained participation and commitment of women and girls.

Without succumbing to exaggeration, it is quickly becoming a matter of life (quality of health, longevity) versus chronic disease or premature death — alarming statistics indicate escalating rates of obesity and chronic diseases, conditions that are largely preventable.

Participation in sport and physical activity plays a key role in helping women and girls to maintain a healthy weight, in addition to its many other developmental health benefits (Horstmann et al., 2011). Within the sport context, creating ideal conditions for success for female athletes, coaches and officials will bear rewards in terms of well-developed and delivered programs, best ever performances and podium results. As governance leaders and professionals within sport, physical activity, education and health sectors, increased numbers of women will ensure a more diverse set of skills, experiences and networks, and be drivers of successful and gender inclusive organizations and initiatives.

We all have a responsibility to ensure that the next generation of women and girls have a viable situation in the Canadian sport and physical activity system.

“Individually we all have voices, and collectively we can make a difference.”

(MARSHALL, DEMERS AND SHARP, 2010, P.198)



SECTION IV

CS4L/LTAD Through the Gender Lens

This section begins by describing general shortcomings of the CS4L/LTAD model, given the previous discussion of the psycho-social factors influencing women and girls. The section then examines the 10 Key Factors influencing LTAD through a gender lens.

GENERAL OBSERVATIONS

There are several acknowledged shortcomings relating to gender and how it is discussed and addressed within the Canadian sport and physical activity system and the CS4L/LTAD model:

- Much of the sport-related research has been conducted with young adult white males. As a result, training programs are often inappropriate for female athletes.
- Conventional physical education curricula, community sport and recreation programs, and training programs for high performance athletes are often biased towards males.
- The dominant culture, which prioritizes the needs and experiences of white, middle-class, heterosexual and able-bodied individuals, is pervasive in sport, recreation and education, excluding the majority of Canadian women and girls (British Columbia Centre for Excellence in Women's Health, 2000).
- Leadership opportunities have typically favoured males in terms of design, valued competencies, established networks, experience, and career opportunities.

Girls' disengagement from sport is linked to the typical format of physical education classes, which privileges boys and disadvantages girls. Girls are deemed less talented, less coordinated, less skilled, less motivated, and less successful at sports than boys. At best, girls are thought to need special rules and remedial instruction; at worst, they are humiliated, discriminated against, or ignored.

(TUCKER CENTRE, 2007)

To optimize sport and physical activity participation, performance and leadership for women and girls, it is imperative that parents, coaches, officials, volunteers, and leaders understand and address the psycho-social factors that impact their participation.

- Psycho-social factors impact all stages of CS4L/LTAD and need to be addressed through language, actions and opportunities within sport and physical activity organizations at the community, provincial/territorial and national levels.
- Those responsible for educating and coaching women and girls, across all stages of the CS4L/LTAD model, must be informed, educated and trained to identify and address the psycho-social factors in constructive ways. It is essential to improve educator and coach understanding of the psycho-social factors that contribute to the behaviour and participation of their female participants.
- The CS4L/LTAD model assumes smooth sailing between stages, when in fact there is an ongoing need to recruit, develop and retain women and girls in the sport and physical activity system across the lifespan. This includes the potential to re-recruit women in similar or other sport or physical activity related roles after a transition from one LTAD stage to another or after a hiatus from involvement. Creating more “on ramps” and “off ramps” in sport can build and maintain sport system capacity, and in particular ensure that women have opportunities for a lifetime’s involvement in sport and physical activity (Sport Canada, 2009).

OBSERVATIONS ABOUT THE 10 KEY FACTORS INFLUENCING LTAD

Within the CS4L umbrella resides the LTAD pathway. Children and youth need to do the right things at the right time to develop in their sport or activity — whether they want to be hockey players, dancers, figure skaters or gymnasts. The LTAD pathway describes the activities children need to be doing at specific ages and stages in their development. Science, research and decades of experience all point to the same thing: kids will get active, stay active, and even reach the greatest heights of sport achievement if they do the right things at the right time. This is the logic behind the LTAD model.

The LTAD model is based on a combination of sport science research, coaching best practices, and related scientific principles. Through the development of the LTAD model, 10 Key Factors essential to athlete development were identified. Along with sport science and coaching, the 10 Key Factors include broader principles that influence how sport and physical activity is organized and managed. For example, competition scheduling to optimize athlete development, organizational alignment of different groups and agencies that make up the Canadian sport system, and the philosophy of Continuous Improvement so we always work to make our science, coaching, and system of athlete development better.

Using a gender lens, here is a snapshot of issues for women and girls related to each of the 10 Key Factors influencing LTAD.

1. THE FUNDAMENTALS

Fundamental movement skills should be introduced through fun and games, followed by the development of basic overall sport skills (CS4L, 2006). Evidence suggests that girls do not receive sufficient quality skill development opportunities. Early socialization, cultural differences, limited or a lack of appealing opportunities, and leader expectations all play a role. Regardless of gender, according to self-determination theory, motivation influences engagement, enjoyment and progression (Deci & Ryan, 2011). Girls and young women are more likely to be engaged, have fun and stay involved (as well as understand the health benefits of participating) if they feel connected, capable and have a sense of choice. “Females who

do not feel intrinsically motivated to participate tend to be passive or withdraw from activities, excluding them from the many positive benefits of sport and regular physical activity” (Gibbons et al., 2010, pp.2-3). Adult women interested in becoming involved in sport and physical activity may not have developed the fundamental skills as children. Therefore, skill development opportunities need to be provided across the life-span. Sport organizations need to provide opportunities for a wide range of activities and experiences in a variety of settings so women and girls benefit from fundamental movement and sports skills and develop physical literacy.

2. SPECIALIZATION

Specialization occurs when an athlete chooses to train and compete in one or two sports exclusively. Specialization is inevitable and necessary for athletes who want to become high performers in their sport, but it must occur at the right age for the athlete to be successful. Sports can be classified as either early or late specialization. Early specialization sports include artistic and acrobatic sports such as gymnastics, diving, and figure skating. These differ from late specialization sports in that very complex skills are learned before puberty since they cannot be fully mastered if taught after puberty. Most other sports are late specialization sports. Well-rounded, physically literate athletes may select a late specialization sport when they are between the ages of 12 and 15 and still have the potential to rise to international stage in that sport.

Specializing before the age of ten in late specialization sports contributes to numerous negative outcomes such as lack of basic movement skills, overuse injuries, early burnout and dropout from sport and physical activity. Disability sports are late specialization. It is important that children with a congenital disability or early acquired disability be exposed to the full range of fundamentals before specializing in the sport of their choice.

A number of early specialization sports attract young female athletes due to their characteristics (e.g. involving music, costumes and elements of dance) or their social perception as “appropriate” pursuits for women and girls. These include gymnastics, figure skating and synchronized swimming. Sport organizations need to plan for and create transition opportunities for female athletes, whether from an early specialization sport to other sports (e.g. from gymnastics to freestyle skiing), to other roles within the sport (e.g., as coaches or officials), or to Active for Life. It is also important that young female athletes have exposure to a full range of activities and early involvement in the FUNdamentals stage to fully benefit from opportunities in late specialization sports.

3. DEVELOPMENTAL AGE

Children grow and develop at different rates. Sport and physical activity programs need to take each child’s stage of growth and development into account when designing training, competition and recovery regimens. The LTAD model distinguishes growth and maturation (developmental age) from chronological age. Current CS4L/LTAD resources are based on sex-specific developmental ages, but the impact of psychosocial factors on developmental age is not well addressed, or even understood. For example, early or late maturation can result in self-esteem issues, bullying and harassment, as well as unwanted sexual attention. Persisting developmental gaps can make chronological age a poor guide to segregating adolescents for training and competitions and can contribute to concerns about competence, impacting retention and drop-out rates.

“The rapid growth of breasts and the widening of hips, locker room issues, and social pressures to discontinue sport involvement, can cause early developing girls to drop out early in their teen years, while late developing females who have had success with their prepubescent bodies as teammates develop before them face the same difficulty when older” (CS4L, 2008, p.23).

4. TRAINABILITY

The LTAD model has contributed to a better understanding of the basics of training and performance, and optimal windows of trainability. The model addresses sex differences and identifies sex-specific optimal windows for stamina, strength, speed, skill and suppleness. Children and adolescents are not adults, yet in many cases training programs are not adjusted to account for differences in aerobic capacity, strength, or skill acquisition. There is also a need for improved awareness and effective action to address the gendered impact of psychosocial factors that influence (by hindering or facilitating) a young female’s opportunity to benefit fully from optimal windows of trainability, and the additional S’s of training (especially (p)sychology, sustenance, schooling, and socio-cultural).

5. PHYSICAL, MENTAL, COGNITIVE & EMOTIONAL DEVELOPMENT

The LTAD model recognizes the importance of physical, mental, cognitive and emotional aspects for each athlete and notes that they should be enhanced to ensure a holistic approach to athlete development. While there is some mention of gender differences and psycho-social factors in the CS4L foundation documents (e.g., self-esteem, competence, connectedness), gaps in knowledge and practice exist. For example, more effort is needed to improve the experiences of girls and young women who experience early or late maturation, who have had early negative experiences with physical activity and sport, and to recognize and support sexual and gender diversity. From a broader perspective, a better understanding of the gendered impact of psycho-social factors on physical, mental, cognitive and emotional development will contribute to improved experiences and outcomes for women and girls. Improved education and practice are also needed to create environments that are safe and welcoming for all participants, not just those who comprise the majority.

6. PERIODIZATION (ANNUAL TRAINING, COMPETITION AND RECOVERY PLAN)

As an essential component in optimal sport programming and athlete development, periodization connects the LTAD stage the athlete is in to the requirements of that stage through developmentally appropriate training, competition and recovery schedules (CS4L, 2006). Biological differences between the sexes have typically not been acknowledged when designing training programs for the female athlete. Rather, results from research studies using young adult white males (18-25 years of age) have been directly applied to female athletes, regardless of age. Consequently, female athletes may experience musculoskeletal injuries or medical issues as a result of their training, recovery strategies and competition (Harber, 2008). *The Female Athlete Perspective. Coach/Parent/Administrator Guide* highlights the LTAD stages where adjustments or adaptations to training can be implemented with the intention of avoiding the known risks (Harber, 2008).

While progress is being made, it is important to emphasize that there are also *individual* differences over and above the gender differences. Coaches often fail to individualize programs for their female athletes but instead consider all girls or women together as a homogenous group. Creating an individually-responsive training program for a group of female athletes of varying skill levels may be challenging, but it is ideal. The coach needs to keep each athlete progressing and motivated to optimize their development, engagement and performance.

More importantly, there are research gaps when it comes to understanding the physiological and psychological differences between male and female athletes. Data from males does not directly transfer to females; gender differences exist, yet are rarely addressed. When combined with the lack of awareness or action on psycho-social factors impacting females' participation and performance, it is clear that much more needs to be done.

7. CALENDAR PLANNING FOR COMPETITION

The LTAD model has brought a great deal of attention to the need for optimal competition calendar planning and appropriate training to competition ratios. For women and girls, careful planning can support their involvement in multiple sports and activities, and support women in juggling their priorities of sport, school, career and family. Sport organizations and community programmers alike need to consider the needs of female athletes and participants when planning training and competition calendars.

Tailoring schedules for women and girls, whether they are participants, athletes, coaches, officials or volunteers, would take into consideration some of the following issues. This list is not exhaustive but will give examples of a need for greater flexibility in scheduling:

- Inconsistent or frequently changing training and competitions schedules may be difficult to attend given other responsibilities and commitments.
- Practices, clinics, classes, and meetings offered during dinner or family time may be problematic.
- Making a commitment to regular sessions with mandatory participation may be difficult.
- Coaching and officiating schedules that demand participation for a whole weekend or a week-long tournament, or extended absences from home for training and competition trips, often exclude or put extra pressure on women with families.
- Conversely, extra pressure is often put on women without families to "pick up the slack".

8. THE 10-YEAR RULE (EXCELLENCE TAKES TIME)

Scientific evidence suggests it takes a minimum of 10 years or 10,000 hours of skill development and training for a talented athlete to become an expert. Most Olympians report a 12 to 13 year period of talent development from their sport introduction to making an Olympic team (CS4L, 2006). A consideration for many female athletes in adulthood is how to juggle concurrent life goals, such as the pursuit of high performance sport with family or care giving and education or a career. It is critical that the Canadian sport system develop strategies to retain female athletes and coaches to maximize the investments made by the athletes, coaches, and other system stakeholders. Individualized training and competition schedules, the development of family care policies (including the provision of child care), and negotiated absences can be effective. Additional research could provide specific guidelines to support athletes and organizations in benefiting from the timeframe it takes to develop excellence.

9. SYSTEM ALIGNMENT AND INTEGRATION

The CS4L/LTAD model is a powerful vehicle for change towards full system alignment and integration. However, at this time, the involvement of females as athletes and participants, coaches, officials and administrators continues to lag behind that of males. Canada needs increased system readiness for women and girls, both in terms of appropriate on ramps and off ramps and in supporting diversity.

As mentioned earlier, the CS4L/LTAD model assumes smooth sailing between stages but fails to provide sufficient on ramps and off ramps to support women's and girls' participation and address their transitions through relevant stages as their interests and goals, responsibilities and life commitments

evolve across the life-span. Women's and girls' involvement in sport and physical activity, and progression from one LTAD stage to the next, may be interrupted by life events that take priority for certain periods of time, including education and career, child-raising or care giving, illness, injury, peer pressure, etc. Re-engaging active women and girls as they transition is another consideration, in terms of whether they know about options and what is necessary to support their transitions. Additionally, many women and girls missed out on opportunities to develop their skills and try the many sport and physical activities available in Canada.

Sport and physical activity organizations should target awareness and recruitment initiatives at women and girls of all ages. (Re)engagement can take many forms including as a physical activity participant, athlete, official, coach, instructor, educator, board member, advocate/champion, volunteer or professional leader. There are many other gateways to becoming engaged, such as through one's professional or volunteer work — including as members of the media covering sport; professionals in sport medicine, sport science, and health promotion; major games mission staff; academia; business and facility ownership and management; equipment suppliers; etc.

More consideration should also be given to the development of effective off ramps, conveying an appreciation for one's prior involvement (in whatever form it was), acceptance and support for current circumstances, and options for being re-engaged in the future (e.g., invitation to reconnect or offer to follow up after a certain period of time, sharing of information regarding other opportunities, active recruitment for other roles, assistance with issues related to one's transition). For example, as an athlete, there are opportunities to participate at a variety of levels, from Masters Games to community sport and recreational activities; although typically there are more options for men than there are for women. As a coach, official, administrator or volunteer, options include special events and opportunities with community, provincial/territorial, national and international programs, clubs, associations and organizations, as well as mission staff/games assignments and countless other roles in the sport and physical activity system. Furthering one's education through training, certification and professional development may be required for some roles and should be part of transition planning.

Another key element needed to achieve system alignment and integration for women and girls is enhanced support for diversity. The information in this document and other resources, such as *Taking the Lead: Strategies and Solutions from Female Coaches* provide insight and direction for supporting diversity. The Canadian sport system in partnership with other sectors must strongly consider the needs of women. Various players in the system need to be ready to better support female participants, athletes, coaches, officials, volunteers and leaders. Supporting diversity makes sense from every angle.

In a very literal sense, enhancing system alignment and integration through the gender lens is about smoothing pathways between different types of involvement, and engaging different types of organizations in promoting sport and physical activity to women and girls.

10. CONTINUOUS IMPROVEMENT

CS4L/LTAD are designed to change and evolve to reflect best practices and current research in the Canadian sport and physical activity system, fuelled by the concept of *Kaizen* (continuous improvement). To truly improve the quality of the system, steps must be taken to actively engage women and girls as participants, athletes, coaches, officials and leaders.

Gender issues need to be considered at the beginning and throughout the development of policies, programs and investments, not as an afterthought. New policies and practices must be developed to address the unique needs, interests and experiences of women and girls. Targeted strategies to engage

marginalized populations, including Aboriginal women and girls, visible minority and newcomer populations, women and girls with disabilities, and women and girls of all ages, social classes, and sexual orientations, are needed. Recruitment and retention strategies that value and maintain women's involvement as leaders, in the boardroom or on the field, need to be identified and implemented. CAAWS has a number of resources and initiatives targeting these groups, but much more needs to be done by all organizations and at the system level.

Investments to support innovation in sport science research that prioritize women and girls will improve female sport equipment, female-centred training programs, and understanding of the physiological, biomechanical and psycho-social factors affecting women's and girls' involvement and performance. A diverse representation of women and girls must be included in research in conjunction with appropriate research methods and tools. In particular, age/lifecycle, race/ethnicity, disability/ability, sexual orientation, and socioeconomic status are diversity domains that need to be better understood and more strongly reflected in research (British Columbia Centre for Excellence in Women's Health, 2000). Research findings

Organizations have to demonstrate a willingness to provide support to women [and girls] during various stages of the life cycle, and differently than they may for men.

(MARSHALL, DEMERS, AND SHARP, 2010, P.197)

and best practices from the field need to be disseminated throughout the Canadian sport and physical activity system to enhance practice, and inform future research. Improvements such as these will contribute to more success, whether measured by more active, healthy and engaged girls and women or more podium-calibre performances by female athletes.

Finally, generational change means that there is a need to regularly revisit beliefs about physical activity, sport, work, work load, expectations and standards. Perspectives change from one generation to the next, as children learn from their parents and from their experiences in the

system. Ultimately, everyone has a role to play and everyone benefits when people are interested and engaged in gender and sport and physical activity issues, especially with a commitment to continuous improvement.



SECTION V

Recommendations for Action — Everyone has a Role to Play When Actively Engaging Women and Girls

Everyone has a role to play in actively engaging women and girls in sport and physical activity. The purpose of this section is to provide recommendations that consider the psycho-social factors influencing women and girls to create environments where they can reach their potential and thrive in sport and physical activity as well as enable their contributions through leadership. The recommendations are intended to engage and influence stakeholders across the sectors described in the CS4L/LTAD model.

The recommendations are grouped into five areas for action:

1. Develop, promote and enforce effective policies to ensure gender equity in the Canadian sport and physical activity system.
2. Promote and demonstrate the value of women and girls in the Canadian sport and physical activity system.
3. Develop and strengthen the capacity of the Canadian sport and physical activity system to support the active engagement of women and girls.
4. Strengthen partnerships and collaborative action within and across sectors to influence national, provincial/territorial, community sport and physical activity environments for women and girls.
5. Support, conduct and disseminate gender-specific research and evaluation.

Specific recommendations for national and provincial/territorial sport and multisport organizations; high performance coaches and leaders; program leaders and community coaches; educators; families and caregivers are included in the Appendices and available to download at www.canadiansportforlife.ca and www.caaws.ca.

1. DEVELOP, PROMOTE AND ENFORCE EFFECTIVE POLICIES TO ENSURE GENDER EQUITY IN THE CANADIAN SPORT AND PHYSICAL ACTIVITY SYSTEM.

- i. Develop and implement policies that enable women's and girls' participation and leadership in sport and physical activity. Women and girls should be consulted in the development of new, effective policy.

For example:

- Gender equity policies should be reviewed/developed and integrated into practice at the national, provincial/territorial, and community levels. Creating a gender equity policy is not the end, but the beginning — there must be implementation.
- Policies requiring a minimum 30% female representation on boards of directors should be implemented by all sport and physical activity governing bodies to increase female involvement in decision-making.
- Comprehensive family care policies that address child and elder care should be implemented for athletes, coaches, officials, and other leaders to increase support during training, competition, and professional development.
- Policies supporting equitable access and investment for women and girls with respect to financial resources, programs, facilities, equipment, quality coaching, leadership opportunities, and media coverage should be developed.
- Harassment and anti discrimination policies addressing one's actual or perceived sex, gender identity and/or gender expression, sexual orientation; socio-economic status; disability, language, race, culture, faith, etc.; hiring procedures; and employment equity should be reviewed/developed and implemented.

- ii. Existing policy barriers should be identified and eliminated.

For example:

- Human resource policies that restrict innovation in sport and physical activity work environments for women, negatively impacting supportive opportunities such as scheduling flexibility, job sharing and caregiver arrangements (both for daily work life and while travelling for training camps and competitions).
- Facility allocation policies that are based on historical use or precedence, which disadvantage women and girls.
- Uniform guidelines and policies that require suggestive attire or fail to provide reasonable choices for female athletes and participants.

- iii. National, provincial/territorial and community policies addressing poverty reduction, education, health care, public transportation and childcare should be renewed/developed and implemented. These policies impact the Canadian sport and physical activity system, and can enhance or restrict women's and girls' participation and leadership.

2. PROMOTE AND DEMONSTRATE THE VALUE OF WOMEN AND GIRLS IN SPORT AND PHYSICAL ACTIVITY.

- iv. The amount and type of media coverage of women athletes, coaches, officials and leaders should be improved and increased. Images and messages should portray women and girls in a variety of roles — as participants, athletes, coaches, officials and other leaders; and should represent the diversity of women and girls in Canada, in terms of one's actual or perceived sex, gender identity

and/or gender expression, sexual orientation, socio-economic status, disability, language, race, culture, faith, etc. Stereotypical constructions of femininity, and the sexualization of women, should be challenged. Enhanced coverage and profile will provide positive female role models to all Canadians.

- v. In all situations, inclusive language should be used, and discriminatory language avoided, so women and girls know they have a place in sport and physical activity. When inappropriate language is heard, the opportunity should be used to lead by example and educate on what is and isn't appropriate and why.

For example:

- Use gender neutral phrases such as player-to-player or individual defense, instead of man-to-man defense.
 - Stop using “you play/throw/kick/etc. like a girl” as a derogatory remark suggesting all women's and girls' skills are inferior. The successes of female athletes and coaches have many Canadians aspiring to perform “like a girl”.
 - Focus on female athletes' athletic competence and accomplishments. Use unbiased adjectives and adverbs to describe female athletes (e.g., athletic, skilled, powerful, focused, committed) rather than using descriptors that emphasize their femininity, sexuality or other stereotypical labels (e.g., tomboy, pretty, nice).
 - Stop using male sports as a yardstick to measure the success or skill of women and girls. Value women's sport for its exciting and competitive nature.
- vi. Recognize the contributions, skills and expertise of women athletes and leaders in award and recognition programs, and in employment and volunteer recruitment and retention programs (including promotions and pay equity).
 - vii. Invite and actively recruit women coaches, officials, educators, academics and leaders to share their skills and expertise in athlete, coach and official development sessions, and at conferences and training events. As discussed, numerous psycho-social and systemic barriers restrict women from volunteering or seeking these roles; actively recruit and invite women to share their skills, knowledge and experiences in this way.

3. DEVELOP AND STRENGTHEN THE CAPACITY OF THE CANADIAN SPORT AND PHYSICAL ACTIVITY SYSTEM TO SUPPORT THE ACTIVE ENGAGEMENT OF WOMEN AND GIRLS AS PARTICIPANTS AND LEADERS.

- viii. All stakeholders, male and female, involved in sport and physical activity must increase their awareness and understanding of the psycho-social factors affecting women's and girls' participation and leadership, and how to reduce the barriers to their full engagement. Women's and girls' experiences are diverse depending on the complex interaction between intrapersonal, interpersonal, environmental, and policy factors.

For example:

- Program providers and educators must understand how to create quality sport, physical activity and physical education programs for women and girls.
- Coaches must understand how to coach female athletes, aware of variations in skill level, motivation, social dynamics, maturation, and demands in their personal lives.

- Administrators must examine recruitment and retention policies and practices to understand how psycho-social factors can enhance or hinder the identification and selection/hiring of staff, coaches, officials, and volunteers.
- ix. Women and girls should be involved in identifying the issues and creating solutions to increasing their participation and leadership. Everyone has a role to play in contributing to success, however *responsibility* for taking action rests with the decision-makers.
 - x. Financial and human resources must be invested to develop strategies to increase the involvement of women and girls as participants and leaders.

For example:

- Opportunities for women and girls to participate in a variety of sports and physical activities, at various competitive levels, across a broad age range must be increased.
 - Action plans to address common barriers, including safety concerns, transportation issues, facility and resource allocation policies, should be implemented.
 - Female-only sport and physical activity programs, and training and professional development opportunities, should be provided to support women and girls whose participation may be hindered by the participation of males, or who may find female-only environments more appealing.
 - Recruitment and retention strategies should be developed and implemented for women staff and volunteers.
 - Professional development and mentorship opportunities should be supported for all women staff, coaches, officials, educators, and volunteers to increase their skills and confidence. Women should be connected to CAAWS' Women and Leadership Network for additional information and support.
- xi. National, provincial/territorial and community organizations should connect with CAAWS to access information, resources and expertise supporting the engagement of women and girls throughout their organization, as participants, athletes, coaches, officials, volunteers and leaders.
 - xii. The Canadian sport and physical activity system must commit to ongoing learning to address emerging issues that may affect women's and girls' participation and leadership in the future.

4. STRENGTHEN PARTNERSHIPS AND COLLABORATIVE ACTION WITHIN AND ACROSS SECTORS TO POSITIVELY INFLUENCE NATIONAL, PROVINCIAL/TERRITORIAL, COMMUNITY SPORT AND PHYSICAL ACTIVITY ENVIRONMENTS FOR WOMEN AND GIRLS.

- xiii. All levels of government responsible for sport, physical activity, recreation, education and health must collaborate to align priorities related to achieving gender equity in the Canadian sport and physical activity system, and more broadly throughout Canadian society.
- xiv. Communication and collaboration between sport and physical activity organizations must be enhanced to support the involvement of women and girls as participants and leaders, and support the development of on and off ramps to maintain their long-term involvement.

For example:

- To support women and girls in transitioning between sports (as dictated by interest, injury, or physical development), into different roles (e.g. from athlete to coach, official, administrator, etc.), and to increase their access to support services.

- To share policies, resources, program models, mentoring opportunities and other promising practices to enhance gender equity.
- xv. Community partnerships must be developed to enhance service and program delivery by building on and sharing assets, including expertise, human resources, facilities, role models, relationships with women and girls, etc. Partnerships with a variety of organizations should be pursued, including local sport organizations, recreation departments, healthy living coalitions, schools, YMCAs/ YWCAs, boys and girls clubs, public and private facilities, public health units, faith organizations, cultural associations, friendship centres, settlement agencies, women’s centres, child care providers, etc.

5. SUPPORT, CONDUCT AND DISSEMINATE GENDER-SPECIFIC RESEARCH AND EVALUATION AND OTHER RELEVANT RESOURCES.

- xvi. Research designed to address persisting gaps in knowledge and practice relating to the psychosocial factors influencing the involvement of women and girls as participants and leaders should be prioritized for funding. Research focusing on the experiences of marginalized populations, including Aboriginal women and girls, visible minority and newcomer populations, women and girls with disabilities, and women and girls of all ages, social classes, and sexual orientations, is particularly needed.
- xvii. Financial and human resources must be invested in evaluating programs and initiatives to identify promising practices that support women’s and girls’ involvement.
- xviii. Collaboration between the sport and physical activity organizations and researchers must be improved to support relevant projects, share expertise, access research participants and sites, and increase dissemination.
- xix. The dissemination of research and evaluation findings must be increased to support more effective policies and programs leading to improved and sustained participation and performance for women and girls. Existing opportunities for posting and disseminating of information include the CAAWS, CS4L and SIRC websites and newsletters, but more needs to be done within and between organizations.
- xx. Research findings must be communicated in ways that are accessible, relevant and practical for participants, athletes, coaches, officials, educators, volunteers, leaders and other decision-makers.



Concluding Comments

Actively Engaging Women and Girls: Addressing the Psycho-Social Factors has been created to improve knowledge about psycho-social factors that influence women and girls; enhance practices that will increase their engagement in sport and physical activity; and improve environments that contribute to females reaching their full potential and thriving as healthy participants, athletes, and leaders.

It is vital to address these issues. Optimal conditions and improved system readiness for the life-long participation of women and girls in sport and physical activity must be created. Strategies must match the unique requirements of women's and girls' lives, their interests and involvement. Furthermore, since females make up approximately half of the population and represent a significant proportion of many organizations' stakeholders, it is difficult to address this group's views and needs without women assuming leadership roles. Valuing females' leadership styles and skills and recognizing their contributions is also important. With intentional and effective action, the quality of women's and girls' experiences will improve as well as their health and well-being, and that of their families, communities and organizations.

APPENDIX A

Recommendations for National and Provincial/Territorial Sport and Multisport Organizations

National, provincial/territorial, and multisport organizations must consider the psycho-social needs of women and girls within their organizations and respective programming. These actions complement and emphasize the recommendations presented in Section V.

1. Revise/develop and integrate gender equity policies that enable women's and girls' participation and leadership across all aspects of the sport organization, including participation and high performance competition, programming, leadership, and coach and official development. Creating a gender equity policy is not the end, but the beginning — there must be implementation.
2. Provide professional development and mentorship opportunities for all women staff, coaches, officials, educators, and volunteers to increase their skills and confidence. Connect women to CAAWS' Women and Leadership Program and online Network for additional support. The Coaching Association of Canada's Women in Coaching Program, and apprenticeship and internship programs coordinated by Canada Games, Commonwealth Games Canada, and the Canadian Collegiate Athletic Association, provide other opportunities.
3. Develop coaching, officiating and governance models that equally value female and male lives and offer flexible alternatives to both women and men. Create workplace and volunteer environments that have psychological, social and physical safety to support women in developing their skills and improving competencies.
4. Create initiatives designed to increase the involvement of women and girls as athletes, coaches, officials, board members, etc.
5. Examine current statistics relating to women's and girls' involvement in your organization. Implement a monitoring strategy to track the information over time, evaluate success, and identify areas that require additional investment.
6. Collaborate with provincial/territorial and community sport and multisport organizations to build participation and leadership development pathways for women and girls across the lifespan. Develop on and off ramps to support women and girls in transitioning between sports (as dictated by interest, injury, or physical development), into different roles (e.g. from athlete to coach, official, administrator, etc.), and to increase their access to support services.
7. Share policies, resources, program models, mentoring opportunities and other promising practices to enhance gender equity within your sport, and with other organizations. Connect with CAAWS to profile the initiative online.

8. Invite and actively recruit women coaches, officials, and leaders to share their skills and expertise in athlete, coach and official development sessions, and at conferences and training events.
9. Ensure balanced content and visual evidence of female and male coaches, athletes, officials and leaders in newsletters, reports, magazines, blogs and media guides, on web pages, and in coaching/teaching curricula.
10. Be a champion of change. Continuously challenge coaching, officiating and leadership policies and practices that exclude or discriminate against women, and advocate for positive alternatives.

APPENDIX B

Recommendations for High Performance Coaches and Leaders

Coaches and leaders involved with athletes in the Train to Compete and Train to Win stages of LTAD must consider the psycho-social needs of the female athletes.

1. EDUCATE YOURSELF

Invest time to learn about the psycho-social factors influencing female athletes, and how to reduce the barriers affecting their full engagement and optimal performance. Encourage and provide opportunities for everyone involved with your athletes to learn more, including support staff and parents/families.

2. COMMIT TO LONG-TERM TALENT DEVELOPMENT

Respect the spectrum of abilities of all of your athletes. Develop intrinsic motivation and desire to develop skills. Emphasize personal choice and responsibility by encouraging your athletes to practice motor and sport skills outside of organized practices. View talent from a developing system point of view. Provide opportunities for mental and physical rest. Be proactive in addressing transitions in athletes' lives, providing suggestions for on and off ramps including links with other sports and coaching and officiating opportunities. Maintain connections during periods of disengagement, whether the athlete's involvement is interrupted temporarily or longer-term.

3. CREATE AN OPTIMAL PERFORMANCE ATMOSPHERE

Respect that athletes have different and unique personalities. Use appropriate tactics to motivate each individual, recognizing that some tactics are effective with some but will negatively impact others. Maintain a positive attitude and communicate in a respectful demeanour (verbal and non-verbal). Provide constructive and specific feedback; use mistakes to foster self-teaching. Challenge athletes on all levels (physically, mentally, emotionally and socially), encouraging them to strive for their true potential. Make goal-setting a collaborative effort between the athlete(s) and coaching staff.

4. INTENTIONALLY CREATE AN INCLUSIVE ENVIRONMENT AND POSITIVE TEAM DYNAMICS

Take responsibility for managing the social dynamics of the team. Proactively address signs of disengagement amongst team members.

Promising practices to build positive team dynamics include:

- Establish social contracts or codes of conduct that include shared values and expectations for positive behaviours. Identify specific rules to create and maintain an inclusive environment (e.g., no texting in dressing rooms); and implement agreed upon consequences that are consistent with the values, rules and policies.
- Enforce a policy of zero tolerance for bullying, harassment, racism, and homophobia.

- Integrate social time into practices through informal activities (e.g., chatting while running to warm up, playing modified games, or providing opportunities for team members to take turns leading activities).
- Organize social opportunities outside of games and practices (e.g. team hikes or meals, attending women's athletic events, movies or taking part in a charity event).
- Know when to use humour, and allow athletes to joke and feel relaxed during training.
- Mix up partners and groups during drills to encourage interaction and avoid the formation of cliques, which have the power to destroy a team or jeopardize camaraderie within a club.
- Respect and spend equal time with all athletes to avoid perceptions of favouritism.
- Welcome newcomers, and avoid "rookie" events that emphasize disparity between team members.

5. MANAGE STRESS & CREATE A LOW PRESSURE ENVIRONMENT

Minimize stress-producing social influences, such as parental pressure, ego-oriented climates, punitive approaches to discipline, and authoritarian and autocratic leadership. Female athletes are more likely to internalize emotional issues than to speak up about conflict and personal challenges. Provide individualized coping tools and strategies, and develop social resources among female athletes, such as relaxation training, support and social ties to help them learn to manage pressure.

Body image and body weight issues can be a source of stress and pressure. Females often internalize comments about their bodies, interpreting them as reflections on their personalities or self-worth. Female athletes participating in endurance sports, aesthetic sports and weight classification sports can feel pressured to try and reach an unrealistic body weight in the hopes of achieving success or improving on their results.

Take steps to remove such pressure and address these issues as necessary, such as:

- Be aware that disordered eating behaviours can result from psychological factors such as low self-esteem, poor coping skills, perfectionism, obsessive compulsive traits, depression, anxiety and perceived loss of control.
- Develop athletes' stress coping skills, and provide resources and education about healthy weights and eating habits.
- Become familiar with signs and symptoms of an athlete struggling with disordered eating (often team-mates know before a coach does).
- Acknowledge that weight gain is a normal part of puberty and adolescence. Female athletes may feel self-conscious about their bodies and it may impact on their performance. Be aware of potential psychological, social and physical issues for underweight, overweight and obese female athletes, and be prepared to support them.

6. SUPPORT OPTIMAL TRAINABILITY

Performance plateaus, drops, and peaks due to many factors including physical and psycho-social issues. Design and implement developmentally appropriate training programs that consider the physical and psycho-social aspects of an athlete's development. Familiarize yourself with your athletes' personal story and sport history, as it may provide insight into the specific psycho-social factors impacting their lives and sport experiences.

APPENDIX C

Recommendations for Community Program Leaders and Coaches

Community program leaders and coaches can increase the participation of women and girls across the lifespan through the delivery of quality sport and physical activity programs.

1. Invest time to learn about the psycho-social factors affecting women's and girls' participation and leadership, and how to reduce the barriers to their full involvement. A number of resources and workshops are available from CAAWS; visit www.caaws.ca.
2. Consult with women and girls in your community to develop programs that meet their needs, interests and experiences. What works in one community may not work in another. Be prepared to provide ideas and suggestions, as women and girls may not be familiar with the opportunities available. Consult on preferred program models, including day of the week, time of day, and session frequency.
3. Create female-only programs that provide an opportunity for women and girls to try new sports and physical activities, and build their skills and confidence, in a safe and supportive environment.
4. Use effective instructional methods to teach, evaluate and motivate women and girls. Emphasize the fun, pleasure and challenge of participation. Consider the age and stage of participants, being aware of the variation in women's and girls' experiences across the lifespan. Individualize learning and provide encouragement and recognition for improvement and effort (in addition to ability). Provide skill development opportunities — women and girls tend to enjoy and participate more often in activities they are competent at; don't assume prior experience, skills or knowledge.
5. Teach women and girls to value what their bodies can "do" rather than "how they look". While weight loss can be an initial motivator for some women and girls to become involved, encourage them to reflect on the other outcomes of their participation, including new skills and increased self-esteem, increased social support, decreased stress, better sleep, etc.
6. Create an inclusive environment that is respectful of diversity in gender, race, ethnicity, culture, ability, body size and sexual and gender identity — in your program, and within your facility. Use inclusive language; ensure diverse images of women and girls are used in promotional materials and within the facility; be sensitive to unique needs based on cultural and religious beliefs.
7. Support positive social dynamics within the program. For many women and girls, social acceptance enhances group performance (in contrast to men and boys, for whom performance enhances social acceptance).
 - Include ice breakers and fun games to build relationships amongst girls.
 - Provide social time for women before or after programs or practices, or built in during warm-ups or other program components.

- Discussions on relevant topics, during or in addition to regular programming, provide an opportunity for women and girls to connect and share their experiences, and may make sport and physical activity more appealing to inactive participants. Potential topics include bullying, self-esteem, media awareness, being a healthy role model, goal-setting, health and nutrition education.
 - Proactively address negative dynamics to avoid a toxic environment that will discourage participation and have other potentially damaging consequences for participants.
8. Provide positive role models for women and girls. Profile female athletes and healthy living champions, and focus on their skills, achievements and contributions. Recruit staff who reflect the diversity of your community.
 9. Evaluate programs and services to identify success factors and possible barriers to participation. Inactive women and girls are a marginalized group that will require additional time, human and financial resources to effectively engage. Don't rely on registration numbers as the sole indicator of program success; alternative measures include skill development, participant and parent satisfaction, registration in other programs, and benefits to participants and the community.
 10. Become part of the Canadian Sport for Life movement to benefit from and contribute to the ongoing evolution of programming ideas and lessons related to LTAD, especially ideas related to improving the environments for women and girls.

APPENDIX D

Recommendations for Educators and School Administrators

Physical education and school-based sport and physical activity can provide valuable opportunities for girls and young women to develop physical literacy and a foundation for life-long participation. Physical education specialists, generalists, school administrators and other school staff all play an important role in creating a positive environment that actively promotes the full engagement and leadership of female students.

Research by Gibbons, Humbert and Temple (2010) examined the motivational processes that determine whether female students find meaning and become engaged in their physical education experience, or find the experience irrelevant and choose to disengage. Findings suggest that quality physical education experiences emphasize the development of female students' **autonomy** (having a sense of choice), **competence** (a sense of efficacy), and **relatedness** (sense of social attachment).

RECOMMENDATIONS FOR ACTION

Autonomy:

1. Survey female students about physical activity preferences, and use the information to plan the physical education program.
2. Use available community resources (e.g. instructors, indoor and outdoor facilities).
3. Allocate some of the Physical Education budget to non-traditional equipment (e.g. yoga mats, steps, current music, instructional DVDs).
4. Promote the value of choice to students and administrators through establishing a strong and ongoing communication process.
5. Continually nurture relationships with community organizations to address ongoing logistical challenges of using community facilities (e.g. transportation, cost, liability).

Competence:

6. Ensure female students are developing physical literacy and the fundamental movement and sport skills. Check for scope and sequence across grade levels and work toward mastery.
7. Include activities to improve health-related fitness.
8. Provide opportunities for students to teach others.
9. Be an active role model.

Relatedness:

10. Include cooperative games and teambuilding activities. Friends and peers play a very important role in the lives of girls and young women.

11. Create a safe and respectful environment so female students feel emotionally secure and comfortable, and protected from physical harm (including preventable injuries and any form of abuse).
12. Explore physical activity opportunities in the community.

ACTION IS ALSO NEEDED OUTSIDE THE GYM AND CLASSROOM:

13. Provide professional development for all staff to increase their awareness and understanding of the psycho-social factors affecting female students' participation and leadership, and how to reduce the barriers to their full engagement.
14. Establish policies that identify girls and young women as a priority group for programming, resources and recognition. Identify and address gender inequities in facility allocation practices and usage patterns, award and recognition programs, and program budgets and staffing.
15. Recruit and hire female physical education specialists and certified community partners to be involved in the school's physical education program, providing positive female role models for everyone.
16. Work collaboratively with all members of the school community (students, parents, community members, school administrators and other staff) to develop and integrate school-based Active Start, FUNdamentals, Learn to Train, and Active for Life programs with community-based programs to increase opportunities for girls and young women to participate on a regular basis.

"Girl-friendly physical education", a term used by Felton et al., (2005), describes the following characteristics for successful elementary physical education:

- Gender separation opportunities in class
- Students are physically active in class
- Non-competitive activities are offered
- Life-long physical activity is emphasized
- Classes are fun and enjoyable
- Appropriate instructional methods (including small groups) are used
- Behavioural skills for physical education are taught

Senior elective physical education courses that successfully maintain a high enrolment of female students have the following characteristics (Gibbons, 2009):

- Focus on lifetime physical activities
- Student involvement in course development
- Authentic assessment
- Gender as a course design feature
- Value added options
- Positive and respectful class environment

Physical education is an integral part of CS4L / LTAD. Information and resources related to developing physical literacy and linking physical education to CS4L / LTAD are now available from PHE Canada and CS4L. Visit www.phecanada.ca or www.canadiansportforlife.ca for more information.

APPENDIX E

Recommendations for Families and Caregivers

Parents, partners, family members and early childhood caregivers can support women's and girls' involvement in sport and physical activity in a multitude of ways.

1. Invest time to learn about the psycho-social factors influencing women and girls, and how to reduce the barriers affecting their participation and optimal performance. Recognize the important role you play — become informed so you are prepared to take action.
2. Start young! Encourage and enable girls to move and express themselves physically through active play and participation in sport and physical activity. Ensure she is developing physical literacy and a foundation for life-long participation through quality physical education, physical activity, and sport programs. Consider the toys and games you buy or use and the messages they send — choose toys and games that promote activity rather than sedentary behaviour.
3. Take both active and supportive roles in female family members' sport and physical activity involvement.
 - Be active together, whether playing with active games, going for a hike, practicing skills, or training for competition.
 - Provide opportunities for participate and develop skills in a variety of sport and physical activities. This will broaden her interests, and reduce the risks associated with being inactive or specializing too early.
 - Talk to her about her interests, and listen to her challenges and successes.
 - Provide transportation to and from programs, practices, and games.
 - Invest in quality equipment and clothing to ensure proper size, fit and comfort.
 - Attend her sport and physical activity events to cheer her on. Provide positive feedback and support.
4. Ensure female family members have time in their lives to be active — support a balance between work, domestic responsibilities, homework, and their sport and physical activity participation. Often women and girls prioritize their needs below those of others. However, participation provides a number of benefits that can enhance their performance and involvement in other areas of life, including productivity and stress reduction.
5. Promote the variety of benefits of involvement in sport and physical activity, including fun, social networks, skill development, decreased stress, leadership and career opportunities, travel, etc. While weight loss can be an initial motivator for women and girls to become involved, encourage them to reflect on the other outcomes of their participation.

6. Avoid comments about body size and shape; instead, celebrate female family members' skill, strength and spirit. Recognize that body image and body weight can be a source of stress and pressure for females, especially since they often internalize comments about their bodies, interpreting them as reflections on their personalities or self-worth. Learn about potential psychological, social and physical issues for underweight, overweight and obese women and girls, and be prepared to support them.
7. Encourage women and female adolescents to become leaders in sport and physical activity, as volunteers, coaches and officials. Talk to girls and young women about careers and volunteer opportunities in Canada's sport and physical activity system as a way to stay involved in an activity they love. Support their participation in certification and leadership development courses.
8. Introduce women and girls to women athletes, coaches, officials, and sport and physical activity leaders at the community, provincial/territorial, national and international levels. These women are inspirational role models for the whole family.
9. Be a champion for women and girls in your community. Consider gender equity in programs, events, facilities, equipment, quality coaching, leadership opportunities, media coverage, recognition of success, etc. Question policies and practices that limit women's and girls' participation and leadership in sport and physical activity, and throughout Canadian society.
10. Become part of the Canadian Sport for Life movement to benefit from and contribute to the ongoing evolution of programming ideas and lessons related to LTAD, especially ideas related to improving the environments for women and girls.

RECOMMENDED RESOURCES

How Parents Can Encourage Their Daughters in Sport and Physical Activity
<http://caaws.ca/e/resources/publications/>

CS4L: A Sport Parent's Guide and Developing Physical Literacy www.canadiansportforlife.ca

APPENDIX F

Recommendations to Make Sport and Physical Activity More Welcoming to Sexual and Gender Diversity

The powerful potential of sport and physical activity is undermined by intolerance of sexual and gender diversity, and homophobic and transphobic attitudes. Sexual and gender diversity refers to the full range of human sexual experience and gender identity, and includes one's perceived or actual sexual orientation as lesbian, gay, bisexual, transgendered/transitioned, queer or questioning, or heterosexual. Acceptance of sexual and gender diversity is a willingness to acknowledge this diversity and may be expressed in terms of an individual's personal relationships and interactions or through support for institutional policies and practices that acknowledge this diversity (CAAWS, 2006; Kardia, 1996). Homophobia is the fear or hatred of homosexuals or homosexuality. Taking steps to reduce homophobia is not only consistent with Canada's efforts to foster safe and welcoming environments in sport and physical activity, but is consistent with Canadian values of diversity, acceptance and fairness (CAAWS, 2006).

Actions to make sport and physical activity environments more welcoming to sexual and gender diversity include:

1. Invest time to learn about sexual and gender diversity generally, and in sport and physical activity specifically. Encourage and provide opportunities for others to learn more, including coaches, officials, administrators, volunteers, participants and athletes. Invite CAAWS to deliver a half-day workshop on addressing homophobia in sport for staff, coaches, officials, athletes and volunteers, or deliver a shorter presentation to your Board. A number of resources are available to download at www.caaws.ca.
2. Develop and implement policies that support and protect lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ) participants and leaders, including anti-harassment policies and same-sex partnership policies. Examine staff and volunteer recruitment and hiring policies and practices for biases. Avoid treating LGBTQ athletes and the issues raised by their participation in sport as a "special" situation; integrate policy applying to LGBTQ athletes into overall team, department or organization policy.
3. Monitor your own stereotyped beliefs about LGBTQ people and commit yourself to challenging them. Do not assume all athletes, coaches, instructors, officials, educators, volunteers and others involved with your organization are heterosexual. Assume there are LGBTQ persons (or family members who are LGBTQ), but don't speculate about who may or may not be heterosexual or LGBTQ.

4. Judge teammates, other participants and coaches on the basis of their character and personality, not their sexual orientation or gender expression. Make it clear to the people around you that you are open to diversity in all members of your team, program, class or organization. If you have LGBTQ friends, ask them how you can help make sport and physical activity more welcoming for them.
5. Use inclusive language. Do not tolerate disparaging remarks about LGBTQ people, even if they are said in jest or not intended to be hurtful. Speak out against anti-gay harassment directed at individuals or teams from spectators, opponents, coaches, or teammates. Your silence supports prejudice.
6. Find out about local LGBTQ support groups and resources, such as peer help groups for LGBTQ people, parents and allies; and telephone help lines for those who are LGBTQ.
7. Post a positive space symbol to visibly signal your organization is open and welcoming, as well as equitable and accessible, to persons of all sexual and gender diversity.
8. When traveling internationally with teams or for professional development events, be aware that other countries may have strict laws about homosexuality that may make it unsafe for those who are LGBTQ.
9. If LGBTQ'ers feel the environment is welcoming, they may choose to come out in their sport or physical activity environment. Be prepared. How you and your organization react will send strong signals to everyone, not just those who are LGBTQ, about how welcoming your organization is to diversity.
10. Become an Ally or Champion as part of the Step Up! Speak Out! Ally Campaign for Inclusive Sport, which aims to eliminate homophobia in sport by asking athletes, coaches, officials, sport administrators, parents, fans and other members of the Canadian sport and physical activity community to publicly commit to bring the message of inclusion, respect and equality to their sport. Visit www.stepupspeakout.com and encourage others in your organization to get involved.

Addressing homophobia has important benefits for all:

- It promotes inclusiveness, acceptance and diversity — essential ingredients to strong and cohesive teams, groups and classes.
- It eliminates stereotypes and reduces fear and ignorance, thus enriching the learning environment that sport, physical activity and physical education can offer.
- It improves the situation of lesbian, gay and bisexual youth who are at greater risk of isolation and harmful behaviours than their heterosexual counterparts.
- It removes barriers to participation in sport, physical activity and physical education.
- It makes sport a more welcoming place for women and girls, whose participation may be discouraged or who may stay away from sport out of fear they will be labelled as lesbians.
- It creates a safer environment that enhances the social and psychological well-being of all participants, and paves the way for a future generation of athletes, coaches, educators, officials, and sport and physical activity leaders who are accepting of minorities and differences.

A number of resources and an interactive workshop are available from CAAWS.

Visit www.caaws.ca/homophobia/e/resources_caaws/index.cfm

For more information about working with transitioning/transitioned athletes in sport.

Visit [www.caaws.ca/e/resources/pdfs/Summary_Transition_Discussion_Paper_FINAL1%20\(2\).pdf](http://www.caaws.ca/e/resources/pdfs/Summary_Transition_Discussion_Paper_FINAL1%20(2).pdf).

APPENDIX G

Glossary of Terms

ADOLESCENCE: During this period, most bodily systems become adult, both structurally and functionally. Structurally, adolescence begins with an acceleration in the rate of growth in stature, which marks the onset of the adolescent growth spurt. The rate of statural growth reaches a peak, begins a slower or decelerative phase, and finally terminates with the attainment of adult stature. Functionally, adolescence is usually viewed in terms of sexual maturation, which begins with changes in the neuroendocrine system prior to overt physical changes and terminates with the attainment of mature reproductive function.

BODY IMAGE: The picture of our physical selves that we hold in our mind's eye. Often this image does not resemble the way we actually look and competes with unrealistic weight or fitness expectations. Our emotions also affect our perceptions of our bodies.

BUILT ENVIRONMENT: A part of our physical surroundings; includes the buildings, parks, schools, road systems, and other infrastructure that we encounter in our daily lives (PHAC, 2011).

CHILDHOOD: From the end of infancy — the first birthday — to the start of adolescence, and is characterized by relatively steady progress in growth and maturation and rapid progress in neuromuscular or motor development. It is often divided into early childhood (ages 1 to 5), and late childhood (ages 6 to the onset of adolescence).

CHRONOLOGICAL AGE: The number of years and days elapsed since birth. Children of the same chronological age can differ by several years in their growth, development and maturation.

CRITICAL PERIODS OF DEVELOPMENT: A point in the development of a specific behaviour when experience or training has an optimal effect on development. The same experience, introduced at an earlier or later time, has no effect on or retards later skill acquisition.

DEVELOPMENT: The interrelationship between growth and maturation in relation to the passage of time. The concept of development also includes the social, emotional, intellectual, and motor realms of the child. The terms growth and maturation are often used together and sometimes synonymously. However, each refers to specific biological activities. **GROWTH** refers to observable, step-by-step, measurable changes in body size such as height, weight, and percentage of body fat. **MATURATION** refers to qualitative system changes, both structural and functional in nature, in the organism's progress toward maturity; for example, the change of cartilage to bone in the skeleton.

DEVELOPMENTAL AGE: The interrelationship between growth and maturation, which also includes social, emotional, intellectual, and motor realms of the child. The integrated nature of growth and maturation is achieved by the interaction of genes, hormones, nutrients, and the physical and psychosocial environments in which the individual lives. This complex interaction regulates the child's growth, neuromuscular maturation, sexual maturation, and general physical metamorphosis during the first 2 decades of life.

EQUALITY: The process of allocating resources, programs and decision making so that males and females have the same (therefore females and males would each receive 50% of the resources, facilities, and each have access to the same program).

EQUITY: The process of allocating resources, programs and decision-making fairly to both males and females. This requires ensuring that everyone has access to a full range of opportunities to achieve the social, psychological and physical benefits that come from participating in sport and recreation. It does not necessarily mean making the same programs and facilities available to both males and females. Gender equity requires that women and girls be provided with a full range of activity and program choices that meet their needs. Therefore, some activities may be the same as those offered to boys and men, some may be altered, and some may be altogether different.

GAY: A term that describes an individual whose primary emotional and sexual attractions and connections are with persons of the same sex. Most often used to describe men who are attracted to men.

GENDER: Socially constructed roles, relationships, behaviours, activities, and attributes that a given society considers appropriate for women and men. Feminine and masculine are gender categories.

GENDER BASED ANALYSIS: A tool to assist in systematically integrating gender considerations into the policy, planning and decision-making processes. It corresponds to a broader understanding of gender equity using various competencies and skills to involve both women and men in building society and preparing for the future (Status of Women Canada, 2007).

GENDER IDENTITY: A person's internal sense of themselves as female, male or something in between.

GENDER MAINSTREAMING: A dual approach that implies the reorganization, improvement, development and evaluation of all policy processes for the purpose of incorporating a gender equity perspective into all policies, at all levels and at all stages, by the actors normally involved in policy-making. By bringing gender equality issues into the mainstream, we can make sure that the gender component is considered in the widest possible variety of sectors. (Status of Women Canada, 2007)

HETEROSEXUAL: A term that describes an individual whose primary emotional and sexual attractions and connections are with persons of the opposite sex.

HETEROSEXISM: The assumption that everyone is or should be heterosexual, and that heterosexuality is the only "normal" or "natural" expression of sexuality.

HOMOPHOBIA: An irrational fear or intolerance (either conscious or unconscious) of lesbians and gay men.

LGBT OR LGBTQ: An acronym for lesbian, gay, bisexual, transgender and /or two-spirited, and queer and/or questioning. Increasingly, this general acronym (or longer versions) is used to describe a broad community of sexually diverse minorities, including gays and lesbians.

PHYSICAL ACTIVITY: Movement of the body that expends energy; such as participation in sport, dance, and exercise.

PHYSICAL EDUCATION: A school subject designed to help children and youth develop the skills, knowledge, and attitudes necessary for participating in active, healthy living. Quality physical education programs provide the best opportunity to develop physical literacy in children and youth, helping them make healthy and active choices now and throughout their lives. Regardless of age, gender, culture, socio-economic status or ability, children who have the opportunity to participate in quality physical education programs throughout their school years experience a variety of activities in a progressive, sequential format that ensures maximum learning and enjoyment.

PHYSICAL LITERACY: The mastering of fundamental motor skills and fundamental sport skills.

POSITIVE SPACE: A term to identify an organization that is open and welcoming, as well as equitable and accessible, to sexual and gender diversity.

POST-NATAL GROWTH: Commonly, although sometimes arbitrarily, divided into 3 or 4 age periods, including infancy, childhood, adolescence, and puberty.

PSYCHO-SOCIAL FACTORS: Factors that affect an individual psychologically or socially (e.g., interpersonal, intrapersonal, environmental, and policy factors).

PUBERTY: A complex biologic and psychological process involving sexual development, accelerated growth, and maturation of the adrenal gland marked by the secretion of numerous hormones.

QUEER: A term most often used by LGBTQ youth to describe someone who is gay or lesbian.

QUESTIONING: A term used to describe individuals who are not yet sure and are exploring their sexual orientation.

READINESS: A child's level of growth, maturity, and development that enables her/him to perform tasks and meet demands through training and competition.

SELF ESTEEM: The degree of worth and competence that we attribute to ourselves.

SEX: The biological and physiological characteristics that define women and men. Female and male are sex categories.

SEXUAL ORIENTATION: The direction of one's sexual attraction towards a continuum ranging from the same sex (homosexual), the opposite sex (heterosexual) or both sexes (bisexual).

SPORT: Broadly defined as physical activities that involve competition and rules, and that develop specific skills.

STEREOTYPE: The broad, often inaccurate characteristics of a cultural, ethnic or racial group used to describe an individual thought to be a member of that group. Example: All boys enjoy hockey. All girls enjoy dance.

TRAINABILITY: The genetic endowment of athletes as they respond individually to specific stimuli and adapt to it accordingly. Malina and Bouchard (1991) defined trainability as "the responsiveness of developing individuals at different stages of growth and maturation to the training stimulus."

TRANSGENDERED: An umbrella term used to describe a wide array of persons whose gender identity does not conform to stereotypical gender norms of male or female.

TRANSITIONED: Refers to a person experiencing gender dysphoria (the intense and continuous discomfort a person feels when their physical sex and gender identity are not aligned) who chooses to align their gender role and gender identity. Transitioned individuals undergo hormonal treatment, surgery and possibly other body modifications so they may live their lives physically, psychologically and emotionally as either a woman or a man.

TWO-SPIRITED: A term derived from an Aboriginal tradition, describing people who display characteristic of both genders. It is used today in reference to LGBTQ persons of Aboriginal origin.

APPENDIX H

Support Organizations and Recommended Resources

CANADIAN ASSOCIATION FOR THE ADVANCEMENT OF WOMEN AND SPORT AND PHYSICAL ACTIVITY www.caaws.ca

The Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS) is a national non-profit organization dedicated to creating an equitable sport and physical activity system in which girls and women are actively engaged as participants and leaders. CAAWS provides a number of services, programs and resources to a variety of clients, including sport and physical activity organizations, teachers, coaches, health professionals and recreation leaders. Since 1981, CAAWS has worked in close cooperation with government and non-government organizations on activities and initiatives that advocate for positive change for girls and women in sport and physical activity.

CAAWS has a number of resources, initiatives, and practical workshops available for individuals and organizations involved with the Canadian sport and physical activity system:

- On the Move (increasing opportunities for inactive girls and young women; targeted initiatives for Aboriginal, newcomer and visible minority girls and young women)
- Mothers in Motion
- Sport and Physical Activity for Women 55-70+
- Women and Leadership Program Workshops
- Women and Leadership Network
- Addressing Homophobia in Sport and Physical Activity
- Publications (e.g. Women on Boards, sex discrimination in sport, self-esteem, disordered eating, tobacco prevention and cessation)
- Photo CD with picture of girls and women in sport and physical activity
- Website, Facebook, Twitter
- eNewsletter

CANADIAN SPORT FOR LIFE www.canadiansportforlife.ca

The Canadian Sport for Life website is the number one source for information about Long-Term Athlete Development and the CS4L movement. Information and resources are regularly added. Key resources include:

- The Female Athlete Perspective: Key Strategies for Long-Term Success
- Developing Physical Literacy: A Guide for Parents of Children Ages 0 to 12
- Canadian Sport for Life — A Sport Parent's Guide
- No Accidental Champions: Long-Term Athlete Development for Athletes with a Disability
- A targeted Active for Life website was launched in 2011 — www.activeforlife.ca

SUPPORT ORGANIZATIONS

Canadian

- Égale ACTION (Quebec) www.egaleaction.com (French site and resources)
- ProMOTION Plus (British Columbia) www.promotionplus.org/content/home.asp
- InMotion Network (Alberta) www.inmotionnetwork.org
- Bodysense www.bodysense.ca
- Canadian Women's Foundation www.canadianwomen.org
- Canadian Women's Health Network www.cwhn.ca
- Girls Action Foundation www.girlsactionfoundation.ca

International

- Catalyst www.catalyst.org
- Tucker Center for Research on Girls and Women in Sport www.cehd.umn.edu/tuckercenter/
- National Association for Girls and Women in Sport (USA): www.aahperd.org/nagws/
- Women's Sport Foundation (USA): www.womenssportsfoundation.org/
- Women's Sport and Fitness Foundation (UK): wsff.org.uk/commission
- International Working Group on Women and Sport: www.iwg-gti.org/
- International Association for Physical Education and Sport for Girls and Women www.iapesgw.org/

RECOMMENDED RESOURCES

- Actively Engaged: A Policy on Sport for Women and Girls (2009). Sport Canada: www.pch.gc.ca/pgm/sc/pol/fewom/101-eng.cfm#a8
- Canadian Journal for Women in Coaching. Coaching Association of Canada: www.coach.ca/canadian-journal-for-women-in-coaching-s12541
- Coaching Female Athletes (2011). Coaches BC: www.coachesbc.ca/coachingfemaleathletes
- Developing Physically Active Girls: An Evidence-Based Multidisciplinary Approach (2007). Tucker Center for Research on Girls and Women in Sport: www.cehd.umn.edu/tuckercenter/
- Taking the Lead. Strategies and Solutions from Female Coaches (2010). Robertson, S. (Ed.) Edmonton, AB: University of Alberta Press.
- Trophy Women? NGB Leadership Audit (2010). Commission on the Future of Women's Sport: <http://wsff.org.uk/publications/reports/trophy-women-ngb-leadership-audit-2010>

References

- Bauman, A., Sallis, J., Dzewaltowski, D., & Owen, N. (2002). Toward a better understanding of the influences of physical activity: the role of determinates, correlates, casual variables, mediators, moderators and confounders. *American Journal of Preventative Medicine*, 23, 5-14.
- Brackenridge, C., Allred, P., Jarvis, A., Maddocks, K. & Rivers, I. (2008). *A review of sexual orientation in sport*. Edinburgh: Sport Scotland.
- British Columbia Centre for Excellence in Women's Health (2000). *The health benefits of physical activity for girls and women literature review and recommendations for future research and policy*. Vancouver, BC: British Columbia Centre for Excellence in Women's Health.
- Canadian Association for the Advancement of Women and Sport and Physical Activity (2009). *In her voice: An exploration of young women's sport and physical activity experiences*. Ottawa, ON: Canadian Association for the Advancement of Women and Sport and Physical Activity.
- Canadian Association for the Advancement of Women and Sport and Physical Activity (2011). Canadian women executive directors, ceos or board members of physical activity, multi-sport or national sport organizations. Ottawa, ON: Canadian Association for the Advancement of Women and Sport and Physical Activity.
- Canadian Centre for Ethics in Sport (2008). *What sport can do: The True Sport Report*. Ottawa, ON: Canadian Centre for Ethics in Sport.
- Canada's Chief Public Health Officer (2008). *Chief Public Health Officer's Report on the State of Public Health in Canada*. Ottawa, ON: Public Health Agency of Canada.
- Canadian Fitness and Lifestyle Research Institute. (2010a). Physical Activity levels of Canadian children and youth. Kids CAN PLAY! 2010 series, Bulletin 2.
- Canadian Fitness and Lifestyle Research Institute. (2010b). Sport participation rates of Canadian adults. 2009 Physical Activity Monitor, Bulletin 08.
- Canadian Fitness and Lifestyle Research Institute. (2011). Participation in sport among children and youth. 2010 Physical Activity Monitor, Bulletin 02.
- Canadian Sport for Life (2006). *Long-Term Athlete Development resource paper*. Canadian Sport Centres. Retrieved from www.canadiansportforlife.ca/sites/default/files/resources/CS4L%20Resource%20Paper.pdf
- Canadian Sport for Life (2008). *Developing physical literacy: A guide for parents of children ages 0 to 12*. Canadian Sport for Life. Retrieved from www.canadiansportforlife.ca/sites/default/files/resources/Developing%20Physical%20Literacy.pdf
- Canadian Sport for Life (2011). Website. Retrieved from <http://www.canadiansportforlife.ca/>

- Coaching Association of Canada (2009). *A report on the status of coaches in Canada: A summary of the findings*. Ottawa, ON: Coaching Association of Canada.
- Colley, R.C., Garriguet, D., Janssen, I., Craig, C.L., Clarke, J., & Tremblay, M.S. (2011). Physical activity of Canadian children and youth: Accelerometer data from the 2007 to 2009 Canadian Health Measures Survey. *Health Reports*, 22 (1), 7-14.
- Deci, E.L. & Ryan, R.M. (2012). Self-Determination Theory. In Van Lange, P., Kruglanski, A. & Higgins, E.T. (Eds.), *Handbook of theories of Social Psychology*, (Vol. 1) (pp. 416-434). Thousand Oaks, California: Sage Publications Inc.
- Deci, E.L. & Ryan, R.M. (2012). Self-Determination Theory: An Approach to Human Motivation & Personality Website. Retrieved from <http://www.selfdeterminationtheory.org/theory>
- Demers, G. (2006). Homophobia in sport — Fact of life, taboo subject. *Canadian Journal of Women in Coaching*, 6 (2).
- Donnelly, P., Kidd, B., Norman, M. (2011). *Gender equity in canadian interuniversity sport: A biannual report*. Toronto, ON: University of Toronto Centre for Sport Policy Studies.
- Dooris, M., Poland, B., Kolbe, L., de Leeuw, E., McCall, D., & Wharf Higgins, J. (2007). Healthy settings: Building evidence for the effectiveness of whole system health promotion — challenges and future directions. In D. McQueen & C. Jones (Eds.), *Global perspectives on health promotion effectiveness* (pp. 327-352). NY: Springer.
- Egan, M., Tannahill, C., Petticrew, M. & Thomas, S. (2008). Psychosocial risk factors in home and community settings and their associations with population health and health inequalities: A systematic meta-review. *BMC Public Health*, 8:239. Retrieved from <http://www.biomedcentral.com/1471-2458/8/239>
- Felton, G., Saunders, R., Ward, D., Dishman, R., Dowda, M., & Pate, R. (2005). Promoting physical activity in girls: A case study of one school's success. *Journal of School Health*, 75(2), 57-62.
- Froehlich Chow, A. (2010). Supporting the healthy development of rural children: An ecologically based investigation of barriers and facilitators identified by early years caregivers in the promotion of physical activity and healthy eating. (Master's thesis). University of Saskatchewan, SK. Retrieved from <http://library.usask.ca/theses/available/etd-09302010-225725/unrestricted/MastersThesis.pdf>
- Gibbons, S.L. (2009). Meaningful participation of girls in senior physical education courses. *Canadian Journal of Education*, 32(2), 222-244.
- Gibbons, S.L., Humbert, M.L., & Temple, V. (2010). Making physical education meaningful for girls: Translating theory into practice. *PHEnex Journal*, 2(1), 1-20.
- Glanz, K., Rimer, B. K. (2005). *Theory at a Glance: A Guide for Health Promotion Practice* (Second Edition). National Cancer Institute, National Institutes of Health, U.S. Department of Health and Human Services. Retrieved from <http://www.cancer.gov/cancertopics/cancerlibrary/theory.pdf>
- Griffin, P. (1998). *Strong women, deep closets: Lesbians and Homophobia in Sport*. Champaign, IL: Human Kinetics.
- Gyurcsik, N., Spink, K., Bray, S., Chad, K., & Kwan, M. (2006). An ecologically based examination of barriers to physical activity in students from grade seven through first-year University. *Journal of Adolescent Health*, 38, 704-711.

- Harber, V. (2008). The Female Athlete Perspective. Canadian Sport for Life. Retrieved from www.canadiansportforlife.ca/resources/female-athlete-perspective
- Horstmann, A., Busse, F. P., Mathar, D., Müller, K., Lepsien, J., Haiko S., . . . & Pleger, B. (2011). Obesity-related differences between women and men in brain structure and goal-directed behavior. *Front Hum Neurosci*, 5:58. Retrieved from http://www.frontiersin.org/Human_Neuroscience/10.3389/fnhum.2011.00058/abstract
- Humbert, M.L. (1996). Nowhere to hide: Experiences of young women in physical education. *Women's Education des femmes*, 14 (2).
- Humbert, M.L., Chad, K., Spink, K., Muhajarine, N., Anderson, K., & Bruner, M. et al. (2006) factors that influence physical activity participation among high-and low-SES youth. *Qualitative Health Research*, 16, 467-483.
- International Working Group on Women and Sport. (2011). Sydney Scorecard, Legacy of the 5th IWG World Conference on Women and Sport. International Working Group on Women and Sport. Retrieved from www.sydneyscoreboard.com/global-scoreboard/
- Kardia, D. (1996). Impact of college on student attitudes toward gay and lesbian issues. Retrieved from www.diversityweb.org/research_and_trends/research_evaluation_impact/benefits_of_diversity/kardia_intro.cfm
- Malina, R.M. & Bouchard, C. (1991). *Growth, Maturation, and Physical Activity*. Champaign, IL: Human Kinetics.
- Marshall, D., Demers, G. & Sharp, D.-M. (2010). Developing the next generation of female coaches. In Robertson, S. (Ed.), *Taking the Lead: Strategies and solutions from female coaches* (pp. 181-201). Edmonton, AB: University of Alberta Press.
- McLeroy, K., Bibeau, D., Steckler, A., Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4):351-378 (PMID 3068205).
- Nahas, M., Goldfine, B., & Collins, M. (2003). Determinants of physical activity in adolescents and young adults: the basis for high school and college physical education to promote active lifestyles. *Physical Educator*, 60.
- Needham, L., Dwyer, J., Randal-Simpson, J., & Heeney, E. (2007). Supporting healthy eating among preschoolers: challenges for child care staff. *Canadian Journal of Dietetic Practise and Research*, 68, 107-110.
- Northcott, M.C. (2009). ' . . . So yeah, you do what you can . . . ': Exploring the barriers to women's opportunities for physical activity. (Master's thesis). Victoria University of Wellington. Retrieved from <http://researcharchive.vuw.ac.nz/bitstream/handle/10063/1084/thesis.pdf?sequence=1>
- Physical and Health Education Canada (2011). Website. Retrieved from www.phecanada.ca/
- Public Health Agency of Canada. (2011). Supportive environments for physical activity: how the built environment affects our health. Retrieved from www.phac-aspc.gc.ca/hp-ps/hl-mvs/be-eb-eng.php
- Sport Canada. (2009). *Actively engaged: A policy on sport for women and girls*. Ottawa, ON: Government of Canada.

- Status of Women Canada (2007). Gender-based Analysis: An Integrated Approach to Gender-based Analysis, 2007 Edition. Retrieved from www.swc-cfc.gc.ca/pol/gba-acsguide/2007/gba-acsg-eng.html
- Symons, C., Sbaraglia, M., Hillier, L. & A. Mitchell. (2010). *Come out to Play: The Sports experiences of Lesbian, Gay, Bisexual and Transgender (LGBT) people in Victoria*. Institute of Sport, Exercise and Active Living and the School of Sport and Exercise at Victoria University.
- Tucker Center for Research on Girls and Women in Sport. (2007). *Developing physically active girls: An evidence-based multidisciplinary approach*. Minneapolis, MN: Tucker Center for Research on Girls and Women in Sport.
- Werthner, P. & Callary, B. (2010). Coaching as a viable career path for women. In Robertson, S. (Ed.), *Taking the lead: Strategies and solutions from female coaches* (pp. 167-179). Edmonton, AB: University of Alberta Press.
- Werthner, P., Culver, D., & Mercier, R. (2010). Changing the androcentric world of sport: is it possible? In Robertson, S. (Ed.), *Taking the lead: Strategies and solutions from female coaches* (pp. 37-55). Edmonton, AB: University of Alberta Press.
- Wharf Higgins, J., Begoray, D., MacDonald, M. (2009). A social ecological conceptual framework for understanding adolescent health literacy in the health education classroom. *American Journal of Community Psychology*, 44:350-362. doi: 10.1007/s10464-009-9270-8.
- World Health Organization. (2005). *Girls' participation in physical activities and sports: Benefits, patterns, influences and ways forward*. Centre for Physical Education and Sport Research. Retrieved from <http://www.icsspe.org/documente/Girls.pdf>



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