*





Sport Canada Research Initiative 6th Annual Conference

October 30, 2012

















Minister of State (Sport)

Ministre d'État (Sports)

Ottawa, Canada K1A 0M5



Welcome to the 6th annual Sport Canada Research Initiative conference.

Research plays a critical role in supporting our Government's efforts in advancing sport in Canada. Over the past six years, this conference has brought sport researchers together with policy-makers and practitioners, and the connections between these communities are growing stronger with every year.

Much of the strength of the new 2012 Canadian Sport Policy (CSP 2012) is due to the quality of evidence related to sport participation barriers and outcomes collected over the past six years via the joint Sport Canada-Social Sciences and Humanities Research Council Sport Participation Research Initiative. With the bold new CSP 2012, we are looking to the sport research, policy and practitioner communities to refine their priorities once again to ensure progress toward the new policy's goals.

This year's workshop is designed to obtain input on the new research priorities for the Sport Participation Research Initiative. To achieve the vision of CSP 2012, it will be important to understand the conditions under which policies and programs have the best chance of achieving benefits for Canadians. It will be equally important to monitor and evaluate their levels of success.

Today's keynote address will not only remind us of how individuals and communities can be transformed by the power of sport, but will allow us to learn from others how to most effectively translate evidence into action.

As Minister of State (Sport), I would like to thank all the delegates for your valuable contributions to sport policy and to the Sport Canada Research Initiative. I wish you a successful and productive conference.

The Honourable Bal Gosal



SPORT CANADA RESEARCH INITIATIVE (SCRI) CONFERENCE

Table of Contents

TAB 1	Agenda
TAB 2	Biography of Keynote Speaker
TAB 3	Plenary Presentations
TAB 4	Poster Presentations
TAB 5	Conference Abstracts (in progress projects)
TAB 6	Knowledge Transfer Papers (completed projects)
TAB 7	Where should we focus our research?
TAB 8	List of Participants
TAB 9	Conference Evaluation Form
	Sport Information Resource Centre
	Sport Participation Research Initiative
TAB 10	Notes

SPORT CANADA RESEARCH INITIATIVE (SCRI) CONFERENCE

AGENDA

Brookstreet Hotel

525 Legget Drive, Kanata, Ontario
Grand Scheme Ballroom

Tuesday, October 30, 2012 7:30 **Registration opens** 8:30 Welcome and opening remarks 9:00 Research Presentations - GROUP #1 • Jessica Fraser-Thomas – "Assessing youth sport programs' facilitation of positive youth development" • Martin Gendron – "Participation au soccer amateur au Canada" 10:15 Poster Break Session 11:15 Research Presentations - GROUP #2 • Hala Tamim – "Tai Chi among culturally diverse mid to older community dwelling Canadian adults living in low income neighborhoods" • Margo Watt – "Relations among anxiety sensitivity physical activity and health-related outcomes" 12:30 **Lunch and Keynote (Robert Witchel)** 1:45 Research Presentations - Group #3 • Anne Bowker – "Extracurricular activity participation in Canadian youth: What they do and the benefits they experience" Where should we focus our research? 2:15 • Establishing the research priorities under the new Canadian Sport Policy 2012 4:15 **Closing Remarks**

SPORT CANADA RESEARCH INITIATIVE (SCRI) CONFERENCE

Biography of Keynote Speaker

Robert Witchel National Director, Canada for *Right To Play* (RTP) shares insights on recent programs and preliminary evaluations carried out by RTP and partners as they facilitate sport for development in First Nations.

As the head of the Canadian National Office, Robert is responsible for leading Canadian revenue development, athlete and sports alliances, communications and stewardship activities. Robert is also responsible for Right To Play programming in Canada and oversees both the PLAY (Promoting Life-skills in Aboriginal Youth) and Youth To Youth initiatives. He possesses over 20 years of multi-



disciplinary business experience in international business development, sales, marketing and operations in Canada, USA, Latin America and Europe. After extensive experience with technology and financial services companies including Dow Jones, Reuters and E*TRADE, he entered the not-for-profit sector where he worked with Canada's leading children's hospital for three years prior to joining Right To Play. Robert is a member of Right To Play's Global Leadership Team and is a director of three not-for-profit boards. He's on his road bike whenever he gets the chance.

2012 SPORT CANADA RESEARCH INITIATIVE CONFERENCE

PLENARY PRESENTATIONS

FRASER-THOMAS, J

Assessing youth sport programs' facilitation of

positive youth development

GENDRON, M Participation in Amateur Soccer in Canada

Tai Chi among culturally diverse mid to older

TAMIM, H community dwelling Canadian adults living in low

income neighborhoods

WATT, MRelations among anxiety sensitivity physical

activity and health-related outcomes

Extracurricular activity participation in Canadian

BOWKER, A youth: What they do and the benefits they

experience

Assessing Youth Sport Programs' Facilitation of Positive Youth Development



Jean Côté Nicholas Holt







What we know...

- Organized leisure can serve as a context to facilitate positive youth development (Larson, 2000)
- Sport is the most popular organized youth activity (Hansen & Larson, 2007)
- Sport participation is associated with positive and negative experiences/outcomes (Zarrett et al., 2008)
- Limited research has accounted for the diversity in youth sport program types (Gould & Carson, 2007).

Program Differences

- Competitive programs with more <u>frequent/intense</u> involvement associated with:
- More positive outcomes
 - Prosocial norms
 - Interpersonal relationships
 - Time management
 - Academic and adult achievement
 - Diverse peer groups
- More negative outcomes
 - Physical/emotional exhaustion
 - Risk behaviour
 - Poorer interpersonal functioning

(Busseri et al., 2006; Marsh & Kleitman, 2003; Strachan et al., 2009; Wilkes & Côté, 2010)

What we don't know...

Do other <u>individual and sport program</u>
<u>characteristics</u> influence youths'
<u>developmental experiences</u> within these
sport programs?





- Individual Characteristics
 - Age, Sex, Years of Involvement, Birth Month, Ability
- Program Characteristics
 - Sport Type (Team, Individual)
 - Number of Coaches
 - Sex of Coaches
 - Age of Coaches
 - Team Sex (Coed, Same-Sex)
 - Age Range of Athletes
 - Size of Team
 - Team Manager
 - Training time
 - Competition Time
 - Context (Club, School)
 - Community Size





Purpose

 To examine associations between sport program characteristics, and youths' developmental experiences within these sport programs.



Participants

- 920 youth athletes
 - Age: 10-18 (M=14.2, SD=2.4)
 - Sex: 53% Male, 47% Female
 - Sport Type:
 - 80% Team, 20% Individual
 - · 32 Sports: Soccer, Volleyball, Basketball, Swimming
 - Level: 39% Regional, 55% Provincial, 6% National
 - Context: 36% School, 64% Club
 - Diverse Communities:
 - Population 105 1.3 million
 - · Ontario, Alberta, Nova Scotia

Youth Experiences Survey for Sport (YES-S; MacDonald et al., 2012)

- 37-items measuring experiences in 5 domains:
 - Personal and Social Skills (14)
 - "I learned about the challenges of being a leader"
 - Cognitive Skills (5)
 - "I improved my creative skills"
 - Goal Setting (4)
 - "I learned to consider challenges when making future plans"
 - Initiative (4)
 - "I learned to focus my attention"
 - Negative Experiences (10)
 - "Adult leaders made personal comments that made me mad"
- 4-point scale anchored: "not at all" & "yes definitely"

Data Analysis

5 Separate Multiple Regressions

17 Independent Variables

· Individual and program characteristics

5 Dependent Variables

- · Personal/Social Skills
- · Cognitive Skills
- Goal Setting
- Initiative
- Negative Experiences



Results Personal and Social Skills

- Adjusted $R^2 = .07$, p < .05
 - 7% of variance in personal and social skills attributable to predictor variables

Significant Predictors	β	p
Sport Type (Team)	.41	<.001
Training Time	.19	<.05
Team Sex (Mixed-Sex)	.22	<.05

Results Initiative

- Adjusted $R^2 = .07, p < .05$
 - 7% of variance in initiative attributable to predictor variables

Significant Predictors	β	p
Age	.22	<.05
Coach Sex (Same as Athlete)	.18	<.05

Results

Cognitive Skills

• 9% of variance in cognitive skills attributable to 1 predictor variable – age.

Goal Setting & Negative Experiences

 None of variance in goal setting and negative experiences attributable to 17 predictor variables.

Implications for Enhanced Participation

- High amounts of training time associated with the development of personal and social attributes.
- Policy and Practice
 - Recognize value of training time versus competition time in developing the person within the athlete.

Implications for Enhanced Participation

- Mixed-sex teams associated with the development of personal and social attributes.
- · Policy and Practice
 - Consider methods to create more opportunities for co-ed youth sport involvement.

Implications for Enhanced Participation

- Team sports associated with the development of personal and social attributes.
- Future Direction
 - How can individual sports better facilitate personal and social attributes such as leadership and teamwork?

Implications for Enhanced Participation

- Coach-athlete sex match associated with initiative development.
- Policy and Practice
 - · Continue Women in Coaching program
 - Prioritize training and placement of female coaches on female-only and co-ed teams at youth levels.
- Future Direction
 - Why are sex-matched coaches doing a better job of facilitating initiative among youth sport participants?

Implications for Enhanced Participation

- Sport program characteristics <u>did not</u> predict youths' development in the areas of cognitive skills, goal setting, or negative experiences.
- Future Direction
 - What other factors <u>within</u> programs are contributing to youths' developmental experiences in sport?
- Policy and Practice
 - Assure adequate resources <u>within</u> programs to facilitate optimal development for all youth.

Acknowledgements



Research Team
Theresa Beesley
Dany MacDonald
Katherine Tamminen



Canadian Heritage Sport Canada Patrimoine canadien



Social Sciences and Humanities Research Council of Canada

Participation in amateur soccer in Canada

Martin Gendron, Ph.D., Université du Québec à Lévis (UQAR) Éric Frenette, Ph.D., Université Laval Pierre Valois, Ph.D., Université Laval Claude Goulet, Ph.D., Université Laval

Research funded by Sport Canada and the Social Sciences and Humanities Research Council of Canada (SSHRC)

















The objectives of the research on participation in amateur soccer in Canada are as follows:

- (1) Develop and validate four versions of the survey questionnaire (player, parent, coach, referee);
- (2) Collect and compare the perceptions of players, parents, coaches and referees concerning factors that may influence participation in soccer among U12 to U18 players; and
- (3) Identify the factors associated with the decision by young Canadians to maintain or abandon their participation in this sport.





Situation of soccer in Canada

- Most popular sports in Canada among children 5 to 14 years of age (Sport Canada, 2008):
 - SOCCER (44%)
- baseball (22%)
- ice hockey (24%)swimming (24 %)
- basketball (13%)



- In 2008, membership peaked with 192,078 members at the Fédération de Soccer du Québec (FSQ, 2009) and 384,000 members at the Ontario Soccer Association (OSA, 2009).
- From 1980 to 2008, FSQ membership grew by 488% (FSQ, 2009).





Problematic

- Ice hockey in Canada is an example of a sport that, after having reached high participation levels among young people, experienced massive desertion during the 1980s.
- Possible explanations include high costs and violent incidents involving players, coaches and parents. (Bernard, 2003; CPAT, 2001).
- For a number of sports, including soccer, clearly observed intimidation and violence represent a serious problem. (Kavussanu et al., 2006; Kerr, 2005; NASO.org, 2008; Shields, 1999).
- In this context, is soccer a healthy sport in regard to youth participation?



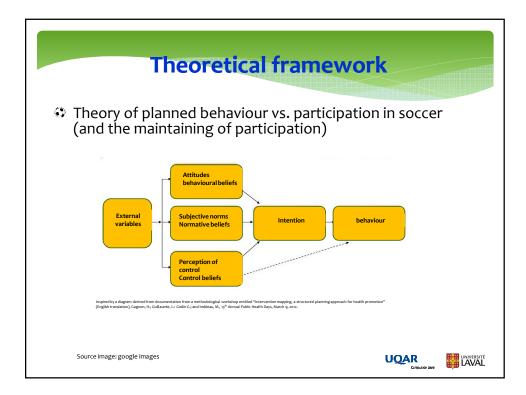


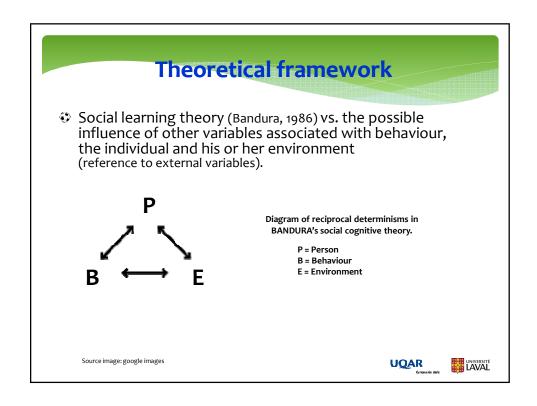












Methodology - Instruments

- Develop four versions of the Questionnaire concerning participation in amateur soccer in Canada (player, parent, coach, referee).
- Player's version
 - Focus group and pretesting with players (n = 47)
 - Scales:
 - * Behavioural beliefs (11 items, $\alpha = .61$)
 - * Normative beliefs (17 items, $\alpha = .89$)
 - * Control beliefs (7 items, $\alpha = .94$)
 - * External variables:
 - Unsportsmanlike behaviours (11 items, $\alpha = .91$)





Methodology - Instruments

- Committee of experts for validation of the other three versions.
- Parent's version
 - Scales:
 - * Behavioural beliefs (12 items, $\alpha = .63$)
 - * Normative beliefs (18 items, $\alpha = .83$)
 - * Control beliefs (7 items, $\alpha = .94$)
 - * External variables:
 - Unsportsmanlike behaviours (11 items, $\alpha = .89$)





Methodology - Instruments

Coach's version

- Scales:
 - * Behavioural beliefs (12 items, $\alpha = .66$)
 - * Normative beliefs (18 items, $\alpha = .80$)
 - * Control beliefs (7 items, $\alpha = .92$)
 - * External variables:
 - Unsportsmanlike behaviours (11 items, $\alpha = .89$)



Referee's version

- Scales:
 - * Behavioural beliefs (12 items, $\alpha = ,66$)
 - * Normative beliefs (18 items, $\alpha = .73$)
 - * Control beliefs (7 items, $\alpha = .88$)
 - * External variables:
 - Unsportsmanlike behaviours (11 items, $\alpha = .90$)







Methodology - Participants

- Paper data collection version during two Quebec tournaments + Online data collection version (Qc and On)
 - Players (n= 1 395; $\mathcal{L} = 50.8\%$; G = 47.4%; N/D = 1.8%)
- Online data collection version (Quebec and Ontario)
 - Parents (n= 1 130; Q = 61,0%; d = 38,7%; N/D = 0,3%)
 - Coaches (n= 557; \mathcal{L} = 13,6%; \mathcal{L} = 85,8%; N/D = 0,5%)
 - Referees (n= 96; Q = 20.8%; d = 78.2%; N/D = 1.0%)
- Total N = 3 178 participants







Results – Behaviour beliefs

"Belief" X "Value" concerning the player's participation in league soccer

	Play	/ers	Pare	ents	Coa	ches	Refe	rees	
Behaviour beliefs	Rank	M	Rank	M	Rank	M	Rank	M	ANOVA
Brings them a lot of fun (C8)	2nd	2.92	1st	3.15	1st	3.07	1st	2.44	F' = 7.963**
Allows them to stay in good physical shape (C1)	1st	2.67	2nd	3.12	2nd	2.74	2nd	2.27	F' = 21.923**
Allows them to improve technically (C2)	3rd	2.43	3rd	2.53	3rd	2.71	4th	1.61	F' = 14.856**
Allows them to make new friends (C6)	4th	1.92	4th	2.08	4th	2.01	3rd	2.13	F' = 1.804

^{**} p < .01





Results – Normative beliefs

Factors that may lead the player to NO LONGER play league soccer as of the following season

	Pla	yers	Par	ents	Coa	ches	Refe	rees	
Normative beliefs	Rank	M	Rank	M	Rank	M	Rank	M	ANOVA
Unsportsmanlike behaviour (C13)	2nd	2.52	2nd	2.97	2nd	3.05	2nd	3.62	F' = 49.309**
Pressure from parents regarding the team's performance (C14)	8th	2.21	4th	2.70	1st	3.07	1st	3.91	F' = 119.739**
Poor team performance (C12)	5th	2.31	7th	2.43	3rd	2.97	3rd	3.61	F' = 75.016**
The quality of supervision offered by coaches (C17)	4th	2.35	1st	3.08	6th	2.84	4th	3.60	F' = 17.300**
Amount of playing time (C11)	3rd	2.39	6th	2.54	5th	2.87	5th	3.53	F' = 38.279**
The quality of refereeing (C15)	1st	2.60	5th	2.61	8th	2.79	16th	2.69	F' = 3.774**

**p < .01





Results - Control beliefs

"Belief" X "Importance" concerning the opinion of people who may influence the player's decision to continue playing soccer

	Play	/ers	Pare	ents	Coa	ches	Refe	erees	
Control beliefs	Rank	M	Rank	M	Rank	M	Rank	M	ANOVA
Influencing the decision to continue: Team mates (C4)	1st	1.48	4th	2.97	1st	4.74	3rd	5.01	F' = 87.77
Influencing the decision to continue: Coach (C3)	3rd	0.57	2nd	3.29	3rd	4.47	2nd	5.04	F' = 144.50
Influencing the decision to continue: Father (C1)	4th	0.50	3rd	3.29	2nd	4.51	1st	5.30	F' = 145.25**
Influencing the decision to continue: Mother (C2)	5th	0.11	1st	3.41	4th	3.99	4th	3.94	F' = 154.99
Influencing the decision to continue: Friends (C5)	2nd	0.86	5th	2.02	5th	3.56	5th	3.39	F' = 61.31

**p < .01





Results – External variables Unsportsmanlike behaviours

During the last 12 months, frequency of players being victimized by the following behaviours:

Unsportsmanlike	Pla	yers	Par	ents	Coa	ches	Refe	rees	
behaviours	Rank	М	Rank	М	Rank	M	Rank	М	ANOVA
Witness: Intentional shoving and pushing (C7)	1st	7.92	1st	5.45	2nd	4.07	1st	7.93	F' = 101.93**
Witness: Mockery or sarcasm (C1)	3rd	7.25	3rd	4.17	1st	4.45	2nd	7.50	F' = 110.34**
Witness: Elbow strikes (C10)	2nd	7.39	2nd	5.12	4th	3.72	5th	4.66	F' = 93.81**
Witness: Insults (C2)	4th	7.16	4th	3.86	3rd	3.84	3rd	7.23	F' = 126.93**

**p < .01





Discussion - Behaviour beliefs

- Consensus of all 4 groups of participants concerning the top 4 beliefs associated with the benefits of playing soccer for the player (a total of 12 items).
- 1 of 4 main factors is specific to soccer (allow them to improve technically).
- The other 3 main factors are more general and may be found in other sporting activities (pleasure, physical shape, and friendship).





Discussion - Normative beliefs

- Disparity in the ranking established by each groups of participants.
- Unsportsmanlike behaviours as a consensus factor among the 4 groups of participants.
- Low-impact factors (to be isolated and contextualized):
 - the cost of essential equipment;
 - equipment supplied by the club;
 - field quality and availability.
- The first choice of groups of participants attributes a deciding role to another person with the power to influence the player's decision concerning whether or not to stop playing soccer.

Player → Referee Parent → Coach

Coach and referee → Parent





Discussion - Control beliefs

- The opinion held by players is less crystallized than adults.
- The importance of the role of the father would seem to predominate over that of the mother (with the exception of parents who replied... the % of mother respondents being higher than father respondents (61% vs. 39%)).
- Similar opinions of coaches and referees.
- "Professional star players" are not a factor as regards continuing to play (but do they influence behaviours during soccer activities?! ... Stay tuned...).













Discussion – External variables Unsportsmanlike behaviours

- Intentional shoving and pushing: consensus with three first choice rankings.
- Players and referees (present on the field) report a much higher number of unsportsmanlike behaviours than parents and coaches (even nearly twice as many in several cases).
- «Top 4»: Occurrence of at least one behaviour belonging to all three scales: Verbal intimidation (4 items), Physical intimidation (4 items), Physical violence (3 items).
- Standard deviations are high, signifying a wide variability of results.





Conclusion - Limits of the research

- Limited access to reach participants with @ as well as the high costs and constraints from ethics committee for paper collection.
- Research is limited to two provinces.
- Representativeness of groups' gender is not the one expected (e.g., players, parents).
- The results reflecting the perception of each group of participants deserve to be validated by observations in game's context.







Conclusion - Next steps

- Examine the results according to different variables (e.g., gender, age, level of competition, region). (2012-11)
- Compare the perceptions of the various groups of participants in terms of maintenance participation determinants. (2012-11)



- Follow up with participants (mini data collection on maintenance participation vs. TCP model (intention and behavior)). (2012-11)
- Final report to SSHRC / Sport Canada. (2012-12)
- FSQ, OSA and clubs consult to share respective expertise in order to develop action plans with a view to maintain a healthy participation. (2012-11 to ...)





Conclusion - Recommandations

- Taking to account these results, conduct focus group interviews with key groups of participant to define determinants, stakes and concrete steps to favour maintenance in soccer participation of players and other group participants.
- Raise awareness into different groups of participants in regard to their respective roles on player's maintenance participation by the way of resources put forward by the associations and clubs (e.g., local meetings, memo by @, websites and dynamic material like videos).







Acknowledgements





Thanks to Quebec and Ontario associations' and clubs' board of direction

Thanks to all research assistants for their contribution that made possible this study





Thanks to the players, parents, coaches and referees for their precious collaboration.

Thanks to M&E team: Adrien Cantat, Julien D'Amours-R., Élyse Fréchette, Jacinthe Cloutier







Tai Chi among culturally diverse mid to older community dwelling Canadian adults living in low income neighborhoods

Hala Tamim¹ Chris Ardern¹, Paul Ritvo¹, Patricia Lynn Weir², Joe Baker¹

1School of Kinesiology and Health Science, York University, Toronto, Canada 2 Department of Kinesiology, University of Windsor, Windsor, Canada

What we know



- Tai Chi is a traditional Chinese form of physical activitymost popular in China especially among older adults
- □ Low intensity, slow, continuous, fluid
- Mind body integration:
 - Mental concentration
 - Relaxation
 - Slow, deep breathing
- Activity with muscle strengthening elements, especially for the lower extremities.

YORK UNIVERSITÉ UNIVERSITY

What we know

Tai Chi and Physical health

Improvements in cardio-respiratory & musculoskeletal functions, balance, waist circumference, BMI, blood pressure

Tai Chi and Mental health

Overall better mood, improvements in self-esteem, reductions in depression, decrease in stress levels

- Beneficial effects can be seen as early as 6 weeks
- "Tai Chi is a promising type of exercise that has the potential of being the preferred balanced training" (the American Geriatrics Society, the British Geriatrics Society and the American Academy of Orthopedic Surgeons- 2001).

What we know



- Reduced mobility and musculoskeletal function
 - Leading cause of falls
 - o Burden the health care system
- Prevention is an important challenge Physical activity
- 68% of older adult women and 53% of older adult men in Canada do not participate in any form of regular exercise (Statistics Canada, 2005).
 - O Low SES older adults and ethnic minorities

What we know



Optimally:

- Safe
- Affordable
- Accessible
- Frequent
- Socially supportive

What we do not know



- Limited research examining effectiveness of a TC intervention in a community based setting.
- Generalizability to the ethnically diverse Canadian population.
- Low SES, ethnic minority populations (could benefit substantially from an inexpensive, low impact PA modality like TC).



Objectives- three years

- 1.Examine and assess the factors influencing older adults in terms of enrolment in a locally offered TC program
- 2.Examine the TC effects in terms of improved health related fitness and psychological well being
- 3.Examine and assess factors affecting sustained participation in TC

Three years study



- •Two groups:
 - Group 1: Cultural affiliation not related to TC
 - Group 2: Cultural affiliation related to TC

Target population / inclusion Criteria

YORK

Group 1- Jane / Finch Community

- Lower SES compared to Toronto mean
- Visible minority comprises over 70% of its population

Group 2- Dundas / Spadina community

- One of largest Chinese communities in North America
- Socio-economically similar to the Jane-Finch
- Inclusion Criteria: Community dwelling, 50+ years, have medical capability to be involved in an exercise intervention.
- Study approved by the ethics review committee of York University. Signed consent forms obtained.

(Profile of Low Income in the City of Toronto 2010, Statistics Canada, 2010)

Three years study



Group 1: Cultural affiliation not related to TC

Cohort 1
August - December 2009
35 Shoreham Drive
Toronto Community Housing Building

Cohort 2 November 2011-March 2012 Driftwood & John Booth Community centers

Group 2: Cultural affiliation related to TC

Cohort 3: March 2011- July 2011 Alexandra Park community center

YORK

Specific objectives

- ☐ Characteristics of participants enrolled in the Tai Chi program
- Adherence levels
- Changes in functional fitness and perceived stress

Tai Chi Exercise Program



- 16 weeks free Tai Chi program
- Tai chi classes taught by Tai Chi master
- 6 classes per week (on specific days in the morning and afternoon)- Advised to attend at least 2 sessions per week
- 1 hour sessions
 - o 15 min warm-up (Qi Gong)
 - o 45 min Tai Chi (Yang Style)
- Class attendance was assessed throughout study.

Data collection



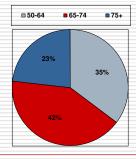
Specific sessions for data collection assessed pre program, mid study, and post-program.

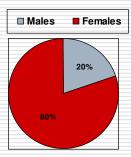
- O Attendance
- o Socio-demographic characteristics
- o Physical health
- o Mental Health

Results



A total of 210 participants were recruited (78, 80 and 52 for cohorts 1, 2, and 3).

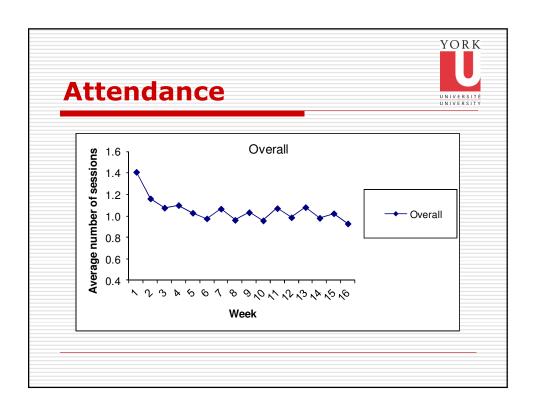


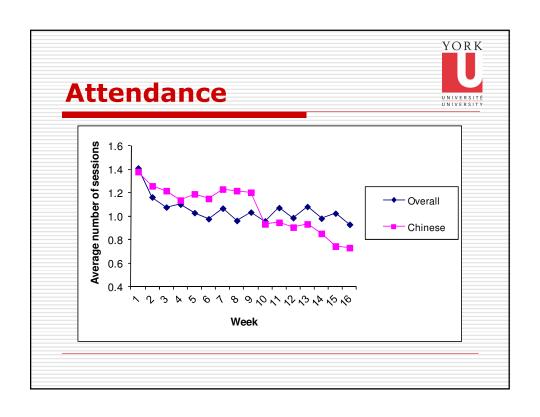


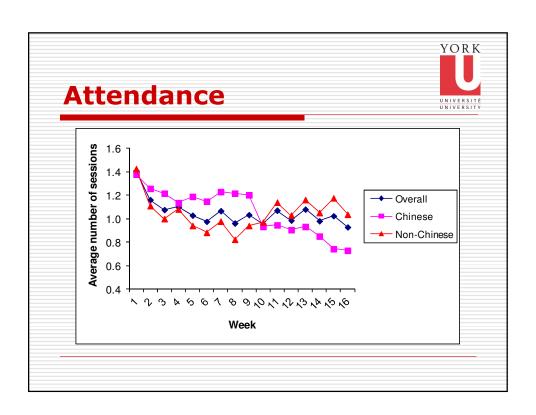
Results		UNIVERSIT
Education		
Illiterate	14 (6.7)	
Primary	80 (38.1)	
High school	79 (37.6)	
College/university	29 (13.8)	
Marital Status		
Never married /separated/ divorced/ widowed	112 (53.3%)	
Married / living with a partner	92 (43.8%)	
Income		
<\$14,000 per year	135 (64.3%)	
\$14,000-\$30,000	35 (16.7%)	
>\$30,000	19 (9.0%)	

Results		UNIVERSI: UNIVERSI:
Ethnic origin		
South America	54 (25.7)	
China	74 (35.2)	
Caribbean	13 (6.2)	
South Asia	10 (4.8) 33(15.7)	
Europe Canada	13 (6.2)	
Other	8 (3.8)	
Smoking	4 (1.9)	
Drinking alcohol	45 (21.4)	
Walking provision	18 (8.6)	
Previous participation in TC	49 (23.3)	

Results		UNIVERSIT
Perceived physical fitness		
Poor / very poor	22 (10.5)	
Average	91 (43.3)	
Good	63 (30.0)	
Very good	25 (11.9)	
Perceived Overall health		
Poor / fair	46 (21.9)	
Good	107 (51.0)	
Very Good / Excellent	48 (22.9)	
Comorbidities		
Hypertension	105(50.0%)	
Arthritis	102(48.6%)	
Diabetes	45(21.4%)	
Depression	31(14.8%)	
COPD	10 (4.8%)	











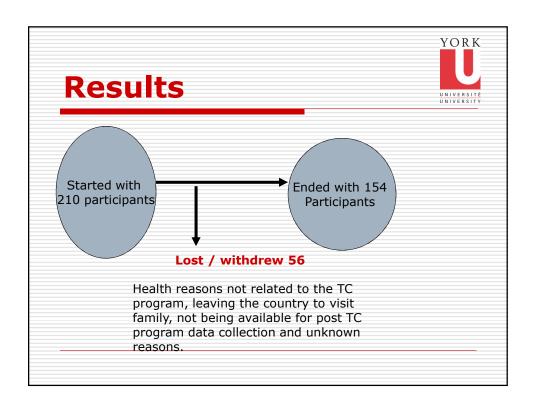












Results



	Pre TC program Mean (SD)	Post TC program Mean (SD)	Р
Cardiovascular and	anthropometric		
Resting heart rate (bpm)	72.1 (10.0)	73.0 (10.4)	0.21
Resting diastolic blood pressure (mmHg)	75.5 (7.7)	75.6 (6.7)	0.88
Body mass index kg/m ²	27.0 (6.7)	26.8 (6.7)	0.63

Results



	Pre TC program Mean (SD)	Post TC program Mean (SD)	P
Functional fitness - Strength			
Right hand grip (kg)	27.8 (8.8)	28.6 (8.8)	0.029
Left hand grip (kg)	26.7 (8.0)	28.1 (7.9)	<0.001
Combined grip strength (kg)	54.2 (16.6)	56.6 (16.3)	<0.001
Functional fitness - Flexibility			
Sit and reach (cm)	26.9 (9.1)	28.8 (8.5)	0.004

Results



	Pre TC program Mean (SD)	Post TC program Mean (SD)	P
Functional fitness - Endurance			
Chair stand (30 seconds)	12.4 (4.1)	15.8 (6.2)	<0.001
Arm curl (30 sec)	15.6 (5.3)	18.9 (5.7)	< 0.001
Up and go	7.5 (3.3)	6.9 (2.6)	0.001
Perceived stress			
Perceived Stress Scale	18.8 (8.1)	17.3 (8.8)	0.027

Discussion



Strengths

Multiple low income elderly ethnicities.

Limitations

- •Study design (internal validity)- impact of daily activity change, seasonal affect and health status, mood
- Self-reporting bias

General implications for enhanced participation



- Optimal mode of physical activity for a culturally diverse group of older adults
 - Well attended
 - Significant health improvements
 - o Performed by ambulatory participants at any level of skill
- Incorporated into community programs, senior center activities, senior nursing homes- requirements do not involve expensive equipment (TC master, available space)
- Potential for considerable public health improvement and cost savings to the health care system.

Future directions



Current studies:

- Assessing the barriers and promoters for sustained participation in TC
- Assessing if physical and mental health improvements is different for older adults of Chinese versus non-Chinese origin

Future studies:

- Assessing sustainability of participation in TC exercise over longer duration (greater than 4 months)
- Assessing cost effectiveness of TC programs.



Relations among anxiety sensitivity, physical activity, & health outcomes

Margo C. Watt, PhD

Full Professor of Psychology, St Francis Xavier University Adjunct Professor, Dalhousie and Acadia Universities SPRI Conference, October 2012







Research Question

What are the relations among anxiety sensitivity (AS), physical activity & health outcomes?

> Role of personality variable (AS) as potential barrier to physical activity?





Anxiety Sensitivity (AS)



- ❖ Fear of arousal-related bodily sensations due to beliefs that sensations have harmful **physical**, **cognitive**, and/or **social** consequences (Reiss, 1991)
- ❖ High AS (HAS) implicated in development and maintenance of anxiety- and related disorders:
 - * Panic disorder
 - **❖** PTSD (Schmidt et al., 1999)
 - ❖ Substance use disorders (Stewart et al., 1999)



❖ Hypochondriasis (Watt & Stewart, 2000)

Margo C. Watt, PhD

AS and Physical Health



* HAS linked to ...

- Poor perceived health (Schmidt et al., 1996, 2003; Schmidt & Telch, 1997; Yartz et al., 2005)
- * Chronic pain (Asmundson & Norton, 199; Asmundson & Taylor, 1996)
- ❖ Tinnitus (Andresson & Vretblad, 2000)
- ❖ Menstrual distress (Sigmon et al., 1996, 2000)



AS and Physical Activity (PA)

- **❖** HAS individuals tend to avoid activities (e.g., physical exercise) that induce arousal-related sensations
 - Lower perceived fitness levels (Lefaivre & Watt, 2006; McWilliams & Asmundson, 2001)
 - * Engage in less PA (McWilliams & Asmundson, 2001; Watt & MacDonald, 2003)
 - ❖ Less use of exercise to cope with stress (Watt & MacDonald, 2003)
 - Less likely to participate in organized sports (Lefaivre & Watt, 2006)





Margo C. Watt, PhD

Research Project



Objectives:

- 1. Examine relations between *AS & PA* and health outcomes in young adults.
- 2. Examine *learning experiences* (e.g., parental influence) on physical activity levels.
- 3. Examine *process* by which brief cognitive-behavioural treatment (CBT) with running as interoceptive exposure component reduces high AS.

Research Project



What we knew or thought we knew:

➤ Learning experiences → High AS levels
 ➤ High AS levels ↔ low physical activity levels
 ➤ Brief CBT = decreases in AS levels

What we didn't know:

Mechanism (i.e., whether decreases in AS are due to affective changes, cognitive changes, and/or changes in physical fitness levels.



Margo C. Watt, PhD

What We Found:



Study 1:

- Only 20% met Health Canada guidelines for physical activity (≥ 30 minutes of moderate exercise, ≥ 5 x/week)
- Men (vs. women) reported significantly greater frequency (almost 2x) of participation in high and moderate intensity exercise per week.
- **❖ High AS > Low AS:**
 - * Less stress and anxiety, but not depression
 - * Better perception of health, fitness, and energy
 - Relations between PA and both mental and physical health mediated, in part, by AS-Social Concerns



What We Found:

Study 1:

- ***** High AS < Low AS:
 - * Perceive more barriers and benefits to PA
 - * Lower parental support & encouragement for sport/PA





Margo C. Watt, PhD

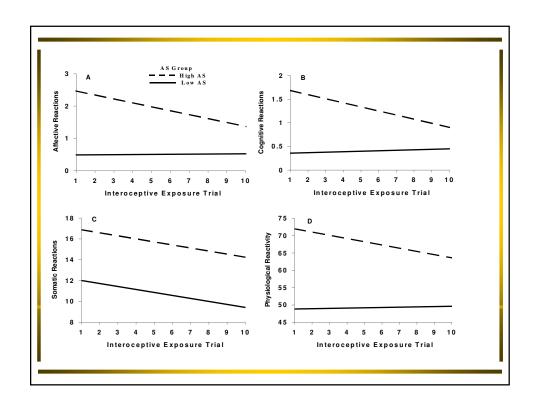
What We Found:



Study 2:

- ❖ At baseline, High AS > Low AS:
 - * Affective, cognitive, somatic, physiological reactivity
- ❖ Over IE (running) trials, **High AS > Low AS:**
 - ❖ Decreased affective, cognitive, physiological reactivity; not somatic
 - * Reductions in stress, anxiety, and depression





General Implications

- Brief CBT with running as IE component yields positive mental and physical effects
- ❖ PA as non-pharmacologic approach to reducing emotional distress
- PA as means of prevention / prophylactic effect
- Benefits to targeting high-risk populations (e.g., high AS)







Implications



Practitioners:

 Importance of physical exercise (running) in prevention and treatment of physical and mental health problems

Policymakers:

- * Education: parents, teachers, health & medical practitioners
- Exercise and sport programs for children/adolescents should include attention to role of psychological factors as potential barriers



Margo C. Watt, PhD

What We Still Don't Know

- Given the broad psychological and physical benefits of PA, need to look at barriers ...
 - What prevents people from engaging in PA and sport (Sabourin et al., 2010; Smits et al., 2010)?
 - What prevents health care professionals from prescribing PA more often?
- **❖** What about ...
 - ❖ Women's sport and exercise?
 - Other factors that may interact with AS (MF, attachment) in PA and sport?





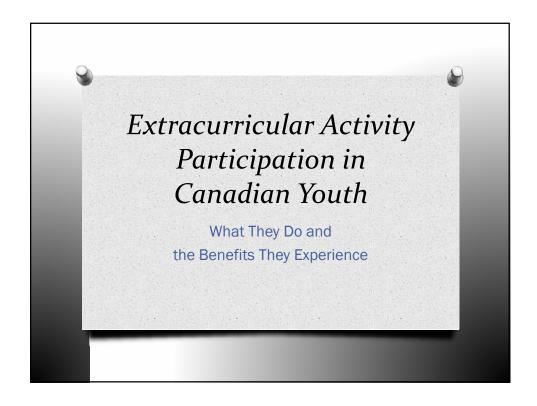
Dissemination of Findings

- 1. 5 publications in peer-reviewed journals
- 2. 2 papers being revised for resubmission
- 3. 17 conference presentations
- 4. 2 dissertation students & numerous undergraduates
- 5. Contribution, in part, to ...

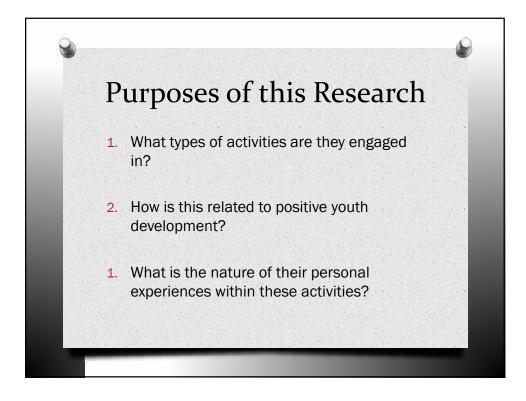
Watt, M. C. & Stewart, S. H. (2009). *Overcoming fear of fear: How to reduce anxiety sensitivity.* Oakland, CA: New Harbinger Press



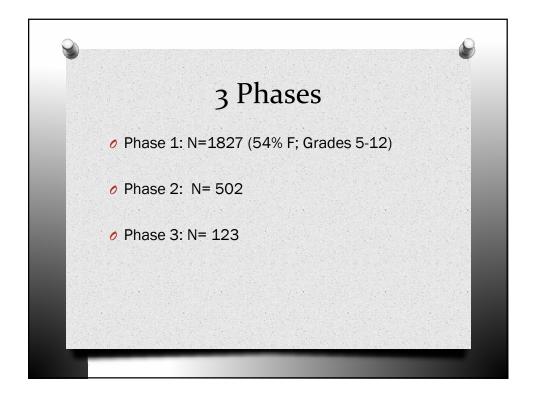


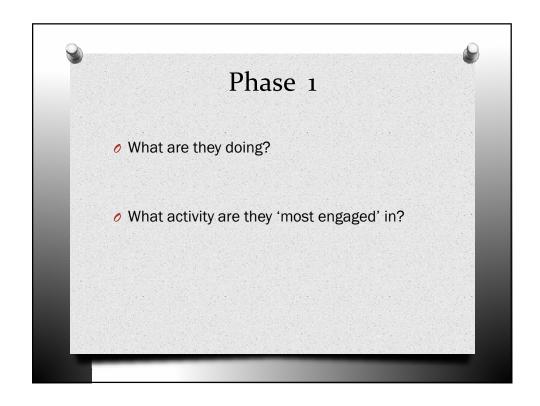






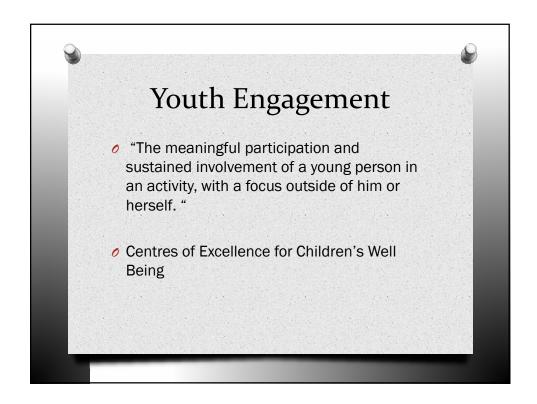


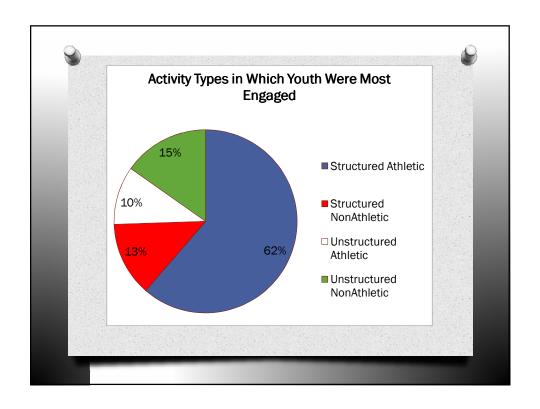


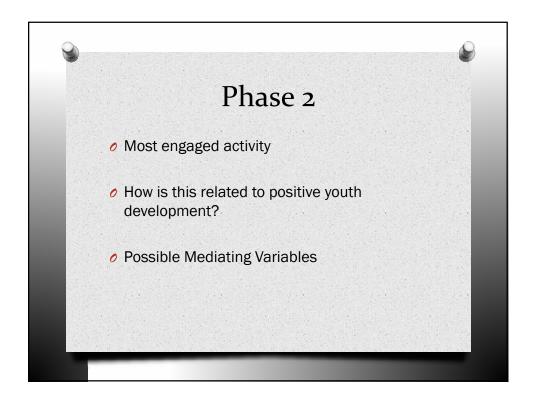


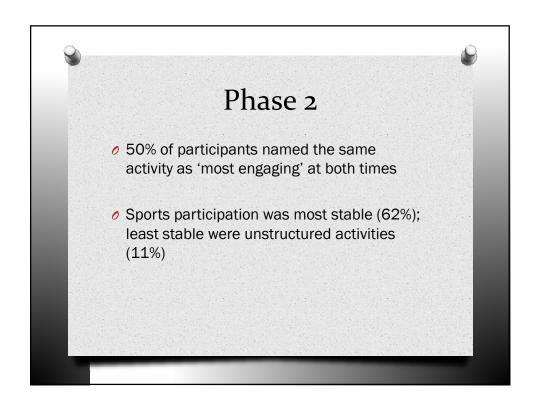






















SPORT CANADA RESEARCH INITIATIVE 2012 CONFERENCE POSTER PRESENTATIONS

BAXTER-JONES, A.	The effects of adolescent physical growth and maturation on selection into sport and long-term effects on youth sports participation
BÉLANGER, M.	Monitoring Activities of Teenagers to Comprehend their Habits: An update on The MATCH project
BRAY, S.	You Believe I Can? So do I! Interpersonal Feedback Increases Self- efficacy and Intrinsic Motivation to Perform Novel Motor Skill Tasks.
BRUNER, M.	Social Identity and Moral Behaviour in Youth Sport
DE LISIO, A.	Regeneration or gentrification? Sport mega-event hosting and social housing
DIXON, J.	Exploring Developmental Factors for Overcoming Relative Age Effects in Ice Hockey
FRASER-THOMAS, J.	Trickle down effect? Exploring the influence of the Olympic Games on preschooler development and sport participation
GAUDREAU, P.	The role of parents and coaches in predicting consequential sport participation outcomes: A daily training diary study
GRAHAM, J.	"Keep trying it took me a while to get that too!" Investigating peer feedback for increasing self-efficacy and intrinsic motivation in children's sport.
HAVITZ, M.	Impact of Ego Involvement with Running on Varsity Athletes' Post- University Running Participation and Health
HAYHURST, L.	Corporatizing Sport for Aboriginal Girls: Connecting Corporate Social Responsibility, the 'Girl Effect' and Aboriginal-focused Sport, Gender and Development Programs
HORTON, S.	Role Models of Aging: Fostering sports participation among older adults
JEFFERY-TOSONI, S.	Exploring contemporary issues in Canadian youth hockey: Experiences and perspectives of peewee players and elite hockey insiders

LAPOINTE, L.	Transformation of social norms concerning transportation and community capacity building to ensure the continuation of an active transportation program for getting to school: case study of Trottibus.
MACINTOSH, E.	Towards sustainable sport and development programs in two- third world communities
MILLINGTON, B.	Aging in the Information Age: An Ethnographic Study of Video Gaming in Canadian Retirement Centres
моск, ѕ.	The Role of Sexual Minority Sport Group Involvement in Counteracting Minority Stress: Preliminary Findings
MUNROE- CHANDLER, K.	CAPIQ: A measure of children's imagery use during active play
PERRIER, M.	Getting To Yes: Differences Between Sport Actors Intenders and Non-Intenders with Acquired Physical Disabilities
READE, I.	Factors Affecting Retention of Experienced Sport Coaches
RIVARD, L.	Girls' Perspectives on Their Lived Experiences of Physical Activity and Sport in Secondary Schools: A Rwandan Case Study
STRACHAN, L.	Coaches Perceptions of Project SCORE!: A pilot study
TAKS, M.	Leveraging Sport Events for Participation: Results from a Panel of Experts
WEIR, P.	Physical activity as a form of engagement in seniors: Where are we at?

Sport Canada Research Initiative Conference

October 30, 2012

Kanata, Ontario

CONFERENCE ABSTRACTS

Projects In-Progress

ADAMS, CARLY	7
Imagining Community: Women's ice hockey, high performance sport, and rural survival in Southern Alberta	
ALEXANDER, EDWARD	8
Space and the Social Inclusion of Youth through Sport	8
ARELLANO, ALEXANDRA	9
Building Sustainable Youth Development Sports	9
BAILIS, DANIEL	10
Goal Conflict as a Barrier to Regular Physical Activity	10
BALISH, SHEA	12
The Social Ecology of Team-Sport Participation in Youth: A Multilevel, Gender-Specific Approach	12
BAXTER-JONES, ADAM	13
The effects of adolescent physical growth and maturation on selection into sport and lon term effects on youth sports participation	_
BÉLANGER, MATHIEU	14
Monitoring Activities of Teenagers to Comprehend their Habits: The MATCH project	14
BLODGETT, AMY	15
The Relocation Experiences of Aboriginal Athletes Pursuing Sport Dreams	15
BRAY, STEVEN R	16
You Believe I Can? So do I! Interpersonal Feedback Increases Self-efficacy and Intrinsic Motivation to Perform Novel Motor Skill Tasks	16
CLARK, ANDREW	17
Comparing the Barriers Between Organized and Unorganized Sport Participation in Hamil	-
DE LISIO, AMANDA	18
Re-Generation/Gentrification: Urbanization and the 2015 Pan/Paranan American Games	18

DEMERS, GUYLAINE	19
Sport Experiences of Lesbian, Gay, Bisexual and Transgender Athletes and Coaches	19
DIXON, JESS	20
Exploring Developmental Factors for Overcoming Relative Age Effects in Ice Hockey	20
DONNELLY, MICHELLE	21
Riding, Community, Segregation: Exploring Girls-only skateboarding Programs	21
DONNELLY, PETER	22
Multiculturalism and physical culture in the GTA	22
DUBUC-CHARBONNEAU, NICOLE	2 3
Addressing Varsity Athletes Burnout and Well-being through the Implementation of a F based Self-regulation Intervention	
FALLS, DOMINIQUE	24
Growing up on the road: Young Athletes in Canadian Small Cities	24
FRASER-THOMAS, JESSICA	25
Trickle down effect? Exploring the influence of the Olympic Games on preschooler development and sport participation	25
FRASER-THOMAS, JESSICA	27
Assessing Youth Sport Programs' Facilitation of Positive Youth Development	27
GADBOIS, SHANNON	28
Extracurricular Activities Involvement in Canada: What Do Youth Get Out of the Experie	
GAUDREAU, PATRICK	29
The Role of Parents and Coaches in Predicting Consequential Sport Participation Outcomed Daily Training Diary Study	29
The Shifting Landscape of Interests in Physical Activity: Preferences for Physical Activity the Lifespan	

GENDRON, MARTIN	32
Survey on Participation in Amateur Soccer in Canada	32
GOODMAN, DAVID	33
Unsportsmanlike Aggression in Youth Hockey: Attitudes, Perceived Social Approval, an Situational Temptation	
GRAHAM, JEFFREY	34
"Keep trying, it took me a while to get that too!" Investigating peer feedback for increself-efficacy and intrinsic motivation in children's sport.	
HATTON, NATHAN	35
Wrestling with Ethnicity: Immigration, Sport and Class in Winnipeg Before 1930	35
HAVITZ, MARK	36
Impact of Ego Involvement with Running on Varsity Athletes' Post-University Running Participation and Health	
HAYHURST, LINDSAY	38
Corporatizing Sport for Aboriginal Girls: Connecting Corporate Social Responsibility, the Effect' and Aboriginal-focused Sport, Gender and Development Programs	
HOEBER, LARENA	39
Innovations in community sport organizations	39
HORTON, SEAN	40
Role Models of Aging: Fostering sports participation among older adults	40
KOCH, JORDAN	41
One Size Doesn't Fit All: Sport, Community Development, and Cultural Diversity	41
LAPOINTE, LAURENCE	42
Transformation of social norms concerning transportation and community capacity by to ensure the continuation of an active transportation program for getting to school:	•
study of Trottibus	42
LEIPERT, BEVERLY	43
Curling and Rural Health Promotion: A National Photovoice Study	43

MASON, COURTNEY	45
Barriers to Participation in Physical Activity for Shibogama First Nations	45
McRAE, HEATHER	46
Culturally Relevant Sport for Urban Aboriginal Youth: Examining the Role of Sport Educa	
MILLINGTON, BRAD	
Aging in the information age: An ethnographic study of video gaming in Canadian retirencentres	
MISENER, KATIE	48
An investigation of nonprofit community sport organizations through the lens of social responsibility	48
MOCK, STEVEN	49
The Influence of Sexual Minority-Focused Sport Group Involvement on the Well-Being of Sexual Minorities	
MONROE-CHANDLER, KRISTA	51
Imagery Use in CAPIQ: A measure of children's imagery use during active play	51
PERRIER, MARIE-JOSÉE	52
Getting to yes: differences between sport non-intenders, intenders and actors with acque physical disabilities (completed in 2012)	
READE, IAN	53
Social Sciences and Humanities Research Council: Sport Participation Research Initiative Factors Affecting Retention of Experienced Sport Coaches	53
REHMAN, LAURENCE	55
Understanding Supportive and Satisfying Sport Experiences of Overweight Children	55
RIVARD, LYSANNE	56
Girls' Perspectives on Their Lived Experiences of Physical Activity and Sport in Secondary	56

STRACHAN, LEISHA	57
Coaches Perceptions of Project SCORE!: A pilot study	57
STARKES, JANET	58
Lifelong Commitment to Sport: Comparing Masters Athletes from Different Discipline	s 58
STIRLING, ASHLEY ELISA	60
Athletes' Experiences of Emotional Abuse in Sport	60
TAKS, MARIJKE	61
Leveraging Sport Events for Participation: Results from a Panel of Experts	61
TRUDEAU, FRANÇOIS	62
Factors in adopting Long-term Athlete Development	62
ULVICK, JOCELYN	63
Group cohesion in adolescent sport	63
WATT, MARGO	64
Relations among Anxiety Sensitivity, Physical Activity and Health-Related Outcomes	64
WEIR, PATRICIA	66
Physical activity as a form of engagement in seniors: Where are we at?	66
WEISS, JONATHON	67
Predictors of sport participation in youth with intellectual disability: Who gets and wh involved?	•
WOOD, LAURA	68
The Social Nature of Women's Sport Participation	68
YOUNGBLUT, HOPE	69
Views of Sport and Physical Activity of Early Adolescent Female Youth	69

ADAMS, CARLY

Lethbridge University

SRG 2011

Imagining Community: Women's ice hockey, high performance sport, and rural survival in Southern Alberta

Canada is becoming increasingly urbanized with small rural communities subject to amalgamation or threatened by decline. Statistics Canada data indicate that by 1931, for the first time in Canadian history, more citizens (54%) lived in urban centre than rural communities. By 2006, this percentage had reached 80%. This demographic shift has serious ramifications for small rural communities struggling to survive. For Warner, a Southern Alberta agricultural-based community of approximately 380 persons, a unique strategy was adopted to imagine a sense of community and to allow its residents the choice to remain 'in place' (Whitson and Epp, 2006). Located 65 km south of Lethbridge, the rural village was threatened with the potential closure of the consolidated Kindergarten to Grade 12 school (ages 5-17). Citizens were determined to save their school and the community as a whole through the sport of ice hockey. By 2003, the Warner vision of an imagined community, to paraphrase Benedict Anderson (1983) came to include images of a high performance female hockey school, with its out of town players attending the local school. Warner is representative of many rural Canadian communities in that its citizens have always had to be sensitive to issues of survival and to seek innovative solutions to defend against community decline. What is unique about Warner is the creation of a high performance hockey school as the primary innovation to save its school, and implicitly the town itself. Thus the proposed research has as its focus, the Warner Hockey School as the site to explore the social determinants that led to the establishment of the school, its purposes, both imagined and actual, and the underlying role that high performance sport might play in rural community survival.

ALEXANDER, EDWARD

University of British Columbia

POST-DOCTORAL STIPEND 2007

Space and the Social Inclusion of Youth through Sport

Policy analyses have identified the need for safe environments where social networks, autonomy, and control can be developed by youth (Donnelly & Coakley, 2002) and for "inclusive public spaces for leisure and activities that allow the expression of difference" (Papillon, 2002, p. 5). While it is not disputed that spaces may be a key element of providing social inclusion through sport, postwar sporting spaces have also been critiqued for the ways they restrict and control some while valorizing others (Vertinsky & McKay, 2004). Research has also drawn the link between urban forms and public health, implicating city planners in current health crises in North America (Frank, Engelke, & Schmid, 2003). Development of cities and the (re)drawing of political boundaries of governance are reported to have particularly constricting outcomes for how public spaces are controlled and homogenized vis-à-vis citizens from lower socio-economic positions (Harvey, 2001; Mitchell, 2003). This is of specific concern in the Canadian context where urban and rural communities are being consolidated into regional governance systems as a method of achieving financial efficiencies (Kushner & Siegel, 2005; Siegel, 2004). In contrast, research investigating the lives of urban youth has uncovered agency in the ways they modify the planned order and the way "local neighbourhoods were actually the arena and also the basis of multiethnic harmony" (Watt & Stenson, 1998, p. 254). My postdoctoral research program examines how rural, suburban and urban spaces are constructed by institutions, staff and youth.

The research pursues the following questions:

- 1) How is space implicated in sport inclusion policies and interpreted by municipal staff, and intended beneficiaries (e.g., diverse youth on low-income)?
- 2) How are spaces of sport inclusion defined (including their location, format, level of participant autonomy)?
- 3) How are diverse youth living in low-income experiencing (or not experiencing) spaces of sport inclusion?

ARELLANO, ALEXANDRA

University of Ottawa

E. MACINTOSH, T. FORNERIS

SRG 2011

Building Sustainable Youth Development Sports

In recent years, the movement to utilize sport for development purposes has received increased empirical attention to understand in part, the impact, tensions and responsible nature by which programs can and should be managed (e.g., Hayhurst & Frisby, 2010; Skinner & Zakus, 2008). The capability of organizations to deliver effective sport and development programs is influenced by many internal and external factors (Coalter, 2010; Kidd, 2008). In fact, an array of challenges related to program delivery, monitoring, and evaluation have exposed concerns regarding the nature of sport and development programs and their likelihood of achieving sustainability (Burnett, 2009; MacIntosh & Spence, 2010; Skinner & Zakus, 2008).

In this qualitative research study, one such sport and development initiative operated by the Right to Play (RTP) organization and in partnership with two First Nation communities in Canada is explored in depth over the course of the two years of operations within a four year research plan. Specifically, the program known as "Promoting Life-skills in Aboriginal Youth" (PLAY) is examined. The PLAY program is the first experience for RTP in Canada.

Several types of data have been collected to date including documentation detailing the sport and development initiatives, field visits, observational note taking, informal discussions with stakeholders, and interviews with stakeholders (e.g., community members, organizational administration). This poster presentation will outline the data collected. Further, this presentation will discuss the findings thus far while highlighting the psycho-social youth challenges, the systemic challenges facing the sustainability of the initiative and outcomes thus far.

BAILIS, DANIEL

University of Manitoba

SRG 2007

Goal Conflict as a Barrier to Regular Physical Activity

Most people who adopt the goal of improving physical activity do not succeed. The aim of this research is to examine goal conflict as a uniquely contributing factor to the low rate of success. To date, the research has involved the screening of over 1,000 undergraduates with high exercise motivation into a series of laboratory experiments. In our typical experiment, after making a commitment to exercise, students are randomly assigned to conditions that prompt them to think about either their conflicting academic goals, or their consistent exercise goals. Follow-up measures of the students' mood, motivation/intentions, and exercise behaviour permit us to test the effects of this brief exposure to goal conflict, while holding other factors constant.

Preliminary experiments and those conducted in the first year of this grant showed that goal conflict can create a barrier to regular physical activity in several ways: by (a) lowering the amount of exercise that is performed up to 1 week later, (b) preventing intrinsic enjoyment of exercise, and (c) conditioning negative emotions to exercise-related objects and settings. These studies (now under peer review) found no evidence that goal conflict lowers participants' attitudes or intentions to exercise: instead, it prevents them from acting on their intentions.

Experiments in the second year considered goal conflict in the broader context of excuses for non-adherence to exercise, and personal factors and interventions that might counteract goal-conflict effects. The excuse-making research formed the basis of a successful Master's thesis and new collaboration with researchers who are including exercise prescriptions in an online treatment program for patients with insomnia.

The major focus of research in years 2 and 3 has been interventions to manage goal conflict effectively. To date we have examined interventions such as scheduling exercise in advance, promotional messages that emphasize the costs of inactivity vs. the benefits of regular activity, and videos that emphasize the benefits of exercise for health vs. alternate goals. In each case, our findings suggest that the damaging effects of goal conflict for exercise performance or enjoyment can be avoided.

Two practical implications of this research are already clear. The first is that poor adherence to exercise has psychological causes and remedies apart from individuals' knowledge of health-related risk, or other sources of motivation toward exercise, which are still the main targets of interventions in this field. The second is that goal conflict is likely to be fueled by a social organization of exercise that keeps it separate from (and

therefore apparently costly to) individuals' other goal pursuits. To address goal conflict, public policies and promotional messages can shift toward the notion of sustainably integrating exercise with other pursuits.

BALISH, SHEA

Dalhousie University

C. BLANCHARD, D. RAINHAM

DOCTORAL STIPEND 2012

The Social Ecology of Team-Sport Participation in Youth: A Multilevel, Gender-Specific Approach

While the societal utility of sport is increasingly being established (Fraser-Thomas, Côté, & Deakin, 2005; Holt, 2008), sport participation is declining in many modern societies including Canada (Ifedi, 2008) while alarming gender differences persist.

Traditional research addressing this gap has been "atomistic," in that, it focuses narrowly on individuals (e.g., athletes, coaches, parents) and dyadic interactions (e.g., athlete-coach, coach-parent). However, there is an emerging realization that research at the individual level—although necessary—is insufficient. Aligning with the social ecological approach, Balish, Rainham, and Blanchard (2012) recently proposed a multilevel model of sport participation that hypothesizes influential factors at multiple analytic levels (i.e., biological, intrapersonal, interpersonal, institutional, community, policy) and how such factors should be interrelated.

To test this multilevel model, the proposed project intends to recruit 800 participants (male n=400, female n=400) between the ages 14 to 16 from Canadian high schools. Data collection will consist of anthropometric measurements, survey responses, and geospatial information. The initial survey will include three of the six categories of measures: (1) biological measures (e.g., height, weight, handgrip strength, 2D:4D finger ratio), (2) intrapersonal measures (e.g., self-referenced athletic competence), (3) interpersonal measures (e.g., socioeconomic status). The final three measures will be collected with the aid of geospatial technologies. At the (4) institutional level, types of sport programs offered at participants' school and in their community will be identified and catalogued in a geographic information systems database. At the (5) community level, participants' current place of residence will be identified and linked to an already existing spatial database of the natural and built environment (e.g., hockey rinks, parks). At the (6) policy level, regions of participants' environment will be compared using an index that represents investment in recreational and sporting facilities. Data analysis will require geographic information systems and hierarchal linear modeling.

BAXTER-JONES, ADAM

University of Saskatchewan

W. PROCTOR, S. CUMMING, L. SHERAR

SRG 2012

The effects of adolescent physical growth and maturation on selection into sport and long-term effects on youth sports participation

At present we know that youth sport initiation and sustained participation are influenced by a large number of physical and psychosocial factors. One potentially important determinant of sports participation, that has both physical and psychosocial effects, is variations in adolescent growth and maturation. For example, within many team sports, an adolescent boy with greater physical maturity (either because he has a birthday early in the selection year, and thus is older and/or because he is an early maturer) is more likely to be selected for sports teams because of advanced development in size, strength, speed and endurance. However, what we don't know is whether this maturity bias at try-outs holds true across a range of team sports and for females. We also don't know the impact of maturation on long term youth participation in sport. This research has two main objectives: 1) to examine the relationships among biological maturity status, age, physical size, and success at being selected into male and female youth Canadian provincial soccer, basketball, volleyball and hockey try-outs. 2) to examine the influence of growth and maturation and success at team try-outs on long term (3 years) youth participation in sports. In addition, the association between maturity status and date of birth and a youth's perceptions of their own sports competence, physical conditioning, strength and body attractiveness and perceptions of coaching behaviour will also be investigated. Baseline measurements will be obtained through a series of physical measures and questionnaires at the try-outs and all youth (whether selected or not) will be followed up for 3 years using an internet based survey. Findings from this study will be used to inform practice and policy changes in Canada to support youth who are at risk from dropping out of team sports.

BÉLANGER, MATHIEU

University of Moncton

J. BEAUCHAMP, J. O'LOUGHLIN, C. SABASTON

SRG 2010

Monitoring Activities of Teenagers to Comprehend their Habits: The MATCH project

Although a majority of Canadian adolescents are physically inactive, there are some who maintain a high level of involvement in sports and others who initiate such activities. A better understanding of when and why physical activity declines during adolescence is needed to guide the development of effective interventions to increase and then maintain physical activity levels of the population. This study aims at 1) identifying factors motivating participation in specific physical activities at different periods during adolescence; and 2) identify factors contributing to interrupting or sustaining participation in specific physical activities.

The objectives are pursued using a prospective cohort study design. Participation in specific physical activities is measured three times per year throughout adolescence. Motives for participating or not participating in different physical activities will be explored in the questionnaire. In addition, a sub-sample of the cohort is followed up with yearly interviews. This sub-sample was selected to represent participants in a variety of physical activities. Analyses will be stratified according to various forms of activities (ie.: specific sport, or grouping of physical activities sharing similar attributes such as team sports, individual sports, or sports of comparable intensity).

This information will be useful for the development of policies and programs aiming at enhancing participation in sport. Sport associations will have information enabling them to target interventions to promote recruitment and retention of appropriate age groups. The design of these interventions will also be improved because of the detailed information we will provide on the factors influencing maintenance, initiation, and discontinuation of participation specific to a variety of sports.

BLODGETT, AMY

Laurentian University

DOCTORAL STIPEND 2012

The Relocation Experiences of Aboriginal Athletes Pursuing Sport Dreams

To date, there has been very little consideration of culture within sport psychology, and as such, the voices and experiences of diverse groups have been marginalized within the field (Duda & Alison, 1990; Ram, Starek, & Johnson, 2004). Responding to this inadequacy, the current project will contribute to the newly emerging area of cultural sport psychology by bringing forward the voices and experiences of young Aboriginal athletes through a contextually-driven line of inquiry (Schinke, Hanrahan, & Catina, 2009). From community consultations in northern Ontario it has been indicated that young on-reserve athletes have to relocate to larger urban communities if they wish to pursue developmental or elite sport opportunities, and as such, they are challenged with having to adjust to a mainstream cultural context and persist within this unfamiliar environment. The need remains to better understand these lived experiences so that concerted efforts can be made to improve the quality of Aboriginal people's sport experiences and support them in maintaining lifelong participation. Herein, Aboriginal athletes' experiences of relocation will be explored through an arts-based research process, which has been shown to help participants reflect on and express their experiences in ways that are meaningful and engaging (Bagnoli, 2009; Liebenberg, 2009; White, Bushin, Carpena-Mendez, & Laoire, 2010). The content to be delineated includes the challenges that athletes face, as well as effective strategies for supporting and motivating athletes through the relocation process. The athletes' personal stories will be developed into vignettes that can be shared within local reserves as inspirational and educational resources that may encourage other aspiring youth to pursue their own sport dreams. The research will be framed by a participatory approach that engages Aboriginal community members as co-researchers to oversee that efforts remain true to the cultural context.

BRAY, STEVEN R

McMaster University

SRG 2010

You Believe I Can?... So do I! Interpersonal Feedback Increases Self-efficacy and Intrinsic Motivation to Perform Novel Motor Skill Tasks.

The objective of the second phase of this project was to investigate the effects of controlled exposure to verbal and non-verbal manipulations of instructional behaviours on children's perceived competence and intrinsic motivation. Two laboratory-based experiments were carried out involving a total of 120 children taking part in 2-week camp sessions at McMaster University's Summer Sport Fitness School (SFS) during July and August of 2012. Both studies used similar interpersonal feedback manipulations based on data gathered in Phase 1, but differed in terms of one being effort-based (endurance handgrip squeezing) while the other was skill-based (throwing darts at a target). All children were given basic instruction prior to, and during, an initial series of attempts at the experimental tasks. They were then randomized to experimental and control groups. Both groups were given positive feedback and further instruction during a rest break, but the experimental group also received a combination of verbal (e.g., "I believe you are capable of doing much better on your next attempt at the task") and non-verbal (e.g., high five) interactions to manipulate relation-inferred self-efficacy (RISE). A second set of experimental tasks was then performed and a "free time" play period was provided. Children performed similarly regardless of experimental condition, but those exposed to the RISE-enhancing manipulations reported higher perceived competence and greater engagement and interest towards the target tasks. The results provide a foundation for Phase 3 that will investigate effects of complex RISE-enhancing interactions embedded into the instructional delivery of sport skills in the SFS camp environment.

CLARK, ANDREW

McMaster University

DOCTORAL STIPEND 2010

Comparing the Barriers Between Organized and Unorganized Sport Participation in Hamilton, Canada

Sport is an integral part of a healthy, active lifestyle for people, but in Canada and many other places around the world there is a lack of sport participation. This lack of sport participation is a contributing factor to the general inactivity of the Canadian population, which can cause many health problems such as asthma, heart disease and obesity. This study is an analysis of data collected as part of the Hamilton Active Living Study (HALStudy) in the city of Hamilton, Ontario during the summer of 2010. The survey was a comprehensive look at the active lifestyle of the Hamilton population, which included questions about exercise, walking, bicycling, active video games, and sports. The questions about sport ask about an individual's participation in sport as well as the barriers that prevent participation and the same questions are asked about both organized and unorganized sport. This analysis of the HALStudy dataset uses a series of binary logit models to answer 3 research questions. First, how much organized and unorganized sport participation is there in Hamilton? Second, what barriers to both organized and unorganized sport exist and are any barriers more prevalent than others? Third, do traditional barriers, such as income, age, gender, and weight, impact unorganized sport participation? Finally, what are the differences in barriers to organized versus unorganized sports?

DE LISIO, AMANDA

University of Toronto

DOCTORAL STIPEND 2012

Re-Generation/Gentrification: Urbanization and the 2015 Pan/Parapan American Games

For over a decade, political figures, business elites, and sports advocates in Toronto have aggressively chased an internationally recognized sport mega-event to stimulate the renewal of the once barren and toxic waterfront (Oliver, 2011). The promise of a world-class event is perceived as a chance to resolve: (i) jurisdictional fragmentation resulting from competing responsibilities of various public and private agencies (Kipfer & Keil, 2002); (ii) the continual decline of industrial factories and port-related industries; and (iii) the economic possibilities for non-industrial land or rather, concern over the privatization of the waterfront (Desfor, 1993; Laidley, 2011). The site of the 2015 Pan/Parapan American Athletes' Village, located on the West Don Lands of Toronto's Waterfront, is now undergoing a swift transformation. The once derelict area, filled with halted potential, is now in the midst of development and is said to "showcase a modern community where design excellence, sustainability and technology come together" (Waterfront Toronto, 2011). This research project will examine the construction of the site to determine the manner in which the legacies associated with the revitalization of the waterfront reflect the lived realities of host communities in Toronto. Specifically, I will critically investigate which imaginaries, both for the space and bodies inside, are privileged in the urban renewal process and how this in turn, will impact the local host communities. Extrapolating from the Toronto context, I intend to evaluate how event-led processes of urbanization aid (or hinder) socially just and environmentally sustainable development. Stated differently, I am interested in how cities can ensure that the enormous human and financial investment awarded to event-led urbanization will offer a more equitable distribution of positive legacies associated to the Games.

DEMERS, GUYLAINE

Laval University

SRG 2012

Sport Experiences of Lesbian, Gay, Bisexual and Transgender Athletes and Coaches

This study aims to gain a better understanding of the sport experience of lesbian, gay, bisexual and transgender (LGBT) athletes and coaches. There is very little Canadian data to date on the reality of LGBT athletes and coaches. However, all existing studies on the subject look at the difficulties faced by LGBT athletes and coaches, for example, rejection by peers, harassment, name-calling, giving up the sport, stress and underperformance. In this project, we focus more specifically on competitive sport. In particular, we want to 1) describe the positive and negative experiences of LGBT people on sports teams, 2) measure the attitude of heterosexual members of sports teams toward LGBT athletes and coaches, 3) identify and understand barriers to and elements facilitating the participation of LGBT people in sports, 4) determine the prevalence of homophobia on sports teams, 5) describe the impact of homophobia on LGBT athletes and coaches, and 6) develop and run a training workshop on homophobia in sport based on the results of the project. Athletes and coaches who are members of the CCAA* and CIS** will be solicited to take part in this project. We will use the questionnaire from the Out to Play Project by Symons et al. (2010), which measures homophobia in sport and describes the sport experiences of LGBT people. We will invite LGBT questionnaire respondents to take part in a qualitative interview in order to describe their sport experiences in more detail. The Lesbian, Gay and Bisexual (LGB) Knowledge and Attitudes Scale for Heterosexuals (Worthington et al., 2005) will be used to measure the attitudes of heterosexual members of sports teams toward LBG athletes and coaches. Lastly, we will develop and run a workshop on homophobia in sport.

^{*}Canadian Colleges Athletic Association

^{**}Canadian Interuniversity Sport

DIXON, JESS

University of Windsor

SRG 2012

Exploring Developmental Factors for Overcoming Relative Age Effects in Ice Hockey

Relative Age Effects (RAEs) are concerned with identifying age (dis)advantages relative to other children within pre-defined age groups. While intended to promote equality and fairness through the maintenance of general developmental similarities, age-based grouping policies in sport and educational systems have had the unintended consequence of advantaging relatively older children, while disadvantaging relatively younger children within the same cohort. Relative age effects in sport and education tend to endure, resulting in an accumulated advantage that could have important implications for overall development (Murray, 2003). Despite the advantages provided to the relatively older, a significant proportion of relatively younger children persist in sport and education systems that are systematically biased against them. Moreover, there is evidence that relatively younger athletes who "survive" these systems may be superior performers (Ashworth & Heyndels, 2007; Baker & Logan, 2007). It is the experiences and developmental outcomes of this relatively younger sub-sample of athletes that we will be examining in this research program.

The purpose of this research program is to investigate the accumulated advantage of RAEs amongst Canadian male ice hockey players (16-20 years of age) in hopes of identifying solutions for reducing or eliminating their effects. To this end, we will execute a multi-phase research program that seeks to: a) identify the attributes of success and developmental outcomes (e.g., leadership) in Canadian junior-aged hockey players within the context of RAEs; b) compare the attributes of relatively younger and older hockey players; c) identify the developmental factors that helped relatively younger athletes overcome the effects of the RAE, and; d) share the outcomes with relevant stakeholders through an action research intervention. The sport of ice hockey has demonstrated a consistently fruitful avenue for exploring the RAE (Cobley et al., 2009) and was chosen by the research team as an appropriate context for this research.

DONNELLY, MICHELLE

University of Southern California

POST-DOCTORAL STIPEND 2010

Riding, Community, Segregation: Exploring Girls-only skateboarding Programs

Using ethnographic research methods, I will study girls-only skateboarding programs that offer skateboarding instruction to girls of varying ages and skill levels. Program instructors are all girls and women, and are often professional skateboarders. Often, girls-only skateboarding programs organize workshops, camps, and events in gendersegregated settings, i.e., girls-only days and times at the skatepark or street riding location. On their websites and in promotional materials, girls-only skateboarding programs refer consistently to their aims: more opportunities for girls to skateboard, making skateboarding more accessible to girls, developing girls' skateboarding skills, creating a safe and positive environment for girl skateboarders; and their outcomes: confidence, empowerment, support, community. The consistency of language employed across girls-only skateboarding programs suggests common understandings of the current context of skateboarding in North America (an activity dominated by boys and men), and the perceived necessity of programs for girls only. Through this research, I seek to use girls-only skateboarding programs as an empirical site to understand the contemporary existence of girls-only leisure activities, and the relevant meanings and context of these specific cultural practices.

DONNELLY, PETER

University of Toronto

SRG 2012

Multiculturalism and physical culture in the GTA

The Greater Toronto Area (GTA) is home to one of the most multiculturally diverse communities in the world. This proposed study of physical culture in the GTA – a city that could well, on the basis of preliminary research, prove to be the "physical cultural capital of the world" – is intended to address that gap in research. The main objective of this study is to catalogue, as comprehensively as possible, all of the forms of physical culture practiced in the more than 190 different ethnocultural communities in the GTA.

The resulting archive will celebrate the diversity of physical cultural forms in the GTA. The archive will also provide an incredibly rich resource for research on multiculturalism, and provides a legacy for future research. This study will use the collected data to address the following research objectives: to examine the life course of physical cultural forms in order to determine what might cause some to thrive and some to die out; to discover the ways in which physical cultural forms may be involved in social integration and social inclusion, and examine federal multicultural funding policies that attempt to promote integration; and to explore the ways in which physical culture may be seen as a form of social and/or cultural capital. A final objective is to consider the consequences of Sport Canada failing to directly address multiculturalism and ethnocultural equity and inclusion in its policies, despite having specific policies mandating gender, disability, Aboriginal and official languages equity and inclusion.

The data collected will contribute to understanding multiculturalism, and the ways in which new Canadians may use physical culture to negotiate their place in Canada; to sport and physical activity participation research; and to policy development with regard to multiculturalism, and physical activity participation.

DUBUC-CHARBONNEAU, NICOLE

University of Ottawa

DOCTORAL STIPEND 2008

Addressing Varsity Athletes Burnout and Well-being through the Implementation of a Feel-based Self-regulation Intervention

Varsity athletics can represent the peak of an athlete's competitive career. While playing on a college or university team can provide numerous health and social benefits (Miller & Kerr, 2002). However, due to numerous athletic, academic and social demands, varsity athletes may also have elevated level of stress (Gould & Whitley, 2009). It is suggested that the stress that can result from an athlete's inability to cope with demands can contribute to the development of burnout (Gustafsson, Kenttä, & Hassmén, 2011; Raedeke & Smith, 2004) and have negative repercussions on the quality of athletic experiences as well as the students' academic and personal life (Dubuc, Schinke, Eys, Battochio, & Zaichkowsky, 2010). Thus, it has been suggested that the examination of potential interventions to prevent and reduce burnout is warranted (Goodger, Gorely, Lavallee, & Harwood, 2007). As a result, the purpose of the current study was to develop and implement a person-centered, feel-based self-regulation intervention with student-athletes experiencing burnout. Based on their moderate to high baseline scores on the Athlete Burnout Questionnaire (Raedeke & Smith, 2001), eight of 147 varsity athletes from various sports at two Canadian Universities were invited and chose to participate in a season-long intervention. A mixed-methods approach (Hanson, Creswell, Plano Clark, Petska, Cresswell, 2005) including was used to assess the process and effects of the intervention. Specifically, quantitative results revealed that as the intervention progressed, the athletes' ability to self-regulate and their level of psychological well-being increased significantly and that stress and burnout decreased. Furthermore, qualitative findings revealed that frequent stressors included academic demands (e.g., exams, assignments, performance outcomes), sport demands (e.g., performance standards, scheduling), and social demands (e.g., pressure from coach or family). Adaptive self-regulation strategies put forth to cope with stressors included cognitive strategies (e.g., acceptance, focus), organizational strategies (e.g., manage schoolwork, time management), physical strategies (e.g., rehabilitation, sport specific training), and social strategies (e.g., communication, removing oneself from negative situations).

FALLS, DOMINIQUE

Simon Fraser University

DOCTORAL STIPEND 2011

Growing up on the road: Young Athletes in Canadian Small Cities

In this poster presentation, I look to outline and problematize our current understanding of youth, sport and community in Canadian rural and small town (RST) regions. Young people in small towns are the most likely to be sports participants more so than their rural and urban counterparts. However, counting the number of participants does little to tell us how young RST region participants experience sport and what conditions exist in their communities that contribute to their experiences. The main source of data for this project is drawn from exploratory ethnographic research in an RST region in south central/eastern British Columbia, Canada. While the larger project considers adult and young people's experiences of youth sport in this particular region, ethnographic observation and interviews with adults are the primary source of data gathered at this point. The goal of the overall project is to critically examine and move beyond some of the taken-for-granted 'truths' around youth sport in RST communities - 'truths' that have been based on limited or anecdotal data. Most notably, an argument will be made that by looking 'beyond the ice rink' we can learn a lot about how contemporary young people are growing up in and experiencing their local RST communities through and beyond sport. Themes that are ready for discussion at this point in the project are (a) the role of young people in this RST region (b) the role of sport in this RST region, and (c) the ways in which local stakeholders are influencing the intersection between the two.

FRASER-THOMAS, JESSICA

York University

P. SAFAI, P. DONNELLY,

SRG 2011

Trickle down effect? Exploring the influence of the Olympic Games on preschooler development and sport participation

What we do and don't know ...

Despite the assumption that sport facilitates leadership, sportspersonship, and initiative, relatively little research has explored young children's social and life skill development through sport. Given the growth of children's involvement in structured sport programs at increasingly early ages and the significant influence of adults (e.g., parents) among the youngest demographic, our first objective is to explore sport participation and development among preschoolers. The Olympic Games offer a social and cultural event with the potential to influence young children's sport participation and development. A popular assumption among the public, politicians and policy makers is that the Olympic Games have a 'trickle down effect', positively influencing sport involvement at the grassroots level and promoting pro-social norms such as fair play. While research has not strongly supported the trickle down effect, there has been no examination of this potential effect in young children, arguably the most influenced. Our second objective is to examine preschoolers' sport participation patterns pre- and post-Olympic Games. Finally, there has been no examination of the processes by which the Games may lead to a trickle down effect, particularly in the area of broader social development, thus our third objective is to explore the influence of the Olympic Games on preschoolers' psychological and social development.

How we will address the research questions...

This research program will be built around the 2012 London Olympic Games. Data will be collected in spring 2012 and spring 2013. At both time points, parents of preschoolers (N=250) will complete an online proxy survey of their children's sport participation patterns. In addition, childcare providers, parents, and preschoolers at 10 childcare centres will engage in interviews and focus groups exploring preschoolers' sport participation patterns and development through sport, and the influence of the 2012 Olympic Games on preschoolers' psychological and social development.

How this research will contribute to enhancing sport participation...

Findings will speak directly to the assessment of the benefits and outcomes of participation in sport and the identification of the barriers to participation in sport. Sport programmers and policy makers will be interested in findings on the role of sport

in facilitating positive development among preschoolers. Further, policy makers and programmers will be interested in findings as they will offer preliminary insight into the opportunities as well as potential social and structural barriers to sport participation among the youngest demographic.

FRASER-THOMAS, JESSICA

York University

S. JEFFERY-TOSONI, T. BEESLEY, N. HOLT

SRG 2008

Assessing Youth Sport Programs' Facilitation of Positive Youth Development

Among growing societal concern for youth's healthy development, it has been proposed that sport programs can serve as contexts to foster healthy psychosocial development and life skills (Fraser-Thomas et al., 2005). Despite this, little research has focused on how different types of sporting programs may be facilitating positive experiences and outcomes among youth. The purpose of this study was to examine associations between program characteristics and youths' developmental experiences within these programs. Nine hundred and eight youth aged 10-18 involved in a diverse range of programs in three provinces across Canada completed the Youth Experience Survey for Sport (YES-S; MacDonald et al., 2012). Preliminary results indicate numerous individual factors including youths' age, sex, and level of competition, in addition to specific program characteristics such as number of coaches and club/group size are associated with different developmental experiences in the areas of personal and social skills, initiative, goal setting, cognitive skills, and negative experiences. Preliminary findings suggest further exploration is necessary to fully understand the processes and mechanisms that may be contributing to more positive or negative experiences in different youth sport programs. Discussion will focus on how findings can inform future program guidelines to enhance youths' sport participation and optimize youths' development through their sport experiences.

Acknowledgements: Theresa Beesley, Katherine Tamminen

GADBOIS, SHANNON

Brandon University

A. BOWKER, L. ROSE-KRASNOR, L. FINDLAY

SRG 2008

Extracurricular Activities Involvement in Canada: What Do Youth Get Out of the Experience?

Extra-curricular activities (ECAs) that are organized, regularly scheduled and voluntary (e.g., music lessons, volunteering, sports teams) are related to many positive outcomes for youth including higher physical and general self-esteem, a stronger sense of selfefficacy, reduced rates of delinquency and reduced aggression (e.g., Duda & Mtoumanis, 2005; Eccles & Gootman, 2002; Gadbois & Bowker, 2007; Larson et al., 2005). This presentation will examine preliminary findings of a three year longitudinal research project designed to examine the types of activities in which youth are engaged, the relationships between participation in ECAs and indices of positive youth development, and youths' descriptions of their experiences in these activities. A total of 1372 youth from southwestern Manitoba listed all of the ECAs in which they participated and their most engaging activities in year 1 of the study. In year 2 of the study, approximately one year later, 502 of the original participants again listed the ECAs in which they participated, the activities in which they were most engaged, as well as measures of general and domain specific self-esteem, temperament, motivation for participation, and parental involvement. Finally, in year 3 of the study, again approximately one year later, 51 youth participated in one-to-one interviews regarding their most engaging activity and the experiences they had within the activity. presentation will outline three categories of outcomes: 1) generally, with regard to the types of (and most engaging) activities in which this sample of Canadian youth participate; 2) specifically, with reference to the relationship between ECAs participation and positive youth outcomes like general and physical self-esteem; and 3) with respect to youths' personal reflections on their opportunities to experience benefits including leadership, initiative, and skill development.

GAUDREAU, PATRICK

University of Ottawa

M. FECTEAU, V. FRANCHE

SRG 2009

The Role of Parents and Coaches in Predicting Consequential Sport Participation
Outcomes: A Daily Training Diary Study

An important goal of this research program is to investigate the role of parents and coaches in predicting consequential sport participation outcomes of adolescent athletes. Past research has found that parents and coaches can positively influence athletes by giving them choices, by recognizing their feelings and perspectives, as well as by providing them with opportunities for autonomy and self-initiative (Mageau & Vallerand, 2003). Little is known about whether parental (PAS) and coaching (CAS) autonomy support have cumulative and/or complementary influences on the sport participation of adolescent athletes (Gaudreau et al., 2011). Training is a significant part of the lives of athletes during which most of the athlete-coach interactions are taking place. Therefore, CAS is likely to bolster the feelings of autonomy, competence, and social connectedness during practices which, in turn, are likely to facilitate goal attainment and a host of desirable sport participation outcomes (e.g., sport satisfaction, positive affective states). Parents are primary socialization agents. In line with our past research (Gaudreau et al., 2011), we propose that PAS should act as a compensatory mechanism to protect the athletes from negative experiences occurring during practices. Therefore, the relation between need satisfaction and sport participation outcomes during practices should depend on the level of PAS perceived by the athletes. A sample of 97 adolescent female athletes competing in synchronized figure skating have completed a short questionnaire after six consecutive daily practices. Results of multilevel modeling analyses will be presented at the 2012 SCRI conference. This line of research is important to highlight the differentiated and complementary roles of parents and coaches in the athletic development of adolescent athletes. Our research will inform the development of psycho-educational and informational prevention programs to foster the autonomy supportive style of significant adults in their daily interactions with competitive athletes.

GAVIN, JAMES

Concordia University

M. MCBREARTY, M. KEOGH

SRG 2009

The Shifting Landscape of Interests in Physical Activity: Preferences for Physical Activity

Across the Lifespan

Purpose and Research Questions

The current study involves an inquiry into the activity preferences and exercise motivations of different age groups across the lifespan. Our intention was to appreciate how individuals view opportunities for sport and physical activity engagement as they age, as well as understanding their reasons for engagement. The potential value of this study was thought to lie in a clearer portrait of what people of different ages might want and thereby to be able to target different age cohorts with appropriate messages about active living.

The research questions were as follows:

- 1. What differences might exist between age groups regarding their preferences for different types of sports and physical activity?
- 2. What differences might exist between age groups regarding their motivations for exercising?

Participants

2,041 members of the YMCA of Montreal participated in this study by electing to complete a lengthy questionnaire about exercise personality, motivation and interest patterns. Touch screen computers were located in strategic locations in eight branches of the YMCA during the period of 2006-2008. 1991 participants who had indicated their age on the questionnaire were sub-grouped into five categories:

- 1. Teens 195
- 2. Twenties 879
- 3. Thirties 457
- 4. Forties 265
- 5. Fifty and older 195

Method

Two sets of questions allowed an analysis of activity type and motivational interests:

1. Activity types: Using a principal axis factor analysis of interest levels in 50 different sports and physical activities, eight factors were extracted, interpreted and labelled as follows: Yoga & stretching, non-gym leisure, martial arts, group fitness, outdoor activities, group cardio, weight training, and competitive sports.

2. Motivations: Using a principal axis factor analysis of 20 reasons for exercising, five factors were extracted, interpreted and labelled as follows: Weight & health, fun & friends, mental toughness, self-esteem, and challenge.

Results

Findings show significant differences across all factors of motivation and activity types across the lifespan. Patterns of differences are interpreted to offer insight into program planning and marketing initiatives to increase engagement in physical activity for different age cohorts.

GENDRON, MARTIN

University of Quebec at Rimouski

VALOIS, FRENETTE, GOULET

SRG 2008

Survey on Participation in Amateur Soccer in Canada

In general, this sport is seen as an important factor in personal and social development (Sport Canada, 2002). The benefits of physical activity and sports have been the subject of numerous studies (Gendron et al., 2005; Parfitt & Eston, 2005). Nonetheless, the number of young North Americans who play sports has been declining for a number of years (CDC, 2005, 2006; Sport Canada, 2003). In 1998, barely half of Canadian children aged five to 14 years old actively played a sport (Sport Canada 2000). Why is the participation of Canadians in physical activity and sports steadily declining, beginning in adolescence?

Soccer, the most frequently played federated sport in the country, is a world-wide phenomenon that knows no boundaries or limitations and that enjoys unprecedented popularity among young people. What can we learn from the situation in Canada to maintain a solid rate of participation in a healthy and formative environment?

The purpose of this research project is to gather perceptions through survey questionnaires (player, parent, referee and coach versions) about the factors that may influence participation and continued participation in amateur soccer among U12 to U18. A set of variables specific to soccer players and to its stakeholders and environment will be investigated. The responses will be used to compare the views shared by the various stakeholders and to identify the positive aspects and potential issues. Preventive action may be recommended. Ultimately, the goal is to help form healthy, responsible and socially well-adapted citizens. To date, the four questionnaires have been developed and validated in English and French. The data is being collected and preliminary results will be presented.

GOODMAN, DAVID

University of Minnesota

M. WEISS, L. KIP

SRG 2006

Unsportsmanlike Aggression in Youth Hockey: Attitudes, Perceived Social Approval, and Situational Temptation

Unsportsmanlike attitudes and actions in youth ice hockey are learned through modeling of and approval by significant adults and peers (Weiss, Smith, & Stuntz, 2008). The present study extended the knowledge base by assessing: (a) competitive league and gender differences on attitudes regarding unsportsmanlike actions, (b) relationships between perceived approval by significant others and youths' attitudes toward unsportsmanlike actions, (c) whether specific hockey situations affect legitimacy of acting in unsportsmanlike ways, and (d) youth hockey players' NHL role models and whether type of model is related to youths' sportsmanlike attitudes. Youth hockey players (192 male, 86 female) representing atom (M = 10.9 yrs), peewee (M = 12.6 yrs), and bantam/midget (M = 14.8 yrs) leagues read three scenarios about unsportsmanlike actions and responded to questions assessing legitimacy, intention, perceived social approval, and situation-specific legitimacy and intention of performing the actions. Analyses of variance showed that legitimacy and intention of engaging in unsportsmanlike acts increased with competitive league, as did perceptions of approval by best friend, teammates, coach, and parents. Male players scored higher than female players on legitimacy, intention, and best friend, teammate, and coach approval. Regression analyses revealed strong relationships between perceived social approval and unsportsmanlike attitudes, with best friend and teammate approval the strongest predictors. Of the hockey situations, players indicated they were most tempted to engage in unsportsmanlike behavior if it would help win the championship game and if one's opponent did it first. Chi-square analyses showed that players scoring in the upper 20% on legitimacy of unsportsmanlike actions were more likely than those in the lower 20% to name aggressive, fighter players as their NHL idols and less likely to name gentlemanly, skillful players. Results extend research on individual and social factors influencing endorsement of unsportsmanlike behaviors in youth ice hockey.

GRAHAM, JEFFREY

McMaster University

DOCTORAL STIPEND 2012

"Keep trying, it took me a while to get that too!" Investigating peer feedback for increasing self-efficacy and intrinsic motivation in children's sport.

Research shows that peer influences are one of the strongest social correlates of children's attitudes and behaviours at early ages (Smith, 2007) and can be utilized as a medium for changing behaviours such as food selections and preferences (Ogden, 2004). Yet, despite the potential for peer influences to affect behaviour and behaviour change, few studies have investigated the role of peer influences on children's thoughts about their physical capabilities or sport participation. Self-efficacy refers to a person's beliefs in his or her abilities to perform specific behaviours and is a well-documented determinant of intrinsic motivation and physical activity. According to social cognitive theory (Bandura, 1997), a powerful method of developing self-efficacy or confidence is the verbal feedback one receives about his/her performance. However, when children learn tasks, feedback needs to come from a credible source and be contextualized to In most sport instruction environments, children receive their own skill level. performance feedback from coaches who may have high instructional credibility but lack contextual credibility because the feedback comes from a dissimilar other who is not performing at the same level as the learner. Research clearly shows that many children who lack self-efficacy to improve or be successful in sport fail to develop or quickly lose their motivation to participate (Weiss & Williams, 2004). This study will use qualitative interview methods to explore children's perceptions of peer behaviours (verbal and non-verbal) and how these behaviours may improve or undermine selfefficacy. I expect that children will identify a host of verbal and non-verbal behaviours that they appraise and internalize to affect their self-efficacy. The focus of this research is to add to our understanding and knowledge of how children interact with one another within the sport skill acquisition environment and how we can manipulate these factors to encourage future and prolonged participation.

HATTON, NATHAN

University of Waterloo

DOCTORAL STIPEND 2007

Wrestling with Ethnicity: Immigration, Sport and Class in Winnipeg Before 1930

After 1896 Winnipeg underwent substantial demographic changes. New immigration policies, improved economic conditions, and the closing of the American settlement frontier all served to attract thousands of new immigrants to the Canadian Prairies. Previously a predominantly Anglo-Protestant community, Winnipeg quickly emerged as Canada's most ethnically diverse urban centre. Rapid growth presented many new challenges within the city as it became increasingly stratified according to both ethnicity and class. Wrestling's popularity grew markedly during Winnipeg's transformative period, and many of the tensions present in the larger society found symbolic and physical representation on the mat. Wrestling with Ethnicity explores the "mat game's" wide-reaching appeal among a number of ethnic groups in Winnipeg, giving particular attention to how its meaning varied according to the cultural values and goals held by each participant community. The study also examines how immigrant access to the sport changed over time, as well as the ways in which their involvement alternately reinforced and challenged Anglo-Canadian views towards non-English speaking peoples. Simultaneously, Wrestling with Ethnicity investigates wrestling's popularity within classbased organizations such as the One Big Union, and how it served as a vehicle for furthering specific socioeconomic interests and ideologies.

Although Canadian historians have given considerable attention to team sports, individual sports, specifically those of a combative nature, remain largely unexamined. *Wrestling with Ethnicity* probes the varied and often competing meanings associated with wrestling during the early twentieth century, and in doing so, seeks to further our understanding of Canada's multicultural and multi-class sporting heritage.

HAVITZ, MARK

University of Waterloo

A.W. WILSON, S.E. MOCK

SRG 2009

Impact of Ego Involvement with Running on Varsity Athletes' Post-University Running
Participation and Health

This research explored lifelong running and jogging participation patterns among a sample of one-time competitive distance runners. This research is part of a larger project built on Baltes' (1987) assumptions that development is a lifelong process imbedded in age-based context, that it is multidimensional and multidirectional, and influenced by life history and environment. More recently, Baltes, Lindenberger and Staudinger (1998) spoke to three components of individual development: 1) individual communalities, 2) individual differences, and 3) intraindividual development. The focus of this paper is on the latter in that it explores change, or lack thereof, in the respondents' ego involvement with running over their post-university lifespans without making explicit between respondent comparisons. Leisure involvement research is rooted in the ego involvement literature. Sherif et al. (1973) argued that "self [ego] is conceived as a system of attitude structures which when aroused by on-going events, are revealed in more characteristic and less situation-specific behaviors toward objects or classes of objects" (p. 312). Social judgment theory suggests that enduring traits of ego involvement influence activity choice by setting individual latitudes of acceptance and rejection which guide behavior. Multiple streams of ego involvement research have evolved over the past eight decades building on seminal conceptual work in mainline social psychology in the 1940s (e.g., Allport, 1943, 1945; Sherif & Cantril, 1947). Perhaps the most widely referenced stream in sport psychology is the one developed by Duda and colleagues (Chi & Duda, 1995; Duda 1988, 2007) which focuses on task orientation and ego orientation. That line of research has been especially important in advancing understanding of goal setting in competitive sport. The present study is rooted in another line of ego involvement research (Laurent & Kapferer, 1985; Zaichkowsky, 1985) which stresses facets of personal relevance and has been extensively applied in a broad range of primarily non-competitive sport and recreation contexts (Funk & James, 2001; Havitz & Dimanche, 1999; McIntyre & Pigram, 1992; Selin & Howard, 1988; Siegenthaler & Lam, 1992). This choice was deemed relevant because a good portion of respondents, even those who continued to run post-graduation, de-emphasized the competitive aspects of their adult participation. Involvement was measured using Kyle et al.'s (2007) Modified Involvement Scale; three items each for five facets – attraction, centrality, social, identity affirmation, and identity expression. Respondents were 262 varsity cross country runners' from an American and a Canadian university. The average age was 49

years old (SD = 17.28) and ranged from 24 to 94 years old. Nearly seventy percent (69.7%) of the sample was male and just over thirty percent (30.3%) were female. All respondents over fifty-five were male as varsity cross country was not offered for women at those schools until the 1970s. Independent variables included in-university involvement facet scores and current involvement facet scores. Analyses controlled for age and sex. Individual regression analyses were run for each facet of involvement with each dependent variable (current overall health perception, current average days run per week, current length of average run, current running pace, and running competitions entered in last year). Intrinsic involvement facets were most consistently associated with dependent variables: Current centrality to lifestyle was positively associated (p < .05) with all five dependent variables. Current attraction and identity affirmation were positively associated with four of the five (pace and length of run being the respective exceptions). By contrast, extrinsic facets were less consistent predictors: Current social involvement was positively associated with just three outcomes (health and length of run excepted). Current identity expression was positively associated with just two (health, length, and pace excepted). Likewise, and as expected, in-university involvement was an effective predictor of fewer current dependent variables: days run and length of runs. The data suggest that health and leisure services professionals should focus efforts on currently held intrinsic involvement facets.

HAYHURST, LINDSAY

University of Toronto

SRG 2011

Corporatizing Sport for Aboriginal Girls: Connecting Corporate Social Responsibility, the 'Girl Effect' and Aboriginal-focused Sport, Gender and Development Programs

The 'Girl Effect' movement is a global initiative that claims girls to be catalysts capable of bringing about 'unparalleled social and economic change to their families, communities and countries.' In response to the Girl Effect, multinational corporations (MNCs) have created "socially responsible" girl-focused development programs across the globe to improve the lives of marginalized girls, and to build on their potential as the next 'answer' to tackling global poverty. Many of these programs are known as "sport, gender and development" (SGD) initiatives, and use sport and physical activity to promote girls' development, especially to advance their health, socio-economic status, education and wellbeing. As the number of corporate-sponsored SGD programs in disadvantaged communities continues to grow, the implications for "targeted beneficiaries" remains unclear. In particular, little is known about the (un)intended consequences of these programs for marginalized groups such as Aboriginal girls, who have recently been targeted by corporate-funded SGD initiatives in Canada. Thus, there is a critical need to understand how Aboriginal girls are impacted by corporate-funded SGD initiatives, as they are one of the most disadvantaged groups in Canada, and are less likely to participate in physical activity.

To address these research gaps, this study will focus on girls participating in SGD initiatives funded by the N7 initiative for Aboriginal youth in Canada. The N7 program funds Aboriginal sport programming, and also promotes a Nike's new line of sporting equipment that claims to be "tailored specifically to Aboriginal groups." The research has the following three objectives: 1) to determine the factors that enable and inhibit Aboriginal girls' participation in SGD programs in Canada; 2) to incorporate Aboriginal girls' perspectives on corporate involvement in funding, developing and implementing Aboriginal physical activity programming; and 3) to establish what a decolonized SGD program for Aboriginal girls should look like. To accomplish these objectives, the study will use a postcolonial indigenous feminist participatory action framework (PIFPAR), combined with cultural studies of girls, and intersectional theory. Overall, the use of a postcolonial feminist PAR approach combined with decolonizing methodologies will aim to prioritize the voices of girls targeted by SGD initiatives, and will add to policy-relevant research and make policy recommendations based on their needs and perspectives.

HOEBER, LARENA

University of Regina

A. DOHERTY, O. HOEBER, R. WOLFE

SRG 2010

Innovations in community sport organizations

With This research program investigates the nature and process of innovation in community sport organizations (CSOs) and the factors that impact on that. With increasing reliance on CSOs to deliver sport participation programs and services that provide many physical, social, and emotional benefits to individuals and their communities, it is important to understand the extent to which CSOs are innovative and if so how that process unfolds.

An examination of radical versus incremental innovation in CSOs, representing a greater or lesser departure from existing practice, respectively, is underway. Previous research suggests that CSOs adopt incremental innovations, involving only slight changes to the organization, to a far greater extent than more radical innovations (Hoeber, Doherty, Hoeber, & Wolfe, 2012). Thus, it is of interest to uncover factors that explain this variation. Telephone interviews are being conducted with presidents of 30 CSOs in a variety of sports and sizes of community across Ontario. Those CSOs have adopted or considered adopting at least one radical and one incremental innovation in the past three years. The interviews are tapping into the attributes, determinants, and (expected) outcomes of both types of innovation. The findings are expected to highlight factors that explain why CSOs are more or less likely to adopt or even consider adopting radical innovations.

A subsequent investigation will examine the influence of board culture and club culture (i.e., the values, expectations, way of doing things) on the innovation adoption process, with a particular focus on radical and incremental innovations. This investigation will use focus groups generated from 10 different CSOs (one focus group per club) to gain rich insight into the nature and impact of those cultures.

The ongoing research program is expected to inform policy and action to improve CSOs' capacity to implement innovations, and particularly more radical innovations, that may enhance their program and service delivery for sport participation.

HORTON, SEAN

University of Windsor

SRG 2010

Role Models of Aging: Fostering sports participation among older adults

Sport involvement in Canada drops precipitously as we age. While two-thirds of Canadians under 20 are active participants in sport, by the age of 40 these numbers have fallen by half, and by the age of 60 participation rates have fallen by a full 60% (Bloom, Grant, & Watt, 2005). At all ages, females participate less frequently in sport than males. Participation rates in physical activity decline in a similar fashion, again with females less active than males (Statistics Canada, 2005). Considering the myriad of diverse benefits associated with participation in sport and physical activity, this rate of decline is of concern.

While there has been extensive research into role models for youth and young adults, there has been comparatively little attention paid to the value of role models for older adults. Levy and Banaji (2002) noted that exemplary individuals (i.e., role models) have the potential to change attitudes of group members themselves, as well as societal stereotypes of that group.

The objectives of this project are to examine the importance of role models for older adults. In particular, we are investigating three specific and related areas:

- the relevance of role models and the extent to which they vary with age and activity level.
- whether masters athletes can serve as viable role models to decrease barriers to participation in sport and physical activity.
- to what extent participants use predominantly prevention versus promotion orientations (i.e., upward or downward social comparisons) and how that may differ depending on age and activity level.

Ultimately this project will provide valuable insight into role models of the aging process, and the extent to which masters athletes can serve as appropriate role models to decrease barriers to participation in sport and physical activity.

KOCH, JORDAN

University of Alberta

DOCTORAL STIPEND 2010

One Size Doesn't Fit All: Sport, Community Development, and Cultural Diversity

This study considers a range of stakeholder perceptions surrounding the rise and fall of a federally subsidized sport-related campaign that emerged in a First Nations community in central Alberta, Canada. This program was initially conceived of (by some stakeholders at least) as a 'gang intervention strategy' and was hoped to improve the overall health and wellness of residents in this First Nations community, specifically youth. Highly popular during its first few years of operation, over time, interest and support (human and financial) in the program waned significantly, almost to the point of non-existence. Using a theoretical framework informed by Pierre Bourdieu's fieldanalytic perspective, this study explores the diverse and sometimes competing views surrounding the function(s) of this sport-related campaign in a particular community in the new millennium. An extensive amount of ethnographic fieldwork combined with a series of open-ended, semi-structured interviews with different stakeholders in the community comprises the primary evidence for this study. The preliminary findings emphasize the diverse ways in which sport is used and re-employed by multiple stakeholders to service an array of socio-cultural and economic-political agendas in the community, thus extending and complicating taken for granted notions of sport and health. The findings further point to the tensions and complexities that must be negotiated by government and other stakeholders in sport development when supporting similar types of initiatives.

LAPOINTE, LAURENCE

University of Montreal

S. LABERGE

DOCTORAL STIPEND 2012

Transformation of social norms concerning transportation and community capacity building to ensure the continuation of an active transportation program for getting to school: case study of Trottibus.

The proportion of students who walk to school in Quebec has decreased significantly over the past few years. To address this problem, the Canadian Cancer Society wanted to use its expertise in community engagement and partnerships by creating Trottibus, a program to promote active transportation (AT). This study aims to (1) identify the environmental factors that influence students' choice of transportation (active, motor or mixed) in schools where Trottibus has been implemented, (2) explore the driving factors of and barriers to the transformation of social norms concerning the mode of transportation used to get to school, and (3) examine the factors that help build capacity in a community in order to implement an active transportation program and ensure its sustainability. An electronic questionnaire on environmental factors (physical, socio-cultural, economic, organizational and political) will be sent to the parents of children who do not have access to school buses to determine what factors influence the mode of transportation chosen for their child. Discussion groups with parents and volunteers will be an opportunity for us to obtain explanations of the most important variables influencing whether or not AT is adopted and to examine the issue of transforming social norms. Semi-structured interviews with stakeholders from the various program implementation sites will allow us to evaluate factors that contribute to building community capacity. The results of our study will allow us to document the impact of this type of program on the transformation of social norms concerning active transportation and help us better understand how building community capacity can ensure the sustainability of programs that promote physical activity in order to encourage and boost the participation of young people in active transportation programs.

LEIPERT, BEVERLY

University of Western Ontario

R. PLUNKETT, D. MEAGHER-STEWART, L. SCRUBY, H. MAIR, K. WAMSLEY

SRG 2009

Curling and Rural Health Promotion: A National Photovoice Study

Curling is a significant activity in rural Canada for many women. The health of women in rural Canada is much compromised compared to the health of their urban counterparts. Yet little research has explored rural sporting activities as sites for health promotion.

Thus, the purpose of this study is to: 1) examine the social lives and health of rural women within the contexts of curling and curling clubs; 2) explore the roles that sport and recreation clubs play as community places for rural women; 3) utilize photovoice, an innovative, participatory qualitative research method, to work with rural women in photographing, documenting, and expressing their perspectives about their health and social lives within the context of and as influenced by rural curling and curling clubs; 4) understand how these sport and recreation activities and meanings differ for women across diverse rural communities in Canada; and 5) determine how health, sport, and recreation are to be understood within the broader contexts of gender and community change in rural areas.

Type of work: This research is guided by a social capital theoretical approach that explores the degree and nature of rural women's participation in social and civic life, in particular sport and recreation activities as represented by curling, and by a feminist theoretical approach that informs an understanding of rural women's leisure, social lives, and health in terms of power and control as these relate to personal and collective health, and the individual, sociocultural, economic, and contextual factors that influence health.

Method: In this study which will be conducted in selected rural communities across the country, 48-64 women (6-8 women from 8 rural communities in Nova Scotia, the Northwest Territories, Manitoba, and Ontario) will take photographs, record in log books, and participate in two focus groups to explore the influence of curling on their social lives and health. To date, narrative and pictorial data have been provided by 50 rural women and girls in Ontario, Nova Scotia, and Manitoba. Data from the Northwest Territories will be collected in Winter 2012.

Outcomes: Findings to date reveal that curling facilitates vital social connections, assists in innovative gender critique, enhances physical and mental health, and provides a

valued and visible way for women to support rural community life. The girls and women in the study have also suggested ways to enhance curling in rural communities. Preliminary conclusions address the enhancement and sustainability of rural curling for women and girls, and the relevance and utility of curling for rural health promotion and rural health practices. Additional research could usefully explore the role of curling in rural sustainability, resilience, expansion of the sport, and gender variations in curling purposes and functions.

MASON, COURTNEY

University of Ottawa

POST DOCTORAL STIPEND 2011

Barriers to Participation in Physical Activity for Shibogama First Nations

This research examines the barriers to participation in sport and physical activity for Shibogama First Nations communities in northwestern Ontario, Aboriginal peoples face significant barriers to participation in physical activity in comparison to Euro-Canadians or other minority populations. This collaborative research project qualitatively investigates how sport and physical activity are connected to both broader cultural practices and Aboriginal holistic perspectives of health in two remote First Nations (Wawakapewin and Kasabonika Lake). This research focused on land-based practices associated with food harvesting (hunting, fishing and gathering). Key questions included: 1) What barriers to being physically active exist; and What are the the exercise, dietary and cultural implications of participating in land-based practices for these First Nations? While supported by participant observation, semi-structured and unstructured interviews with thirty-five community members form the basis of primary information collected. In two months of fieldwork in these communities, I contributed to several programs designed to enhance food security and improve access to physcial activity. Preliminary findings suggest that despite the significant barriers that these communities encounter, land-based practices can support community-driven initiatives to increase physical activity as a strategy to prevent chronic disease and foster cultural continuities. For millennia, cultural practices that constitute forms of physical activity have been grounded in the daily lives of First Nations communities. This research unravels some of the complexities surrounding participation in physical activity and explores how it is linked to broader conceptions of health for rural First Nations.

McRAE, HEATHER

University of Manitoba

DOCTORAL STIPEND 2009

Culturally Relevant Sport for Urban Aboriginal Youth: Examining the Role of Sport Education

In Canada, Aboriginal sport leaders have argued that sport is a basic human need and that more attention and resources are required to build a strong grassroots base for sport in Aboriginal communities (Maskwachees Declaration, 2000). However, there is an absence of scholarly literature that addresses the design of culturally relevant sport programs in Aboriginal communities (Forsyth, Heine & Halas, 2007). Researchers investigating sport-for-development programs have stated that such programs require carefully designed program structures (Sugden, 2006) and considerable facilitation skills, especially for outsiders to local issues (p. 288).

Yet, research gaps exist regarding a) "...how sport may be adapted to achieve positive outcomes in different contexts, and for different populations and individuals" (Sport for Development and Peace International Working Group, 2007, p. 4) and, b) leadership training for volunteer leaders (p. 5).

My study will examine sport education as a key factor in the design and development culturally relevant sport programs for urban Aboriginal youth in Manitoba. Building on the research of Forsyth et al. (2007) regarding the need for culturally relevant physical education for Aboriginal youth in schools, my research theorizes a positive relationship between culturally relevant sport programs and sport educators, and the participation and engagement of urban Aboriginal youth.

Specifically, this project addresses the following research questions: To what extent are community sport programs designed to be culturally relevant for urban Aboriginal youth? What is the significance of sport education (e.g., leadership training and experiential learning) in community sport programs identified as culturally relevant? What sport education processes and mechanisms enable sport educators (e.g., volunteers/coaches/staff) to develop culturally relevant sport practices?

The intended start date for my qualitative research study is January 2010.

MILLINGTON, BRAD

University of Toronto

POST-DOCTORAL 2011

Aging in the information age: An ethnographic study of video gaming in Canadian retirement centres

This research explores the use of sport-based video games, or 'exergames', in activity programs for seniors – a trend that has become popular in retirement centres in Canada elsewhere in recent years. Despite a belief in past eras that later life should be a sedentary time (Gilleard, 2005), what we know from existing research on sport and aging is that older persons are increasingly pursuing sport and leisure opportunities into retirement (see Higgs et al, 2009; Pike 2012; Vertinsky, 2000). We also know that information and communication technologies are increasingly marketed towards older persons, though the successful use of new media depends on numerous factors (e.g., one's history of media use – see Millington, in press; Selwyn, 2004). What we do not yet know is whether events like 'Wii Olymics' in retirement centres are successful in facilitating sport participation, and whether seniors actually find merits in such initiatives. This research addresses these issues through a multi-phase ethnographic study. It specifically involves participant observation at retirement centre staff members, and analyses of documents pertaining to exergame participation. Initial findings show that games like Wii Bowling are perceived as a useful complement to more traditional forms of activity (e.g., real bowling) in task of promoting social, cognitive, and physical well-being among seniors. However, such technologies also present novel challenges - most notably, the challenge for seniors and retirement centre staff members of developing the technological literacy needed to successfully operate exergame hardware and software. This study is ultimately designed to inform public policy on sport participation through a complete report on the benefits and drawbacks of video game-based activity programs upon its completion.

MISENER, KATIE

University of Western Ontario

POST-DOCTORAL STIPEND 2009

An investigation of nonprofit community sport organizations through the lens of social responsibility

Community Sport Organizations (CSOs) are expected to play a significant role in civil society. However, our understanding of their social impact is primarily limited to the context of their basic mandate for sport service provision. Pearson (2008) argues that a type of social responsibility mirroring the CSR movement in the business sector could be a central element in the development of sport policy and fundamental to sport governing bodies' advancement of social capital. Greater evidence is needed to show how these clubs integrate concerns and action on wider social issues into their structure, operations, and plans. Then, equipped with this organizational understanding, research can determine how CSOs may contribute to the community development agenda of the broader nonprofit and voluntary sector, while supporting or enhancing their primary mandate—sport participation.

This study investigates the prevalence of a broader social responsibility among CSOs that encompasses more than just providing a particular 'good' to society; it refers to ethical practices and a more generalized concern for the community (e.g., societal integration, environmental activism). Presidents of CSOs in three provinces will complete an online survey that measures the extent to which they are engaging in various aspects of social responsibility (legal, ethical, philanthropic, instrumental), as well as the perceived importance of each construct for their organization's strategy and operations. Analysis of variance will also be used to determine whether social responsibility is associated with institutional characteristics such as sport, size of club, age of club, community size, and urban/rural location. The research will be used to develop a model of social responsibility in nonprofit sport organizations, and generate understanding about social responsibility as a (potential) avenue for strategic practice by CSOs to further their social impact.

MOCK, STEVEN

University of Waterloo

S. SHAW, R. MANNELL, B. RYE

SRG 2011

The Influence of Sexual Minority-Focused Sport Group Involvement on the Well-Being of Sexual Minorities

Background: Homophobic stigmatization leads to alienation and poor self-concept with negative consequences for well-being known as minority stress (Meyer, 2003). Sexual minority-focused sport group involvement provides a promising context for counteracting minority stress. Recent research suggests these groups offer relief from homophobia sometimes encountered in sport contexts (Jones & McCarthy, 2010) and provide the camaraderie and social support that are some of the key reasons why sport contributes to psychological well-being (Mannell, 2007; Shaw, Kleiber & Caldwell, 1995).

Sexual Minority Sport Group Project: For this longitudinal study, we seek to understand the role of sexual minority-focused sport group involvement in counteracting the negative consequences of minority stress. Over the past year, diverse sexual minority-focused sport groups were approached (e.g., curling, hockey, softball) and **320 adults** were surveyed about the impact of sport group involvement on identity management, social integration, and wellbeing for **Year 1** of this study.

Preliminary Findings: Results from analyses of Year 1 data show that sport group involvement is particularly beneficial for those who have experienced higher (vs. lower) levels of homophobic stigmatization. For example, for those who have experienced higher levels of stigmatization, the more meaningful and important sport group involvement is, the lower their internalized homophobia (b = -.24, p < .01) compared to those who have experienced lower levels of stigmatization (b = .14, p = n.s.). Similarly, meaningful sport group involvement is associated with greater disclosure of sexual orientation (i.e., being "out") for those who have experienced higher levels of stigmatization (b = .38, p < .05) but not for those who have experienced less stigmatization (b = -.25, p = n.s.).

With a behavioural measure of sport group involvement (e.g., frequency of attending practices, volunteering for the group, attending sport group social gatherings), greater involvement was associated with greater feelings of belonging to the LGBT community for those who had experienced greater stigmatization (b = .44, p < .001) compared to those who had experienced less stigmatization (b = .23, p = n.s.). In sum, meaningful involvement in the sport groups and frequency of participation appear to enhance

identity, identity disclosure, and sense of belonging, especially for those who have experienced stigmatization related to sexual minority status.

Contribution of Project to an Understanding of Sport Participation: Although previous research findings are promising, a theoretically-grounded study investigating causal mechanisms with longitudinal research is needed. Preliminary findings from this study support our predictions that the support, affiliation, and self-acceptance developed in a sexual minority-focused sport setting will enhance individual identity, identification with the broader sexual minority community, and decrease concealment of identity in other contexts. These processes of identity enhancement are expected to help explain how sport group involvement may lead to better psychological wellbeing and counteract minority stress.

This research is supported by a SSHRC Standard Research Grant (410-2011-2683) and the SSHRC/Sport Canada Sport Participation Research Initiative (862-2011-0002); 2011-2014, \$112,956.

References

Jones, L. & McCarthy, M. (2010). Mapping the landscape of gay men's football. *Leisure Studies*, 29, 161-173.

Mannell, R. C. (2007). Health, well-being, and leisure. *World Leisure Journal*, 49, 114-128.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697.

Shaw, S. M., Kleiber, D. A. & Caldwell, L. L. (1995). Leisure and identity formation in male and female adolescents: A preliminary examination. *Journal of Leisure Research*, *27*, 245-263.

MONROE-CHANDLER, KRISTA

University of Windsor

C. HALL, L. COOKE, D. TOBIN, M. GUERRERO

SRG 2009

Imagery Use in CAPIQ: A measure of children's imagery use during active play

Despite recent physical activity guidelines recommending that at least half of children's physical activity accumulated should be in active play (unstructured physical activity), the majority of Canadian children remain inactive during their free time (Active Healthy Kid Canada, 2012). Recent research using focus group methodology found that children report using imagery during active play (Tobin et al., 2011), thereby suggesting imagery use may be a viable method to enhance motivation for physical activity. As such, the purpose of the current study was to develop an instrument, the Children's Active Play Imagery Questionnaire (CAPIQ), to assess imagery use during children's (7 – 14 years) active play. This was addressed through three phases. In phase 1, items were developed and an assessment of content validity was conducted using experts (N = 7), while phase 2 assessed the factorial validity and reliability of the CAPIQ using a sample of children (N = 302). Lastly, phase 3 contributed to the factorial validity of the CAPIQ by utilizing confirmatory factor analysis among an independent sample of children (N = 252). The final version of the CAPIQ consists of 11 items across three factors: fun, social, and capability. Further use of the CAPIQ may aid in identifying types of imagery used among children in their active play and thereby enable more effective interventions aimed at increasing physical activity.

PERRIER, MARIE-JOSÉE

Queen's University

C. SHIRAZIPOUR, A. LATIMER-CHEUNG

DOCTORAL STIPEND 2010

Getting to yes: differences between sport non-intenders, intenders and actors with acquired physical disabilities (completed in 2012)

Approximately 3% of individuals with acquired physical disabilities currently participate in sport. This study compares those currently involved in sport (actors), those considering joining a sport in the future (intenders) and those with no interest in sport (non-intenders) on HAPA and athletic identity constructs to determine important group differences in these sport determinants. Participants were 201 individuals with acquired physical disabilities (Mage=44.0+12.8; Myears post-injury=16.2+11.5). Age, years postinjury, mode of mobility and sex were included as covariates in a significant MANCOVA, F(13, 177), p<.001. Actors and intenders expressed higher affective outcome expectancies for sport (p<.001), perceived similarity to athletes (p<.001) and more positive evaluations of athletes than non-intenders (p<.05). Both intenders and nonintenders expressed lower levels of task and scheduling self-efficacy, as well as intentions to engage in sport during the next two weeks than actors (p<.001). Significant differences between groups for athletic identity, barrier self-efficacy and action planning (p<.001) were found; intenders endorsed these constructs more than non-intenders, yet they also expressed less self-efficacy and planning than actors. No significant differences were found for instrumental outcome expectancies (p=.12) or risk perceptions of sport (p=.18). These results suggest that for intenders it may be particularly important to target multiple types of self-efficacy and planning that support sport behaviour as opposed to affective attitudes or prototype similarity. Messages for non-intenders should target all aspects of the HAPA as well as identity constructs.

READE, IAN

University of Alberta

W. ROGERS, C. HALL

SRG 2011

Social Sciences and Humanities Research Council: Sport Participation Research Initiative Factors Affecting Retention of Experienced Sport Coaches

Coaches play an important role in positive youth development through sport (Holt, 2008; Smith & Smoll, 1997) and in the performance of developmental and elite athletes (Lyle, 2000).

In a recent study, findings revealed a number of prevalent factors in the coaches' work environments, such as excessive workloads, low pay, poor job security and inadequate evaluation processes, which previous research has identified as being associated with employees intending to quit their jobs (Kelloway & Day, 2005).

Identifying work environment factors (Meyer, Allen, & Smith, 1993), and variables within the organizational commitment construct associated with the formation of the intent to leave will be critical in developing a coach retention strategy.

The investment in coach education is lost if a coach quits and does not continue to contribute to either coaching or coach education.

MAJOR RESEARCH QUESTIONS

The work environment characteristics of interest (stemming from the literature as well as our previous studies) are: workload, job security, evaluation, salary/compensation, role conflict/ambiguity, support from employers and significant others and job control. We explored the relative influence of these characteristics on coaches' intentions to quit and actual quitting.

- What factors are involved in the coaches' decisions to stay or quit?
- Are some factors more influential in predicting that a coach is about to quit?
- Which factors, if any, can be controlled by the employer sport organization?
- When coaches quit, do they continue to contribute to sport?
- Does the retention problem vary by sport, gender, age of athlete, or other factor?

We are currently conducting data analysis from 23 semi-structured interviews to understand why coaches leave coaching jobs. The interview guide was based on the tenets of the theory of planned behavior (in regards to intentions to stay or quit), and

the organizational commitment and work environment literature which suggests that factors in the work environment are associated with employees' intentions to stay or quit their professions.

REHMAN, LAURENCE

Dalhousie University

M. BRUNER, C. SHIELDS, S. BALISH, S. BROWN, C. FORREST, M. KEATS

SRG 2011

Understanding Supportive and Satisfying Sport Experiences of Overweight Children

Background

Given (a) the potential for sport as a vehicle for youth development, (b) the proposed role sport may play in addressing obesity, (c) the stigma associated with being overweight, and (d) the potential impact of the perceptions held by others on the self-related beliefs that drive engagement in and satisfaction with the sport experience, there is a need to examine how children, and particularly overweight children are impacted by the social context of sport. The current research examines how those involved in the sport experience impact the psychosocial outcomes of sport for children; of particular interest is the impact on overweight children. Using a two phased, mixed methods approach data will be drawn from three different populations: children (ages 10-14) participating in sport, their parents/guardians, and coaches/leaders of sports teams/programs. In phase 1 survey data will be collected while phase 2 will involve parent interviews and coach focus groups.

Progress and Plans

To date, we have survey data collected from 52 child-parent/guardian dyads, and 6 youth sport coaches/leaders from two study sites located in Ontario and Nova Scotia. Phase 1 recruitment will continue including after school sport and activity programs as well as fall and winter sports teams. Initial parent interviews and coach focus groups are planned for the fall and also continuing into the winter.

Given the stigma associated with overweight, and the potential for a vicious cycle of negative feedback, lowered self-perceptions and disengagement from sport, gaining a more comprehensive understanding of how these interrelated perceptions may impact the sport experience of children in different weight categories will help to inform training modules aimed at enhancing the sport experience.

RIVARD, LYSANNE

McGill University

DOCTORAL STIPEND 2011

Girls' Perspectives on Their Lived Experiences of Physical Activity and Sport in Secondary
Schools: A Rwandan Case Study

The international Sport for Development and Peace (SDP) movement, through its Sport, Gender and Development (SGD) programming, promotes physical activity and sport as tools that can empower girls living in developing countries by breaking down gender norms and stereotypes that control and confine girls' lives (UN Office for SDP n.d.). However, the majority of studies identifying the benefits of girls' participation in physical activity and sport have taken place in Western contexts (Brady 2005) and experts call for studies that help to better understand how physical activity and sport are defined and understood in developing contexts where socio-cultural norms and gender dynamics greatly differ (Larkin et al. 2007). Drawing on Girlhood Studies and Participatory Methodology, this exploratory case study implemented the Photovoice method to bring forward girls' lived experiences of physical activity and sport in Rwandan secondary schools. Contextual and social-cultural influences that shape their experiences are highlighted. The girls' photographs also served as the basis for interviews with their Sports Masters, Gender and Physical Education Experts and three Ministries. The objective of the interviews was to communicate girls' issues of concern with targeted stakeholders and policymakers that can improve girls' experiences of programming.

STRACHAN, LEISHA

University of Manitoba

D. MACDONALD, J. CÔTÉ

SRG 2011

Coaches Perceptions of Project SCORE!: A pilot study

Positive youth development (PYD) has advanced the idea that youth are resources to be cultivated; the development of young people involves fostering positive outcomes rather than simply reducing problem behaviors (Benson et al., 2006). Research points to the potential of youth sport as an avenue to support the growth of particular outcomes (MacDonald et al., 2011; Strachan et al., 2009). A recurring theme in this line of research, however, is the need to establish deliberate delivery so that positive outcomes are more likely. The purpose of the project is to design and deliver an innovative, technology-based PYD program. The SCORE! (Sport COnnect and REspect) program has been established to deliver a PYD program that supplements participation in an organized sport setting (www.projectscore.ca). Five coaches followed a 10-lesson program with a variety of youth sport teams and were interviewed upon completion. Feedback from the coaches indicated that the lessons were appropriate. Constructive comments regarding the ease of the website and specific sessions (i.e., "Your turn") were noted. Information will be used to evaluate and/or modify the program prior to its implementation in the larger study. Results will have a direct impact on youth and coaches alike; young people will learn valuable psychosocial skills while enhancing sport competence and participation while coaches will gain knowledge that will assist with their coaching development and create positive sport contexts for children and youth.

STARKES, JANET

Queen's University

J. BAKER, A.J. LOGAN, P.L. WEIR

SRG 2006

Lifelong Commitment to Sport: Comparing Masters Athletes from Different Disciplines

The Sport Commitment Model (SCM; Scanlan, 1993, 2003) examines the factors that contribute, either positively or negatively, to sport participation. Although originally developed for youth, the model is beginning to be used with more diverse populations, including high performance athletes and adults. Our project applied this model to masters athletes, a group of older sport participants, to determine the nature of their commitment to their sport and the factors which are most important for their sport engagement. Using data from a variety of sports (marathon running, track & field, golf, bowling, triathlon, & ultra-endurance running), we aim to answer the following questions:

- 1. Does motivation and commitment to sport change across age in adult athletes?
- 2. Are there gender differences in motivation for sport?
- 3. Does motivation for continued participation change in high active (e.g., marathon, triathlon) vs. low active (e.g., golf, bowling) sports?

In previous years we have reported that: (a) sport enjoyment, involvement opportunities, and personal investment were the top three reasons for participation; (b) functional commitment (wanting to participate) determined sport involvement more than obligatory commitment (needing to participate); (c) functional commitment was slightly higher in older (> 65 years) than younger (40-65 years) athletes; and (d) male athletes were more likely to be motivated by extrinsic rewards, like trophies and prizes, than female athletes.

For this conference, we focused on the third question: namely, does the activity level of the sport affect motivation to participate? We compared the answers from our marathon runners (mean age 52 ± 5 years) with new data from recreational bowlers (mean age 65 ± 9 years). Bowlers showed higher levels of obligatory commitment (having to participate) and social constraints (e.g., pressure from other people) in their sport participation than marathon runners. Marathon runners were more likely to show involvement opportunities (e.g., being with their friends) and personal investment (time, money, effort) than bowlers. These findings could be attributed to the activity level of the sport, or other factors such as training time and team dynamics.

We also examined what factors predicted functional commitment (R^2 = .76, N = 88) and obligatory commitment (R^2 = .62, N = 88) in bowlers. Functional commitment was significantly predicted by personal investments and satisfaction, while obligatory commitment was significantly predicted by involvement alternatives, personal investments, satisfaction, and social constraints.

From these findings it seems especially important for athletes to feel a sense of satisfaction and personal investment in their sport. Although some questions remained unanswered, these data will provide us with insights on what motivates sport participation in a variety of disciplines. With attention to these factors, we will be able to design sport programs for older adults that are suited to their needs, and will engage them for life.

STIRLING, ASHLEY ELISA

University of Toronto

DOCTORAL STIPEND 2008

Athletes' Experiences of Emotional Abuse in Sport

There has recently been a growing understanding of the occurrence of sexual abuse of young athletes in sport, but very little research has attempted to explore other forms of abuse, such as emotional abuse, within this environment. In addition to the lack of empirical research, there is a substantial need for policy implementation and regulation within sport organizations. However, research on the processes by which abuse is experienced in sport is required to inform policy development and implementation. The purpose of my dissertation, therefore, is to explore the process by which emotional abuse occurs and is often sustained over the course of an athlete's career. The methodological approach used for the study is a constructivist and symbolic interactionist approach to grounded theory. Semi-structured interviews were conducted with 18 elite athletes (male, n=8; female, n=10). Data were analyzed inductively using open, axial, and selective coding techniques. The findings suggested a pattern of temporal stages by which emotionally abusive coach-athlete relationships develop and are sustained over time. Interestingly, the reports provided by the abused athletes suggested that they normalize emotional abuse and view it as an accepted means of athlete development. Comparisons are made with Cense and Brackenridge's (2001) temporal model of sexual abuse with children and young persons in sport. Implications are discussed for policy makers, and recommendations of made for future research.

TAKS, MARIJKE

University of Windsor

L. MISENER, L. CHALIP, C. GREEN

SRG 2010

Leveraging Sport Events for Participation: Results from a Panel of Experts

There is little empirical evidence to support the common notion that "sport events stimulate sport participation", and if there is, empirical studies are mainly focussed on 'mega' or 'hallmark' sport events (e.g., Frawley & Cush, 2011). The focus of our research is to explore how small-to-medium sized sport events might provide more sustainable sport participation benefits, as opposed to hallmark sport events. The first stage of the research examined two past events' leveraging tactics, the 2005 Pan-American Junior Athletic Championships (Windsor, ON), and the 2005 Canadian National Figure Skating Championships (London, ON). Despite some variation based primarily facility development, neither community capitalized on the event to stimulate sport participation, and the participants identified the missed opportunity to potentially increase sport participation and development. The purpose of the second stage of the research was a participatory research approach convening a panel of experts to identify new strategies and tactics to assist local (sport) organizations to leverage sport events for sport development purposes. Following the protocol for dialectical decision-making (DDM; Mitroff & Emshoff, 1979), a twelve-member task force was held in Windsor, Ontario on April 17, 2012 to consider the challenges and prospects for leveraging sport events for sport development. The participants included practitioners and academics with expertise in the areas of sports policy, event management, facility management, coaching, tourism, marketing, education, and community development. The research team simultaneously evaluated the results as they emerged from the workshop, which resulted in development of a Model of Event Leveraging that focuses on the sport and non-sport goals associated with event leveraging. These goals will be contextual and affect the core areas of the model: physical, knowledge, and human resources available for leveraging, which are also mediated by systems and structure, attitudes and opinions, and cultural context for each event and community. The results of this second stage will now be used for the third stage through implementing and evaluating tactics and strategies to increase sport participation through an event.

TRUDEAU, FRANÇOIS

University of Quebec at Trois-Rivières

SRG 2006

Factors in adopting Long-term Athlete Development

Beginning in 2005, national sport organizations in Canada were required to implement their own adapted Long-Term Athlete Development Model (LTAD) proposed by Sport Canada. The purpose of this study was to analyze the coaches' implementation of the LTAD and identify the factors associated with varying degrees of LTAD implementation based on the heuristic model, Diffusion of Innovations, by Rogers (2003). An on-line survey was completed by 117 French-speaking Canadian coaches (74 men and 43 women aged 37.1 \pm 11.5 and 28.5 \pm 9.2 respectively). One third of the respondents indicated that they were not familiar with the Canadian LTAD model. When coaches were asked about their interest in trying new approaches and methods in sport and training, 28.2% said they had "little interest," but most of them (67.6%) were completely interested. Being an "innovator" does not increase the probability of using the LTAD principles in the training plan. However, self-efficacy and the perception of having sound knowledge about the LTAD are associated with an increased probability of adopting the LTAD. The majority of respondents (88.6%) believe that the LTAD can contribute fully (54.3%) or fairly well (34.3%) to their sport or to the development of their athletes. The coaches who felt that the LTAD can contribute to the development of their athletes and improve performance were more likely to include the LTAD principles in their training plan. We found that other potential factors, such as recent NCCP certification, organizational restraints and the inherent complexity of the LTAD did not have a significant influence on the its implementation. One interesting point noted: LTAD information does not appear to be transmitted solely through coach certification activities.

ULVICK, JOCELYN

University of Saskatchewan

DOCTORAL STIPEND 2012

Group cohesion in adolescent sport

Participation in organized sport has shown a downward trend in recent years among Canadian youth, particularly during the adolescent years (Ifedi, 2005). Given the numerous benefits associated with continued sport involvement, there is a need to understand the factors related to sport participation and dropout. Considering that peers and peer groups constitute an important source of social influence during adolescence (Smith & McDonough, 2008), it may be helpful to consider how aspects of a sport group are associated with individual adherence. In adult sport, for example, perceptions of the group's cohesiveness have been connected to several indicators of adherence (e.g., Carron et al., 1988). Athletes who rate their teams as more cohesive are less likely to dropout (Robinson & Carron, 1982) and express greater intentions to return to the team the following season (Spink, 1998). However, how cohesion relates to these adherence outcomes in a youth sport setting has yet to be examined. To address this gap, this program of research will investigate the group cohesionadherence relationship in youth sport through a series of three linked studies. The first study will establish the relationship between group cohesion and subsequent adherence outcomes (e.g., dropout, intention to return) in high school team sport. As it might be expected that perceptions of cohesiveness might relate to players feeling more connected with their teammates, and feeling more connected might increase adherence, the second study will explore the structure of the team's social network as a possible mechanism in the cohesion-adherence relationship. The third study will attempt to manipulate cohesion using an established team-building protocol (Carron & Spink, 1993). If this study can show that increasing cohesion leads to greater player interconnectedness and adherence, this will identify potential targets for change to sustain adolescents' involvement in sport.

WATT, MARGO

St. Francis Xavier University

SRG 2006

Relations among Anxiety Sensitivity, Physical Activity and Health-Related Outcomes

This research project has three main objectives. The **first objective** is to investigate the relationship between anxiety sensitivity (AS) and physical activity in a sample of young adults. Anxiety sensitivity (AS) is a dispositional variable referring to the fear of anxiety-related bodily sensations arising from beliefs that these sensations have harmful physical, psychological, and/or social consequences. High AS has been implicated in the development of psychopathology (e.g., anxiety and related disorders) but also has been implicated as a risk factor for physical pathology (low levels of physical activity). It has been suggested that, because exercise produces physiological sensations similar to those feared by individuals with high AS (e.g., elevated heart rate), it tends to be avoided. An alternative explanation is that a lack of exposure to these sensations resulting from physical inactivity promotes increased AS.

The **second objective** of this research project is to investigate childhood learning experiences related to the development of both AS levels and physical activity habits. My early work demonstrated links between retrospectively-reported childhood learning experiences and elevated AS in young adulthood, and found AS to mediate relations between childhood learning experiences and elevated health-related concerns in young adulthood. Although some attempts have been made to identify factors that may influence physical activity habits, knowledge in this area remains rudimentary. Research has found some evidence for the influence of social learning factors (e.g., parental reinforcement and parental modeling) on children's health-related activities. Collection of parental validation data will allow for corroboration of students' retrospective accounting.

The **third objective** of the present research is to investigate the process through which a brief cognitive behavioural intervention that includes physical exercise as the interoceptive exposure component decreases anxiety sensitivity (AS) in a non-clinical population. A brief cognitive behavioral treatment (CBT) that includes an interoceptive exposure (IE) component (i.e., running) has been found to be effective in decreasing fear of anxiety-related sensations in high anxiety sensitive (AS) women (see Watt, Stewart, Birch, & Bernier, 2006). The current research project included a process-based study which examined the specific role of the IE component in explaining intervention efficacy. This study found that the affective and cognitive reactions, and objective physiological reactivity, to the running were initially higher in high (vs. low) AS participants and decreased over IE trials in high (vs. low) AS participants. In contrast,

self-reported somatic reactions, which were initially greater in the high AS participants, decreased comparably in both AS groups over IE trials. Findings were consistent with the theorized cognitive and/or habituation pathways to decreased AS.

WEIR, PATRICIA

University of Windsor

SRG 2010

Physical activity as a form of engagement in seniors: Where are we at?

Multidimensional models of successful aging (SA) encourage active engagement with life as one factor in achieving SA, however little is known about the impact of active leisure/physical activity. To date three research projects have been conducted: 1) The impact of productive, social, active, and passive leisure on physical and cognitive function was evaluated in 287 adults (55-90 years). The highest percentage of activities participated in was passive leisure (37.24%), followed by productive (28.76%), social (24.4%) and active leisure (19.04%). Only active leisure activities predicted improved physical function. When activities were categorized according to high, moderate or low frequency of participation, only high frequency activities predicted both physical and cognitive function. These data suggest that higher frequency of participation in a variety of activities leads to sustained function (Liffiton & Weir, 2012). 2) The use of frequency was then evaluated as a proxy for engagement within a model of SA. Using a subsample of 181 older adults, two measures of engagement were contrasted within a traditional three factor model of SA. Engagement was defined as: a) interpersonal relationships and productive activities, and b) the frequency of participation in 29 activities over a one week period. Using frequency to quantify engagement resulted in a higher percentage of older adults being identified as SA sending a positive public health message that even a moderate level of participation may be beneficial (Wiseman et al., 2012). 3) To determine why "healthy" older adults do not participate in physical activity, data from the CCHS-Healthy Aging module (n=4,900) were used to evaluate the impact of traditional barriers, self-reported health and chronic health conditions on nonparticipation. The data were clear in suggesting that barriers are not the limiting factor to participation and non-participation was best predicted by chronic health conditions (Smith et al., in press).

WEISS, JONATHON

York University

SRG 2012

Predictors of sport participation in youth with intellectual disability: Who gets and who stays involved?

Participation in organized sport is an important activity for Canadian youth with and without disabilities, and has been linked to numerous benefits. Youth with intellectual disabilities, who represent approximately 2% of the Canadian population, are largely marginalized from typical recreational, leisure, and social activities, even though they are physically integrated in the community. It is imperative that we understand the factors that lead to participation in sport for these youth and what keeps them involved. The overall goal of the current research is to understand the factors that lead youth with intellectual disabilities into sport and to remain involved in sport. The current project aims to compare relevant developmental assets and sport specific psychosocial experiences in youth with intellectual disabilities who are athletes in Special Olympics to a matched group of youth with intellectual disabilities who do not participate in sport, and determine the factors that are predictive of involvement and retention. SCRI funding for this project begins in January 2013. We aim to recruit 150 youth with intellectual disabilities involved in Special Olympics, 11-21 years of age. We will also recruit a comparison group of 150 youth who are not involved in Special Olympics or other organized sport, through referral from Special Olympics families and recruitment from our ongoing research registries. Parents will complete measures of their children's developmental assets and skills. Youth will be administered questionnaires that measure their sport specific psychosocial experiences: Motivation, social relatedness, physical competence, and feelings about sport. We will re-contact participants 12 months after they complete the questionnaires, to see who remained in sport, who dropped out, and who (from the non-Special Olympics group) became involved in sport over that time period.

WOOD, LAURA

University of Western Ontario

DOCTORAL STIPEND 2010

The Social Nature of Women's Sport Participation

While research has found that people prefer to participate in sport with others, work examining constraints to participation has primarily taken an individual perspective. Further, recent research has found that participation as a group can facilitate women's persistence in recreational sport pursuits (Wood & Danylchuk, 2011). Recreational sport groups may be particularly beneficial for mid-to-older women as they can help negotiate or resist societal constraints related to gender and age (Green, 1998). However, recreational sport in the lives of older women is significantly underexplored, with a few exceptions (e.g., Heuser, 2005; Yarnal, Chick, & Kerstetter, 2008). Employing constraints as a framework represents one fruitful approach (Godbey, Crawford, & Shen, 2010). Examining constraints at various levels (intrapersonal, interpersonal, and structural) and their impact within a group may provide insight into the group's ability to operate and engage in activities as a collective, and the groups' role in helping individuals manage participation related constraints. Understanding the factors that influence participation in sport could assist in the development of effective solutions for increasing participation amongst this population. Thus, this study examined constraints and negotiation processes in a self-organized women's recreational sport group.

Data were collected using ethnographic methods and analyzed through a grounded theory approach. Although some constraints influenced recreation involvements negatively, the findings predominantly describe how the group collectively developed strategies that enabled them to negotiate most constraints. Specifically, findings highlight six ways in which the group of women negotiated constraints. These include: managing to participate without others, meeting the physical limitations of the majority, reconciling family commitments with group leisure, coordinating activities of group, maintaining connections despite distance, and new members adjusting to group. Importantly, a description of how constraints developed and were negotiated over time was also identified and described, thereby casting the negotiation process in a dynamic light.

YOUNGBLUT, HOPE

Laurentian University

DOCTORAL STIPEND 2009

Views of Sport and Physical Activity of Early Adolescent Female Youth

Over the past decade there has been an increased interest in the physical activity levels of children and adolescent youth from health perspectives (e.g., obesity and diabetes prevention) and psychological perspectives (e.g., self-esteem and social development). Researchers have indicated that female youth are particularly vulnerable to withdraw from sport and physical activity programming during early adolescence (see Healthy Active Kids Canada, 2009). In order to develop relevant sport and physical programs it is first imperative to understand the lived experiences of those for which the programs are intended. Within the current research project, the researcher aims to elucidate the views held by early adolescent females about sport and physical activity through the use of in-depth individual face-to-face interviews conducted using an interpretive phenomenological approach. Each participant will be interviewed two times, the first interview will last about 60 minutes and follow the interview guide, the second interview will allow for further explanation and clarification from the participants as themes begin to emerge from the collected data. Finally, focus groups will be conducted to allow participants to provide feedback on the analysis of the study data. Dissemination of research findings will focus on the barriers that prevent girls from participating in physical activity and aspects that enable girls to participate in physical activity in early adolescence. Further, the researcher will delineate the differences between physically active and inactive girls and make recommendations for engaging inactive girls in physical activity programming. The researcher will also focus on the effectiveness of the methodology in sport and physical activity research with adolescent female youth.

Sport Canada Research Initiative Conference

October 30, 2012

Kanata, Ontario

KNOWLEDGE TRANSFER PAPERS

Completed Projects

BAKER, JOSEPH	6
Aging Expectations and Physical Activity Behaviours	6
SEAULAC, JULIE	8
A Promising Community-Based Hip-Hop Dance Intervention for the Promotion of Psycho and Physical Well-being among Youth Living in a Disadvantaged Neighbourhood	
SEWELL-WEISS, CARMEN	12
Predictors of Excessive Exercise in Anorexia Nervosa	12
OUCHER, BOB	15
Culture of National Sport Organizations and Participation in Sport	15
RIDEL, WILLIAM	19
FinishWhatever it Takes: Considering Pain and Pleasure in the Ironman Triathlon (A Soc Cultural Analysis)	
RUNER, MARK	2 3
Understanding the Influence of Peer Groups in Sport on Adolescent Social Development.	2 3
CALLARY, BETTINA	26
Exploring the process of lifelong learning: The biographies of five Canadian women coach	
OUSENS, LAURA	31
Examining Interdependence in Canada's Sport System: Community Basketball)	31
DARNELL, SIMON	35
The Politics of International Sport: An investigation of the Sport for Development and Pe movement, completed 2010	
DEMERS, GUYLAINE	39
Description of the first years of experiences of novice female coaches (2010)	39
DETELLIER, ÉLISE	42
They Always Remain Girls: The re/production of gender relations in women's sports in	47

DIONNE, MICHELLE	. 45
Sociocultural barriers to women's participation in sport: The role of self-objectification and stereotype threat	
DORSCH, KIM D.	. 48
Phsychological skills and factors related to ice hockey officials' coping and performance(20	
FRASER-THOMAS, JESSICA	. 51
Understanding Adolescents' Positive and Negative Developmental Experiences in Sport	. 51
FRISBY, WENDY	. 55
Combating Social Exclusion in Sport and Recreation through Participatory Policy Development	
GAGNÉ, CAMILLE	. 58
Influence of Structural and Psychosocial Factors on the Level of Physical Acticity of Preschoolers Attending Daycare (2011)	. 58
GAGNON, JOCELYN	. 61
Strategies Used by Physical Educators to Implement a Program that Encourages Their Students to "Adopt a Healthy and Active Lifestyle	. 61
GILLES, JENNIFER	. 64
A Framework for Creating a Campus Culture of Compassion: A Participatory Action Research Approach to Equality	
HAMM, SHANNON	. 67
Can Conflict be Productive? An Examination of Conflict in Non-profit Sport Boards	. 67
HARVEY, WILLIAM J	. 70
Children with ADHD and physical activity behaviours: What happens when the village turns back on you	
HOLT, NICHOLAS	. 74
A Sport-based Critical Hours Program for Low-Income Youth	. 74

JEFFERY-TOSONI, SARAH	77
Exploring contemporary issues in Canadian youth hockey: Experiences and perspectives of peewee players and elite hockey insiders	
KWAN, MATTHEW	81
Transitioning Students' Sport and Physical Activity Participation)	81
LOCKWOOD, KELLY	84
Infrastructure & Expertise: A Model to Investigate Effective Training through Long-term Athlete Development	84
LU, CHUNLEI	88
Chinese-Canadians' Perspectives on Health & Sport Participation	88
MAIR, HEATHER	92
Curling and Community in Rural Canada	92
MORDEN, PETER A.	95
Adolescent Leisure Opportunities in a Changing Community (2011)	95
O'REILLY, NORM	99
Urban Youth Engagement in Sport: Process, Access and Participation	99
SAFAI, PARISSA	. 103
The social determinants of athletes' health: Understanding the relationship between hea and high performance sport	
SHANNON, CHARLENE	. 106
Understanding Parents' Experiences in Facilitating Physically Active Leisure for their Child who are Overweight or Obese	
STRACHAN, LEISHA	. 109
Examining Positive Youth Development in Elite Sport Contexts Using Photo Eliciation	109
SULLIVAN, PHILIP	. 111
The Effect of Coaching in Youth Sport in Canada (2010)	111

TAMIM, HALA	113
Tai Chi (TC) for older adults: improving physical and psychological health and identifying	and
overcoming cultural/ethnic barriers to participation	113
TAMMINEN, KATHERINE	116
Understanding and Coping Among Adolescent Athletes	116
TRUDEAU, FRANÇOIS	121
Factors in Adopting Long-term Athlete Development	121
TRUDEL, PIERRE	124
An Analysis of High School Sport	124
TRUSSEL, DAWN	126
Organized youth sport, parenthood ideologies and gender relations: Parents' and children experiences and the construction of "team family"	
WATTIE, NICK	130
Relative Age, Recreation Sport Participation and Youth Development (2011)	130
YOUNG, BRADLEY	133
Lifespan Analyses of Social Influence on the Sport Commitment and Participation of Mas	

BAKER, JOSEPH

York University

P. WEIR, J. STARKES

SRG 2007

Aging Expectations and Physical Activity Behaviours

Project Summary

A developing area of research focuses on 'successful aging', which has the central objective of discovering significant predictors of optimal health in later life so that risks of disease and disablement can be targeted and reduced. From this research, there is evidence indicating beliefs that older adults have of their own aging process (aging expectations) play an important role on health and healthy behaviors (e.g., sport and physical activity) throughout later life.

The current research project develops our understanding of this area by examining the relationship between older adult's expectations of aging and their involvement in preventive health behaviors such as sports and physical activity. Previous evidence shows that older adults who expect decline with age are less likely to engage in 30 minutes of moderate-to-vigorous walking activities in the previous week compared to those with affirming aging expectations; however, the impact that aging expectations have on other modes of physical activity has not yet been explored.

As a result, the main objective of this research was to discern the influence that aging expectations have on multiple kinds of physical activity behavior.

Research Methods

249 adults aged 40 and greater (average age was 70 years) completed a multi-scale penciland-pen survey. Recruitment took place in the Greater Toronto Area. Participants were all community-dwelling as they were recruited from retirement housing complexes, recreational activity groups (both physical (e.g., mall walking groups) and cognitive (e.g., bridge)), and senior centers. Each individual was given a survey, a stamped and addressed envelope. The questionnaire surveyed a) multiple physical activity practices and preventive health care seeking behavior (getting a routine annual physical exam from a health care professional), b) mental, cognitive, and physical aging expectations), and c) a number of important social, demographic, and clinical factors that are important and relevant to the associations being tested (e.g., gender, ethnicity, cultural background, income, education, chronological age, depression, reports of pain, restriction of daily activities, and chronic conditions). Ethics approval was granted from York University and all participants had to provide informed consent.

Research Results

Are aging expectations associated with multiple kinds of physical activity behaviour? Higher aging expectations were found to significantly relate overall physical activity, participation in strenuous sport, and lawn work or yard care. Again, an examination of the aging expectation sub-scales revealed that these overall effects were driven by the physical health aging expectations only. Furthermore, solely physical aging expectations were also associated with participation in light sport activities, moderate sport activities, and light housework. Findings suggest that expectations of decline with age, namely declines in physical health, are associated with decreased reports of participation in various modes of physical activity. As a result, promoting positive aspects of aging may help maintain levels of physical activity across the lifespan.

Policy Implications

Our results may have considerable policy implications given the increased attention to 'Aging at Home' among many provincial and national health agencies. In general, they suggest that health messaging to older adults should reflect a more optimistic perspective since one's expectation towards their aging influences their involvement in pro-health behaviors. However, we recognize the difficulties in implementing a 'pro-aging' messaging campaign in a society that values youth and may have unreasonable expectations of what constitutes 'health' and 'fitness' particularly in older age groups.

Next Steps

The most significant 'next step' is the development of an intervention framework with older adults, in an attempt to 'disarm' the negative stigma associated with older age. We anticipate that this will not be easy (if possible at all) given the social focus on youth, beauty, fitness – all concepts not normally associated with the aging person.

We also anticipate continued examination of the role of aging attitudes and expectations on other preventive health behaviours (e.g., diet, doctor visits) and other aspects of health (e.g., self-concept, social engagement).

Key Stakeholders and Benefits

- Provincial Ministries of Health, Health Promotion and Sport
- Health Canada
- Sport Canada
- Canadian Association on Gerontology
- Provincial Associations for Older Persons, Aging, and Gerontology

BEAULAC, JULIE

University of Ottawa

Doctoral Stipend 2006

A Promising Community-Based Hip-Hop Dance Intervention for the Promotion of Psychosocial and Physical Well-being among Youth Living in a Disadvantaged Neighbourhood

Project Summary

This project involved a partnership between the University of Ottawa and three community partners: South-East Ottawa Community Health Centre (SEOCHC), Culture Shock Canada, and Heron Road Community Centre. Prior to implementing a new physical activity program in South-East Ottawa, an initial study sought to better understand the needs, barriers, and facilitators to youth participation in physical activity in order to conceptualize the new intervention. This study determined that the young people and parents were aware of the benefits to youth participation in physical activity but that contextual constraints need to be addressed. The second study of this project consisted of an implementation and outcome evaluation of a new weekly hip-hop dance intervention. The implementation findings demonstrated that the program reached the intended population and provided valuable feedback on the strengths and weaknesses of this new program. The outcome findings were mixed. In general, the quantitative results did not support the program objectives; however, qualitative findings were more positive, and suggested that the hip-hop dance intervention is a promising program for the promotion of youth well-being.

Research Methods

The intervention conceptualization study involved a literature review and three focus groups: seven male youth; 10 female youth; and 13 parents/guardians. Youth participants were 11 to 14 years of age. The evaluation of new intervention study, involved ninety-one youths 11 to 16 years old. The youths were socially and ethnoculturally diverse; most were female (82.4%). The evaluation involved a non-experimental pretest-posttest design from the perspective of youth participant, parent/guardian, and program staff. Mixed methods were used including document review, observation, interview, focus group, and questionnaire format.

The intervention studied was a new, free community-based hip-hop dance program, implemented in South-East Ottawa for young people between 11 and 16 years of age. The program was designed to break down some of the barriers to participation by providing a free, relevant, and supervised activity, in an accessible location, that included transportation assistance and participation incentives. Two program formats were offered, girls-only and coed, across two program sessions: a winter session (13 weeks) and a spring session (12

weeks); different young people participated in each session. A final showcase production was held one week after the final class of each session where participants performed in front of their families, friends, and other community members. The young people also attended preand post-program evaluation classes.

The program was delivered according to a structured intervention manual. Two dance instructors from Culture Shock Canada taught the classes at a local community centre. A balance between learning new hip-hop dance skills and fostering positive peer and staff relationships was sought in order to maximize youth involvement and positive outcomes. A youth coordinator and health promoter for youth were also staffed to provide youth with transportation assistance, on-site supervision, and to assist with coordination and outreach.

Research Results

Findings from the first study demonstrated that the young people and parents were aware of the benefits of youth participation in physical activity programs. Hip-hop dance was reported as an appealing program option. Limitations of this study are the small sample size and the use of one method. Nonetheless, the intervention conceptualization study was important in informing program development and implementation, including decisions around offering co-ed and girls-only formats, program timing, participation incentives, and transportation assistance. Findings also demonstrated the importance of involving the community in developing and implementing new programs.

Findings from the second study demonstrated that program implementation was moderately satisfactory. Strengths included: accessibility, relevance and challenge in learning something new. In addition, the participants described a mainly positive/non-competitive environment and positive connections with peers and staff. Not unlike other community-based programs for youth and disadvantaged populations, almost 50% of the youths discontinued participation in the program. Other key areas of weakness included inconsistencies in the program timing, adult management of youth behaviour, and transportation, in addition to the short length of the program and unachieved outreach objective. Improving the program would likely improve youth retention and impact. Importantly, however, the youth participants in this program reflected the target population and reported overall satisfaction with the program. Participants, parents, and staff agreed that the program should be continued, with modifications, likely requiring new resources. A strength of this study was the use of multiple methods; however, low participation rates were problematic.

This program sought to promote positive development and well-being among youth living in a disadvantaged, multicultural urban community. In general, the quantitative results did not support these objectives except for a statistically significant improvement in perceived hiphop dance skills, likely due to small sample size, high attrition, low intervention dose, and implementation problems. However, qualitative findings suggest that the intervention is a promising program for the promotion of youth well-being. More specifically, almost all the

young people, staff, and parents reported an improvement in hip-hop dancing and/or other related skills, and in self-confidence. In addition, many described improved behaviours, an increase in participation in physical activity, trying new activities, and a transfer of skills to other activities, improved physical health, shyness, mood and relationships; some also described an increase in respect for others or for diversity. Less commonly, the youths and parents also indicated that health overall and/or attention improved; a few also reported improved school performance. These findings are consistent with other research on the benefits of participation in physical activity and positive youth development programs. Although these findings suggest a promising program, they need to be interpreted in light of certain limitations, such as the small sample size and non-experimental design of the research; as a result, we cannot attribute participant changes to involvement in this intervention per say.

Policy Implications

The study supports consideration of both environmental and individual level factors in the promotion of physical activity. Currently too much emphasis is placed on individual level factors; Further, additional resources may be necessary to appropriately meet the needs of lower-income and culturally diverse young people.

The study suggested promise in offering weekly physical activity programming for youth living in a disadvantaged community. Two particularly important program-related factors were relevance (Hip-hop dance was reported as highly relevant for intervening with youth and accessibility (i.e., program cost, location, and transportation.). Promoters of physical activity should consider these two critical factors in the development and implementation of interventions.

The evidence supports collaborative, multi-setting interventions in adolescents. Attempts should be made to combine community-based interventions with those targeting other settings (e.g., school, home) as the problem of physical inactivity, health, and social problems is complex. This research also demonstrated the importance of involving the community in developing and implementing new interventions.

Next Steps

A more rigorous study is needed to confirm the benefits of this and other community-based physical activity programs. Future intervention research needs to include more diverse and lower-income youth in order for findings to be generalizable, and to investigate a broader range of outcomes – beyond physical health. Studies investigating implementation and other dimensions of interventions are also critical to the effective study and dissemination of new programs.

Key stakeholders and benefits

- Public Health Agency of Canada, Health Promotion Branch
- Ontario Physical and Health Education Association
- Ontario Ministry of Health and Long-Term Care
- Active Healthy Kids Canada
- Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS)

BEWELL-WEISS, CARMEN

York University

DOCTORAL STIPEND 2006

Predictors of Excessive Exercise in Anorexia Nervosa

Project Summary

The present study was aimed at determining a model that would predict excessive exercise in individuals with anorexia nervosa. This is very important because exercising excessively while underweight, as can be the case in certain forms of sport participation, has been shown to have dangerous health consequences, and has been linked to negative prognosis and higher psychological distress. At the same time, in other populations, exercising has been shown to have positive health effects (both physical and psychological). Thus, the present study examined the associations, both positive and negative, between exercise and various psychological and behavioral variables.

Research Methods

Participants were 153 patients admitted to an inpatient treatment program for anorexia nervosa. Excessive exercise status was defined as a minimum of one hour of obligatory exercise aimed at controlling shape and weight, six days per week in the month before admission. This definition of excessive exercise has been used in other published studies looking at exercise in anorexia nervosa, and, although it may appear that one hour per day of exercise is not very much, it is important to note that these individuals are at such low body weights, that any amount of activity could be considered too much. Also, many of the participants exercised much more than the one hour minimum.

The psychological and behavioural predictors used in this research had all been previously identified in past research as independent predictors of excessive exercise, but they had never been combined in the same model. The advantage of combining them was that we could see which predictors remained strong even after their shared predictive capabilities were accounted for. For example, it could have been true that depression and self-esteem were significant predictors when run separately, but if the reason they were associated with exercise was similar (e.g., negative view of self), then one of them would likely not remain a significant predictor when both were included in the same model. All the behavioural and psychological predictors were measured using widely-used and validated self-report measures.

Research Results

The overall model found that while excessive exercise was indeed linked to negative factors, such as increased dietary restraint and higher levels of depression, it was also associated with lower levels of obsessive-compulsive symptoms and higher levels of self-esteem. It is interesting to note that past research has found the opposite relationship between obsessive-compulsive symptoms and excessive exercise. Finally, excessive exercise was linked to the restricting form of anorexia nervosa (vs. the bingeing/purging subtype), which is also in contrast to the findings of previous research; however, there is some evidence to suggest that the differences in the current study may have been driven more by the presence or absence of binge-eating rather than purging. These results would suggest that excessive exercise is related to both positive and negative factors, and they suggest that treatment programs, which usually encourage their patients to stop exercising entirely, should consider both the potential positive and negative effects of this recommendation. They also point to the possibility of incorporating some form of moderate exercise into treatment.

To our knowledge, the present study is the first attempt to identify a model predicting excessive exercise in patients with AN, using previously identified predictors from the extant literature. It is important to note, however, that in some cases, we used different measures of specific variables than other studies used. Although all of the measures that we used have been widely utilized and have been shown to have good validity and reliability estimates, our understanding of excessive exercise in AN would be strengthened by replications of the present model by independent research groups, using the same measures we used.

Our study was also limited in that all of our participants had been admitted to inpatient treatment at the time of assessment and none were actively engaging in exercise when they were completing their questionnaire packets. Thus, it is possible that some or all of the findings may have been a reaction to not exercising. It would be a worthwhile effort to try to assess patients before they come into the treatment program to see if our current model of excessive exercise in anorexia nervosa holds. Also, it is not clear how well the results of a model of excessive exercise developed using inpatients would extend to individuals with anorexia nervosa in the community (who also often do not seek treatment and who may have less severe eating disorders).

Finally, because our study did not control for any variables (e.g., randomly assigning one group to exercise and comparing them to a group that does not exercise), we can only talk about relationships among the predictors and excessive exercise. We cannot say that the predictors cause excessive exercise, or that excessive exercise causes the predictors. It is also just as possible that they coexist together because of some other, unmeasured, variables. Future prospective research is needed to begin to determine the direction of the associations we found.

Policy Implications

The current recommendations for individuals presenting to intensive treatment for anorexia nervosa include stopping exercising entirely, as it has been shown to be associated with negative psychological variables and negative treatment outcome. The present findings partially support these recommendations, but do raise the possibility that there are positive aspects to exercising as well. Thus, the findings would suggest that further research is needed to determine the relationship between exercise/ excessive exercise and the course/ treatment of anorexia nervosa. It may be that some exercise, such as certain forms of sport participation, can be usefully incorporated into treatment (perhaps later in treatment as weight has begun to be restored), as long as efforts are made to prevent the exercise from becoming excessive.

Next Steps

Future research is needed to replicate the present model, determine the directions of the relationships between the predictors and excessive exercise, and evaluate the impact of incorporating some form of exercise, such as certain forms of sport participation, into treatment for anorexia nervosa.

Key Stakeholders and Benefits

At this point, the current findings may be useful for health professionals who work with individuals with anorexia nervosa and physical activity and sport leaders dealing with participants with this condition.

BOUCHER, BOB

University of Windsor

V. GIRGINOV, M. TAKS, S. MARTYN, M. HOLMAN, J. DIXON

SRG 2006

Culture of National Sport Organizations and Participation in Sport

Project Summary

This project examined the relationship between the culture of Canadian national sport organizations (NSOs) and participation in sport. The overall goal was to better understand and ultimately increase the effectiveness of policies aiming to promote sport activities such as the Sport Participation Development Program (SPDP). Generally, NSOs subscribed to a humanistic-encouraging type of organizational culture, but they did not actively promote the values of sport participation. The SPDP is perceived as a source of extra funding rather than an integral part of the strategy of NSOs. Both Sport Canada and NSOs need to embrace sport participation as a cultural process to improve its strategic management.

Research Methods

Ten Canadian NSOs participating in the 2007-2008 SPDP formed the focus of the study including Alpine Skiing, Athletics, Badminton, Ten-pin Bowling, Cycling, Gymnastics, Hockey, Rowing, Swimming and Volleyball. They represent sports with different histories, constituencies and structures, and varying degrees of professionalisation. Four main methods and instruments were employed for data collection including:

- literature review (research, policy documents and reports);
- semi-structured interviews (except Rowing) utilizing an interview guide based upon the cultural dimensions of sport organisations (Smith & Shilbury, 2004);
- monitoring and evaluating NSOs' websites using the eMICA model (Burgess & Cooper, 2000); and analyzing the use of the Internet for establishing and maintaining relationships with sport participants utilizing the Relationship-building Process Model for the Web (Wang, Head, & Archer, 2000);
- on-line surveys with members of NSOs (the Organisational Culture Inventory (Cooke & Lafferty, 1989).

Research Results

The participating NSOs showed a humanistic-encouraging primary style culture characterised with being supportive of others, resolving conflicts constructively and helping others to grow and develop. However, no NSOs' organisational culture was homogeneous as four subgroup cultures emerged: 'board member', 'coaching staff', 'middle management' and 'senior management'. This demonstrates that organizational culture is always multi-dimensional and

cannot be determined by the values of one group only. A limitation of this survey was its response rate of 22% (N = 37).

Four clusters of cultural interpretations of sport participation amongst the NSOs emerged:

- 'elite culture' following a top-down approach where international success is used to promote grass-roots sport (e.g., Alpine Skiing, Athletics, Hockey);
- 'mass culture' suggesting a bottom-up process which naturally leads to elitism (e.g., Gymnastics, Swimming);
- 'sessional culture' suggesting that sport participation 'dies when the grant dies' (e.g., Volleyball, Cycling);
- 'place culture' suggesting that sport participation is promoted only in certain geographic areas (e.g., Badminton, Ten-pin Bowling).

There has been a distinct lack of awareness about the existence, purpose, implementation and how the SPDP would benefit the NSOs both within the NSOs staff and the general public. The SPDP was seen as a departmental responsibility and not as a core business of the entire NSO.

NSOs have largely perceived the SPDP as an additional source of funding and not as an opportunity to address the fundamental ongoing issue of sport participation. The program has not been incorporated into NSOs' strategic plans to ensure a better synergy between different departments.

Most NSOs were lacking the capacity to successfully run the program. Ownership of SPDP is an issue for some NSOs as they outsource the delivery of the program to private agencies over which they have little or no control.

The introduction of the SPDP has reinforced both the competition for funding and participants amongst NSOs, and an environment which favours those NSOs with better structures and resources who can afford the resources to implement sport participation initiatives. Less structured and funded NSOs straggled to cope with the expectations presented by the SPDP.

There is a tension between the LTAD model and the objectives of the SPDP program promoted by Sport Canada. These are based on two different philosophies and NSOs were confused about their relationship. Tensions also exist between NSOs and PSOs resulting in mistrust and resistance to implementation of national programs.

The Internet technology provides great advantages and the ten NSOs have been receptive to the use of the Web for promoting sport participation. However, they are still failing to utilise the opportunities offered by the interactive technology to effectively communicate their objectives and to develop relationships with members.

Regular communications with Sport Canada are critical to any project. In this respect Sport Canada could do more to facilitate research projects concerning its policies and the work of NSOs.

Policy Implications

NSOs need to change their perceptions about the SPDP and ensure that it is well integrated into their strategic plans. The values and practices of the SPDP should not be seen as a project managed by an officer but as an essential part of the mission of the organization which is embraced equally by all members. NSOs need to better utilize their websites to promote a culture of sport participation.

Sport Canada needs to establish a developmental strategy to support the SPDP in three key areas:

- Establishing clear conceptual and practical linkages between the LTAD and SPDP so the two programs complement each other;
- Putting in place a capacity-building strategy to help NSOs develop the organizational capabilities needed to successfully implement the program;
- Implementing a systematic promotional campaign to assist in enhancing both the public and NSOs' awareness about the SPDP.

Next Steps

Sport participation needs to be appreciated as a process of acculturation where NSOs are cultural agents, not just as a resource or opportunity to attain other goals.

More strategic examinations into the role of the World Wide Web is needed in promoting a participation culture by investing in better designs, functionality and communications with NSOs' constituencies. Further research is needed in devising Web-based relationship strategies for initiating and sustaining participation in sport. Academia can make a significant contribution to the work of NSOs in this regard, as it possesses a great resource: technologically savvy and sport-active students. The questions 'how do NSOs' culture facilitate the socialisation of participants in and through sport?' and 'how do NSOs understand the participant and give meaning to the importance of sport?' need further investigation.

Key Stakeholders and Benefits

- Sport Canada (better informed sport promotion policies; staff development)
- Ministry of Health (better integration of health policies with sport)
- Ministry of Education (better integration of educational policies with sport)
- National and Provincial Sport Organizations (clearer visions and better targeted efforts in enhancing participation; staff development)
- Schools and Universities (better integrate their social and sport policies with Sport Canada's agenda)
- Sport event organizers (better use of sport events to promote participation)
- Academic community (use of findings to inform research and teaching)

BRIDEL, WILLIAM

Queen's University

Doc 2008

Finish...Whatever it Takes: Considering Pain and Pleasure in the Ironman Triathlon (A Socio-Cultural Analysis)

Project Summary

Stemming from my own involvement in Ironman triathlons, I became interested in ideas of *pain* and *pleasure* as social constructs. How might ideas about these things in the Ironman context relate to ideas about pain and pleasure circulating in the broader socio-cultural context? Furthermore, what might these relationships tell us about contemporary understandings of *bodies* and *identities*?

The ideas about pain and pleasure that I uncovered were significantly shaped by the importance placed on finishing. Finishing an event resulted in the acquisition of an *Ironman identity*, an identity that was suggested to provide *cultural capital* since Ironman triathletes are often represented as excellent examples of health, self-empowerment, and discipline — highly valued characteristics in a neoliberal political and social context. With the importance placed on finishing, there seems to be a mostly uncritical promotion/adoption of the "no pain, no gain" philosophy. That said, many interview participants stressed the importance of negotiating the difference between *positive* and *negative* kinds of pain. Paradoxically, despite critical awareness of the different kinds of sport-related pain, injury stories were still prevalent. Thus, the importance placed on becoming an Ironman seems to mostly trump the state of participants' bodies and their overall health. It also shaped ideas about pleasure. Very few of my participants suggested that they found sensuous pleasure in their participation; rather, they found pleasure in the challenge of overcoming "limits," finishing the event, and reaping the rewards that are perceived to come along with that.

Research Methods

I conducted interviews with 19 Ironman triathletes. On average, these interviews lasted two hours. I recorded the conversations and then transcribed them. I also incorporated my own Ironman experiences through the inclusion of training journals and race reports I kept when participating in the sport. Mediated representations of the Ironman — NBC broadcasts of the World Championships (1991 to 2010) and a sample of two triathlon-related magazines (1983 to 2010) — helped to contextualize the interview and autobiographical materials. I coded and analyzed the materials in Atlas.ti (qualitative research software).

Research Results

The results here are based on my own interpretations of the qualitative materials gathered. Only 19 people from a limited geographic context (Eastern Ontario) were interviewed. This group represents a very specific demographic – the professional middle class. This reflects the triathlon/endurance sport community but not the general Canadian population. That in mind, I present the following synopsis.

Sport sociology research has revealed the problematic ways that pain and injury are seen to be a "natural" part of sport and how coaches, sport administrators, and athletes themselves can contribute to this notion. The people with whom I spoke, however, contended that getting injured would preclude the possibility of finishing an event and so they sought to carefully negotiate the different kinds of pain in order to avoid injury. At the same time, there seems to be disconnection between critical awareness and lived experience because injuries are still quite prevalent. I estimated that between the 19 participants and myself, we likely spent upwards of \$40,000 per year on sports medicine services, a number that is part of the often under-estimated costs of sports-related injuries in Canada annually (White, 2004). Some of my participants talked about the use of NSAIDs (e.g., Advil, ibuprofen) as a pain-management and/or pain-treatment strategy. This is concerning given some of the documented side effects of excessive use of NSAIDs, including alterations in kidney function, gastric bleeding, and the increased possibility of hyponatremia (Gorski, Cadore, & Santana Pinto, 2009). There were also cautionary notes about NSAIDs in the triathlon magazines analyzed, suggesting it is a concern for the community. This further emphasizes the paradoxical nature of holding up Ironman athletes as examples of good health.

Pleasure, in the materials gathered, was constructed in instrumental ways (i.e., notions of challenge, achievement, rewards, and recognition). Considering pleasure in such limited ways is prevalent in the fitness industry more generally (Smith-Maguire, 2008) so perhaps these results are not that surprising; they are, however, no less important. When focus is placed more on, for example, the achievement of finishing than how one is experiencing one's body while being physically active, there is a greater chance of becoming injured and having to deal with the related short and long-term health impacts that injury can have.

Policy Implications

There seems a need for more thoughtful discussion about sport/fitness-related pains and pleasures. In focusing more pointedly on bodily experiences in, versus outcomes of, sport participation we can initiate a conversation that does not seem to be occurring at the present time. With an increased focus on long-term athlete development (LTAD) in Canada (including ideas of being "active for life") there needs to be, for example, more thought put into how different stakeholders in sport can talk about pain and injury (and connections to health since sport participation is being promoted as part of "healthy" lifestyle). At the moment, most reference to pain/injury assume that injury is a normal part of athletic involvement and that to deal with it, athletes should have a sport

medicine strategy as part of their training plans. Official documents should include discussion of the possible costs of sport participation, rather than promoting sport as unquestionably healthy. Admittedly, incorporating these kinds of discussions will not be easy as evidenced by the many different (and sometimes competing) ways that pain was talked about in the context of my study. To ignore such discussions altogether, however, does a disservice to those who are participating in sport at any level and ignores the possibility that one can participate in sport without experiencing negative kinds of pain and injury. Finally, one of the stated objectives of LTAD is to promote "physical literacy"; it seems to me that this should include stage-appropriate discussions related to bodily experiences of pain (as above) and pleasure — with a view to move beyond pleasure being connected to achievement and rewards.

There are two places that such information could begin to be circulated: coaching certification programming (through the Coaching Association of Canada) and in Canadian sport organizations' long-term athlete development models. For example, could a discussion of sport-related pain become a part of all coach training materials developed by the CAC? Can we extend the currently limited ideas about sport-related pleasure?

Next Steps

The idea that "anyone can do an Ironman" emerged in my research. We must be cognizant of a shift in what is considered "normal" in terms of physical activity to more extreme ends of a continuum, as this will no doubt effect how people view their own bodies and the bodies of others around them. There remain bigger questions about the growth in Ironman and other "extreme" fitness practices as a form of leisure: what has been going on over the past 30 years that contributes to the continued growth of these kinds of events? It seems that people are beginning to expect more and more extreme things of their bodies, something that is readily promoted through mainstream and sport-specific media, with a focus on outcome as opposed to process. This, combined with a lack of any meaningful discussion about sport-related pain and pleasure, might result in a scenario where the costs of participation begin to outweigh the benefits, something that sport organizers and policy-makers should wish to avoid.

Key Stakeholders and Benefits

At this point in time, I believe that there are three stakeholder groups who would benefit from this and future information: (1) Sport Canada's long-term athlete development group; (2) Coaching Association of Canada; and, (3) Triathlon Canada (and potentially the provincial federations as well).

References

Gorski, T., Lusa Cadore, E., &, Santana Pinto, S. (2009). Use of NSAIDs in triathletes: Prevalence, level of awareness, and reasons for use. *British Journal of Sports Medicine*. Retrieved from, www.bjsm.bmj.com.

Smith-Maguire, J. (2008). *Fit for consumption: Sociology and the business of fitness*. New York: Routledge.

White, P. (2004). The costs of injury from sport, exercise and physical activity: A review of the evidence. In, K. Young (Ed.), *Sporting bodies, damaged Selves: Sociological studies of sports-related injury* (pp. 309—332). Oxford: Elsevier.

BRUNER, MARK

Queen's University

J. CÔTÉ

POST-DOCTORAL STIPEND 2009

Understanding the Influence of Peer Groups in Sport on Adolescent Social Development

Project Summary

The primary objective of this research was to examine how the identities that youth form through membership on sport teams – their social identities – influence their social development. Specifically, the research examined the relationships between social identity and prosocial (e.g., helping an injured opponent) and antisocial behaviors (e.g., deliberately hurting an opponent) in youth sport. A secondary objective was to investigate whether perceptions of task cohesion (perceptions of the team working together toward goals) and social cohesion (perceptions of social bonding among the team members) influenced the relationships between social identity and prosocial and antisocial behavior toward teammates and opponents. Participants included 449 high school athletes from 37 sport teams (e.g., basketball, soccer, football) who completed a survey at the beginning, middle and end of the season. The findings revealed that stronger perceptions of social identity at the beginning of the season were associated with greater frequency in prosocial teammate behavior near the end of the season. Certain aspects of social identity were found to be associated positively and negatively with antisocial behavior. Stronger ingroup ties (perceptions of similarity and connectedness to the team) were associated with more frequent antisocial behavior toward teammates and opponents while stronger ingroup affect (feelings toward the team) were associated with less frequent antisocial behavior toward teammates and opponents. In regards to the research's second objective, perceptions of team cohesion were found to influence the relationships between social identity and prosocial and antisocial behaviours of the athletes. Among the relationships, task and social cohesion were found to significantly impact the social identity-antisocial behavior relationships. Collectively, the results provide evidence of the important role of social identity in predicting the moral behaviours of youth in sport, and the potential role of cohesion in explaining some of these relationships. The findings also offer support for previous suggestions that next to family, sport teams are one of the most influential groups to which an individual can belong.

Research Methods

After obtaining institutional and school board ethics approval, coaches from three school boards were invited to participate in the study. Contact with coaches involved

presentations at school board athletic meetings and invitations to speak with high school coaches at their respective schools. Participants were recruited from the high school teams of interested coaches. Participants included 449 male and female youth (Mean age =16 years) from 37 high school sport teams (n= 14 basketball, n= 10 volleyball, n= 4 soccer, n=3 ice hockey, n= 2 American football, n=2 rugby, n=1 lacrosse, n=1 cross country) who completed questionnaires at the beginning, middle and end of the regular season. The questionnaire assessed the three dimensions of social identity (ingroup ties, cognitive centrality, ingroup affect), task and social cohesion and prosocial and antisocial behavior toward teammates and opponents. The data was analyzed using structural equation modeling.

Research Results

The study findings revealed that stronger perceptions of social identity at the beginning of the season were associated with greater frequency in prosocial teammate behavior (e.g., giving constructive feedback to a teammate) near the end of the season. Certain aspects of social identity were found to be associated positively and negatively with antisocial behavior. Stronger ingroup ties (perceptions of similarity and connectedness to the team) were associated with more frequent antisocial behavior toward teammates (e.g., criticizing a teammate) and opponents (e.g., trying to injure an opponent) while stronger ingroup affect (feelings toward the team) were associated with less frequent antisocial behavior toward teammates and opponents. In regards to the research's second objective, perceptions of team cohesion were found to influence the relationships between social identity and prosocial and antisocial behaviours of the athletes. Among the relationships, task and social cohesion were found to significantly impact the social identity-antisocial behavior relationships. Collectively, the study results provide evidence of the important role of social identity in predicting the moral behaviours of youth in sport, and the potential role of cohesion in explaining some of these relationships. The study findings also offer support for previous suggestions that next to family, sport teams are one of the most influential groups to which an individual can belong.

Despite several strengths of the study including its prospective design (i.e., over the season), this study is not without limitations. First, the questionnaire items assessing one of the dimensions of social identity, cognitive centrality (the importance of the group to the individual) were excluded because of a lack of validity in this sample. A second limitation of the study was the observational nature of the study design. In other words, the group dynamic variables examined, including social identity and cohesion, were not altered by the researchers to evaluate how changes in the group variables may impact prosocial and antisocial behavior by the athletes toward teammates and opponents. Nevertheless, this naturalistic approach to adolescent development through sport provided novel findings that have practical implications in terms of program design.

Policy Implications

This research on social identity and social development in youth sport is directly relevant to the Sport Participation Research Initiative (SPRI) and the federal government's Canadian Sport Policy 2012 document. Specifically, the research supports several goals and objectives of the CSP and SPRI. The primary objective of the research was to examine the influence of social identity on adolescent social development in sport. This objective supports Sport Canada's broad goal of sport for development (sport as a tool for social development and the promotion of positive values). The objective also supports the first broad objective of the SPRI to build empirical evidence to inform programs to enhance sport participation among Canadians. The findings from the research will help inform future strategies used by youth sport coaches to foster personal and social development and promote future sport participation. In addition, the findings will inform policy by providing evidence to highlight the benefits of sport on personal and social development and sport individual participation. This outcome supports the SPRI's second broad objective and the SPRI's fifth target area [identification and assessment of the benefits and outcomes of participation in sport].

Next Steps

Several future directions emanate from the study findings. One of the interesting findings was the complexity of the social identity-antisocial behavior relationship. Ingroup ties (perceptions of similarity and connectedness with team members) was associated with more frequent antisocial behavior toward teammates and opponents while ingroup affect (feelings associated with the team) had a negative relationship with antisocial behaviours toward teammates and opponents. Further qualitative research is needed to better understand the social identity — antisocial behavior relationships in sport. Additional research is also needed to further refine the social identity measure for use in the sport context. While previous empirical support exists for the social identity measure, this was the first attempt to adapt the multidimensional social identity scale for a youth sport context. Finally, future research should look to progress the current findings through application of experimental designs that test the identified relationships. For example, experimental work could examine the effects of group-based interventions (e.g., team-building) specifically designed to foster group processes within a team (e.g., social identity, cohesion) that may promote prosocial behaviors and deter antisocial behaviors in sport.

Key Stakeholders and Benefits

- Provincial Ministry of Health and Long Term Care (formerly Ministry of Health Promotion and Sport)
- Sport Canada
- National and Provincial Sport Organizations
- Coaching Association of Canada

CALLARY, BETTINA

University of Ottawa

P. WERTHNER, P. TRUDEL

DOCTORAL STIPEND 2009

Exploring the process of lifelong learning: The biographies of five Canadian women coaches.

Project Summary

The purpose of this dissertation was to explore the biographies of five Canadian women coaches using Jarvis's theory of human learning to understand how the multitude of experiences throughout their lives have contributed to their learning and coaching development.

Coaches learn from a number of different situations and their past experiences influence what they choose to pay attention to and learn (Werthner & Trudel, 2009). Understanding the process of learning to coach can be explored holistically over the course of an individual's lifespan. This thesis was guided by Jarvis' (2006, 2007, 2009) theory of human learning, which takes a psychosocial perspective to understanding the way that individuals perceive their social situations, change their biographies, and become who they are over the course of their lives.

These findings add to the emerging body of literature on female coaches and coach learning by further understanding how the coaches' biographies determined what kinds of learning opportunities they each found meaningful; the importance of social connections in learning to coach; and the importance of reflection in understanding the interconnections of learning from life experiences. The study may motivate women coaches in understanding how lifelong learning influences their career paths and it informs coach education programs about the muddled reality of coaches' learning and development.

Research Methods

A constructivist paradigm was used to explore individual perceptions of social experiences (Light, 2008) and to understand how coaches learn based on their experiences. Purposive sampling, as recommended by Polkinghorne (2005), was used to select five women coaches with long careers in coaching and representing a variety of sports. Four semi-structured and in-depth interviews were conducted with each coach. Each interview lasted approximately two hours. Jarvis' (2006) theoretical framework guided the questions in the interviews. Each interview was transcribed and sent to the

participants via email to be member checked. In keeping with Creswell's (2007) and Polkinghorne's (1995) outline of a narrative methodology, the interview data were chronologically organized into a narrative of the learning experiences that occurred throughout the lifespan of each participant. Each narrative was structured into approximately 20 pages single-spaced based on an in-depth examination of each transcript to ensure that all learning experiences were included in the narrative.

Research Results

The main findings of the dissertation study include:

- a) the women coaches learned from situations before they became coaches (in childhood and adolescence) including experiences with family, at school, and in sport that influenced their approaches to coaching;
- b) the women coaches were open to learning and sought out many meaningful opportunities to learn that helped them develop and become experienced as coaches;
- c) the women coaches developed values throughout life experiences influenced coaching actions;
- d) as the researcher, my own process of learning throughout the PhD degree was influenced by my lifetime of experiences to date;
- e) methodologically, the constructivist research process was a co-creation between the researcher and the participants.

Limitations:

A limitation of this research was the focus on the individual. I chose a predominantly psychological approach, while not forgetting the importance of the social context; therefore, a global and structural understanding of learning from a more sociological perspective was beyond the scope of this dissertation.

Due to the framework that I used in this dissertation, the questions that I asked the participants regarded their individual learning experiences, which I cannot say with certainty were caused by their gender or social positions within the power structure of institutions or culture.

While I acknowledge that it is possible to be a coach and not learn year after year, the interview questions drew out meaningful experiences for the women coaches that helped to explore their learning.

Policy Implications

This research can be used to enhance sport participation for women coaches in two ways: (a) to help women coaches reflect on learning experiences in coaching, and (b) to create recommendations for coaching education initiatives led by the roadmap of the Canada's Sport Policy 2.0 (CSP, 2012).

- a) This dissertation provides stories of real women coaches, in real settings, with real athletes, in real learning situations. It is hoped that the narratives and articles act as motivators to other women coaches who can find some similarities in the experiences and can reflect on and develop solutions to their own issues based on the understanding that they have a wealth of knowledge from their previous experiences throughout life and that they are not alone in what they are experiencing. Therefore, as suggested in the key principles of the CSP, we should include inspirational story-lines or narratives of successful women coaches to create resonance with others and build a long-term coach development concept within the policy.
- b) The practical implications of this research for coaching education initiatives, instigated by the CSP to provide direction to the sport community, while allowing stakeholders to contribute in their own ways include:
 - a. Providing women coaches with the opportunity to have a multitude of coaching experiences,
 - b. Providing women coaches with the opportunity to tell stories about those experiences (to other coaches, facilitators, peers, mentors). For instance, networking with other coaches helped the women coaches learn information and receive advice. Coaching conferences are important forums for women to gain access to a network of women coaches, advocate for themselves, and listen to others.
 - c. Providing women coaches with the opportunity to learn how to reflect on their experiences, values, actions, and decisions to develop future goals and directions (to not only reflect on coaching experiences, but also other relevant experiences that may influence their coaching approach). e.g., In courses, help facilitators learn to properly assist coaches in reflecting on their lives, on what they do, and on how they do it.
 - e.g., Provide coaches with the opportunity to explore personal coaching approaches while working with athletes to discover these authentic approaches.
 - e.g., Provide program policies on completing end-of-season progress reports and performance reviews to help coaches think about their seasons and plan for upcoming seasons.
 - d. Providing women coaches with the opportunity to work in collaborative ways with one another so that they develop strong and professional relationships with individuals from whom they can learn. In particular, a performance management strategy, in which Sport Organizations are flexible (i.e. work sharing) and provide financial support and job security to women coaches, such as through maternity leave and through salaried coaching positions would help increase the low number of women coaches and retain them in

the workforce. Such progress could be measured, monitored and easily managed to develop a more equitable gender-ratio in coaching.

Next Steps

The Canadian Sport Policy has as its goal "to maximize the benefits of sport and to mitigate its potential negative impacts" since sport can benefit persons and communities "under the right conditions". Therefore, future research can focus on how women coaches can engage in learning opportunities that are more inclusive and accessible, and help promote sustainable careers. Furthermore, research could explore how sport participation is experienced by the athletes and participants led by coaches engaged in lifelong learning. For instance, future research endeavors could focus on how coaches implement what they learned from their lifelong experiences to attempt to facilitate positive sport experiences for their athletes. More specifically, if values are developed throughout life and are inherent in coaching actions, how do these values translate to the coaches' athletes, especially youth, the aging population of sport participants, those of differing gender, cultures, and/or ethnic backgrounds? Future research could explore how relationships created between coach and athlete enhance or diminish a positive influence in sport participation and the development of life skills. In this way, the process of participation in sport can continue to be monitored and evaluated.

Key Stakeholders and Benefits

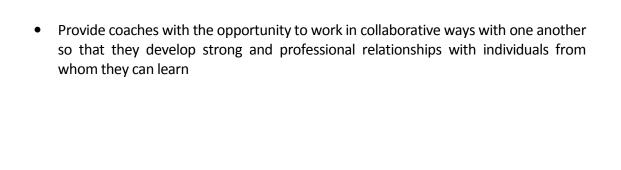
Sport Canada:

Sport Canada may benefit from the findings of this study as there are meaningful stories of women coaches who note the many lifelong experiences that led them to their coaching careers. It is important for Sport Canada, and the Canadian Sport Policy-makers, to be aware that such narratives act as motivators to other women coaches who can find some similarities in the experiences and can reflect on and develop solutions to their own issues based on the understanding that they are not alone in what they are experiencing.

Coaches Association of Canada:

Coaches Association of Canada may benefit from the findings of this study as there are concrete implications to coach education initiatives that derive from the research:

- Provide coaches with the opportunity to have a multitude of coaching experience
- Provide coaches with the opportunity to tell stories about those experiences (to other coaches, facilitators, peers, mentors)
- Provide coaches with the opportunity to have their stories told back to them as food for reflection
- Provide coaches with the opportunity to learn how to reflect on their experiences, values, actions, and decisions to develop future goals and directions (to not only reflect on coaching experiences, but also other relevant experiences that may influence their coaching approach)



COUSENS, LAURA

Brock University

SRG 2006

Examining Interdependence in Canada's Sport System: Community Basketball)

Project Summary

The purpose of this research was is to explore and assess the existence of partnerships or network collaborations within the delivery network of basketball providers in one geographic region of Canada: Niagara. Investigators used network analysis to investigate the degree of integration (incidents of network collaboration) and interdependence (partnership effectiveness) between providers of sport (e.g., basketball clubs, Boys and Girls Clubs, Parks and Recreation Departments) in one geographic region. The specific objectives of the research were: to identify the providers of the sport of basketball in one geographic region of Canada; to identify the location (central, periphery) of each actor in the network of providers, as well as the level of connectedness (density) of the network; to identify the conditions that have facilitated or hindered collaboration and integration in the networks; and to explore the environmental context (normative, regulative, cognitive) of the networks. The study revealed a fragmented network wherein the number of actual linkages among the organizations was low (one third of all possible linkages,) with organizations working independently rather than fully exploiting opportunities for collaboration. The referees association was situated at the centre of the network given its control over a key resource, referees, valued by each of the basketball clubs.

The dedicated basketball clubs were more tightly coupled to one another than to the nonprofit organizations (e.g. Boys & Girls club; YMCA) or to the educational institutions (e.g., post secondary).

Reasons for lack of integration among local providers of basketball included:

- need for control over decision-making in the club;
- challenge of securing buy-in from other clubs to partner;
- challenges associated with working with volunteer boards of directors;
- rivalry between local clubs for athletes, facilities, and financial resources;
- lack of volunteer time and expertise to establish and manage partnerships;
- lack of realization of the economies of scale (e.g., lower administrative overhead for marketing, registration, and facility booking) available through collaboration;
- fear of uncertainty and of making long-term commitments to other organizations;
 and
- need to hire paid staff to manage relationships with key partners/stakeholders.
- Mechanisms that facilitated collaboration uncovered:

- Friendships that facilitate the use of 'social capital' to acquire resources;
- Assigning board members to manage relationships with key partners/stakeholders;
- Hiring paid staff to manage relationships with sponsors, facility providers, and with the referees association;
- Establishing a framework for collaboration based upon shared goals and values; and
- Leveraging informal contacts in the basketball community to initiate partnerships.

Research Methods

Quantitative data was collected using a five-page survey adapted from Provan, Harvey, and Guernsey de Zpaien's (1995). Questions surrounding the reasons for linkages between basketball providers were drawn from the literature on community sport organizations, and included links to share information, resources, marketing, and fundraising. Respondents were asked to indicate the organizations to which they were linked from a list of basketball providers. Additional questions related to organizational goals and structure, barriers to collaboration, and key players in the community who facilitated or hindered collaboration. 11 out of 12 organizations completed the questionnaire. Data were analyzed using the UCINET 6 network analysis software (Borgatti, Everett & Freeman, 2002).

Qualitative data were collected via 11 in-depth guided interviews with basketball providers at the local, provincial, and national levels. Individuals contacted for interviews included two university basketball coaches, senior administrators or members of the board of directors of local clubs, the leaders of recreation basketball programs, as well as representatives from Canada Basketball and Ontario Basketball. Questions were posed to gain a deeper understanding of the inter-organizational relationships that existed – or did not exist - among the clubs or with other key resource providers. Each interview was recorded, transcribed verbatim, and member-checked by the interviewee for content accuracy. Each member of the research team read the data to identify codes, patterns and relationships.

Research Results

Power and dependence: Local clubs' efforts to maintain power over critical areas of their operations hindered opportunities for collaboration, not only with other local clubs, but with governance bodies in the broader environment encompassing the sport of basketball. The clubs were highly dependent upon others in their environment for virtually all of the critical resources needed to operate.

Industry rivalry: Dedicated basketball clubs clearly identify themselves as rivals in this local market, competing for athletes, volunteers, facilities, and financial resources from local governments or sponsors. Low barriers to entry (e.g., easy for start-up clubs to enter the market), and high levels of uncertainty in relation to facility access and funding from sponsors intensified industry rivalry among local basketball clubs.

Reliance on normative processes. In the case of dedicated basketball providers, it appears that some level of cooperation has arisen through normative processes that are embedded

in the social relationships in this community. It appears that social norms were used as the basis of behaviors by the majority of the providers. Accordingly, the threat of punishment or sanctions (e.g., limit access to referees or facilities) worked in support of cooperative behavior.

Managing interdependence. Linkages with other organizations involve commitments, obligations, and a greater degree of inter-organizational interdependence that necessitates internal coordination. However, the managerial structures needed to effectively integrate inter-organizational activities were largely absent in dedicated basketball clubs. Some clubs were moving towards adopting a more structured approach to managing relationships by creating dedicated positions to facilitate interactions. Informal (e.g., friendships) means were also used to manage inter-organizational interdependence.

The results of this research are not generalizable to a broader array of individual and/or seasonal sports; however they do highlight resource constraints that are typical of many community sport clubs.

Policy Implications

Establish, at the provincial level, a regional framework for local, same-sport clubs; one that limits club rivalry among existing clubs and creates barriers to entry for new clubs that lack specified governance frameworks and organizational structures.

Mandate strategic planning by local sport clubs. Emphasize strategies to reduce uncertainty through long-term contracts or relationships with facility providers (municipal governments, schools) and/or corporate sponsors. The capacity of local sport clubs to increase participation is severely limited by uncertain access to facilities.

Mandate a prescribed governance structure for local sport clubs.

Provide incentives for collaborative structures, such as sport councils, that will alter the power and dependence relationships between sport clubs and their key suppliers.

Create, at the municipal level, liaison mechanisms (staff, processes) that enable local sport clubs that use municipal facilities to manage their power/dependence, and to enhance communication.

Provide a framework for longer-term access (3 to 5 years) to facilities to enable sport clubs to enhance participation through planned growth strategies.

Develop a strategic plan for regional sport facilities that considers the facilities owned by local governments, private companies, and nonprofit organizations. Consider non-traditional venues such as churches, outside spaces, and refurbished industrial buildings.

Next Steps

What are the normative processes used by local sport clubs to manage their interdependence with resource providers and competitors?

How do coalitions of sport organizations, such as Sport Councils, serve as mechanisms to manage the relationships among community sport clubs and their resource providers?

How do networks encompassing nonprofit providers of sport compare to networks encompassing private and public-sector providers of sport programs?

Which organizational structures facilitate or hinder collaboration and integration among community sport clubs and their resource providers?

Key Stakeholders and Benefits

- Local governments (in particular Parks and Recreation Departments)
- Provincial Sport Organizations
- National Sport Organizations
- Sport Councils (Commissions)

DARNELL, SIMON

Durham University

Post-Doc 2008

The Politics of International Sport: An investigation of the Sport for Development and Peace movement, completed 2010

Project Summary

Briefly describe research objectives and conclusions here. Language used should be accessible to a diverse, non-academic audience. Theoretical discussion should be avoided. Sport and physical activity is now mobilized in programs and initiatives designed to meet international development goals, leading to a sector known as 'Sport for Development and Peace' (SDP). A number of different organizations make up this sector, including non-governmental organizations, charities, corporations, professional sports clubs, and governments. As a result, sport is formally recognized, by organizations including the United Nations, to contribute to advancing social development, particularly in Low and Middle Income Countries (LMICs).

Drawing on interviews with program officials and policy makers from across the SDP sector, this study sought to:

- a) Investigate the particular mandates of, and approaches to, international development taken up within SDP
- b) Compare and contrast these mandates against the history of international development and the different orientations to development that have taken up post World War II.

Two main conclusions can be drawn: One, while the SDP sector clearly represents a new incarnation of the mobilization of sport for social change, the political dimensions and implications of conceptualizing and implementing development initiatives through SDP are not new. International development is inherently political and those working in the SDP field generally recognize it as such. In fact, the political challenges of SDP map closely onto the politics of development identified within critical development scholarship over the past several decades. In particular, balancing modernization and stewardship versus self-determination remains a challenge in SDP. As a result, and two, the political challenges of development preclude the mere application of sport as a solution to or panacea of international development struggles. Sport is not an answer to development, though it may be part of the process of re-imagining and in some cases resisting traditional forms of international development.

Research Methods

Briefly describe research methods here. Epistemological and ontological discussion should be avoided.

Semi-structured interviews (n=9) were conducted with program officials and managers from SDP organizations. These included representatives from two organizations concerned with SDP advocacy and facilitation, one celebrity athlete foundation, one charitable arm of a professional sports club focused on international development and SDP, one youth sport and coaching development organization, and four SDP NGOs working in the Global South and focused on youth education and health.

Interview questions focused on policy makers' understandings of the position and role of sport-for-development and its political dimensions and challenges. While the insights collected through the interviews do not fully capture the ongoing changes and increasing diversity of SDP, they do offer some critical insights and reflections as to the political orientation(s) of SDP.

All interviews took place between January and July 2010.

Research Results

Explain key findings here. Conclusions should be as direct as possible, and limitations of results/conclusions should be discussed.

Three themes emerged from the interviews.

First, it is reasonable to argue that traditional notions of development as a process of modernization cling to, and influence, current understandings and conceptualizations of sport-for-development within SDP, particularly because it positions SDP as a way to facilitate improvement amongst marginalized persons and populations. Despite the sustained critical perspectives that SDP stakeholders bring to bear on their work and on the sector in general, the tendency to reduce development to a process of improvement, and of securing modernity for those currently denied its benefits, remains an attractive political platform from which to mobilize sport-for-development.

Second, it therefore remains a challenge within SDP to reconcile critical and theoretical understandings of development and ways to do development differently, against the practical challenges of how to implement new approaches to development through sport. Specifically, attempts to do development differently have led SDP practitioners and champions, particularly from NGOs, to focus purposively on local ownership of development programs as a means of challenging traditional development hierarchies. This, though, produces a set of new challenges in SDP over governance, funding and monitoring and evaluation.

Third, there is evidence that some SDP practitioners are indeed working directly to protect the development novelty that sport affords. That is, for some SDP policy makers, sport is a response to the failure of dominant development orthodoxy, even though organizing it as such is very difficult to do within the political economy of development and within the pressures to effect and measure if not prove sustainable change.

Policy Implications

Describe relevance of research to enhancing sport participation in Canada here. If possible, refer to specific relevant policies and/or programs as well as organizations and/or levels of government (municipal, provincial-territorial and/or federal).

The first and most significant policy implication is that the political dimensions of mobilizing sport to meet development goals cannot be ignored or dismissed even in the cases where sport is a genuinely popular activity with cross cultural appeal. International development is, and will remain, fraught political territory and policy makers would do well to embrace the political dimensions of their decisions in the SDP sector and in regard to sport-for-development more generally.

Second, there is strong evidence from the field that a wide range of stakeholders in the SDP sector are interested in, and committed to, critical self-reflexion as well as innovative partnerships within the sector. That is, traditional understandings of development as the deliverance of aid to a passive third world are understood as anachronistic within the SDP sector. Policy makers have a significant opportunity then, to re-imagine their policy models and organizations in mobilizing sport to meet development goals.

Next Steps

Outline unanswered and new questions raised by research as well as possible related issues (social, cultural, political, and economic) that may surface.

The main next step for my research is to examine and investigate whether there are other or alternative political orientations to development (more radical, more active, more resistant) than the traditional approach which often seems to predominate within SDP. This will allow for a comparative analysis between 'sport-for-development' (as currently practiced within SDP), versus sport-for-political-activism or resistance.

Key Stakeholders and Benefits

Provide a list of sport organizations, governments (units, branches or sectors) and/or groups that may benefit from the findings and describe those benefits here. Sport Canada will disseminate the report to key stakeholders directly and include the researcher in the communication.

Any organizations or groups mobilizing and/or organizing sport and physical education for purposes of development (social, community, economic, relational, etc) may benefit from the insights of this study. This may be of particular interest to those organizations that are doing this kind of work in the Global South.

- Sport for development NGOs (e.g. Right to Play, SCORE)
- Organizing bodies (e.g. United Nations Office on Sport for Development and Peace, Streetfootballworld)
- Celebrity athlete charitable foundations (Steve Nash Foundation, Roger Federer Foundation)
- Government Ministries (Sport Canada, Canadian Heritage)
- Corporate charities (Nike, adidas)

DEMERS, GUYLAINE

Laval University

SRG 2006

Description of the first years of experiences of novice female coaches (2010)

Project Summary

The objective of this study is to better understand the experiences of novice female coaches during their first two years of coaching. Conclusions of previous studies have shown an under-representation as well as a decreasing number of female coaches in the last 30 years. Not only are there less female coaches, those who chose this profession stay in it for approximately four years, in comparison to their male counterparts who remain in coaching for 11 years. Building on these conclusions, we have set two specific objectives: 1) describe the profile of women entering the coaching profession and 2) identify the different successes and difficulties they experience in their first two years of coaching.

Although this research is an exploratory one, identifying successes and especially problems has provided excellent leads in terms of the training of female beginner coaches. It appears, in fact, that their training should include a component on handling discipline. This is not surprising in and of itself, because young coaches often work with younger groups of athletes. The need for teaching strategies and access to a varied exercise bank appears critical to training women beginner coaches.

This study confirms that mentorship support should be available to beginners as it is for experienced coaches. The differences appear to relate to the objectives of the mentoring. Experienced coaches need more support to overcome obstacles having to do with the fact that they are women, while beginners seem to need more technical support, such as educational strategies or examples of exercises to apply.

In closing, we can state that the coaches appreciated opportunities to record their successes and problems. As one said, "It feels funny describing negative events; it gets them out of your system." They are increasingly sensitive to their experiences, and their descriptions are becoming more refined over time. This approach seems to hold potential for working with female beginner coaches

Research Methods

We have chosen a multiple case study in order to better understand the experiences of novice female coaches.

1) Recruiting the female coaches

We recruited the novice female coaches through the Quebec school sport system. We called the athletic director of every high school to have the contact informations of any new female coaches in that particular school. We also contacted few gym clubs where we knew they had new females in a coaching positions. We were able to recruit 12 novice female coaches involved in gymnastics (6), basketball (1), soccer (2), taekwondo (1), curling (1), and cheerleading (1). Nine were coaching in the community stream and three in the competition stream.

2) Data collection on problems and successes

We used the critical incident technique in order to collect data on the problems and successes those novice coaches were experiencing. Each of them reported a minimum of two incidents per week (one linked to a problem, one linked to a success) for a period of time varying from 16 to 20 weeks. We collected between 32 and 40 incidents for each coach for a total of 462 incidents.

Research Results

Although this research is an exploratory one, identifying successes and especially problems has provided excellent leads in terms of the training of female beginner coaches. It appears, in fact, that their training should include a component on handling discipline. This is not surprising in and of itself, because young coaches often work with younger groups of athletes. The need for teaching strategies and access to a varied exercise bank appears critical to training women beginner coaches.

This study confirms that mentorship support should be available to beginners as it is for experienced coaches. The differences appear to relate to the objectives of the mentoring. Experienced coaches need more support to overcome obstacles having to do with the fact that they are women, while beginners seem to need more technical support, such as educational strategies or examples of exercises to apply.

In closing, we can state that the coaches appreciated, and continue to appreciate, opportunities to record their successes and problems. As one said, "It feels funny describing negative events; it gets them out of your system." They are increasingly sensitive to their experiences, and their descriptions became more refined over time. This approach seems to hold potential for working with female beginner coaches.

Policy Implications

This research is relevant to the new Policy on sport for women and girls. Specifically, it is linked to the following action plan activities (based on the Policy Intervention areas outlined in the policy):

 Program Improvement
 Support and encourage organizations funded through Sport Canada via on-going liaison processes to actively engage women and girls as governance leaders, coaches, technical leaders, officials and athletes participants (as appropriate), including through the provision of facilitation expertise and use of readiness and gap analysis tools.

Strategic Leadership

Advocate with Provincial/Territorial Governments to support and/or develop sport programs and initiatives that actively engage women and girls in sport as athlete participants, coaches, technical leaders and officials, and as governance leaders (as appropriate).

Next Steps

Research questions

- What would be the impact of women only training session on recruitment of women coaches?
- What is the impact of mentorship on women coaches' retention?
- What do the different sport organizations do to support their new female coaches?
- Why do women stay in coaching for a shorter period of time compare to their male counterparts?
- Qualitative study to describe women's experiences in a action research project where we help beginner coaches to learn their new profession.
- Practical applications
- Design women-only training workshops including the new findings (e.g. how to deal with discipline issues, how to deal with parents).
- Develop a mentorship program linked with the workshops; make that process automatic.
- Develop a network to let the local sport organizations know about who are the trained women available to coach in their sport.
- Work with the NSO so they would develop drills and exercices «handbook» for their sport (develop a template to help them).
- Write a chapter to add to the material that is used to train NCCP Learning Facilitators about women learners in a coaching workshop.

Key Stakeholders and Benefits

- Coaching Association of Canada (NCCP and Women in coaching program)
- National and Provincial Sport Organizations
- Canadian Interuniversity Sport
- Canadian Collegiate Athletic Association
- Sport Canada (Women and sport)
- Canada Games council
- Provincial and territrorial governing bodies (ministry or secretary of sport)

DETELLIER, ÉLISE

University of Montreal

SRG 2006

They Always Remain Girls: The re/production of gender relations in women's sports in Quebec, 1919-1961 (2011)

Project Summary

This doctoral thesis examines how multiple factors influenced women's participation in sports in Quebec between 1919 and 1961. It shows that gender, class, age, religious and ethno-linguistic affiliation, as well as whether a facility was co-ed or not, must be taken into consideration for a better understanding of women's participation in sports, an area that was, and still is, more readily associated with men.

The thesis is based on the study of the discourse of doctors, physical education teachers—especially Cécile Grenier—Catholic clergy members, women athletes—particularly Myrtle Cook—and, to a lesser extent, of civil servants, to identify the arguments these social actors put forward to restrict or encourage women's participation in sports. This study is linked to that of women's sports played in two sports centres in Montreal, namely the Palestre nationale, a co-ed centre frequented by French-Canadians, and the Young Women's Christian Association (YWCA), a centre for women where members are predominantly English-speaking Protestants.

Research Methods

Numerous documents were consulted during this research, specifically French- and English-language medical journals, Catholic Church tracts, a number of Myrtle Cook's newspaper sports columns, and the archival records of Cecile Grenier, Conrad Poirier (photographer), and the Palestre nationale and YWCA in Montreal. In these archives, meeting minutes, annual reports, correspondence, bulletins, conference papers, articles and photographs were reviewed. By relying on a greater number of sources, the thesis highlights the complexity of the history of women's sports in Quebec.

Research Results

This thesis shows that between 1919 and 1961, many voices contributed to the discourse on women's sports in Quebec, and that practices were varied. In the province, as elsewhere in Canada, women's participation in sports therefore gave rise to social debates. The diverse prescriptive views on women's sports expressed by social actors as well as the various women's sports practices are understood in light of the definitions given according to gender, class, age, religious and ethno-linguistic affiliation, and whether a sports facility was

co-ed or not, while considering the socio-historical context in which the discourses took place and the sports were practiced.

This thesis sheds some light on the complexity of studying the history of women's sports in Quebec. The analysis is foccused on the discourse of a number of social actors and on the women's sports offered in two facilities. The study of other discourses and practices would help provide a better understanding of the elements of discourse and the practices that either encourage or prevent women from participating in sports.

Policy Implications

This thesis helps provide a better understanding of the various social, economic and political interests pursued by doctors, physical education teachers, Catholic Church clergy, women athletes and sports associations in deciding on or organizing women's sports at a time (1919–1961) when the federal government, the Quebec provincial government, and the municipalities rarely intervened in this area.

Next Steps

This thesis raises many questions to be investigated about the history of women's sports in Quebec, which could help understand how gender, class and ethnicity influenced the organization of sports in the province and elsewhere in Canada, for instance by initiating the comparative study of physical education programs in English- and French-language schools and by analyzing the practices of the Young Women's Hebrew Association (YWHA) in Montreal. Although this city is a very important case study for women's sports in Quebec, as shown in this thesis, for example, researchers should also place a greater focus on the province's other cities and towns to better grasp how the gendered dimension of sports organizations is expressed and structured in a particular local context. It would also be useful to see how gender influenced the implementation of the first provincial and federal state activities in sports, an issue that requires further research.

Key Stakeholders and Benefits

Canadian Association for the Advancement of Women and Sport and Physical Activity
This thesis provides an in-depth analysis of the gender dimension of the history of sports in
Quebec, therefore highlighting the complexity of the study of women's participation in the
field, both in the province and elsewhere in Canada. The study of class, age and ethnolinguistic and religious affiliation, as well as the impact of whether the sports facility was coed or not on women's participation in sports, also reflects the complexity of the
phenomenon. This thesis also makes it possible to identify, in part, the strategies used by
women to overcome some of the ideas and practices preventing them from participating in
sports, a field primarily associated with men.

Panthéon des sports du Québec [Quebec's Sports Hall of Fame]

This thesis enhances our knowledge of women athletes and sports organizers in the province.

Sports Quebec

This thesis provides a better understanding of the history of women's participation in sports in Quebec before the first universal state activities in the field, specifically the interests pursued by various sport organizations in the organization of women's sports, such as the Association athlétique d'amateurs Le National [National Amateur Athletic Association], the Commission de la Palestre de l'Association catholique de la jeunesse canadienne-française and Association athlétique nationale de la jeunesse.

DIONNE, MICHELLE

Ryerson University

SRG 2006

Sociocultural barriers to women's participation in sport: The role of self-objectification and stereotype threat

Project Summary

Women and girls in sport have endured years of cynicism regarding their physical abilities, much of which is perpetuated via media portrayals that emphasize their appearance, femininity, and (hetero) sexuality rather than athletic competence. Although female athletes have made gains in international recognition, funding and opportunity, the negative representations and resultant stereotypes about women's suitability for sport remain. Although there is speculation that such attitudes could pose truly serious barriers to women's participation and performance in sport, remarkably little research has provided tangible evidence of this effect as yet. However, a parallel body of evidence shows performance decrements on cognitive tasks when female participants are primed with stereotypes about women (stereotype threat), and other studies have shown similar effects when attention is focused on a participant's appearance (self-objectification). There is reason to believe that the domain of physical performance could be similarly affected via these mechanisms.

The connection to participation in sport is as follows. If stereotypes about women and sport are internalized, performance may be compromised. After repeated attempts where one's success is short of optimal, motivation wanes for further participation. Choices are then made to engage in other activities where performance does not have the same meaning for one's sense of self-worth. If women do not feel competent or confident in participation in sport and exercise, then they will be less likely to do so. This is the question we wish to examine.

Our specific objective was to consider whether priming stereotypes and self-objectification can lead to performance decrements on physical performance tasks, including sports activities. We further hypothesized that these effects might be at least partially mediated through changes in self-perception, effort or motivation. Our preliminary findings provide some of the first evidence that sport performance can be compromised by priming stereotypes about women. Further, these stereotypes lead women to have a diminished view of their own physical competence, and are less likely to see themselves as athletic. Similar results are seen when attention is focused on the appearance of women's bodies rather than on their physical capabilities. We believe that stereotypes can constrain women from participating in sport because of the negative attitudes they engender.

Research Methods

We used true experimental designs in the laboratory as is common in psychological research to test our hypotheses.

In one study, we asked female participants play a golf game using a Nintendo Wii with either a male or a female avatar (game character). Half of the participants were told that there are no gender differences in performance on that task, and the remaining participants were told that men typically outperform women on the task. In addition to the performance task, participants completed self-report measures of athletic identification and physical self-perceptions.

In another study we primed a state of self-objectification (a type of self- attention on appearance) and had female participants perform an athletic task. Specifically, we randomly assigned participants to wear tight and revealing, or loose and concealing athletic wear. Then, to exacerbate the effects of self-objectification, participants in one group were asked to attend to and estimate the size of their own body by looking in a mirror and indicating widths of their shoulders, waist and hips on a nearby screen. Participants in a control group were similarly asked to estimate the size of a control object at three designated places. Finally, all participants were asked to complete two performance tasks: an actual test of golf putting performance (mini-putt) and virtual putting using the Nintendo Wii.

Research Results

The key findings are consistent with initial hypotheses. For the stereotype threat study, results indicated that women showed marginally better performance when they played with a male avatar as opposed to a female avatar, regardless of explicit information about gender performance. The results were even clearer for athletic self-perceptions. Women who had played with the male avatar were more likely to report seeing themselves as "athletic" and as being physically competent than those playing with a female avatar.

For the self-objectification study, results were less clear but there was a trend towards support for our hypotheses. That is, there was a tendency to see slightly worse performance from women when they were asked to wear tight-fitting and revealing clothing during the golf task. One only needs to consider the now infamous comments by Sepp Blatter (FIFA president) that women's soccer would attract more fans if they wore tighter clothing to understand where such attitudes originate and where they might lead for women's sport. While these results are promising, there are limitations. Both studies would benefit from additional data collection and as such it will continue so that we can increase statistical power in the analyses. There are also additional controls that we would like to implement, and also replicate a parallel design with male participants to further explore gender differences.

Policy Implications

It has been established over decades of research that the media, particularly sport media, contain the types of messages theorized to contribute to self-objectification and to the formation of stereotypes about the appropriateness of sport for women. What has yet to be clearly established is evidence of the harm that these attitudes can have to women's performance in and enjoyment of sport. If women do not see themselves as possessing the physical competence of a successful athlete, they are going to be less likely to take up sport activities and more likely to drop out once they have started. Existing policies to ensure equal access to sport for both genders, including equal access to funding, training and facilities must be continued and arguably enhanced. Researchers in this area in the US frequently refer to Title IX as a watershed moment of for women's sport in that country. Canadians must continue to ensure equal access with or without such a policy.

Next Steps

One clear future direction of this research for media psychologists would be in devising and testing media interventions so that women can resist the cultural messages regarding their ability to participate and perform successfully in sport.

Key Stakeholders and Benefits

The Canadian Association for the Advancement of Women in Sports http://www.caaws.ca/e/index.cfm may find these results of interest.

DORSCH, KIM D.

University of Regina

D. PASKEVICH, H. RIEMER, R. SCHINKE

SRG 2006

Phsychological skills and factors related to ice hockey officials' coping and performance(2011)

Project Summary

Research focusing on the development of psychological skills in sport, has been conducted primarily with athletes and coaches. However, we know little on how to assist officials to enhance their performance. Thus, the general objective of this research was to better understand ice hockey officials' experiences in their sport and factors that influence their performance. More specifically, this research aimed: (a) to explore motives for becoming an ice hockey official, (b) to identify sources and determine the extent and levels of stressful experiences, (c) to identify coping strategies used, and (d) to identify skills necessary for successful officiating performance.

Despite popular perception, officials report moderate levels of stress due to officiating; however numerous potential stressors were identified. Focusing on changing the situation was the most prevalent coping style used. Other psychological skills that increased with certification level included goal setting, concentration, confidence levels, and the ability to remain positive and calm. The complexity of officiating skills was identified.

Research Methods

A mixed methodology involving both quantitative and qualitative methods was used. The project received approval from the University of Regina's Research Ethics Board and was supported by Hockey Canada and provincial governing bodies.

Quantitative sample. The final sample included 265 officials (91.7% males; 8.3% females) from Level 1 (n = 63), Level 2 (n = 75), Level 3 (n = 86), Level 4 (n =29), Level 5 (n = 8), and Level 6 (n = 2). The mean age of officials was 28.2 years (SD = 13.9, Range = 10 to 59 years) with an average of 9.89 years (SD = 9.8 years, Range = 1 to 42 years) officiating experience. Two provincial associations provided lists of all registered officials. Officials in Levels 1 through 4 were randomly selected and contacted with invitations to participate. Attempts were made to contact all officials in Levels 5 and 6.

Qualitative sample. Twenty-five interviews with male referees certified in Levels 1 through 4 and 7 interviews with female referees certified in Levels 1 and 2 were conducted.

Participants were recruited through their provincial hockey association. All interviews were semi-structured, audiotaped, and transcribed verbatim. All analyses were conducted with the assistance of an officiating supervisor who has 17 years of supervising experience.

Research Results

Motives for Officiating. There are intrinsic (the desire to stay involved with the sport, to stay active, and to develop skills), extrinsic (financial), and socially-related (the influence of relatives, friends, and coaches) motives for becoming an ice hockey official that may differ between genders. Effective recruitment strategies would include utilizing coaches and/or parents to support and encourage officiating as a way to stay involved in the sport.

Sources and Intensity of Acute Stressors. Despite identifying numerous sources of stress within the sport, officials, on average, reported feeling only moderate levels of stress. Three main categories of stressors were apparent: (a) fear of mistakes, (b) verbal and physical abuse from players, coaches, and spectators, and (c) working with a partner official. Officials in the higher levels felt significantly more stress from fear of mistakes than those in the lower levels. Female officials also reported having to deal with inappropriate sexual and gender-related comments from players, coaches, and spectators.

Extent of Acute Stressors. The stressors experienced most often included making a wrong call, verbal abuse by coaches, being in the wrong location to make a call, and supporting a partner official after they make a wrong call. While threats of physical abuse were scarce in the lower levels (reported by 15.9% of Level 1 officials and 18.7% of Level 2), these incidents did rise to a somewhat alarming rate as the competitive level of hockey increased (27.9% of Level 3, 44.4% of Level 4, and 25% of Level 5 officials reported being threatened at least once per season or more).

Coping Styles and Strategies. Officials are more likely to try to change the situation than deal with their emotional reactions within the situation. Officials in the higher levels as compared to the lower levels reported (a) using more goal setting strategies, (b) feeling more confident in their officiating abilities, (c) feeling better able to concentrate during games and able to handle unexpected situations better, (d) performing better under pressure, and (e) staying more positive and calm during games.

Officiating intentions. The vast majority of the officials surveyed intended to return to officiating in the next season (88.6%). However when asked if they intended to become certified at the next level, only 45.4% of Level 1 and 2 officials and 14.5% of Levels 3 to 6 officials replied positively.

Categories of officiating skills and abilities. Skills necessary for successful officiating were categorized into five themes: (a) Judgment, (b) Psychological skills, (c) Physical characteristics, (d) Communication, (e) Knowledge, and (f) Application.

Limitations. The sample included very few level 5 and 6 officials and females. Attempts to target these populations are ongoing. There is also the possibility of a biased sample. For example, those who chose to become involved are also those who are highly committed to officiating and may not be representative of the entire population.

Policy Implications

One of the defining principles guiding the Canadian Sport Policy is that by 2012 the sport environment will be focused on development. Fundamental to achieving this goal is that all participants have the right to be provided with "a safe and secure environment" (p. 14). It is the responsibility of the on-ice official to make the game "fair" and "safe" (Hockey Canada, n.d.). Consequently, from recreational to professional levels, officials are needed to maintain the safety of the ice hockey environment. But one cannot forget the safety of the official themselves. The results of this research would suggest that officials experience a great deal of abuse, which is impacting their sport experience. Steps need to be taken to ensure officials are safe, particularly when these officials are children.

Next Steps

Numerous questions have arisen from this research. For example, reasons why officials are choosing not to go further with certification needs exploration. So too does the exploration of other performance factors and ways to assist officials gain valuable psychological skills. Finally, as one of the most cited solutions to the retention of officials is the inclusion of supervision and mentorship, ways to most effectively use this scarce resource needs to be explored.

Key Stakeholders and Benefits

The training of officials is an interesting dilemma as there is really nowhere for officials to practice their skills. Current training protocols focus mainly on rule knowledge and positioning. However, this research suggests that more intangible factors (e.g., psychological skills and judgment) are also crucial. Application of the knowledge discovered will be beneficial in the development of officiating training and development.

Key stakeholders include:

- Hockey Canada
- Provincial governing bodies
- National Hockey League
- Sport Officials Association of Canada

FRASER-THOMAS, JESSICA

York University

POST-DOCTORAL STIPEND 2006

Understanding Adolescents' Positive and Negative Developmental Experiences in Sport.

Project Summary

Currently, there is considerable public concern about youths' healthy physical and psychosocial development. As such, researchers in both developmental and sport psychology highlight a need to better understand how organized sporting activities may be contributing to youths' positive or negative development. The purpose of this study was to gain understanding of adolescents' positive and negative developmental experiences in sport. Athletes suggested their sport involvement facilitated many positive developmental experiences related to challenge, meaningful adult and peer relationships, a sense of community, and other life experiences. Athletes also highlighted negative developmental experiences related to poor coach relationships, negative peer influences, parent pressure, and the challenging psychological environment of competitive sport.

Research Methods

Participants included 22 competitive swimmers aged 14-18, purposefully sampled for maximum variation (i.e., mixed genders, clubs, coaches, competency levels, and engagement levels). Participants engaged in a semi-structured interview (approximately 1 hour) with questioning focused on participants' positive and negative developmental experiences in competitive swimming during adolescence. Data was analyzed using previously established guidelines (Tesch, 1990).

Research Results

Tables 1 and 2 present the findings that emerged from the data. Positive developmental experiences were grouped into five categories related to: challenge, meaningful adult relationships, meaningful peer relationships, a sense of community, and other life experiences. Negative developmental experiences were grouped into four categories related to: poor coach relationships, negative peer influences, parent pressures, and challenging psychological environments.

Generalizations to other sport environments should be done with caution due to substantial differences across sport programs; however, as the first study to gain such in depth understanding of adolescents' developmental experiences, findings serve as a springboard for future investigation and understanding of developmental experiences in other sport programs. It should also be noted that more females than males participated in this study. As such, future investigation should aim to gain a more comprehensive understanding of both

genders' developmental experiences in sport, and potential differences in male and females' experiences.

Policy Implications

Findings highlight the critical importance of appropriate training for coaches of adolescent athletes. First, many athletes outlined concerns regarding coaches' ability to understand adolescents' psychological, social, and emotional development, highlighting a need for improved curricular content and practical learning in this area. Second, findings emphasize a 'disconnect' between coaches' perceptions of their behaviours and athletes' perceptions of coaches' behaviours. As such, coach certification programs and pedagogical workshops should place additional weight on the importance and value of self-evaluation and peer-evaluation, and should outline effective methods for conducting such evaluations. Third, findings highlight coaches' important roles in facilitating adolescents' positive adaptation to the stressful environment afforded by competitive sport. Focusing more on communication skills, and strategically weighing the provision of a challenging environment with opportunities for success in that environment, are of utmost importance.

Next Steps

Findings suggest many new research questions, areas for future investigation, and subsequent implications. The following are a few examples:

Developmental Experiences: Do developmental experiences vary across different sport environments (e.g., different types of sports, competition levels, investment levels)? How can positive developmental experiences be facilitated in all sport environments?

Coaches: Do certain positive coach-related experiences 'balance out' or neutralize negative experiences? Can coaches facilitate adolescents' positive adaptations to sport-related challenge and stress?

Parents: How are different youth sport programs addressing parent education, and how effective are they in doing so? Can more innovative methodologies (e.g. journals, ethnography) be used to gain deeper understanding of parent-adolescent relationships in sport?

Key Stakeholders and Benefits

With growing concern for youths' healthy physical and psychosocial development, this research is timely and of wide reaching interest. Findings serve as a starting point for future modifications and interventions in youth sport programming aimed at enhancing healthy development and facilitating prolonged engagement. Sport Canada is encouraged to disseminate freely.

Table 1
Positive Developmental Experiences: Categories and Themes

Category	Themes	N
1. Athletes were	1. Sport structure demanded a strong work ethic.	18
challenged	2. Coaches demonstrated belief in athletes'	13
	capabilities.	
	3. Sport required commitment, discipline, and	13
	perseverance.	
	4. Coaches provided meaningful constructive	12
	feedback.	
	5. Coaches taught and guided the goal setting	8
	process.	
	6. Coaches pushed athletes and held high	7
	expectations.	
	7. Parents, siblings, and peers influenced athletes'	7
	work ethic	
2. Athletes had	1. Coaches made special connections with athletes	15
meaningful adult	2. Sport provided an opportunity to develop special	13
relationships.	relationships with parents	
	3. Coaches were good communicators.	10
	4. Coaches served as adult role models.	6
3. Athletes had	1. Sport provided an opportunity to develop close	16
meaningful peer	and unique friendships built on common interests.	
relationships.	2. Club structure provided opportunities to develop	15
	special relationships with different aged peers.	
	3. Sport provided opportunities for leadership and	12
	role modelling.	
4. Athletes experienced	1. Clubs were family focused.	10
a sense of community.	2. Clubs hosted events.	7
5. Athletes had other	1. Sport structure, coaches, and peers facilitated	9
positive life experiences.	good time management skills.	
	2. Sport travelling fostered independence.	9
	3. Sport experiences facilitated personal attributes.	9
	4. Sport experiences guided life values, interests, and	9
	careers.	
	5. Sport provided opportunities to overcome stress	5
	and develop resistance.	
	6. Sport served as a context to develop good	4
	communication skills.	

Note. $\it N$ represents number of participants that discussed a theme.

Table 2
Negative Developmental Experiences: Categories and Themes

Category	Theme	N
1. Athletes had poor	1. Coaches were poor communicators	9
relationships with	2. Coaches had favorites	9
coaches	3. Coaches were intimidating	7
	4. Coaches modeled a poor work ethic	6
	5. Coaches demonstrated inappropriate behaviors	6
2. Athletes were	1. Peers were jealous and negative towards each	4
negatively influenced	other.	
by peers.	2. Peers demonstrated a poor work ethic	3
3. Athletes were	1.Parents pressured athletes to excel	4
burdened with parent	2. Parents pressured athletes to stay in the sport	3
pressure.		
4. Athletes	1. Sport provided a context for excessive stress.	6
experienced a	2. Sport provided a context for negative self-	3
challenging	perceptions.	
psychological		
environment		

Note. *N* represents number of participants that discussed a theme.

FRISBY, WENDY

University of British Columbia

L. THIBAULT

SRG-RELEASE TIME STRIPEND 2006

Combating Social Exclusion in Sport and Recreation through Participatory Policy

Development

Project Summary

The purpose of this study was to examine how experiences with physical activity for recent immigrant Chinese women living in Vancouver can inform Canadian sport and recreation policy at the local, provincial, and national levels to increase their participation. The Chinese population is the largest 'visible minority' group' in Canada, yet little is known about the role of physical activities in local community centres in their settlement into a new country. While many important sport and physical activity initiatives are aimed at children and youth, much less emphasis is placed on adults or immigrants, which is surprising given immigrations rates, the aging of the Canadian population, and the related costs to the health care system. Our focus was on women because their sport and physical activity participation rates are lower than men and our previous research has shown that women want to be positive role models for their children, they desire the health benefits, and they have a major influence over sport participation decisions within the family (Frisby, Reid, & Ponic, 2007).

Research Methods

Multiple qualitative data collection strategies included:

- an analysis of documents related to multiculturalism, sport and physical activity participation,
- interviews with immigrant Chinese women in Mandarin, Cantonese or English (n=50),
- interviews with local, provincial, federal policy makers (n=36) and staff from an immigrant service agency (n=5).

In addition, we organized a two-day workshop that brought the immigrant women, policy makers, immigration workers, and researchers together to discuss the findings and identify action steps which continue to be tracked through ongoing email communications with study participants.

Research Results

Our analysis reveals that involvement in community sport and physical activity has an important role to play in helping immigrant Chinese women with settlement. While many of them expressed interest in continuing activities done in their homeland, they were also interested in learning more about "Canadian activities" to improve fitness, decrease stress and social isolation, be good role models for their children, and adjust to their new country. Yet, most receive no information on the opportunities available to them.

Even though 1 in 5 Canadians are born outside the country (Statistics Canada, 2008) and we were able to find sport and recreation equity policies for girls and women, persons with disabilities, people on low income, and aboriginals - no policies were found related to multiculturalism and sport or physical activity. This confirms the findings of an earlier study by Donnelly and Nakamura (2006). Local, provincial and federal policy makers saw multiculturalism as an important policy development area, but were often unsure how to proceed because of the complexities involved. Government jurisdictions that create divisons in how sport, physical activity, and recreation are defined, resourced, and operationalized are a contributing factor.

Another overall finding was that sport and physical activity are not seen as a priority by immigration workers because of the emphasis placed on housing and employment, even though some had portfolios in the areas of health, community services, and public education. Yet the immigration workers saw potential health benefits for their clients by developing partnerships with local community centres to promote sport and physical activity programs, and expressed interest in being involved in future discussions on the topic.

Several action ideas on how to promote inclusion were generated when the new Canadians, sport and recreation policy makers, immigration workers, and researchers came together at the workshop. These included: providing free passes in the first year (and in subsequent years for those who continue to live on low income); partnering with immigration services; providing free facility tours and information sessions; childcare; multi-lingual communications, and family instruction in "Canadian sports."

Policy Implications

The results of this study contribute directly to the Canadian Sport Policy goal, that has been adopted by the provinces, of increasing access and equity in sport for under-presented groups including visible minorities. It also informs Leisure Access Policies in recreation departments/community centres in Canadian municipalities.

We are preparing a Multiculturalism, Sport, and Physical Activity Workbook to share the 'learnings' obtained through this study with others and we plan to make it available through the Leisure Information Network (LIN). It is not our intent to provide a simple 'recipe' for policy development that can be implemented in other communities, because needs and interests differ both within and between different cultural groups. Rather our intent is to emphasize a process that includes partnerships and citizen engagement that can be adapted

by different individuals, groups, and organizations to meet their specific aims and circumstances.

Next Steps

Replications of this study are needed to determine if the findings can be transferred to other Chinese immigrants and immigrants from other cultural groups. More research with cultural groups that considers intersections with gender, age, social class, disability, sexuality, etc. will enhance our understanding of the importance of sport and physical activity in their lives, the barriers they face, and the distinction, if any, between sport and physical activity for these groups.

Research is also needed on the sport and recreation policy and program development at the local, provincial and federal levels that can build capacity to support the inclusion of new Canadians and increase their participation rates (including those of adults), so they can reap the same benefits as other citizens. In addition, future research should examine multiculturalism, sport, and physical activity policy and success stories in other countries that could serve as a guide to new initiatives in Canada.

Key Stakeholders and Benefits

- Sport Canada and their provincial affiliates
- Canadian Parks and Recreation Association and their provincial affiliates
- Local sport organizations, clubs, leagues, teams
- Local community centres in municipal recreation
- Non-profit sport organizations (e.g. YWCA, YMCA)
- Immigration and social service organizations
- Local health authorities

GAGNÉ, CAMILLE

Laval University

SRG 2007

Influence of Structural and Psychosocial Factors on the Level of Physical Acticity of Preschoolers Attending Daycare (2011)

Project Summary Objectives

- Check the level of physical activity of children aged three to five attending daycare.
- Identify the factors that affect the physical activity of children who attend daycare.
- Identify the factors that motivate educators to get children moving for at least two hours per day (as recommended by the National Association for Sports and Physical Education).
- Identify the factors on which should be based the interventions aimed at increasing the physical activity of children attending daycare.

Theoretical framework: Theory of planned behaviour (Ajzen 1991) and the Cohen et al. structural model (2000).

Research Methods

Population: Children aged three to five attending a child care facility, run by the government of Quebec, in the National Capital and Chaudière-Appalaches regions (Quebec, Canada), and their daycare workers.

Sample: Randomly selected child care centres from a list of daycare centres available on the Quebec Ministère de la Famille et des Aînés Web site. The final sample to identify the determinants of behaviour comprised 46 volunteer educators from 20 child care centres and 242 children whose parents agreed to their participation in the study. The sample to identify the determinants of commitment consisted of 174 daycare workers.

Measurement instruments: The psychosocial variables were measured through a self-reporting questionnaire, developed according to the guidelines of the theory of planned behaviour (Ajzen 1991). The structural variables and democratic-style interventions of the educator were measured with certain indicators on the Educative Quality Observation Scale (Bourgon & Lavallée, 2004). The children's physical activity was measured with an ActiGraph GT1M accelerometer, which was worn for four days, from the time they arrived at the daycare centre to the time they left. The accelerometer captured movements every 15 seconds.

Data analysis: Multilevel analyses, simple multiple regression and logistic regression were conducted to help answer the research questions.

Research Results

Children aged three to five participating in this study attended a day care service for an average of eight hours per day. While they were at the daycare centre, they engaged in low-, moderate- or high-intensity physical activity for an average of 53 minutes (SD=23.55) per day. On average, 13 (SD=9.19) of these 53 minutes involved moderate- to high-intensity physical activity. The following factors account for 19% of the variation in physical activity of children at the daycare centre: the daycare worker's commitment to getting the children moving, their perception that the other daycare workers do or do not get the children moving for two hours per day, the worker's democratic-style intervention, the daycare worker's age, the quality of the material, and the age and sex of the child. The results also indicate that 33% of the daycare workers are not highly motivated to get the children moving for at least two hours per day. The following factors account for 85% of the variation in the daycare workers' commitment (motivation) to involving children in physical activity for at least two hours per day: their perception of control in terms of being able to get the children moving, the ethical standard and the worker's perception that individuals who are important to her think that she should get the children moving.

These results suggest that it would be useful to intervene in daycare centres to raise the level of physical activity of children aged three to five. Intervention should specifically increase the motivation of daycare workers who show a lower level of commitment to getting the children moving. This could be done, especially, by removing the perceived barriers (busy schedule, lack of time, inclement weather, etc.). Furthermore, they would need to perceive that the management of the daycare service, the children's parents and their fellow workers support their efforts to get the children moving for at least two hours per day. Child care centre managers and parents must therefore clearly formulate their expectations in this regard. It also seems that involving the children in physical activity is not a significant value for many poorly motivated workers; this aspect should therefore be developed further. For workers who are already motivated to get the children moving, it would be important to intervene to ensure they act on their commitment. The implementation intentions strategy (Gollwitzer, 1993, 1999) could also prove useful in this context. Daycare workers could also facilitate cooperation between children while laying down rules regarding safety and discipline. Lastly, it appears that children are more physically active when the material is of good quality (for example when they are adapted to their needs or foster various dimensions of development). This aspect could therefore be emphasized in daycare services concerned with getting the children moving.

The findings and suggestions presented here are applicable to the sample of daycare workers and daycare centres studied as part of this research. It is possible that the variables that explain the physical activity of children are not the same as those for another sample of

daycare workers or child care centres. If this were the case, the intervention methods could therefore be different from those suggested here.

Policy Implications

According to the Long-Term Athlete Development Model proposed by Sport Canada, it is important that physical literacy be developed early in life. To this end, it is important to provide young children with the opportunities to explore and try out a variety of movements. Yet, the results of this study are in line with other findings in the literature and indicate that children aged three to five attending daycare centres are not sufficiently active. The findings of this study are useful particularly for developing or updating the child care centres' educational programs and post-secondary training programs for daycare workers. The results are also relevant to the management of child care centres and groups involved in child care, such as the Association du personnel-cadre des CPE. Organizations such as Québec en forme and Kino-Québec also have an interest because of their concerns about the active lifestyle and health of children.

Next Steps

This study has shown that it is important that daycare workers be better informed of the benefits and risks of physical activity. The findings also indicate that daycare workers do not have a clear idea of what is expected of them regarding the physical activity of the children they are responsible for. They would therefore have to obtain the proper training, equipment and support they need to promote the physical activity of children aged three to five.

Key Stakeholders and Benefits

The Quebec Ministère de l'Éducation, du Loisir et du Sport, Québec en forme, Kino-Québec, the Canadian Society for Exercise Physiology, the Canadian Fitness and Lifestyle Research Institute, Sports Québec, Active Healthy Kids Canada, the Quebec Association des CPE, the Quebec Association du personnel-cadre des CPE, the Canadian Child Care Federation, the Quebec Fédération des kinésiologues, the Canadian Kinesiology Alliance, the Quebec Institut de la statistique and others.

GAGNON, JOCELYN

Laval University

D. MARTEL, L. NADEAU, V. MICHAUD

SRG RELEASED TIME STIPEND 2006

Strategies Used by Physical Educators to Implement a Program that Encourages Their
Students to "Adopt a Healthy and Active Lifestyle

Project Summary

Essentially, the purpose of this research project is to implement a program, such as Team Pentathlon, in primary and secondary schools to encourage physical activity and study various aspects of the program implementation process. More specifically, we:

- describe the development of the students' physical activities (nature, frequency, and duration of physical activity sessions) throughout Team Pentathlon;
- describe the students' views about their physical educators' actions to encourage them to participate in Team Pentathlon;
- analyze the action strategies used by physical educators to establish a process for "adopting a healthy and active lifestyle" during the implementation of Team Pentathlon; and
- analyze the students' response within their team as part of Team Pentathlon to improve or maintain their level of physical activity.

The analysis of preliminary research data shows that 84% of the students, both boys and girls, who participated in the pentathlon were active or very active during the eight weeks of the program. More specifically, the pentathlon led them to increase the frequency, duration and intensity of their physical activity and diversify their activities by trying new activities and new sports. In fact, the amount of time the participants spent practicing physical activity is well above the recommendations of Quebec, Canadian and US organizations.

Research Methods

Team Pentathlon is an event that takes place over eight consecutive weeks, during which the members of each team of five students must collectively log at least 160 hours of physical activity. There are five activity categories. The 160 hours must include at least 15 hours of aquatic activity, 35 hours of team sports and games, 15 hours of cycling, 35 hours of artistic games and activities and 10 hours of two-person sports and games. A meaningful contribution from each student is imperative for the team to be successful. Five symbolic awards (Award of Excellence, Gold Medal, Silver Medal, Bronze Medal, Honorable Mention) are given out at the end of the pentathlon to the teams that meet those particular standards. Over the course of four training sessions, physical educators are instructed on methods to

implement and complete Team Pentathlon. During the pentathlon, the students organize and manage their individual and team activities, as needed, to most effectively fulfill the pentathlon requirements. They record their results daily on a sheet provided for this purpose. Every two weeks, program administrators collect the students' results, entering them on spreadsheets to produce summary reports that they then give to the physical educators. The physical educators, like the students, will use these results to re-adjust their action strategies, as needed, to promote the students' successful response as much as possible.

Since the project started, nine physical educators from primary schools and three from secondary schools have introduced Team Pentathlon to over 1,150 students. Four other physical educators from secondary schools plan to test the program with their students in February and March 2011.

Each morning during the pentathlon, the classroom teacher gives the students a few minutes to record on the sheet all of their physical activity sessions from the day before. This way, the data on the students' physical activity is collected systematically. However, the students' level of practice and, as a result, their level of success, depends in part on the strategies used by their physical educator to educate, support and motivate them during Team Pentathlon. The description of these action strategies is created based on the physical educators' planning (what they want to do) and their reports on what they actually did during meetings with their students. Furthermore, the critical incidents technique (Brunelle et al., 1988) is used to gather descriptions from the students of how their physical educator's actions encouraged them to participate in Team Pentathlon.

It is also important to stress that Team Pentathlon is an event that requires a meaningful contribution from each student to be successful. Interviews are held at the end of the pentathlon with each team of students to determine the individual and team response to improve or maintain the level of physical activity. Finally, during the reporting phase, the students will fill out a questionnaire, giving their opinion on the design and requirements of Team Pentathlon, based on their experiences.

Research Results

Team Pentathlon really does encourage students to be more active over the eight weeks of the program. What's more, most participants said that they have maintained a good level of physical activity after the program. The motivating effect of the pentathlon is observable in both girls and boys. More specifically, 84% of the students, both boys and girls, who participated in the pentathlon were active or very active during the eight weeks of the program. More specifically, the pentathlon led them to increase the frequency, duration and intensity of their physical activity and diversify their activities by trying new activities and new sports. In fact, the amount of time the participants spent practicing physical activity is well above the recommendations of Quebec, Canadian and US organizations.

However, boys and girls do not have the same preferences when it comes to the type of physical activity they practice. Girls prefer individual or artistic activities, while boys participate more in team sports.

Most notably, 85% of students who participated in the pentathlon said that they wanted to do the program again because it really helped them be more active.

Policy Implications

This action research encouraged many students to participate in regular physical activity and sports. In addition, many students who were already active benefited from the program by experiencing new sports or activities that they did not already practice on a regular basis. Lastly, the study helped identify factors that contribute to students being more active (the data for this part of the study is still in its analysis stage).

Next Steps

Since the analysis of the results of our project is not finished, we have not yet fully met all of our objectives. We are presently working on describing the teachers' actions and students' strategies that had a positive impact on physical activity. However, our project has raised new questions. We found that some students who were fairly inactive prior to the pentathlon became active during the program, while others remained completely or fairly inactive. Future research should look at the characteristics of this particular group. It would also be worthwhile to compare the effects of the pentathlon on students from various socioeconomic backgrounds. Lastly, it would be interesting to examine the long-term "pentathlon effect" by measuring participants' physical activity on a regular basis after the program is over.

GILLES, JENNIFER

University of Waterloo

DOCTORAL STIPEND 2008

A Framework for Creating a Campus Culture of Compassion: A Participatory Action
Research Approach to Equality

Project Summary

This dissertation united key stakeholders from the University of Guelph community in order to examine issues around accessibility and inclusion of students with disabilities in campus recreation and sport opportunities. The research team included representatives from the University of Guelph's Centre for Students with Disabilities and the Department of Athletics, an undergraduate student with a disability, and two university alumni. The ultimate goal was to develop a planning framework to guide universities in supporting the human rights and inclusion of students with disabilities in extra-curricular campus life. What emerged from data analysis was the development of a framework for creating a Campus Culture of Compassion. This framework, which encompasses six guiding principles, three fundamental characteristics, and six process pieces, explores how universities can implement programs, policies, services and practices that better respond to the changing and diverse needs of university students with disabilities in order to ensure their full engagement in all areas of campus life.

Research Methods

This dissertation used a Participatory Action Research approach as the strategy of inquiry. This involves the researcher working as part of a collaborative research team in order to connect the research to larger social change efforts. The overall goal was to develop a framework to guide universities in creating an inclusive campus community, particularly pertaining to extra-curricular activities. In order to ensure that the framework included perspectives of all key stakeholders, interviews were conducted with five research team members and 18 University of Guelph stakeholders, including: students with and without disabilities, staff members from the Department of Athletics and the Centre for Students with Disabilities, faculty members, and senior administrators. Transcripts of the interviews were analyzed for common patterns which were then clustered together into broader categories. Based on this analysis, a five page draft of the framework was created and then shared with all members of the research team. The research team collectively worked through and reflected on the initial framework in order to provide examples for the components and to identify areas that needed further development. In order to ensure that the framework truly reflected the perspectives of the participants, all participants were invited to participate in a 'focus group' where we provided an overview of the preliminary findings. Suggestions and recommendations from the focus group and team meetings were incorporated into the final framework.

Research Results

What emerged from data analysis was the development of a framework for creating a Campus Culture of Compassion. This framework centres around six principles that help guide universities toward developing a campus culture that is compassionate. Essentially, a campus culture of compassion values: (a) access for all; (b) diversity and uniqueness; (c) interdependence and social responsibility; (d) diverse knowledge bases, voices, and perspectives; (e) the power of learning and education as a tool for social change; and (f) the whole person. The framework also indicates three fundamental characteristics that a campus culture of compassion must possess. In essence, post-secondary institutions and their community members must be: (a) interconnected, (b) supportive and enabling, and (c) informed. Six process pieces are included in the framework which enables a campus culture of compassionate to be fuelled and sustained over time. These pieces include: (a) creating a vision for the future, (b) constructing a plan to achieve the vision, (c) securing funding to put the plan in place, (d) thinking critically and measuring actions against the vision, (e) being proactive to making change happen, and (f) reaching beyond compliance. The framework encourages university stakeholders to collectively reflect, dialogue, and collaborate in order to create broader systemic changes. These changes are necessary since constraints to campus engagement can threaten a student's well-being and sense of self. This framework can serve as a starting point to initiate these conversations and inspire universities to use a participatory approach to encourage positive social change within the university context.

Policy Implications

This study offers insights into the barriers that students with disabilities face when seeking to participate in campus recreation and athletics while providing practical strategies to combat these barriers.

Government of Canada policy acknowledges that in order to have claim to full citizenship, athletes with a disability must be provided equivalent opportunities to develop their abilities and to compete at provincial, national and international sporting events. The framework that emerged from my dissertation is aligned with this initiative and seeks to shed additional light on the important role that recreation and athletic engagement plays within an individual's life, and within a community as a whole. The framework informs communities on the core values, characteristics and process pieces that are essential to creating an inclusive and accessible environment.

The framework from this dissertation reveals that a major component of being involved in sport and physical activity is being adequately informed. Thus, persons with disabilities must have access to information regarding: a) the benefits of being physically active, b) available programs and services, and c) the accessibility of an event or service prior to participation. This study highlights the benefits of developing mutually benefiting partnerships both within

and outside of one's core community in order to streamline services, provide support in a holistic approach, blend resources, and diminish redundancies. A collaborative approach will also help to increase participation rates, reach a broader target audience, and provide diverse and supportive services.

Next Steps

The perspectives of key stakeholders within a university, highlighted in this study, may be transferable to other community groups and within other community contexts. The components of this framework can ideally be used to encourage communities to collaborate and create community conversations that raise awareness of each other's perspectives and work towards collective problem solving. However, future research may need to explore the perspectives of other community groups, particularly those who are marginalized, in order to enhance the relevance and usability of the framework within a generalized community setting.

Future research could also develop a 'tool kit' for creating community cultures of compassion based on the main components of the framework. The 'tool kit' would draw upon the insights gained from the framework, and would follow a similar format of guiding principles, characteristics, and process pieces. Future research could document the process by which a university, or other community, utilizes the framework or 'tool kit'. Such a study would provide insight on the usefulness of the framework or 'tool kit' within another community context both in terms of its ability to create campus partnerships and conversations, as well as its ability to facilitate action or social change. It would also shed additional light on the process by which university stakeholders, or community members, can use a participatory approach to unite relevant individuals in order to achieve a shared outcome.

Key Stakeholders and Benefits

- The following organizations could benefit from the findings of this study:
- Ontario University Athletics Association (OUA)
- Canadian Interuniversity Sport
- Canadian Intramural Recreation Association (CIRA)
- Sport Canada
- Canadian postsecondary institutions
- Canadian Sport Associations

HAMM, SHANNON

University of Western Ontario

DOCTORAL STIPEND 2006

Can Conflict be Productive? An Examination of Conflict in Non-profit Sport Boards

Project Summary

Given the importance of board decisions on the development of sport programming in Canada, an investigation of the impact of conflict within these groups is essential for effective board functioning. Thus, the purpose of this project was to examine the nature, level, and impact of task, relationship, and process conflict in provincial sport organization (PSO) boards. In defining group conflict, three types of conflict were examined: Task conflict was viewed as disagreement among group members about the content of tasks; process conflict was defined as disagreement about how to accomplish tasks; and relationship conflict was described as disagreement that is personal in nature. For each conflict type, perceptions of conflict, the factors that influence perceptions of conflict and the outcomes of conflict were explored.

Research Methods

This study of sport organization boards was conducted in the fall and winter of 2007/2008. A survey was used to collect data regarding the individual (e.g., age) and group (e.g., routine or non-routine decision type) characteristics of members and their boards, as well as each board member's perceptions of: intragroup conflict, board decision quality, satisfaction with their board and board commitment.

A sample of board members of PSOs within Ontario was surveyed. The study was limited to active board members and included individuals with central (e.g., president) or peripheral (e.g., treasurer) roles. This sample was chosen because of the influence of PSO board members whose decisions ultimately impact the delivery of sport within the province.

A total of 41 of the 86 registered PSOs in Ontario agreed to participate in the survey study. Two hundred (200) surveys were sent out. The survey was completed by 74 board members for a response rate of 37%.

Research Results

Decision Quality. When task, relationship, and process conflict increased, the quality of the board's decisions decreased; decisions were less likely to be based on the best available information or the board's current strategies. Further, relationship conflict was the strongest predictor of decreased decision quality (i.e., when conflicts were personal in nature, lower decision quality resulted).

Board Member Satisfaction. When each conflict type increased, board member satisfaction with their board decreased. Relationship and process conflict were the strongest negative predictors of board member satisfaction (i.e., when disagreements were personal in nature or about "how you do things" as a board, participants had negative feelings toward their board).

Board Member Commitment. When all three types of conflict increased, board member commitment decreased. Relationship conflict was the strongest predictor of decreased board commitment (i.e., when differences of opinion were personal, board member identification with their board decreased).

Further, task conflict and process conflict led to, or triggered, relationship conflict, which then had a negative impact on outcomes. Thus, task and process conflict were likely to result in dysfunctional relationship conflict. For instance, if boards were disagreeing about a task (e.g., where to hold their next championship) or how to complete a task (e.g., who will do what) this often lead to tension or friction among board members which resulted in negative impacts on both group and individual outcomes.

The results presented above provide insight into the nature of conflict in PSO boards, however there are a few limitations that should be noted. First, given the purpose and exploratory nature of the study the results were analyzed at the individual level, and thus conclusions regarding the nature of conflict within specific PSO boards cannot be made. Second, task, relationship, and process conflict were found to be highly related to one another. Although, multicollinearity statistics were used to demonstrate that three separate types of conflict were in fact represented in the data, the participants may have had trouble distinguishing between each conflict type. Therefore, it is important to gain a more comprehensive understanding of board member perceptions of conflict in this context. This could be accomplished through further research using qualitative methods (i.e., interviews and observations).

Policy Implications

The results demonstrate that conflict has a negative impact on decision quality, satisfaction, and commitment in this setting. It is recommended that policy makers create greater awareness of intragroup conflict in sport boards. Given the negative relationships seen here, strategies to educate board members on the nature and impact of conflict should be developed to improve PSO board capacity around identifying and managing conflict in a proactive and effective manner.

Next Steps

Preliminary results suggest that continued research is needed to understand the mechanisms that underlie the conflict process, for instance: how potential positive task conflicts lead to negative outcomes, what causes task and process conflict to lead to relationship conflict, and how conflict impacts board performance. Working with non-profit

boards and policy makers to develop longitudinal examination of the conflict process may help identify some of the "triggers" to conflict and potentially improve the effectiveness of conflict management in this setting.

The results presented here have been accepted for publication in a top-tier sport management journal and have been presented at the 2008 North American and European sport management conferences. Since this survey study, a qualitative research project was completed that further explored the nature of conflict in PSO boards. These findings have been submitted to the 2009 North American Society for Sport Management (NASSM) student research paper competition and a working paper is currently in review for publication.

Further, the importance of connecting this research with the sport community is recognized. As such, a formal written report summarizing the results and subsequent implications for management has been submitted to each PSO involved in the study. Moreover, continued networking with Sport Canada and the non-profit sport community has been anticipated through attendance and participation at subsequent SCRI conferences.

Key Stakeholders and Benefits

- Provincial sport organisations
- The Sport Alliance of Ontario
- The Ontario Government (and other provincial governments)
- Sport Canada
- National sport organisations

HARVEY, WILLIAM J.

McGill University

S. WILKONSON, C. PRESSÉ, R. JOOBER

DOCTORAL STIPEND 2006

Children with ADHD and physical activity behaviours: What happens when the village turns its back on you

Project Summary

The three main objectives for this research project were to: (a) describe the physical activity (PA) behaviours of children with attention-deficit hyperactivity disorder (ADHD), (b) explore the feelings and attitudes that children with ADHD and their parent(s) had about PA, and (c) generate a grounded theory of PA and children with ADHD. The conclusions of this research project include: (a) differing PA planning subtypes were observed for children with ADHD, a positive finding for future self-regulation strategies in PA and sports, (b) children with ADHD and their parents have social inclusion motives for PA participation, (c) the social exclusion of children with ADHD from many daily activities, and (d)an urgent need for structured education programs and specific PA and sport programs that include children with the nonvisual disability of ADHD.

Research Methods

Central Research Question: This research project explored the PA experiences of children with ADHD to answer the following question: How do children with ADHD choose to get involved in physical activity?

Data Collection: There were three main procedures with this research project. First, each child with ADHD performed the *Test of Gross Motor Development-2 (TGMD-2)* was used to assess locomotor and object control skills (Ulrich, 2000). The Movement Assessment Battery for Children-2 (Henderson et al. 2007) was used to assess balance skills and manual dexterity skills.

Second, each child recorded his/her daily PA for a two-week period on a recording sheets. These sheets documented PA that each child participated in. Each child was provided with a disposable camera to have an activity leader, friend or parent take pictures of their PA participation in various contexts. The daily recording sheets and pictures were collected by a research assistant. Approximately two weeks after all information was collected, the children were then asked place their PA photographs in a scrapbook. A research assistant interviewed each child while she or he created their PA scrapbook. Each scrapbook interview was videotaped.

Third, parents expressed their viewpoints from a current perspective. We conducted videotaped interviews with a parent(s) about their child's PA experiences. Parents may adopt an important part of children's PA involvement by assisting in the activity selection process. Parental views on their child's PA behaviours produced a substantial part of our understanding of the children's play behavior. Child and parent data are being combined to develop a grounded theory of ADHD and PA participation. Videotaped interviews were transcribed verbatim for thematic analysis as part of a within-case analysis to learn as much as possible about each child's PA experience (Merriam, 1998).

Research Results

There were four main sets of findings which are limited in their generalizeability because of the qualitative nature of the research. There are four manuscripts which emerged from this research project. First, we created a new qualitative research method in sport and exercise (Harvey, Wilkinson, Pressé, Grizenko & Joober, in press). A consecutive and concurrent scrapbook interview technique was compared with small groups of children with ADHD. The concurrent scrapbook interviewing approach was found to be a more effective interview strategy that was suggested to obtain complex, qualitative data from children with ADHD so we could hear PA stories from their own perspectives. This approach enabled (a) more vivid details and child speak, (b) an increase in depth of participant statements and meaning between and across themes, and (c) greater insight to be gained into day-to-day events and experiences which may influence PA participation.

Second, we have written a manuscript on the concurrent scrapbook interview approach with a group of 10 children with ADHD (Harvey et al., in review a). It is currently under peer-review at an international level physical education research journal. There were study findings that were similar to past research because children with ADHD: (a) demonstrated poor performance on the TGMD-2 and MABC-2 and TGMD-2 tests, (b) had pictures of friends, (c) were aware of their physical inabilities, (d) were on organized teams (i.e., cheerleading, gymnastics, etc.), (e) spoke about observational learning, and (f) viewed parent work schedule as a constraint to PA participation. There were also study findings that were different from past research because children with ADHD demonstrated: (a) performance anxiety, (b) good sporting values, (c) a superficial understanding of purpose for PA, and (d) social fragmentation.

Third, we have written a manuscript on 15 parent interviews of children with ADHD (Harvey et al., in review b). It is currently under peer-review at an international level physical activity research journal. This study is also original research that describes retrospective and current parent perspectives about their views of their children's PA experiences. The study findings demonstrate that the parents were: (a) intricately involved in the daily PA of their children, (b) aware of the movement problems of their children, (c) convinced that their children seldom organized PA, (d) unaware of their children's perceived ability to plan PA, (e) suggesting that school teachers were perceived as not aware of the implications of ADHD, (e)

stating that the purpose of getting involved in PA was secondary to the activity itself (i.e., socialization, improved discipline Vs. playing hockey or practicing karate), and (f) aware of the social fragmentation issues raised by the children with ADHD.

Fourth, we are finalizing the grounded theory on ADHD and PA by collecting more interview data until the end of December, 2011 (currently sample is 23 pairs of participants). Our studies have indicated that social isolation is the major theme which emerged in our grounded theory. The essence of the PA stories emerging is a picture where children with ADHD may be excluded from school, the local community recreation center, sporting opportunities, physical education class, with social challenges surrounding some significant others (i.e., parents, teachers, coaches, peers, etc.) and substantial environmental barriers experienced (i.e., lack of transportation, limited amounts of time, etc.).

Policy Implications

The relevance of this research to enhanced sport participation in Canada is related to education programs and specific interventions focused on the inclusion of all people in sport participation at the national, provincial, and community levels. Quite frankly, at first, the study results were a bit surprising as perceptions about the involvement of many significant others (i.e., parents, teachers, etc.) seemed to reveal a multitude of reasons for sport participation. Upon reflection, the study results are not so surprising. Parents and people with disabilities are susceptible to mass messages that our education and health systems as well as sport organizations send out (i.e., sports and PA build character, develop discipline, build health, etc.). However, the children and their parents fall between enormous cracks created by society and government (i.e., overlap between ministries of sport, health, and education). I predict this unfortunate relationship will continue in the future as our research funding and capacity to develop greater knowledge and intervention bases in this area will dry up, given the recent decision by SSHRC to be seemingly void of any sport research related to persons with disabilities as it may be deemed as health-related research (even in the context of the Sport Participation Research Initiative). Clearly, the concept of selfdetermination and people who are not elite athletes may well continue to be disregarded. For example, based on our current research findings, our scholarly group submitted a proposal to develop better understandings of self-determination and autonomy-supportive networks in sport participation for persons with mental health problems (MHP). We deemed sport participation as a tremendous vehicle to further our understanding of selfdetermination from an adult with MHP perspective by being encouraged to choose to become actively involved in their communities. We believed sport could be an answer for many people with MHP to improve their conceptualization of social functioning. In fact, at least 6 million Canadians per year experience MHP which may be positively impacted by community sport participation but this research was deemed ineligible by SSHRC and not even available for review by Sport Canada and the current initiative.

Next Steps

- 1. Are children with ADHD excluded from PA participation because they are being discriminated against?
- 2. How do children with poor movement skills gain access to PA and sport programs with no major supporting infrastructure?
- 3. How is the health and welfare of children with ADHD being compromised due to exclusionary PA and sport practices in schools and local communities? National and provincial funding opportunities?
- 4. Do the social isolation issues, related to a lack of PA and sport participation, lead children with ADHD to become involved in undesirable groups or to withdraw into their homes to become further isolated and predisposed to deeper mental health problems?
- 5. How will positive and cost-efficient PA programs be developed to lead to better outcome measures so children with ADHD have a better chance at becoming involved in their communities and successful, self-determining citizens?
- 6. How may university and national coaching programs develop sufficient expertise for physical education teachers and coaches to include persons with non-visual disabilities in their programs?

Key Stakeholders and Benefits

- Sport Canada
- Physical and Health Education Canada
- Active Living Alliance
- National and Provincial Learning Disabilities Associations
- Provincial Ministries of Education and Health
- Sport Canada Long Term Athlete Development (LTAD) program
- Children with Attention Deficit Disorders (CHADD)

HOLT, NICHOLAS

University of Alberta

T. MC HUGH,

DOCTORAL STIPEND 2009

A Sport-based Critical Hours Program for Low-Income Youth

Project Summary

This program of research addressed three important issues faced by Canadian children; the problem of low physical activity, the need to increase sport participation, and the absence of programming during the 'critical hours' after-school period (see Active Health Kids Canada, 2012 Report Card for a review). It is particularly important to offer critical hours programming for children in low-income areas to provide safe places for them to develop skills, explore interests, and learn healthy living traits. Therefore, the overall purpose of this research was to develop, implement, and evaluate a sport-based critical hours program for children living in low-income areas of Edmonton, AB.

Research Methods

We conducted a 3 phase project. Based on a participatory action research (Park, 1993) approach, the first phase of the research involved developing an understanding of the context and building relationships with community partners. In the second phase a multi-sport program involving collaborations between the school board, schools, and provincial sport organizations was created and delivered to 37 children (from grades 2 and 3) at two schools in low-income areas. Semi-structured interviews were conducted with 28 program participants (i.e., children) and 19 stakeholders (i.e., adults) to evaluate program delivery and implementation.

In the third phase a revised program (now named TRY-Sport) was created and delivered to 35 children (from grades K-3) attending two schools in low-income areas (one school from phase 2 and one 'new' school). Following the program we interviewed 14 children to obtain their views about program content and skills they learned through participating in TRY-Sport.

Research Results

Qualitative analysis of data from phase 2 revealed five themes that depicted participants' views of the program: (1) "I Play Those Games Nowhere Else," (2) "Just General Life Skills," (3) "How We Fit in the Whole Picture," (4) "It's Not Always Financial," and (5) "Plan for it Long Term." Overall, findings showed that children had positive experiences, the program filled a void in their lives, and they learned some life skills. The adults' views supported some

aspects of the delivery of the program and provided direction for future program development.

We revised the program based on our findings from phase 2. First, while collaborations with provincial sport organizations were valuable partnerships, we realized the need to create a more independent program that would still address a range of movement and sport skills without relying on provincial sport organizations to send staff to run program sessions. Second, we realized a need to more specifically target life skills in a consistent manner. Third, it was important the revised program required minimal equipment because schools did not have financial resources to buy/repair equipment. Finally, we built flexibility into the program so that it could fit with the requirements and constraints of different schools.

Hence, for the third and final phase of the project, we revised the program (and renamed it TRY-Sport). It was designed to teach fundamental movement skills and life skills through the sports of soccer, volleyball, and basketball in a manner consistent with the FUNdamentals stage of the Long Term Athlete Development/Canadian Sport 4 Life model. In addition, the program focused on teaching three life skills: Leadership, teamwork, and confidence.

Analysis of the children's interviews from phase 3 showed that in terms of program content the activities children reported they enjoyed the most were based on creating optimal challenges and 'adventures' which engaged their imaginations. Children also reported learning social and life skills (e.g., teamwork, sportspersonship, listening) along with a range of fundamental movement skills. These skills seemed to be specifically learned in the program and there was some evidence of transfer of these skills to other parts of the children's lives. Finally, the need to adapt program delivery within the context of the two different schools was confirmed as a strength of the approach. Thus, this study showed the importance of engaging children's imagination to deliver the TRY-Sport program and the need for a flexible approach.

Limitations of the research included the fact that the program was delivered to a relatively small number of schools/children and therefore the results likely generalize only to schools/children in similar circumstances to those we studied. We did not evaluate the effectiveness of the program in terms of its effects on sport participation or physical activity. Further research is needed to address these issues.

Policy Implications

The research showed that it was viable to provide high-quality critical hours programs to children who attend schools in low-income areas. These children face limited options during the critical hours period and have few opportunities to engage in organized sport activities. The critical hours period is an important opportunity to influence children's sport participation and levels of physical activity. The main implications are as follows:

- It was important to develop collaborations with organizations from multiple sectors. Such collaborations supported the creation and development of programs that address participants' needs. However, relying on these collaborations for program delivery was unsustainable. We showed that 'stand-alone' programs that are relevant to stakeholders' needs could be delivered with minimal staff/equipment and will therefore likely be more sustainable in the long-term.
- TRY-Sport was shown to be viable approach that was positively received and appraised by children and adult stakeholders. It made a positive difference in the children's lives. Thus, the creation of such programs should be addressed by all levels of government.
- 3. Our research showed critical hours programs should be created and delivered in a flexible rather than standardized manner. A flexible approach that has certain core principles (i.e., fundamental movement skills and select life skills) and can be adapted to the circumstances and restraints faced in particular schools is required. There is no 'one size fits all' critical hours program, but a flexible approach based on core principles appears to represents a valuable and practical way forward.
- 4. Given that the federal government is exploring ways to promote sport and physical activity, and that the Children's Fitness Tax Credit program appears to benefit middle and higher income families (Spence, J. C., Holt, N. L., Dutove, J., & Carson, V. (2010). Uptake and effectiveness of the Children's Fitness Tax Credit in Canada: The rich get richer. BMC Public Health, 10, 356. doi:10.1186/1471-2458-10-356) the provision of direct funding to critical hours programs represents a policy option. This issue also applies to provincial governments that have introduced tax credit programs for children's sport/physical activity.

Next Steps

There is a need to evaluate the effectiveness and longer-term outcomes of the TRY-Sport program. A 'program manual' that includes the core principles of the TRY-Sport program will be created and disseminated. This will be useful for various organizations who wish to deliver critical hours programs.

Key Stakeholders and Benefits

- Provincial and National Sport Organizations
- Branches of provincial and federal governments responsible for sport/physical activity promotion.
- Physical and Health Education Canada
- Schools, school boards.
- Active Health Kids Canada

JEFFERY-TOSONI, SARAH

York University

J. FRASER-THOMAS, J. BAKER

DOCTORAL STIPEND 2010

Exploring contemporary issues in Canadian youth hockey: Experiences and perspectives of peewee players and elite hockey insiders

Project Summary

Hockey has a profound impact on the values, attitudes, and behaviours of Canadians (Earle, 2002; Gruneau & Whitson, 1993; Nixon, 1976). Youth hockey in Canada has been the target of much recent criticism, with attention being called to an increasingly aggressive and violent atmosphere (e.g., Ackery, et al., 2012; Loughead & Leith, 2001; Therien, 2012). This research project aimed to gain greater understanding of two contemporary issues commonly associated with this aggression and violence: youth hockey parents, and the presence of body checking in the youth game. Interviews were conducted with forty peewee players (i.e., 11-12 years of age) over the course of a competitive season and ten elite hockey insiders (i.e., those with professional, major junior, or university level experience as either a player, coach, parent of elite player, official, or national media personality). Results indicate that elite insiders described concerning parent involvement including modelling poor and aggressive behaviour, having unrealistic expectations, putting pressure on their children to perform, over-stepping the boundaries of the coach, and living vicariously through their children. However, peewee players reported being generally satisfied with their parents' level and type of involvement. Both elite insiders and peewee players discussed the regular occurrence of negative parent behaviours at games (i.e., yelling at players and officials), and the negative impact of these behaviours. Further, peewee players reported enjoying the presence of body checking in their game, despite discussing feelings of both fear and safety on the ice, with the feelings of fear often attributed to size differences between players. Conflicting findings, recommendations and future directions are discussed.

Research Methods

Study 1

Participants included ten (8 male, 2 female) elite Canadian hockey insiders age 22-54, all of whom emerged from the Canadian youth hockey system. Each participant was a current or former elite player, coach, official, parent of an elite player, or national hockey media personality. "Elite" was operationally defined as having experience at the professional (National Hockey League), major junior (Canadian Hockey League), or university level (National Collegiate Athletic Association (NCAA) Division I; USA, Canadian Interuniversity Sport (CIS); Canada); many participants had multiple roles (i.e., player, coach, parent). Each

participant engaged in a 30-60 minute in-depth, semi-structured telephone interview focused on their perspectives of parent involvement in Canadian youth hockey. Each interview was audio-recorded, transcribed verbatim, and analysed using previously established guidelines (e.g., Tesch, 1990).

Study 2

Participants included 40 youth hockey players from nine competitive teams in three different hockey leagues in Southern Ontario, Canada. Participants were recruited from minor peewee (i.e., 11 years old; 11 players) and peewee teams (i.e., 12 years old; 29 players), with a mean age of 11.73 years. The competitive levels of teams ranged from BB to AAA (the highest competitive level). Each player participated in two 15-45 minute in-depth, semi-structured interviews; one at the beginning of the season, and one following the conclusion of the season. Interview questions focused on their parents' involvement in their hockey and behaviours at their hockey games, as well as their perceptions of body checking. Data were analyzed in the same way as discussed for Study 1.

Research Results

Peewee players reported generally positive parent involvement however, the elite insiders highlighted several issues that necessitate further attention, including parents having unrealistic expectations, putting pressure on their children to perform, over-stepping the role of the coach, and living vicariously through their children. Both peewee players and elite insiders reported that although cheering and positive comments are often heard at youth hockey games, negative parent spectator behaviours are commonplace. Peewee players suggested negative comments came primarily from the "other team's parents," with officials and physical players often being the target of these negative comments. Some participants spoke of being distracted, frustrated, and angered by negative parent comments during games, suggesting that negative comments hold more weight and are more likely to be heard, internalized, and remembered by youth players. With regard to body checking, many peewee players reported liking the presence of body checking in their game, however increased injuries and rough play since its introduction were discussed at length, as well as players feeling both fear and safety on the ice, with players most often attributing their feelings of fear to size differences. Players also reported that body checking was rarely taught as a specific skill; it was either included as part of other drills, or not taught at all. Results should be interpreted with caution in that the perspectives of other parties were not taken into consideration, and social presentation bias (Nederhof, 1985) may have influenced responses.

Policy Implications

With over 570,000 youth involved in hockey in Canada, a safe and enjoyable environment is of critical importance. The extensive discussion of negative parent behaviours at Canadian youth hockey games by both elite hockey insiders and peewee players point s to the need for effective parent education programs, with a particular focus on appropriate parent behaviour at games. While there has been extensive

growth in such programs in recent years, it is essential that these programs are grounded in evidence-based research, and undergo rigorous evaluation to assure their effectiveness. Elite insiders suggested parent education programs be developed by a diverse team of experts, and be made standardized, while being audited/monitored. Further, they suggested programs focus on encouraging parents to have realistic expectations, keeping a healthy distance from their children's hockey, and demonstrating respect and caring at games. Further exploration of an anonymous reporting system may also be valuable in alerting league officials to particularly problematic parent issues, eventually contributing to a more positive parent culture in Canadian youth hockey. Findings also point to the important of a clear and strict national policy on discipline.

Recommendations for policy regarding body checking among young players continue to be challenging, given conflicting and contradictory findings within and between research studies. Most participants in this study expressed enjoying the presence of body checking in their game and feeling safe on the ice, yet many also reported experiencing fear. Given that peewee players often discussed fear in the context of size differences, findings suggest that matched physical size rather than matched chronological age may be a better framework for the inclusion of body checking. Findings also highlight the importance of mandatory inclusion of an effective body checking curriculum for young players, given that many participants spoke of limited to no opportunity to correctly learn the skill of body checking.

Next Steps

This study has advanced our understanding of parent involvement, and the presence of body checking in youth hockey by taking into consideration perspectives of the youth players themselves, and allowing their collective voices to inform policy decisions. Future research should continue to examine player perspectives, and consider a large-scale case-study approach including players, parents and coaches, as well as observational data from games. Moreover, the longitudinal approach of the current study could be expanded to include more time points throughout the season, if only to validate the consistency of the responses given in the present study.

Researchers should also continue to examine minor hockey players' perceptions of body checking to further determine why players report seeing so much rough play and injury due to body checking, but also report enjoying it, and oftentimes, feeling safe on the ice. Researchers should also continue to examine the roles of parents, coaches, and officials in body checking.

Finally, future researchers may investigate gender differences in perceptions of parent involvement and body checking in Canadian youth hockey. Given that the present study had primarily male participants (i.e., 34 males, 6 females), it was difficult to discern any

differences in perceptions between males and females, and future researchers should attempt to examine these lines of inquiry.

Key Stakeholders and Benefits

- Hockey Canada
- BC Hockey
- Hockey Alberta
- Saskatchewan Hockey Association
- Hockey Manitoba
- Hockey Northwestern Ontario
- Ontario Hockey Federation
- Ottawa District Hockey Association
- Hockey Québec
- Hockey New Brunswick
- Hockey PEI
- Hockey Nova Scotia
- Hockey Newfoundland and Labrador
- Hockey North

KWAN, MATTHEW

University of Toronto

DOCTORAL STIPEND 2007

Transitioning Students' Sport and Physical Activity Participation)

Project Summary

The transition from late adolescence to young adulthood represents a time of profound changes, including a period for which substantial declines in physical activity levels occur. As the late adolescent population transitions into early adulthood, a number of trajectories are possible (e.g., entry to the workplace, armed forces), but a large proportion of young adults elect to pursue a higher education at college or university. Recently, research has begun to examine the patterns of physical activity among students as they transition from high school into university. Consistently, the studies have found participation in moderate-to-vigorous physical activity being significantly higher during students' last year at high school compared to during their first-year at university. Anecdotally, substantial decreases in organized sport has been a significant contributor to those overall declines in physical activity participation; however, changes in sport participation during the transition from high school to university had not been previously examined.

Research Methods

Participants were 162 first-year students that completed a questionnaire during their spring semester at university. The questionnaire included a global (general) measure of physical activity (Godin Leisure-Time Exercise Questionnaire; Godin & Sheppard, 1985), a detailed measure of sport and physical activity behaviours (Modifiable Activity Questionnaire for Adolescents; MAQ-A; Aaron et al., 1995), and semi-structured open-ended questions to identify the perceived barriers to sport participation during students' first-year at university.

Research Results

Consistent with previous research, the study found participation in both vigorous and moderate type physical activities decreasing from high school to university. Among the participants, 63% of the students exhibited declines in their overall physical activity, 22% of the students showed an increase in their physical activity, while 15% did not changed.

- Average engagement in strenuous/vigorous physical activities decreased from 3.64 times/week during high school to 2.35 times/week during university.
- Average engagement in moderate physical activity decreased from 3.61 times/week during high school to 3.01 times/week during university.
- Together, moderate-to-vigorous physical activity declined from 7.26 times/week during high school to 5.36 times/week in first-year university.

- The primary purpose of this study was to further examine the role of sport participation. The results found an overall declines in their participation in organized sports, similar to the declines in overall physical activity levels.
- On average, students reported participating in a sport activity on 14 days/month during high school; entering university, students reported engaging in sports on an average of 5 days/month.
- In addition decreases in the frequency of sport participation, there were decreases in the duration of those sport activities. On average, students engaged in 77 minutes/session during high school, and only 39 minutes/session at university.
- Decreases in sport participation were moderately related to decreases in strenuous/vigorous type physical activity; and weak-to-moderately related to the decreases in moderate type physical activity.

With the many health and social benefits associated with being physical activity and sport, research should strive to understand populations such as first-year students and the reasons behind their decline in both their sport and physical activity levels. Students identified a number of important barriers to their sport participation during their first-year at university.

- Time constraints
- Availability of sports
- Fatigue
- Alternative social activities
- Laziness

Policy Implications

The present findings demonstrate significant linkages between declines in sport participation to the overall declines in physical activity behaviours among young adults transitioning into university. It must be recognized that the transition into early adulthood is a period for which individuals disengage from sport participation, continuing to become less active advancing with age. Given the many benefits associated regular participation in sport and physical activity, this transitional period offers a critical point to intervene

Next Steps

This study was able to provide a snapshot into the sport participation of students transitioning from high school to university. While providing some insights to first-year students' participation in sport-specific activities, there is a need for further research. First, more efforts is required to develop the capacity for sport and physical activity surveillance among the collegiate population (i.e., tracking sport participation over time). Secondly, qualitative studies may be necessary to gain a more in-depth understanding behind the contexts associated with declines in sport participation. Lastly, future research needs to continue to understand the key changes occurring during this transition period, and to

develop a sustainable intervention to help students maintain their engagement in sports through this life change.

Key Stakeholders and Benefits

Broadly, the findings from this study will be informative to organizations and ministries associated with sport and health promotion (e.g., Ontario Ministry of Health Promotion and Sport, Canadian School Sport Federation). Furthermore, the findings could also be useful for physical activity educators — highlighting the needs for a greater emphasis on sustaining lifestyle sport and physical activities following high school graduation.

LOCKWOOD, KELLY

Brock University

JACKSON, G.

SRG – RESEARCH TIME STIPEND 2006

Infrastructure & Expertise: A Model to Investigate Effective Training through Long-term
Athlete Development

Project Summary

A Hockey Intervention Program (HIP) was established as an innovative vehicle to evaluate the infrastructure-athlete relationship for training athletes in the sport of ice hockey. This research examined both system level and athlete level factors that influence stakeholders' decisions to access and/or integrate infrastructure into athlete development and how innovative infrastructure can best provide effective support for athlete development throughout the stages of Long Term Athlete Development (LTAD). The HIP coupled facility time (hard infrastructure) in the form of a sport specific training device (skate treadmill) emphasizing fundamental skill development and expertise (soft infrastructure) in the form of highly qualified and specialized trainers. Outcomes of the research strongly supported the value of sport specific infrastructure programs, such as HIP, which focused upon fundamental skill acquisition and development at all stages of LTAD. Simply stated, fundamental skills, such as skating, are rudimentary to the sport and the mechanics can and should be introduced, taught, trained and mastered at all levels of player development.

Research Methods

This study employed a mixed-method research design to examine the impact of the HIP according to two perspectives. First, system-level qualitative data regarding when, how and why sport infrastructure is most effective in supporting athlete development was gathered from four hockey sub-system stakeholders — parents, coaches, minor hockey leaders, and hockey talent scouts/agents. These groups have vested interests in athlete development and as such, make decisions that directly influence the type of facilities and expertise an athlete utilizes. Open-ended surveys and interviews provided data on stakeholder attitudes about the role of both hard and soft infrastructure in supporting athlete development.

Second, athlete-level quantitative data was gathered to examine how the HIP contributes to athlete development and sport specific performance. Physiological, biomechanical and onice performance measures were tracked pre and post a 12-week HIP training intervention per year for two years. Biomechanical measures assessed change in mechanical skill acquisition and refinement of technique, physiological measures assessed change in fitness

level, and sport-specific performance measures assessed the transference of dry-land training to on-ice performance.

These data – stakeholder attitudes and performance measures – were analyzed and interpreted both independently and compiled in order to determine how stakeholders access infrastructure in ways that provide the greatest amount of support for athlete development. All data was collected on a yearly (cross-sectional) and ongoing (longitudinal over two years) basis to track system and athlete changes. This approach and timeline also facilitated the development of practical recommendations as outlined below.

Research Results

System level qualitative data was collected from 160 stakeholders; 120 parents and 40 decision makers that act on behalf of a minor hockey player. One parent for each athlete was surveyed with the exception of those 20 athletes in the "Active for Life" stage of LTAD; as adults making their own decisions, these athletes were surveyed directly. The remaining stakeholder groups included a random distribution of coaches, league administrators, scouts and agents. System level qualitative results emphasized support for three themes: the reasons for accessing sport specific infrastructure, the timing of 'first access' of sport specific infrastructure, and the quality or 'perceived impact' of facility time and expertise associated with sport specific infrastructure exposure.

Athlete level quantitative data was collected from an athlete sample of 140 hockey players; 20 athletes for each of seven stages of the LTAD model. Analysis revealed three themes consistently across all stages of LTAD: significant pre-post differences in mechanical literacy; confidence; and physical literacy gained as a result of exposure to HIP.

Combining and interpreting both qualitative and quantitative findings has provided a framework to assess the sport infrastructure-athlete connection. The greatest influence in understanding sport specific infrastructure and expertise occurred in Year 1 of the HIP when the novelty and impact of the program was high. Participants and stakeholders recognized the benefits of HIP early in an athlete's development and the influence of an integrated approach to mechanical and physical literacy seen consistently throughout the stages of LTAD. While this study focused specifically on ice hockey, research outcomes strongly support the value of sport specific infrastructure programs which emphasize the acquisition and development of fundamental skills, such as skating mechanics, as a part of athlete development at all stages.

Policy Implications

Where enhancing sport participation is concerned, this research project has three major implications:

1. Alternative infrastructure (e.g. Skate treadmill training) is as an effective way to teach, learn and train "FUNdamentals"

The Canadian Sport Centres have called skating one of the "FUNdamentals" of LTAD in on-ice sports. As noted above, most ice hockey stakeholders believe that even young children, given quality instruction, can acquire confidence and learn proper skating mechanics and technique on the skate treadmill.

2. Skate treadmill training as an alternative to scarce and expensive ice time

Several interviewees noted that ice and ice time are scarce commodities in many communities. One of the advantages of the HIP is that it is the only off-ice mode of training that allows actual skating, thus circumventing the need for ice and ice time. Additionally, skate treadmills are considerably less expensive to build and maintain than ice surfaces, and take up far less space. As a result, skate treadmill training can be an attractive solution to issues associated with access to ice.

3. The need for accreditation/certification of instructors

One of, if not the, major benefit of the HIP noted by stakeholders was the skating-related knowledge and expertise of HIP instructors – knowledge and expertise that is necessary to benefit from the training of what Hockey Canada calls the most important skill in ice hockey. Related to this, several stakeholders mentioned the range of instructor quality associated with the "plethora" of commercial hockey training resources that exist today. Many suggested a need to accredit or certify instructors so that all stakeholders can have confidence in, and benefit from, available coaching and instruction. Both the Ontario Minor Hockey Association³ and Hockey Canada⁴ emphasize the need for certification and continuing education of coaches.

Next Steps

Results of this study support the development of fundamental movement patterns or mechanics of motion beyond the Active Start and FUNdamentals stages. Mechanical literacy has the potential to significantly enhance sport performance at all stages of development if

86

¹ Canadian Sport Centres. (2006). *Canadian Sport For Life Through Long Term Athlete Development:*Resource Paper V2, p. 21. Retrieved September 29, 2010, from

http://www.canadiansportforlife.ca/upload/docs/LTAD%20Downloads%20Eng/Canadian%20Sport%20for%20Life%20Resource%20Paper.pdf

² Hockey Canada. (2008). Long Term Player Development Plan. p. 12.

³ Interview with OMHA administrator.

⁴ Hockey Canada. (2008). Long Term Player Development Plan.

integrated appropriately. It is recommended that a model of mechanical literacy be built and superimposed on the current model of physical literacy throughout all stages of LTAD.

Skating ability has been called the most important skill in the sport of ice hockey. However, the transfer of skating-related research knowledge to fundamental development of athletes' skating skills is lacking and neglected. To ensure ongoing development of the game of ice hockey, it is imperative that we develop effective tools for teaching, training, tracking and /monitoring fundamental movement skills such as skating mechanics. Hockey Canada has made positive initial steps in regulating/accreditating facilities and programs.

Provide a template for like-sport (e.g. women's hockey, ringette, sledge hockey, special needs games) organizations to include alternative infrastructure and expertise.

Key Stakeholders and Benefits

- International Hockey Federation (IHF)
- National Hockey League (NHL)
- Hockey Canada
- Provincial Hockey Associations
- Local Minor Hockey Leagues and Associations
- Ringette Canada
- Provincial Ringette Associations
- Local Ringette Leagues and Associations
- Coaches Association of Canada (CAC)
- Canadian Sport For Life (CS4L)

87

⁵ Hockey Canada. (2008). Long Term Player Development Plan. p. 12.

⁶ Kalchman, L.. (2010, May 28). Pilot projects first step toward hockey camp regulation. *thestar.com*. http://www.thestar.com/sports/hockey/article/816271--pilot-projects-first-step-toward-hockey-camp-regulat

LU, CHUNLEI

Brock University

M. McGINN, J. SYLVESTRE

SRG 2006

Chinese-Canadians' Perspectives on Health & Sport Participation

Project Summary

The main objective of the project was to investigate Chinese-Canadians' perspectives about health and sport practice.

Overall, participants reported both positive and negative changes in their perspectives and practices related to health and sport participation after immigrating to Canada. They experienced both cultural conflicts and integration. Multiple factors influenced their sport participation. For many, their sport practice seemed to be influenced by Chinese cultural values. Culturally appropriate policies and programs are critical to increase sport participation for this largest visible minority group in Canada.

Research Methods

The study involved qualitative interviews and quantitative questions from 100 first-generation Chinese immigrants, aged 25 or above, residing in one of four urban centres: Toronto, Vancouver, Halifax, or St. Catharines. A mixed sampling strategy combined purposive sampling, snowball sampling in Chinese-Canadian communities, and open calls.

Research Results

Participants generally perceived sport as a component of a healthy lifestyle and a means to maintain and enhance health.

These Chinese-Canadians experienced mixed changes over the course of immigration: many reported increases in sports and physical activity (e.g., because they had more time and resources) while others reported decreases (e.g., because they lacked friends and access to preferred activities).

Factors that contributed to positive changes in sports and physical activity included: encouragement from friends, colleagues, and media; available resources (e.g., facilities, equipment, natural environment); affordable costs; easy access; enhanced awareness about health; and more spare time in comparison to China.

Common sports practices included ping pong, badminton, tennis, basketball, soccer, golf, swimming, and cycling. It seemed that ping pong was the preferred ball game, but participants regretted that it was not better respected in Canada.

Most participants recommended newcomers engage in sports and physical activities to attain benefits in terms of physical health, as well as mental health (e.g., getting out of the house, making friends, releasing stress), integration into society, and meaningful leisure. They also encouraged newcomers to take advantage of community resources (e.g., free or low cost programs, facilities) and natural environments (e.g., parks, wilderness) in Canada. Other suggestions for newcomers included trying to do fun and suitable (e.g., age or ability appropriate) sports and physical activity, do sports and physical activity with friends or in groups, and adopt Canadian sports (e.g., skating, skiing, hunting) while maintaining Chinese preferred ones (e.g., taijiquan, ping pong).

The sources of information about sport and physical activity included (in decreasing order of importance): (a) media (e.g., magazine, books, TV, internet); (b) friends, relatives, schoolmates, and colleagues; (c) medical professionals; (d) environment such as surroundings, community centres, and general society; (e) school education; and (f) family, including parents and siblings.

There seemed to be cultural differences and conflicts between Chinese-Canadians and mainstream sports and physical activity. For example, participants tended to adopt traditional Chinese philosophies or values, such as *following nature* (顺其自然), yinyang harmony (阴阳调和), and *golden mean* (中庸之道). Associated cultural understandings about health, sport, and the meaning of life led these individuals toward soft and mild-moderate sports (see those commonly practiced sports above), rather than strenuous, extreme, or adventurous activities (e.g., hockey, triathlon, skiing, sailing, or mountain climbing). They thought the goal of sports and physical activity should emphasize being healthy, not necessarily being strong.

Many Chinese-Canadians are not aware of sports programs and resources available in communities, or provided by government agencies or services.

Limitations:

The results are specific to Chinese-Canadians and may not generalize to other ethnocultural groups.

Sport participation was just one emphasis within a larger study; other results relate to physical activity, fitness, lifestyle, and health.

Policy Implications

Policy-makers should be aware that current sport policies are primarily based on Western cultural values (e.g., the more, the better; competitiveness) that may not be shared by all ethnocultural communities. Culturally appropriate sport participation policies should be developed to serve the diverse needs within Canada's multicultural society.

There is a need to develop sport programs and facilities (e.g., table tennis, badminton) in response to culturally appropriate sport participation. Culturally appropriate sport and recreation facilities and park design should consider growing needs among major minority groups.

Sport organizations at all government levels for sports such as badminton and table tennis should target the Chinese-Canadian community to provide a variety of opportunities for their participation in favoured sports. Other sport organizations such as boccia, bowling, curling, judo, karate, taekwondo as well as disabilities sports (e.g., goalball, wheelchair basketball) should make themselves visible and promote their sport programs in Chinese-Canadian communities because these sports are well aligned with Chinese cultural values.

Media, medical professionals, and community centres, as important factors for Chinese-Canadian sport participation, should make efforts to encourage Chinese-Canadians to participate in sports for health and leisure. Language-specific information (e.g., online sources, brochures, pamphlets) should be available for major minority groups to promote programs and services for sport participation.

Next Steps

There are still some unanswered and new questions regarding Chinese-Canadians' sport participation:

- The present project identified some increases and some decreases in sport participation among Chinese-Canadians: who are those that reported increases or decreases in sport participation, and what factors contributed to these changes?
- What are the differences in sport participation before and after 10 years of immigration among Chinese-Canadians? (Note: Ten years is considered a milestone in research on immigrant health.)
- What about sport participation for second-generation Chinese-Canadians? Are second-generation Chinese-Canadians more integrated into mainstream sport participation patterns as a result of increased acculturation compared to first-generation Chinese-Canadians?
- What are the specific barriers or challenges to Chinese-Canadians' sport participation? How can these barriers or challenges be addressed in order to increase their sport participation?

- Does the framework developed in the present project (e.g., changes and causes
 of changes in sport participation after immigration, factors and sources of sport
 participation) apply to sport participation for other ethnocultural groups? What
 strategies help to increase sport participation for other top immigrant groups in
 Canada (e.g., Indians, Filipinos)?
- How does sport participation help immigrants' acculturation and integration in Canada?

Key Stakeholders and Benefits

- The following sectors, organizations, or groups may benefit from the findings:
- Sport Canada
- Ontario Ministry of Health Promotion & Sport
- Sport associations at all levels (national, provincial, municipal): boccia, bowling, curling, judo, karate, taekwondo, disability sports (goalball, wheelchair basketball).
- General media
- Medical professional groups
- Community centres

The benefits from the findings for the sectors or groups listed above will help develop more culturally appropriate sport policies and programs. Further, they can target and serve Chinese communities—the largest visible minority in Canada, especially in the two urban centres, Toronto and Vancouver. Eventually more Chinese-Canadians will be attracted by and get involved in those programs that fit their needs.

MAIR, HEATHER

University of Waterloo

SRG 2006

Curling and Community in Rural Canada

Project Summary

The main objective of this research was to understand the role of curling clubs in rural Canadian life. It aimed to deepen and broaden our understanding of the role of leisure and sport settings in community development by studying the rural curling club. Specifically, it sought to: (1) explore the functions of these clubs as sport and community places over time; (2) examine the roles the clubs play in rural life and assess the challenges and opportunities they face; (3) observe and document the club year-round as well as community-based activities in the facility; (4) understand how these functions and meanings differ across communities and the country; (5) determine how rural curling clubs are community spaces to be understood within the broader contexts of rural and social change; (6) develop and refine new research approaches designed to best capture the complex interactions in these sport settings.

Thus far, it can be concluded that curling clubs are central places in small communities and have some combination of the following six characteristics:

- 1. Sources of regular physical activity and life-long social connections
- 2. Part of community identity
- 3. Sites of pride, history, commitment and ownership
- 4. Founded upon volunteerism
- 5. Platforms for valued family time and activity
- 6. A gathering place' for the community

Research Methods

Because these are small clubs and are located in very small communities, an ethnographic approach was undertaken. The researcher travelled to two clubs in each of the ten provinces (with an additional two clubs in Northern Ontario) and spent a bonspiel (generally a multiday, multi-team tournament) weekend at the clubs. Graduate students were often present and part of the research team. Where possible, the researcher also travelled to the clubs during the summer (off-season) months to meet with key players (e.g. clubs presidents, board members, etc.) and to get a sense of what role the club plays in the community when curling is not taking place. During the winter, the research team spent entire weekends in the club, taking part in social events and aiming to have as many meaningful, informal conversations with participants as possible. In all, it can be estimated that a total of approximately 600 hours were spent in the clubs over the course of the research (average

time in the clubs was about 30 hours). In addition to conversations, the research team carefully observed the behaviors and activities of the curlers. Notes from conversations and observations were recorded and were later analyzed. Photos and later video recordings were also made on site and proved to be very helpful sources of information during data analysis.

Research Results

Specifically, the findings can be grouped as answers to four main questions: Why do people try curling; why do they join (and remain club members); what challenges do the clubs face; and how are clubs attempting to meet these challenges?

It is clear the primary factor influencing an individual's decision to join a curling club is a social connection. Indeed, nearly all participants listed family, friends and co-workers as primary influences. Other reasons cited by participants included: school and youth involvement; change in family status that provoked a desire for a new activity (e.g., kids leaving home, spousal death or divorce, moving to a new community); and a desire for winter-months physical activity.

Curlers join and remain members of clubs because of the following benefits: Contributes to their health and well-being; allows them to enjoy regular physical activity at varying levels of experience and ability; provides volunteer and leadership opportunities; fosters a sense of ownership in the club; and allows for community engagement.

Challenged facing clubs relate primarily to economic issues, in particular, a lack of stable economic and volunteer burn-out. Other challenges included: the effects of a lack of diversity within the sport; a growing divide between elite/professional and amateur curling (what is referred to as competitive vs. social curlers); and the resulting tendency for sport organizations (including the Canadian Curling Association) to provide uneven support for clubs (high performance camps vs. grants for small repairs and upgrades).

Many clubs are working hard to address these challenges with innovative programs and strategies, including: maintaining affordability; identifying as a 'life-long sport' (e.g., from 'Little Rocks' for youth to Masters Curling); developing coaching and leadership capacity; responding to modern participant needs with flexible memberships and league play; promoting the social benefits of club membership; and updating the club's former image (closed, elite, white, male-dominated spaces) to socially diverse, community places.

A serious limitation was the researcher's lack of French-speaking abilities, which meant the clubs visited in Quebec were generally bilingual and not solely Francophone. Further, due to cancellations, two clubs identified for research and visited in the off-season ceased to be available for research during the winter term.

Policy Implications

In general, local curling clubs have been highlighted as sites of important physical activity with tremendous potential for social benefits. To achieve the benefits, clubs need stable and dependable investment and access to resources to help them continue to build capacity and maintain infrastructure. A successful and thriving curling club is one at the centre of both sport and community life. As such, the following should be supported and resourced: Youth Development; family-friendly infrastructure and programming; and capacity to understand and meet the needs of the modern adult participant, seniors and people with challenges and non-traditional curlers.

There are three steps sport policy makers can take to support curling clubs: 1) Support curling with the same level of financial (federal, provincial, municipal) afforded to other sports (e.g. hockey); 2) Increase exposure to curling by implementing programs in schools across Canada; and 3) Provide development funds to national or provincial curling organizations and to local clubs.

Next Steps

All research opens new doors of inquiry and this project has been no exception. One of the outcomes of this project is the development of a project focussing on the challenges of diversity and access facing urban clubs. The study focused deliberately on small communities because it was thought that the role of the club in the community may be more easily visible on a smaller scale. However, there is certainly room to look at bigger clubs in larger communities. Other questions that stem from this project include: What is the state of urban curling clubs and what challenges are facing them; What is the image of curling in the minds of new Canadians and how can we increase its appeal; How can national sport organizations communicate more effectively with, and respond to the needs of, their grassroots members; How can those concerned with sport development and participation balance the needs of high-level/elite sport development with those of everyday Canadians; How are (particularly winter) sport clubs working to meet environmental challenges with facilities such as hockey and curling rinks?

Key Stakeholders and Benefits

Canadian Curling Association; All provincial and regional curling associations; The Curling News; The World Curling Federation; Federation of Canadian Municipalities

MORDEN, PETER A.

Concordia University

D. ISRAEL

SRG 2006

Adolescent Leisure Opportunities in a Changing Community (2011)

Project Summary

The context of leisure is especially amenable to fostering the acquisition of developmental assets and the development of. However, the issue of access to developmentally significant opportunities becomes problematized as inner-city areas are transformed by the process of gentrification, which may disrupt existing usage patterns and which alters the dynamics of supply and demand at the community level. It is not clear to what extent community "revitalization" projects are considered improvements by all members of the community, and there is scant research about the impact of the process on pre-existing residents, specifically their leisure behaviour. Additionally, youth perspectives are seldom sought by researchers examining gentrification, although appealing to such perspectives has been advocated for social research, particularly research with policy implications. The objectives of this research are to examine the extent and distribution of socioeconomic changes within a gentrifying community and to elicit the views of youth pertaining to their perceptions, experiences and use of the community leisure infrastructure.

Research Methods

The first step in this research has been to assess the degree and distribution of gentrification within the community of Little Burgundy, an approximately one square kilometre area of Montreal, Quebec. Whereas Little Burgundy has been identified as prototypical of gentrification, there has been scant attention paid to intra-community changes resulting from the gentrification process. Data from the Canadian Census were used in order to paint a socio-economic profile of the community and to examine differences as may be evident between the four census tracts of which Little Burgundy is comprised.

The second step in the research process involved semi-structured interviews conducted with over four-dozen adolescents residing in the community. Interviews covered adolescents' perceptions of the community and their use of community leisure resources, daily time-use, leisure companions, and impressions about community change. Interviews were recorded, conducted in either English or French, and their duration ranged from 20 to 90 minutes. Data coding procedures were used to derive a

wide variety of descriptive categories as well as broad themes which best captured the experiences and meaning of the community, its leisure resources, and its development over time for these adolescents.

Research Results

Initial analyses sought to examine the socio-demographic evolution of Little Burgundy over the quarter century between the 1981 and the 2006 Canadian Census. Of particular interest were changes in population, household income, linguistic make-up, and the proportion of youth under 20 residing in each of the four census tracts within Little Burgundy (67, 68, 77, and 78). Demographic changes have been previously reported but, in short, community change along a number of dimensions has not been uniformly distributed across Little Burgundy. Indeed, from the relatively similar tract profiles in 1981 there have developed two areas of marked contrast, represented by tracts 68 and 78, and another two tracts that have developed between these extremes. While tract 78 has seen an influx of wealthy residents to occupy converted and built accommodations, tract 68 is distinctly more impoverished, ethnically and linguistically diverse, and has far greater proportion of youth in the area than in all other tracts.

Given the elevated proportion of youth and the concentration of disadvantage in tract 68, it is here that community leisure provisions would seem of greatest need and also of greatest potential benefit. The perceptions of youth from tract 68, and their use of community resources, are highlighted below.

Youth within this area were generally quite positive about Little Burgundy overall as well as the community leisure affordances: It's a nice neighbourhood. Like, the people are nice, people are friendly, you have the basketball court right there. You can just come outside and walk around a chill. So, it's a good area. That said, youth seldom indicated use of any of the leisure resources in Little Burgundy that were beyond tract 68 and, in certain cases, indicated that such areas were largely ignored. Of paramount importance to these youth was the park located within this tract, one of the two main parks in Little Burgundy: It is very attractive for the youth and the community. A lot of kids go there because it is... the closest place to the centre of the community and that's where we get together—everybody coming and going because it is, like, in the middle. Although most frequently mentioned as a favourite place, the park had its detractors, as well: The thing is that a lot of teens go there that have a bad influence, so... It is mostly between four and five [o-clock] that they start to come... after those times... when I go the park I am scared because you never know what can happen.

Youth from this area also mentioned their reliance upon not-for-profit organizations in order to occupy their free-time and also serve their leisure needs. Indeed, such community organizations were reported as "favorite" places by a substantial proportion of tract 68 youth. Of significance, as well, were that such community agencies provided financial support to youth with limited means in order to participate in leisure activities:

They helped me out this year to pay my fees for basketball. People are nice here, I like to spend my time with the advisors and people.

The youth in the area certainly noted the economic changes in Little Burgundy that have left tract 68 largely unaffected—both in terms of income growth and also infrastructural improvements: All the stuff that is coming in, all the condos and everyone is pushing people out of Burgundy... like, most of the people here, most are on welfare, so they can't really pay what they have to pay. Some expressed concern that resources that they valued may also be affected: They may destroy some places and build other things. Maybe they might do that. Or here [community youth-serving organization], for example, maybe they might break it down to build condos or something... I don't think they should do that because it is a place that you like to go.

Within the context of a Little Burgundy that has seen drastic though unequally distributed economic and social change over the 25 years examined here, adolescents within the most impoverished and socially troubled area of the neighbourhood respond relatively favorably to their environment. Perhaps they have developed resilience in the face of adversity due to supportive adult networks and opportunities for the constructive use of time, and some teens in this study have alluded as much. However, with the prospect of further gentrification to come, it is essential that "low-income residents have a say in their neighbourhood's future" (Formoso, Weber & Atkins, 2010, p 399) and no constituency needs a voice more that tract 68 adolescents.

Policy Implications

The findings suggest the crucial importance played by the developed sports and leisure infrastructure for positive adolescent development. However, the findings also suggest that gentrification does not benefit all youth residents equally due to the asymmetrical patters of economic and social development. It is, thus, imperative to consider the needs of all residents when considering infrastructure renewal and development, program offerings, and community access to resources. It is also important to seek from youth information about the range of barriers and constraints that may limit their participation is developmentally-appropriate leisure in the community.

Next Steps

The findings reported here suggest many research questions and fruitful avenues for research engagement. Examples include an in-depth analysis of leisure policy as it pertains to youth engagement at the community level; for instance, what policies serve to encourage or inhibit youth use of community spaces and places? Similarly, systematically assessing the needs of all community adolescents with respect to leisure programs, facilities, and green spaces may help disclose differing patterns of use across segments of the youth population of relevance to leisure planning and policy. Lastly, an assessment of the degree of coordination between the private, not-for-profit, and public sectors would facilitate the equitable development and distribution of leisure goods in areas undergoing gentrification.

Key Stakeholders and Benefits

- Ministère de l'Éducation, du Loisir et du Sport du Québec
- UQTR L'Observatoire québécois du loisir
- Sport et Loisir de l'Île de Montréal
- Association québécoise des professionnels en loisirs

O'REILLY, NORM

Syracuse University

I. BERGER, T. HERNANDEZ, M. PARENT, B. SEGUIN

SRG 2006

Urban Youth Engagement in Sport: Process, Access and Participation

Project Summary

This research examines participation and engagement with sport among Canadian urban youth and the resulting impact on athlete development, sport organizations, businesses, sponsors and Canadian society. Particular emphasis is put on the city of Toronto and pool and rink sports. There are four research questions:

- In what ways and how deeply are young urban Canadians engaged in sport?
- What is the engagement process?
- What capacity exists to facilitate, support and enhance engagement?
- What roles, responsibilities and benefits accrue to business, government and non-profit organizations?

Deep Capacity and Acces **Engagement Facilities** HP **Transformational** Technical Competition Processes Expertise Sport and/or Organizational **Club or League** Identification Support Mechanisms Regular Participation Engagement with Sport Spectator Active Video Drivers of Engagement

Research Methods

This project involved an extensive array of secondary

research efforts and primary data collection protocols. Secondary research included a literature review and cohort analysis of Canadian Youth 1992 to 2005 using the Statistics Canada General Social Surveys (1992, 1998 and 2005). Approximately 10,000 respondents completed the sport and physical activity module of the GSS.

Primary Research included two netnographies (written accounts of online cyberculture, informed by the methods of cultural anthropology) of a number of online forums to better understand and identify the important factors driving or inhibiting youth sport participation. Water sports facilities and arenas in Toronto, Montreal and Sudbury were observed to determine the daily and regular user habits of young people. The researchers concentrated on participant ethnicity, socioeconomic level, mode of transportation to the site, family involvement, types of activities and activity level. Interviews focused on youth athletes, non-athletes and youth in schools.

Experimental intervention included three surveys and one intervention with 123 students from Grades 4 to 8 attending three public primary schools in Sudbury, as well as their parents. Students were divided into three groups: active household, moderately active household and inactive household based on a first survey. A second survey focused on youth attitudes and behaviour in relation to physical activity. Following the second survey, the youth were randomly divided up into two groups: one group received an information kit on physical activity and the other, an information kit on diet. A third survey, identical to the second, was distributed after the intervention to determine if there had been a change in the level of engagement and attitude toward physical activity and/or in the level of family support.

The questionnaire for a large sample survey ("National Survey of Urban Canadian Youth" (n=3003)) of youth in Toronto, Vancouver and Montreal was built from all previous studies and literature.

A still ongoing spatial analysis of sport facility infrastructure in the city of Toronto will layer the location of facilities, clubs and other important infrastructure in relation to various demographic factors, as well as the results of the other methods, to provide a geospatial assessment of Greater Toronto.

Research Results

The literature review and cohort analysis revealed that urban youth sport participation was determined by six underlying factors: household context, parental education, community context, social/gender, self-perceptions, and competing behaviours. All these drivers discriminate between adolescents who do and adolescents who do not participate in sport. Notably, the cohort analysis also found that the younger generations are decreasing their participation rates at higher levels than other cohorts.

The interviews, netnography and experimental intervention allowed for deeper understanding of these factors at many levels. For example, youth interviews highlighted eight drivers of sport participation: (i) parental/siblings influence, (ii) coaches, (iii) socioeconomic status of the family, (iv) technical skills, (v) geographical context, (vi) personal attributes (identity aspect) and skills (perception of strengths vs. weaknesses), (vii) friends, and (viii) school as an initiator into sport (but also an obstacle to great engagement). Notably, gender and ethnicity did not appear to be as important as previous thought (literature). The interviews further made three important comments vis-à-vis the process and strength of engagement: First, the processes of youth sport participation depend on the interaction with youth's social surroundings. Second, the strength of youth engagement in sport is influenced by the level of competition and degree of family involvement. Third, parental involvement may be the most important of all drivers. Importantly, the interviews revealed that youth participate in sport via one of three processes: social (family, friends), institutional (school,

club), identity (self-perceptions, ego, etc.). There is a difference between these processes for youth who are doing sport for recreation and those who are high-performance athletes. The netnography highlighted that youth lacking a supportive environment are most in need of policy support vs. those in middle-class, two parent families. In addition, analysis using GSS data related to 'household context' reinforced this driver as a critical — if not the most important - element in adolescent sport participation. Households of intact families, with higher than average incomes, in which several household members participate in sport, define an ideal that is not available to all adolescents.

Early analysis of the large sample survey suggests that those in need of support in sport participation are those who do not match the drivers of sport participation noted earlier. Indeed, the profile of the current sport participant suggests that effort should be expanded to target and encourage adolescent females, over the age of 17, from Central Canada, living with less-educated parents, in a lower income, non-in-tact family, with a father born in Canada and without other household members who participate, coach and attend amateur sporting events.

Policy Implications

This research brings forward a number of important recommendations to governments at the level of policy and the level of programs. The most important policy recommendation, clearly, is the need to develop policies that target the portion of the Canadian population who requires support. The middle-income family, with two parents living at home, and a decent income does not need help. Their kids are largely active. It is in fact the single mother or the widower, living in a condo, with limited income that really needs the support. Their kids are largely not active. This is emphasized by the cohort analysis which found that youth sport participation declined at a significantly higher rate for households with incomes of less than \$40,000 per year versus those households in the \$100,000 per year category. The income divide clearly indicates the need for fiscal (government) support of lower- and middle-class income earners' children's participation. Government-sponsored spaces at different recreational and competitive levels in organized sport for these families' youth may have a greater impact.

Next Steps

Two important steps remain in the analysis of all this data: geospatial analysis of facilities and further data analysis of the large sample survey.

Key Stakeholders and Benefits

There is a need for policy makers and investors in grassroots sport to target resources at participants not in 'supportive' environments and/or 'ideal' households. These organizations include governments, foundations, sponsors, COC, and NSOs.

Organizations interested in increasing participation rates should act to overcome structural challenges to capitalizing on the large potential pools of participants.

Health promoters should take note that younger generation sport participation rates are decreasing rapidly. Policy should focus on developing active lifestyles among young adults by targeting key messages at schools, teachers and school boards. There is also a need to link sport development objectives to healthy living messages targeting girls.

Finally, there is a need to consider youth culture/subcultures (i.e. social networking and competing screen interests) in program planning for adolescents.

SAFAI, PARISSA

York University

SRG 2006

The social determinants of athletes' health: Understanding the relationship between health and high performance sport

Project Summary

Researchers are beginning to pay greater attention to the connections and contradictions between sport, health and healthcare. Despite the conventional wisdom that greater participation in sport and physical activity enhances health and the quality of life, more and more evidence points to the ways in which sport participation is not always healthful or beneficial. Nowhere is this more evident than for athletes participating in high performance sport. The ideology of excellence within elite sport demands the professionalized and scientifically calculated pursuit of the linear record on the world sporting stage which in turn demands, on the part of the athlete, the development of levels of disregard for the body in the pursuit of sporting excellence. Although our understanding of athletes' immersion in sport's "culture of risk" is growing — a culture that sees the unquestioned acceptance, production and reproduction of health-compromising norms (e.g., pain/injury tolerance, dangerous dieting practices or the use of performance-enhancing drugs), there has been a relative absence of research exploring other social, economic and political determinants of athletes' health and wellbeing.

There is extensive national and international research documenting the ways in which social determinants of health (SDOH) influence the health of individuals and communities and are directly related to the ways in which resources are organized and distributed among the members of a society. SDOH impact and influence participation in sport and physical activity and, in turn, are impacted and influenced by, in varying degrees, participation in sport and physical activity. This study is interested in examining the material conditions of athletes' lives, as structured by the Canadian sport system and Canadian sport policy, and the ways in which those material conditions frame and impact their health and wellbeing. In other words, the structure of the Canadian sport system, as guided by sport policy, frames the production of high performance and the health-compromising realities for sport participants. This project investigated the social determinants of high performance athletes' health in Canada and the material conditions that contribute to or detract from athletes' health and wellbeing. The foci of the project included: 1) exploring athletes' lived experiences with their health and wellbeing in relation to the material conditions of their lives; 2) studying the incidence of compromised health among athletes, particularly those participating in representative high performance sport; 3) constructing and administering a quantitative bilingual survey questionnaire on the social determinants of athletes' health; and 4)

developing a framework of the social determinants of health (SDOH) for athletes at the pan-Canadian level. At a theoretical level, the first objective of this project was to critically analyze and bring into focus the ways in which the material conditions of being an athlete, particularly in high performance sport, influence one's health and wellbeing. The second objective was to identify the ways in which the high performance sport system and, by implication, the state structure mediates the material conditions of athletes' lives and protects or endangers their health and wellbeing. Finally, we endeavoured to situate athletes' health and wellbeing within broader discussions of athletes' lived experiences, and contribute to a growing body of knowledge that theorizes and contextualizes the relationship between sport and health in Canada.

Research Methods

This three-year project employed both qualitative and quantitative research methods. Qualitatively, the project involved in-depth, semi-structured interviews with athletes. The qualitative portion of the project also includes some documentary research on relevant federal and provincial/territorial sport policies in relation to the material conditions of athletes' lives. For the quantitative aspect, the key activity was the development and administration of a bilingual survey questionnaire on the social determinants of athletes' health. The bilingual survey questionnaire was distributed cross-country to athletes registered with provincial and national sport organizations.

Research Results

Results from the qualitative and quantitative portions of the study indicate a number of key themes: that health is a relative concept among athletes and their parents; that many athletes rely, often heavily, on others for material support; and that there remain barriers to participation in high performance sport particularly with regard to socioeconomic status. Contextually, a number of social forces within and outside of high performance sport work to perpetuate the inaccessibility of sport for all including: the whittling of public budgets for sport/recreation facilities, programs and services; the continued focus on downstream, rather than upstream, determinants of health; and the sustained and, in fact, heightened emphasis on performance over health within the high performance sport system as Canada participated in the 2008 Beijing and 2010 Vancouver Olympic Games and prepares for other major international games (e.g., 2012 London Olympics). Limitations with this study focus predominantly on the survey questionnaire and its relative low return rate.

Policy Implications

High performance athletes comprise a unique community within Canada given the work that they do – the term 'work' is underscored here not only in reference to the actual extensive time, costs and labour athletes invest in the pursuit of sporting success. This project contributes to our understanding the social determinants of athletes' health and in understanding the ways in which the Canadian sport system, including Canadian sport policy, frames the material conditions of athletes' lives. Information on the social determinants of

athletes' health has policy implications for sport participation as results indicate that: 1) socio-economic barriers continue to prevent access to full participation for some athletes, even in spite of sport-specific policies and programs to mediate the influence of income; and 2) socio-economic stresses negatively impact the health and well-being of some athletes as well as members of their support systems (i.e., their parents, spouses or families).

Next Steps

At this point in time, data continues to come in from the quantitative survey however next steps include the refinement of the survey tool and another attempt at distribution cross-country. Thematically, it will be important to map the results from high performance athletes to changes in sport programming at community levels as community sport is often the first point in the Canadian sport system in which high performance athletes are introduced to their activity, exposed to the development system and begin to interact with others (coaches, teammates, competitors).

SHANNON, CHARLENE

University of New Brunswick

SRG 2006

Understanding Parents' Experiences in Facilitating Physically Active Leisure for their Children who are Overweight or Obese

Project Summary

Parents are key influencers of their children's leisure behaviours. They identify and create opportunities for their child's continued participation in leisure activities including sport. There are a number of factors that affect a parent's ability to support his/her child's participation in leisure activities. Given increasing concerns about childhood obesity and the importance of involving overweight/obese children in physical activity, three objectives guided this study:

- To identify the leisure behaviour patterns of overweight and obese children aged 5 to 16 and their parents;
- To explore parents' experiences with facilitating and supporting their child's participation in physically active leisure;
- To determine whether and in what ways participation in parent leisure education sessions influences parents' ability to facilitate or support their child's engagement in physically active leisure.

The study demonstrated that parents' personal limitations, lack of knowledge about available recreation and sport opportunities, and lack of awareness about their children's leisure interests make it difficult to support their child's ongoing participation in sport and physical activity. Children's negative experiences with sport and active leisure pursuits can also be a strong influence. However, leisure education can help parents by providing them with opportunities to: acquire knowledge about available recreation and sport resources; discover their children's interests; and develop strategies for overcoming various challenges in creating and supporting sport and active leisure opportunities.

Research Methods

Data collection involved parents who had a child who was overweight or obese participating in the University of New Brunswick's Paediatric Lifestyle Management Program (LMP). The Paediatric LMP was a 10-week program that provided education and guidance in the area of health, nutrition, and leisure and physical activity through 3 group sessions and 7 weekly, one-on-one individualized sessions with a paediatric nurse, dietician, and leisure educator. Twenty-five parents (19 mothers, 6 fathers) ranging in age from 32 to 49 participated in the study.

Prior to beginning the program, face-to-face, semi-structured interviews were conducted with one parent from each family that focused on 1) the leisure behaviour patterns of the parent, 2) family leisure patterns, and 3) the leisure interests, behaviours, and experiences of the child who was overweight or obese. Each parent attended between 4 and 7 individualized leisure education sessions lasting 20 to 30 minutes that focused on discussing aspects of the child's leisure (e.g., knowledge about leisure, leisure interests, and barriers to participation) and their roles as facilitators of their child's leisure. All parents were provided with a leisure interest inventory (listing 50 leisure and sport activities) to review with their child in an effort to determine previously unidentified interests. Finally, parents participated in a semi-structured, face-to-face interview the week after they had completed the program. Questions were related to changes that had been made to their own and their children's leisure behaviors as a result of their participation in the education sessions and to their perceived value.

Research Results

At the time they began the Paediatric LMP, children were engaged primarily in sedentary pursuits. In addition, children were not always moving while participating in a sport activity (e.g., serving as the goal keeper in soccer).

Only five of the 25 parents in the study were regularly physically active (3 times per week) at the time they began the LMP. Parents who were not active indicated lack of time and lack of energy as key reasons for their sedentary lifestyles. Mothers appeared to be less active than fathers. Ten parents, all of whom were overweight or obese themselves, identified weight-related health issues (e.g., back or knee problems, joint pain, diabetes) as limiting their ability to be physically active with their child.

Parents' own limitations (e.g., time, ability to pay, energy, skill, unpredictable work schedule, geographical distance from a community and health) affected their ability to engage in active leisure with their children. Parents also had difficulty overcoming children's negative experiences in recreation and sport programs (bullying, exclusion, and inability to keep pace with the other children) that affected the child's desire to continue participation in organized activities.

All parents reported that the leisure education component of the LMP was valuable. Parents indicated that it made them more aware of their children's time use and ways to redirect from sedentary to more active (or developmentally beneficial) pursuits. They also acquired knowledge about active leisure opportunities available within their community and become more aware of activities that interested their children. Most parents reported an increased awareness of their influence on their child's leisure behaviours and the importance of being a good role model. Some parents were confident they had discovered or developed strategies for overcoming some of the barriers they had faced in engaging their child in active leisure (e.g., had developed time management skills; were now aware of free or low-cost programs). Many parents identified making greater efforts to engage in physically active family leisure.

At the end of the program, most parents had either enrolled or planned to enroll their child in an active leisure recreation or sport program. In most cases, limits on the amount of screen time children were allowed each day had been put in place.

Policy Implications

Policy aimed at enhancing children's sport participation may require more consideration of parents' role as the facilitators of children's sport participation. Initiatives that provide opportunities for children to "drop-in" and receive instruction may support parents who want to gauge interest or are not able to commit to a regularly scheduled program. Partner initiatives such as KidSport are critical to reaching those children who most need sport and whose family may not have the financial means. The impact of negative first experiences on continued participation suggests the importance of including, as part of the training of recreation and sport leaders, ways of welcoming, encouraging, and supporting first-time participants. Specific efforts by youth-serving organizations to create safe and supportive environments that lessen incidences of bullying and peer harassment may be an important step to ensuring children's continued participation.

Next Steps

Future research should address the long-term impact of leisure education sessions; overweight and obese children's first-hand perceptions of their experiences with participation in sport and active recreation; and the role of youth serving recreation and sport organizations in protecting children from exclusion and victimization and their management of bullying incidents when they occur

Key Stakeholders and Benefits

The following organizations may be interested in the findings:

- Government of New Brunswick Department of Wellness, Culture, and Sport
- Recreation New Brunswick (and other provincial recreation organization)
- Sport NB (and other provincial sport bodies)
- City of Fredericton Community Services (Recreation Division)
- Town of Oromocto Leisure Services and Tourism
- Village of New Maryland Recreation and Leisure Services
- Fredericton YM-YWCA

STRACHAN, LEISHA

University of Manitoba

Post-Doctorate 2008

Examining Positive Youth Development in Elite Sport Contexts Using Photo Eliciation

Project Summary

Previous research in the field of positive youth development has highlighted the importance of extracurricular activities, such as sport, in developing healthy youth (Larson, 2000, Petitpas et al., 2005). Further, the National Research Council Institute of Medicine (NRCIM, 2002) have suggested eight setting features that are critical to the growth of positive young people: physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, positive social norms, support of efficacy and mattering, opportunities for skill building, and integration of family, school, and community efforts. The presence of these setting features has not yet been examined extensively within youth sport contexts (Perkins & Noam, 2007). Recent research with elite youth sport coaches found the presence and delivery of the setting features within elite sport contexts (Strachan, Côté, & Deakin, 2011). With increasing elite sport participation by children and youth, it is critical that elite sport contexts be explored through examining athlete perceptions to ensure the best possible program delivery. Results point to the 7th setting feature, opportunities for skill building, as a meaningful feature of elite sport contexts. Other highlighted features include physical safety as well as appropriate structure.

Research Methods

Twelve athletes (Mage = 11) were recruited from swimming and gymnastics. These athletes were all invested in their respective sports spending at least 10 hours per week in practice. A photo elicitation methodology was used; this methodology involves individuals taking photographs within a specific context in order to explore the environment in greater depth (Morrow, 2001; Power, 2003). Each athlete participated in three or four separate sessions which have proved to be appropriate with children and youth (Cook & Hess, 2007). The sessions include an explanation of the methodology, taking pictures during a practice, selecting pictures, and speaking to the researcher about their experiences by explaining the photographs taken. The final session was audio recorded and transcribed verbatim for analysis.

Research Results

Athletes described features related to Opportunities for Skill Building as the most meaningful part of their elite sport experience. Interestingly, skill building encompassed a broad range of activities: skill development, cognitive development, and psychological skills development.

Physical Safety and Appropriate Structure were also important to these athletes as they wanted to feel safe in their sport experience and have an understanding that proper progressions were being taught and delivered.

Positive Social Norms and Support of Efficacy and Mattering were often mentioned by these athletes as they understood that they were developing positive values in sport. In addition, recognition was mentioned by several athletes as important in their experience and this was extremely valued.

The support and encouragement of friends as well as having supportive coaches were not mentioned quite as much but were also very valued by these athletes.

Opportunities to Belong and Integration of Family, School, and Community were the least reported by these athletes.

Policy Implications

The first goal of the Canada-Manitoba Sport Development document is to increase the level and range of participation in sport within Manitoba's remote, isolated and inner urban communities, and especially among Manitoba's Aboriginal and new immigrant populations. While special populations have not yet been addressed through this research, results can have an impact on the level and range of sport participation among youth.

Participation in elite youth sport brings about many challenges, particularly with issues of dropout and burnout. A greater focus on the tenets of positive youth development in this context can help to encourage talented athletes to persist in sport while gaining positive experiences within a more deliberate context.

Next Steps

The next steps of this research include examining more of the context in elite youth sport, particularly parents/guardians and their contribution to positive development. More links are needed examining family structure (i.e., siblings), school involvement, and community links within elite youth sport. Further, more diverse populations are important to consider through this research including Aboriginal and New Immigrant youth, athletes with physical disability, and athletes with intellectual disability.

Key Stakeholders and Benefits

The key stakeholders in this research include:

- The Coaching Association of Canada
- Sport Canada LTAD
- Swimming Canada/Swim Manitoba
- Gymnastics Canada/Manitoba Gymnastics Association

SULLIVAN, PHILIP

Brock University

N. HOLT, G. BLOOM

SRG 2007

The Effect of Coaching in Youth Sport in Canada (2010)

Project Summary

This project was designed to examine the impact of coaching on athlete outcomes in youth sport. The research focused on both the perceptions and behaviors of the coach, and assessed sporting and non-sporting (i.e., positive youth development) outcomes of the athletes. To maximize the applicability of results to the Canadian sporting culture, efforts were made to collect data within the three different youth sport streams determined by the Coaching Association of Canada – competitive, community and instructional sports.

Research Methods

A sample of 352 athletes and their coaches (N = 47) participated in this study. Coaches completed the Coaching Efficacy Scale (CES) and Revised Leadership Scale for Sports (RLSS). Athletes completed the Coaching Behavior Scale for Sports (CBS-S) and Youth Experiences Survey (YES). The CES measures confidence coaches have in four interrelated areas – motivation, strategy, teaching technique, and character building. The RLSS measures the frequency of four different coaching behaviors – training and instruction, positive feedback, social support, and situational consideration; and two different decision making styles – autocratic and democratic.

All scales are answered on via close ended Likert-type questions. The CES and RLSS have been supported with respect to their validity, reliability, and psychometric properties. One of the objectives of the research was to validate the YES and CBS-S.

Research Results

The YES and CBS-S were both analyzed for psychometric properties (e.g., internal reliability, factor structure). In both cases and reduced version of the scale was validated.

It was found that there is a significant relationship between coaches self perceptions (i.e., coaching efficacy) and their behaviors (e.g., training and instruction and positive feedback). Further, there were significant relationships between coaches efficacy and their perceptions of their own behavior and athlete assessments of coaching behavior. Finally, preliminary analyses showed that positive youth development may be an outcome of coaching in youth sport.

Policy Implications

These findings may be applicable to coaching education material that is distributed by the National Coaching Certification Program.

Next Steps

These findings may be applicable to coaching education material that is distributed by the National Coaching Certification Program.

Key Stakeholders and Benefits

- Coaching Association of Canada
- National Coaching Certification Program

TAMIM, HALA

York University

C. ARDERN, P. RITVO, P. WEIR, H. BAKER

SRG 2008

Tai Chi (TC) for older adults: improving physical and psychological health and identifying and overcoming cultural/ethnic barriers to participation

Project Summary

Tai Chi (TC), a traditional Chinese exercise, has been shown to have several health benefits. In general, TC is a widely practiced, well received exercise in large populations in China. Such generally positive attitudes towards the exercise result from a long history of practice in Chinese culture. The current literature has identified some factors affecting its use by older Chinese adults but it is still unclear, however, whether these factors are applicable to or consistent across the different ethnicities that characterize Ontario's population. The objectives of the study were to examine and assess the factors influencing multi-ethnic Canadian older adults living in low income neighborhoods in terms of enrolment and adherence to a four months locally offered TC program, and to examine the program's effects on cardio-respiratory fitness and mental health. Results of this study showed that women were more socially motivated to both recruit and participate, whereas men were more focused on initiating physical activity to obtain the subsequent health benefits. The TC program was well attended by the participants who had multiple chronic conditions ranging from metabolic to orthopedic. Even within a group of participants with a range of functional abilities, participants were able to fully engage in and maintain TC practice for the duration of the study. Adherence to the program did not differ between Canadians of Chinese and non-Chinese origin. Furthermore, results of the present study showed that the program was effective in improving physical and mental health.

Research Methods

The study targeted community dwelling older adults in two locations in the Greater Toronto Area of Ontario, Canada; Jane and Finch as well as Dundas and Spadina. These two locations were chosen for their diverse ethnic make-up and their low socio economic status (SES). Eligibility for participation was limited to being 50 years of age and older, residing in the above-mentioned locations and with the medical capability to be involved in an exercise program. Two focus groups (male/female) were initially conducted to identify barriers and promoters to participation in the community based TC program. Information obtained from participants of these focus groups helped identify poster placement in strategic areas in the neighborhoods to actively recruit participants. Participants were exposed to 16 consecutive weeks of TC offered free of charge. The TC program consisted of an average of 6 TC classes

given throughout the week where participants were advised to attend two classes per week. Classes took place at a Toronto Community Housing building and local community centers in each area. A professional TC master facilitated the classes. Each class was 60 minutes long and consisted of 15 minutes of Qigong followed by 45 minutes of Yang style TC. Attendance of study participants was collected throughout study period. Socio-demographic, lifestyle and health related characteristics were collected at baseline. Measures of physical, mental and perceived stress were collected at baseline and at end of study and were compared to assess effectiveness of TC program.

Research Results

A total of 210 participants were recruited for the present study. The mean age at enrolment was 68 and the majority of the participants (80%) were females. The majority had less than primary education (45%) and had an annual income less than \$14,000 (64%). The country of origin of participants included China (35%), South America (26%), Europe (16%), Caribbean (6%), Canada (6%), South Asia (5%) and other. The proportion of participants who reported having arthritis, hypertension, diabetes and depression were 48.6%, 50%, 21.4%, 14.8%, respectively. A total of 18 participants (9%) were using walking provision devices at baseline. Over the duration of the program, 34% attended < 8 TC classes, 21% attended 8-16 TC classes, 15% attended 16-24 TC classes and 31% attended > 24 TC classes. The average weekly attendance for the overall sample was 1 session per week, with no difference observed in the overall average weekly attendance for the Chinese versus non-Chinese groups. Of the 210 overall sample recruited, 27% did not complete the study and hence were lost to follow-up. Reasons for loss to follow-up included health reasons not related to the TC program, leaving the country to visit family, not being available for post TC program data collection and unknown reasons. Not completing the study was not related to any of the socio-demographic characteristics. Results showed that the 16 week program was effective at improving strength, endurance and flexibility as well as mental health and stress perception. These findings are of particular importance since improvements were in the context of real world settings based within lower income communities.

The limitations of the study relate to self-reporting bias and the uncontrolled intervention design such as changes in daily and seasonal physical activities as well as changes in dietary patterns and lifestyle factors.

Policy Implications

It has been assumed that individuals are more likely to adopt and maintain physically active lifestyles if they are able to perform activities that are culturally affiliated with their own. Research concerning TC in Canada is still in its infancy with respect to its potential uptake. For example, some individuals may view the activity as too "foreign". Such ethno-cultural barriers might seriously reduce TC acceptance. Yet, it is apparent from our study that TC is an optimal mode of physical activity for a culturally diverse group of older adults. Furthermore, results of the present study demonstrate that even

with an average weekly attendance of one session of TC per week, significant physical, mental and stress changes can occur. This has significant implications for public health strategies targeting physical inactivity among older adults, as even a modest level of TC activity may contribute to meaningful improvements in health, and can be performed by ambulatory participants at any level of skill. It is an activity that can be incorporated into community programs, senior center activities or senior nursing homes to promote the wellbeing of community dwelling elders. The requirements of TC do not involve expensive equipment and are limited to a good TC master and an available space where the exercise can take place. This relatively inexpensive program could be widely implemented across our aging population and has the potential for considerable public health improvement and potential cost savings to the health care system.

Next Steps

Based on the data collected, the team is currently working on addressing the following research questions; 1) assessing the barriers and promoters for sustained participation in TC, 2) assessing if physical and mental health improvements due to the TC program is different for older adults of Chinese versus non-Chinese origin.

Potential important future studies would include; 1) assessing sustainability of participation in TC exercise over longer duration (greater than 4 months), 2) assessing cost effectiveness of TC programs.

Key Stakeholders and Benefits

- Coalition for Active Living Canada
- Active Living Coalition for Older Adults
- Public Health Agency of Canada
- Health Canada, Healthy Living
- Seniors Association Canada

The benefits are to encourage participation in a safe, low impact, physical activity.

TAMMINEN, KATHERINE

University of Alberta

Doctorate 2008

Understanding and Coping Among Adolescent Athletes

Project Summary

Research Objectives: Participation in youth sport is associated with a variety of positive developmental outcomes among adolescents, however studies of recreational and competitive youth sport contexts have revealed stressors which include not having fun, an overemphasis on winning, conflicts with coaches or opponents, or parental pressures to succeed (Anshel & Delaney, 2001; Goyen & Anshel, 1998; Sirard, Pfeiffer, & Pate, 2006). Researchers speculate that failing to cope with these stressors may lead to burnout and eventually sport withdrawal (Petlichkoff, 1992; Smith, 1986). Thus, by understanding how youth deal with potential stressors, coping may play an important role in improving athletes' experiences in sport and maintaining sport participation rates.

Conclusions: Results from study 1 suggest that the development of coping among adolescent athletes is malleable and is influenced by the athlete's social network and prior coping experiences. Social networks including athletes' parents, coaches, and teammates should be developed by focusing on communication and positive social interactions. By developing social networks and coping skills, youth may maintain sport participation throughout adolescence.

Results from study 2 suggest that learning to cope was an experiential process for adolescent athletes, implying that athletes must gain personal experience in dealing with stressors in order to learn how to cope. Athletes learned about coping by being exposed to multiple situations in their sport and by reflecting on their stressors and coping efforts. Parents and coaches helped athletes learn to cope by creating a trusting environment which facilitated the learning process, and by using specific strategies for assisting athletes in learning about coping. Strategies included questioning and reminding, sharing experiences, providing perspective, and dosing stress experiences to help athletes learn to cope. Parents also initiated informal conversations about coping, while coaches used direct instruction and created opportunities to learn about coping

The results of this research have been published in peer-reviewed journals:

Tamminen, K. A., & Holt, N. L. (in press). A grounded theory of adolescent athletes' learning to cope and the role of parents and coaches. *Psychology of Sport and Exercise*. doi: 10.1016/j.psychsport.2011.07.006

Tamminen, K.A., & Holt, N. L. (2010). A meta-study of qualitative research examining stressor appraisals and coping among adolescents in sport. *Journal of Sports Sciences, 28,* 1563-1580. doi: 10.1080/02640414.2010.512642

Research Methods

Study 1: The purpose of this study was to create an integrated conceptual perspective and to establish 'what is known' about youth sport stress and coping. A qualitative meta-study was conducted of youth sport coping research from 1970-2009. Twelve sport psychology journals were manually searched and six online databases were searched electronically. Weekly automatic database searches were also conducted. Based on inclusion criteria, 17 articles and 3 dissertations were retained. Analyses produced the following themes: contextual and dynamic stressor appraisals, dynamic coping efforts, development of coping, and social networks as assets and liabilities.

Study 2: The purpose of this study was to develop a grounded theory of adolescent athletes' process of learning to cope and the role of parents and coaches within this process. The key research question was "how do coaches and parents influence the development of coping in sport?" Interviews were conducted with 17 athletes (8 females, 9 males, *M* age = 15.6 years) 10 parents (8 mothers, 2 fathers), and 7 male coaches. Interviews were analysed using grounded theory methodology (Corbin & Strauss, 2008). Analyses produced the main category of learning about coping, as well as three categories concerning the role of parents and coaches: creating context, strategies for assistance, and balancing acts. Learning about coping was an experiential process for adolescent athletes, suggesting that athletes must gain personal experience in dealing with stressors in order to learn how to cope.

Research Results

- Athletes' social networks are complex and intricately tied to the appraisal of stressors and the ways in which they cope with stressors. Parents and coaches may serve as assets to helping athletes learn to cope with stressors in sport, however they may also be liabilities in learning about coping (i.e., athletes may perceive parents and coaches as stressors and not as sources of support). Positive interactions with coaches and parents may improve or facilitate athletes' coping.
- 2. Most previous studies have concluded with applied implications that involve helping adolescent athletes build a repertoire of coping resources and/or selecting the coping strategies that are 'tried and true.' The current research also highlights the importance of delivering interventions that focus on athletes' social networks which were found to be both assets and liabilities. Thus, interventions that also target coaches, parents, and even team/peer interactions may be useful for improving adolescents' coping in sport. This issue does not appear to have been widely considered in the literature to date.
- 3. Learning about coping occurred through an experiential process where athletes needed direct exposure to stressors to try out coping strategies (see Figure 1). This was facilitated by exposure to different situations, and by having appropriate social support networks in place to assist athletes' coping. Thus, being exposed to various situations in sport with

- supportive parents and coaches surrounding the athlete may contribute to the development of coping strategies. The current research confirms the idea that athletes benefit from instruction regarding coping; however these findings emphasize the importance of providing athletes with opportunities to try out coping strategies in competitive situations.
- 4. Parents and coaches reported that they attempted to create a context for learning about coping by listening and by monitoring their own reactions when discussing stressors with their child. The context created by parents appeared to influence the extent to which athletes sought assistance from their parents when facing stressors. Family contexts appear to influence the development of adaptive and maladaptive coping among adolescents (Grant et al., 2006; Kliewer, et al., 1996; Lafferty & Dorrell, 2006), and researchers have suggested that coping intervention programs need to address parenting and communication within family environments (e.g., Blount, Davis, Powers, & Roberts, 1991); the current findings support this proposition.

Policy Implications

Exposure to multiple experiences in sport should be supported by information and education regarding the importance of social support in athletes' coping. Parents and coaches should not be left out of interventions, since they are integral parts of athletes' social networks. Education should be provided to parents and coaches regarding stressors and coping among athletes including information regarding potential stressors for athletes, ways of coping with stressors, and adaptive and maladaptive ways of coping. There should be an emphasis on improving communication between athletes and their coaches and parents, with an emphasis on positive social interactions to facilitate the development of coping. Sharing experiences, questioning and reminding athletes about possible ways of coping, providing perspective, and providing opportunities to learn about coping all appear to be practical ways to help athletes learn to cope with stressors in sport. By helping athletes learn to cope adaptively with stressors in sport, they may improve the quality of their sport experiences, thereby reducing burnout and withdrawal. These suggestions are relevant for the Canadian Sport for Life goal of enhanced sport participation and improving the quality of sport for young athletes.

Next Steps

Athletes' perceptions of stressors and use of coping strategies changes with development (Reeves, et al., 2009), and parents and coaches may help athletes learn to cope in qualitatively different ways across stages of development (Skinner & Zimmer-Gembeck, 2009). Future research may investigate the ways in which parents and coaches contribute to athletes' learning to cope at different developmental stages. Understanding how parents and coaches help athletes learn to cope at different stages may help to develop developmentally appropriate interventions for parents, coaches, and athletes.

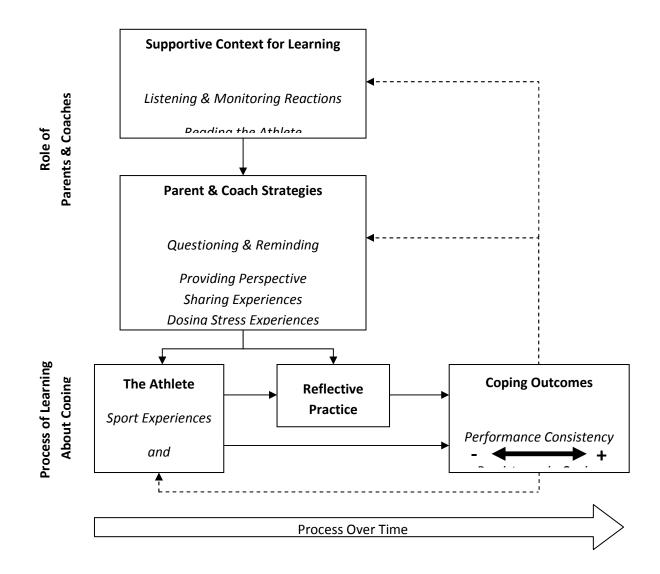
While it is important for athletes to experience potentially stressful situations to develop new coping abilities, parents and coaches must also determine the relative ability of the athlete to cope with stressors. Parents and coaches may adjust their protective practices as athletes develop a repertoire of coping skills. This represents an interesting area of study regarding parent-athlete relationships and the ways in which parents negotiate risks involved in allowing their child to engage in potentially stressful competitive contexts. The question is 'how do parents negotiate their child's involvement in competitive sport?' Future research may include the examination of parental and coach socialization or modeling of coping responses in sport.

Key Stakeholders and Benefits

There appears to be scope for education programs to be distributed through the Coaching Association of Canada, and also through national sport governing bodies to direct information at parents of young athletes.

- Coaching Association of Canada (enhancing supportive coaching environments)
- Sport Canada (encouraging multiple sport experiences for young athletes)
- National & Provincial Sport Organizations
- Academic & coach education programs
- Parents of athletes

Figure 1. A grounded theory of adolescent athletes' learning about coping and the role of parents and coaches.



TRUDEAU, FRANÇOIS

Université du Québec à Trois-Rivières

L. LAURENCELLE, R. LAROUCHE, R. SHEPHARD

SRG 2009

Factors in Adopting Long-term Athlete Development

Project Summary

Purpose: Several studies have reported an age-related decline of physical activity (PA). We examined the impact of four transitional periods—adolescence, the beginning of post-secondary education, entry into the labour market, and parenthood—on the PA of participants in the Trois-Rivières quasi-experimental study. The objective of this project was to identify the contribution of each of these periods to the lifespan decrease of physical activity. A second objective was to verify if a quality daily physical education program could change the impact of these transitional periods.

Findings: These results add to the body of evidence indicating a non-linear age-related decline in PA levels from adolescence to midlife. In our sample, the proportion of "very active" participants (i.e. over 5 hours of PA per week) dropped from 70.4 to 17.0%. A more dramatic decrease was seen on entering the labour market, when the percentage of "very active" participants fell from 55.9 to 23.4%. Moreover, by the age of around 44 years, our experimental subjects (who had 5 hours of physical education per week during childhood) showed no benefit from their PA in adulthood. We conclude that initiatives aimed at further maintaining PA may be warranted during these important transition periods.

Research Methods

A total of 44 women and 42 men aged 44.0 ± 1.2 years were given a semi-structured interview; the frequency and duration of physical activities were examined during each of these transition periods. The subjects had been participants in either an experimental program (5 hours of weekly physical education (PE)) or the standard curriculum (40 minutes of weekly PE) from Grades 1 to 6. The interviews allowed a more in-depth examination of the events that occurred during the transition periods that could have been associated with a modification in PA behaviours. Our sample size also ensures the saturation of data, which, in qualitative studies, determines the point where the addition of new data no longer adds to comprehension of the phenomenon. Furthermore, the control process adopted when analyzing the interviews contributes to the credibility of our analyses.

Research Results

The proportion of "very active" participants decreased by almost 75% between secondary school and the arrival of children. Concomitantly, there was an almost tenfold increase in the prevalence of physical inactivity. According to earlier reports, the decline in PA was not linear; the biggest negative factor was entry into the labour market, when the percentage of "very active" individuals dropped from 55.9 to 23.4%. The influence of each transition is discussed further below.

Transition from primary to secondary school. Although it is difficult to disentangle the respective influences of a change in education system and the onset of puberty, in our investigation over 85% of participants claimed that they were still "sufficiently active" during adolescence. However, many of them had only vague memories of their childhood behaviours.

Beginning of post-secondary education. For those participants who went on to pursue post-secondary education, the percentage of inactive participants increased almost fourfold, while the proportion of "very active" individuals fell by about 15%. Other researchers have also observed a decline in PA during this transition. Many factors might be responsible. Firstly, for many students the need to combine work and academic studies greatly reduces the free time previously available for PA. Secondly, moving to another city for post-secondary studies is likely to reduce PA.

Entry into the labour market. In our study, this transition was associated with the most significant decline in PA. Many participants justified their reduced PA by citing a lack of time as a result of their work. Finally, several individuals reported logistic problems, including, for example, difficulty in getting access to a hockey arena at reasonable hours.

Parenthood. After the arrival of children, almost 25% of participants reported that they were inactive, and 60.1% did not meet the recommended PA level. Such rates are comparable to American data. Many participants suggested they lacked time to be active because of the need to take care of their children. Other researchers have also reported that parenthood is associated with a significant decrease in PA.

Impact of the experimental program on PA behaviour. In the previous follow-up of Trois-Rivières study participants, women from the experimental group were more active than controls when they were 35 years of age. However, our current results suggest that this advantage vanished over the following decade. Thus, it appears that exercise habits in childhood do not necessarily guarantee that individuals will maintain a high level of PA throughout adult life, even though several theoretical models have insisted on the importance of establishing the roots of an active lifestyle during childhood or adolescence. This finding is noteworthy given the importance of maintaining a high level of PA to prevent cardiovascular events, chronic diseases, cognitive impairments and all-cause mortality. The absence of significant differences in PA between the experimental and control groups could derive from many factors. Firstly, the experimental program ended upon entry to secondary

school, which is known to be a critical period in the evolution of PA behaviours. However, in our study, the proportion of "very active" individuals during adolescence was still very high. Secondly, several studies have indicated that most adolescents do not compensate for the cessation of compulsory PE in the upper grades of high school by a spontaneous increase in their PA. Finally, early childhood interventions cannot be successful in influencing adulthood physical activity, if not supported by lifespan interventions to favour physical activity.

Policy Implications

Given the decrease in physical activity and sport participation during life transition periods, focus should be placed on individuals and their environment (workplace, post-secondary institution, etc.) throughout promotion campaigns.

Next Steps

Further research on how to prevent a decrease in physical activity and sport involvement during life transition periods is warranted.

Key Stakeholders and Benefits

- Provincial and federal health and education ministries and departments.
- Post-secondary education organizations.

TRUDEL, PIERRE

University of Ottawa

N. DURAND-BUSH, P. WERTHNER, W. GILBERT, M. CLOES

SRG-RELEASE TIME STIPEND 2006

An Analysis of High School Sport

Project Summary

Among the various opportunities young people have to practise sports, school sports are of particular interest because the ultimate goal of schools is to shape our future citizens. Although school sport has become increasingly popular in Canada, there are very few studies enabling us to assess whether it is achieving its stated mission objective, specifically to promote the overall development of student athletes through sport. An analysis of the data collected over the past three years confirms that (a) all the players involved (administrators, coaches, student-athletes, parents) believe that sport helps impart values and life skills to student athletes; (b) the way in which school sport is structured can affect the transmission of values and life skills; (c) coaches receive little training on teaching values and life skills and have difficulty providing tangible examples of activities they use to do so; and (d) recruiting coaches is a significant problem.

Research Methods

In phase 1, interviews were conducted with school principals (n=13), coaches (n=50), student-athletes (n=20) and parents (n=20). In phase 2, a questionnaire was administered online to survey and gather the views of over 1,100 school sport actors in Quebec (administrators, coaches, student-athletes and parents).

Research Results

All school sport actors (administrators, coaches, parents and student-athletes) believe that this type of sport is beneficial but agree that there is room for improvement. Administrators report perceiving the greatest gap between the ideal situation and what the situation actually is. When we compare the sport structure in Quebec (where student-athletes practise one sport year-round) to that in Ontario (where student-athletes can practise several sports because the season lasts only a few months) we note significant differences in terms of who does the coaching (teachers, parents, student-athletes) and, consequently, the expected effect of sports practice on the transmission of values and life skills. Parents play a supportive role (financial, logistical and psychological), but this role becomes less important in the student-athlete's last year of high school. Interviews with student-athletes revealed that because of the way they are structured, certain sports provide more opportunities for developing values and life skills than other sports. In addition, the opportunity to negotiate

their specific sports activities with their coaches and parents may be an important factor to the global development of student-athletes through school sport. In this study, data was collected through interviews and a questionnaire, which provided the views of the various actors on school sport. It would be useful to conduct field observation studies in this area.

Policy Implications

Describe relevance of research to enhancing sport participation in Canada here. If possible, refer to specific relevant policies and/or programs as well as organizations and/or levels of government (municipal, provincial-territorial and/or federal).

Providing young Canadians with a positive sport experience in school will result in rising rates of sport participation and will help youth develop values and life skills. These two points have been previously raised in government reports.

- Sport Canada (2002; Canadian Sport Policy)
- There is a need to improve the place of sport and physical activity in schools and upgrade the training of coaches.
- Canadian Centre for Ethics in Sport (2003/2004; The Sport we Want)
- School sport functions independently from community sport and the two could be much more closely linked for the benefit of participants and the community.

Next Steps

Although sport can provide opportunities supporting the overall development of children and adolescents, we must maintain realistic expectations regarding the potential of school sport to impart values and life skills. The data indicates that a shortage of coaches leads administrators to rely increasingly on parents or students finishing high school, who often have no coaching training and are probably poorly qualified to use sport as a basis to teach values or life skills. Our initial reaction could be wanting to develop a training program specifically designed for schools but how would coaches respond? How many hours of training would be required to train a coach to teach values and life skills? Could we ask volunteer school sport coaches to put in even more hours? In addition, a strategy focusing solely on coaches would not be adequate because to ensure that school sport can contribute to the overall development of children and adolescents, coaches need the support of administrators, parents and players.

Key Stakeholders and Benefits

- Organizations Responsible for School Sport:
 - Canadian School Sport Federation (CSSF)
 - Ontario Federation of School Athletic Associations (OFSAA)
 - Fédération Québécoise du Sport Étudiant [Quebec student sports federation]
 (FQSE)
- Coaching Association of Canada (CAC)

TRUSSEL, DAWN

University of Waterloo

Doctoral Stipend 2007

Organized youth sport, parenthood ideologies and gender relations: Parents' and children's experiences and the construction of "team family"

Project Summary

This study sought to understand how family relationships, interactions, and values are shaped by children's sport involvement, and the social and cultural context in which their sport participation occurs. The themes that emerged from this study reflect the contradictory nature of organized youth sport, including the strengthening of familial relationships, as well as the tensions and disagreements arising out of divergent perspectives. Emphasis is put on the public nature of parenting in the youth sport context and its relationship to social constructions of being a "good parent". In terms of broader implications, the study emphasizes the close connection between organized youth sport, and changing cultural ideals and practices associated with gender and parenting.

Research Methods

Semi-structured interviews and on-line participant journals (10 days duration) were used to discover divergent experiences of mothers, fathers, and children. Individual semi-structured interviews occurred in the family home. Informal observations and conversations were also recorded while spending time with family members sharing meals and at other informal family gatherings. A purposive sample of seven families (19 children, 7 mothers, and 6 fathers) participated in the study. Data analysis was guided by a constructivist grounded theory approach to facilitate understanding of participants' perceptions and meanings of youth sport participation.

Research Results

Data analysis revealed three major themes: "Understanding Children's Experiences", "Parenting in Public and Private Spaces", and the "Nexus of Family Experiences". From these themes, a core theme emerged reflecting the idea of "Upholding Team Family".

"Understanding Children's Experiences" revealed the intensity of the children's activities and how it had become a way of life for many of them. Children clearly enjoyed the "fun" and social aspects of organized youth sport, and also understood the socio-cultural importance of their participation as it related to living a healthy and active lifestyle. Children's participation in organized youth sport also had implications for their relationships with their siblings in ways that both strengthened and caused considerable tension. For some children, organized

youth sport gave them common interests, regardless of their age or gender that appeared to provide a sense of unity. Yet, for other children, living with a "star athlete", particularly when the "star athlete" was younger, created feelings of tension and inadequacy for the older sibling and a desire to drop-out of sport.

The second major theme "Parenting in Public and Private Spaces" revealed the parents' perspectives on the high cost of youth sport for the family unit (emotional, physical, and financial cost). Yet, organized youth sport was believed to be a highly valued activity. The provision of such opportunities was characterized as a necessary characteristic of being a "good parent". The parents' own beliefs were then used to evaluate other parents (in the community, their spouse, and the grandparents) and their moral worth as a good parent. Observations of the other parents' behaviour in the community, and their level of involvement/support for their children's activities, as well as their behaviour at games, provided the basis for their judgment. Further, parents also expressed a sense of obligation to the sport organizations related to their volunteer responsibilities. The organizational politics were revealed to create heightened tension and frustration within the family unit. The parents' volunteer responsibilities were also seen to shape the parent-child relationship (both strengthen and weaken). The gendered nature of the parents' organizational responsibilities (fathers in highly visible roles, and mothers in hidden periphery roles) and the mothers' primary responsibility for the coordination of their children's activities was also evident.

"The Nexus of Family Experiences" illustrated the intersections of the children's and parents' perspectives. In particular, this theme revealed the complexity of the decision-making processes. On the surface it appeared that the children made their own decisions, but underlying this discourse was a sense of the subtle and not so subtle pressures exerted by the parents. At times, the children were coaxed in a particular direction and this was shaped by parental pressure related to family resources (e.g., time, money), parents' preferences for specific sports, and parents' notion of commitment and "sticking it out". Moreover, underlying pressures by family members, other children, and broader society, as they related to cultural values of gender-appropriate activities, shaped the children's decisions for their sport involvement.

From these three major themes, a core theme emerged reflecting the idea of "Upholding Team Family". Throughout the three major themes, there was an overall sense of organized sport creating a shared family identity and sense of belonging, and at the same time, the significant sacrifices to family life that were made in the creation of this identity. Moreover, the sense of upholding team family was revealed in both the public and private spheres of family life.

Policy Implications

Through education and awareness to youth sport organizations and parents, promote aspects that encourage positive experiences for parents and children:

- 1. Recognition of mandate of youth sport program and appropriate level of intensity. Many parents talk about the long and intense seasons that were often perceived as too much for the recreational level. Thus, families make the decision to limit the number of sport opportunities rather than supporting multi-sport/seasons, and/or drop out of the sport program altogether. Also, significant strain to family life is evident with the numerous "extras" (i.e., tournaments) that require additional financial resources and time commitments.
- 2. Recognition of the high time commitment of volunteers who are often parents of children on the team. This commitment shapes the nature of the parent-child relationship with their other children (often perceived negatively). It also heightens the parents' exhaustion and fatigue, and consequently, is a strain on continuing to support children's active participation. Consider alternate models such as "job sharing" to help minimize the time commitment as well as provide parents with the opportunity to spend time with their other children and family members.
- 3. Educate parents on how youth sport participation can shape sibling relationships. Some children may need to be supported in different programs/activities from their siblings to enhance feelings of being proficient and skilled, rather than live in the shadow of their athletically talented sibling (which for some increases their desire to drop-out).
- 4. Recognition by sport programs that youth sport becomes a venue where the quality of parenting may be judged by other parents. Development of support programs (e.g., formal car pooling schedules) to support families with diverse employment contexts (i.e., shift work, evening/weekend jobs, low-income) that constrain parents' ability to support their children's sport participation.

Next Steps

The present study was limited to the experiences of selected families. Clearly it will be important in future research to capture the experiences and meanings of other families. For example, the families who participated in this study were a fairly homogenous group with two heterosexual parents who were married (with no indication of being a "second-marriage"), and Caucasian. Families from diverse family forms such as co-habiting or gay or lesbian families may reveal diverse perspectives. Blended and single-parent families may also have different experiences related to time pressures and conflicting familial demands. Families from different race and ethnic groups may also attach different meanings to family life and organized youth sport. Further, many of the participants in this present study expressed a clear pro-sport ideology, and this may affect the applicability or transferability of the findings to other families who do not have similar pro-sport values and beliefs.

Key Stakeholders and Benefits

Grass-root community sport organizations such as "True Sport" and other federal/provincial governing minor sport organizations, may benefit from understanding how organized youth sport shapes family life, and consequently, the type and frequency of children's participation.

WATTIE, NICK York University

Doctorate 2008

Relative Age, Recreation Sport Participation and Youth Development (2011)

Project Summary

In both youth sport and education, children and adolescents are grouped into cohorts by using annual age grouping policies, whereby a child must be a certain age by a specified selection date (e.g., December 31st). Relative age describes the fact that children born early in their cohort/selection year (e.g., January) will be *relatively older* - by up to 12 months - than their peers that are born late in the selection year (e.g., December). Research has shown that relatively older youth may be more likely to be selected to youth sport teams, including school sports teams, and also more likely to make it to elite/professional levels of play in some sports (i.e., soccer and hockey). The purposes of the current project were:

- To gain a better understanding of the different factors that might affect whether or not relative age influences recreational youth sport participation among boys and girls. The current project considered the quality (low vs. high) of youths' school environment.
- To explore how sport participation and relative age interact to influence indicators of positive development (i.e., self-perceptions of academic competence, social acceptance, physical appearance, behavioural conduct and global self-worth).

Relative age was only an influence on sport participation among boys in a school with a low quality rating, with relatively older boys more likely to participate. Relatively older boys also reported higher levels of enjoyment of sport and physical education. Relative age was not related to participation or enjoyment among girls in a *lower-rated* school or a school with high quality rating. And relative age was not related to participation among boys in a *higher-rated* school. Interestingly, sport participation was only related to indicators of positive youth development among boys in the *higher-rated* school, where relative age had no influence on participation.

Research Methods

Participants were purposefully sampled from two different schools in the United Kingdom. The first sample was drawn from a school which had been given the <u>lowest</u> possible quality rating (i.e., Inadequate) by government inspection procedures. Youth were 11 to 14 years of age (mean \pm : 12.9, \pm 0.86), and the sample size was 391 (46.3% female). The second sample was drawn from a school which had been given the <u>highest</u> possible quality rating (i.e., Outstanding). Youth were 11 to 12 years of age (mean \pm : 11.70, \pm 0.29), and the total sample size was 206 (48.1% female). Participants completed questionnaires that asked them to describe their participation in sport(s), how much they enjoyed sport, and indicators of

positive youth development (i.e., self-perceptions of academic competence, social acceptance, physical appearance, behavioural conduct, and global self-worth). Demographic and school-related variables were also collected from the schools.

Research Results

Among those in the *Inadequate-rated* school relatively older boys were more likely to be participating in sport(s). Relatively older boys, regardless of whether they participated in sport, also reported higher levels of enjoyment for both sport and physical education (PE) classes. Relative age did not influence sport participation or enjoyment of sport and/or PE among girls. Overall, approximately 32% of youth from this school participated in sport(s). Relative age and/or sport participation did not have an influence on boys or girls self-perceptions.

Relative age had no influence on sport participation among either boys or girls in the *Outstanding-rated* school. Overall, 76% of youth in this school regularly participated in sport, making youth in this school approximately 7 times (OR: 6.98, 95% CI: 4.75-10.26) more likely to participate in sport compared to youth in the *Inadequate-rated school*. Boys, and to a lesser extent girls, who participated in sport(s) had higher self-perceptions (i.e., perceptions of academic competence, social acceptance, physical appearance, and global self-worth) compared to those than didn't participate

Generalizations based on this project should be tempered by the fact that only two schools were sampled, and significant variation between schools may exist. Similarly, this project is only one of the few that has explored relative age among recreational participants and females; as such more research is needed in these areas. Furthermore, future research will need to consider the influence of specific sports on the trends reported in the current project.

Policy Implications

The results of the current project suggest that addressing the influence of relative on sport participation, at least at the recreational level, may not require making modifications to selections dates or annual age grouping policies. Solutions may need to consider wider social trends (such as inequalities in the distribution of resources), and broader non-sport characteristics (such as school environment). Furthermore, any policies aimed at addressing the influences of relative age may need to be gender-specific (since relative age had a more salient influence among boys). In summary, just looking at relative age alone does not provide a "whole picture" of the factors that influence sport participation.

Next Steps

The findings of the current study suggest several possible directions for future research. In particular, the current project suggests that by only looking at relative age alone important nuances and trends may missed. Therefore, for a complete understanding of how relative age influences sport participation and outcomes related to sport participation, future research will need to consider relative age alongside the many other factors that have been shown to influence sport participation. This "whole picture" may involve including socioeconomic status, ethnicity, family size, overall age as well as characteristics of specific sports in future relative age research projects.

Key Stakeholders and Benefits

The influence of relative age on sport participation would be of interest to policy makers, parents and coaches involved in both recreational and competitive youth sport. However, the results of the current project may also be of interest to those within the education sector. Dialogues between those in the sport and education sectors may be necessary to address the complexities of relative age's influence on sport participation.

YOUNG, BRADLEY

University of Ottawa

J. STARKES, N. MEDIC

Doctorate 2007

Lifespan Analyses of Social Influence on the Sport Commitment and Participation of Masters Athletes

Project Summary

This research aimed to identify the nature of various social influences determining increased commitment to continue sport involvement among middle-aged and older sport participants. Research was conducted among samples from international-, national-, and regional-level masters sport (> 35 yrs old) events, as well as from Senior Games (55+ yrs) events. First, results showed that the influence of significant others was related to higher levels of voluntary (functional) sport commitment among masters athletes (MAs), which is important because voluntary commitment typically encourages continued participation. Some evidence showed that the influence of significant others on functional commitment depended on age status. For example, younger MAs (40 yrs old) reported more functional resolve to continue sport when perceived expectations and pressures from others declined, whereas older MAs (early 60s) increased their desire to continue sport as expectations from significant others rose. Second, results showed that both positive social influence (support) and negative social influence (expectations/pressure) were important to consider in ensuring that participants continued in sport, without feeling highly obligated to do so. For example, when international-level MAs reported increases in perceived social support over the course of a year, their feelings of obligatory commitment correspondingly decreased, which is important because high feelings of obligation do not typically foster continued involvement. Third, for subsets of MAs that reported a broad social network around them, the four most important agents for influencing sport commitment were one's spouse (or significant other), own children, training partners, and one's health professional. Masters athletes' obligatory commitment levels were predicted by perceived pressure from one's spouse and from training partners, such as the anticipated disapproval from these agents should they quit their sport. Endorsement of sport participation from one's physician, on the other hand, was associated with lower obligatory commitment. Pressure from one's children to continue in sport was a salient perception explaining both obligatory and functional commitment. Fourth, descriptive data revealed that not all MAs have a broad social network surrounding them (e.g., > 20 % report no children or spouse), and it may be possible that a different set of social agents may be influential for these athletes. Fifth, some small gender differences were observed, with males typically reporting stronger obligations to have to continue their sport involvement, with males' obligatory commitment levels being more strongly tempered by social support, and males' obligatory commitment levels being more strongly related to social pressures.

A secondary objective was to examine the influence of individual factors on sport commitment, in order to more fully understand what facilitates continued commitment, above and beyond social influences. In both longitudinal and cross-sectional samples, functional commitment was most strongly predicted by the degree to which participants reported enjoying the sport experience. Additionally, longitudinal results for internationallevel masters demonstrated that increased perceptions of having invested personal resources in sport predicted increased functional commitment, especially among older cohorts (> 60 yrs). When athletes increasingly anticipated having enjoyable experiences and special occasions as a result of future sport involvement (i.e., involvement opportunities), then their voluntary commitment also rose, especially among younger masters (40 yrs). Results indicated that involvement opportunities relating to mastery of personal skills, improvement of health and fitness, travel through sport, achieving competitive goals, delaying effects of aging, and social reasons, were important. Findings were replicated for the most part in cross-sectional analyses for regional-level masters and Senior Games athletes. Gender effects indicated that females' functional commitment was more strongly predicted by personal investment.

Research Methods

Cross-sectional and longitudinal (panel design) self-report survey methods involving reliable and valid instruments relating to the Sport Commitment Model were distributed on-site or via an on-line platform to participants from masters sport events and clubs, and Senior Games events.

Research Results

- Current MAs and Senior Games participants report much higher levels for functional (voluntary) commitment than they do for obligatory commitment. Thus, on the whole, they are doing sport because they want to and have freely chosen it. Still, many participants report concurrent, yet lower levels of obligatory commitment, which may be problematic because obligation does not necessarily facilitate continued involvement and may be related to drop-out.
- Perceived social support was positively associated with the types of commitment that sustain sport involvement, and perceived social pressures determined the types of commitment that possibly result in drop-out or discontinuance.
- Individual factors related to enjoyable experiences, prior investments in sport, and perceptions of diverse beneficial involvement opportunities unique to masters sport, each determined the types of commitment that facilitate continued sport participation. Perceptions of enjoyable experiences are particularly important at all life stages, perceptions of prior personal investments are increasingly important at older ages (> 60 yrs) and more so among females

- than males, and perceived involvement opportunities have the strongest effects on commitment under the age of 60.
- Social support interventions should focus on the social agents that appear most influential for increasing commitment. Based on the present findings, MAs (who report a broad social network) would benefit from interventions that focus on spouse, children, training mates, and health practitioners.

Limitations of results/conclusions:

 Additional analyses need to link each of the types of commitment to the frequency, intensity, and seasonal nature of MAs' involvement, and to determine the impact of across several consecutive seasons.

Results pertain to already active sport participants, thus, findings are more likely to inform interventions to retain individuals; applying findings towards the recruitment of new individuals to masters sport would require confirmation with different samples.

Policy Implications

Relevance of research to enhancing sport participation in Canada:

- Strategies to increase participation should focus on elevating functional commitment, while alleviating conditions that cause obligation. Education and sport curriculum guides for MAs, their significant others, coaches or programmers might illustrate examples of ways to facilitate conditions for functional commitment.
- Sport programming interventions might consider means to reduce pressures from, and/or encourage support and the sharing of supportive resources from spouse, children, and training mates, and find means to heighten support from health practitioners.
- Informational strategies to promote lifelong sport should enunciate the enjoyment of present participation, but also highlight the diverse involvement opportunities that have been reported by MAs. Opportunities that should be advertised as part of the masters sport 'brand' include: competitive achievement and personal challenge, skill learning and mastery, health and fitness, social motives, travel through sport, and deferral of aging effects. These involvement opportunities should inform activity programming. Without discounting its important, our findings suggest that prior literature has possibly overestimated the opportunity for social affiliation, while failing to acknowledge the attractive opportunities that MAs see in competition and testing one's skills. The aforementioned opportunities should perhaps be celebrated as being more diverse than opportunities afforded by other alternative leisure pursuits for middle-aged and older individuals. It may also be important that these opportunities be advertised as applying to an entire community of masters participants, to counter the risk that many in society see the masters sport experience as relating only to the exceptional few (i.e., the super age-group athletes) featured in popular media. Interventions that advertise anticipated benefits unique

to sport participation should be important at all life stages, though our research suggests that their effects may be greatest for participants < 60 yrs. Finally, strategies to retain active participants (especially females, and those > 60 yrs) might focus on having individuals reflect on the amount of time, energy, and effort that they have already invested in sport.

Next Steps

One research question may be to identify the individual and social conditions that attract new people to masters sport. Newcomers may be 're-engagers', people who formerly did sport in youth but then disengaged, 'transfers' from one sport to another, or 'first-timers' who are engaging in sport for the first time as an adult, and the conditions for adopting sport activity may vary among these groups.

Key Stakeholders and Benefits

Findings may inform sport programmers/organizations who seek to strategically tailor activities and resources to the personal and social motives of MAs, with the goal of building a critical mass of lifelong sport participants, in a system that sufficiently sustains participants' involvement such that they may benefit from sport over the long-term.

Canadian Sport Policy 2012



A vision for a dynamic and innovative culture that promotes and celebrates participation and excellence in sport.

Implicit in the vision is the notion that Canada is a leading sport nation where all Canadians can pursue sport to the extent of their abilities and interests, including performing at the highest competitive levels; and where sport delivers benefits, for increasing numbers, to individual health and well-being, and contributes to socioeconomic outcomes.

Core principles:

Values-based: All sport programs are values-based, designed to increase ethical conduct and reduce unethical behaviour.

Inclusive: Sport programs are accessible and equitable and reflect the full breadth of interests, motivations, objectives, abilities, and the diversity of Canadian society.

Technically sound: Principles of long-term participant development inform sport programs in all contexts of sport participation, recognizing that different participant pathway models exist across jurisdictions.

Collaborative: Sport is built on partnerships with other sectors – most importantly with Education and Recreation – and is fostered through linkages with community organizations, service providers, and the private sector.

Intentional: Sport programs are based on clear objectives in order to achieve their desired outcomes.

Effective: Monitoring and evaluation of programs and policies support improvement, innovation and accountability. A research agenda supports the identification of conditions under which programs and policies have the strongest potential to deliver on their objectives.

Sustainable: Organizational capacity, partnerships, innovative funding, sharing and economizing of resources, exist to achieve system objectives.

Why is it important?

CSP 2012 contributes to:

- Excellence
- · Enhanced education and skill development
- Improved health and wellness
- Increased civic pride, engagement and cohesion
- Increased economic development and prosperity

Who's it for?

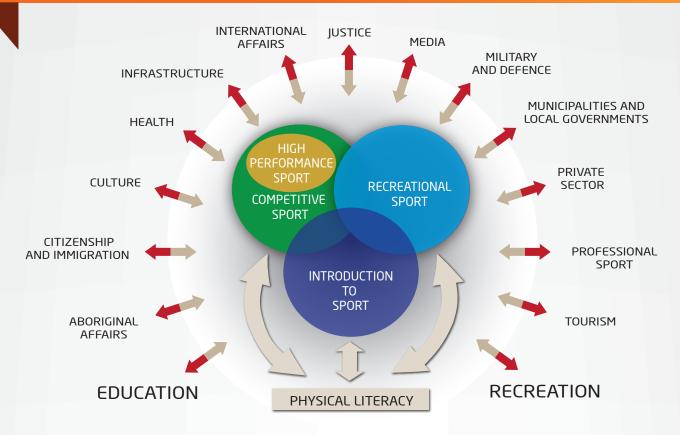
CSP 2012 sets direction for the period 2012-2022 for all governments, institutions and organizations that are committed to realizing the positive impacts of sport on individuals, communities and society. CSP 2012 encourages the development of new partnerships with local and national, domestic and international, sport and non-sport partners as seen in the framework graphic.

What type of sport is impacted?

CSP 2012 impacts the practice and provision of sport in all its forms and contexts, including organized and unorganized, in schools, colleges and universities, parks, and public and private sport centers.

CSP 2012 Policy Framework

The Policy's framework draws on the full spectrum of sport practice in Canada. The graphic below identifies four common contexts of sport participation plus physical literacy, and key sectors involved in and influenced by sport participation.



The graphic identifies four common contexts of sport participation plus physical literacy, and key sectors involved in and influenced by sport participation.



A desired outcome of the Policy is that both the number and diversity of Canadians participating in sport will increase over the timeframe of 2012-2022.

Goals:

INTRODUCTION TO SPORT: Canadians have the fundamental skills, knowledge and attitudes to participate in organized and unorganized sport.

RECREATIONAL SPORT: Canadians have the opportunity to participate in sport for fun, health, social interaction and relaxation.

COMPETITIVE SPORT: Canadians have the opportunity to systematically improve and measure their performance against others in competition in a safe and ethical manner.

HIGH PERFORMANCE SPORT: Canadians are systematically achieving world-class results at the highest levels of international competition through fair and ethical means.

SPORT FOR DEVELOPMENT: Sport is used as a tool for social and economic development, and the promotion of positive values at home and abroad.



Quebec recognizes the positive impact of sport on economic and social development; however it cannot subscribe to this goal as part of a Canadian sport policy.

INPUTS / ACTIVITIES / OUTPUTS

IMMEDIATE OUTCOMES

- Leaders, educators and parents are aware of the roles and benefits of physical literacy and safe, healthy, values-based play among children and youth
- Sport providers are aware of strategies to engage persons from traditionally underrepresented and/or marginalized populations as participants and leaders
- Sport and other sectors recognize the importance of enhanced collaboration to provide sport programs
- Sport providers are aware of the conditions under which sport programming is accessible, equitable and inclusive and ensures a fun and safe experience
- Municipalities and local governments are aware of the importance of environmental design to physical literacy development and sport
- Educators are aware of strategies to provide physical literacy and sport opportunities
- Community coaches/leaders are trained in technically sound sport fundamentals and ethical conduct
- Municipalities / local governments, schools and sport organizations recognize the importance of enhanced collaboration to provide recreational sport programs
- Sport providers are aware of strategies to recruit and retain volunteers and salaried workers
- Community, regional and provincial / territorial partners recognize the importance of enhanced collaboration to share and expand facilities, green spaces and equipment
- Sport organizations, municipalities / local governments and educational institutions collaborate to align participant development and maximize facility utilization
- Facility developers and managers of major games and events recognize the after-use needs of and benefits to the community

The inputs, activities and outputs are not yet available. They will be contained in the action plans of governments and stakeholders and will be added to this column as they become available.

- Sport participants are aware of codes of ethics and conduct
- Sport programmers are aware of principles of long-term athlete development
- Competitive coaches are trained in technically sound performance and ethical conduct
- Officials are trained in supporting fair and safe competition
- Organizations understand their needs in relation to governance and organizational capacity
- All stakeholders understand respective primary and potential roles and responsibilities in the competitive sport system
- Sport organizations and potential partners are aware of innovative public-private funding models for the ongoing development of sport
- Canadians promote positive values, anti-doping and ethics in sport
- Sport leaders are aware of leading-edge scientific practices and knowledge
- Technical leaders are aware of strategies to plan and deliver world class high performance programs
- Event organizers are aware of a coordinated national strategy for hosting major national and international sport events to maximize their contribution to sport and community
- Sport leaders are aware of strategies for the systematic identification and development of potential HP athletes
- Stakeholders align performance targets used in monitoring and evaluation
- Sport leaders are aware of opportunities to serve in high level positions in international sport federations and international multisport organizations.
- Sport organizations recognize the importance of developing athletes as leaders
- Sport, community and international development organizations recognize the importance of enhanced collaboration to leverage sport programming intentionally for domestic and international social development.
- · Sport-related sectors recognize the potential of sport to contribute to community building and social development objectives
- Event organizers recognize the conditions under which sport events deliver benefits to host communities and local economies.

CSP 2012 OBJECTIVES	CSP 2012 GOALS	ULTIMATE OUTCOMES
 Leaders, educators and parents support the development of physical literacy and safe, healthy, values-based play and sport among children and youth. Opportunities are provided for persons from traditionally underrepresented and/or marginalized populations to actively engage in all aspects of sport participation, including leadership roles.* (Also appears in REC and COMP) Partnerships among sport and other sectors deliver quality age- and stage-appropriate programs to an increasing number of participants.* (Also appears in REC) Programming is accessible, equitable and inclusive to meet the needs, motivation and interests of participants in a fun and safe experience.* (Also appears in REC) Children and youth have access to safe and appropriate spaces for unstructured play and self-organized sport. Educators increase the opportunities for children to learn and practice the fundamentals of sport. 	INTRODUCTION TO SPORT: Canadians have the fundamental skills, knowledge and attitudes to participate in organized and unorganized sport	
 Qualified community coaches and leaders deliver technically sound sport fundamentals and guidelines for ethical conduct in sport. Linkages and partnerships are fostered and supported among municipalities / local governments, schools, provincial/territorial sport organizations and national sport organizations to provide leadership and resources for recreational sport programs. Capable volunteers and salaried workers are recruited and retained in order to achieve system objectives.* (Also appears in COMP) Collaboration among community, regional and provincial/territorial partners supports the development of sustainable sport facilities, green spaces and equipment accessible to all citizens. Linkages and partnerships between and among sport organizations, municipalities / local governments and educational institutions align and leverage athlete, coach and officials' development and facility utilization.* (Also appears in COMP and HP) Facilities developed for major games and events are available after-use for all members of the community. 	RECREATIONAL SPORT: Canadians have the opportunity to participate in sport for fun, health, social interaction and relaxation	Excellence Enhanced education and skill development
 All participants in Canadian competitive sport adhere to a code of ethics and code of conduct.* (Also appears in HP) Sport programming is based on sound science and principles of long-term athlete development and promotes safe and ethical participation. Athletes at all levels of competitive sport have access to quality coaching which is based on sound science and principles of coach development. Sport competitions are officiated by competent officials who have the knowledge, skills and judgment to support fair and safe competition (Also appears in HP). Key stakeholders have the organizational capacity, i.e. governance, human and financial resources, to achieve system objectives.* (Also appears in HP) Roles and responsibilities in the competitive sport system are clearly defined in the context of organizational capacity to achieve system objectives. * (Also appears in HP) New approaches to building a sustainable and diversified public and private resource base are explored and implemented for the ongoing development of sport.* (Also appears in HP) 	COMPETITIVE SPORT: Canadians have the opportunity to systematically improve and measure their performance against others in competition in a safe and ethical manner	Increased civic pride, engagement and cohesion Increased economic development and prosperity
 Canadians are leaders internationally in the promotion of positive values, anti-doping and ethics in sport. Leading-edge scientific practices and knowledge are integrated into athlete and coach development. Technical leaders plan and deliver world-class high performance programs. All hosting partners adhere to a coordinated national strategy for hosting major national and international sport events to maximize their contribution to sport and community-building objectives. Strategies for the systematic identification and development of potential high performance athletes are established and implemented. Performance targets for major international events guide expectations and assist in the evaluation of performance and the effectiveness of the sport system. More Canadian sport leaders serve in high level positions in international sport federations and international multisport organizations. 	HIGH PERFORMANCE SPORT: Canadians are systematically achieving world-class results at the highest levels of competition through fair and ethical means	
 The development of athletes as leaders and role models in sport and society is supported. Sport, community and international development organizations collaborate to leverage sport programming intentionally for domestic and international social development. Sport-related sectors incorporate sport intentionally to achieve social development objectives Sport events are intentionally designed and delivered to benefit host communities and local economies. 	SPORT FOR DEVELOPMENT: Canadian sport is used as a tool for social and economic development and the promotion of positive values at home and abroad	

SPORT CANADA RESEARCH INITIATIVE (SCRI) CONFERENCE

CONFÉRENCE DE l'INITIATIVE DE RECHERCE DE SPORT CANADA (IRSC)

List of Participants / Liste de participants

GRANT RECIPIENTS / TITULAIRES DE SUBVENTIONS

- 1. Carly Adams, University of Lethbridge [carly.adams@uleth.ca]
- 2. Adam Baxter-Jones, University of Saskatchewan [baxter.jones@usask.ca]
- 3. Mathieu Bélanger, Université de Sherbrooke [mathieu.f.belanger@usherbrooke.ca]
- 4. **Steven Bray**, McMaster University [sbray@mcmaster.ca]
- 5. William Bridel, University of Alberta [william.bridel@gmail.com]
- 6. Mark Bruner, Nipissing University [markb@nipissingu.ca]
- 7. **Krista Chandler**, University of Windsor [chandler@uwindsor.ca]
- 8. Laura Cousens, Brock University [lcousens@brocku.ca]
- 9. Amanda De Lisio, University of Toronto [amanda.delisio@gmail.com]
- 10. Jess Dixon, University of Windsor [jdixon@uwindsor.ca]
- 11. Peter Donnelly, University of Toronto [peter.donnelly@utoronto.ca]
- 12. **Kim Dorsch**, University of Regina [Kim.Dorsch@uregina.ca]
- 13. **Dominique Falls**, Simon Fraser University [dfalls@sfu.ca]
- 14. Jessica Fraser-Thomas, York University [jft@yorku.ca]
- 15. Patrick Gaudreau, University of Ottawa [pgaudrea@uottawa.ca]
- 16. Jim Gavin, Concordia University [james.gavin@concordia.ca]
- 17. Martin Gendron, UQAR campus de Lévis [martin gendron@ugar.ca]
- 18. Jeffrey Graham, McMaster University [grahajd2@mcmaster.ca]
- 19. Mark Havitz, University of Waterloo [mhavitz@uwaterloo.ca]
- 20. **Nicholas Holt**, University of Alberta [nick.holt@ualberta.ca]
- 21. Sean Horton, University of Windsor [hortons@uwindsor.ca]
- 22. **Sarah Jeffery-Tosoni**, York University [sjt@yorku.ca]
- 23. Laurence Lapointe, Université de Montréal [laurence.lapointe@umontreal.ca]
- 24. Courtney Mason, University of Ottawa [cmaso2@uottawa.ca]
- 25. **Brad Millington**, University of Toronto [bradjmillington@gmail.com]
- 26. Laura Misener, Western University [lmisene@uwo.ca]
- 27. **Steven Mock**, University of Waterloo [smock@uwaterloo.ca]
- 28. Marie-Josee Perrier, Queen's University [8mp38@queensu.ca]
- 29. Ian Reade, University of Alberta [ian.reade@ualberta.ca]
- 30. Lysanne Rivard, McGill University [lysanne.rivard@mail.mcgill.ca]
- 31. Leisha Strachan, University of Manitoba [leisha.strachan@ad.umanitoba.ca]
- 32. Hala Tamim, York University [htamim@yorku.ca]
- 33. Margo Watt, St. Francis Xavier University [mwatt@stfx.ca]
- 34. Patricia Weir, University of Windsor [weir1@uwindsor.ca]

ADDITIONAL RESEARCH TEAM MEMBERS / MEMBRES DES GROUPES DE RECHERCHE

- 1. **Anne Bowker**, Carleton University [anne bowker@carleton.ca]
- 2. Alison Doherty, Western University [adoherty@uwo.ca]
- 3. **Eric Frenette**, Université Laval [Eric.Frenette@fse.ulaval.ca]
- 4. **Jean Harvey**, Université d'Ottawa [jharvey@uottawa.ca]
- 5. **Eric MacIntosh**, University of Ottawa [eric.macintosh@uottawa.ca]

SCRI CONFERENCE COMMITTEE / COMITÉ DE LA CONFÉRENCE IRSC

- 1. **Debra Gassewitz**, SIRC [debrag@sirc.ca]
- 2. **Joanne Kay**, PHC Sport Canada [joanne.kay@pch.gc.ca]
- 3. David McCrindle, PCH -Sport Canada [david.mccrindle@pch.gc.ca]
- 4. Parissa Safai, York University [psafai@yorku.ca]
- 5. Marijke Taks, University of Windsor [mtaks@uwindsor.ca]
- 6. Lucie Thibault, Brock University [Ithibault@brocku.ca]

SPEAKERS / CONFÉRENCIERS

- 1. Raymonde D'Amour, Intersol Group Ltd. [rdamour@intersol.ca]
- 2. **Robert Witchel**, Right To Play [rwitchel@righttoplay.com]

EXTERNAL SPORT AND RESEARCH ORGANIZATIONS / ORGANISATIONS EXTERNES RECHERCHE ET SPORT

- Monique Allain, Canadian Olympic Committee / Comité olympique canadien [mallain@olympic.ca]
- 2. **Anne Brown**, Canadian Centre for Ethics in Sport / Centre canadien pour l'éthique dans le sport [abrown@cces.ca]
- 3. Melinda Campbell, Government of Ontario [melinda.campbell@ontario.ca]
- 4. **Jeff Carmichael**, Toronto Sports Council [jeff@torontosportscouncil.ca]
- 5. **Deb Chapman**, Sport Matters Group / Groupe le Sport est Important [deb.chapman@sportmatters.ca]
- 6. **Marie-Pier Charest**, Speed Skating Canada / Patinsge de vitesse canada [Mcharest@speedskating.ca]
- 7. **Mary Duggan**, Canadian Society for Exercise Physiology (CSEP) / Société canadienne de physiologie de l'exercice (SCPE) [mduggan@csep.ca]
- 8. **Douglas Duncan**, Speed Skating Canada / Patinsge de vitesse canada [dduncan@speedskating.ca]
- 9. **John Edwards**, CanoeKayak Canada [jhedwards@canoekayak.ca]
- 10. **Tim Hall**, Algonquin College -Sport Business Management [hall0377@algonquinlive.com]
- 11. Ellorie Hanson, Ringette Canada / Ringuette Canada [ellorie@ringette.ca]
- 12. **Kathy Hare**, Motivate Canada [kathy@motivatecanada.ca]
- 13. **Donna Harris**, Univeristy of Manitoba [dharris@athletics.ca]
- 14. **Eva Havaris**, Taekwondo Canada / Association Canadienne de Taekwondo [ehavaris@wtfcanada.com]
- 15. **Paul Jurbala**, Brock University, Canadian Sport for Life / « Au Canada, le sport c'est pour la vie » [paul@communityactive.ca]
- 16. **Laurissa Kenworthy**, Physical & Health Education Canada (PHE Canada) / Éducation physique et santé Canada (EPS Canada) [laurissa@phecanada.ca]

- 17. **Vanessa Lodge**, Aboriginal Sport & Wellness Council of Ontario [vanessa.lodge@aswco.ca]
- Amy Mathurin, Ottawa Centre Minor Hockey Association [amymathurin@gmail.com]
- 19. **Michelle Matte-Stotyn**, Algonquin College -Sport Business Management [michelle.matte-stotyn@sportmatters.ca]
- 20. **Sydney Millar**, Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS) / Association canadienne pour l'avancement des femmes, du sport et de l'activité physique (ACAFS) [snmillar@caaws.ca]
- 21. **Erin Mistak**, Algonquin College -Sport Business Management [mist0018@algonquinlive.com]
- 22. **Allie Moore**, Algonquin College -Sport Business Management [moor0464@algonquinlive.com]
- 23. Nathalie Muller, Ringette Canada / Ringuette Canada[nathalie@ringette.ca]
- 24. **Julie Perrone**, Association for Canadian Studies / L'Association d'études canadiennes [julie.perrone@acs-aec.ca]
- 25. Al Pilcher, Cross Country Canada / Ski de fond Canada [pilchea@algonquincollege.com]
- 26. Judy Sutcliffe, The Sutcliffe Group Inc./SPORT4ONTARIO [judy.sutcliffe@gmail.com]
- 27. **Shaunna Taylor**, University of Ottawa [staylor@coach.ca]
- 28. **Laurent Torrecillas**, Inuksuit International, Inc. [laurent.torrecillas@inuksuitinternational.com]
- 29. **Alix Williams**, Algonquin College -Sport Business Management [alix.williams@rogers.com]
- 30. **Christine Winiarz Searle**, Canadian Yachting Association / Association canadienne de yachting [cwsearle@panacherules.com]
- 31. Mellissa Wood, Government of the NWT [mellissa_wood@gov.nt.ca]
- 32. Jennifer Young, NWT Sport and Recreation Council [jennifer@nwtsrc.com]
- 33. **Visnja Zaborski Breton**, Canadian Parks and Recreation Association / Association canadienne des parcs et loisirs [info@cpra.ca]

FEDERAL GOVERNMENT / GOUVERNEMENT FÉDÉRAL

- 1. **Kristen Brawley**, PCH -Sport Canada [kristen.brawley@pch.gc.ca]
- 2. Marc-André Cossette, PCH -Sport Canada [marc-andre.j.cossette@pch.gc.ca]
- 3. **Jocelyn East**, PCH -Sport Canada [jocelyn.east@pch.gc.ca]
- 4. **Steve Findlay**, PCH -Sport Canada [steve.findlay@pch.gc.ca]
- 5. Fannie Gouault, Canadian Heritage / Patrimoine canadien [fannie.gouault@pch.gc.ca]
- 6. Mike Grimes, Canadian Heritage / Patrimoine canadien [michael.grimes@pch.gc.ca]
- 7. **Paul Joseph**, PCH -Sport Canada [paul.joseph@pch.gc.ca]
- 8. **Paulin Lafontaine**, PCH -Sport Canada [Paulin.Lafontaine@pch.gc.ca]
- 9. **Samira Majdoub**, Canadian Heritage / Patrimoine canadien [samira.majdoub@pch.gc.ca]
- 10. Brian Mc kee, Canadian Heritage / Patrimoine canadien [brian.mckee@pch.gc.ca]
- 11. Francine Ouimet, PCH -Sport Canada [francine.ouimet@pch.gc.ca]
- 12. Gwen Prillo, PCH -Sport Canada [gwen.prillo@pch.gc.ca]
- 13. Katherine Schlosser, PCH -Sport Canada [katherine.schlosser@pch.gc.ca]
- Isabelle Sénécal, Social Sciences and Humanities Research Council of Canada (SSHRC) / Conseil
- 15. de recherche en sciences humaines du Canada (CRSH) [isabelle.senecal@sshrc-crsh.gc.ca]

- 16. Dan Smith, PCH -Sport Canada [dan.smith@pch.gc.ca]
- 17. Bharathi Sriraman, PCH -Sport Canada [Bharathi.Sriraman@pch.gc.ca]
- 18. Katherine Tinkler, PCH -Sport Canada [katherine.tinkler@pch.gc.ca]

SPORT CANADA RESEARCH INITIATIVE (SCRI) CONFERENCE EVALUATION

Thank you for attending the Sport Canada Research Initiative Conference. We value your feedback. Please drop off your evaluation form at the Registration Desk or take advantage of our online survey http://www.sirc.ca/scri/index.cfm

1. Will you keep the conference package for future reference?				
Comments:	YES	NO		
2. Did you en	joy the researcher pre	sentation format?		
Suggestions:	YES	NO		
3. What did you think of the length of the research presentations?				
Comments:	Too short	The right length	Too long	
4. Did you enjoy the Poster Break session format?				
Comments:	YES	NO		

5. How many	poster presentation	ons did you att	end?		
0-5 Comments:	6-10	11-15	16-20	20+	
6. Did you enj	oy the keynote sp	eaker?			
Did you find th	YES ne topic and prese	NO ntation relevan	t?		
7. Did you enj	oy the Canadian S	port Policy 201	.2 Presentation	and Workshop?	
Comments:	YES	NO			
8. Do you plar	n to attend this co	nference again	next year?		
Comments:	YES	NO			
9. In what wa	y could this confe	ence be impro	ved?		

SPORT CANADA RESEARCH INITIATIVE CONFERENCE

Did you know...

The SIRC Collection has over 6.5 million pages of sport related research dating as far back as the 1700's and encompassing over 62 different languages.

Membership

We encourage people to visit us in Ottawa and we also recognize that this is not always possible. As a result we are excited about SIRC Membership. This provides SIRC Members with online access to our services from anywhere in the world.

SIRC Members can:

- » Ask a SIRC Librarian
- > Search the SIRC Collection
- > Receive your Articles
- > Stay Informed

NOT A MEMBER?

Read about the <u>benefits</u> of SIRC membership and <u>subscribe today!</u>







Services

- Careers
- News Service
- Events Calendar
- Membership
- <u>Literature Review</u>
- Boardroom
- Webinars

Contact Us

Sport Information Resource Centre (SIRC)

180 Elgin Street, Suite 1400 Ottawa, Ontario Canada K2P 2K3

Tel.: +1 (613) 231-7472 Toll Free +1 (800) 665-6413

Fax: +1 (613) 231-3739 www.sirc.ca

Sport Information Resource Centre (SIRC)

SIRC is Canada's national sport resource centre. We receive over 30,000 sport related articles from around the world every year. What makes SIRC unique is that we review and index the articles so that we are familiar with information trends and can help connect users with information that is relevant to them. Information becomes knowledge once it can be received and applied. SIRC's goal is to collect and archive educational sport information and to ensure individuals and organizations involved in sport are aware of and have access to it. By continuing to develop a comprehensive library containing everything from coaching and training to sport medicine material, SIRC is the world's leading sport information resource centre.

Feature Articles

Ask SIRC

SIRC librarians are unique in that they integrate a genuine love of sport with their knowledge of library practice. On a daily basis we see the latest information and trends in the field. Having worked with colleagues in the sport administration community, coaches, students



and researchers alike, we have gained a strong understanding of the different perspectives and requirements for sport information.



Search The Collection

SIRC is in the process of digitizing much of it's collection. The goal is to create a virtual library so that visitors can search the extensive collection on-line and obtain the complete document electronically. With 700,000 sources

of information indexed, SIRC maintains over 8,000 titles in its collection and receives thousands of new and continuing titles on a regular basis.

SIRC Sport Researcher Database

The SIRC Sport Researcher Database is a collection of researcher profiles from universities and institutions across Canada



spanning all fields in the sport and physical activity disciplines. The goal of the database is to provide a forum through which researchers can make themselves and their research areas known, and policy-makers and sport practitioners can search and ask questions on research topics of interest.



Governance

The environment in which the sport community operates is continuously changing. In an effort to help sport organizations develop and maintain effective governance practices, SIRC

together with Sport Canada and the Canadian Olympic Committee (COC) are bringing resources and tools that can assist sport organizations with their governance.





Social Sciences and Humanities Conseil de recherches en Research Council of Canada

sciences humaines du Canada



Home > Funding > Sport Participation Research Initiative: Research Grants

Sport Participation Research Initiative

2012-2013 Competitions

A Joint Initiative of SSHRC and Sport Canada

Application deadline	Value	Duration	Results announced	Apply
Insight Development Grants February 1, 2013	\$7,000 up to \$75,000	1 to 2 years	June 2013	See details under Description below
Insight Grants August 15, 2012, for Notice of Intent (mandatory) October 15, 2012, for full application	\$7,000 up to \$100,000 annually, to a maximum of \$250,000 over three years	3 to 5 years	March 2013	See details under Description below
Postdoctoral Fellowship Supplements October 4, 2012	\$10,000 in addition to the value of the SSHRC Postdoctoral Fellowship	12 months	February 2013	See details under Description below
For applicants registered at a Canadian postsecondary institution, the institution sets the deadline. For all other applicants, the deadline is November 7, 2012.	\$10,000 in addition to the value of the doctoral award	12 months	Spring 2013	See details under Description below

Context Objectives Description Value and Duration Eligibility Evaluation and Adjudication Administrative Regulations and Related Information Contact Information



Context

Participation in sport is widely accepted as contributing powerfully to personal and social development. The physical exercise involved in sports is a vital component of a healthy lifestyle that helps promote personal well-being and prevent disease, while the social dimensions of such participation contribute to stronger, more cohesive communities.

Despite these benefits, over the past decade Canadians' participation in sport has declined significantly. Research and public enquiry have also raised concerns about the quality of the experience of participating in sport. The federal government's Canadian Sport Policy (PDF document, 380 KB), published in 2002, recognizes the importance of research-based knowledge to address this decline in sport participation. Halting and reversing this decline will require the systematic application of such knowledge.

Accordingly, Sport Canada, a branch of Canadian Heritage, in consultation with the sport research community, the policy research community and the federal research granting agencies, is building Canada's capacity to conduct research on and related to participation in sport.

The joint Sport Participation Research Initiative (SPRI) supports this objective by funding selected doctoral students, postdoctoral researchers and postsecondary institution-affiliated researchers to conduct research on matters related to enhancing participation in sport in Canada.



Objectives

This initiative has two broad objectives:

- 1. to promote Canadian research that will develop better understanding, based on empirical evidence, of Canadians' participation in sport, in order to better inform programs and policies intended to promote and enhance Canadians' participation in sport; and
- 2. to build Canada's capacity to conduct research on and related to participation in sport, specifically in the target areas described below.

To help achieve these objectives, all SPRI grant and award holders are expected to participate in an annual Sport Canada Research Initiative conference as a condition of holding their grant or award.



Description

The initiative offers three separate funding mechanisms to support research on participation in

sport in Canada.

Research Grants

The partners seek to stimulate short- and long-term research in sport participation in Canada by increasing the funding available through the Insight Development Grants and Insight Grants funding opportunities.

Sport Canada considers for funding applications that propose programs of research relevant to its policy priorities and that SSHRC adjudication committees have recommended for funding, but that, due to budgetary constraints, do not receive an Insight Development Grant or Insight Grant.

Note that the initiative is designed to complement, not replace, existing SSHRC support for sport participation research offered through the Insight program.

Postdoctoral Fellowship Supplements

Applicants for a SSHRC Postdoctoral Fellowship who indicate their interest on the application form and who are working in one or more of the target areas identified below will be considered for a Sport Canada Postdoctoral Fellowship Supplement.

Only applications that are recommended for funding at SSHRC are referred to Sport Canada. Postdoctoral researchers who already hold a SSHRC Postdoctoral Fellowship are ineligible to apply for this supplement. If interested, please contact the Research Training Portfolio.

Doctoral Award Supplements

Applicants for a SSHRC doctoral award who indicate their interest on the application form and who are working in one or more of the target areas identified below will be considered for a Sport Canada Doctoral Award Supplement.

Only applications that are recommended for funding at SSHRC are referred to Sport Canada. Those who already hold a SSHRC doctoral award are ineligible to apply for this supplement. If interested, please contact the Research Training Portfolio.

Target Areas

For all three awards—Research Grant, Postdoctoral Fellowship Supplement and Doctoral Award Supplement—the partners invite proposals that address the broad objectives described above and that focus on one or more of the following specific areas of research:

- identification and overcoming of barriers to participation in sport;
- training of participants, volunteers, coaches and administrators in sport;
- development, monitoring and evaluation of policies designed to enhance participation in sport;
- development of capacity and infrastructure that will enhance participation in sport; and
- identification and assessment of the benefits and outcomes of participation in sport.



Value and Duration

Research Grants

SPRI Research Grants are available for Insight Grant applications and are worth up to a maximum of \$100,000 annually, but not totaling more than \$250,000 in a three-year period.

Insight Grant applicants who request funding for up to five years and for more than \$250,000 via the Insight Grant application may also be considered for SPRI funding. Those applicants will be requested to resubmit an adjusted three-year budget.

SPRI Research Grants are also available through the Insight Development Grants funding opportunity. These grants have a maximum value of \$75,000 over one to two years.

For both funding opportunities, a minimum request of \$7,000 is required in at least one year of the project.

Postdoctoral Fellowship Supplements

SPRI Postdoctoral Fellowship Supplements are tenable for 12 months and are worth \$10,000, in addition to the annual value of the SSHRC Postdoctoral Fellowship.

Doctoral Award Supplements

SPRI Doctoral Award Supplements are tenable for 12 months and are worth up to \$10,000, in addition to the annual value of the SSHRC doctoral award.



Eligibility

In order to be eligible for and maintain SPRI funding, all grant and award holders are expected to meet and follow program funding conditions determined by Sport Canada, in addition to the eligibility requirements outlined below for each specific type of grant or award.

Applications submitted to SSHRC that would be more appropriately evaluated by the Natural Sciences and Engineering Research Council or the Canadian Institutes of Health Research will not be accepted. To determine if your research falls within SSHRC's mandate, please see Subject Matter Eligibility.

Research Grants

Applicants and participants

The SPRI partners invite proposals from individual researchers and research teams affiliated with an eligible Canadian postsecondary institution who are working in Canada in one or more of the target areas of interest.

Note: To be eligible to apply to the October 2012 Insight Grants competition, Insight Grants applicants must first submit a Notice of Intent to SSHRC via the online forms system **by August 15, 2012**. See the Insight Grants funding opportunity description for more details.

A researcher currently holding an SPRI grant may not submit a new SPRI application as a principal applicant. A researcher may not submit an application for an SPRI grant and another application for an Insight Development Grant or Insight Grant as a principal applicant in the same competition. All applicants must comply with other SSHRC eligibility criteria for the Insight Grants and Insight Development Grants funding opportunities.

Teams may consist of an applicant (principal investigator / project director) and/or one or more co-applicants (co-investigators) or collaborators.

Institutions

Institutions that propose to administer any grant awarded under this funding opportunity must meet the requirements for managing SSHRC funds and must hold or obtain institutional eligibility.

Postdoctoral Fellowship Supplements

Applicants for a SSHRC Postdoctoral Fellowship who are working in one or more of the target areas of interest, and who are affiliated with an eligible Canadian postsecondary institution, are eligible to apply.

Doctoral Award Supplements

Applicants for a SSHRC doctoral award who are working in one or more of the target areas of interest, and who are affiliated with an eligible Canadian university, are eligible to apply.



Evaluation and Adjudication

Each application for an SPRI Research Grant is adjudicated first by the relevant SSHRC adjudication committee. Then, if the application is recommended for funding but, due to budgetary constraints, is placed on SSHRC's supplementary list, it is referred to the Sport Canada Relevance Committee.

The Relevance Committee is made up of the Sport Canada research co-ordinator and members of the academic community. This committee assesses whether the research will contribute to efforts to enhance sport participation in Canada. The committee reviews each application and forms a consensus on whether the proposed research adequately meets the funding opportunity's objectives and target areas. To this end, applications must clearly and specifically indicate how the proposed research applies to the Initiative's sport participation objectives.

The SPRI Relevance Committee's decisions cannot be appealed.

In the case of applications for the Postdoctoral Fellowship Supplement and the Doctoral Award

Supplement, the procedure is similar. The significant difference is that the postdoctoral fellowship and doctoral award adjudication committees will only refer successful applications to the Sport Canada Relevance Committee.

SPRI adjudication timelines

Funding opportunity	Review by SSHRC adjucation committees	Relevance review by Sport Canada	Results announced	SPRI grant/award start date
Insight Development Grants	May 2013	May 2013	June 2013	January 2014
Insight Grants	March 2013			
Postdoctoral Fellowship Supplements	February 2013			
Doctoral Award Supplements	April 2013			

Conditions of Funding

In order to receive and maintain eligibility for an SPRI grant or award, applicants must meet the following criteria:

- 1. The proposed research must meet the SPRI objectives on sport participation and have a focus on one or more of the target areas of research.
- 2. During the life of their grant and until the end of their research projects, grant and award holders must participate in the annual Sport Canada Research Initiative conference in Ottawa, to which they will be invited by Sport Canada. SPRI funding includes costs related to travel to the conference. Therefore, applicants must include costs related to attendance at the conference as part of their research proposal's budget.
- 3. As part of the knowledge transfer component of the SPRI funding, grant and award holders will be required to prepare a short paper targeted at the sport policy and practitioner communities, summarizing the key findings of their research. The deadline for the submission of these knowledge transfer materials is September 30 of the final year of the grant. Sport Canada will contact grant and award holders at their funding end date to communicate the due date and SPRI knowledge transfer guidelines. Grant and award holders will be asked to follow the knowledge transfer template provided by Sport Canada in preparing their paper. Grant and award holders are encouraged to seek publication of their paper in an open source publication.



Administrative Regulations and Related Information

For descriptions of SSHRC terms, see Definitions of Terms.

Research Grants

All applicants and grant holders must comply with the Regulations Governing Grant Applications and with the regulations set out in the Tri-Agency Financial Administration Guide.

Postdoctoral Fellowship and Doctoral Award Supplements

All applicants for and holders of fellowships and scholarships must comply with the Regulations Governing Fellowship and Scholarship Applications and with the regulations set out in the appropriate Award Holder's Guide.



Contact Information

For more information about the SPRI, please contact:

Fatima Bidas

Program Officer Research Portfolio SSHRC 350 Albert Street P.O. Box 1610 Ottawa, ON K1P 6G4

Tel.: 613-943-1560 Fax: 613-992-7635

Email: fatima.bidas@sshrc-crsh.gc.ca

Joanne Kay

Senior Research and Policy Analyst Policy and Planning Sport Canada 15 Eddy Street, 16th Floor Gatineau, QC K1A 0M5

Tel.: 613-294-3036 Fax: 514-939-1918

Email: joanne.kay@pch.gc.ca

Website: www.canadianheritage.gc.ca/sportcanada

Date Modified: 2012-06-15