



## **Engaging South-Asian Female Adolescents in Secondary Physical Education: A Culturally-relevant Approach**

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## Abstract

The South-Asian (SA) population constitutes the largest visible minority group in Canada; yet little Canadian research has examined gender and culture in physical education (PE) and strategies to increase PE participation among SA female adolescents. The lack of teacher training on culturally-relevant PE may cause PE teachers to perpetuate Western norms and ideals as being the most desirable. Based upon the theory of culturally-relevant PE, an in-depth literature review, and the authors' teaching experiences, this paper examined the challenges to PE participation of SA female adolescents and proposes a framework as a set of strategies to help engage minority female adolescents (especially SA) in PE. The components of this framework include: a supportive learning environment; student-centred programming; alternative instructional models; authentic tasks and assessment; school, family, and community partnerships; and culturally-relevant pedagogy. This paper may support teachers' efforts to increase SA female adolescents' participation and enjoyment in school PE.

**Key words:** pedagogical; South-Asian; female; adolescent; engagement; culturally-relevant; physical education

## Résumé

La population sud asiatique est la plus grande minorité visible au Canada; cependant peu de recherches au Canada ont étudié le genre et la culture en éducation physique auprès de cette population ni les stratégies pour accroître la participation à l'éducation physique des adolescentes de cette minorité. Le manque de formation des enseignants axée sur une éducation physique adaptée à la culture serait la cause de la perpétuation des normes et idéaux occidentaux comme étant les plus désirables en éducation physique. En se basant sur une théorie de l'éducation physique adaptée à la culture, une revue de littérature approfondie et sur l'expérience d'enseignement de ses auteurs, cette étude décrit les défis touchant la participation à l'éducation physique d'adolescentes sud asiatiques et propose un cadre de référence sous forme d'un ensemble de stratégies pour favoriser l'engagement d'adolescentes des minorités en éducation physique, et particulièrement les sud asiatiques. Les éléments de ce cadre de référence sont les suivants: un environnement d'apprentissage soutenant; une programmation centrée sur l'élève; des modèles alternatifs d'enseignement; des tâches d'apprentissage et une évaluation authentique; des partenariats avec l'école, la famille et la communauté; une pédagogie adaptée à la culture. Cette étude peut appuyer les efforts d'enseignants visant à augmenter la participation d'adolescentes sud asiatiques à l'éducation physique de même que leur plaisir.

**Mots clés:** pédagogie; sud asiatique; adolescents; engagement; éducation physique; adapté à la culture.

## Introduction

As the largest visible minority group in Canada, the people of South Asian (SA) origins include either SA (e.g., East Indian, Pakistani, Sri Lankan, Punjabi origins) alone or with other origins (Statistics Canada, 2016). While most of South Asians (69.3%) were born outside Canada, Canadians of SA origin are almost equally divided among the Sikh (28%), Hindu (28%) and Muslim (22%) faith groups (Statistics Canada, 2007). Twenty-six point six percent (26.6%) of immigrants who identified as South Asians came to Canada between 2006 and 2011 (Statistics Canada, 2016). These statistics infer that an inter-mingling of cultural ideas and practices provide complexity in the school teaching and learning environment. For this research project, we adopt the definition of a “culture” as the distinctive ideas, customs, social behaviour, products, or way of life of a particular nation, or society (Oxford English Dictionary, 2018).

Insufficient physical activity has been identified as one of the leading risk factors for global mortality and is a key risk factor for noncommunicable diseases such as cardiovascular diseases, cancer, and diabetes (World Health Organization, 2018). In Canada, 91% of children and youth do not meet physical activity guidelines (ParticipACTION, 2018). In developed countries (e.g., Canada, UK, USA), South Asians are less physically active than the rest of the population at all ages (Rajaraman et al., 2015). Further, South Asian children are less physically active than their white counterparts, and girls are less likely than boys to be interested in physical activity among SA children and adolescents (Duncan, Woodfield, Al-Nakeeb, & Nevill, 2008; Rajaraman et al, 2015). More specifically, the level of moderate physical activity was lowest in SA female immigrants in Canada, which suggests that it is common for many SA immigrants to adopt a sedentary lifestyle after immigrating to developed countries (Bryan, Tremblay, Perez, Arden, & Katzmazyk, 2006). In addition, physical activity levels sharply decline during adolescence worldwide, especially among girls (Dumith, Gigante, Domingues, & Kohl, 2011).

School physical education (PE) plays a critical role in helping children and adolescents to develop active lifestyles (Forsberg & Chorney, 2014); yet, there has been no research regarding SA female adolescents’ participation in PE in Canada. Thus, the purpose of this paper is to review the literature on SA female adolescents’ engagement in PE and suggest realistic, meaningful, and culturally relevant strategies for PE teachers and administrators to implement. The work of Halas (2013) is included as it is particularly helpful and it is the only culturally-relevant PE framework found in PE research.

There are a few reports on SA girls’ participation in PE in England. For example, Stride (2014, 2016) examined over 100 SA girls’ (aged 13-15) PE experiences in a large, urban, co-ed, secondary school (91% Muslims, 76% British Asian of Pakistani origin) in England. She reported that the girls were not passive, frail, or oppressed as stereotypes suggested. Instead, a number of them had similar experiences to Caucasian girls as they were physically active in diverse, strategic ways. More specifically, Stride (2014) revealed that competition and ability discourses were more prominent in PE, while religion and culture discourses were more significant in family and community contexts. The author called for more studies on the challenges and opportunities for being physically active among this group. In the examination of the rising incidence of parental withdrawal of Muslim girls (mostly Pakistani and Bangladeshi) from PE in schools in Birmingham, England, a commissioned research project (Dagkas, Benn, & Jawad, 2011) indicated that parental influences were strong across the age phases with physical and religious consciousness increasing during adolescence. More importantly, there was a need

to improve the recognition of religious requirements (for some Muslim young people), adopt more inclusive accommodations, engage in shared decision-making, and implement situation-specific policies. As a result of the authors' observation and concerns regarding limited physical activity of female adolescents of SA origin, the research question asked: (a) what literature exists regarding challenges to PE participation of SA female adolescents? And (b) what culturally-relevant strategies might help engage minority female adolescents (especially SA) in PE?

### **Methodology**

The research method of this study was comprised of three parts. The first part involved an extensive literature search by the first author; the second part was an analysis of the literature by all of the authors who identified common themes. Finally, the authors developed a framework to represent strategies to engage SA adolescent females in physical education.

#### **Literature Search**

There were two steps involved in the literature search. In Step 1, the search in the physical education, sociology, cultural studies, sport and physical activity databases (e.g., ERIC, Education Source, CBCA Complete, Scholars Portal E-Journals, and Sport Discus) was conducted using the following key words: "immigrants and physical education," "females in physical education," "South-Asian females and physical education," "South-Asian females and physical activity," "culturally-relevant pedagogy in physical education," "culturally-responsive pedagogy in physical education," and "culturally-sensitive physical education." After the initial search, Step 2 was undertaken, which involved adding to the literature review through an examination of public organizations including: the Government of Canada, provincial associations of health and physical education (e.g., Ophea) in Canada, ParticipACTION, Active Healthy Schools Canada, and Centers for Disease Control and Prevention (CDC). These public organizations were examined to find current research related to the topic as well as valuable teaching strategies for the chosen population.

#### **Analysis of the Literature**

Following the identification of relevant literature, an analysis of the literature was conducted with three steps. In the initial step, the abstract of each article was read and categorized. Articles that discussed one or more the following criteria were included in the data pool: female adolescent population in PE, minority population and PE, minority population and PA, PA and ethnicity, PE and ethnicity, South Asian adolescents in PE, South Asian adolescents in PA, Muslim Girls in PE, Muslim Girls in PA, South Asian female PA, South Asian family support of PE, South Asian family support of PA, culturally relevant pedagogy in PE. Examples of articles that were not relevant included PE experiences of SA males and articles related to health equity. This was followed by a thorough read and analysis of the most relevant articles and their reference lists. In the second step, key scholars in the field of females in PE and culturally-relevant pedagogy were identified, and these scholars' publications were examined to further exhaust the literature review. The third step involved a thematic analysis. In particular, Braun & Clarke's (2006) step-by-step thematic analysis was used.

**Thematic analysis.** The first phase of thematic analysis involved becoming familiar with the data. Articles were read and re-read and key ideas were recorded in the field of “Engaging SA females in PE.” In the second phase, initial codes were generated by underlining key words and making notes of interesting and recurring ideas stemming from the literature. The third phase involved a search for relevant themes. The notes were compiled from phase two to create a list of potential themes. Thematic mind maps were used to connect ideas and create sub-themes. In phase four, themes were reviewed and refined by all authors. Themes with insufficient research evidence were removed or developed into a sub-theme. Themes were assessed to ensure they followed a pattern and a final thematic map was created. In the phase five, themes were generated, adapted, defined, and named with sub-themes finalized. The following themes were generated: barriers and challenges to adolescent females’ PE participation, barriers and challenges to SA adolescent females’ PE and physical activity participation, strategies to increase engagement in PE, and culturally-relevant pedagogy in PE. In the phase six, the report was produced. All of the themes were analyzed and connected to research-based practical strategies to engage the target population (Braun & Clarke, 2006). In the final phase, the framework “Engaging South Asian Female Adolescents in PE” was developed. This framework was created based on the analysis of the literature review, thematic analysis, and the first author’s teaching experience assisted by the other two authors.

### **Authors’ Personal Experience**

As researchers, we believe that it is important to state our orientations to the topic, which was the focus of a Master’s major research paper. The first author teaches PE in a multi-cultural school board with a large SA population. She spent two years teaching PE to predominantly SA females where she had first-hand experiences in the challenges and success that informed this paper. Her experiences in sport and physical activity were very different from the experiences of her SA students. When she made a conscious effort to build her cultural competence, build rapport with her students, and empower them by having them lead the class through culturally relevant activities, she was able to find success in engaging SA female adolescents in a meaningful way. The second author is a teacher-educator with East-West cross-cultural teaching experiences in the field of health and physical education in schools and universities in China, the United States, and Canada. The third author is a Canadian PE teacher-educator with professional expertise in inclusive pedagogies and teaching experience in Canada and Asia. Based on their rich teaching experiences in schools and universities, both professors had extensive discussions with the first author in the formation of the framework during the research process.

The next sections present the challenges and the framework to enhance SA female adolescent participation in PE. The goal of this framework is to help increase the engagement and overall physical activity levels of SA females.

### **Challenges to Engage SA Female Adolescents in PE**

Based on the literature reviewed and our teaching experiences, we identify five areas of challenge:

**(1) An aversion to public fitness testing.** Many SA adolescent females found pressure and felt pressured to meet fitness standards, and were frightened that their lack of fitness would hinder their overall marks (Stride, 2014; Walseth, 2015);

**(2) Feelings of discomfort with displays of power and dominance.** Western approaches to PE program values can be intimidating, especially when the program delivery is in

a highly competitive environment. Physical performance and skill being on display for others to observe may create an uncomfortable environment (Frisby, 2011; Walker, Caperchione, Mummery, & Chau, 2015);

**(3) Faith-based expectations not considered by teachers.** Challenges for those practicing the Islamic faith include the need for gendered groupings, modest dress options, and modified physical activity options during Ramadan (Dagkas et al., 2011; Nakamura, 2002);

**(4) Gendered role conflicts.** South Asian families embody a collectivist approach which values women as mothers and wives. South Asian culture typically reinforces the prioritization of students' academic and intellectual development; sports may be associated with play and thus, are not worthy of commitment, dedication, or future career aspirations (Babakus & Thompson, 2012; Dagkas et al., 2011).

**(5) Lack of culturally-sensitive personnel.** When students felt that teachers or administration were not culturally-sensitive and accommodating, they were not able to have positive experiences in PE classes (Dagkas et al., 2011).

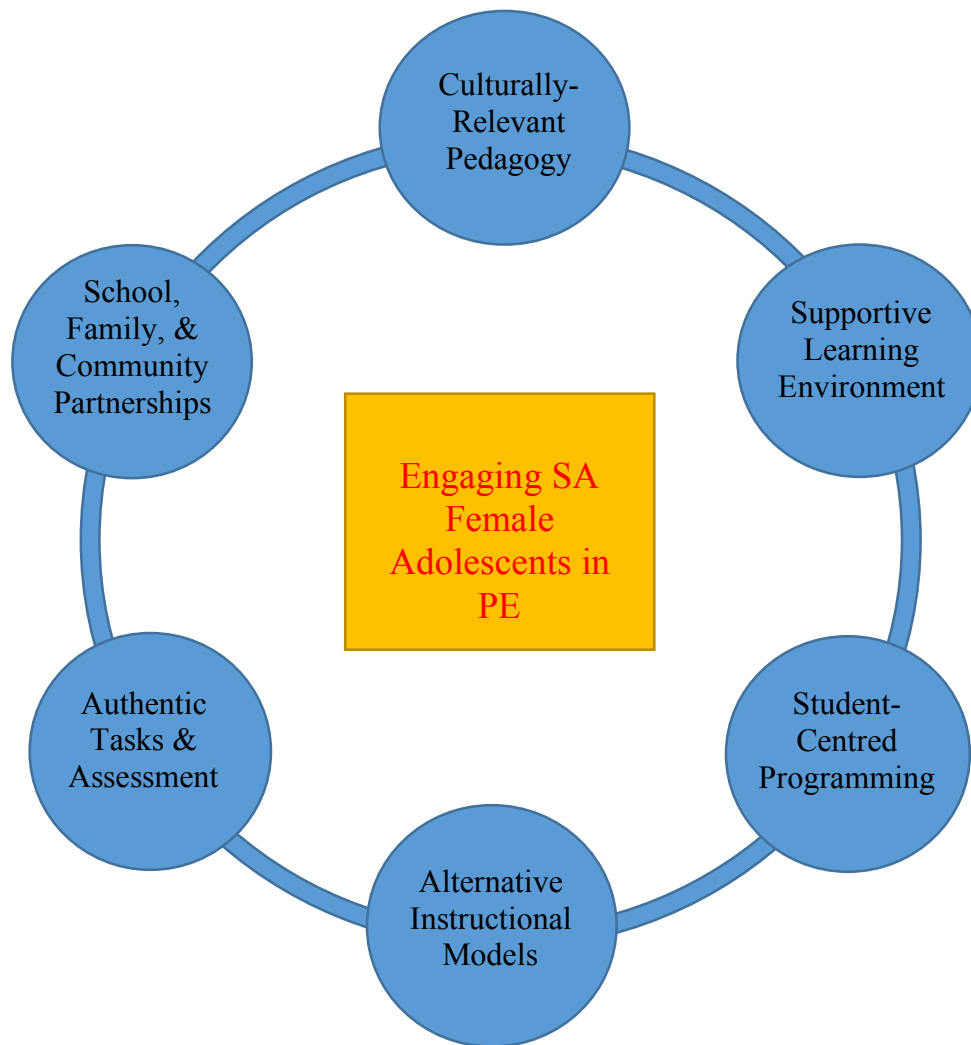
In addition, there is also a lack of pre-service and in-service teacher training for culturally-relevant PE (Casey & Kentel, 2014). If teachers are not provided with adequate training, they may be more likely to perpetuate Western norms and ideals as being the most desirable, thus leaving curriculum that may have little meaning or value to SA female adolescents. Literature consistently demonstrates that dominant and traditional approaches exacerbate girls' disengagement in PE; therefore, non-traditional pedagogy should be explored in order to effectively engage female adolescents to be physically active (Goodyear, Casey, & Kirk, 2014).

### **A Proposed Framework to Engage SA Female Adolescents in PE**

Physical education is designed to facilitate students' acquisition of the necessary knowledge, skills, and attitudes for healthy and active living (Forsberg & Chorney, 2014). To help this occur, we propose a culturally-relevant framework to engage female minority students in PE. The six components created in this framework (and the strategies included) were developed based upon Halas' culturally-relevant PE theory, an analysis of the themes in the literature review, and the authors' practical experiences as educators. Halas' (2013) model includes four constructs: teacher as an ally, understanding students' day-to-day cultural landscape, supportive learning climates, and meaningful and relevant curriculum (Halas, McRae, & Carpenter, 2013). Halas' framework was chosen and modified because it was the only culturally-relevant PE framework found in PE research. Halas' framework was adapted to meet the needs of females in PE; specifically, South Asian females and their challenges in PE.

Our proposed framework (Figure 1) consists of six components as comprehensive strategies: culturally-relevant pedagogy; supportive learning environment; student-centred programming; alternative instructional models; authentic tasks and assessment; and school, family, and community partnerships. The components: *student-centered programs* and *alternative instructional models* were based heavily on the research of Gibbons and other scholars in engaging females in PE. The components: *supportive learning environment* and *authentic task and assessment* were derived from Halas' model as well as Gibbons (2009, 2014) and other literature on engaging females in PE. The component *school, family, and community partnerships* was chosen based on the literature review research on SA females demonstrating that parental influence and approval was found to be an important part of PE/PA decision-making. Finally, *culturally relevant PE* was chosen to be located as the top of this model as

knowledge and understanding of this component is the basis for creating an effective PE program for SA females. This framework has the potential to help increase the engagement of female minority adolescents in PE, ultimately improving their overall physical activity levels. The following provides a detailed description of the framework. Also included is Table 1, which provides practical suggestions for teachers to consider when striving to engage SA female adolescents in PE.



*Figure 1.* A culturally-relevant framework to engage SA female adolescents in PE

### **Supportive Learning Environment**

The feeling of being socially connected to one's peers is associated with motivation and feelings of competence in PE (Cox & Williams, 2008). Setting a positive tone by presenting clear expectations, encouraging inclusive language, and reinforcing positive behaviour is critical for the development of a safe and equitable environment (Gibbons, 2014). Co-constructing

behavioural rules with students, implementing a process of choosing partners or groups in an inclusive manner, and employing ice-breakers can help create a positive and welcoming climate in the classroom (Gibbons, 2014).

It is essential that PE programs address students' emotional needs and help students learn how to regulate their emotions because emotionally competent behaviour can help develop a supportive and positive learning environment, both of which should be priorities in PE (Lu & Buchanan, 2014). Regularly recognizing students' contributions, such as highlighting a "Student of the Day" or "Student of the Week," is also an effective way to create a positive and welcoming environment (Gibbons, 2014). When students feel respected and understood by their teacher, they are more likely to enjoy coming to class (Lorusso, Pavlovich, & Lu, 2013).

Incorporating external motivational techniques to build a level of excitement in PE (e.g., through trophies, prizes, and picking favourite games from a hat) while using a cooperative learning approach (learning together in small, structured groups) can be a great way to engage females in PE (Gibbons, 2014). However, in order for physical activity to become a lifelong habit, students need to become intrinsically motivated in PE. Strategies to increase intrinsic motivation may include: activities such as low-organizational games and novel activities where students all start at the same level, activities that are chosen or led by the students based on their interests (e.g., cultural dance unit), or activities that allow all students to experience enjoyment and success (Douglas, Lu, & Barrett, 2014; Gibbons, 2014). An example of an effective activity would be Zumba where students are able to participate in a variety of fun movements that can be dance or fitness focused with current music playing in the background to keep students' motivation high. In addition, activities that empower students by letting them create a dance, lead a warm-up, invent a game, or organize a tournament can increase intrinsic motivation. Further, PE opportunities that allow for social interaction have been shown to build confidence, increase enjoyment, and decrease feelings of marginalization in SA female adolescents (Stride, 2014).

### **Student-Centred Programming**

Student-Centred learning is a broad term in education that refers to a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, goals, and/or cultural backgrounds of students (The Glossary of Education Reform, 2014). Generally, previous research demonstrates that females benefit from a student-centred PE program that is varied, novel, and meaningful with choice, autonomy, and value-added options (e.g., first-aid certification) (Gibbons, 2009; Gibbons & Humbert, 2008). South Asian female adolescents would also benefit from a student-centred approach that is culturally relevant. Teachers should create learning environments where students can develop ownership and make choices that allow them to embrace their cultural and religious landscapes (e.g., cultural games or dance). Other choices for them may include their choice of appropriate PE attire, activity selection, and self-assessment (Gibbons, Temple, & Humbert, 2011; Young & Sternod, 2011). Teachers can also provide leadership opportunities using a variety of instructional strategies such as guided discovery, peer teaching, and task teaching (Lorusso et al., 2013). In addition, teachers should adopt outdoor space and community facilities to expose students to a wide variety of physical activity options in which students can participate in their local communities (Lu, Francis, & Lodewyk, 2014). To increase their engagement and future participation in physical activity, student-centred programs should target alternative forms of physical activity that could include



cultural dance, cultural games, yoga, and various forms of fitness with appropriate SA music as an additional stimulus and motivator.

**Cultural dance.** Cultural dance can be described as dance within a community or group that serves one or more purposes related to traditional or ceremonial practices, celebrations, healing, spirituality, cultural transmission, or social connectedness (Jain & Brown, 2001). In many SA communities, cultural dance is a common way to celebrate family parties, weddings, and cultural events. Cultural dance has positive effects on SA populations including enjoyment and increased engagement in physical activity (Vahabi, Beanlands, Sidani, & Fredericks, 2012; Vahabi & Damba, 2015). Physical Education teachers are encouraged to implement a culturally-tailored dance unit or course to engage SA female adolescents. However, teachers must take specific concerns into consideration such as avoiding boys' presence, having a female dance instructor, and ensuring that the lyrics in the music and the dance movements are appropriate and not offensive or hyper-sexualized (Benn, 2005; Vahabi et al., 2012; Vahabi & Damba, 2015).

**Cultural games.** In addition to cultural dance, cultural games should be included in a student-centred program for SA female adolescents. Traditional SA games include kabaddi (originated in India, the national sport in Bangladesh), Sepak Takraw (originated in Malaysia), Kho (originated in India), ball badminton Kho (originated in India), field hockey (the national sport of India and Pakistan), and cricket. South Asian athletes have dominated and won many medals in these sports in Asian Games and/or in Olympic Games. Learning these sports may allow SA females adolescents to be proud of their culture and facilitate their families' involvement in these sports. Teachers should use culturally-relevant resources (e.g., <https://gtactivity.ca>) to teach or co-teach with students, or invite students' family members or SA community experts to teach a variety of cultural physical activities. Implementing a cultural games unit or cultural games day for students in PE is also an effective way to embrace cultural heritage and enhance students' interests in PE.

**Yoga.** Canadian research demonstrates that members of the SA community identify mental health as a highly stigmatized and silenced health issue (Islam, Khanlou, & Tamim, 2014). Yoga and mindfulness exercises provide opportunities for the teacher to discuss and practice positive mental health behaviours as they have been found to provide physical and mental benefits. Particularly for youth who may suffer from anxiety and stress, relief may be found in relation to academic examinations, food choices, social situations, and work-life balance (Gould, Dariotis, Greenberg, & Mendelson, 2016; Robinson & Berezowski, 2016). Since yoga and mindfulness originated in South Asia, this may allow SA female adolescents to feel proud by learning about and gaining an appreciation for their cultural heritage. Further, these body-mind activities are important alternatives to Western PE and can easily be adopted in and outside PE for current and lifelong benefits (Lu, 2012).

**Fitness.** Fitness testing has been consistently found as a source of fear and anxiety for many females, especially if fitness performance is assessed on achievement (Mitchell, Gray, & Inchley, 2015). A dislike of public fitness testing was one of the common themes found in the literature. Nonetheless, fitness testing can be used as an important tool to track students' improvement in fitness and increase their self-efficacy through cooperative learning activities where students can participate with their peers in a fun and non-threatening environment. Cooperative fitness testing activities may include a relay 12-minute run, a relay beep test, or a team fitness challenge. These group fitness activities are effective for SA female adolescents because students are challenged to work together with their peers taking the attention and peer observance away from a single student. Other novel fitness activities such as boxercise, Pilates,

step aerobics, spin class, and Zumba are popular among females in PE (Lorusso et al., 2013; Gibbons, 2009) as long as variation in performance is welcomed. Targeting a variety of individual and cooperative group fitness activities may be an effective way to increase the engagement of SA female adolescents, which makes PE relevant to their interests and lives outside of school.

### **Alternative Instructional Models**

An instructional model refers to a unique plan to design instructional materials, guide instruction, and facilitate certain learning outcomes. It is normally rooted in specific theoretical orientation and helps program planning and implementation (Metzler, 2011). The existing PE models include the Adventure Education Model, Easy-Play Model, Fitness Education Model, Multi-Activity Model, Sport Education Model, Teaching Games for Understanding, and Teaching Personal–Social Responsibility Model (Dyson, Kulinna, & Metzler, 2016; Lu & Steele, 2014; Siedentop & Tannehill, 2000). To effectively engage SA female adolescence in PE, inclusive teaching models should be employed (Rich, 2004) such as the Easy Play Model, Teaching Games for Understanding (TGFU), and Sport Education. The Easy-Play Model fosters inclusive, enjoyable, cooperative, engaging, safe, and sustainable sport play for all participants. With a student-centred focus, this model emphasizes learning through playing, healthy competition, balanced games, and optimal challenges (Lu & Steele, 2014). Teaching Games for Understanding is an approach to teaching games through progressive game formats. It also focuses on thematic learning to apply the common or transferable knowledge and skills in different games within the structure of the four categories including target, net/wall, striking/fielding, territory/invasion (Mandigo, Butler, & Hopper, 2007). The Sport Education Model is an approach to offering students with an authentic sporting experience by serving realistic roles (e.g., players, captains, coaches, organizers, statisticians, officials, publicists). Three goals (i.e., literacy, enthusiasm, and competency) are targeted following six features (i.e., seasons, affiliation, formal competition, record keeping, festivity, culminating events) (Siedentop, Hastie, & van der Mars, 2011). These three models may be effective alternatives to the dominant, traditional Multi-Activity Model, as they focus on participation, engagement, inclusion, and cooperation rather than skills and competition.

### **Authentic Task and Assessment**

An authentic assessment pursues tasks and foci that have value and meaning to students beyond the instructional context (Georgakis, Wilson, & Evans, 2015). When students are able to see what they are learning can be used in real-life settings, they are much more likely to remain engaged in course materials. An example of an authentic task in PE may be inviting the students and their family members into the class to teach a cultural game or dance. These types of activities can be used with the purpose of celebrating diversity and provides relevancy for SA females in PE (Young & Sternod, 2011). TGFU is also an example of an authentic assessment because of the climate for continuous learning that occurs during the actual game setting as students are provided with authentic learning within the context of the game (Georgakis et al., 2015). Service-learning is a community-based method of education where students fulfil their course requirements while simultaneously contributing to the community (Bringle & Hatcher, 1996). Service-learning provides a real-life setting for students to apply course material, while also raising awareness of public needs, social concerns, and the civic responsibility of community members (Domangue & Carson, 2008). Service-learning opportunities for secondary

school students may include involving students in volunteer activities in and outside school, such as leading intramurals or fitness clubs, running a school-wide event (e.g., Wellness Week), organizing sports tournaments, operating an Amazing Race, volunteering in community events (e.g., a charity run), and teaching physical activity in local senior centres. By providing SA female adolescents with a variety of field-based authentic experiences in diverse communities, they have the potential for meaningful experiences that can increase their cultural competency through physical activity. Teachers should ensure that they provide appropriate authentic task and assessment guidelines or criteria before service-learning begins for clear directions and expectations.

### **School, Family, and Community Partnerships**

Parents are particularly influential in the lives of SA children and adolescents (Dagkas et al., 2011). Regular physical activity has been associated with positive mental health, better social networking, decreased stress, reduced disruptive behaviour, enhanced concentration, increased academic achievement, greater school satisfaction, and overall happiness (Atkinson, 2015; Davis & Cooper, 2011; Donnelly & Lambourne, 2011; Taras, 2005; Trudeau & Shephard, 2010). Despite this large amount of evidence, research demonstrates that knowledge of physical activity and its benefits are lacking in SA populations (Babakus & Thompson, 2012; Vahabi et al, 2012). To engage families and community partners, teachers can hold an information session or send home an information sheet regarding the benefits of physical activity. In many SA cultures, there is an emphasis on family bonds and viewing parents as authority figures. Thus, targeting families to encourage physical activity at home is an effective strategy to consider (Taymoori, Rhodes, & Berry, 2010). Physical education provides an ideal opportunity for families to share their cultural knowledge and expertise in the form of cultural games and dances (Young & Sternod, 2011). Teachers can engage families by having them volunteer in various health, sport, and fitness related events at the school. Physical education teachers can encourage physical activity at home by setting up physical activity workshops, sending home weekly emails with potential fitness workouts, and making school space available for mothers to exercise with their daughters (Taymoori et al., 2010). Parents can support physical activity by providing transportation, encouragement, and participating in physical activity with their children (Taymoori et al., 2010). Further, schools can also partner with local community recreation centres to create effective cultural or religious accommodations that allow SA females to be physically active. Accommodations such as creating sex-segregated spaces, reducing the cost of participation, and increasing education regarding the positive outcomes of a physically active lifestyle should be made a priority for recreation leaders (Jiwani & Rail, 2010). Schools can work with community recreation partners to create programs or training sessions that are culturally-competent.

### **Culturally-Relevant Pedagogy**

Teachers generally lack expertise and confidence in issues pertaining to race and diversity (Casey & Kentel, 2014). The purpose of culturally-relevant pedagogy in PE is not merely to include activities from other cultures. Rather, it involves a shift in social attitudes through a class climate that values diversity by using knowledge about the culture of students to make meaningful connections with the students and the community (Robinson, Barrett, & Robinson, 2016). By gaining an understanding of the community dynamics such as who the student lives with, religions practiced, languages spoken at home, and the amount of parental support available for homework, teachers are developing their own cultural competency; and

thus, they are better able to implement strategies that align with their cultural knowledge (Flory & McCaughtry, 2011). Once teachers are able to develop their own cultural competence, understand students' cultural landscapes, and provide necessary accommodation, they can then implement culturally-relevant activities (Columna et al., 2010; Harrison, Carson, & Burden, 2010).

More specifically, PE teachers can ensure that the environment is established in an inclusive manner with zero tolerance for racial slurs or racist comments. Teachers can also ensure that discussions of race are a regular aspect of class to increase awareness and improve cultural competency of all students. In PE, strategies to increase cultural relevancy may include translating physical activity materials into parents' native language (Flory & McCaughtry, 2011) and providing students with cross-curricular opportunities to share their music, dance, and games of their cultures through subjects such as health, biology, history, geography, and world religion which promotes authentic culturally-relevant pedagogy (Casey & Kentel, 2014).

Since many Muslim girls in the SA population embody their faith, teachers need to accept the diversity of their physical activity preferences (Walseth, 2015). The teacher must ensure that he/she is not consciously or unconsciously promoting one religion over another. Asking students to fill in a *get to know you* form to find out their cultural and religious background is a good strategy at the beginning of the course, as some minority groups may not feel comfortable discussing these issues in a group setting. Issues such as modest clothing, restricted access, and religious practices (e.g., fasting) need to be addressed. It is essential to have sex segregation in PE at the secondary level to maximize PE participation for many female adolescents (Benn & Dagkas, 2006). Controlled access of males to the gymnasium and blinds on the windows of fitness rooms where female classes are taking place should be implemented when necessary. Clothing options of long pants and long-sleeved shirts should be allowed. Teachers should make an effort to acknowledge religious holidays (e.g., Ramadan) and provide opportunities for sharing among students about the importance of the event. Teachers also need to be culturally-sensitive with regards to physical contact in PE when some activities such as self-defence, wrestling, or dance may involve contact that is not preferred in certain SA religions (Young & Sternod, 2011).

It is important to note that students' approaches to learning may be affected by the value system in which they were raised. The individualist value system reflects individual competition, whereas a collectivist-oriented system reflects collaboration and interdependence. Many SA cultures display a collectivist orientation; thus, in PE, culturally-relevant activities that embrace both value systems can provide meaning and relevancy for all students (Young & Sternod, 2011). Collectivist activities may include choreographing a dance or creating a low-organizational game while individualist activities may include creating a personal fitness plan. Furthermore, PE often presents an atmosphere where domination and masculinity is often valued, as the goal of many physical activities is often to perform better or faster than an opponent (Casey & Kentel, 2014). According to socially constructed norms, females who do not act in a feminine manner may encounter a marginalized experience in schools. Common forms of gender slang in PE that oppress females such as "girl push-ups" or "you run like a girl" should be avoided and discussed directly if they arise. Thus, culturally relevant PE helps to breakdown the stereotypes associated with physical activity, and focuses on the physical and mental benefits (Casey & Kentel, 2014).

<b>Supportive Learning Environment</b>	<ul style="list-style-type: none"> <li>• Set clear expectations that are co-constructed with students (e.g., inclusive language)</li> <li>• Reinforce positive behaviour</li> <li>• Use external motivation to build excitement (e.g., trophies, awards)</li> <li>• Use internal motivation techniques by giving students choice and ownership based on interests (e.g., create a game unit)</li> </ul>
<b>Student-Centred Programming</b>	<ul style="list-style-type: none"> <li>• Provide choice of units, activity, or assessment</li> <li>• Provide choice of appropriate PE attire</li> <li>• Student led units (e.g., cultural dance, cultural games)</li> <li>• Cooperative fitness activities (relay beep test, team fitness challenge, yoga)</li> </ul>
<b>Alternative Instructional Models</b>	<ul style="list-style-type: none"> <li>• Easy-Play Model</li> <li>• Teaching Games for Understanding Model (TGfU)</li> <li>• Sport Education</li> </ul>
<b>Authentic Task and Assessment</b>	<ul style="list-style-type: none"> <li>• Invite family members into the class to lead an activity</li> <li>• Provide service-learning opportunities (student-led intramurals/fitness clubs, sports tournaments for feeder schools, etc.)</li> </ul>
<b>School, Family, and Community Partnerships</b>	<ul style="list-style-type: none"> <li>• Hold PE information session nights</li> <li>• Send home monthly or weekly emails with article links of physical activity benefits, workouts, etc.</li> <li>• Set up a physical activity workshop for parents and their daughters</li> <li>• Educate parents on ways they can support their child's physical activity participation (e.g., providing transportation, encouragement, exercising with them)</li> <li>• Pair with community partners to run culturally-relevant PE programs inside the school and in the community</li> </ul>
<b>Culturally-Relevant Pedagogy</b>	<ul style="list-style-type: none"> <li>• Use a variety of teaching strategies (e.g. station teaching, peer teaching, cooperative learning, cognitive strategies)</li> <li>• Examine teachers' internal biases</li> <li>• Develop teachers' cultural competence</li> <li>• Create an inclusive environment, work to increase cultural competency of all students (e.g., use icebreakers, "get to know you" student information sheets)</li> <li>• Learn about students' cultural landscapes (e.g., religions practiced, language(s) spoken at home, amount of parental support available for homework)</li> <li>• Use strategies to increase cultural relevancy (e.g., translating physical activity materials into parent's native language, provide cross-curricular learning opportunities parents can relate to)</li> <li>• Be aware of and effectively implement cultural accommodations (e.g., long-sleeved PE shirts and pants, modified physical activity options during fasting, modified physical contact, restricted access of males to physical activity area)</li> </ul>

## Discussion

The purpose of this paper was to examine the challenges to PE participation in SA female adolescents and present research-based evidence to explore effective culturally-relevant strategies to inform physical educators. Included is a framework based upon the work of Halas (2013) which outlines these strategies for teachers to consider and implement. This paper appears to be the first to address culturally-relevant programs in PE for SA female adolescents. This population encounters many unique challenges to PE participation and current PE programs do not seem to meet the needs of SA female adolescents. The literature review of this paper identified five main challenges that SA female adolescents faced in PE including an aversion to public fitness testing, feelings of discomfort with displays of power and dominance, faith-based expectations not considered by teachers, gendered role conflicts, and lack of culturally-sensitive personnel. If PE is not made culturally-relevant for these females, the SA female population might continue to decrease in physical activity engagement, resulting in an increased risk of physical and mental health issues.

The framework created in this paper works to address all of the aforementioned challenges. *A supportive learning environment* has been demonstrated as an important factor, as social connection and level of relatedness to peers in PE has been seen as a motivator to PE participation. Existing literature on female adolescents has found that *a student-centred program* can increase PE engagement by fostering choice, autonomy, and cooperation. While a student-centred program that targets gender in PE has been found to be effective, the present paper adds to the literature by recommending cultural dance, yoga and mindfulness, and personal fitness for the SA female adolescent population. Previous research demonstrates that the traditional multi-activity model intended primarily for skill development is not effective in engaging adolescent females; instead, in the present paper, the TGFU Model and Sport Education have been supported by research as having the potential to increase engagement while the Easy Play Model is a new and promising model that emphasizes cooperation and enjoyment. These *alternative instructional models* have been shown through experiences to be effective in engaging adolescent females in PE.

*Authentic assessment*, specifically service-learning, has been found to be very effective in teacher education programs; however, we recommend its use at the secondary school level. *School, family, and community partnerships* have been indicated as an important factor for SA communities, as research demonstrates that SA parents are often uninformed of the importance of PE programs. Providing school and community programs that allow mothers to be active with their daughters, and offering information sessions at school about the importance of PE programming, appears to be effective strategies to target parents. Finally, *culturally-relevant pedagogy* is not a new term and it has been applied to PE in some literature. Recently, strategies to include culturally-relevant pedagogy as a part of the Ontario health and physical education curriculum have been introduced; however, the present paper is the first to apply these strategies specifically to SA female adolescents. Strategies according to race and immigrant status, religion, culture, language, and gender have been outlined in the body of this paper.

### **Conclusion**

The implications of this research calls for improved culturally-competent training for both pre-service and in-service teacher education programs. Specifically, this research can provide concrete examples and enrich the content of the cultural diversity courses or the cultural diversity section in PE teacher education courses in order to develop pre-service and in-service teachers' cultural competency. In addition, schools should help SA families enhance their value of PE and physical activity for their children's health in addition to academic performance. For future research directions, quantitative, qualitative, and mixed methods research should be employed in Canada and in other countries to examine if the framework created in this paper will assist teachers to effectively engage SA female adolescents and other female minority groups in PE. Research should continue to examine the barriers to physical activity and PE participation in SA females across a variety of religious groups including Hinduism and Sikhism, as the majority of the existing studies have focused on the Muslim population. In addition, the proposed framework can be explored to see if it can be used in other minority female groups. It would also be beneficial to study which PE models are most effective for this population. Moreover, future research as reinforced by others (Centers for Disease Control and Prevention, 2018; Lu, Barrett, & Steele, 2013) should explore how the Comprehensive School Physical Activity Program (CSPAP) can help enhance SA female adolescent engagement in PE and physical activity in schools, at home, and in the community.

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