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Supporting Inclusive Development of Physical Literacy in Leisure Settings: Building on the Affective Dimension

Stéphanie Girard

Université du Québec à Trois-Rivières Trois-Rivières, Québec CANADA

Annie Paquet

Université du Québec à Trois-Rivières Trois-Rivières, Québec CANADA

Suzie McKinnon

Université du Québec à Trois-Rivières Trois-Rivières, Québec CANADA

Myriam Rousseau

Université du Québec à Trois-Rivières Trois-Rivières, Québec CANADA

Author Biographies

Stéphanie Girard is Professor in the Department of Human Kinetics at the Université du Québec à Trois-Rivières, her research interests focus on the implementation of an empowering and inclusive motivational climate to support youth motivation in the various environments where they are physically active, as well as on the training of the different stakeholders interacting with them.

Annie Paquet is a Professor in the Department of Psychoeducation at the Université du Québec à Trois-Rivières and director of the *Groupe de recherche sur l'intervention précoce inclusive (GRIPI)*, her work focuses on the inclusion of young children with disabilities. She is particularly interested in early inclusive intervention for young children with ASD, individualization of this intervention and participation of stakeholders involved.

Suzie McKinnon is an Institutional researcher at the CIUSSS of Saguenay–Lac-St-Jean and associate professor in the Department of Psychoeducation at the Université du Québec à Trois-Rivières, she is interested in screening practices and evaluation trajectories for autism in young children. She is also involved in research projects on the evaluation of training/support programs for parents of children with autism or intellectual disabilities, as well as for practitioners working with these clients.

Myriam Rousseau is an Institutional researcher at CIUSSS of Mauricie-et-du-Centre-du-Québec and associate professor in the Department of Psychoeducation at the Université du Québec à Trois-Rivières, her work focuses on young people with autism or an intellectual disability. She is particularly interested in parent training programs, the role of parents in their child's inclusion and the training of professionals working with autism or intellectual disability.

Résumé

Dans le but de soutenir le développement inclusif de la littératie physique, cette étude découle d'un partenariat avec le camp de jour du YMCA du Québec (Canada) afin d'expérimenter leur outil « Maximiser la participation de tous les campeurs », incluant 15 stratégies motivationnelles, ainsi que la formation sur l'utilisation de l'outil. Axée sur la dimension affective de la littératie physique, cette étude vise à évaluer l'appréciation de la formation par le personnel du camp (animateurs et accompagnateurs), à explorer la disparité entre leur intention de départ d'utiliser les 15 stratégies motivationnelles et la fréquence réelle d'utilisation ainsi qu'à explorer l'évolution de leurs croyances concernant ces stratégies. Les données ont été recueillies via deux questionnaires en ligne (juin et août 2021) auprès de 35 animateurs et 43 accompagnateurs. Les participants ont apprécié la formation portant sur l'utilisation de l'outil et ont déclaré avoir une intention élevée d'utiliser les stratégies motivationnelles. Les animateurs ont rapporté une fréquence d'utilisation plus faible et des croyances moins favorables à l'égard de cinq stratégies, tandis que les accompagnateurs ont rapporté une fréquence d'utilisation plus faible concernant six stratégies, mais ont déclaré entretenir des croyances plus favorables envers deux stratégies. En conclusion, l'outil est approprié pour soutenir le personnel de camp au regard de la dimension affective du développement inclusif de la littératie physique.

Mots-clés : personnel du camp d'été; motivation; incapacités; besoins particuliers; formation

Abstract

In order to support inclusive development of physical literacy, this study stems from a partnership with the YMCA of Quebec (Canada) summer day camp for the purpose of testing their tool "Maximize Participation of all Campers", including 15 motivational strategies, as well as the training on the use of the tool. Focused on the affective dimension of physical literacy, the study aims to evaluate camp stakeholders' (counsellors and companions) appreciation of the training, explore the disparity between their initial intention to use the 15 motivational strategies and the actual frequency of use, and explore the evolution of their beliefs in terms of these strategies. Data were collected through two online questionnaires (June and August 2021) from 35 camp counsellors and 43 companions. Overall, participants appreciated the training on how to use the tool and reported a high intention to use the motivational strategies. Camp counsellors reported a lower frequency of use and a decline in their beliefs regarding five motivational strategies; while companions reported a lower frequency of use towards six strategies but more favourable beliefs towards two strategies. In conclusion, the tool is appropriate to supports camp staff regarding the affective dimension of inclusive development of physical literacy.

Keywords: summer camp staff, motivation, disabilities, special needs, training

Introduction

Developing a shared vision of how to promote the adoption of a physically active lifestyle among youth is a societal issue at the provincial (Ministère de l'éducation et de l'enseignement supérieur [MÉES], 2016), national (ParticipACTION, 2020) and international levels (UNESCO, 2015). In recent years, physical literacy development has been recognized as a pillar to guide action, including that of policymakers, aimed at promoting children's participation in physical activity (Mandigo et al., 2018; MÉES, 2016; Tremblay et al., 2018; UNESCO, 2015). According to Whitehead (2013), physical literacy represents "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for maintaining purposeful physical pursuits/activities throughout the life course" (p. 29). Specifically, it consists of developing three dimensions (affective, physical and cognitive) for one purpose – engaging in a longterm physically active lifestyle, which refers to the behavioural domain (Whitehead, 2013). Although the concept is inclusive in itself given its conceptualization can be applied to all individuals regardless of age, culture, ability or capacity (Whitehead, 2010), there have been few studies on participants with disabilities, young children, or physical activities outside of school and sport settings (Pushkarenko et al., 2021). One study focusing on an afterschool physical literacy program concluded that this type of program could provide improvement of the affective dimension of physical literacy (Bremer et al., 2020). Additional research is therefore needed to determine how to offer meaningful physical activity experiences to more vulnerable groups (ParticipACTION, 2020; Pushkarenko et al., 2021).

Different contexts are conducive to the physical literacy development of children with or without disabilities (Dudley, 2015; Pot et al., 2018). During the school year, physical education and school-based extracurricular activities are recognized as important avenues to reach all children and young people of school age (Brusseau & Kulinna, 2015; Turcotte et al., 2018). Summer day camps offer a context away from the school setting where, in addition to recreational sports activities, children can engage in physical activities more playfully due to the specific nature of these camps (Carbonneau et al., 2018). Indeed, given the importance of developing young people's physical literacy early and as a complement to school, day camps represent an interesting environment for introducing children, with or without disabilities, to physical activities and thus developing physical literacy in an inclusive manner (Girard et al., 2022; Schenkelberg et al., 2015; Schenkelberg et al., 2017). To generate positive experiences for both children and practitioners (Arbour-Nicitopoulos et al., 2018), recreational physical literacy programs need to be truly inclusive, collaborative, welcoming and responsive to participants' needs (Yi et al., 2019). Quality inclusive leisure spaces are those that engage every child, including socially, and therefore, go beyond simply placing children with disabilities in the same environments as their peers without disabilities (Smart et al., 2018). To promote children's access and participation in physical activity, settings must provide strong leadership in favour of inclusion as well as facilitating conditions, especially in terms of support and training for stakeholders (Girard et al., 2022; Warner et al., 2021). Day camps, however, can often present barriers to the development and implementation of inclusive practices (Pronovost, 2020).

A Summer Day Camp Initiative

In 2018, the YMCA of Quebec¹ developed an inclusive physical literacy program and documented the directions and strategies to be applied in a tool for camp counsellors (responsible for a group of children) and companions (responsible for supporting the inclusion of children with disabilities in a group of children) called "Maximize Participation of all Campers [MPC]". Indeed, inclusion is one of the organization's core values, and this inclusive approach aims to support the wellness of all campers by providing an experience that includes "dignity of risk, an opportunity to grow, and a place to feel belonging" (YMCA, 2022, para. 2). To offer an environment valuing representation and diversity as well as a barrier-free camping experience, the MPC tool clarifies the conceptual framework and process of reflection that enables the choice of strategies supporting the participation of all campers. It comprises four steps mobilizing different strategies: (a) identify the camper's interests, needs and abilities; (b) identify the types of participation that match the camper's needs and abilities; (c) identify barriers to the camper's participation along with related solutions; and (d) identify motivational strategies to support the camper's motivation and engagement. The principal investigator collaborated with the YMCA physical literacy consultant and the diversity and social inclusion advisor to create the MPC tool, with a specific focus on the 15 motivational strategies included in step 4 to support the affective dimension of physical literacy. Indeed, the motivation and confidence to be physically active are fundamental to physical literacy and represent the "heart of the concept" (Whitehead, 2013, p. 31).

Motivational Theories Underlying the Affective Dimension

The 15 motivational strategies build on previous research in the fields of sport and physical education focusing on how to support children's motivation (Blais et al., 2020; De Meester et al., 2020; Duda & Appleton, 2016; Duda et al., 2018; Girard et al., 2021; Haerens et al., 2013; Smith et al., 2015). The strategies were derived from a training course based on the combination of two well-known motivational theories, self-determination theory (SDT; Deci & Ryan, 1985) and achievement goal theory (AGT; Ames & Archer, 1988), to create an empowering motivational climate in physical education that included 33 motivational strategies (Girard et al., 2021). They were then adapted to the camp setting in collaboration with the physical literacy consultant and the diversity and social inclusion advisor of the YMCA of Quebec.

According to SDT, people are motivated to engage in activities that support their three basic psychological needs: autonomy, competence and relatedness (Deci & Ryan, 1985). Autonomy means people feel they are acting according to their own will or interests. They need to feel respected and understand the rationale behind any constraint or obligation. In other words, when a particular constraint is imposed, individuals feel their need for autonomy is satisfied when they understand the reasons for the constraint and choose to adhere to it. Accordingly, motivational strategies such as meeting children's interests, offering them choices and variations, encouraging initiative-taking and providing opportunities to experiment on their own, without intervention, can be applied to support their need for autonomy in the camp setting. Competence means people feel that they are able to meet the expectations of the environment and can succeed based on their abilities.

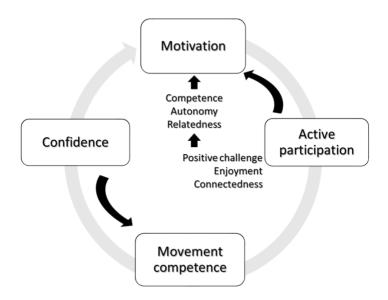
¹ YMCAs welcome more than 2,000 children annually in eight service points in the Greater Montreal area and one in Quebec City (Canada).

Supporting this need may be viewed through two lenses: one based on AGT and the other on SDT. According to AGT, creation of a mastery motivational climate nurtures a sense of competence and leads to the adoption of mastery goals (Ames & Archer, 1988). To this end, success is defined in terms of improvement, personal progress and effort in the learning process (instead of by results and normative ability). Hence, strategies such as planning tasks based on children's capacity, offering realistic and positive challenges, boosting confidence, recognizing effort, and reinforcing good deeds can be used to support children's need for competence (mastery) in the camp setting. By contrast, creating a performance motivational climate might thwart the need of competence and leads to the adoption of performance goals (approach or avoidance), which might have maladaptive outcomes for children's motivation and engagement (Elliot & Church, 1997).

According to SDT, the structure of the activity should also allow individuals to learn and feel competent. Thus, motivational strategies such as providing clear explanations, using visual cues and minimizing downtime are recommended to support children's need for competence in terms of structuring activities. Finally, relatedness refers to the need to feel connected and safe with others. People must have a sense that others care about them and accept them as they are. Strategies like inviting children to take part in an activity while making sure they feel included and respected, offering opportunities to develop friendships, and engaging with energy and determination while showing care and concern for children should, in consequence, help nurture this need in the camp setting. Indeed, when applied in a leisure setting, the empowering motivational strategies included in the MPC tool complement the high-quality inclusive leisure experience (Carbonneau et al., 2015) insofar as they describe how to support children's basic psychological needs and thus encourage their motivation.

Indeed, concepts of self-determination theory were recently embedded in the physical literacy cycle (Cairney et al., 2019; Jefferies et al., 2019; Stuckey et al., 2021). As presented in Figure 1, sustaining children's motivation by meeting their basic psychological needs encourages active participation, which contributes to enhance their movement competence and their confidence, hence their motivation. The cycle also works the other way around; experiencing positive challenges, enjoyment and connectedness during active participation may contribute to support children's motivation, while feeling confident may improve their movement competence.

Figure 1Physical Literacy Cycle with the Integration of Self-determination Theory (adapted from Cairney et al., 2019; Jefferies et al., 2019; Stuckey et al., 2021)

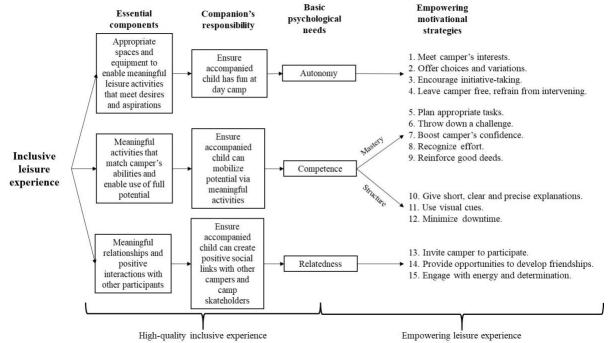


Inclusive Leisure Experience Framework

In keeping with the framework established by Carbonneau et al. (2015), a high-quality inclusive leisure experience revolves around three essential components (which is consistent with the YMCA approach): (a) accessibility to space and equipment to enable significant participation in activities meeting children's desires and aspirations (opportunity to grow); (b) possibility to take part in meaningful activities adapted to children's abilities (dignity of risk); and (c) development of positive and meaningful relationships with others (to have a sense of belonging).

This framework was recently applied in leisure studies that focused on adults with disabilities participating in outdoor activities (Carbonneau et al., 2020) and creative workshops in public libraries (Poulin et al., 2021). As Figure 2 indicates, companions play an important role in meeting the basic psychological needs of children with disabilities (Deci & Ryan, 1985). The definition of their role can be represented on a continuum ranging from: (a) one-on-one companion to a child with disabilities; (b) to assistant-counsellor in a group including a child with disabilities, (c) to counsellor providing a degree of accompaniment to a child with disabilities (Carbonneau et al., 2018). Whatever the case, companions should use the three pillars of optimal development as guides to offer a high-quality inclusive leisure experience (Carbonneau et al., 2018) consistent with the support of the three basic psychological needs (Deci & Ryan, 1985). By doing so, they establish an empowering motivational climate (Duda et al., 2018; Girard et al., 2021) that motivates children to participate.

Figure 2Combining the Foundations of a High-quality Inclusive Experience and an Empowering Leisure Experience (adapted from Carbonneau et al., 2018 and Girard et al., 2021)



Simply knowing about these motivational strategies, of course, is no guarantee camp counsellors and companions will use them. Indeed, according to the theory of planned behaviour (Ajzen, 1991), individuals tend to adopt strategies when they believe such strategies will work, are easy to apply, and are accepted by others. Variables such as *intention* or *beliefs* about the proposed strategies (Aelterman et al., 2014; Reeve & Cheon, 2016; Reeve et al., 2014; Schaumleffel & Backlund, 2009) are, therefore, antecedents of action and must be considered if we are to understand how the theoretical framework (Figure 2) can be applied in real day camp settings. There are three types of beliefs regarding a strategy: effectiveness, feasibility and normality (Reeve & Cheon, 2016). *Effectiveness* refers to whether a strategy achieves effective results (i.e., do the counsellors or companions believe the strategy will be effective to motivate campers); *feasibility* to whether it is easy to apply (i.e., do the counsellors or companions believe the strategy is easy to implement to motivate campers); and *normality* to whether it is accepted by others (i.e., do the counsellors or companions believe the strategy is commonly used by their colleagues to motivate campers).

Context and Objectives

After the YMCA summer camp staff had been trained to use the MPC tool, the university team sought to assess the participants' appreciation of the training and their intention to implement the empowering motivational strategies proposed. Also, as recommended by the research team and in line with the scientific literature (Aelterman et al., 2014; Girard et al., in press; Reeve & Cheon, 2016; Reeve et al., 2014; Schaumleffel & Backlund, 2009), beliefs regarding the 15 motivational strategies in the MPC tool (step

4) were investigated. In addition to collecting this information, researchers aimed to verify the evolution of these variables after the MPC tool had been used with children for an entire summer. The YMCA was interested to verify if the staff's beliefs had evolved favourably or unfavourably by the end of this period. Obtaining this information was especially important for the organisation because their staff included many new employees or former employees in new roles. Therefore, in order to verify if the training and the MPC tool contribute to support camp staff in the inclusive development of campers' physical literacy, the present study had three aims: (a) to evaluate the *appreciation* of the training received by participants (i.e., camp counsellors and companions) in the study; (b) to explore the disparity between the initial *intention* to use the 15 motivational strategies and the *frequency of use* reported at the end of the summer by participants; and (c) to explore the evolution of participants' *beliefs* (effectiveness, feasibility and normality) regarding the 15 motivational strategies proposed in the fourth step of the MPC tool between the start and end of the summer camp.

We hypothesized that both camp counsellors and companions would appreciate the training and demonstrate high intention to use the motivational strategies recommended. However, it was plausible that, after these strategies had been applied over the course of a summer, their frequency of use might vary based on the initial intention. As for the three types of beliefs about the 15 strategies, considering the variability of experiences that can occur during a summer camp, we supposed they might vary differently between the start and end of summer. Differences might also arise depending on whether the participants were counsellors or companions. These results will allow for a better understanding of the beliefs of camp staff, taking into account their role (counsellors or companions), regarding the strategies to be implemented to develop the physical literacy of all campers, with or without special needs. With a better understanding of their beliefs regarding motivational strategies, it will be possible to better support and equip them to address the diverse needs of all children at camp by providing a high quality, inclusive leisure experience.

Method

Participants

The sample consisted of 35 counsellors (self-identified as men = 9; self-identified as women = 26) and 43 companions (self-identified as men = 3; self-identified as women = 36; self-identified as non-binary or intersex = 3; missing data = 1). At Time 1 (June 2021), 33 counsellors and 36 companions completed the online questionnaire. At Time 2 (August 2021), the number of participants included 16 counsellors and 18 companions, representing about half the original sample (counsellors = 48.5%; companions = 50%). The number of participants differs depending on the variables analyzed, since not all participants completed all the scales of the questionnaires both times. The average age of the counsellors was 22.08 years (SD = 4.67), and the majority were English speakers (76.7%). The average age of the companions was 22.96 years (SD = 3.66), and slightly more than half were English speakers (54.3%). Detailed socio-demographic characteristics of participants are presented in Table 1.

 Table 1

 Sociodemographic Characteristics of Participants

Characteristics	Camp counsellors		Comp	anions
	N	%	N	%
Gender (self-identification)				
Men	9	25.7	3	7.1
Women	26	74.3	36	85.7
Non-binary or intersex	0	0	3	7.2
Do any of the following apply to				
you (self-identification):				
Disability	3	8.6	0	0
Different needs and diverse abilities	0	0	2	4.7
Neurodiverse	2	5.7	3	7.0
Prefer not to answer	2	5.7	5	11.6
No	28	80.0	31	72.1
Other	0	0	2	4.7
Main language spoken at home				
English	19	54.3	33	76.7
French	7	20.0	5	11.6
Other	9	25.7	5	11.6
Current or completed school level				
Secondary school	4	11.4	3	7.0
Vocational studies	0	0	0	0
College studies	15	42.9	21	48.8
University studies	15	42.9	19	44.2
Prefer not to answer	1	2.9	0	0

Note. When the percentages do not exactly add up to 100%, it is due to rounding.

Procedure

After receiving ethical approval (CER-21-278-07.31), the research project was presented to all employees at the intensive training session in June. The session included a 1-hour training for all stakeholders (companions, camp counsellors with at least one year of experience and site managers) that consisted of a description of the MPC tool along with practical exercises on how to apply it. In addition, they received a 45-minute training focusing on physical literacy and adapted programming. There was also a 1-day training specifically for companions that focused on developing the skills needed to use the MPC tool daily (in addition to the other tools available). During this day, companions worked on real-life situations that may arise during summer camp, for which they could refer to the tool, but also to other training courses they attended during the intensive training session. Finally, counsellors and companions received a particular type of training, referred to as the "bag of tricks", to reinforce the tool's motivational strategies (step 4) and behaviour management strategies. This involved associating each strategy with an object in the bag as a kind of memory aid.

At the end of a meeting during the first week of camp (late June), each site manager or team coordinator reminded the counsellors and companions about the research project previously introduced. The participants then received an email with a link to access the consent form and complete the first questionnaire voluntary. There was also the option to leave the meeting and complete the questionnaire at another time. Two reminders to complete this first questionnaire were sent during the following week. After completing it, participants were asked to leave their email address if they agreed to complete the second one at summer's end. If so, an email (and two reminders) was sent to them at that time. It is also important to note that the pandemic certainly had an effect on this study. In addition to the fact that all trainings were held remotely, it was also impossible to be onsite to present the research to participants as well as to conduct data collection.

Measures

Participants responded to two bilingual questionnaires: one at the start (June 2021; T1) and one at the end (August 2021; T2) of camp. The first questionnaire measured employees' (camp counsellors and companions) *appreciation* of the training and *intention* to use the motivational strategies and beliefs (effectiveness, feasibility and normality) connected with these strategies. The second questionnaire measured the *frequency of use* of these strategies, as well as employees' *beliefs* (effectiveness, feasibility and normality) regarding each of them. Internal consistency measures are not presented, as was the case in the studies cited, because they cannot be calculated based on a single item.

Appreciation

To measure participants' appreciation of the training, we used the 11-item appreciation questionnaire (Aelterman et al., 2013) and adapted some items to the camp setting (see examples in **bold**). Specifically, the questionnaire measured participants' evaluation of interaction (1 item: *The training was sufficiently interactive.*); innovation (1 item: *The training was innovative.*); interest (2 items: e.g., *The training awakened my interest in this subject.*); intelligibility (2 items: e.g., *The training was easy to understand.*); essentiality (1 item: *The training was essential to my training for work at camp.*); practical usefulness (1 item: *The strategies proposed during training are useful for maximizing camper participation in camp activities.*); feasibility (1 item: *The strategies proposed in the training are feasible.*); intention to apply (1 item: *I intend to apply the strategies suggested during training in my day camp work.*); and recommendation (1 item: *I would recommend this training to colleagues.*). For the two variables consisting of two items, we calculated a composite score. Participants responded on a 5-point Likert scale (1 = totally disagree to 5 = totally agree).

Intention

To measure counsellors and companions' intention to use the motivational strategies suggested during training (see Figure 2), we used the same question as in a study investigating the same subject with regard to physical education teachers (Aelterman et al., 2016): "To what degree do you intend to apply the proposed strategies?" For each strategy, they responded on a 5-point Likert scale (1 = no intention to 5 = completely the intention).

Beliefs

To measure participants' beliefs about the effectiveness, feasibility and normality of the motivational strategies suggested during training (see Figure 2), we used the beliefs questionnaire (Aelterman et al., 2014; Reeve et al., 2014). To assess effectiveness, participants were asked: "On a scale of 1 (totally disagree) to 7 (totally agree), to what extent do you believe this strategy is effective?" To assess feasibility, they were asked: "On a scale of 1 (totally impossible) to 7 (totally possible), to what extent do you believe this strategy is feasible?" Finally, to assess normality, they were asked: "On a scale of 1 (not representative at all) to 7 (totally representative), to what degree is this strategy representative of the norm in your day camp?"

Frequency

To measure the frequency of use of motivational strategies (see Figure 2) by camp counsellors and companions, we adapted the intention questionnaire (Aelterman et al., 2016) by asking: "How often did you apply the proposed strategies?" For each strategy, they responded on a 5-point Likert scale (1 = never to 5 = always).

Data Analysis

First, descriptive statistics were calculated to assess the entire sample of counsellors and companions. Second, given the small sample and the non-normality of the data, we performed the Wilcoxon signed-rank test for related samples, a nonparametric test, to compare the scores between intention (T1) and frequency of use (T2) and between participants' beliefs at the start (T1) and end of summer camp (T2). This test is very flexible to test paired data that do not meet the assumption of normality and is effective with small samples (Pett, 2016). In addition, because of the small sample, trends ($p \le .10$), although not statistically significant ($p \le .05$), are also considered as results of interests, as it was done in previous studies (Girard et al., in press; Smith et al., 2016; Smith et al., 2017; Wahl-Alexander et al., 2017). Indeed, when the sample size is small, doing so reduces the chances of making type 2 errors (i.e., accepting the null hypothesis when it should be rejected). In other words, a type 2 error would be equivalent to saying that there is no significant difference, when in fact there is.

Results

To address the first objective, to evaluate the appreciation of the training received by counsellors and companions, descriptive analyses were conducted. The results are presented in Table 2.

Table 2

Appreciation of Training

Items	Can	p counse	ellors	Co	Companions				
	n	M	SD	n	M	SD			
Acceptability									
Interaction	24	4.00	0.72	32	3.84	0.88			
Innovation	23	3.57	0.95	32	3.59	0.91			
Interest	24	3.52	0.77	32	3.72	0.88			
Intelligibility	24	4.06	0.76	32	3.92	0.75			
Essentiality	24	3.96	0.81	32	3.81	1.00			
Practical usefulness	23	4.04	0.83	31	3.90	0.79			
Feasibility	24	4.25	0.53	32	4.06	0.84			
Intention	23	4.39	0.50	32	4.16	0.81			
Recommendation	24	3.79	0.78	32	3.78	0.91			

Note: minimum = 1; maximum = 5

For counsellors, results show that all items had a mean score above 3.52 and more than half had a mean score above 4/5 (agree). The lowest rated item by counsellors was interest in training (M = 3.52, SD = .77), while the item for intention to use the strategies during work at the camp was the highest rated and showed the least variability in responses (M = 4.39; SD = .50). For companions, the mean scores for all items were above 3.59. Two items (feasibility of strategies and intention to use strategies) have mean scores above 4/5. The lowest rated item by companions concerned the innovative aspect of the training (M = 3.59, SD = .91). As for the counsellors, the item for intention to use the strategies during work at the camp was rated highest (M = 4.16; SD = .81).

Nonparametric analyses with paired samples (Wilcoxon signed-rank test) were performed to address objectives 2 and 3. Results regarding objective 2, the disparities between intention to use motivational strategies at the start of summer camp (T1) and frequency of use reported at the end of summer camp (T2), are given in Table 3 for counsellors and Table 4 for companions.

Table 3Disparities between Camp Counsellors' (n = 13) Intention to use Motivational Strategies at the Start of Summer Camp (T1) and Frequency of use Reported at the End of Summer Camp (T2)

Motivational strategies		T1			T2		Z	p
	M	Mdn	SD	M	Mdn	SD		
1. Meet camper's interests.	4.38	4.00	0.51	4.23	4.00	0.60	-1.41	.157
2. Offer choices and variations.	4.62	5.00	0.51	4.23	4.00	0.60	-1.89	.059
3. Encourage initiative-taking.	4.31	4.00	0.63	4.08	4.00	0.76	-1.00	.317
4. Leave camper free, refrain	3.77	4.00	1.17	3.46	4.00	1.20	-0.96	.336
from intervening.								
5. Plan appropriate tasks.	4.38	5.00	0.77	3.92	4.00	0.86	-1.67	.096
6. Throw down a challenge.	4.31	4.00	0.75	4.08	4.00	0.64	-1.00	.317
7. Boost camper's confidence.	4.38	5.00	0.87	3.92	4.00	0.95	-2.12	.034
8. Recognize effort.	4.77	5.00	0.44	4.69	5.00	0.48	-0.58	.564
9. Reinforce good deeds.	4.62	5.00	0.87	4.23	4.00	0.73	-1.18	.238
10. Give short, clear and precise	4.54	5.00	0.52	4.46	5.00	0.66	-0.58	.564
explanations.								
11. Use visual cues.	4.15	4.00	0.90	3.92	4.00	0.86	-0.72	.470
12. Minimize downtime.	4.23	4.00	0.60	3.69	4.00	0.95	-2.07	.038
13. Invite camper to participate.	4.69	5.00	0.63	4.46	5.00	0.66	-1.00	.317
14. Provide opportunities to	4.54	5.00	0.52	4.31	4.00	0.75	-1.34	.180
develop friendships.								
15. Engage with energy and	4.69	5.00	0.48	4.14	4.00	0.54	-2.53	.011
determination.								

Note: minimum = 1; maximum = 5; T1 = intention to use; T2 = frequency of use

Regarding camp counsellors, results show significant downward differences $(p \le .05)$ for three of the 15 strategies and two negative trends $(p \le .10)$. The mean scores for frequency of use assessed at the end of camp were smaller than those pertaining to intention to use the strategies at the start of camp for the following strategies: offer choices and variations (z = -1.89; p = .059), plan appropriate tasks (z = -1.67; p = .096), boost camper's confidence (z = -2.12; p = .034), minimize downtime (z = -2.07; p = .038), and engage with energy and determination (z = -2.53; p = .011).

Regarding companions, the results in Table 4 reveal three significant downward differences ($p \le .05$) and three negative trends ($p \le .10$). In contrast to the counsellors, these differences tended to be in the following strategies: meet camper's interests (z = -1.90; p = .058), encourage initiative-taking (z = -2.27; p = .023), throw down a challenge (z = -2.07; p = .038), give short, clear and precise explanations (z = -1.73; p = .084), use visual cues (z = -2.31; z = .021), and provide opportunities to develop friendships (z = -1.73; z = .083).

Table 4Disparities between Companions' (n = 10) Intention to use Motivational Strategies at the Start of Summer Camp (T1) and Frequency of use Reported at the End of Summer Camp (T2)

Motivational strategies		T1			T2		z	p
	M	Mdn	SD	M	Mdn	SD	•	
1. Meet camper's interests.	4.50	4.50	0.53	3.90	4.00	0.88	-1.90	.058
2. Offer choices and variations.	4.10	4.00	0.74	4.00	4.00	0.94	-0.45	.655
3. Encourage initiative-taking.	4.60	5.00	0.52	3.80	4.00	0.63	-2.27	.023
4. Leave camper free, refrain	4.00	4.00	0.67	3.50	3.50	0.53	-1.52	.129
from intervening.								
5. Plan appropriate tasks.	4.40	4.50	0.70	4.00	4.00	1.05	-1.41	.157
6. Throw down a challenge.	4.10	4.00	0.57	3.40	4.00	0.97	-2.07	.038
7. Boost camper's confidence.	4.50	4.50	0.53	4.60	5.00	0.70	-0.58	.564
8. Recognize effort.	4.80	5.00	0.42	4.70	5.00	0.48	-0.58	.564
9. Reinforce good deeds.	4.60	5.00	0.52	4.50	4.50	0.53	-0.38	.705
10. Give short, clear and precise	4.80	5.00	0.42	4.20	4.00	0.79	-1.73	.084
explanations.								
11. Use visual cues.	4.00	4.00	0.67	3.10	3.00	0.57	-2.31	.021
12. Minimize downtime.	3.70	3.50	0.82	3.30	3.00	0.68	-0.96	.336
13. Invite camper to participate.	4.80	5.00	0.42	4.80	5.00	0.42	0.00	1.00
14. Provide opportunities to	4.60	5.00	0.52	4.30	4.00	0.48	-1.73	.083
develop friendships.								
15. Engage with energy and	4.30	4.00	0.68	3.90	4.00	0.57	-1.41	.157
determination.								

Note: Minimum = 1; maximum = 5; T1 = intention to use; T2 = frequency of use

Regarding the third objective – to verify the evolution of camp counsellors and companions' *beliefs* (effectiveness, feasibility and normality) in terms of the motivational strategies suggested in the fourth step of the MPC tool between the start and the end of summer camp – complete descriptive statistics for the variables are available in Appendix A and B. For the sake of brevity, only the significant results ($p \le .05$) or trends ($p \le .10$) for beliefs that changed between the start and end of the summer are presented.

For counsellors, the results indicate one significant difference ($p \le .05$) and four negative trends ($p \le .10$) regarding beliefs about the 15 strategies presented during training. Scores for beliefs about the motivational strategies suggested were significantly lower at the end of the camp concerning the normality of: offer choices and variations (z = -1.84; p = .066); boost confidence (z = -1.86; p = .063); feasibility (z = -1.63; p = .102); the normality of minimize downtime (z = -2.12; p = .034); and the normality of engage with energy and determination (z = -1.63; p = .102). These results reveal a decline in beliefs at the end of camp.

For companions, on the other hand, scores for beliefs were significantly higher $(p \le .05)$ at the end of the camp regarding the feasibility of *offer choices and variations* (z = -2.07; p = .038) and the effectiveness (z = -2.00; p = .046) and feasibility of *plan appropriate tasks* (z = -2.00; p = .046).

Discussion

This study stems from a partnership with the summer day camp of the YMCA of Quebec. In order to support camp staff in the inclusive development of all campers' physical literacy, the aims were threefold: (a) to evaluate the *appreciation* of the training given to camp counsellors and companions; (b) to explore the disparity between the initial *intention* of camp counsellors and companions to use the motivational strategies and the *frequency of use* of these strategies at the end of summer camp; and (c) to explore the evolution of their *beliefs* (effectiveness, feasibility, and normality) concerning these motivational strategies between the start and end of summer.

Regarding the first objective, results supported our hypothesis that both the counsellors and companions appreciated the training. However, counsellors rated interest as the lowest score, and companions rated it as the second lowest. We believe this is due to scheduling: because of the COVID-19 pandemic, the training session on the MPC tool, offered remotely (via Zoom) on a Friday night, was among a series of training sessions on other subjects given over several days before the start of summer camp. Although previous research supports the efficacy of online training for camp counsellors (Wahl-Alexander et al., 2018) and the training was well planned and delivered in a need-supportive way (Aelterman et al., 2016; Girard et al., 2021), the context (time, duration, remote delivery) may be the reason for participants' lack of interest. The innovative aspect was also among the lowest rated for both counsellors and companions, which is hardly surprising given the YMCA's well-established inclusive approach. Indeed, inclusion is one of the organization's core values, and its aim is to support the wellness of all campers (YMCA, 2022). Additionally, the MPC tool could be considered repetitive, since it brings together several elements that are discussed in greater detail during intensive training. A better alternative in future would be to establish the added value of the tool and use it in all related training to help participants recognize its innovativeness. Indeed, providing a rationale has proved an effective strategy for encouraging participants to adhere to the message delivered (Aelterman et al., 2013; Steingut et al., 2017). It may, therefore, be a good idea to introduce the tool at the very start of intensive training and return to it several times during the sessions. Overall, it is encouraging to see that, after participating in the training, counsellors and companions both reported a high intention to implement the tool's strategies.

As regards the second objective involving the 15 motivational strategies in the fourth step, camp counsellors and companions reported a high intention to apply them. These high scores are in line with our hypothesis and fully reflect the excitement and anticipation often observed among counsellors and companions at the start of summer camp (Kirts, 2015; Warner et al., 2021), especially after an intensive training session. It should be kept in mind, nevertheless, that a social desirability bias may also explain these scores (Grimm, 2010). Indeed, even if everything was done to ensure participants' confidentiality, it is still possible they answered what they believed was expected of them. In this regard, it is interesting to observe the frequency of use reported at summer's end,

which is consistently lower than participants' initial intention at the start of the season. However, significant differences (or trends) were observed for different strategies, based on their use by counsellors or companions.

At the end of summer, counsellors revealed they used five strategies less often than first anticipated. These strategies were: *offer choices and variations* (autonomy support); *plan appropriate tasks* and *boost confidence* (competence support – mastery); *minimize downtime* (competence support – structure); and *engage with energy and determination* (relatedness support). Interestingly, these results coincided with those regarding the third objective: there was a decline in their beliefs regarding the normality of these strategies at summer's end. In other words, counsellors reported they used these strategies less and believed this was the case for their counterparts as well.

That camp counsellors reported engaging with less energy and determination at the end of summer agrees with the results of previous studies (Bailey et al., 2012; Schaumleffel & Backlund, 2009; Wahl-Alexander et al., 2017). For example, a study on how training transfers to work behaviours during day camp revealed that, as summer progresses, "program leaders were in a survival mode to keep participants safe and occupied...." (Schaumleffel & Backlund, 2009, p. 155). Similarly, our results indicate that it was harder for camp counsellors to minimize downtime given the decline in their feasibility belief about this specific strategy. This may reflect employees' limited experience planning activities that motivate children to participate. To minimize downtime, the transition between activities and the instructions related to each activity should be well planned. Roles or responsibilities can also be assigned to each child, based on their abilities, and there should be animated transitions. Establishing and maintaining specific routines using visual cues (e.g., pictograms, photographs, dry-erase boards, visual timetables, etc.), notably for movement between activities or during a specific physical activity, is also effective for limiting downtime and is reassuring for children with disabilities (Nagro et al., 2019). To this end, the partner suggested to promote the use of pictograms already available for camp staff in the inclusion boxes. According to the physical literacy cycle (Figure 1), we can make the hypothesis that the difficulty for counsellors to apply these strategies might have affected children's need satisfaction, resulting in affecting their active participation, notably by feeling less enjoyment (too many downtimes) or less connectedness with their counsellors. However, this was not measured in the present study. In future research, it would be important to measure actual effects on children's motivation and engagement.

At summer's end, companions reported using six strategies less often than expected. These strategies were: *meet camper's interests* and *encourage initiative-taking* (autonomy support); *throw down a challenge* (competence support – mastery); *give short, clear and precise explanations* and *use visual cues* (competence support – structure); and *provide opportunities to develop friendships* (relatedness support). Unlike counsellors, however, after using the MPC tool throughout the summer, companions reported having more favourable beliefs towards the feasibility of *offering choices and variations* and towards the effectiveness and feasibility of *planning appropriate tasks* for the accompanied camper. The latter results underscore the differences between the two categories of participants. On one hand, after using the MPC tool during summer, counsellors reported applying two strategies (*offering choices and variations, planning appropriate tasks*) less often and believed this to be the case for all camp counsellors. Companions, on the other

hand, reported these strategies were easier to apply than initially assumed and that *planning* appropriate tasks was also more effective than they thought. This result is quite encouraging for the inclusive development of children with disabilities' physical literacy in camp setting because,

adjustment of the challenge to ability, whether through changing the activity or suggestions for how to improve engagement..., can create the conditions where an initial negative affective state related to doubt and worry is overtaken by the enjoyment related to recognising progression and the possibility of mastery. (Jefferies, 2020, p. 18)

At first glance, the differences in outcomes between counsellors and companions might be explained by the nature of their role in the organization at opposite ends of the continuum (Carbonneau et al., 2018): counsellors are responsible for a group of children (with and without disabilities), while companions support one specific child with disabilities. Indeed, because the MPC tool was first created and developed for companions, it is encouraging to see they had more favourable beliefs after applying it in real settings. Nevertheless, the YMCA also intended the tool to be used to support collaboration among camp stakeholders. Collaboration may be defined as an interaction between two stakeholders who are committed to achieving a common goal through a shared decisionmaking process (Friend & Cook, 2017). This raises the question of whether a counsellor in charge of a group of children could work with a companion in charge of a single child to choose the right strategies. It could also be interesting to examine each role and responsibility in order to clarify expectations. Indeed, information about one's own role and that of others is viewed as a core competency of collaborative practices (Interprofessional Education Collaborative, 2016; Suter et al., 2009). For example, a counsellor may not think to offer choices and variations for the group, plan appropriate tasks or boost the confidence of a child with disabilities because he or she expects the companion to use these strategies with the accompanied child. Similarly, a companion may not mobilize strategies to the extent anticipated at the start of camp because he or she expects the counsellor to give short, clear and precise explanations, use visual cues and provide opportunities for friendship for the entire group. This highlights the importance of clarifying each stakeholder's roles and responsibilities (Carbonneau et al., 2018). In future, counsellors and companions should be given time to discuss how the MPC tool can help them collaborate and cooperate towards the common goal of providing a high-quality inclusive and empowering leisure experience (Carbonneau et al., 2018; Girard et al., 2021) aimed at developing children's physical literacy. During the intensive training session, it would be advisable to use case studies with concrete examples where counsellors and companions could work together to apply strategies suggested in the tool. Feedback about these case studies, but also about real situations experienced during summer, should be provided by inclusion specialists or camp site managers, so counsellors and companions could progress in their ability to develop all children's physical literacy in an inclusive and collaborative manner.

Finally, companions reported they made less than expected use of three motivational strategies (*meet camper's interests*, *encourage initiative-taking* and *throw down a challenge*) that build on the information gathered in the first step of the MPC tool: identify camper's interests, needs and abilities. In our view, this aspect merits attention because previous research shows these strategies are effective to support motivation (Van

den Berghe et al., 2014). Indeed, meeting children's interests and encouraging their initiative-taking ensures fun for an accompanied child thanks to activities they enjoy and that nurtures their need for autonomy (Carbonneau et al., 2015; Carbonneau et al., 2018). In keeping with the theoretical model (Figure 2) and the MPC tool developed by the YMCA, both counsellors and companions are expected to identify the child's interests, needs, and abilities (step 1 of the tool). Indeed, they must consider children's abilities to throw them appropriate challenges to support the inclusive development of physical literacy. As displayed in the physical literacy cycle (Figure 1), this aspect is of upmost importance considering the role of positive challenges in active participation, movement competence and confidence (Cairney et al., 2019; Jefferies et al., 2019; Jefferies, 2020; Stuckey et al., 2021). However, according to Jefferies (2020), the "careful calibration of the challenge to ability underscores the need for trained educators..." (p.17). Given that training of camp stakeholders is, after all, limited to the intensive training session at beginning of camp, one recommendation is to involve parents at the start of camp by asking them about their child's interests, strengths, and limitations in terms of physical activities. Indeed, information gathered in step 1 of the tool might be less explicit for camp staff. During the training sessions, explicit examples about which strategies to use according to specific needs often encountered by children during summer could be provided. In this line, to support camp staff during summer, a mobile application, PeP ton jeu!², is freely available. This application contains more than 400 active games and the YMCA of Quebec integrated adaptations regarding five needs children may encounter: distancing, communication, agitation and impulsivity, reduced mobility, and sensory integration. This information would make it easier to offer activities that are just hard enough to prevent discouragement and to nurture children's need for competence (Carbonneau et al., 2015; Carbonneau et al., 2018).

Limitations and Conclusion

This study has certain limitations. During the first online questionnaire, a widespread outage forced some participants to fill out the survey again from scratch, resulting in the loss of many participants. Although the project was conducted mainly in French, all documents (letter of information, consent form, online questionnaire) were bilingual because a high proportion of participants spoke English as their first language. This resulted in overly long texts, which may have discouraged some participants from completing the first questionnaire and providing their email address for the second one. The sample was therefore reduced by almost half, leaving us with a smaller number of respondents. Although the sample size was quite small and limited the power for statistical analyses, given the exploratory and partnership nature of the study, it was deemed acceptable. In addition, the gender imbalance may be a potential confound. However, this imbalance is representative of summer camp staff. Another methodological limitation is that it was not possible to provide internal consistency measures because scales consisted of only one item. In addition, the particular context of the YMCA (e.g., values, structure, and approach) makes it difficult to generalize our results to other types of camps.

Be that as it may, the YMCA context also enriches the scientific literature on the work of summer camp staff (Warner et al., 2021). In particular, it offers new information regarding the training of camp staff and how they implement the strategies of the MPC tool

² For more information, please see: https://www.communautepep.ca/pep-ton-jeu/

in their practice. The composition of the sample also compensates for the underrepresentation of minority groups in camp staff studies (e.g., LGBTQ+; neurodiversity; Warner et al., 2021). This study further contributes by refining the high-quality inclusive leisure experience framework (Carbonneau et al., 2018). Indeed, this framework states "what" the companions' responsibilities are in terms of a camper's three basic psychological needs by specifying "how" to sustain these needs by means of 15 empowering motivational strategies. These strategies are endorsed by research (Girard et al., 2021) and are meaningful to practitioners considering their application through a collaborative process. Further studies could test the implementation of this enhanced framework in other types of camps and examine its impact on the development of physical literacy in children with disabilities. In addition, we view the ways to support collaboration between camp stakeholders and with parents of accompanied children as a promising avenue of future research.

Finally, in terms of inclusive development of physical literacy for children with and without disabilities in camp settings, the tool created by the YMCA of Quebec in collaboration with the university seems appropriate. Indeed, it provide supports for camp stakeholders regarding the motivation part of the physical literacy cycle (Figure 1) and suggests effective motivational strategies to enhance active participation, in terms of positive challenges, enjoyment and connectedness. Future research could include more components of the cycle to provide a more comprehensive view of its effectiveness in supporting inclusive development of physical literacy for all children.

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References

- Aelterman, N., Vansteenkiste, M., Van den Berghe, L., De Meyer, J., & Haerens, L. (2014). Fostering a need-supportive teaching style: Intervention effects on physical education teachers' beliefs and teaching behaviors. *Journal of Sport & Exercise Psychology*, *36*(6), 595–609. https://doi.org/10.1123/jsep.2013-0229
- Aelterman, N., Vansteenkiste, M., Van Keer, H., De Meyer, J., Van den Berghe, L., & Haerens, L. (2013). Development and evaluation of a training on need-supportive teaching in physical education: Qualitative and quantitative findings. *Teaching and Teacher Education*, 29, 64–75. https://doi.org/10.1016/j.tate.2012.09.001
- Aelterman, N., Vansteenkiste, M., Van Keer, H., & Haerens, L. (2016). Changing teachers' beliefs regarding autonomy support and structure: The role of experienced psychological need satisfaction in teacher training. *Psychology of Sport and Exercise*, 23, 64–72. https://doi.org/10.1016/j.psychsport.2015.10.007
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology*, 80(3), 260–267. https://doi.org/10.1037/0022-0663.80.3.260
- Arbour-Nicitopoulos, K. P., Boross-Harmer, A., Leo, J., Allison, A., Bremner, R., Taverna, F., Sora, D., & Wright, F. V. (2018). Igniting fitness possibilities: A case study of an inclusive community-based physical literacy program for children and youth. *Leisure/Loisir*, 42(1), 69–92. https://doi.org/10.1080/14927713.2017.1414627
- Bailey, A. W., Kang, H., & Kuiper, K. (2012). Personal, environmental, and social predictors of camp staff burnout. *Journal of Outdoor Recreation, Education, and Leadership*, *4*(3), 157–171. https://doi.org/https://doi.org/10.7768/1948-5123.1134
- Blais, D., Girard, S., & Lemoyne, J. (2020). Contribution des buts d'accomplissement en éducation physique sur la pratique d'activités physiques : comparaison entre classes spéciales et classes ordinaires. *Revue canadienne de l'éducation*, 43(1), 87–120.
- Bremer, E., Graham, J. D., & Cairney, J. (2020). Outcomes and feasibility of a 12-week physical literacy intervention for children in an afterschool program. *International Journal of Environmental Research and Public Health*, *17*(9), 3129. https://doi.org/10.3390/ijerph17093129
- Brusseau, T. A., & Kulinna, P. H. (2015). An examination of four traditional school physical activity models on children's step counts and MVPA. *Research Quarterly for Exercise and Sport*, 86(1), 88–93. https://doi.org/10.1080/02701367.2014.977431
- Cairney, J., Dudley, D., Kwan, M., Bulten, R., & Kriellaars, D. (2019). Physical literacy, physical activity and health: Toward an evidence-informed conceptual model. *Sports Medicine*, 49(3), 371–383. https://doi.org/10.1007/s40279-019-01063-3
- Carbonneau, H., Cantin, R., & St-Onge, M. (2015). Pour une expérience de loisir inclusive. *Observatoire québécois du loisir*, 12(11), 1–4.

- Carbonneau, H., Gilbert, A., Duquette, M.-M., & St-Onge, M. (2020). Déterminants d'une expérience inclusive de plein air pour soutenir la participation optimale des personnes ayant des incapacités. *Nature & Récréation*, 8, 53–64.
- Carbonneau, H., St-Onge, M., Oligny, B., & Roussel, N. (2018). L'accompagnateur de jeunes handicapés en camp de jour : pour une meilleure compréhension du rôle et des fonctions. *Observatoire québécois du loisir*, 15(15), 1–5.
- De Meester, A., Van Duyse, F., Aelterman, N., Muynck, G.-J., & Haerens, L. (2020). An experimental, video-based investigation into the motivating impact of choice and positive feedback among students with different motor competence levels. *Physical Education and Sport Pedagogy*, 25(4), 1–18. https://doi.org/10.1080/17408989.2020.1725456
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plennum Press.
- Duda, J. L., & Appleton, P. R. (2016). Empowering and disempowering coaching climates: conceptualization, measurement considerations, and intervention implications. In M. Raab, P. Wylleman, R. Seiler, A.-M. Elbe, & A. Hatzigeorgiadis (Eds.), *Sport and exercise psychology research: From theory to practice* (pp. 373–388). Elsevier. https://doi.org/10.1016/b978-0-12-803634-1.00017-0
- Duda, J. L., Appleton, P. R., Stebbings, J., & Balaguer, I. (2018). Towards more empowering and less disempowering environments in youth sport. In C. J. Knight, C. G. Harwood, & D. Gould (Eds.), *Sport psychology for young athletes* (pp. 81–93). Routledge. https://doi.org/10.1080/17408989.2021.1953457
- Dudley, D. A. (2015). A conceptual model of observed physical literacy. *The Physical Educator*, 72(5), 236–260. https://doi.org/10.18666/tpe-2015-v72-i5-6020
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72(1), 218–232. https://doi.org/10.1037/0022-3514.72.1.218
- Friend, M. P. & Cook, L. (2017). *Interactions: Collaboration skills for school professionals* (8th ed.). Pearson Education.
- Girard, S., de Guise, A.-A., Hogue, A.-M., & Desbiens, J.-F. (in press). Changes in physical education teachers' beliefs regarding motivational strategies: A quasi-experimental study. *The Physical Educator*.
- Girard, S., Desbiens, J.-F., & Hogue, A.-M. (2021). Effects of a training course on creation of an empowering motivational climate in physical education: a quasi-experimental study. *Physical Education and Sport Pedagogy*, 1–20. https://doi.org/10.1080/17408989.2021.1953457
- Girard, S., Paquet, A., & Cyr, C. (2022). Camps de jour et enfants ayant un trouble du spectre de l'autisme : examen de la portée de la littérature scientifique. *Leisure/Loisir*, 46(4), 569–597. https://doi.org/10.1080/14927713.2022.2040382
- Grimm, P. (2010). Social desirability bias. In J. Sheth & N. Malhotra (Eds.), *Wiley International Encyclopedia of Marketing*. John Wiley & Sons, Ltd. https://doi.org/10.1002/9781444316568.wiem02057
- Haerens, L., Aelterman, N., Van den Berghe, L., De Meyer, J., Soenens, B., & Vansteenkiste, M. (2013). Observing physical education teachers' need-

- supportive interactions in classroom settings. *Journal of Sport & Exercise Psychology*, 35(1), 3–17.
- Interprofessional Education Collaborative. (2016). *Core competencies for interprofessional collaborative practice: 2016 update*. Interprofessional Education Collaborative.
- Jefferies, P., Ungar, M., Aubertin, P., & Kriellaars, D. (2019). Physical literacy and resilience in children and youth. *Frontiers in Public Health*, 7, 346. https://doi.org/10.3389/fpubh.2019.00346
- Jefferies, P. (2020). Physical literacy and resilience: The role of positive challenges. *Sciences et bonheur*, *5*, 11-26. https://doi.org/10.17605/OSF.IO/SBZYW
- Kirts, J. (2015). Exploring nature Together: A program for children on the autism spectrum and their typical peers. *Legacy*, 26(6), 27–29.
- Mandigo, J., Lodewyk, K., & Tredway, J. (2018). Examining the impact of a teaching games for understanding approach on the development of physical literacy using the Passport for Life assessment tool. *Journal of Teaching in Physical Education*, 38(2), 136–145. https://doi.org/10.1123/jtpe.2018-0028
- Ministère de l'éducation et de l'enseignement supérieur, secteur du loisir et du sport-MÉES. (2016). Pour une vision québécoise d'un mode de vie physiquement actif. Gouvernement du Québec. https://tmvpa.com/attachments/f2c2f487-d250-4eee-bb2641ea88c7730f/ModeViePhysiquementActif_VF.pdf?h=824c93696ac0e9b37 0b3f1b401ac661c
- Nagro, S. A., Fraser, D. W., & Hooks, S. D. (2019). Lesson planning with engagement in mind: Proactive classroom management strategies for curriculum instruction. *Intervention in School and Clinic*, *54*(3), 131–140. https://doi.org/10.1177/1053451218767905
- ParticipACTION. (2020). Le rôle de la famille dans l'activité physique, les comportements sédentaires et le sommeil des enfants et des jeunes. L'édition 2020 du Bulletin de l'activité physique chez les enfants et les jeunes de ParticipACTION. ParticipACTION.

 https://participaction.cdn.prismic.io/participaction/3b498307-98c1-4210-8155-69322766799f Bulletin_complet.pdf
- Pett, M. A. (2016). Nonparametric statistics for health care research: Statistics for small samples and unusual distributions (2nd ed.). SAGE Publications.
- Pot, N., Whitehead, M. E., & Durden-Myers, E. J. (2018). Physical literacy from philosophy to practice. *Journal of Teaching in Physical Education*, *37*(3), 246–251. https://doi.org/10.1123/jtpe.2018-0133
- Poulin, V., Carbonneau, H., Mostefa-Kara, L., Porcedda, A., Guibourgé, D., Therriault, P.-Y., & Reichhart, F. (2021). Déterminants d'une expérience inclusive de loisir dans des ateliers créatifs au sein de bibliothèques publiques. *Loisir et Société / Society and Leisure*, 44(2), 233–255. https://doi.org/10.1080/07053436.2021.1935430
- Pronovost, G. (2020). La clientèle des personnes handicapées des camps de jour municipaux au Québec : mesurer, analyser, planifier. Association québécoise pour le loisir des personnes handicapées. https://www.aqlph.qc.ca/app/uploads/2020/05/La-cliente%CC%80le-des-camps-de-jour-municipaux-au-Que%CC%81becV6.pdf

- Pushkarenko, K., Dunn, J. C., & Wohlers, B. (2021). Physical literacy and inclusion: A scoping review of the physical literacy literature inclusive of individuals experiencing disability. *Prospects: Quarterly Review of Comparative Education*, 50(1-2), 107–126.
- Reeve, J., & Cheon, S. H. (2016). Teachers become more autonomy supportive after they believe it is easy to do. *Psychology of Sport and Exercise*, 22, 178–189. https://doi.org/10.1016/j.psychsport.2015.08.001
- Reeve, J., Vansteenkiste, M., Assor, A., Ahmad, I., Cheon, S. H., Jang, H., Kaplan, H., Moss, J. D., Olaussen, B. S., & Wang, C. K. J. (2014). The beliefs that underlie autonomy-supportive and controlling teaching: A multinational investigation. *Motivation and Emotion*, *38*(1), 93–110. https://doi.org/10.1007/s11031-013-9367-0
- Schaumleffel, N. A., & Backlund, E. A. (2009). Program leaders' intention to process recreation experiences to achieve targeted outcomes. *Managing Leisure*, *14*(2), 141–160. https://doi.org/10.1080/13606710902752745
- Schenkelberg, M. A., Rosenkranz, R. R., Milliken, G. A., Menear, K., & Dzewaltowski, D. A. (2017). Implications of social groups on sedentary behavior of children with autism: A pilot study. *Journal of Autism Developmental Disorder*, 47(4), 1223–1230. https://doi.org/10.1007/s10803-017-3037-0
- Schenkelberg, M. A., Rosenkranz, R. R., Milliken, G. A., & Dzewaltowski, D. A. (2015). Social environmental influences on physical activity of children with autism spectrum disorders. *Journal of Physical Activity and Health*, *12*(5), 636–641. https://doi.org/10.1123/jpah.2013-0312
- Smart, E., Edwards, B., Kingsnorth, S., Sheffe, S., Curran, C. J., Pinto, M., Crossman, S., & King, G. (2018). Creating an inclusive leisure space: Strategies used to engage children with and without disabilities in the arts-mediated program Spiral Garden. *Disability and Rehabilitation*, 40(2), 199–207. https://doi.org/10.1080/09638288.2016.1250122
- Smith, N., Quested, E., Appleton, P. R., & Duda, J. L. (2017). Observing the coach-created motivational environment across training and competition in youth sport. *Journal of Sports Sciences*, 35(2), 149–158. https://doi.org/10.1080/02640414.2016.1159714
- Smith, N., Tessier, D., Tzioumakis, Y., Quested, E., Appleton, P., Sarrazin, P., Papaioannou, A., & Duda, J. L. (2015). Development and validation of the multidimensional motivational climate observation system (MMCOS). *Journal of Sport & Exercise Psychology*, 37(1), 4–22. https://doi.org/10.1123/jsep.2014-0059
- Smith, N., Tessier, D., Tzioumakis, Y., Fabra, P., Quested, E., Appleton, P., Sarrazin, P., Papaioannou, A., Balaguer, I., & Duda, J. L. (2016). The relationship between observed and perceived assessments of the coach-created motivational environment and links to athlete motivation. *Psychology of Sport and Exercise*, 23, 51–63. https://doi.org/10.1016/j.psychsport.2015.11.001
- Steingut, R. R., Patall, E. A., & Trimble, S. S. (2017). The effect of rationale provision on motivation and performance outcomes: A meta-analysis. *Motivation Science*, *3*(1), 19–50. https://doi.org/10.1037/mot0000039

- Stuckey, M., Richard, V., Decker, A., Aubertin, P., & Kriellaars, D. (2021). Supporting holistic wellbeing for performing artists during the covid-19 pandemic and recovery: Study protocol. *Frontiers in Psychology*, *12*, 577882. https://doi.org/10.3389/fpsyg.2021.577882
- Suter, E., Arndt, J., Arthur, N., Parboosingh, J., Taylor, E., & Deutschlander, S. (2009). Role understanding and effective communication as core competencies for collaborative practice. *Journal of Interprofessional Care*, 23(1), 41–51. https://doi.org/10.1080/13561820802338579
- Tremblay, M. S., Costas-Bradstreet, C., Barnes, J. D., Barlett, B., Dampier, D., & Lalonde, C., et al. (2018). Canada's physical literacy consensus statement: Process and outcome. *BMC Public Health*, *18*(Suppl. 2), 1034. https://doi.org/10.1186/s1288 9-018-5903-x
- Turcotte, S., Berrigan, F., Beaudoin, S., Gignac, C., Bessette, L., Bezeau, D., Chevrier, J., Desautels, J., Dessureault, M.-J., Gendron-Gallant, A., Grand'Maison, A., Lemieux, W., Potvin-Gingras, M.-F., & Suzuki Fortin, S. (2018). Revue de littérature sur les facteurs facilitants et les obstacles visant l'intégration de l'activité physique au secondaire (volet 2). Rapport de recherche déposé aux membres du comité des offres de services au milieu scolaire de la Table sur le mode de vie physiquement actif. https://www.usherbrooke.ca/chaire-kino-quebec/Documents/Rapports_de_recherche/Rapport_Volet_2_UdeS.pdf
- UNESCO (2015). *Quality physical education (QPE): Guidelines for policy makers.*https://en.unesco.org/inclusivepolicylab/sites/default/files/learning/document/2017/1/231101E.pdf
- Van den Berghe, L., Vansteenkiste, M., Cardon, G., Kirk, D., & Haerens, L. (2014). Research on self-determination in physical education: Key findings and proposals for future research. *Physical Education and Sport Pedagogy*, *19*(1), 97–121. https://doi.org/10.1080/17408989.2012.732563
- Wahl-Alexander, Z., Richards-Rosse, K. A., & Howell, S. (2018). The influence of online training on camp counselor perceived competence. *Journal of Park and Recreation Administration*, *36*(4), 72–89. https://doi.org/10.18666/JPRA-2018-V36-I4-8611
- Wahl-Alexander, Z., Richards, K. A., & Washburn, N. (2017). Changes in perceived burnout among camp staff across the summer camp season. *Journal of Park and Recreation Administration*, 35(2), 74–85. https://doi.org/10.18666/jpra-2017-v35-i2-7417
- Warner, R., Godwin, M., & Hodge, C. (2021). Seasonal summer camp staff experiences: A scoping review. *Journal of Outdoor Recreation, Education, and Leadership*, 13(1), 40-63. https://doi.org/10.18666/jorel-2021-v13-i1-10535
- Whitehead, M. (2013). Definition of physical literacy and clarification of related issues. *Journal of Sport Science and Physical Education*, 65, 29–34.
- Whitehead, M. (2010). Physical literacy: Throughout the lifecourse. Routledge.
- Yi, K. J., Cameron, E., Patey, M., Loucks-Atkinson, A., Loeffler, T. A., McGowan, E., Sullivan, A. M., Borduas, C. et Buote, R. (2019). University-based physical literacy programming for children: Canadian community stakeholders'

recommendations. *Health Promotion International*, *34*(5), 992–1001. https://doi.org/10.1093/heapro/day063

YMCA du Québec. (2022). *Inclusion at camp*. https://www.ymcaquebec.org/en/Find-a-Y/Day-Camps/Inclusion-at-Camp

Appendix A Beliefs (Effectiveness, Feasibility and Normality) at the Start and at the End of Summer of Camp Counsellors (N=8)

Motivational strategies			Camp counsellors				
_		T1			T2		
	M	Mdn	SD	М	Mdn	SD	
Meet camper's interests.							
Effectiveness	6.38	6.50	0.74	5.75	6.50	1.83	
Feasibility	6.13	6.00	0.84	6.13	6.50	1.13	
Normality	6.38	6.50	0.74	6.13	6.50	1.13	
Offer choices and variations.							
Effectiveness	6.63	7.00	0.52	5.75	6.00	1.49	
Feasibility	6.38	7.00	0.92	5.88	6.00	0.99	
Normality	6.63	7.00	0.52	5.75	6.00	0.89	
Encourage initiative-taking.							
Effectiveness	6.25	6.50	0.89	6.13	6.00	0.99	
Feasibility	6.25	6.50	0.89	5.88	6.00	0.99	
Normality	6.13	6.00	0.84	6.13	6.00	0.99	
Leave camper free, refrain from							
intervening.							
Effectiveness	5.38	5.50	1.69	5.00	5.50	1.60	
Feasibility	5.63	6.00	1.60	5.38	5.50	1.06	
Normality	5.38	5.50	1.69	5.25	6.00	1.58	
Plan appropriate tasks.							
Effectiveness	6.75	7.00	0.46	6.13	6.00	0.99	
Feasibility	6.38	6.50	0.74	5.88	6.00	0.99	
Normality	6.38	6.50	0.74	6.00	6.00	0.93	
Throw down a challenge.							
Effectiveness	6.25	6.00	0.46	6.00	6.00	0.93	
Feasibility	6.50	6.50	0.54	6.13	6.00	0.99	
Normality	6.25	6.00	0.71	6.00	6.00	0.93	
Boost camper's confidence.							
Effectiveness	6.25	6.50	0.89	6.00	6.50	1.31	
Feasibility	6.25	6.50	0.89	5.50	6.00	1.77	
Normality	6.38	7.00	0.92	5.38	6.00	1.69	
Recognize effort.							
Effectiveness	6.75	7.00	0.46	6.13	6.50	1.13	
Feasibility	6.38	6.00	0.52	6.13	6.00	0.99	
Normality	6.50	6.50	0.54	6.25	6.50	1.04	
Reinforce good deeds.							
Effectiveness	6.38	6.00	0.52	6.13	6.00	0.99	
Feasibility	6.50	6.50	0.54	6.13	6.00	0.99	
Normality	6.50	6.50	0.54	6.25	6.50	1.04	

Give short, clear and precise						
explanations.						
Effectiveness	6.63	7.00	0.52	6.38	7.00	1.06
Feasibility	6.63	7.00	0.52	6.13	6.00	0.99
Normality	6.63	7.00	0.52	6.25	6.50	1.04
Use visual cues.						
Effectiveness	6.13	6.50	1.13	6.00	6.00	0.93
Feasibility	6.00	6.00	1.07	5.75	6.00	0.89
Normality	5.88	6.00	0.99	5.63	6.00	0.92
Minimize downtime.						
Effectiveness	6.38	6.50	0.74	5.75	6.00	1.28
Feasibility	6.38	6.50	0.74	5.75	6.00	0.89
Normality	6.38	6.50	0.74	5.05	5.50	0.93
Invite camper to participate.						
Effectiveness	6.88	7.00	0.35	5.88	6.50	1.55
Feasibility	6.50	7.00	0.76	6.25	6.50	1.04
Normality	6.75	7.00	0.46	6.38	7.00	1.06
Provide opportunities to develop						
friendships.						
Effectiveness	6.63	7.00	0.74	6.00	6.00	1.07
Feasibility	6.25	7.00	1.04	5.75	6.00	1.04
Normality	6.50	7.00	0.76	5.88	6.00	0.99
Engage with energy and						
determination.						
Effectiveness	6.50	6.50	0.54	6.25	6.50	1.04
Feasibility	6.75	7.00	0.46	6.13	6.50	1.13
Normality	6.63	7.00	0.52	6.00	6.00	0.93

Note: minimum = 1; maximum = 7; T1 = start of camp; T2 = end of camp

Appendix B Beliefs (Effectiveness, Feasibility and Normality) at the Start and Aat the End of Summer of Companions (N=8)

Motivational strategies	<u> </u>	Companions				
2		<u>T1</u>			T2	
	M	Mdn	SD	М	Mdn	SD
Meet camper's interests.						
Effectiveness	6.50	7.00	0.76	6.75	7.00	0.46
Feasibility	6.50	6.50	0.54	6.25	6.50	1.04
Normality	6.38	7.00	1.06	6.38	6.50	0.74
Offer choices and variations.						
Effectiveness	6.25	6.00	0.71	6.38	6.00	0.52
Feasibility	5.25	5.50	1.04	6.13	6.00	0.64
Normality	5.13	5.00	0.84	5.50	6.00	1.51
Encourage initiative-taking.						
Effectiveness	6.00	6.00	1.07	6.00	6.00	0.76
Feasibility	5.63	6.00	0.92	6.00	6.00	0.76
Normality	5.63	6.00	1.19	5.75	6.00	0.71
Leave camper free, refrain from						
intervening.						
Effectiveness	5.00	4.50	1.20	5.13	5.00	1.25
Feasibility	4.63	4.50	0.74	5.25	5.50	1.17
Normality	4.13	4.00	0.99	4.50	4.50	1.93
Plan appropriate tasks.						
Effectiveness	6.13	6.00	0.99	6.63	7.00	0.74
Feasibility	5.88	6.00	0.99	6.38	7.00	0.92
Normality	5.38	6.00	1.19	6.00	6.50	1.41
Throw down a challenge.						
Effectiveness	5.75	6.00	0.89	5.63	5.50	1.06
Feasibility	5.25	5.50	0.89	5.63	5.50	1.06
Normality	5.38	6.00	0.92	5.38	5.00	0.92
Boost camper's confidence.						
Effectiveness	6.50	6.50	0.54	6.63	7.00	0.52
Feasibility	6.50	6.50	0.54	6.75	7.00	0.46
Normality	6.13	6.00	0.99	6.38	6.00	0.52
Recognize effort.						
Effectiveness	6.75	7.00	0.46	6.63	7.00	0.52
Feasibility	6.63	7.00	0.52	6.63	7.00	0.52
Normality	6.25	6.50	1.04	6.25	6.00	0.71
Reinforce good deeds.						
Effectiveness	6.50	6.50	0.54	6.50	6.50	0.54
Feasibility	6.38	6.00	0.52	6.63	7.00	0.52
Normality	6.13	6.00	0.99	6.50	6.50	0.54

Give short, clear and precise						
explanations.						
Effectiveness	6.75	7.00	0.46	6.63	7.00	0.52
Feasibility	6.63	7.00	0.52	6.63	7.00	0.52
Normality	6.38	7.00	1.06	6.25	6.00	0.71
Use visual cues.						
Effectiveness	5.88	6.00	0.84	5.75	6.00	1.28
Feasibility	6.13	6.00	0.35	6.13	6.00	0.99
Normality	5.50	6.00	1.31	5.63	6.00	1.77
Minimize downtime.						
Effectiveness	5.25	5.00	1.28	5.38	5.50	1.19
Feasibility	5.38	5.00	0.92	4.88	5.00	0.84
Normality	5.13	5.00	1.13	4.75	5.00	1.04
Invite camper to participate.						
Effectiveness	6.38	7.00	1.06	6.13	6.00	0.84
Feasibility	6.13	7.00	1.46	6.25	6.00	0.46
Normality	6.38	7.00	1.06	6.13	6.00	0.64
Provide opportunities to develop						
friendships.						
Effectiveness	6.38	7.00	0.92	6.75	7.00	0.46
Feasibility	6.38	6.50	0.74	6.63	7.00	0.52
Normality	6.13	6.50	0.99	6.38	6.50	0.74
Engage with energy and						
determination.						
Effectiveness	6.38	6.00	0.52	6.38	6.00	0.52
Feasibility	6.13	6.00	0.35	6.38	6.50	0.74
Normality	6.13	6.00	0.64	6.25	6.00	0.71

Note: minimum = 1; maximum = 7; T1 = start of camp; T2 = end of camp