

How to Outsource Coaching in School-Based Extracurricular Sports Activities: Evaluating Perceptions of External Coaches

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Received: July 8, 2014

Accepted: August 5, 2014

Published: September 1, 2014

doi:10.5296/ije.v6i3.5942

URL: <http://dx.doi.org/10.5296/ije.v6i3.5942>

Abstract

Participating in school-based extracurricular sports activities is valuable for the healthy development of children and adolescents. The use of external coaches (outsourcing human resources) has been suggested to support teachers in coaching and managing such activities. However, hiring external coaches is difficult, and their number is insufficient. The purposes of the present study were therefore to evaluate the facilitators and barriers for engaging external coaches in school-based extracurricular sports activities, and determine whether differences in facilitators and barriers exist for the coaches and if these are related to the various characteristics of the coaches. A cross-sectional self-administrated questionnaire was distributed to 1 974 external coaches, who indicated whether they felt each facilitator and barrier applied to them with respect to engaging in school-based extracurricular sports activities. Data were obtained from 149 coaches, and they perceived many facilitators and barriers. Some differences were found in the responses related to the coaches'

characteristics—especially with respect to age-group and their willingness or unwillingness to become full-time teachers. In conclusion, the following steps would be valuable toward creating an effective strategy to promote the engagement of external coaches in school-based extracurricular sports activities: improving the coaching environment for the coaches such that they feel enjoyment or undergo personal development; easing institutional limitations; enhancing teacher support and participation in the activities; allotting appropriate roles for the teacher and external coach; and holding activity workshops.

Keywords: extracurricular activity, human resource management, mixed methods approach, physical education, volunteer

1. Introduction

Participating in sports is valuable for a healthy, culturally rich life [Ministry of Education, Culture, Sports, Science and Technology in Japan (MEXT), 2011]. In view of the carry-over effect of physical activity from childhood to adulthood (Telama, 2009), it is important to sustain an environment in which children and adolescents can be physically active. Physical education in the school curriculum provides an opportunity to participate in sports and physical activity. Though the number of classes devoted to physical education is limited (MEXT, 2008, 2009), school-based extracurricular sports activities (SBECSA)—conducted after school or on weekends—offer other opportunities for participation. In addition, it is easier to take part in SBECSA than in community sports owing to the costs, lack of transportation needs, and the familiar setting (Meester, Aelterman, Cardon, Bourdeaudhuij, & Haerens, 2014). Indeed, many SBECSA are performed on the school setting after school or on weekends (Australian Bureau of Statistics, 2012; Edwards, Kanters, & Bocarro, 2011; MEXT, 2013; Sport Council Wales, 2009). Engaging in SBECSA contributes not only to the physical development but also to the mental, academic, and social development of adolescents (Barnett, 2007; Dotterer, McHale, & Crouter, 2007; Fredricks & Eccles, 2006; Lipscomb, 2007; MEXT, 2012; Schaefer, Simpkins, Vest, & Price, 2011; Shernoff & Vandell, 2007). As a result of these benefits, SBECSA should be actively encouraged for their positive merits.

In Japan, the use of external coaches (outsourcing human resources) has been suggested as a way of supporting teachers in the coaching and management of SBECSA (MEXT, 2013). Owing to the lack of properly trained teachers able to coach SBECSA (Yamagata Prefecture Board of Education, 2010), the transfer of SBECSA teachers to other schools leading to a reduction in SBECSA at the original school (Tokyo Metropolitan Board of Education, 2007), and considerable workload burdens for teachers to manage the SBECSA (Japan Senior High School Teachers and Staff Union, 2008; MEXT, 1997; Whiteley & Richard, 2012), over 80% of school principals and teachers in Japan are in favor of the use of external coaches for SBECSA (MEXT, 1997). Furthermore, the benefits of using external coaches include an increase in students' interest and participation in SBECSA and improvement in the coaching skills of teachers that manage the activities (Tokyo Metropolitan Board of Education, 2008). However, the difficulties in hiring external coaches (Aoyagi et al., 2013a; Miyagi Prefecture Board of Education, 2008; Williams, Hay, & Macdonald, 2011; Yamagata Prefecture Board of Education, 2010) and the small number of coaches in some regions of Japan and for certain types of sport have been reported (Nippon Junior High School Physical Culture Association, 2013; Nishijima, Yano, & Nakazawa, 2007). Additionally, the number of coaching hours provided by external coaches is insufficient to meet demand (Miyagi Prefecture Board of Education, 2008; Yamagata Prefecture Board of Education, 2010). Thus, enhancing the engagement of external coaches—number of coaches, coaching frequency, and continuous participation—is important for the teachers who need their help.

Enhancing the engagement of external coaches for SBECSA demands the development of effective strategies (MEXT, 2013). Previous surveys and studies have attempted to clarify the facilitators and barriers related to the engagement of external SBECSA coaches (Kanagawa

Prefecture Board of Education, 2008; LaVoi & Dutove, 2012; Miyagi Prefecture Board of Education, 2008). However, most of that research was conducted with a limited number of questions and limited sample groups; thus, those facilitators and barriers have been only partially examined. Using semi-structured interviews, Aoyagi et al. (2013c) qualitatively identified categories of facilitators and barriers for engaging external SBECSA coaches; they included system, support, environment, and climate of SBECSA. However, the extent to which each facilitator and barrier related to the engagement of those coaches was not addressed. Additionally, it is unclear whether the facilitators and barriers depend on various characteristics of the coaches. Thus, the present study aimed to examine the importance of the facilitators and barriers to the engagement of external SBECSA coaches, as initially investigated in a previous qualitative study (Aoyagi et al., 2013c); it also had the objective of determining whether differences in facilitators and barriers exert different effects according to the personal characteristics of such coaches.

2. Methods

2.1 Participants and Procedures

A cross-sectional self-administrated questionnaire survey was given to external SBECSA coaches at public junior high and high schools. Request letters for study participation along with a set of questionnaires (including instructions and a consent form) were sent to the principals of 658 randomly selected schools (329 junior high and 329 high schools). All of Japan's 47 prefectures were represented, and seven junior high and seven high schools were selected from each prefecture. Combined junior high and high schools, evening schools, and branch schools were excluded before the random sampling because they are minority in the school system and may have biased the results. Based on the average number of external coaches (Sasakawa Sports Foundation, 2011; Tokyo Metropolitan Board of Education, 2008), three sets of the questionnaires were sent to each school. The maximum numbers of participants was therefore 1 974. The school principal distributed the questionnaires to the SBECSA teachers, and they in turn gave the questionnaires to the external coaches. Upon completion, the surveys were returned to the researchers. This survey was conducted in 2012. The study purpose and design were explained to the participants, and they all provided their written informed consent. The research proposal was approved by the ethics board of Waseda University (No. 2011-242).

2.2 Questionnaire

The questionnaire contained 53 questions to assess perceived facilitators and 54 questions to determine perceived barriers to engaging in SBECSA for the external coaches. The questions covered all the facilitators and barriers reported by external coaches in a previous study, which included interviews, and extracted using qualitative analysis (Aoyagi et al., 2013c). The facilitators were constructed with large categories, such as positive feelings, adequate system, positive social support, comfortable climate of SBECSA, environment, growth of external coach, and network building. The barriers consisted of such categories as negative

feelings, inadequate system, lack of support, uncomfortable climate of SBECSA, poor environment, and burdens. The responses were set on a six-point scale, ranging from “not applicable at all” (0) to “very applicable” (5). Each participant was also asked to complete a series of sociodemographic questions about their gender, age, and the type of school where they coached (junior high school or high school). They were also asked whether or not they were willing to become a full-time teacher.

2.3 Analyses

To estimate the importance of each facilitator and barrier, the percentages of applicability were calculated. Scores of 0–2 were defined as inapplicable answers and 3–5 were considered as applicable. The percentages of applicability between gender (male or female), age (younger or older group dichotomized by mean age), type of school (junior high or high school), and external coaches who were and were not willing to become full-time teachers were calculated respectively. Then, chi-square tests ($\alpha = .05$) were conducted to verify the differences between the two groups for each facilitator and barrier. Any missing values were excluded. All analyses were performed using IBM SPSS Statistics Version 21.

3. Results

3.1 Participant Characteristics

Responses were received from 149 external coaches (response rate, 7.5%). The participant characteristics appear in Table 1. There were 129 male (86.6%) and 20 female (13.4%). The participants showed a wide age-range, with a mean age of 46.7 years (standard deviation, 15.1). The numbers of external coaches who coached at junior high and high schools were 86 (57.7%) and 59 (39.6%), respectively. Seventeen external coaches were willing to become full-time teachers, 12 of whom were in their 20s.

Table 1. Participant characteristics

	n	%
Overall	149	100.0
Gender		
Male	129	86.6
Female	20	13.4
Missing	0	0.0
Age group		
20-29	27	18.1
30-39	24	16.1
40-49	33	22.1
50-59	33	22.1
60-69	19	12.8
70-80	12	8.1
Missing	1	0.7
Mean±SD		46.7±15.1
Type of school		
Junior high school	86	57.7
High school	59	39.6
Missing	4	2.7
Willing to be a teacher		
Yes	17	11.4
No	123	82.6
Missing	9	6.0

3.2 Facilitators to Engaging in SBECSA

For 39 of the 53 facilitators, more than 50% of the external coaches indicated that they were applicable (Table 2). The facilitators that were reported to be applicable by over 90% of the coaches were as follows: f2, feeling enjoyment (98.6%); f5, feeling enjoyment to consider team members (91.3%); f12, love of the sport that external coach plays (100.0%); f16, desire for team members to win (94.6%); f22, having a cooperative SBECSA teacher (91.3%); f30, seeing technical improvement in team members (98.0%); f31, seeing personal progress in team members (96.0%); f36, having a coaching environment available (95.3%); and f40, learning of external coach (92.6%). Within the large category of comfortable climate of SBECSA, all the small categories were considered applicable by over 80% of the coaches. Financial compensation was not regarded as an important facilitator (12.2%).

Only one facilitator—f25, understanding from parents—was reported more frequently as a facilitator among female than male (100.0% and 79.5%, respectively). Four items showed a significantly higher rate of applicable responses from coaches in the younger (20–46 years) than older age-group (47–80 years old): f37, having a SBECSA teacher to learn from (54.3% versus 33.8%); f49, being able to network (75.7% versus 51.3%); f50, increasing acquaintances (77.1% versus 61.5%); and f53, getting a position as a part-time teacher (10.0% versus 1.3%). Subjects who coached in junior high schools felt that one item—f24,

understanding from teachers other than the SBECSEA teacher—was more applicable than those who coached in high schools (80.2% versus 63.8%); participants who coached in high schools felt that two items—f19, getting compensation (19.0% versus 7.0%) and f23, adjusting practice time around external coach's schedule (55.9% versus 32.6%)—were more applicable than those coaching in junior high schools.

With five items, there were higher proportions among coaches who were willing to become full-time teachers: f37, having a SBECSEA teacher to learn from (70.6% versus 39.3%); f47, accumulating coaching experience (88.2% versus 61.8%); f49, being able to network (94.1% versus 58.5%); f50, increasing acquaintances (94.1% versus 65.0%); and f53, getting a position as a part-time teacher (17.6% versus 3.3%). By contrast, with four items there were higher proportions among the coaches who did not wish to become full-time teachers: f13, vitalizing the local sport the external coach plays (85.2% versus 58.8%); f20, being requested by the organization to which external coach belongs (33.6% versus 5.9%); f33, alma mater of external coach (41.0% versus 11.8%); and f34, close proximity of school (64.2% versus 35.3%).

Table 2. Percentages for facilitators of involvement among the external coaches

Large category (7)	Middle category (24)	Small category (53)	Overall	Age group		Willing to be a teacher	
				20-46	47-80	Yes	No
positive feelings	enjoyment	f1. sharing a dream with team members	82.6	82.9	82.1	82.4	81.3
		f2. feeling enjoyment	98.6	98.6	98.7	100.0	98.4
		f3. having a refreshing change	53.7	60.9	47.4	52.9	52.9
		f4. achieving a sense of fulfillment	85.9	82.9	88.5	82.4	85.4
		f5. feeling enjoyment to consider team members	91.3	90.0	92.3	100.0	89.4
		f6. having fun as a coach	40.3	45.7	35.9	47.1	37.4
	parental-like warmth toward team members	f7. feeling parental-like warmth toward team members	87.9	88.6	87.2	76.5	88.6
		f8. desire to continue to involve team members	89.3	92.9	85.9	88.2	88.6
		f9. desire to help team members continue to engage in SBECSEA	88.5	87.1	89.6	94.1	86.9
	desire to coach	f10. desire to coach	87.2	91.4	83.3	88.2	86.2
		f11. desire to have a positive influence as a coach	63.1	58.6	66.7	58.8	62.6
	love for the sport	f12. love of the sport that external coach plays	100.0	100.0	100.0	100.0	100.0
		f13. vitalizing the local sport the external coach plays	82.4	81.4	83.1	58.8	85.2*
	commitment or responsibility	f14. having a commitment or responsibility	89.9	90.0	89.7	88.2	90.2
		f15. desire to repay an obligation	79.2	82.9	75.6	70.6	79.7
desire to win	f16. desire for team members to win	94.6	98.6	91.0	100.0	93.5	
adequate system	little responsibility	f17. affable status of external coach for team members or their parents	76.5	71.4	80.8	64.7	76.4
		f18. having little sense of responsibility by getting no compensation	10.8	12.9	9.1	11.8	10.7
	compensation	f19. getting compensation	12.2	12.9	11.7	23.5	9.8
	strong request from an organization	f20. being requested by the organization to which external coach belongs	30.4	31.4	29.9	5.9	33.6*
	rights of the external coach	f21. having the right to enter the competition site	46.6	39.1	52.6	56.3	43.8

positive social support	cooperative SBECSA teacher	f22. having a cooperative SBECSA teacher	91.3	88.6	93.6	76.5	92.7
		f23. adjusting practice time around external coach's schedule	42.3	38.6	46.2	47.1	42.3
	understanding from the school	f24. understanding from teachers other than the SBECSA teacher	74.3	77.1	71.4	70.6	73.8
	understanding from parents	f25. understanding from parents	82.3	84.3	80.3	76.5	82.6
	cooperative family	f26. support from own family members	62.4	55.7	67.9	58.8	61.8
comfortable climate of SBECSA	acceptance of SBECSA	f27. acceptance of team members	89.9	85.7	93.6	82.4	91.1
		f28. respect from team members	81.2	75.7	85.9	64.7	82.1
		f29. team members who take external coach's advice	85.9	81.4	89.7	82.4	85.4
	growth of team members	f30. seeing technical improvement in team members	98.0	98.6	97.4	100.0	98.4
		f31. seeing personal progress in team members	96.0	94.3	97.4	94.1	95.9
high motivation of team members	f32. high motivation of team members	86.5	90.0	83.1	76.5	87.7	
environment	easy access	f33. alma mater of external coach	38.5	41.4	35.9	11.8	41.0*
		f34. close proximity of school	61.1	55.7	66.7	35.3	64.2*
		f35. being able to go to practice facility using only a commuter pass	11.6	12.9	10.5	23.5	9.1
		f36. having a coaching environment available	95.3	92.9	97.4	88.2	95.9
	environment where an external coach can grow	f37. having a SBECSA teacher to learn from	43.9	54.3*	33.8	70.6*	39.3
		f38. being on a powerful team	24.5	21.4	26.3	23.5	24.8
inadequate environment	f39. being motivated by a poor SBECSA environment	35.1	34.3	36.4	23.5	37.7	
growth of external coach	growth of external coach	f40. learning of external coach	92.6	90.0	94.8	94.1	91.8
		f41. growth of external coach	83.8	87.1	80.5	88.2	82.0
		f42. enhancement of communication skills	85.8	82.6	88.5	82.4	85.2
		f43. learning ways to communicate with team members	74.3	81.4	67.5	94.1	71.3
		f44. enhancing competitive ability of external coach	63.1	65.7	60.3	64.7	61.8
	f45. enhancing physical fitness of external coach	59.1	55.7	61.5	47.1	60.2	
	coaching experience	f46. having an educational experience	60.5	67.1	53.9	70.6	59.5
f47. accumulating coaching experience		65.1	72.9	57.7	88.2*	61.8	
f48. talking with other coaches or SBECSA teacher		72.5	75.7	69.2	76.5	71.5	
network building	networking	f49. being able to network	63.1	75.7**	51.3	94.1**	58.5
		f50. increasing acquaintances	69.1	77.1*	61.5	94.1*	65.0
		f51. increasing customers for self-employed external coaches	4.7	1.4	7.8	0.0	5.7
	positive influence on future career	f52. perceiving that external coaching is helpful in passing the teacher adaptation examination	13.8	15.7	12.2	29.4	11.7
		f53. getting a position as a part-time teacher	5.4	10.0*	1.3	17.6*	3.3

Note. "f" placed in front of small category means "facilitator"; ** = $p < .01$; * = $p < .05$; Percentages exclude missing data.

3.3 Barriers to Engaging in SBECSA

With respect to barriers, no items were considered applicable by 50% or more of the coaches (Table 3). Barriers that over 40% of the coaches perceived as applicable were as follows: b1, gap between a coaching ideal and actual experience (44.6%); b11, no environment where coaches can work (41.5%); b14, institutional limitation on working range (44.6%); b27, insufficient contact with SBECSA teacher (41.6%); b30, insufficient parenting (44.6%); and b39, low motivation of team members (40.9%). Poor financial compensation was not regarded as an important barrier (13.5%).

Only one barrier—b31, poor relationships between parents and SBECSA teacher (40.0% versus 18.0%)—was reported more frequently by female than male. Coaches in the younger age-group (20–46 years) were significantly more likely to report barriers than their older counterparts (47–80 years), and they did so for 22 of the 54 items. Nine of these items were perceived to be applicable by more than 40% of the participants aged 20–46 years: b2, concerns about own coaching method (45.7% versus 28.2%); b11, no environment where coaches can work (50.7% versus 33.8%); b18, unsure of status or role (41.4% versus 17.9%); b20, school policy that prohibits involvement of external coaches (45.7% versus 28.6%); b21, teachers who have negative opinions about involvement of external coaches (43.5% versus 23.4%); b24, SBECSA teachers who rarely come to the field (41.4% versus 19.2%); b27, insufficient contact with SBECSA teacher (51.4% versus 32.1%); b36, poor relationships with team members (40.0% versus 23.1%); and b43, inadequate facilities or equipment (48.6% versus 30.8%). Only one barrier—b38, retirement of external coach's own child from SBECSA (14.9% versus 0.0%)—was accorded a higher rate by the coaches aged over 47 years. There were no significant proportional differences among the barriers between junior high and high school.

Seven items showed a higher proportion among the coaches who were willing to become full-time teachers: b9, no credit on teacher adaptation examination (29.4% versus 4.2%); b11, no environment where coaches can work (75.0% versus 37.7%); b20, school policy that prohibits involvement of external coaches (58.8% versus 33.6%); b24, SBECSA teachers who rarely come to the field (58.8% versus 25.2%); b25, insufficient efforts to accept external coaches (52.9% versus 20.5%); b26, conflicting opinions with SBECSA teacher (58.8% versus 20.3%); and b28, lack of understanding from parents (47.1% versus 21.3%). However, one item—b52, unrealistic expectations from teachers or parents (30.1% versus 0.0%)—was accorded a higher rate by coaches who were not willing to become full-time teachers.

Table 3. Percentages for barriers to involvement among the external coaches

Large category (6)	Middle category (24)	Small category (54)	Overall	Age group		Willing to be a teacher	
				20-46	47-80	Yes	No
negative feelings	worries about coaching	b1. gap between a coaching ideal and actual experience	44.6	45.7	44.2	29.4	45.1
		b2. concerns about own coaching method	36.9	45.7*	28.2	52.9	34.1
		b3. having to engage in tasks other than technical coaching	32.7	30.4	35.1	17.6	33.1
	physical and mental fatigue	b4. feeling fatigued	18.8	24.3	12.8	17.6	16.3
		b5. poor competition score for external coach	15.0	18.6	11.8	17.6	14.8
	concerns about team members becoming injured	b6. concerns about team members becoming injured	26.2	37.1**	16.7	17.6	26.0
lack of enjoyment	b7. not enjoying the coaching experience	36.1	42.0	29.9	41.2	35.0	
inadequate system	primitive system	b8. no mediation system for external coaches	21.5	25.7	17.9	17.6	21.1
		b9. no credit on teacher adaptation examination	6.9	8.6	5.4	29.4**	4.2
		b10. no educational system for external coaches	33.3	40.6	26.0	47.1	32.2
		b11. no environment where coaches can work	41.5	50.7*	33.8	75.0**	37.7
		b12. not continuing the involvement of external coaches	19.7	27.5*	13.0	29.4	16.5
	limitations of the system	b13. institutional limitation on coaching frequency	23.5	30.0	17.9	35.3	20.3
		b14. institutional limitation on working range	44.6	50.0	40.3	47.1	43.4
		b15. institutional limitation on number of external coaches	20.9	30.0*	13.0	29.4	18.0
	lack of compensation	b16. little or no compensation	13.5	20.0*	7.8	11.8	13.1
		b17. not an hourly wage	2.7	4.3	1.3	0.0	3.3
unclear status or role	b18. unsure of status or role	29.5	41.4**	17.9	35.3	28.5	
	b19. no official request from school	16.8	18.6	14.1	23.5	14.6	

	b20. school policy that prohibits involvement of external coaches	37.2	45.7*	28.6	58.8*	33.6
lack of understanding from the school	b21. teachers who have negative opinions about involvement of external coaches	33.3	43.5**	23.4	52.9	29.8
	b22. cumbersome approval procedure to enter the school	7.4	12.9*	2.6	17.6	4.9
	b23. being unrecognized by students (excluding team members)	20.8	22.9	19.2	17.6	21.1
	b24. SBECSA teachers who rarely come to the field	29.5	41.4**	19.2	58.8**	25.2
uncooperative SBECSA teacher	b25. insufficient efforts to accept external coaches	25.7	34.8*	17.9	52.9**	20.5
	b26. conflicting opinions with SBECSA teacher	26.2	37.1**	16.7	58.8**	20.3
	b27. insufficient contact with SBECSA teacher	41.6	51.4*	32.1	41.2	41.5
lack of support	b28. lack of understanding from parents	25.0	37.1**	14.3	47.1*	21.3
	b29. poor relationships with parents	27.0	38.6**	15.6	41.2	24.6
	b30. insufficient parenting	44.6	44.3	45.5	52.9	42.6
	b31. poor relationships between parents and SBECSA teacher	20.9	25.7	15.6	29.4	17.2
lack of communication	b32. no chance for information exchange	21.8	30.0*	14.3	23.5	18.2
	b33. no interaction among coaches	23.0	28.6	18.2	35.3	19.7
opposition from external coaches family	b34. lack of support from external coaches family members	18.1	24.3	12.8	17.6	15.4
uncooperative athletic association	b35. uncooperative athletic association	25.2	35.7**	14.5	41.2	23.1

uncomfortable climate of SBECSA		b36. poor relationships with team members	31.5	40.0*	23.1	41.2	29.3
	poor relationships with team members	b37. having team members who do not accept external coach's instruction	34.2	41.4	26.9	35.3	33.3
		b38. retirement of external coach's own child from SBECSA	7.6	0.0	14.9**	0.0	8.3
	low motivation of team members	b39. low motivation of team members	40.9	45.7	37.2	41.2	40.7
	despair or distress of team members	b40. despair or distress of team members	22.8	20.0	25.6	17.6	22.8
poor environment	inconvenient practice time	b41. inconvenient practice time	32.7	39.1	27.3	29.4	30.6
	inconvenient location	b42. long distance to school	12.1	14.3	9.0	11.8	11.4
	inadequate facilities or equipment	b43. inadequate facilities or equipment	39.6	48.6*	30.8	47.1	39.0
	bad weather	b44. bad weather	7.5	8.6	6.6	0.0	8.3
burdens	time burdens	b45. decrease in private time	26.4	34.3*	19.5	23.5	26.2
		b46. requires time	20.1	25.7	15.4	23.5	19.5
		b47. no extra time to do part-time job	4.7	8.6	1.3	11.8	4.1
		b48. having to sacrifice holidays	24.0	30.0	18.7	11.8	25.6
	pressure or expectations	b49. having the responsibility	34.2	31.4	37.2	29.4	34.1
		b50. not finishing coaching obligations before the next coaching day	19.6	22.9	15.6	23.5	19.7
		b51. pressure from alumni organization	18.2	28.6**	7.8	23.5	17.2
		b52. unrealistic expectations from teachers or parents	28.2	27.1	29.5	0.0	30.1**
negative effect on primary job	b53. difficulty balancing primary job and coaching	27.7	32.9	23.4	29.4	26.2	
	b54. having to compete against other school teams	7.4	5.7	9.0	0.0	8.1	

4. Discussion

A cross-sectional self-administrated questionnaire survey were conducted among external SBECSA coaches at junior high and high schools across Japan to examine the importance of facilitators and barriers in engaging the coaches. It was also aimed to clarify whether differences existed in perceptions of the survey items with respect to various characteristics of the coaches.

Most of the highly perceived (over 90%) facilitators may be regarded as intrinsic motivation—doing something because it is inherently interesting or enjoyable (Ryan & Deci,

2000): f2, feeling enjoyment; f5, feeling enjoyment to consider team members; f12, love of the sport that external coach plays; f16, desire for team members to win; f30, seeing technical improvement in team members; f31, seeing personal progress in team members; f40, learning of external coach. By contrast, the facilitator related to the extrinsic motivation of financial compensation (Ryan & Deci, 2000) was comparatively low (12.2%). Previous surveys conducted among school principals indicated that prohibitive costs were a reason for not outsourcing external coaches (Williams et al., 2011), and greater compensation has been targeted (Miyagi Prefecture Board of Education, 2008). However, the results of the present study indicate that improving the environment in which external coaches can feel enjoyment or undergo personal development (i.e., intrinsic motivations) are more important than greater compensation.

In terms of barriers, b14—institutional limitation on working range—was highly perceived (44.6%). Some prefectures in Japan have rules whereby external coaches are not allowed to take students to competitions or out of school alone; they are also unable to attend managerial conferences (Hokkaido Junior High School Physical Culture Association, 2006, 2010). Easing such limitations would make external coaches engage more readily in SBECSA.

In the middle category of “uncooperative SBECSA teacher” indicated in Table 3, one item—b27, insufficient contact with SBECSA teacher—was a highly perceived barrier (41.6%). Additionally, the large category of “comfortable climate of SBECSA” was more likely to be reported as a facilitator. As suggested by previous studies (Aoyagi et al., 2013b, 2013c), teachers should engage in SBECSA cooperatively and allot an appropriate role to the external coach.

A high proportion of participants in the younger age-group (20–46 years) reported worries about coaching (b2, concerns about own coaching method) and uncooperative SBECSA teachers (b24, SBECSA teachers who rarely come to the field; b27, insufficient contact with SBECSA teacher) as barriers. However, there are cases of teachers wanting to recruit young external coaches (Aoyagi et al., 2013a). Holding workshops toward eliminating worries about coaching and enhancing support from teachers would be valuable in encouraging the engagement of young coaches.

External coaches who were willing to become full-time teachers tended to coach toward gaining experience (f47, accumulating coaching experience) and networking (f49, being able to network; f50, increasing acquaintances), regardless of ease of access (f33, alma mater of external coach; f34, close proximity of school). Because teachers require that external coaches think as educators (Aoyagi et al., 2013a; Flintoff, Foster, & Wystawnoha, 2011), coaches who want to become full-time teachers may be considered suitable human resources. Feedback from teachers is believed to enhance the experience of external coaches (National Institute of Fitness and Sports in Kanoya, Student Sports Volunteer Support Room, 2012). Workshops also have the potential to build up networks with other participants (Lydon & King, 2009). Therefore, when targeting external coaches with educational thinking or knowledge, providing feedback or holding workshops could be useful strategies.

Although there were few differences among the facilitators and barriers by gender, female

coaches more likely to perceive f25 (understanding from parents) as a facilitator and b31 (poor relationships between parents and SBECSA teacher) as a barrier. Creating a good relationship among the external coach, teacher, and parents would be supportive for female coaches. Beyond the question items that appeared in the present study, LaVoi and Dutove (2012) reviewed the barriers for female coaches, such as perceptions of being underpaid, limited upward career mobility, feelings of exclusion by male colleagues, and a lack of respect from athletes. An interview-based investigation (Aoyagi et al., 2013c), which supplied the basis for the questionnaire used in the present study and conducted among male and female Japanese external SBECSA coaches in junior high and high schools, did not identify the above barriers (LaVoi & Dutove, 2012). Differences in the reported barriers may arise through the targeted school type (junior high and high school or university) or professional level (including compensation).

The present study found few differences between coaching in junior high and high schools. It is thus unnecessary to consider differences in school type when examining strategies to promote the recruitment of external SBECSA coaches. One study found a difference between primary and secondary schools: in light of the children's developmental stage, primary school teachers were more likely to require that external coaches possess an educational viewpoint than improve performance (Flintoff et al., 2011). A comparison of facilitators and barriers between coaches in elementary school and those in junior high and high schools may have yielded certain differences.

The current study has some limitations. First, although the participants were collected nationwide, the representativeness of participants may have been insufficient owing to the low response rate. Second, the analysis was cross-sectional, thereby making it impossible to identify the cause and effect. However, the cause-and-effect relationship would not make a large difference in the ultimate practice of SBECSA: enhancing facilitators and reducing barriers is certain to benefit external coaches and improve the SBECSA coaching environment. Despite these limitations, the present study adds quantitative support to the facilitators and barriers reported by Aoyagi et al. (2013c). Describing these facilitators and barriers with a quantitative method, such as the mixed-methods approach previously conceptualized by Creswell (2014), is important toward determining an effective strategy for a large number of external coaches. The results of the present study may be applied to improve the effectiveness of recruiting and managing external coaches.

5. Conclusion

In the present study, a cross-sectional self-administrated questionnaire was distributed to external coaches in order to evaluate the facilitators and barriers for engaging external coaches in school-based extracurricular sports activities and to determine whether differences in facilitators and barriers exist for the coaches and if these are related to the various characteristics of the coaches. Most of the highly perceived facilitators may be regarded as intrinsic motivation; while the facilitator related to the extrinsic motivation of financial compensation was low perception. In terms of barriers, institutional limitation and

uncooperative SBECSA teacher were highly perceived. Some differences were found in the responses related to the coaches' age-group and their willingness or unwillingness to become full-time teachers. Adapting strategies to reflect the most commonly perceived facilitators and barriers would be effective in promoting the engagement of external SBECSA coaches. In particular, policy makers and human resource organizations which mediate schools and coaches need to ease institutional limitations and hold SBECSA workshops. Additionally, SBECSA teachers should improve the coaching environment such that the coach can feel enjoyment or undergo personal development, support the coach and participate in the SBECSA, and allot appropriate roles for the external coach.

Acknowledgement

The authors would like to thank all participating external coaches and the individuals who introduced participants. The present study was supported by the Research Grant (No. 26-3450) from Japan Society for the Promotion of Science, and Global COE Program "Sport Sciences for the Promotion of Active Life" from the Ministry of Education, Culture, Sports, Science and Technology in Japan.

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