
ARTICLES

Exploring the Out-of-School Time Program Ecology of Boy Scouts

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Youth development programs, such as Boy Scouts of America, and other out-of-school time programs (e.g., sport), may represent important ecological assets in the lives of youth. Participation in such programs has been linked to indicators of positive youth development, including character virtues. Nuanced relationships exist, however, between involvement in specific sets of out-of-school time programs and indicators of positive youth development. The present study examined character virtues of youth ($N = 667$) who participated in Boy Scouts of America and in other out-of-school time programs (e.g., sport, band/music, or faith-based activities). Scouts participated in an average of two other out-of-school time programs. There was relatively limited variability, however, in the intensity of out-of-school time program participation. Sport was the other out-of-school time program most frequently engaged in by Scouts. In general, character virtues did not vary in relation to participation breadth or intensity. Limitations of the present study and implications for future research are discussed.

Contemporary models of positive youth development (PYD) are linked to the relational developmental systems (RDS) metamodel (Overton, 2015), which emphasizes that youth thriving occurs when the strengths of youth (e.g., character virtues) are integrated reciprocally with assets in their ecologies (e.g., see Lerner, Lerner, Bowers, & Geldhof, 2015). Such assets may promote positive growth (Benson, Scales, & Syvertsen, 2011) and are found in all places wherein young people spend their time; for example, in families, schools, and—for many millions of American youth—out-of-school-time (OST) youth development (YD) programs (for review, see Vandell, Larson, Mahoney, & Watts, 2015).

OST programs represent important and ubiquitous ecological assets linked to PYD within the individual-context developmental system (e.g., Vandell et al., 2015). In particular, nationally-available YD programs (e.g., 4-H, YMCA, Boys and Girls Clubs, Big Brothers/Big Sisters, Girls, Inc., Girl Scouts of the USA, and Boy Scouts of America [BSA]) may serve as key contexts in the lives of young people that promote indicators of PYD, including, for example, the Five Cs of PYD (e.g., competence, confidence, connection, caring, and character; Benson et al., 2011; Lerner et al., 2005; Roth & Brooks-Gunn, 2003). Participation in such programs is related to the development of character virtues, confidence, contribution to others and one's community, school competence, and lower likelihood of engagement in risk/problem behaviors (e.g., Hilliard et al., 2014; Lerner et al., 2005).

Many youth participate in several different YD programs each year while they are in school (e.g., Vandell et al., 2015). These programs may involve one or more of the above-noted national YD organizations: that is, programs that seek to promote one or more of the Five Cs of PYD, through providing safe spaces for youth and delivering programs that involve the "Big Three" (Lerner, 2004). These programs offer opportunities for (1) cultivating and sustaining positive relationships with adult mentors, (2) developing important life skills, and (3) applying these skills in other valued activities in different contexts. In addition to the above-noted national YD programs, other organized OST programs offering the "Big Three" may include faith-based programs, school/academic clubs, music and/or arts programs, civic/community service programs, or sport programs (Vandell et al., 2015).

There is some evidence suggesting that all previously discussed OST programs may serve as assets that promote youth thriving (e.g., Urban, Lewin-Bizan, & Lerner, 2009). Moreover, there is evidence suggesting that "more is better" (Benson et al., 2011); that is, the broader the array of OST programs in which youth participate, the greater their likelihood of PYD. There are, however, some qualifications that need to be made about this generalization. For example, youth vary in the number of programs in which they participate at the same time (as indexed, for instance, by breadth), and in the amount of time per week or month they devote to a program (as indexed, for instance, by intensity). Thus, different dimensions of OST program participation need to be differentiated to understand if and how such participation is related to youth thriving.

Moreover, research examining these different dimensions of youth program involvement has yielded mixed findings about whether breadth or intensity of OST program participation is more likely to promote PYD (e.g., Bohnert, Fredricks, & Randall, 2010). Research suggests the importance of measuring different dimensions of OST program participation simultaneously to better understand potential interrelations between such dimensions, and how such dimensions of OST program participation might impact indicators of development during childhood and early adolescence (e.g., Bohnert et al., 2010; Lerner et al., 2015; Vandell et al., 2015).

In addition, the benefits of OST program participation may depend on the specific combinations, or sets, of programs in which youth participate simultaneously (i.e., breadth). For instance,

although sport is the most frequently engaged in OST program among American youth, data indicate that young people's likelihood of PYD may be diminished when they are only involved in sport, as compared to when they participate in sport and an array of other programs, particularly YD programs (e.g., Holt, 2016; Larson, Hansen, & Moneta, 2006; Vandell et al., 2015; Zarrett et al., 2009). Thus, sport involvement may be linked to positive (e.g., academic achievement) and potentially problematic (e.g., risk behavior) outcomes, depending on whether sport involvement occurs in conjunction with involvement in non-sport-related activities (e.g., Larson et al., 2006; Zarrett et al., 2009). For instance, Zarrett et al. (2009) examined program participation among youth in Grades 5 through 7 and identified complex associations between OST programs and sport involvement. Their findings suggest that the benefits of sport participation may depend on the specific combinations of other activities in which youth participate in addition to sport. For example, youth who participated in sport and YD programs simultaneously had significantly higher scores on PYD than youth who only participated in sport. Metzger, Crean, and Forbes-Jones (2009) found similar results in their assessment of patterns of OST program participation among ethnically diverse, urban adolescents. Results from these two studies suggest that young people's involvement in different OST programs may be complex and differentially linked to specific developmental attributes (e.g., Metzger et al., 2009).

In regard to intensity of OST program participation, Ferris, Oosterhoff, and Metzger (2013) found that variation in intensity of participation in specific OST programs was linked to indicators of PYD among rural adolescents. For instance, greater levels of participation in academic clubs were associated with higher grade point averages, whereas greater levels of involvement in faith-based activities were related to lower engagement in problem behaviors, specifically alcohol consumption and illicit drug use. These findings suggest that intensity of OST program participation provides unique developmental benefits for adolescents. Further investigation of this dimension of OST program participation is warranted, however, because little is known about the impact of intensity of OST program participation on youth in middle childhood and early adolescence.

In short, then, research describing associations between sport participation, involvement in other OST programs, and indicators of PYD needs to ascertain if variation in breadth and intensity of OST program participation is linked differentially to specific indicators of PYD (e.g., Bohnert et al., 2010; Hilliard et al., 2014; Zarrett et al., 2009). As such, the present research seeks to elucidate the ecology of OST program participation among children and young adolescents participating in BSA by examining the relationship between breadth and intensity of participation in BSA, sport, and other OST programs and indicators of character development that are of particular interest to BSA (BSA, 2010).

To make this contribution to the literature, we capitalized on an ongoing study of children and young adolescents who were participating in BSA programming (e.g., Hilliard et al., 2014; Wang, Ferris, Hershberg, & Lerner, 2015a). Such programs focus on promoting indicators of PYD, with a particular emphasis on the development of character virtues, such as trustworthiness, helpfulness, and kindness (Wang et al., 2015a, 2015b). In the present study, we assessed the relationship between breadth and intensity of participation in BSA, sport, and other OST programs and indicators of character development among Scouts. Consistent with prior research (e.g., Holt, 2016; Zarrett et al., 2009), we expected that, in addition to BSA, sport would be the OST program engendering the most OST program participation in our sample. Because this study was primarily exploratory in nature, however, we formulated no specific hypotheses about potential associations between dimensions of OST program participation (i.e., breadth and intensity) and character virtues.

METHOD

Our sample was derived from a longitudinal and mixed-methods investigation of character among Cub Scouts and non-BSA elementary school-aged youth in the greater-Philadelphia area that took place between 2012 and 2014 (see Hilliard et al., 2014). We present, however, only the method and results relevant to our cross-sectional assessment of a portion of the overall sample. In the larger study, 1,803 Scouts were surveyed across five data collection time points, along with 1,040 of their parents. Some of these parents completed a demographic questionnaire at one point in time. This measure included questions about their children's involvement in various OST programs. In the present study, our sample consisted of Scouts ($N = 667$) whose parents completed the demographic measure and who, as well, participated in Scouting for at least one hour per week and completed measures of character virtues with minimal missing data (0.30% to 2.70%). Because youth data were collected across five time points, we analyzed youth questionnaire data that were collected closest in time to when parent questionnaires were completed.

Participants

Youth participants included 667 boys recruited from Cub Scout packs in greater Philadelphia ($M_{age} = 9.27$ years, $SD = 1.36$, range = 6–11 years). Participants were from diverse racial/ethnic backgrounds, with the majority of youth ($n = 491$, 73.6%) identifying as White. Data were also collected from parents/guardians ($N = 667$) of participating youth, with the majority of respondents identifying themselves as Scouts' mothers ($n = 425$, 63.7%), having at least a college degree ($n = 440$, 66.0%), and being currently married ($n = 531$, 79.6%).

Measures

In the present study, parental reports of youth weekly participation in various OST programs were used to index breadth and intensity of youth program participation. In turn, we used an established measure of character virtues to index youth PYD.

OST program participation. The parent questionnaire included a list of 12 OST programs and asked parents to indicate the programs in which their children were involved. This list was an adapted version of the Participation in Activities measure that was created for use in the 4-H Study of PYD (Lerner et al., 2005). OST programs were categorized into seven groups based on recommendations from prior research (e.g., Ferris et al., 2013): (1) Scouting (or BSA), (2) YD programs other than Scouting (i.e., Big Brothers/Big Sisters and Boys & Girls Club), (3) academic clubs, (4) sport (i.e., sport and martial arts), (5) faith-based activities, (6) band/music, and (7) volunteering. Involvement in arts/crafts, the Salvation Army, and parks and recreation was excluded from analysis because these activities failed to meet criteria for structured OST programs (e.g., Vandell et al., 2015). For each OST program, parents were also asked to report the average number of hours per week that their children spent in the program. Parents used a 5-point Likert-type scale, ranging from 0 (*less than 1 hour*) to 4 (*five or more hours*). Responses with a value of 0 were treated as missing data in the analysis, as they indicated either no participation or minimal weekly participation in a specific OST program. The other response values, which ranged from 1 to 4, were used to index Scouts' intensity of involvement in each program,

with higher scores indicating greater intensity of OST program participation (e.g., Bohnert et al., 2010). Breadth of OST program participation was indexed as the summed total number of programs in which Scouts participated for at least one full hour per week. This score ranged from 1 to 7, with higher scores indicating greater breadth of OST program participation (e.g., Bohnert et al., 2010).

Character virtues. Youth completed the Assessment of Character in Children and Early Adolescents (ACCEA; Wang et al., 2015b), which measures character virtues that are emphasized in the BSA curriculum. All character virtues measured by the ACCEA were scored using a 5-point Likert-type scale, ranging from 1 (*not at all like me*) to 5 (*exactly like me*); higher scores indicated greater presence of the virtues measured by the scales. The character virtues measured by the ACCEA include:

Obedience. Participants completed four items ($\alpha = .72$) that assessed rule-following. For example, “I do what my teachers say.”

Religious reverence. Participants completed four items ($\alpha = .79$) that assessed their involvement in faith-based practices. For example, “I pray.”

Cheerfulness. Participants completed three items ($\alpha = .80$) that assessed their self-reported degree of happiness. For example, “I am happy.”

Kindness. Participants completed four items ($\alpha = .81$) that assessed their kindness toward others. For example, “I’m kind to other kids.”

Thriftiness. Participants completed four items ($\alpha = .62$) that assessed their conservation of resources. For example, “I save my money for something special.”

Hopeful future expectations. Participants completed three items ($\alpha = .71$) that assessed their future-mindedness. For example, “I will have a happy family.”

Trustworthiness. Participants completed five items ($\alpha = .80$) that assessed their level of honesty and responsibility. For example, “I can be counted on to tell the truth.”

Helpfulness. Participants completed six items ($\alpha = .80$) that assessed their engagement in prosocial behaviors. For example, “I help my friends.”

Procedure

Data were collected by trained Scout leaders or by members of the research team (see Hilliard et al., 2014). For all youth data, parental consent and youth assent were obtained, and participants were incentivized with a \$20 gift card. Parents also completed a brief questionnaire, which asked them to provide family demographic information and information about their children’s OST program participation.

Analytic Strategy

This study explored the ecology of OST program participation among children and young adolescents participating in BSA by examining the relationship between breadth and intensity of

participation in sport and other OST programs and indicators of character development. First, we conducted descriptive analyses by tabulating the frequency with which Scouts participated in different combinations, or sets, of programs (e.g., “BSA only,” “BSA plus one other OST program,” “BSA plus two other OST programs,” “BSA plus three other OST programs”—all the way through “BSA plus six other OST programs”). Then, we explored if and how these frequencies of participation in BSA and other programs were differentiated on the basis of OST program category or group (e.g., sport, band/music, academic clubs). We also described participants’ average weekly intensity of participation in the different sets of programs.

As explained below, sport was the other OST program in which Scouts participated most. In turn, faith-based activities and band/music were the second and third most frequently participated in programs, respectively. Accordingly, we only analyzed data from youth who participated in “BSA only,” “BSA plus sport,” and “BSA plus faith-based activities or band/music,” given the relatively low levels of youth involvement in the other OST programs measured. It should be noted that, although, on average, Scouts participated in BSA plus two other programs, these other programs did not necessarily include sport, band/music, or religious activities. We conducted a one-way multivariate analysis of variance (MANOVA) to explore whether the three groups of Scouts differed in their scores on the character virtues that were assessed. We, then, used structural equation modeling (SEM) to examine the potential relationship between overall breadth and intensity of OST program participation, and the interaction between breadth and intensity, and youth character virtues.

RESULTS

To enhance understanding of the ecology of Scouts’ OST experiences, we examined the breadth and intensity of Scouts’ participation in various OST programs and their relations to indicators of PYD, specifically, character virtues.

Scouts’ Breadth of OST Program Participation

We tabulated the frequencies and percentages with which Scouts participated in different sets of programs (e.g., “BSA only,” “BSA plus one other OST program,” “BSA plus two other OST programs,” “BSA plus three other OST programs,” through “BSA plus six other OST programs”). We also explored whether Scouts’ participation was differentiated on the basis of OST program category or group (e.g., sport, band/music, academic clubs). As stated earlier, the number of OST programs in which Scouts participated for at least one full hour during an average week was summed to create a variable representing breadth of involvement in a range of OST programs ($M = 3.34$, $SD = 1.25$, range = 1–7 OST programs). As shown in [Table 1](#), most Scouts ($n = 218$, 32.7%) participated in BSA in conjunction with two other OST programs. In contrast, a relatively small number of Scouts ($n = 42$, 6.3%) only participated in BSA. These findings are consistent with other studies of OST program participation; that is, American youth who are involved in OST programs participate in an average of about three programs per year (e.g., Lerner et al., 2015).

As shown in [Table 1](#), in addition to BSA, sport was the most common program in which Scouts participated ($n = 517$, 77.5%). Many Scouts were also involved in faith-based programs

TABLE 1
Frequencies and Percentages of Scouts Involved in Different Sets of Out-of-School Time Programs

		<i>Sport</i>	<i>Other Youth Development</i>	<i>Academic</i>	<i>Band/Music</i>	<i>Volunteer</i>	<i>Faith-based</i>	<i>Total</i>
Boy Scouts of America (BSA) only	<i>n</i>	0	0	0	0	0	0	42
	Row %	0.0	0.0	0.0	0.0	0.0	0.0	100.0
BSA + 1 other	Column %	0.0	0.0	0.0	0.0	0.0	0.0	6.3
	<i>n</i>	72	3	7	14	4	23	123
BSA + 2 other	Row %	58.5	2.4	5.7	11.4	3.3	18.7	100.0
	Column %	10.8	.4	1.0	2.1	.6	3.4	18.4
BSA + 3 other	<i>n</i>	171	18	33	68	9	137	218
	Row %	78.4	8.3	15.1	31.2	4.1	62.8	100.0
BSA + 4 other	Column %	25.6	2.7	4.9	10.2	1.3	20.5	32.7
	<i>n</i>	166	28	49	121	16	145	175
BSA + 5 other	Row %	94.9	16.0	28.0	69.1	9.1	82.9	100.0
	Column %	24.9	4.2	7.3	18.1	2.4	21.7	26.2
BSA + 6 other	<i>n</i>	75	21	54	62	23	69	76
	Row %	98.7	27.6	71.1	81.6	30.3	90.8	100.0
BSA + 7 other	Column %	11.2	3.1	8.1	9.3	3.4	10.3	11.4
	<i>n</i>	25	13	22	23	18	24	25
BSA + 8 other	Row %	100.0	52.0	88.0	92.0	72.0	96.0	100.0
	Column %	3.7	1.9	3.3	3.4	2.7	3.6	3.7
BSA + 9 other	<i>n</i>	8	8	8	8	8	8	8
	Row %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	Column %	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	<i>n</i>	517	91	173	296	78	406	667
	% of Total	77.5	13.6	25.9	44.4	11.7	60.9	100.0

($n = 406$, 60.9%) and band/music ($n = 296$, 44.4%). Although Scouting represents an important YD program in the OST program ecology of youth in the current sample, it is worth noting that more than 10% of Scouts participated in other YD programs (e.g., Boys and Girls Clubs) in addition to BSA each week ($n = 91$, 13.6%).

Scouts' Intensity of OST Program Participation

Table 2 presents the average weekly intensities of Scouts' participation in each type of OST program measured. Scouts participated in sport and other YD programs with greater intensities (in the range of 2 to fewer than 4 hours per week: $M = 2.18$ hours for sport, and $M = 2.07$ hours for other YD programs). Average weekly intensity of participation in all other OST programs showed relatively little variability, ranging from 1 to fewer than 2 hours per week.

Indeed, the lack of variability in intensity of OST program participation was underscored when we examined the average weekly intensities associated with Scouts' participation in different sets of OST programs (e.g., "BSA only," "BSA plus one other OST program," "BSA plus two other OST programs," "BSA plus three other OST programs"—all the way through "BSA plus six other OST programs"). As shown in Table 3, when Scouts participated in "BSA only" or in BSA plus up to five other OST programs, their average weekly intensities of OST program participation ranged from 1 to fewer than 2 hours per week. When Scouts participated in "BSA plus six other OST programs," their average participation intensity increased to slightly more than 2 hours per week.

In short, across the descriptive analyses of the ecology of Scouts' OST program participation that are summarized in Tables 1 to 3, when Scouts took part in OST programs other than BSA, sport was the most likely program in which they participated. When Scouts were involved in BSA and up to six other OST programs, faith-based programs and band/music were the second and third most frequently participated in programs, respectively. The variability in breadth of OST program participation in our sample is consistent with past studies of such breadth among American adolescent OST program participants (e.g., Lerner et al., 2015; Vandell et al., 2015). Despite the level of variability in breadth, the relatively low variability in intensity of OST program participation observed in our sample is a new and important finding. Our finding of a relatively low level of variability in intensity underscores the importance of studying different dimensions of OST program participation simultaneously. This finding also suggests that any

TABLE 2
Average Weekly Intensities of Participation in Different Out-of-School Time (OST) Programs

<i>OST Programs</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Scouting	1.35	.71	667
Sport	2.18	1.05	517
Youth development programs	2.07	1.19	91
Academic clubs	1.36	.75	173
Band/music	1.62	.85	296
Volunteer	1.29	.69	78
Faith-based activities	1.60	.99	406

Note. Intensity scores range from 1 (1 to fewer than 2 hours per week) to 4 (more than 5 hours per week).

TABLE 3
Average Weekly Intensities of Participation in Different Sets of Out-of-School Time (OST) Programs

<i>Sets of OST Programs</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Boy Scouts of America (BSA) only	1.42	.86	42
BSA + 1 other	1.28	.72	123
BSA + 2 other	1.31	.61	218
BSA + 3 other	1.34	.70	175
BSA + 4 other	1.39	.77	76
BSA + 5 other	1.56	.92	25
BSA + 6 other	2.13	1.13	8

Note. Intensity scores range from 1 (1 to fewer than 2 hours per week) to 4 (more than 5 hours per week).

significant impact of intensity of OST program participation on character may be constrained because of limited variability in this dimension of involvement.

Relationship Between Breadth of OST Program Participation and Character Virtues

We conducted a one-way MANOVA to examine whether Scouts who participated in (1) “BSA only” ($n = 42$), (2) “BSA plus sport” ($n = 72$), and (3) “BSA plus faith-based activities or band/music” ($n = 37$) differed in their scores on self-reported ACCEA character virtues. As we explained, due to the relatively low levels of involvement in other OST programs (i.e., volunteering, academic clubs, and other YD programs), group-level comparisons of character virtues were not made among Scouts involved in these OST programs. No significant between-group differences were found on the MANOVA omnibus test for the character virtues, Wilks’ $\lambda = .91$, $F(16, 244) = .73$, $p > .05$. Scouts who participated in “BSA only,” “BSA plus sport,” and “BSA plus faith-based activities or band/music” did not differ significantly in their scores on self-reported character virtues. These findings are consistent with those of Zarrett et al. (2009), in that scores on indicators of PYD did not vary among youth participating in different sets of OST programs, including sport, when YD programs were part of a given array.

Consistent, however, with scores on character virtues found in the larger sample of Scouts studied in the Character and Merit Project (CAMP; e.g., Wang et al., 2015a, 2015b), Scouts in the current sample had relatively high ACCEA scores. That is, $M = 3.96$ and $SD = .66$ for obedience, $M = 3.68$ and $SD = 1.01$ for religious reverence, $M = 4.12$ and $SD = .80$ for cheerfulness, $M = 4.31$ and $SD = .71$ for kindness, $M = 3.82$ and $SD = .78$ for thriftiness, $M = 4.56$ and $SD = .61$ for hopeful future expectation, $M = 4.14$ and $SD = .70$ for trustworthiness, and $M = 4.12$ and $SD = .71$ for helpfulness. These ACCEA scores did not significantly differ from those found in the larger sample when t tests were conducted to compare the means.

Exploring Breadth \times Intensity of OST Program Participation Interactions

Despite the restricted variability in regard to intensity of OST program participation that existed in the current sample, we explored whether breadth and intensity of OST program participation interacted in predicting youth character virtues. Accordingly, an SEM was conducted using Mplus Version 7 (Muthén & Muthén, 2010) to examine if and how OST program participation breadth,

intensity, as well as the interaction between breadth and intensity, were related to Scouts' self-reported character virtues. Bivariate correlations indicated that demographic variables such as youth age, race, parental education, and parental marital status were not significantly related to character outcomes; thus, they were not included as control variables in the analysis. All of the dependent variables (i.e., the ACCEA character virtues) were allowed to correlate with each other freely in the model. A significant interaction effect between breadth and intensity was found only for religious reverence ($b = .11$, $SE = .05$, $\beta = .28$, $p < .05$). Given that this finding was not predicted, and that Scouts' participation breadth, intensity, and the interaction between breadth and intensity were not significantly associated with any other character virtues, we believe it is prudent not to interpret this one significant finding as substantive.

In sum, within the current cross-sectional sample of Scouts, BSA program participation typically occurred in conjunction with participation in an average of two other OST programs, with sport being the OST program most often accompanying BSA program participation. The variability in intensity of OST program participation was relatively small and, although the breadth of OST program participation showed greater variation, neither breadth nor intensity, or the interaction between them, was related to the character virtues assessed on the ACCEA. Consistent with findings about character virtues among the BSA participants in the CAMP project (Wang et al., 2015a, 2015b), Scouts in the present analyses also had high ACCEA scores, but these scores did not vary in relation to the ecology of their OST program participation.

DISCUSSION

This study explored the ecology of OST program participation among children and young adolescents participating in BSA by examining their breadth and intensity of participation in Scouting, sport, and other OST programs, and the relationship among these dimensions of OST program participation and indicators of character development. YD programs and other OST programs may constitute influential ecological settings in the lives of youth (e.g., Vandell et al., 2015), perhaps especially when they provide opportunities for the formation of sustained relationships with adult mentors and the acquisition of, and opportunities to use, life skills (e.g., Lerner, 2004). Research also suggests that relations among involvement in different OST programs and youth outcomes may be complex. For instance, distinct patterns of OST program participation have the potential to impact differentially young people's development of character virtues, specifically, and PYD, more generally (e.g., Forneris, Camiré, & Williamson, 2015).

This study expanded existing OST literature by simultaneously examining the relationship among different dimensions of OST program participation (i.e., breadth and intensity) and character virtues among youth ranging in age from 6 to 11 years, a still relatively understudied period of life within which to assess OST–PYD links. Our findings point to variation in the ecology of OST program participation that exists among youth participating in one major nationally operated OST program, BSA. That is, insofar as program breadth is concerned, Scouts, on average, participated in two other OST programs. This finding is consistent with results reported in the 4-H Study of PYD (Lerner et al., 2015), wherein youth across Grades 5 to 12 (about ages 10–18 years) also participated, on average, in three OST programs per year. Nevertheless, more research is needed

on what amount of participation, in which OST programs, for what groups of youth, in what specific contexts is linked to healthy development (e.g., Bohnert et al., 2010; Larson et al., 2006).

Moreover, despite participation in up to seven categories of OST programs among youth in the present study, intensity of OST program participation did not vary greatly, even for those youth who took part in OST programs in all seven categories. In middle childhood and early adolescence, parents play an integral role in the OST program participation experiences of youth (e.g., in terms of activity selection and joint participation between parents and youth; Vandell et al., 2015). Therefore, this finding may simply reflect parents' decision to support their children's OST program participation, but with a strategy of dividing the time allocated to each program into smaller time units (e.g., 1 to fewer than 2 hours per week) to maintain a relatively constant level of OST program participation during an average week. Thus, it may be that the links between OST and PYD, or character virtues development more specifically, may be structurally different among younger versus older youth. However, future research will be needed to investigate this possibility.

In addition, these findings may suggest that young people's engagement, or degree of interest, effort, and enjoyment, in OST programs is too broadly dispersed across OST program contexts (e.g., Lynch et al., 2016). Additional research exploring potential associations between youth engagement in specific OST programs and intensity of program participation may enrich understanding of whether such dispersion is potentially problematic and/or positive in shaping young people's development (e.g., Bohnert et al., 2010; Vandell et al., 2015).

Consistent with past research (e.g., Lerner et al., 2015; Zarrett et al., 2009), we found that, in addition to BSA, sport was the most frequent OST program in which Scouts participated, followed by faith-based activities and band/music. A sizable proportion of Scouts (about 13%), however, participated in a major national OST program other than those of BSA. Of note, given that character development is the indicator of PYD of most interest to BSA (BSA, 2010), we found that character scores did not vary in relation to the array of other OST programs in which Scouts participated. Across the ecology of Scouts' OST program participation, the current sample of youth had relatively high scores on the character virtues measured by the ACCEA. These scores are comparable to those found in the larger sample of Scouts from which the current analytic sample was derived (e.g., Wang et al., 2015a, 2015b).

Using data from the 4-H Study, Zarrett et al. (2009) found evidence that indicators of PYD were lower among youth who participated only in sport. When youth participated in sport and a YD program (such as 4-H, Boy Scouts, or Girl Scouts), however, their scores on indicators of PYD were higher. It may be that YD program participation "inoculated" youth in the 4-H study against problematic developments associated with participating only in sport. Given findings of the present research, however, wherein no youth only participated in sport, we cannot make a direct comparison to the Zarrett et al. (2009) study. We can, however, attain such comparability in the larger CAMP study, given the presence of comparison youth who did not participate in BSA programs. In addition, because we have five times of measurement in the CAMP data set, we can explore whether the development of character virtues differs in regard to the timing of initiation of participation in sport or other OST programs. These analyses are important steps for future research that we will undertake using the CAMP data set.

Limitations and Directions for Future Research

The results of the present study should be interpreted in light of several limitations. First, the demographic composition of our sample involved youth participating in BSA and was all male, largely White, and from one geographic region (i.e., the greater-Philadelphia area). These sample characteristics limit the generalizability of our findings in regard to youth not involved in BSA programs, girls, and/or more ethnically- and contextually-diverse samples (e.g., youth residing in rural settings). In addition, we only analyzed data from youth who were able to complete the questionnaires and whose parents were also able to complete demographic questionnaires, a limitation that further biases our sample.

Despite these constraints on external validity, our findings enhance understanding of the ecology of OST program experiences among children and young adolescents who participate in BSA, one of the largest YD programs in the country. Future research should expand on the present study by exploring whether breadth and intensity of OST program participation (in a sample other than Scouts) might differentially predict the development of virtues and skills (other than those related to character). For instance, the present findings may have implications for future research addressing the efficacy of programs targeting at-risk youth (e.g., Simpkins, 2015). Some preliminary evidence suggests that programs can be effective in helping youth with substance use problems (e.g., Johnson, Pagano, Lee, & Post, 2015; Lee, Veta, Johnson, & Pagano, 2014; Pagano, Wang, Rowles, Lee, & Johnson, 2015).

As noted earlier, future research should also account for youth engagement in the various OST programs in which they are involved. Prior research suggests that OST program engagement is associated with intensity of program participation and youth developmental outcomes (e.g., Lynch et al., 2016). However, in the present study, we did not measure youth engagement in the different OST programs that were assessed. Exploring youth engagement as a potential moderator of the relation between other dimensions of OST program participation and indicators of PYD could provide more nuanced understandings of what combinations of OST programs are most strongly associated with thriving in particular groups of youth. This research would also enable exploration of potential individual differences in young people's OST program experiences that we were not able to examine in the present study.

Other important limitations of the present study are associated with the way in which OST program participation was measured. OST program participation data were only collected at one point in time from parents, and only breadth and intensity of participation were assessed. Prior research suggests that different dimensions of OST program "participation" may result in different conclusions about the relationship between program participation and youth outcomes (e.g., Bohnert et al., 2010). This study would have been enhanced by assessing additional dimensions of youth program involvement (e.g., duration and engagement) based on analysis of data from parents and youth across multiple time points (e.g., Vandell et al., 2015). In addition, in analyzing parent-reported youth intensity of OST program participation, we could not differentiate between "less than 1 hour" per week and no participation, since participants could not differentiate between these two potential options in the response rubric. Thus, responses of "less than 1 hour" per week were excluded from our analysis.

Finally, we have noted that this study is part of a larger 3-year longitudinal investigation of Scouts during the Cub Scout years. To assess more fully the relations between participation in BSA, the ecology of OST program participation, and important developmental outcomes, it is essential to conduct longitudinal research that goes beyond Cub Scouts and follows youth into

their Boy Scout years. Such longitudinal research should simultaneously study breadth, intensity, duration, and engagement of OST program participation. In addition, such research would benefit from assessing how the “Big Three” (Lerner, 2004) are implemented in BSA (and in other OST) programs. Exploring the “black box” of YD programs in this way will enable researchers to elucidate the process through which OST program participation is transformed into character virtues and thriving among youth.

CONCLUSIONS

The present study aimed to enrich understanding of the OST program ecology of Scouts by exploring the relationship between breadth and intensity of participation in BSA, sport, and other OST programs and character virtues during childhood and early adolescence. Most of the Scouts in our sample participated in BSA in conjunction with two other OST programs. Of note, our findings elucidate how two key dimensions of OST program participation (i.e., breadth and intensity) characterize the OST program ecology of Scouts between ages 6 and 11 years. Although Scouts demonstrated variability in their breadth of OST program involvement, there was relatively low variability in their intensity of participation. Thus, this study provides initial insights into patterns of OST program participation during periods of development that are relatively underexplored. An understanding of this breadth of OST program participation, and of the links to program-specific outcomes (e.g., character virtues, in the case of BSA), is vital for future recruitment efforts of YD programs, such as Scouting, as well as for encouraging youth involvement in sport and other OST programs. These findings can help to inform future research examining youth program participation patterns and enhance understanding of how to maximize young people’s potential for thriving in different developmental domains.

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