EMPIRICAL RESEARCH

Examining Youth and Program Predictors of Engagement in Out-of-School Time Programs

Kaylin M. Greene · Bora Lee · Nicole Constance · Kathryn Hynes

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Abstract Prior research suggests that youths’ engagement in out-of-school time programs may be a crucial factor linking program participation to positive outcomes during adolescence. Guided by the theoretical concept of flow and by stage-environment fit theory, the present study explored correlates of engagement in youth programs. Engagement was conceptualized as the extent to which youth found the program activities enjoyable, interesting, and challenging. The current study examined how program content, monetary incentives, and youth demographic characteristics were linked to youth engagement among a sample of primarily low-income middle and high school youth attending 30 out-of-school programs (n = 435, 51% female). Results from multilevel models suggested that program content and staff quality were strongly associated with youth engagement. Youth who reported learning new skills, learning about college, and learning about jobs through activities in the program were more engaged, as were youth who found the staff caring and competent. Results demonstrated that the link between learning content for the future and engagement was stronger for older youth than younger youth. In addition, there was a trend suggesting that providing a monetary incentive was associated negatively with youth engagement. Taken as a whole, these findings have important implications for researchers, practitioners, and policymakers interested in understanding the characteristics of out-of-school time programs that engage older youth.

Keywords Youth programs · Engagement · Out-of-school time · Organized activities · Transition to adulthood

Introduction

Over the past 20 years, researchers and policymakers increasingly have become interested in the role of out-of-school programs in the lives of youth. Participation in youth programs has been linked to identity exploration, gains in human and social capital, and connections between youth and their schools and communities (Lauer et al. 2006; Mahoney et al. 2005a). Extant research suggests that high-quality out-of-school programs can be fun and challenging for youth. As such, they may be suited uniquely to facilitate “flow”, an optimal psychological state that occurs when an individual is engrossed completely in an activity (Csikszentmihalyi 1990; Larson and Kleiber 1993; Sherwood and Vandell 2007).

Despite studies suggesting that high quality youth programs can be engaging for youth, research suggests that these programs often struggle to recruit and retain adolescents (Anderson-Butcher 2005; Weiss et al. 2005). Indeed, one of the most common reasons that youth quit or do not participate in out-of-school programs is that they find the content boring (Weisman and Gottfredson 2001). Yet, surprisingly little research has explored what types of...
program content or program characteristics are simultaneously interesting, enjoyable, and challenging for youth.

The present study helps to fill this gap in the literature by exploring how different kinds of program factors relate to youth engagement in out-of-school time programming. We also explore individual youth characteristics that may be linked to youth engagement, as youth are not only receivers of program content, but are also active agents in their own development (Bronfenbrenner and Morris 2006). We analyze data collected from adolescents attending 30 out-of-school time programs that served predominantly low-income adolescents \(n = 435\). We use multilevel models to explore which type of content youth find engaging, whether incentives are linked to engagement, and which youth are most likely to be engaged. In addition, guided by stage-environment fit theory (Eccles et al. 1993), we explore whether age moderates the association between program content factors and engagement. Understanding correlates of engagement will provide useful information for researchers interested in fostering positive development and supporting the transition to adulthood through the use of organized activities and youth programs. In addition, the present study provides much-needed information for practitioners who often struggle to retain adolescents and who further aim to motivate youth to learn and enjoy what they are doing in their out-of-school time.

Participation in Youth Programs and Youth Well-Being

Researchers and policymakers increasingly have become concerned that a substantial portion of adolescents are unprepared for the transition to adulthood. Many youth do not have the tools required to gain entrance into college and many lack the skills necessary to thrive in the twenty-first century workforce (Pittman 2009). Because schools often are strapped for time and must fulfill many local, state, and federal requirements, recent initiatives have emphasized the potential role that youth programs can play in helping prepare youth to be successful adult citizens (Pittman 2009; Time, Learning and Afterschool Task Force 2007). In response to this need, many out-of-school programs aimed at adolescents are integrating content explicitly focused on preparing youth for their futures, particularly content related to careers or content that prepares youth for college (see, for example, Hooker and Brand 2009; Hynes et al. in press; Russell et al. 2009).

The idea that out-of-school programs can deliver content that will facilitate developmental growth and promote positive well-being is not new. Indeed, during the past 20 years, there has been a burgeoning body of literature linking high quality youth programs to a number of indicators of psychological and educational adjustment including self-esteem, high school completion, and civic participation during adulthood (Broh 2002; Gardner et al. 2008; Kort-Butler and Hagewen 2011). Prior research suggests that eight features characterize high quality out-of-school settings: Physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, positive social norms, support for efficacy and mattering, opportunities for skill building, and integration of family, school, and community efforts (Eccles and Gootman 2002). High-quality youth programs that possess these characteristics may change long-term outcomes by helping youth develop skills, expanding and strengthening social networks, and fostering identity development (Mahoney et al. 2005a). However, despite these promising findings, not all studies have found a link between out-of-school program participation and indicators of youth well-being. Review articles and meta-analyses often paint a murky picture about whether youth programs have any meaningful impact, and if they do, which characteristics or components of the program are responsible for those impacts (Durlak et al. 2010; Lauer et al. 2006; Roth et al. 2010). In addition, experimental and quasi-experimental studies in this domain have demonstrated mixed results, with some showing positive impacts and others showing little association between the youth program and subsequent well-being (e.g., Gottfredson et al. 2010; Hirsch et al. 2011; James-Burdumy et al. 2005; Schochet et al. 2008; Seftor et al. 2009).

Some scholars have argued that these mixed findings may result from variation in the degree of youth participation in these programs. Adolescents in a given program can vary in their intensity of participation (i.e., the frequency of participation) and the duration of their participation (i.e., the length of time that they participate in years). In addition, youth who are attending a program can vary in their engagement in program activities (Bohnert et al. 2010; Busseri and Rose-Krasner 2010). Although research on intensity and duration of participation has flourished over the past decade, much less research has focused on the construct of engagement, which is conceptually distinct from intensity or duration of participation (Bohnert et al. 2010).

Engagement is a multi-dimensional construct that has been conceptualized and measured in numerous ways. Previous studies have measured engagement using youth report (using the experience sampling method or survey methods), staff report, or observer report (Akiva et al. 2011; Mahoney et al. 2005b; Shernoff and Vandell 2007). Researchers drawing from the literature on school engagement suggest that engagement (regardless of the setting) includes behavioral, cognitive, and affective components (Bartko 2005). Within the out-of-school literature, some researchers have conceptualized engagement as the extent to which youth enjoy, are interested in, and concentrate on program activities (Shernoff and Vandell 2007). Similarly, other researchers have created scales that
capture enjoyment, interest, and effort in youth programs (Mahoney et al. 2005b). Still others use measures that capture “engagement with challenge” (Akiva et al. 2011). Although definitions vary, there is a general consensus that engagement includes positive emotions relating to the program (e.g., enjoying, having fun) as well as some sort of cognitive or behavioral component that suggests that youth are being challenged (e.g., they are concentrating, exerting effort, or report that the activities are challenging). In the present study, we conceptualize engagement as the extent to which youth enjoy, are interested in, and are challenged by their youth program. This conceptualization was chosen primarily as a result of our interest in program characteristics (such as program content). Youth programs are increasingly called on to teach youth skills that prepare them for the future. Thus, there is a need for research that helps identify program characteristics that are not only fun and enjoyable, but simultaneously challenging, so programs do indeed meet youths’ needs and help them develop competencies that will support them in their transition to adulthood.

In addition, our conceptualization of engagement was shaped by the theoretical concept of flow (Csikszentmihalyi 1990). Previous research suggests that compared to other activities, such as school or unstructured leisure, organized activities and youth programs may be well suited to promote the state of flow (Larson and Kleiber 1993; Shernoff and Vandell 2007). Flow is a psychological state of extreme engagement which is characterized by being completely engrossed in an activity. Individuals having flow experiences “lose themselves” in an activity (Rathunde and Csikszentmihalyi 2006). In other words, they are focused completely on what they are doing at the present moment. When individuals reflect on flow experiences, they typically report that they found the activity in which they were participating to be both fun and challenging (Csikszentmihalyi 1990). Indeed, the appropriate degree of challenge appears to be central to achieving flow (Shernoff et al. 2003). Research in the domain of leisure (Mannell et al. 1988), like education research (Clifford 1990), demonstrates that an activity that is too easy will not completely captivate youths’ attention and an activity that is too difficult will result in frustration.

Although researchers examining the construct of flow often focus on the activity level (and explore what activities are conducive to flow), it is also possible to identify characteristics of organizations that are conducive to flow. For instance, flow theory suggests that youth will be much more likely to experience flow in organizations that have caring and supportive atmospheres than in organizations with cold or critical atmospheres. This is because flow necessitates that individuals “lose themselves” in what they are doing. Thus, an environment that allows criticism or causes feelings of self-consciousness will inhibit the ability to experience flow (Csikszentmihalyi and Csikszentmihalyi 1988). In sum, flow experiences represent an optimal psychological state that is transitory. However, certain environments and certain types of program content may facilitate or inhibit flow experiences. Therefore, although our focus is on adolescents’ engagement in youth programs as a whole, our conceptualization is informed by the literature on flow.

Importantly, engagement is a subjective individual experience that varies from person to person. There are a number of potential reasons for differential engagement by youth in out-of-school programs. First, youth within the same program often choose from a number of activities. Variation in youth engagement could arise from youth participating in different activities or interacting with different peers or staff members. Second, even when youth participate in the same activities with the same individuals, they may have markedly different experiences. Youth differ in what they find interesting and enjoyable, and, thus, a topic that is fun and exciting to one program participant may be boring to another participant. Similarly, the type of staff members with whom youth enjoy interacting may differ, and thus one youth may report that the staff is caring, whereas another may not report positive relationships with staff. This variation in personal preference highlights the importance of measuring the subjective youth experience of engagement as well as youth perceptions of staff quality.

Beyond personal preference, it is crucial to remember that individual youth bring with them unique capabilities and prior experiences. According to flow theory, flow experiences are not a characteristic of an individual or his or her environment, but rather necessitate a fit between the capabilities of a person and the opportunities afforded by the environment (Rathunde and Csikszentmihalyi 2006). Applying this idea to the domain of youth programs suggests that an activity may be more or less engaging depending on the individual’s prior experiences. For instance, youth with an extensive knowledge of how to apply to college may learn very little during a session about college admission, whereas a student with no prior knowledge may find the session interesting and learn a lot. Thus, given that youth differ in their capabilities and prior experience, it is important to measure perceptions of program content and engagement at the level of the individual youth.

Correlates of Youth Program Attendance and Engagement

Given the importance of the construct of engagement, it is useful to understand program characteristics and youth demographic characteristics that predict engagement.
Although a handful of studies have explored correlates of engagement in out-of-school time programs, this field is still in its infancy. Instead, much of extant out-of-school time literature has examined predictors of attendance in youth programs. Youth program attendance is related to engagement because youth are more likely to continue attending a program if they enjoy and are interested in the program. Thus, research that examines the predictors of youth attendance can help to guide research examining predictors of youth engagement. However, it is important to remember that, although related, these constructs are distinct and may be associated uniquely with program characteristics and youth demographic characteristics. Therefore, in this section we briefly review prior research linking staff characteristics, program content, program incentives, and youth characteristics to youth program attendance and engagement.

**Staff Characteristics**

Numerous studies have linked staff characteristics with both attendance and engagement in youth programs. Prior research suggests that programs with a college-educated staff may be more successful at recruiting and retaining youth than programs with a less educated staff (Hynes et al. 2010). In addition, the quality of relationships with adult staff members has been linked repeatedly to youth attendance. Interviews with adolescents document that some youth are motivated to attend programs because they “like the staff” or the adults at the program “care” about the youth (Gambone and Arbreton 1997; Perkins et al. 2007). These high-quality social processes are crucial for youth engagement as well (Eccles and Gootman 2002). Qualitative research with youth participants suggests that staff can help engage program youth by creating a welcoming atmosphere (Pearce and Larson 2006). Indeed, one recent qualitative study finds that staff members employ a number of relational strategies to create strong staff-youth relationships and by doing so they create a positive climate that facilitates youth engagement (Jones and Deutsch 2011). Thus, the literature suggests that competent and caring staff members are important for youth attendance and engagement.

**Program Content**

Beyond characteristics of the staff, program content may be linked to youth attendance and engagement. Programs offering opportunities youth cannot get elsewhere in the community and those providing career-related content may be more likely to be full than those that do not offer this content (Hynes et al. 2010; Pearson et al. 2007). In addition, a few studies have explored how the type of activity, such as sports or homework help, may be related to engagement during out-of-school time. This research suggests that sports, arts, and other enrichment activities may be especially engaging for youth, whereas homework/academic activities or socializing with friends may be associated with less engagement (Akiva et al. 2011; Shernoff and Vandell 2007). Qualitative research has also examined content associated with youth becoming engaged and motivated in youth programs. This research demonstrates that developing competence, learning skills for the future, and pursuing a purpose helps youth to become connected to a program and become engaged in program activities (Dawes and Larson 2011). This qualitative research suggests that developing skills and gaining knowledge for the future may be related directly to adolescent engagement in youth programs. The present study extends this line of research by exploring how different types of content may be associated with youth engagement.

**Program Incentives**

Another factor that has been related to program participation is the use of program incentives. Incentives include anything that out-of-school programs use to motivate or reward youth for participating, including snacks, transportation tokens, gift certificates to local businesses, and special field trips (Collins et al. 2008). Given that older youth often have other activities competing for their time—such as employment or household responsibilities—the type of incentive provided to youth typically becomes more substantial as children mature. For high school students, many programs opt to provide monetary incentives to reward youth attendance. Some, particularly those with a work-based focus, even pay youth by the hour to attend. Research suggests that youth enjoy these incentives and that the use of incentives may be an effective strategy for encouraging youth to attend programs (e.g., Collins et al. 2008). However, not all studies have found a clear association between financial incentives and youth participation. For instance, in one recent mixed-method study, the qualitative data suggested that incentives promoted attendance. However, the quantitative data did not find a statistically significant association after controlling for other factors (Deschenes et al. 2010).

Little is known about how incentives might be related to engagement. In fact, we know of no study that has explored associations between program incentives and engagement in out-of-school youth programs. It is possible that financial incentives are linked positively to engagement because they get youth interested and excited about the youth program. At the same time, incentives might be linked negatively to youth engagement. Prior literature suggests...
that external rewards can undermine intrinsic motivation (Deci et al. 1999, 2001) and thus although financial incentives may facilitate attendance, they may not necessarily facilitate engagement. Thus, research clearly is needed exploring whether and how financial incentives may be linked to engagement in youth programs.

**Youth Demographic Characteristics**

At the individual level, a number of studies suggest that youth demographic characteristics such as age, gender, race, and immigrant status have been linked to program attendance. Research demonstrates that female youth participate in most organized activities (such as youth programs) at higher rates than male youth (McNeal 1998; Theokas and Bloch 2006). The exception to this overarching trend is sports teams or activities, in which males participate at higher rates than females. Race and immigrant status also have been linked to program participation. Research suggests that Blacks and Hispanics may participate in out-of-school activities at lower rates than Whites (Theokas and Bloch 2006; Wimer et al. 2006). However, much of this discrepancy is explained by income differences between these groups. The literature on immigrant status suggests that youth who are immigrants themselves, or who live with immigrant parents, are less likely to participate in sports or clubs than youth of native-born parents (Reardon-Anderson et al. 2002). However, research also suggests that the associations between immigrant status and organized activity participation vary by race (Peguero 2011). In terms of age, the literature generally suggests that participation in youth programs declines during adolescence (Persson et al. 2007). However, it is important to note that whereas breadth of activity participation (i.e. number of activities in which one participates) may decline with age, intensity of activity participation (i.e. weekly time spent in activities) may not (Denault and Poulin 2009; Pedersen 2005). Taken as a whole, this literature suggests that many youth demographic characteristics have been linked to whether or not youth participate in out-of-school programs.

Little research has examined how youth demographic characteristics may be linked with engagement in youth programs. One qualitative study reported that there were no clear differences in engagement by age, gender, or race/ethnicity (Dawes and Larson 2011). However, a recent quantitative study suggested that girls and younger youth may report higher levels of engagement than boys and older youth (Akiva et al. 2011). In addition, although we know of no study that has explored immigrant status and youth engagement in out-of-school programs, it is possible that immigrants may be more engaged in youth programs. A large body of literature suggests that immigrant youth have higher aspirations and greater optimism for the future than native-born youth of similar backgrounds (Fuligni 1997; Kao and Tienda 1995; Suárez-Orozco and Suárez-Orozco 2001). Thus, there is limited research exploring demographic correlates of engagement in youth programs, suggesting a need for research in this area.

**Moderation by Age**

In addition to functioning as predictors, youth demographic characteristics may also function as moderators. In particular, the age of the youth may moderate whether certain types of program content are linked to engagement. Stage-environment fit theory suggests that the developmental impact of an organized program will depend on the fit between the developmental needs of the youth and the opportunities afforded by the out-of-school setting (Eccles et al. 1993). Applying this theory to the construct of engagement suggests that engagement will be the highest when there is an appropriate match between the characteristics of an activity and the developmental needs of the adolescent. For instance, learning about jobs and learning about college may be especially engaging for older youth because the content is pertinent to their lives. Because the appeal of certain types of content may depend on the age of the youth, we explore whether the link between program content and engagement varies by youth age.

**Current Study**

In the current study, we use data from 435 adolescents attending 30 out-of-school time programs to better understand how staff characteristics, program content, program incentives, and youth demographic characteristics are associated with youth engagement. In light of the previous literature highlighting the importance of staff quality for youth attendance and engagement, we hypothesize that staff quality will be linked positively to engagement. In addition, given recent qualitative research linking the development of new skills with engagement, we hypothesize that program content related to the future (i.e. learning skills for the future, learning content related to careers, and learning content related to college) will be associated positively with engagement. Furthermore, we expect that this association will be stronger for older youth than younger youth, because this content is more immediately relevant to older youth. We also hypothesize that financial incentives will be associated positively with engagement, as they have been linked previously to attendance in youth programs. In addition, we expect that individual characteristics of youth may also be linked with engagement in youth programs. Drawing from previous literature on the
“immigrant optimism hypothesis”, we hypothesize that living in an immigrant family will be related positively to engagement. Furthermore, in light of recent research, we hypothesize that females and younger youth will report more engagement than males and older youth.

Method

Sample

Data came from a larger study about career-related programming during out-of-school time. Survey data were collected from 455 youth attending 30 out-of-school time programs across the state of Pennsylvania. The programs served middle and high school students primarily from low-income areas and included some kind of career-related content within their curriculum. The 30 programs included urban farming programs, arts programs, community activism programs, and programs that focused on exploring regional careers or providing paid work experiences. These programs varied in terms of urbanicity (17 programs were in large cities, 9 were in small to mid-sized cities, and 4 occurred in rural areas). They also varied in terms of program timing: some of the programs operated only during summer \((n = 8)\) whereas others were school year programs \((n = 11)\), and the rest were full-year programs that operated during both the school year and summertime \((n = 11)\).

A small number of youth who were surveyed at the 30 sites did not provide complete data \((n_{\text{youth}} = 20)\). These youth did not finish the survey, skipped a question, or had technological problems during the administration of the survey (because the surveys were administered via cell phones—see below). After excluding the youth who had missing data on any covariates, our final sample consisted of 435 program youth. About half of these youth were male \((49 \%)\) and they ranged from sixth graders to high school graduates who had recently received their diploma \((M_{\text{grade}} = 10.29)\). The sample was diverse racially, as 40 \% of the youth were African American, 24 \% were Hispanic, 16 \% were White, and 20 \% reported multiple races or another race. Although most youth reported that both of their parents were born in the United States, 26 \% of the sample indicated that one or both of their parents were born outside of the country.

Procedures

In line with prior research, we focused on obtaining a sample of higher quality out-of-school programs (Dawes and Larson 2011; Vandell et al. 2004). Given the limited research on engagement, we focused on these programs because prior research suggests that they have the greatest likelihood of engaging youth and producing developmental impacts. To recruit programs, we talked to knowledgeable community members, out-of-school time leaders, program funders, and local experts and asked them to identify quality programs that served primarily low-income youth and offered some kind of career-related programming. We strategically selected programs that varied in terms of program content, age of youth, and urbanicity. After we identified programs, we contacted the director to explore whether they would be interested in participating in the study. Once the director agreed, we conducted an hour-long telephone interview with him or her to learn about the program. Directors received a $50 gift certificate for their participation. In addition to receiving consent from the program director, letters of consent were sent to parents of program participants informing them of the study; parents were instructed to return the signed consent form if they did not want their child to participate. Subsequently, trained research assistants were sent to the programs to observe program activities and administer the youth survey.

Data for this study come primarily from the youth surveys. At each site, written descriptions of the study were distributed and research assistants verbally described the study’s purpose to the youth participants. Youth were told that their participation was voluntary and their answers confidential. In addition, youth were instructed to ask if they had any questions about the meaning of words on the survey or if they were confused in any way by the survey. Then, cell phones (on which the survey was programmed) were distributed to all of the youth and research assistants demonstrated how to answer survey questions by clicking the bubble next to a particular response shown on the phone screen. The phones could not be used for any purpose other than taking the survey. The first question on the cell phone survey asked if they were willing to complete the survey and youth could click “yes” or “no.” If they clicked “yes”, the survey questions appeared one at a time on the cell phone screen and each youth completed the survey at his or her pace. The survey took about 10–15 min to complete and no identifying information was collected from youth participants. Next, the research assistants collected the cell phones and raffled off a $15 iTunes gift card (one per site) as a reward for participation. When the research assistants returned to the university, they downloaded the survey data from the cell phones to use for analysis. Data (i.e., director interviews, site observations, and youth surveys) were collected between February 2011 and January 2012.

Measures

Youth Engagement

The dependent variable of interest was youth engagement, or the extent to which youth enjoyed, were interested in,
and were challenged by program activities. To capture this construct, we created a scale based on answers to six questions pertaining to participants’ feelings about program activities and the program as a whole (e.g., “I enjoy the time I spend at this program”; “The activities I do at this program are challenging”). Youth responded on a scale from 1 (Never) to 5 (Almost Always). Questions were drawn from the interest scale (4 items) and the challenge scale (a subset of 2 items) from the youth survey of the Youth Program Quality Assessment (see Smith et al. 2012). To confirm that these indicators were all a part of one singular construct, we conducted a confirmatory factor analysis that yielded a moderate fit ($\chi^2 (20) = 147.632$, $p < .001$; NFI = .89; CFI = .90; RMSEA = .12) thus supporting our conceptualization of engagement as a unified construct. The engagement scale demonstrated good reliability ($\alpha = .83$).

**Staff Quality**

Youth responded to four items focusing on whether they thought the staff were caring and competent (as used in Russell et al. 2009) (i.e., “The staff here really care about me”; “There is an adult here I can talk to if I have a problem”; “The staff here really know how to help me achieve my goals”; “There is a lot that I can learn from staff here that will help me in the future”, $\alpha = .85$). Youth responded on a scale of 1 (Disagree a lot) to 5 (Agree a lot).

**Learn New Skills**

To capture the extent to which the program helped youth gain important skills for the twenty-first century (Jerald 2009), we adapted questions from the youth survey in the Evaluation of Out-of-school Time Programs for Youth (e.g., Russell et al. 2009). We created a four-item scale (i.e., Please tell us how much you think this program has helped you learn “Learn to solve real-world problems better”; “Learn to communicate ideas more clearly”; “Learn to handle conflicts better”, $\alpha = .82$). Youth responded on a scale from 1 (Not at all) to 5 (A lot).

**Learn About Jobs**

In addition, we included a four-item scale that explored the extent to which the program activities facilitated youth learning about careers and preparing them for jobs (i.e., “I feel like I am learning things at this program that will help me get a good job”; “The staff at this program explain how the activities I do will help me get a good job”; “Please tell us how much you think this program has helped you learn about jobs and careers that you might want”; “Please tell us how much you think this program has helped you learn about skills and experiences that people need to get different types of jobs”, $\alpha = .82$).

**Learn About College**

Our last measure of program content captured the degree to which youth perceived the program to be helpful in learning about college (i.e., “I feel like I am learning things at this program that help me prepare for college”; “The staff at this program explain how the activities we do will help me prepare for college”, $\alpha = .77$). Youth responded on a scale from 1 (Never) to 5 (Almost Always). To ensure that the four constructs deserved to be separate scales, we conducted a confirmatory factor analysis in which our indicators of program content and staff quality demonstrated four latent variables. These latent variables were allowed to be correlated with each other. The results yielded an adequate fit ($\chi^2 (71) = 235.98$, $p < .001$; CFI = .94; NFI = .92; RMSEA = .07), which confirmed that the four variables pertaining to program content and staff quality were correlated, but distinct constructs.

**Financial Incentive**

Using information from the director interviews, we created a variable capturing whether the program paid youth to attend (not paid = 0, paid = 1). The paid incentive was either a stipend or an hourly wage that the youth earned. We measured this variable at the site level because financial payment either occurred or did not occur at each program. In other words, either all of the program participants were eligible to receive a financial incentive or none of them were, resulting in little within-program variance and necessitating that this indicator of payment be a site-level (or, level-2) variable. Of the 30 programs in the sample, 17 used a monetary incentive to encourage youth to participate. Although we would have preferred to separate programs that paid hourly wages ($n_{programs} = 15$) from those that provided a monthly or quarterly incentive ($n_{programs} = 2$), the small number of programs in our sample that gave monthly or quarterly incentives necessitated combining these two groups. Many of the programs that paid youth were full year programs ($n_{programs} = 10$), however there were others that operated only during the summer months ($n_{programs} = 4$) or operated during the school year only ($n_{programs} = 3$). These paid programs were diverse in content and included programs that had youth work in the community (at work sites), programs that had youth work in the program (e.g., by helping out in the office), and programs that paid youth to learn about a substantive topic (e.g., urban farming). In addition, the
programs that paid youth typically served youth in higher grades ($M_{\text{grade}} = 11.12, SD = 1.16$) than those that did not pay youth ($M = 9.40$, $SD = 2.05$) ($t(433) = -10.84, p < .01$). However, it is important to note that our sample included a number of programs that served older adolescents (i.e., juniors and seniors in high school) and did not pay them to attend.

**Immigrant Status**

We created a dichotomous variable indicating whether youth lived in an immigrant family or not (non-immigrant = 0, immigrant = 1). Following previous research (Hernandez et al. 2008), youth were defined as living in an immigrant family if one or both of their parents were born outside of the United States.

**Gender**

Gender was coded 1 if male and 0 if female.

**Grade**

Youth reported on the grade that they currently attended in school. Youth in summer programs reported the grade that they would be attending during the following school year.

**Race/Ethnicity**

To capture race, we provided adolescents with a list of racial/ethnic categories and instructed them to choose all races that applied to them. From these responses, we created four mutually exclusive racial/ethnic categories: African-American (reference), Hispanic, White, and multiple races/other.

**Analytical Strategy**

In order to examine predictors of youth engagement, we use 2-level multilevel models. Multilevel models are appropriate for the present data given that youth are clustered in programs, creating dependence in the data and violating the assumption of uncorrelated errors in ordinary least squares regression. In addition, this approach enables us simultaneously to examine factors that can explain variation both within and between programs. In our analyses, individual youth (level-1) are nested within youth programs (level-2). We ran a series of models in which we first examined level-1 variables and then subsequently added our site-level variable: financial incentive. To test the moderating effect of age, we explored whether our program content variables (i.e. learn skills, learn about college, and learn about jobs) interacted with the grade of the individual. All independent variables were centered at their mean prior to creating interaction terms and conducting analyses. Our descriptive analyses were conducted in Stata (version 12) and our multilevel analyses (Raudenbush and Bryk 2002) were conducted in the software program HLM (version 6). For our multilevel models, we used robust standard errors.

**Results**

**Descriptive Statistics and Bivariate Correlations**

We began by examining the means of our variables of interest and exploring the bivariate correlations between our predictor variables and youth engagement (see Table 1). In general, youth whom we surveyed indicated relatively high levels of engagement, with the mean engagement score being 3.98 ($SD = .72$). This score indicates that youth reported that they “often” enjoyed, were interested in, and were challenged by their youth program. In addition, a number of factors were significantly linked to youth engagement in bivariate correlations. In line with our hypothesis, perceptions of staff quality were positively correlated with engagement. The more that youth perceived the staff to be caring and competent, the more youth were engaged in the program. Similarly, program content was linked to youth engagement. Results suggested that learning new skills, learning about jobs, and learning about college were correlated strongly with youth engagement. The more the youth perceived that they were learning in any of these domains, the more they were engaged. Interestingly, and contrary to our expectations, bivariate correlations suggested that incentives were negatively associated with engagement. Individual characteristics of youth (i.e. gender, grade in school, immigrant status) were not significantly linked to youth engagement.

**Multilevel Analyses**

Given the significant correlations between many of our independent variables of interest, we subsequently explored multivariate models in order to discover whether these factors explained any unique variance in engagement. Analysis of the unconditional model (i.e., without any predictors in the model) suggested that there was significant variation both within and between programs (results not shown). Importantly, the within-program variance (.40) was larger than the between-program variance (.11), indicating that much of the variation in youth engagement resulted from youth within the same program differing in engagement. However, our results suggested that youth engagement did vary across programs as well ($\chi^2$...
After computing this baseline model, we subsequently added our level-1 predictor variables, namely youth perceptions of staff quality and program content, as well as youth demographic characteristics (Table 2, Model 1). In line with our hypothesis, results indicated that staff quality was positively related to engagement. In addition, learning new skills, learning about jobs and careers, and learning about college were each independently associated with youth engagement in out-of-school programs. This means that over and above the presence of high-quality staff, characteristics of the content mattered for youth. Importantly, youth engagement, perceptions of program content, and staff quality were all measured on scales ranging from 1 to 5. Thus, a coefficient of .18 indicates that a 1-pt increase on the learning new skills scale was associated with a .18 increase on the engagement scale. Similarly, a 1-point increase in learning about jobs (range 1–5) was associated with a .21 increase on the engagement scale.

Results also suggested that many of the youth demographic characteristics that we measured (i.e. sex, grade, race) were not significantly linked to engagement. However, there was one exception. Compared to native-born youth, youth who lived in an immigrant family scored .12 higher on the engagement scale (holding other factors constant), a difference that approached statistical significance.

Next, we explored the amount of variance explained by our level-1 variables as a whole (i.e. Model 1 variables). To do this, we subtracted the residual variance of Model 1 from the residual variance of the null model and divided this difference in variance between the two models by the variance of the null model (Raudenbush and Bryk 2002; Singer and Willett 2003). This strategy suggested that together the variables in Model 1 explained 46 % of the variance at level 1 and 63 % at level 2. The fact that individual factors explained variance at the program level (level-2) suggests a compositional effect. That is, the average of individual factors (e.g. staff quality and learning content) varied across programs, and these differences explained a substantial amount of variation in engagement across programs.

The following model (Table 2, Model 2) included the financial incentive variable. This model suggested a trend association between financial incentives and youth engagement. Although we hypothesized that incentives would be associated positively with youth engagement, we found a trend suggesting that program incentives actually were associated negatively with youth engagement. This finding was in line with the negative bivariate correlation documented between program incentives and engagement. Adding the level-2 predictor (incentives) to the model enabled us to explain approximately 4 % more of the variance at the program level. Thus, as a whole, the variables in model 2 explain about 67 % of the variance in youth engagement at the program level.

Next, we computed three models that included interaction terms between the grade in school of the youth and learning new skills, learning about jobs, and learning about college, respectively (see Table 2, Models 3–5). In line with our hypotheses, we observed significant interactions for each association. In order to better understand these interactions, we plotted the simple slopes following the procedure outlined by Aiken and West (1991) in which we added and subtracted the standard deviation from the mean.
value to get groups with “high” and “low” program content and compare older versus younger youth (see Fig. 1).

In general, these results suggested a small interaction, such that learning content for the future (i.e., learning skills, learning about jobs, and learning about college) was linked more strongly to engagement for older youth than for younger youth (i.e., the slopes were steeper for older youth than for younger youth; see Fig. 1). However, as suggested by Preacher et al. (2006), we further probed the interaction in order to better understand at which grades program content was associated with engagement using their online tool (http://www.quantpsy.org/interact/index.html). This method defines the “regions of significance” of the simple slopes. In other words, it yields a certain region (i.e., defined by a lower and upper bound) where the associations between the independent and dependent variable become statistically significant. By doing this, we were able to detect the grade level at which program content actually starts to matter in terms of youth engagement. Results suggested that the grade cutoff for significance was 9.83 for learning new skills, 9.05 for learning about jobs, and 8.05 for learning about college. Above these thresholds, the slope between content and engagement was significant and below these thresholds the slope was not significantly different from zero. What this means is that, for youth in grades 8–12, learning about college was significantly associated with engagement. In addition, learning skills and learning about jobs were both significantly associated with youth engagement for youth in grades 10 and higher and 9 and higher, respectively.

All of the coefficients of the covariates remained similar when each interaction was included in the models. However, it is important to note that the significance of the incentive variable varied; in some models it was a trend association and in other models it was statistically significant at the $p < .05$ level.

### Discussion

Given that participation in quality youth programs has been linked repeatedly with youth well-being (Durlak et al. 2010; Fredricks and Eccles 2008; Mahoney and Vest 2012), it is concerning that many out-of-school programs struggle to recruit and retain adolescents (Anderson-Butcher 2005; Weiss et al. 2005). Indeed, youth often quit

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**Table 2** Multilevel models of youth engagement

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
</tr>
<tr>
<td>Staff quality</td>
<td>0.117*</td>
<td>0.045</td>
<td>0.114*</td>
<td>0.044</td>
<td>0.110*</td>
</tr>
<tr>
<td>Learn new skills</td>
<td>0.176**</td>
<td>0.058</td>
<td>0.178**</td>
<td>0.057</td>
<td>0.168**</td>
</tr>
<tr>
<td>Learn about JOBS</td>
<td>0.209**</td>
<td>0.065</td>
<td>0.210**</td>
<td>0.063</td>
<td>0.194**</td>
</tr>
<tr>
<td>Learn about college</td>
<td>0.162***</td>
<td>0.030</td>
<td>0.159***</td>
<td>0.030</td>
<td>0.163***</td>
</tr>
<tr>
<td>Skills * grade</td>
<td>0.077***</td>
<td>0.020</td>
<td>0.077***</td>
<td>0.020</td>
<td>0.077***</td>
</tr>
<tr>
<td>Jobs * grade</td>
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<td>0.018</td>
<td>0.060**</td>
<td>0.018</td>
<td>0.060**</td>
</tr>
<tr>
<td>College * grade</td>
<td>0.045***</td>
<td>0.010</td>
<td>0.045***</td>
<td>0.010</td>
<td>0.045***</td>
</tr>
<tr>
<td>Financial incentive</td>
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<td>0.065</td>
<td>0.112+</td>
<td>0.066</td>
<td>0.084</td>
</tr>
<tr>
<td>Immigrant</td>
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<td>0.030</td>
<td>0.030</td>
<td>0.030</td>
<td>0.038</td>
</tr>
<tr>
<td>Gender&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.010</td>
<td>0.026</td>
<td>0.026</td>
<td>0.026</td>
<td>0.002</td>
</tr>
<tr>
<td>Grade</td>
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<td>0.045</td>
<td>4.002***</td>
<td>0.042</td>
<td>4.005***</td>
</tr>
<tr>
<td>Intercept</td>
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<td>0.037</td>
<td>0.037</td>
<td>0.037</td>
<td>0.037</td>
</tr>
<tr>
<td>L2 residual variance</td>
<td>0.217</td>
<td>0.217</td>
<td>0.217</td>
<td>0.217</td>
<td>0.217</td>
</tr>
<tr>
<td>Deviance&lt;sup&gt;c&lt;/sup&gt;</td>
<td>644.487</td>
<td>641.927</td>
<td>627.530</td>
<td>639.255</td>
<td>639.231</td>
</tr>
</tbody>
</table>

<sup>a</sup> Male youth are coded 1  
<sup>b</sup> The reference category is African American  
<sup>c</sup> Deviance of the unconditional model is 887.83

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<sup>p < .1, * p < .05, ** p < .01, *** p < .001</sup>
programs due to “boredom” (Weisman and Gottfredson 2001), a harsh reality that highlights the need for research identifying program factors that successfully engage youth. However, relatively few studies have examined correlates of youth engagement, and those that have, typically have focused on the type of activity (e.g., sports, academics, etc.) (Shernoff and Vandell 2007). Thus, the purpose of the present study was to explore program characteristics and youth demographic characteristics associated with engagement in youth programs. In general, our findings are optimistic because youth in our sample reported relatively high engagement. On average, adolescents in our sample “often” enjoyed, were interested, and were challenged by their program. Importantly, the degree to which adolescents were engaged in their program was linked to staff quality, program content, and monetary incentives. We consider each of these domains in turn.

Staff Quality and Program Content

In line with extant research, staff quality emerged as a salient predictor of youth engagement. Our results indicated that when adolescents report that staff members are caring and competent, these adolescents also report higher engagement. This finding was expected, as previous research has consistently documented the importance of positive relationships for youth participation in organized youth programs and—more recently—youth engagement in organized programs (Eccles and Gootman 2002; Gambee and Arbreton 1997; Jones and Deutsch 2011; Perkins et al. 2007). High-quality staff are important because they provide youth with a secure environment in which youth can learn, but are allowed to make mistakes. Indeed, caring staff-youth relationships are so important that some researchers refer to them as the “critical ingredient” in out-of-school programs (Rhodes 2004).

In addition, program content was an important predictor of youth engagement, especially among older youth. When youth perceived that they were learning content for the future or gaining new skills, they were more engaged in the program. These findings are especially intriguing because they remained significant even when multiple types of program content were included in the same model and when staff quality was controlled. This means that program content is linked to engagement above and beyond characteristics of the staff. Previous research has demonstrated that a common reason youth attend out-of-school programs is to learn new skills such as conflict resolution and career skills (Perkins et al. 2007). Our findings suggest that skill development and learning content related to the future are not only associated with attendance, but with engagement as well. These specific types of program content appear to be simultaneously interesting, enjoyable, and challenging for youth. Our results are in line with recent qualitative work by Dawes and Larson (2011) who found that developing competencies and learning skills for the future can help youth connect with programs and foster engagement. Our findings, combined with prior research in this area, suggest that learning content and skills related to the future...
is associated positively with program attendance and engagement in both quantitative and qualitative studies.

Importantly, our results suggest that the link between program content and engagement is qualified by an interaction between content and the grade (in school) of the youth. In general, for older youth we saw a stronger association between program content and youth engagement. This interaction effect was substantively small, but was significant across multiple types of program content. This moderation effect is in line with stage-environment fit theory (Eccles et al. 1993), which proposes that successful development depends on the interaction between the developmental stage of youth and characteristics of the environment. Proponents of flow theory similarly highlight that flow experiences may vary with developmental stage. According to flow theory, equilibrium between the content of an activity and the capacity of the individual must be met such that youth are challenged and find something interesting in the activity (Rathunde and Csikszentmihalyi 2006). Thus, the same activity that is frustrating and difficult for a 9th grader may be interesting or challenging for an 11th grader. With regard to our findings, it is possible that the link between content and engagement was stronger for older youth because older youth find this content more relevant to their lives. Older youth will be transitioning into higher education or jobs soon and thus they may find this content especially interesting and enjoyable. Our study provides preliminary evidence that program content may have unique implications for engagement depending on the age of the youth and their developmental needs.

Financial Incentives

At the program level, our results demonstrated that incentives were negatively associated with engagement. We had expected that providing youth with some kind of cash reward would motivate them to participate actively in the program, given previous research demonstrating a correlation between paying youth and attendance (Collins et al. 2008). However, we found a trend suggesting the opposite relationship. This may be due to the fact that “attending” a program and being “engaged” are two related but distinct constructs, as researchers before us have noted (Weiss et al. 2005) and incentives may be associated differentially with each measure of participation. Previous research in the education domain supports this idea, demonstrating that incentives may be effective in promoting educational inputs, such as attendance and enrollment, but have a less clear association with educational outputs, such as grade points or achievement (Gneezy et al. 2011). Furthermore, some research suggests that external rewards can undermine intrinsic motivation (Deci et al. 1999, 2001). Given that activities must be perceived as intrinsically motivating in order to achieve flow (Csikszentmihalyi and Csikszentmihalyi 1988), this research is particularly relevant to the current study. Yet not all types of tangible rewards have a negative effect on intrinsic motivation. For instance, research suggests that external rewards for task involvement (such as solving math problems) may be associated with less intrinsic motivation, but rewards for participating may not impact intrinsic motivation. Thus, extant literature suggests that associations between incentives and intrinsic motivation may be complex.

To our knowledge, the current study is the first to explore the association between financial incentives and engagement in out-of-school programs using quantitative data. Thus, it is far too premature to make clear statements about the linkages between incentives, attendance, and engagement. Indeed, it is possible that these indicators of program participation are intertwined. For instance, one possibility is that incentives may help to retain adolescents who are slightly less engaged in the program, and who would otherwise drop out of the youth program. These adolescents may still demonstrate developmental gains as a result of participating in the out-of-school program, in spite of their slightly lower engagement. Because our sample consisted of youth attending programs, we could not test this idea, but studies allowing researchers to test simultaneously the role of incentives in program enrollment, attendance, engagement, and youth outcomes would be highly beneficial. Ideally, these studies would rely on experimental designs to allow cost-benefit analyses in order to guide policy and practice.

In addition, it is important to note that our payment variable was a crude measure and thus represents only preliminary evidence. Our measure of financial incentives combined those programs that provided stipends to youth with those that paid youth by the hour. Furthermore, there was substantial variation among the programs that paid youth by the hour, as some programs paid youth to work in the program (e.g., for mentoring younger kids), some paid youth to work on projects that were run by program staff (e.g., urban farming, community arts projects), and still others paid youth who were placed in businesses and job sites out in the community. Our small number of programs limits our ability to further explore this trend in order to obtain a more nuanced understanding of this association. Further studies should examine the use of incentives with more sophisticated measures and a larger sample of programs to clarify their potential linkages with youth participation and engagement in out-of-school programs.

Individual Factors

In general, our study suggested that background characteristics of the youth were less associated with engagement than what youth perceived they were learning at the
program or perceptions of staff quality. We interpret the lack of significant findings to be positive, as it shows that youth of both genders, various races, and different ages reported relatively high levels of engagement in this sample of higher-quality programs. In other words, our study suggests that youth programs are settings that can facilitate the psychological state of flow for individuals who differ on a number of important demographic characteristics. The only individual factor that was linked to engagement in our models was immigrant status. There was a trend association suggesting that living in an immigrant family was associated with higher engagement. This finding was mostly due to Hispanic youth in immigrant families reporting slightly higher engagement than Hispanic youth in native-born families. Unfortunately, we cannot explore possible mediating factors for this trend finding with our data. However, higher engagement may result from high optimism for the future among youth in immigrant families. In line with this possibility, previous research suggests that youth in immigrant families have higher academic expectations and optimism for the future than those from native-born families (Fuligni 1997; Kao and Tienda 1995).

Limitations

The current findings must be considered in light of the limitations of the present study. Perhaps the most important limitation is our non-representative sample of youth programs. We sampled programs that had a reputation for quality that served primarily low-income youth. Thus, it is unknown whether our findings would generalize to higher income samples or programs known to have a reputation for low quality. Furthermore, because we used a non-random sampling procedure (i.e., relying on community leaders, program funders, and program directors to identify programs) results may be biased and thus our findings should be interpreted as suggestive. Our survey captured only those youth attending the program on the day that we visited; dissatisfied youth may have already dropped out and thus they may be underrepresented in the current sample. In addition, we examined programs that had some sort of career-related component. Thus, youth attending these programs might have been particularly interested in this type of content. Also, our sample size of youth \( n = 435 \) and small number of programs \( n = 30 \) limited the number of factors that we could explore at both the individual and site-level. Last, our cross-sectional data limits our ability to explore how program content and engagement may covary over time. More research is needed—especially using longitudinal data—that explores how the combination of individual characteristics and program characteristics jointly may impact engagement over time. In addition, longitudinal research is needed to explore exactly how engagement in out-of-school programs may facilitate subsequent youth well-being.

Policy and Practice Implications

Despite its limitations, the present study documents some interesting associations that have important implications for policymakers and practitioners. First, the importance of program content cannot be underestimated. Youth in the programs we studied were more engaged if they felt that they were learning about careers and college and gaining skills for the future. Programs should consider including content that helps youth learn new skills or aids adolescents in their transition to adulthood (i.e. content about careers, college, etc.). Importantly, this finding does not indicate that after-school programs aimed at younger youth should avoid content related to careers or college—indeed some researchers suggest that content to prepare youth for the transition to adulthood should come earlier in the lifecourse (Hartung et al. 2005; Porfeli et al. 2008). Instead, this finding highlights the importance of designing programs to meet the needs of youth at different ages. Rather than using a “one-size fits all” approach to programming, practitioners should consider the developmental stage of youth and tailor the programs accordingly.

Second, a more general implication of the current study is that the construct of engagement merits more attention from practitioners and program funders. Practitioners might consider surveying youth about which activities or program characteristics youth find engaging in order to make program improvements and best meet the needs of those enrolled. In addition, practitioners might consider using engagement as a proximal outcome when seeking to demonstrate the impact of a program. Previous research suggests that engagement may help to explain the link between youth programs and youth well-being (Shernoff 2010), highlighting the need for more attention to this construct.

Conclusion

As other scholars have noted, engagement may be a crucial factor linking youth programs to positive outcomes (Bartko 2005). The current study adds to the extant literature by exploring this understudied construct with a sample of primarily low-income older youth. Older adolescents are notoriously difficult to recruit and retain in youth programs and thus exploring which program characteristics predict engagement among this population is particularly important. Our results demonstrated that learning skills, learning about careers, and learning about college were each positively related to engagement. Our findings, which highlight
the importance of program content, are timely given that organized youth programs increasingly are called on to provide skills and deliver information that will facilitate a successful transition to adulthood (Pittman 2009). In addition, our findings demonstrate that content related to the future may be linked more closely to engagement for older youth. These findings underscore the importance of considering the developmental stage of youth and recognizing that the needs of older adolescents differ from the needs of early adolescents. Our results also provide preliminary evidence that monetary incentives may be associated differentially with attendance and engagement. Our findings suggest that these associations may be complex and thus researchers should continue to explore this area in order to provide a nuanced understanding of how external rewards may relate to intrinsic motivation as well as engagement among adolescents. The current study, along with future studies exploring engagement among adolescents, may help identify factors that youth find engaging. Discovering which factors youth find particularly engaging may not only help programs boost participation rates but may also help them best support the transition to adulthood by delivering out-of-school programs that are simultaneously fun, interesting, and challenging.

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Conflict of interest The authors declare that they have no conflict of interest.

References


**Author Biographies**

Kaylin M. Greene is a doctoral candidate pursuing a dual-degree in Human Development and Family Studies and Demography at the Pennsylvania State University. Her research interests focus on youth out-of-school activities and their implications for subsequent wellbeing.

Bora Lee is a doctoral candidate in the Department of Human Development and Family Studies at the Pennsylvania State University. Her broad research interest is life-span career development with her primary focus being the role of motivation in career development during the transition from adolescence to adulthood.

Nicole Constance is a graduate student pursuing a dual-degree in Human Development and Family Studies and Demography at the Pennsylvania State University. Her research interests include employment and fertility among adolescents and young adults.

Kathryn Hynes received her Ph.D. from Cornell University and is an Assistant Professor in the Department of Human Development and Family Studies at the Pennsylvania State University. Her research focuses on social programs and policies, particularly child care and youth programs.