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# Post-Secondary Education and Training Support Utilization by Students from Foster Care: Findings from Scholarship Recipient Interviews

Kelly E. Sim John Emerson Kirk O'Brien Peter J. Pecora Letitia Silva

ABSTRACT. The United States federal government estimated that 513,000 children were in foster care as of September 30, 2005. Neglected or abused children are at higher risk for school failure at the secondary and post-secondary levels. Because educational achievement is a powerful determinant of future life success, the educational needs of current and former foster care youth is of particular concern. In the present study, 115 former foster care youth enrolled currently or formerly in Casey Family Programs' (Casey) Continuing Educa-

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Journal of Public Child Welfare, Vol. 2(1) 2008 Available online at http://jpcw.haworthpress.com © 2008 by The Haworth Press. All rights reserved. doi: 10.1080/15548730802237395 tion and Job Training (CEJT) scholarship program were surveyed to explore the kinds of supports and services they utilized as part of their continuing education. It was found that program completers reported utilizing academic and financial assistance the least, while non-completers reported using academic help the most. Additionally, findings suggest that informal supports such as foster or birth family and friends were utilized most for academic and emotional assistance. Meanwhile, formal supports such as the school/institution, foster care agency resources, and community resources were utilized most for financial and medical/dental assistance. Policy and practice recommendations for post-secondary support professionals are discussed.

**KEYWORDS.** Foster care, support system, post-secondary education, college graduation rates, foster care alumni

Research has demonstrated that positive educational experiences are associated with successful youth development and adult self-sufficiency (Redd, Brooks, & McGarvey, 2002; United States [US] Census Bureau, 2002a). For example, the US government consistently documents the direct positive impact that educational attainment has on qualityof-life factors such as average family income, work life earnings, voting rates, employment rates, and volunteering (Bureau of Labor Statistics, 2006; Changing Industrial Employment in the Human Capital Economy 1973–2004, 2005, US Census Bureau, 2002b; 2004). Additionally, the positive influence of degree attainment on average annual earnings is highlighted in Changing Industrial Employment in the Human Capital Economy 1973-2004, (2005). Compelling evidence that postsecondary education and training provides access to higher earnings is provided. Income disparities between high school graduates and those with college degrees continue to grow. For 2004, men with an associate's degree had median annual incomes \$8,000 higher than men with high school degrees only, and women with a bachelor's degree outpaced women with high school degrees by \$16,000 annually (US Census Bureau, 2005). Having the opportunity to prepare for and to access postsecondary education and training programs is increasingly important for achieving independence; however, the transition to independence for thousands of youth exiting foster care is a difficult one, especially for those navigating the education system.

# EDUCATIONAL CHALLENGES FACED BY CHILDREN PLACED IN FOSTER CARE

The US federal government estimates that approximately 513,000 children were in foster care as of September 30, 2005 (US Department of Health and Human Services [DHHS], 2006). Because of abuse, neglect, and unstable home placements, children and youth in foster care are at high risk for school failure and, consequently, endure lower rates of post-secondary enrollment and success (Altshuler, 1997; Ayasse, 1995; Bradford & English, 2004; Cohen, 1991; Courtney, Terao & Bost, 2004; Jackson, 1994; Stein, 1994). Among the risk factors facing youth in foster care, low educational expectations and academic achievement issues may have the most adverse effect on long-term adjustment (Jackson, 1994).

Youth who are at risk for school failure are also at high risk for drug abuse, delinquency, and violence (Dryfoos, 1990; Hawkins, Catalano, & Miller, 1992; Institute of Medicine, 1994; Maguin & Loeber, 1996). Further, a recent study of children in foster care found that placement change with accompanying shifts in schools was linked with increased delinquency (Ryan & Testa, 2005). The relationship between student mobility (moving from one school to another for reasons other than being promoted) and academic achievement has long been established (Kerbow, 1996, Rumberger, 2003: Rumberger & Larson, 1998). For students in foster care, frequent home placements with subsequent interruptions in school placement are the norm.

A necessary hurdle is completing high school required for most post-secondary enrollment, and many alumni studies have found that high school completion rates for youth in foster care have been lower than the 80% completion rate for the general population as reported in the 2000 Census (US Census Bureau, 2000). For example, one of the few national studies examining high school completion by youth in foster care found 54% of these youths had completed high school by age 24 years (Cook, Fleishman, & Grimes, 1991). Courtney et al. (2001) found that only 63% of the alumni had completed high school (even after interviewing youths at age 19 and 20 years—12 to 18 months post-discharge).

In contrast, a recent follow-up study of alumni of foster care (mean age, 30 years) who had spent an average (median) of 6.2 years in foster care with a private agency found that 86.1% had received a high school diploma or a general educational development (GED) certificate at the time of the interview (Pecora et al., 2003). But this study found that the alumni had GED rates fives times higher than

that of the general population (29% versus 6%). While having a GED is more beneficial than not completing high school (Smith, 2003), research indicates that people who obtain diplomas instead of GED certificates are more successful as adults. For example, GED recipients are more than twice as likely as those completing regular high school diplomas to not enroll in post-secondary education (Bozick & DeLuca, 2005), and diploma holders have higher incomes than those with GED certificates (Grubb, 1999).

Indeed, reported high school completion data for youth in foster care vary by agency type serving the youth (public versus private), time of reporting after aging out of foster care, and sample size. However, the results of most studies provide clear evidence that children who become wards of the state and are served by foster care systems fail to complete high school at alarming rates and are therefore unable to access higher education opportunities.

# POST-SECONDARY EDUCATION OR TRAINING EXPERIENCES OF FOSTER CARE ALUMNI

A recent study by the Chapin Hall Center for Children at the University of Chicago (IL) (Courtney et al., 2004) found that as many as 80% of students in foster care had high levels of college aspirations despite having high rates of special education enrollment, school interruptions, placement disruptions, low reading ability, and poor grades—all factors that severely limit postsecondary access and success (Cadoret & Riggins-Caspers, 2002; De Bellis, 2001; Lansford et al., 2002). For this group of young adults, gaining access to college opportunities and navigating the many academic, financial, health and personal barriers to high school or college graduation has been difficult. Students coming from state or privately sponsored foster care are significantly underrepresented in the post-secondary education and training settings that could provide them with greater opportunities for employment and/or higher paying jobs.

Although college enrollment rates for students who have been in foster care are not reported by national or state higher education systems, several studies and reports provide information that suggests college attendance and completion rates are significantly less than the general population and even that of other underrepresented groups. For example, Emerson (2006) estimates that nationally, only approximately 7% to 13% of foster care youth enroll in post-secondary education or training programs immediately after emancipating from care. Another study of more than 1,000 foster care alumni found

that approximately half (43.7%) of those age 25 years and older had enrolled in some kind of post-secondary education, but only 10.1% had earned a bachelor's degree or higher; 20% percent had completed some type of vocational or technical degree; 8% had received an associate's degree; and 16.1% were still enrolled in a post-secondary program (Pecora et al., 2003). While these findings were slightly better than a number of other studies (7% some college, 1% college degree, Jones & Moses, 1984; 27% some college or vocational training, Alexander & Huberty, 1993), foster care college completion rates are still much lower than the college completion rate of the same age general population group (24.4%) (US Census Bureau, 2000). Part of the reason for this is likely a lack of preparation for the coursework—foster care alumni are less likely to be enrolled in college preparatory classes (15% versus 32%), even when they have similar test scores and grades as non-foster youth (Courtney et al., 2004).

# EFFORTS TO PROVIDE INCREASED POST-SECONDARY OPPORTUNITIES FOR STUDENTS

Given these educational challenges faced by foster care alumni, agencies, state and national policymakers, and college programs need to facilitate post-secondary program supports and financial aid to these students. Several state and federal policies have been initiated to provide secondary support. These policies include state tuition waivers for foster care alumni, dedicated state scholarship programs (such as the Washington State governor's scholarships); the new federally funded Chafee Education and Training Vouchers, which provides \$42 million nationally to states to deliver to students from foster care (US DHHS, Administration for Children and Families, 2003); and the California State Fullerton's Guardian Scholars Program that provides outreach, financial aid, and targeted program supports to their students coming from foster care.

Additionally, collaborations between private agencies such as Casey Family Programs (Casey) and the Orphan Foundation of America are providing scholarships for more than 400 foster care alumni to enroll in a post-secondary education or training program. Support services such as virtual email-based mentoring (called *v-mentoring*), regular email, and 800-number contacts accompany the financial assistance. Combined, these public and private efforts are providing important new opportunities for students to pursue their post-secondary aspirations.

# RESEARCH QUESTIONS

Concerns have been raised that many college scholarship programs, including Casey's internal and national programs, were not designed to provide the kinds or amounts of support that foster care alumni need to successfully complete their educational or training programs. Little research has been conducted on the academic needs of foster care alumni who seek to enroll in post-secondary education or training or the support services they seek to utilize in their transition from high school to college (Seyfried et al., 2000).

The sudden transition from foster care status to independent living, especially with the added demands of post-secondary education or advanced training, is a stressful time for these students. Initial impressions support that even modest programs such as v-mentors from Orphan Foundation of America can make substantial differences in the lives of these youth. Although the array of student support services available on most college campuses is extensive, little research focuses on the varying utilization of services by different groups of students.

This exploratory study investigated the nature and timing of supports to alumni of foster care participating in the post-discharge scholarship program at Casey. More specifically, the main questions this study tried to answer were:

- 1) What types of services were most utilized by students?
- 2) Who provided services that were most utilized by students?

Understanding what services and who provides them during post-secondary programs will better inform program administrators and child welfare workers both in preparing alumni of foster care for post-secondary success as well as meeting the pressing requirements of this unique population.

### **METHOD**

# **Participants**

The 115 participants in this study were either current recipients of a post-secondary education and job-training scholarship funded by Casey during 2003 or had completed their scholarship within the past 24 months. Casey was established by United Parcel Service founder Jim Casey in 1966. The program serves children, youth, and families

in the child welfare system. In 1979, Casey instituted the Continuing Education and Job Training (CEJT) program, which provided the opportunity for approximately 170 foster care alumni to enroll annually in a full array of post-secondary options, including community and 4-year college; vocational/technical training; graduate school; professional certification; entrepreneurship, and apprenticeship training.

Table 1 presents the distribution of students by school status and study participation. At the time this study was conducted, there were 148 students enrolled in Casey's CEJT scholarship program. Of the 148, 43.2% were freshmen, 22.3% were sophomores, 20.3% were juniors, and 14.2% were seniors. Due to the nature of the scholarship program extending beyond a traditional 4-year college to include vocational and 2-year programs as well as the relatively small sample of students in the program, data management decisions had to be made. Freshmen were defined as students who were a quarter of the way into their 2-year, 4-year, or vocational program, sophomores were into their second quartile of the program, juniors were in the third quartile, and seniors were those who were in the final quartile of their program. Although this classification does not follow a typical 4-year college degree categorization, chronologically, students from foster care approach the post-secondary experience similarly regardless of whether it extends to 2 or 4 years. At graduation, they are literally on their own without the assistance of a scholarship program or a family they can count on for emergency support.

Also included in the original sample were 37 graduates and 150 non-completers (187 total) who dropped out from 2000-2002. To achieve an acceptable error rate of  $\pm 5\%$  from an initial group of

TABLE 1. Sample of Students Distributed by School Status and Study Participation

School status, n (%)	Current students	Former students	Stratified sample	Study participants	
Freshmen	64 (43.2)	_	32 (20.1)	23 (20.0)	
Sophomore	33 (22.3)	_	22 (13.8)	16 (13.9)	
Junior	30 (20.3)	_	21 (13.2)	14 (12.2)	
Senior	21 (14.2)	_	16 (10.1)	14 (12.2)	
Completers	_	37 (19.8)	24 (15.1)	21 (18.2)	
Non-completers	_	150 (80.2)	44 (27.7)	27 (23.5)	
Total	148	187	159	115	

335 students (current plus former), a stratified random sample of 32 freshmen, 22 sophomores, 21 juniors, 16 seniors, 24 completers, and 44 non-completers (159 total) were selected for the study. Of the 91 current and 68 former students in the sample, 115 students (72.3%) were located and agreed to participate in the survey (23 freshmen, 16 sophomores, 14 juniors, 14 seniors, 21 completers, 27 non-completers).

The demographics of study participants were: female, 61%; male, 39%; African American, 20%; American Indian, 7.0%; Asian/Pacific Islander, 7.8%; Caucasian, 56.5%; and Hispanic, 8.7%. The average age of current students was 21.0 years (SD = 2.2 years). The average age of former students was 23.3 years (SD = 3.1 years).

Due to the transient nature of college students, especially at the

Due to the transient nature of college students, especially at the time of the study during the summer break months, a search company was utilized to track down the location of current and former students. Additionally, an on-line search engine was used to find students with invalid location information. At the close of the interviews, 36 (22.6%) students could not be located and eight (5.0%) refused to participate; thus 115 persons completed the interviews. There was very little difference in characteristics between the survey respondents and non-respondents in terms of gender, ethnicity, or age. Of non-respondents 61% were female, 30% were African American, 5% were American Indian, 7% were Asian/Pacific Islander, 48% were Caucasian, and 11% were Hispanic. The average age of non-responding current students was 20.1 years (SD = 2.3 years). The average age of non-responding former students was 23.5 years (SD = 3.0 years).

#### Measures

A short telephone survey was developed and approved by the Human Subjects Committee at Casey Family Programs. Informed consent forms were mailed to the participants; receipt of these forms was confirmed before the phone interviews were administered by trained research assistants from May through August 2003. The participants were also informed that their responses would only be reported in aggregate form and no individual information would be released. The survey included select items from a pre- and post-test survey currently being used in the evaluation of the Orphan Foundation of America's scholarship program (College Intake and Exit Survey—Revised, 2001 Casey Family Programs, Seattle, WA). Other questions were added that reflected areas identified in the literature as indicative of a suc-

cessful transition from foster care to independent living (Cook, 1994; Goodman, 2001) including students' awareness of community-based independent services and connection with their former case manager, former foster family, and friends. The survey asked participants how often they used various services for six critical domains of their post-secondary education life:

- 1) Academic/vocational counseling or tutoring (e.g., writing and computer labs)
- 2) Medical/dental needs (e.g., acquiring prescription medicine)
- 3) Emotional/social support (e.g., having someone who listens or individual therapy),
- 4) Finances (e.g., student loans)
- 5) Living arrangements (e.g., finding housing)
- 7) Other services (e.g., childcare)

Use of each of these domains was rated across six service providers, which included:

- 1) School/institution
- 2) Casey
- 3) Community
- 4) Family
- 5) Friends
- 6) Other Service Providers

A six-by-six Service-by-Provider matrix was created whereby each service was rated for each provider (for a total of 36 questions). The survey questions were identical for both current and former students, but former students were asked about support utilization in the past tense, such as, "How often *did* you receive academic/vocational counseling from your school/institution?" Responses were rated on a Likert scale, which included: Never (0), About once a year (1), Several times a year (2), About once a month (3), and About once a week (4).

Service utilization subscale scores were calculated for the six types of support separately. A score for each participant was calculated by summing service scores across each of the six providers (for example, the academic/vocational subscale score could range from 0, never used academic/vocational support, to 24, used academic/vocational services from every provider about once a week).

Provider utilization subscale scores were calculated for the six sources of provision separately. A score for each participant was

calculated by summing provider scores across each of the six types of services (for example, the school/institution subscale score could range from 0, never used services provided by the school/institution, to 24, used the school/institution for every type of support about once a week).

#### Data Collection Procedures

Brief phone interviews (approximately 20 minutes) were conducted by interviewers not affiliated with Casey. Each interviewer was given a script to follow. In anticipation of cases for which a phone interview would not be possible due to accessibility or availability or for which paper surveys might be preferable for participants, surveys were also mailed to everyone in the sample with self-addressed and stamped return envelopes. Sixteen (13.9%) surveys were completed by mail. Additional analysis by response type was not done due to the small sample size.

# Analyses

The primary analysis method involved conducting separate oneway analysis of variance (ANOVA). For example, group differences (e.g., gender and ethnic differences) on levels of use for different types of support were examined using separate one-way ANOVAs. If the group had more than two levels, follow-up pair-wise analyses were conducted using a Tukey correction (p < .01).

As part of an exploratory analyses comparing use of formal and informal support, items within each type of support were combined as follows (using academic support as the example): first, the formal academic support subscale was created by adding students' reported scores on how often they receive academic/vocational counseling, advising, or tutoring from school/institution, Casey social worker, and community and dividing by three (the number of providers). Next, the informal academic support subscale was created by adding students' reported scores on how often they receive academic/vocational counseling, advising, or tutoring from friends and family and dividing by two (the division of the formal and informal subscales by three and two respectively, put the subscales scores on comparable scales—ranging from 0 to 4). Formal and informal supports were then compared for each of the five types of support (excluding other) using dependent measures t-tests. dependent measures t-tests.

#### RESULTS

#### Service Utilization

Table 2 presents descriptive data for the type of support utilization. It was found that, for the entire sample (n = 115), students reported using emotional support most frequently (M = 10.77; SD = 3.83) and medical support least frequently (M = 3.43; SD = 2.09).

To test group differences on reported levels of use of different types of support, a series of one-way ANOVAs was conducted separately for each type of support across gender, ethnicity (due to sub-group sample size limitations, this variable was dichotomized into Caucasian and non-Caucasian), type of program (i.e., 4-year college, n=84; or 2-year college only, n=24; because vocational was dropped from all sub-group analyses due to the small number of students (n=7) in this sub-group), and school status (i.e., current students, n=67; completers, n=21; and non-completers, n=27). School status was used in lieu of a more typical delineation of college students, i.e., freshman, sophomore, junior, senior because of the small samples in each of these subgroups.

No statistically significant differences were found between gender, ethnicity, or type of program on the six types of support. However, a significant difference was found for school-status on the academic subscale (F(2, 112) = 5.61, p < .05). Pair-wise follow-up tests (using a Tukey correction) found that completers (M = 5.81; SD = 2.71, p < .01) reported using fewer academic supports than current students (M = 8.96; SD = 4.38, p < .01) and non-completers (M = 9.52; SD = 4.48, p < .01).

TABLE 2. Type of Support and Service Provider Subscale Scores (n = 115)

Type of Support	Descriptive			Descriptive	
	М	SD	Support provider	М	SD
Academic/vocational	8.51	4.32	School/Institution	6.44	3.42
Medical/Dental	3.43	2.09	Casey	11.21	4.25
Emotional/Social	10.77	3.38	Community	3.10	3.55
Finances	6.31	2.87	Family	8.39	5.30
Living arrangements	4.68	3.30	Friends	7.77	4.23
Other	4.30	4.47	Other	1.11	2.48

#### Provider Utilization

Table 2 also presents descriptive data for the providers of support. It was found that, for the entire sample (n = 115), students reported using Casey staff most frequently (M = 11.21; SD = 4.25) Other provider of support least frequently M = 1.1; SD = 2.48).

To test group differences on reported levels of use of different types of providers, a series of one-way ANOVAs was conducted separately for each type of support across gender, ethnicity, type of program, and school status. No statistically significant differences were found between gender and ethnicity on the six types of providers. But a significant difference was found for type of program on the school (t (106) = 5.17, p < .05) and friends subscales (t (106) = 3.73, p < .05). Four-year college students reported using school (M = 7.40; SD = 3.08) and friends (M = 8.65; SD = 4.15) as providers of support more frequently than 2-year college students reported using school (M = 3.88; SD = 2.42) and friends (M = 5.21; SD = 3.37).

Lastly, a significant difference was found for school status on the friend subscale (F(2, 112) = 5.65, p < .05). Pair-wise follow-up tests (using a Tukey correction) found that completers (M = 5.10; SD = 2.95, p < .01) reported using friends as providers of support less than current students (M = 8.27; SD = 4.13, p < .01) and non-completers (M = 8.63; SD = 4.61, p < .01).

# Exploratory Analyses—Formal and Informal Support Utilization

To determine whether there were significant differences between formal and informal supports, five of the six support providers were logically sorted. Educational institution supports such as writing centers and instructors, Casey social workers, and community supports such as churches and banks were combined to form a category called formal providers, while family and friends were combined to form informal providers. Support providers clustered as other providers were excluded from categorization because very few students reported using them and because it was difficult to determine whether the provider was formal or informal for those answers.

The Methods section described how the items within each type of support were combined. Table 3 presents findings comparing the use of formal and informal supports for each time of support. It

support	Formal score, M (SD)	Informal score, M (SD)	<i>t</i> (11			
<b>^*</b>	1 50 (0 73)	1 02 (1 42)	3			

Type of si 14) Academic 3.39 1.50 (0.73) 1.92 (1.42) Medical/Dental\* 0.89 (0.52) 0.30 (0.55) 8.74 Emotional/Social\* 1.38 (0.93) 3.17 (1.01) 15.73 Financial\* 1.36 (0.58) 0.99 (1.03) 3.43 Living Arrangements 0.93 (0.65) 0.89 (1.05) 0.43

TABLE 3. A Comparison of Formal and Informal Support

was found that CEJT scholarship recipients reported seeking more formal providers for medical/dental and financial support, but reported utilizing informal providers more for academic and emotional/social support.

# Most Helpful Assistance

An open-ended question that was posed to all participants was "What assistance or support has been the most helpful to you while you've been/were in CEJT?" As seen in Table 4, the responses were summarized into seven categories. Financial support was the most cited category of assistance/support, and planning support was the least cited category.

#### DISCUSSION

While there is a growing body of research in looking at the deleterious effects of not completing a high school degree for youth in foster care, there has been little examination of post-secondary or vocational achievement of young people after emancipation from care. Low college enrollment rates and even lower completion rates described in the literature review are the results of many barriers experienced as alumni of foster care. The results of the interviews conducted with the participants in this study validated the need for additional resources and support systems in order for alumni of foster care to overcome the barriers to educational or vocational success.

<sup>\*</sup>Indicates a statistically significant difference, p < .01.

TABLE 4. Categories, Percentage of Responses, and Examples of Most Helpful Assistance/Support

Categories of Most Helpful Assistance/Support	Responses, % (n = 115)	Examples
Financial	55.7	1) Financial support; 2) Scholarships
Navigating systems	12.2	<ol> <li>Figuring out loans, classes, coordinating scholarships;</li> <li>Helping with answers about family, school, how to get through systems</li> </ol>
Emotional support	11.3	1) Emotional support; 2) Moral support
Other	7.8	1) Medical; 2) Childcare
Independent living	5.2	<ol> <li>Being able to be on my own; 2) Independent living skills and job training.</li> </ol>
Educational support	4.3	Academic counseling; 2) Educational support
Planning	3.5	<ol> <li>A stepping stone to opportunities, helped plan;</li> <li>Constant contact, help with deadlines, kept me on task</li> </ol>

The main goal of this research was to determine what services, provided by whom, were most utilized by students from foster care receiving post-secondary education scholarships. The study results confirmed that the need for emotional support is high and supportive relationships with agency staff and friends are important for college graduates coming from the foster care system. Additionally, while financial assistance can be a considerable factor for any college bound student in determining which institution to attend, it is a critical one for alumni of foster care who have no additional financial support from their families. The following discussion highlights some implications of the study findings for educators and child welfare workers

# Implications for Education and Training Programs

Not surprisingly, and as this study shows, students coming from foster care rely heavily on institutions for financial assistance. It would behoove financial aid offices at institutions to become more aware of targeted scholarships or state-sponsored independent living program funds for students from foster care to provide their students with

maximum financial support. These students need to have an ally at their school who is knowledgeable about all financial aid options available to them. The California Community College Chancellor's Office has responded to this need by providing training and a resource manual for their financial aid counselors as part of the Foster Youth Success Initiative (FYSI). Moreover, financial aid officers working in concert with their student employment colleagues can greatly assist students in developing year-round financial and living plans. Conversely, agencies can assist their students to learn about and apply for public and private scholarships, grants (e.g., Pell and state need), and tuition waivers. Casey Family Programs has developed the *It's My Life; Financial Aid Excerpt* (2006), which provides comprehensive information on financial aid planning for those coming from foster care.

Recently, the University of Washington's (Seattle, WA) financial aid office queried their undergraduate Free Application for Federal Student Aid (FAFSA) database to identify all students who responded "yes" to FAFSA question #53 ("Are both of your parents deceased, or are you (or were you until age 18) a ward/dependent of the court"). Outreach to 81 students is currently underway to inform them of targeted scholarships and to assess their support needs. This process could be considered by other postsecondary institutions to increase completion rates for their students from foster care.

Furthermore, post-secondary institutions may need to develop more intensive emotional/social support systems for these students. It is important to recognize that almost one-fourth of CEJT scholarship students receive Casey-funded therapy for significant mental health issues deriving from early histories of abuse and neglect. Academically prepared and resourceful students may still find themselves overwhelmed by the pressures of independence at such a young age, post-secondary education or training, and experience a renewal of concerns specific to alumni of foster care. The importance of providing mental health services for students with severe and even moderate mental health issues stemming from their involvement with the child welfare system cannot be understated. Too many campus-based health centers and counseling services are not adequately prepared to offer this type of needed therapy. Hoover (2003) reports that colleges are scrambling to shore up their mental health prevention programs in light of increased need. Although post-secondary programs frequently provide group and sometimes limited individual—counseling services, former foster youth often have mental health issues requiring more intense support than is commonly available at these institutions. More coordinated campus and community based support options need to be made available to sufficiently provide the most frequently utilized assistance for this unique population—emotional/social support, including mental health.

# Implications for Practice

Evaluation of academic and emotional challenges conducted prior to the arrival on campus may help to better prepare a student from foster care so that successful milestones are achieved during the first year of school. Youth educational supports, such as focused tutoring, educational skills remediation, and coaching for class selection and college or vocational planning could be implemented as needed. Students in this study who completed their post-secondary education or vocational training reportedly utilized fewer academic supports than current students or non-completers. A possible explanation for this may be that they were academically and emotionally better prepared to meet the demands of post-secondary education or training.

Emotional/social supports provided by birth/foster family and friends seem to play an important role for students, so helping students identify ways to utilize these resources is a key to providing effective post-secondary case management. At the post-secondary level, preparing these students to transfer support systems from pre-emancipation caregivers, caseworkers, and agencies, to more college, peer- and community-based supports seems necessary.

For youth in long-term foster care, case managers are a familiar support, but their support and advocacy network needs to be expanded after they leave formal care. The study findings indicate that Casey staff, or case managers, were the most frequently utilized providers of overall support for the participants in this study. So even for youth who are adept at finding other resources, case managers serve as a stable anchor or point of reference for overcoming obstacles. They often have a wealth of resources and practical knowledge unavailable elsewhere. In order to build social and academic support systems without relying too heavily on agency staff, students in foster care can be encouraged to pursue self-determination skills related to identifying, securing and monitoring their academic, social and personal supports. College students from foster care need to have a trusted adult they can rely on for guidance and support.

Further research needs to be conducted to examine methods for obtaining low cost access to medical/dental coverage for foster care alumni. Although the medical/dental support was reportedly used least

in this study, it is nevertheless important to maintain this benefit for the students. Unanticipated medical emergencies can incur significant expenditures; with sufficient medical/dental coverage, students can maintain their enrollment status. Students in this study reported that they utilized more formal providers (i.e., school/institution, agency staff, and community) for medical/dental assistance. This is expected since most of these students do not have private insurance. Educational and vocational institutions can help advocate for states to extend Medicaid eligibility to age 21 years with provisions made for returning older students.

# Limitations and Future Study Directions

This study utilized two data collection methodologies. Most of the surveys were conducted over the phone, but a small percentage (13.9%) of surveys were completed through mail. Due to the small sample size, separate analyses for this group of mail-in surveys were not completed. Also due to sample size, a  $2 \times 2 \times 2 \times 3$  factorial ANOVA design was not used and therefore interaction effects were not examined. Only the main effects of gender, ethnicity, type of program, and school status were reported. Future research may benefit from a larger sample size.

Additionally, the lack of data around foster care alumni preparing for, enrolling in, and completing post-secondary training or education, points to the need for more research in this area. While this study did not address which services or providers of services were critical to achieving program completion, it begins to speak to the perceived need for various supports and support systems. Moreover, it was not known whether any of the study participants had any disabilities that further complicated efforts to complete their post-secondary training or education.

Interviewing scholarship participants at program intake and exit may provide valuable information pertaining to barriers to post-secondary education or training completion and effective support delivery. These interviews may help explain how non-completers overcome the initial barriers in order to return to and graduate from educational programs. Because it is common for non-completers to return to educational programs, early success seems vital to their program completion.

Finally, a comparative study or an extensive review looking at differences between first generation college students, special needs students, socio-economically disadvantaged students, and students from foster care with regard to support services may be worth pursuing. There are multiple factors to consider when evaluating any one of these groups, but some trends or similarities may be identified that may assist educators in planning for an array of services.

By becoming more knowledgeable about these students' unique support needs, post-secondary education and training programs can help attract and retain them. Emerson (2006) provides a summary of federal, state, and institutional initiatives that are aimed at improving targeted supports to college students from foster care. Considering the child maltreatment and chaotic life history of these alumni, their achievements are notable. Clearly, more work needs to be undertaken to help more youth pursue and achieve vocational training and college degrees. With the income and employment disparities between degree earners and no degrees, it is imperative that a close collaboration between educators, child welfare professionals, foster parents, and individual students is developed and maintained. These partnerships can help to create educational or vocational service packages that work to help alumni of foster care with successful post-secondary education or vocational training.

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