



ANNUAL REPORT

[Year 1]



Higher Education as the Lifeline to Social Mobility for Former Foster Youth:

A Comprehensive Needs and Assets Assessment

Submitted by:

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This report represents the preliminary results of a two-year study which examines the well-being, resilient qualities, social support needs, and academic support needs of college students who have spent time in foster care. The results of this study lay the groundwork for institutions of higher education to develop more targeted support programs for this unique population of young adults who currently have a 4-6% chance on average, of obtaining a college degree. Given that Illinois has one of the largest and most diverse foster care systems nationwide, study results and recommendations will contribute to the national dialogue related to academic outcomes of former foster youth.

INTRODUCTION

Nationwide, more than 400,000 children and youth reside in foster care with only a 43-50% chance of ever returning home to a safe and stable family environment (Child Trends, 2015; Rolock, 2011; U.S. Department of Health and Human Services, 2013). Many transition out of state care as young adults without the benefit of economic security, family stability, social support or consistent educational preparation. Successful completion of a higher education program can serve as a critical turning point for this population of young adults as they strive to acquire credentials and skills necessary to succeed in adult life and break the cycle of poverty (Okpych, 2012; Peters, Dworsky, Courtney, & Pollack, 2009). Studies show that students who successfully complete a college degree program are likely to increase their lifetime earning potential by more than \$480,000 on average (Peters, Dworsky, Courtney, & Pollack, 2009). Furthermore, exposure to higher education creates a new trajectory of social mobility for young adults from foster care who are otherwise more likely than their peers to experience homelessness (46.6%), multiple out-of-wedlock births (60%), drug and alcohol dependence

(8%), while rates of post-traumatic stress disorder (PTSD) are twice that of military veterans (Casey Family Services, 2005).

While access to higher education yields many social and economic advantages for former foster youth, higher education institutions have not been successful in attracting, supporting and retaining this population of students (Day, Dworsky, Fogarty, & Damashek, 2011). The Annie E. Casey Foundation and others have found that but for a small handful of institutions, most colleges and universities lack the knowledge-base to address the unique needs and circumstances of students with a history of abuse, trauma, and family instability (Davis, 2006; National Working Group on Foster Care and Education, 2014). Specifically, inadequate academic preparedness for college due to multiple school changes and insufficient access to student support services poses unique challenges for this population (Day, Dworsky, Fogarty & Damashek, 2011; Okpych, 2012; Peters, Dworsky, Courtney, & Pollack, 2009). Furthermore, lack of family guidance and worries about younger siblings can create additional stressors which impact the likelihood of college enrollment and completion among students from foster care (Hernandez & Naccarato, 2010; Unrau, Font, & Rawls, 2012). Finally, students from traumatic family environments may also face social and emotional difficulties such as anxiety, depression, stress, and lack of social support which can impede their ability to persist academically (Casey Family Services, 2005; Courtney, Dworsky, Cusick, Havicek, Perez, & Keller, 2007).

Despite these obstacles, students from foster care who do make it to college often possess tremendous leadership ability, life wisdom, and resilient qualities. These attributes can enhance their chances of academic success if provided with the supports they need to succeed (Cicchetti, Rogosch, & Holt, 1993; Hernandez & Naccarato, 2010; Unrau et. al., 2012). Two separate studies found that in college, students from foster care are generally more motivated to succeed

compared to their peers, with more confidence in college instructors and more resilience in the face of adversity (Merdinger, Hines, Lemon Osterling, & Wyatt, 2005; Unrau et. al., 2012). While an emerging body of research attempts to better understand the experiences of college students coming from foster care, these studies are largely descriptive in nature. This study represents an additional contribution to the previous research through an examination of students' resilient qualities and needs, in relation to academic performance and use of supportive resources.

CENTRAL RESEARCH QUESTION:

To what extent do resilient qualities, personal challenges, and use of academic and social supports predict academic performance among former foster youth who attend college?

METHOD

Participants

Approximately 350 students enrolled in Illinois institutions of higher education as former foster youth were invited to participate in an anonymous online survey developed by Illinois State University faculty. The Illinois Department of Children and Family Services (IDCFS) assisted in this effort by identifying eligible students for the study based on their participation in one of three of the following financial aid programs administered by IDCFS: 1) Youth in College Program (YIC), 2) Youth in Scholarship Program (YIS), or the 3) Education and Training Voucher Program (ETV).

Of the 350 emails that were sent out to potential participants, 112 students initiated the on-line assessment which yielded 74 completed surveys and a 66% completion rate. It should be noted that the data collection period was accelerated by three months at the request of the Illinois Department of Children and Family Services. Whereas the initial data collection period was scheduled to begin in September of 2015 while students were enrolled in class, IDCFS officials who agreed to identify participants expressed concerns that all eligible participants were at risk of losing funding to attend college in the fall of 2015 due to a pending Illinois budget proposal which would have eliminated college support for IDCFS-involved students. If the targeted students would have lost funding to attend school in the fall of 2015, it would have been extremely difficult to identify and locate potential participants given that this group made up the entire population of targeted participants for the study. Also, from an ethical standpoint, the research team was concerned about seeking survey feedback from economically vulnerable participants who would have been in the midst of a financial crisis which could have limited their ability to enroll in classes during the 2015-2016 academic year. As a result of these unforeseen events, the research team made a decision to implement the survey portion of the study earlier than planned with the understanding that a summer data collection period would not be the most ideal as students would be more difficult to engage. Given this change in the data collection timeline, the research team, in partnership with the Illinois Department of Children and Family Services, has decided to use the year-one preliminary data as a *base line* which will afford us the opportunity to either re-implement the survey with some slight modifications during the 2016-2017 academic year, or expand the study through additional one-on-one qualitative interviews. A demographic description of the 74 respondents who completed the survey in the summer of 2015 is presented in Tables 1 and 2 below.

Study Procedures

All eligible participants over the age of 18 received an invitation to participate in the study via an electronic letter prepared by Illinois State University (ISU). To preserve confidentiality of the potential participants, the Illinois Department of Children and Family Services sent the ISU letter to all potential participants via an email that informed prospective participants about the research and their right to accept or decline participation. The email included an online link to the Illinois State University survey. The letter of consent, description of the study, and survey questions were contained within this online link. The email explicitly stated that the study was being conducted by Illinois State University, not IDCFS. Students who chose to complete the survey were offered a \$20 e-gift card from Walmart if they chose to enter an email address at the end of the survey which was forwarded to a third party university official not affiliated with the research team. The third party official used the email provided to send the e-gift cards to participants.

Survey Description

One hundred and twenty-one items (including twenty personal background questions) were used to answer identified research questions. For this study, the following domains were assessed:

Personal strengths and talents. Gjesfjeld and Houston (2014) developed an exploratory assessment tool (Personal Strength Inventory) incorporating indicators of strength and resiliency identified in previous studies. Specific areas of this assessment tool include students' perceived strengths and talents in specific areas, including time management, peer relationships,

resourcefulness, and determination. Indicators of personal strengths and talents were also assessed through modified survey items from the Gallup Organization's Clifton StrengthsFinder developed by Lopez, Hodges, and Harter (2005) and used in previous assessments of student leadership qualities.

Resilient qualities. We used a 6-item hardiness scale known as the Brief Resiliency Scale developed by Smith et al., (2008). This scale attempts to measure the degree to which an individual "bounces back" from various life adversities.

Student engagement. In higher education, co-curricular activities have been cited as an indicator of student strength and resilience as well as a predictor of academic success (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Pascarella & Terenzini, 2005; Zacherman & Foubert, 2014). Houston, Gjesfjeld, and Gholson (2014) developed an exploratory assessment of student engagement which asks students to select from a menu of various *activities or clubs* in which they currently participate.

Social support and networks. Social support is vital for all individuals, including college students. Yet, the type and amount of social support needed by college students previously in foster care has not been explored. Gjesfjeld, Greeno, and Kim (2008) have confirmed the utility of 12-item social support survey (MOS-SSS; Sherbourne & Stewart, 1991) assessing subtypes of support including tangible, emotional, positive-interactional, and affectionate. The extent of these students' social networks was assessed with an adapted Social Network Index initially developed by Cohen et al., (1983). Access to *concrete aid* as another aspect of social support (See Houston & Kramer, 2008; Groze, 1994) was also assessed using 5 items which ask students to rate the frequency with which they accessed housing, employment, academic tutoring, housing and life skills assistance.

Psychological health. We assessed the *general stress* that students from foster care experience as they navigate college through a 4-item perceived stress survey (PSS) - a measure specific to determining basic stress (Cohen, Kamarck, & Mermelstein, 1983). Another 4-item scale, the PHQ-4, assessing *anxiety and depression*, is included because it has been used as a screening instrument for anxiety as well as depressive disorders (Kroenke, Spitzer, Williams, & Lowe, 2009). These are important variables because stress, anxiety, and depression can all influence the academic success of students.

Academic support. Utilizing a modified version of the “Campus Resource Survey” (Illinois State University, 2013), students were asked to identify their use of various academic supports and services. These services include academic tutoring and remediation, student health services, student counseling services, and many others.

Academic performance. Given that the current study seeks to promote student enrollment and retention, student grade information (e.g. GPA) concerning both the student’s recent semester as well as cumulative GPA was self-reported.

FINDINGS AND DISCUSSION

Demographics and Personal Characteristics of Former Foster Youth

Gender, age, and school characteristics. The overwhelming majority of respondents were female (84%). Students were on average 20.6 years of age with 10% identifying as freshman, 24% as sophomores, 31% as juniors, and 26% as seniors. Ten percent reported recently completing their higher education program. The majority of the participants in this survey attended a 4-year public university (68%), 16% attended a 4-year private university, 12% attended a 2-year community college, and 4% attended a vocational school.

Whereas the majority of students surveyed reported majoring in the social sciences (30%), science and technology degrees were being sought by 21% of students. Fourteen percent of students were pursuing a degree in education, 12% in theatre, and 18% were pursuing plans of study in business or a professional program such as nursing or social work (see Table 1).

Living arrangement, relationship status, and grade point average. In terms of living arrangement while in school, 29% of students in the study resided on campus, but the majority (71%) reported living off campus. When asked about their own relationships and parenthood, 95% reported being unmarried, 91% of these students had no children. Students' self-reported recent semester grade point average was fairly high, with 31.6% reporting a 3.5 or greater, and 86.4% reporting a recent semester GPA of over 2.5. (see Table 1).

Table 1: Characteristics of Former Foster Youth in Higher Education (N = 74)		
	<i>n</i>	Valid %
Gender		
Male	12	16.2
Female	62	83.8
Age (years)		
18	2	2.7
19	13	17.6
20	20	27.0
21	20	27.0
22	16	21.6
23	3	4.1
Year in School (N = 72)		
Freshman	7	9.7
Sophomore	17	23.6
Junior	22	30.6
Senior	19	26.4
Graduated	7	9.7
Education Type		
4-year Public	50	67.6
4-year Private	12	16.2
2-year Community College	9	12.2

Vocational school	3	4.1
Major (<i>N</i> = 73)		
Social Science	22	30.2
Science/Technology	15	20.6
Education	10	13.7
Arts/Theatre	9	12.3
Business	7	9.6
Professional Program (Social Work, Nursing)	6	8.2
Other	5	5.5
Living Arrangement (<i>N</i> = 73)		
On-campus	21	28.8
Off-campus	52	71.2
Relationship Status		
Married	4	5.5
Unmarried or Single	70	94.5
Has Children	7	9.5
No children	67	90.5
Grade Point Average Recent Semester (<i>N</i> = 73)		
3.5 – 4.0	23	31.6
2.5 – 3.49	40	54.8
0 – 2.49	10	13.7

Child welfare and maltreatment history. The mean age at which students entered foster care was 6.8 years (*SD* = 5.9) with a majority entering foster care as infants before the age of two (31%). Sixty percent resided with one or more sibling while in foster care, and 68% reported having 3 or more biological siblings. It is worth noting that 41% of students reported having more than five siblings (see Table 2).

Parental substance abuse was the number one reason students reported entering foster care (47%), with equal proportions reporting physical neglect or physical abuse (36.5%). A lack of supervision (30%), parental domestic violence (16%), and medical neglect (12%) were experienced by some portion of these students prior to entering foster care.

Family and custody arrangement. Although all participants in the study have a documented history of child maltreatment and foster care placement, family custody

arrangements varied significantly. For example, 40.6% of participants reported being legally adopted at some point during their childhood. An additional 18.9% reported living with a relative who maintained legal guardianship, while a total of 36.5% reported remaining under IDCFS guardianship or became emancipated from IDCFS guardianship as an adult.

Table 2: Child Welfare and Maltreatment History (*N* = 74)

Characteristic	<i>n</i>	Valid %
Entered Foster Care (<i>N</i> = 73)		
≤ 1 year of age	23	31.5
2 – 4	10	13.7
5 – 7	10	13.7
8 – 10	6	12.2
11 – 13	8	11.0
14 – 17	16	21.9
In Care with Sibling (<i>N</i> = 73)		
Yes	44	60.3
No	29	39.7
# of Biological Siblings (<i>N</i> = 73)		
0	1	1.4
1 – 2	22	30.1
3 – 4	20	27.4
> 5	30	41.1
Circumstance(s) associated with Foster Care*		
Physical Neglect	27	36.5
Physical Abuse	27	36.5
Medical Neglect	9	12.2
Lack of Supervision	22	29.7
Parental Domestic Violence	12	16.2
Parental Substance Abuse	35	47.3
Family and Custody Arrangement*		
Adoption by relatives	10	13.5
Adoption by non-relatives	7	9.5
Adoption by foster parent	13	17.6
IDCFS guardianship	13	17.6
Legal guardianship by relatives	14	18.9
Emancipated	14	18.9
Other	3	4.1

*Does not total 100%; Student can endorse more than one circumstance

Survey Variables

Student talents and strengths. Students were asked to self-assess their perceived strengths and talents based on a 5-point Likert scale (1= Not strong whatsoever; 2= Not so strong; 3= Somewhat strong; 4= Very strong; 5= One of my best strengths). Table 3 describes their responses.

Table 3: Strengths and Talents (N = 74)		
Characteristic	<i>M</i>	<i>SD</i>
Self-confidence	4.42	.57
Resourcefulness	4.26	.70
Self-discipline	4.14	.84
Influence	4.14	.87
Social Skills	4.05	.92
Determination	4.03	.97
Enthusiasm	3.95	1.00
Organizational Skills	3.93	.98
Creativity	3.89	.87
Focus	3.85	.89
Communication	3.81	.92
Help-seeking Skills	3.74	1.07
Time management	3.73	1.01
Study Skills	3.58	1.05

The results indicate that students rated themselves highest on self-confidence (“I take personal pride in my talents and accomplishments”) and resourcefulness (“I generally find a way to get access to the things I need”). Their lowest scores were on help-seeking skills (“I am willing to seek help/support when needed”), time management (“I make the best use of my time and resources to accomplish my goals”), and study skills (“I am planful and consistent in my study strategies”).

Student gender and *type of 4-year institution* (public vs. private) were hypothesized to be associated with perceived *strengths and talents* subscale mean scores. Public institution students (N=50) had significantly higher mean scores than students at private 4-year institutions on 6 different domains (self-discipline, focus, time management, influence, determination, and help-seeking skills). While we cannot explain the direction of this effect, it is plausible that there are aspects of social comparison present in these findings. If we make an assumption that private schools are perceived (accurately or not) as having more selective admissions standards, our sample of students in private institutions (N=12) may believe themselves to be less academically talented and prepared because they are comparing themselves to more advantaged private school peers. Given that private schools are more likely to enroll a larger percentage of students from higher income families and high resourced communities, these factors could conceivably contribute to our sample of students' perceived ability to "fit in". If students do not feel a sense of belonging in their academic setting, this could impact self-perception and willingness to utilize the campus resources that could help them achieve academically (Stewart, Makwarimba, Reutter, Veenstra, Raphael, & Love, 2009).

In terms of gender, we examined group means and found women maintained higher scores on the three variables in Table 3a. Other variables did not significantly differ between male and female students. While we are unsure if gender distribution in our survey (84% female) is reflective of the total distribution of scholarship funds, it is conceivable that male students either do not receive sufficient pre-college academic support, or they may perceive themselves to be less academically talented and prepared to attend college when compared to female students.

Table 3a: Comparison of Male and Female Students on Enthusiasm, Influence, and Help-Seeking Skills

Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Enthusiasm			-2.38	72	.02
Males	3.33	1.07			
Females	4.06	.96			
Influence			-2.31	13.20*	.04
Males	3.50	1.09			
Females	4.26	.77			
Help-Seeking Skills			-2.25	71	.03
Males	3.09	1.22			
Females	3.85	1.00			

*The *t* and *df* were adjusted because variances were not equal.

Student needs for social support and assistance. Student participants were asked to identify the frequency with which they required specific assistance in the form of concrete aid. Concrete aid has been identified as a sub component of social support and includes areas such as financial support, housing, academic support, employment, and life skills assistance. Students rated their need for concrete aid based on a 5-point Likert scale (1= Never; 2= Not usually; 3= Some of the time; 4= Most of the time; 5= Always) (see Table 4).

Table 4: How often have you needed help in these areas? (N = 74)

	<i>M</i>	<i>SD</i>
Finances	2.70	1.35
Academics	2.24	1.19
Employment	2.18	1.40
Housing	2.15	1.38
Life Skills	1.99	1.34

These results indicate that support in the area of *finances* (described as “having sufficient income to make ends meet”) was the main concern for these students. A paired samples *t* test indicated that finances was a statistically significant concern when compared to support in the area of *academics* (described as “study skills, writing, math, test anxiety, learning disability) *t*

(73)=3.13, $p<.01$, $d=.36$. No significant gender differences were found in terms of these areas of need.

Examining differences between 4-year private and public institutions, students at private universities (N=12) had significantly more needs in academics, finances, housing, and personal life skills than public students (N=50) (Table 4a). Although these findings have surprised us, it is consistent with the same direction of findings concerning personal strengths and talents. In terms of academics and life skills, they may perceive greater needs than their peers at private institutions. Higher scores on finances and housing may also indicate additional costs or issues that are not readily present at lower cost public institutions. Overall, these findings give us some concerns about the integration of former foster youth in private higher education institutions. Are they and their institutions prepared to address their specific needs as students? Although the sample for this set of analyses is relatively small, the results suggest the need to further explore the differences between 4-year private and public institutions in relation to students' use of and access to support and concrete aid.

Table 4a: Comparison of Private and Public Students on Academic, Financial, Housing, and Life Skills Needs (N=62)					
Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Academics			2.40	60	.02
Public	2.06	1.17			
Private	3.00	1.41			
Finances			3.25	60	<.01
Public	2.44	1.20			
Private	3.75	1.49			
Housing			3.12	12.11*	<.01
Public	1.84	1.11			
Private	3.45	1.64			
Life Skills			2.24	13.22*	.04
Public	1.82	1.14			
Private	3.08	1.78			

Student engagement. Student participants were asked to select the activities in which they were engaged during the academic year. Students could select multiple items for this question; therefore, figures indicate the proportion involved in a particular activity.

Table 5: Common Student Activities (N = 74)		
	%	N
Academic and professional		
Pre-professional Club	12.2	9
Academic Club	8.1	6
Academic Support	2.7	2
Research organization (e.g. McNair Scholars)	5.4	4
Service and leadership		
Community Volunteer	27.0	20
Student-led Organization (SRO)	16.2	12
Student Leadership	14.9	11
Service Learning	5.4	4
Social		
Sorority/Fraternity	21.6	16
Social Club	16.2	12
Student Housing Programming	2.7	2
Affinity		
Church/Faith Organization	23.0	17
Cultural Diversity Organization	6.8	5
Women’s Organization	6.8	5
LGBTQ Organization	6.8	5
Parent Group	1.4	1
Health, fitness, adventure		
Sports (Intramural or organized)	20.3	15
Dance/Theatre/Art Club	16.2	12
Study Abroad	13.5	10
Politics, government, social justice		
Civil Rights Group	2.7	2
Political Organization	1.4	1
ROTC	1.4	1
Student Government	1.4	1

Volunteering, involvement in a sorority/fraternity, attending a church/faith organization, and sports were popular activities for these students. After developing a scale called “engagement”

where we simply added student activities together, we examined student responses to the engagement categories in relation to their cumulative GPA. We found that students with higher cumulative GPAs greater or equal to 3.0 had greater involvement in these student activities ($p < .01$). Inspection of the group means indicate that higher achieving students indicated involvement in 2.9 activities whereas the lower achieving students indicated involvement in 1.4 activities. The relationship indicates a potential positive relationship between academic achievement and campus involvement. This is another area which needs to be examined further in future studies: Do students who engage in co-curricular activities have more of a *sense of belonging* which leads to increased levels of social support and higher academic performance? Or do higher performing, academically confident students engage in more co-curricular campus activities?

Academic support. Students were asked to identify the usefulness of various campus supports and services. These services include academic tutoring and remediation, student health services, student counseling services, and many others (Table 6). Students rated their usefulness on a 5-point Likert scale (1= Very Useless; 2= Useless; 3= Neither; 4= Useful; 5= Very Useful (see table 6). They could also indicate if they had not used these supports.

Table 6: Most Useful Campus Resources	
	Usefulness (1-5)
Financial Aid*	4.08
Health Care*	3.80
Campus Housing*	3.76
Academic Advising*	3.69
Summer Internship	3.69
Tutoring*	3.65
Employment/career Services*	3.50
Faculty Mentoring*	3.44
Affordable Off-Campus Housing	3.36
Spiritual Worship	3.35

Credit Counseling	3.28
Counseling	3.24
Graduate School Advising	3.15
Peer Mentoring*	3.12
Childcare Services	3.12
Summer Break Housing	3.11
Case management Services	2.97
Network for foster youth	2.90
Disability Services	2.87
Legal Services	2.86
Sibling Visit Services	2.83
Adult Learner Services	2.80
Birth Family Reconciliation	2.77
Child Support Enforcement	2.66

*These resources were utilized by over 65% of students.

Concerning the usefulness of resources, no gender differences were found. In terms of type of institution, public university students reported academic advising and health care services as more useful to them than private university students, $t(51) = -2.91, p < .01$ and $t(45) = -2.84, p < .01$, respectively.

Desire for social support from family. Social support has been identified as nurturance, reinforcement for behavior, guidance, access to resources, or tangible aid (Tracy & Whittaker, 1990; Uchino, 2009; Whittaker & Garbarino, 1983). Supportive behaviors may also include approval, help, guidance, kindness, emotional help, information, and concrete aid (Groze, 1996; Houston & Kramer, 2008; Xu & Burleson, 2010)). Participants completed a modified version of Xu and Burleson's (2010) Desired and Experienced Levels of Support scale to assess support they desired from others. Specific areas of this measure include students' desire for "affirmation", "doing things together", "advice", and "comfort when upset" among other items (Table 7). Participants rated their desire for familial social support based on a 5-point Likert scale (1= Didn't Want at All; 2= Wanted Rarely; 3= Wanted Occasionally; 4= Wanted Regularly; 5= Wanted a Great Deal).

Table 7: Desire for Social Support from Family (N = 74)

	<i>M</i>	<i>SD</i>
Desire for Affirmation	3.93	1.27
Desire for Doing Things Together	3.89	1.37
Desire for Advice	3.82	1.23
Desire for Being Taught	3.77	1.23
Desire for Being Close	3.74	1.21
Desire for Comfort When Upset	3.72	1.30
Desire for Tangible Support	3.36	1.37
Desire for Offer to Lend Something	3.26	1.40

The mean scores and differences indicate students wanted togetherness, affirmation, and emotional support from foster or adoptive parents more frequently than specific tangible resources. In terms of gender differences, the significant differences in Table 7a were found. These three findings indicate male students report less desire for these types of social support.

Table 7a: Comparison of Male and Female Students on Desire for Social Support Comforting, Lending, and Doing Things Together

Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Comfort When Upset			-2.31	69	.02
Males	2.91	1.45			
Females	3.87	1.23			
Offer to Lend Something			-2.88	68	<.01
Males	2.25	1.22			
Females	3.46	1.35			
Do Things Together			-2.15	70	.04
Males	3.09	1.51			
Females	4.03	1.30			

Psychosocial variables and academics. Students also took 4 brief instruments measuring resiliency, or the ability to “bounce back” from adversity (Smith et al., 2008), perceived stress (Cohen & Williamson, 1988), perceived availability of social support (MOS-SSS; Gjesfjeld, Greeno, & Kim; 2008), and psychiatric symptoms with the PHQ-4 (Kroenke, Spitzer, Williams,

& Lowe, 2009), a commonly used screening tool for depression and anxiety disorders. The mean and standard deviations of students on these scales is reported in Table 8.

Table 8: Psychosocial Variables		
	<i>M</i>	SD
PHQ-4: Psychiatric Symptoms	3.42	3.43
PSS-4: Perceived Stress	16.4	12
Resiliency	21.9	16
MOS-SSS: Perceived Social Support	50.7	37

To examine the relationship between these variables and academic grades, we performed separate T-tests comparing 2 groups of students (GPA at or below 2.5 vs. GPA over 2.5). While no differences were found in students' recent semester, students in the higher cumulative GPA group (N=48) had significantly higher mean social support scores compared to students with lower cumulative GPA (N=25), $t(71) = 2.16, p < .04$. These results highlight the importance of social support in promoting academic achievement.

Psychosocial variables and psychological health. Stepwise multiple regression was conducted to determine the accuracy of psychosocial variables (perceived stress, resilience, perceived social support, desire for familial support, and engagement) in predicting psychiatric symptoms measured by the PHQ-4. Results indicate that the overall model with 2 predictors significantly predicted symptoms, $R^2 = .39, R^2_{adj} = .37, F(2,62) = 19.68, p < .01$ (Table 8a). Perceived stress had a strong positive relationship with symptoms, while personal resilience had a smaller but significant negative relationship to symptoms. In summary, greater stress had a strong relationship with psychiatric symptoms, yet those with greater resiliency were less likely to experience those symptoms.

Table 8a: Model Predicting Anxiety and Depression Symptoms

	B	β	<i>t</i>	<i>P</i>	Partial <i>r</i>
Perceived Stress (PSS-4)	.66	.55	5.38	<.01	.56
Resilience	-1.03	-.21	-2.11	.04	-.21

IMPORTANT FINDINGS AND THEMES

Based on syntheses of the above preliminary data, several themes (below) have emerged. These themes will set the stage for dialogue with stakeholders, decision makers, and research partners. Moreover, these themes will provide a structure and context to complete additional research and critical exploration:

#1: Survey participants are confident, doing well academically, and are predominately female. In terms of most recent semester grades, over 85% of students report a GPA over 2.5, with nearly a third having a GPA between 3.5 and 4.0. While it is unclear if our sample is an accurate representation of all former foster youth in Illinois higher education institutions, the self-reported GPA of these students does suggest that those who utilize the scholarship have achieved a degree of academic success in higher education. It should be noted however, that there are currently no mechanisms to assess the academic performance of students who exited their institutions of higher education before degree completion. Further, there is no current mechanism to assess the grades of former foster youth who attend college without the financial support of IDCFS. In terms of self-identified strengths, participants perceive themselves as “self-confident” and “resourceful”, but self-rate their specific study skills and time management skills much lower.

Given the majority of respondents were female (84%), we were also curious about gender breakdown in terms of IDCFS scholarship. We will reach out to the IDCFS to determine if this data is available. Limited information about male scholarship recipients limits current knowledge about their pathways to higher education. Some clues may be found on our survey in terms of self-perceived strengths and talents. Female students had greater enthusiasm, influence on others, and more willing to seek-out help than male students. It is not inconceivable that these gender differences in our sample impacted admission and success in higher education.

#2: Childhood experiences can impact psychological well-being in higher education.

While physical neglect was not found to be associated with GPA, we did find that students who reported childhood physical neglect (N=27) had mean PHQ-4 scores 2.2 points higher than students not reporting physical neglect (N=46), $t(71) = -2.77, p < .01$. To give some greater context to this finding, physical neglect was experienced by 36.5% of the sample. However, when we examine the 8 students with severe psychiatric symptoms in our sample, 75% of this group noted physical neglect in childhood. This finding highlights the importance that counseling services must be advertised and available to these students. This is particularly important because students previously in foster care may have ambivalent feelings about helping professionals based on their past experiences.

#3: Finances are the #1 concern of these students. Finances were a greater concern for students than other domains. First, these financial concerns highlight the importance of any sustained IDCFS assistance for education. Second, financial insecurity remains a concern for students even after financial assistance is provided which may indicate that the current level of financial support, while extremely valuable, may be insufficient nevertheless. For example,

a recent report by the U.S. Department of Housing and Urban Development (HUD, 2015) indicates that the average cost of room and board for college students is \$9,804.00 per academic year. This expense does not include the additional three months of housing expenditures that are required for the average student during the summer months when school is not in session. When academically vulnerable students experience income insecurity, they are much more likely to compromise their focus on academics by holding down multiple part time jobs. For this population of college students, income and housing insecurity are of particular concern given that they are less likely to be able to secure financial support from trusted family members to help them bridge the financial gap. Based on the results of this study, financial *aid* was seen as the most useful resources when compared with all other resources. This finding highlights the importance of a sustained financial safety-net and financial literacy support for former foster youth attending college.

#4: Desired connection and support from families. Whereas college students are generally considered young adults, our study participants demonstrate the ongoing need for support, nurturance, social interaction, and affirmation from family members. Although some research has indicated that during college, students seek to develop autonomy from families (e.g., Harrigan & Miller-Ott, 2013), students in this study specifically expressed the need and desire for emotional comfort, time spent together, and family members' willingness to lend resources when needed. This finding sheds light on the fact that students with a background of family disruption, abuse, and neglect may not have the necessary social support and access to concrete aid from family members as they negotiate a critical developmental milestone into adulthood. The lack of necessary support from family members places this group of students at a social and emotional disadvantage when compared with their peers who attend college.

Interestingly, the need for social support from family members differed by gender. Previous research (e.g., Martínez-Hernández, Carceller-Maicas, DiGiacomo, & Ariste, 2016) has revealed that emerging adult men and women desire different types and amounts of social support. Male students did not express the need for these specific supports to the level of their female counterparts which may suggest that a broader range of assessment is needed to adequately capture the social support needs of male students as well as transgendered students. As universities expand their academic reach to include students from vulnerable populations, it may behoove them to identify resources within the community such as adult mentors and host families who can help to fill the void experienced by students who lack sufficient family support. Additionally, academic counselors, financial aid officers, and professors need to be educated regarding the disparities that are inherent when students do not have consistent support from parents and other adult figures. Currently, university policies are established on the assumption that students have reliable family members whom they can turn to for emotional support and concrete assistance such as assistance with financial aid applications, new semester move in days, support and companionship during holidays and breaks, and access to needed financial resources when needed. Institutions of higher education may need to re-think these assumptions if there is a desire to recruit and sustain greater numbers of students from foster care and other non-traditional family settings.

#5: Interventions to improve academic performance and psychological health may involve different key predictors. In our survey, we found campus engagement and social support associated with GPA, whereas stress, resiliency, and a history of physical neglect had significant relationships with psychological health. We see these different results as an example of how

interventions to improve the higher education experience must be comprehensive and take into account both social factors and individual factors that impact student success and wellbeing.

CONCLUSION

In 2014, IDCFS provided financial support through scholarships and/or monthly stipends to 347 former foster youth enrolled in post-secondary education programs. Although students who receive financial support must submit transcripts each semester to IDCFS, little is known about this group of young adults' general well-being: including their ability to cope with stress, social-emotional functioning, their engagement in campus life, or their use of academic support services. Among this group of students, even less is known about their unique talents and resilient qualities. It should be noted that among the modest number of national and regional studies that examine higher education outcomes for former foster youth, these studies rarely address universities' responsibilities in identifying and nurturing the talents and leadership qualities of students who have overcome major life obstacles and who nevertheless succeed academically. The goal of this research is to better understand the kinds of strategic supports that need to be in place to help more of these students enter college and obtain a college degree. During the period beginning in FY 2009 and ending in FY 2014, a total of 30,673 children entered Illinois Foster Care (IDCFS, 2015). Given the historical evidence which shows a 50% likelihood that a child will return home once entering foster care, approximately 15,000 of the children who entered care during 2009-2014 will require sustained educational support from the State of Illinois until they are adopted or emancipated into adulthood. During this same five-year period however, 151 students receiving financial support from IDCFS obtained a bachelor's degree. This represents an average of 30 former foster youth students across the entire state of

Illinois who have received bachelor's degrees with the help of IDCFS financial assistance (IDCFS, 2015). If institutions of higher education expect to increase admissions and retention of students who have spent time in foster care, it is imperative that they work in partnership with child welfare agencies to ensure that students' needs are understood and addressed both in the classroom and beyond.

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