

CAREER PATHWAYS IN CHICAGO, HOUSTON, AND MIAMI: KEY FEATURES AND SUPPORT SERVICES AMONG ADULT EDUCATION PROVIDERS

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ABSTRACT

Many adult education providers are developing career pathways (CP) programs, which are viewed as an important workforce development and poverty alleviation strategy in the Workforce Innovation and Opportunity Act, by state and local governments, and by private funders. Based on a three-year researcher-practitioner partnership, this paper uses survey data from 106 adult education agencies to describe salient features of CP programming in Chicago, Houston, and Miami and then uses focus group data and case studies of six agencies to analyze wraparound support services in greater detail. Ninety-four percent of survey respondents were providing or developing CP programs, but design and implementation varied widely. The findings underscore the importance of providing comprehensive support services to help adult learners address the cognitive and material burden of poverty.

Many adult education providers are developing career pathways (CP) programs, which are viewed as an important workforce development and poverty alleviation strategy in the Workforce Innovation and Opportunity Act (WIOA), by state and local governments, and by private funders. Although adult education agencies have long provided job training, the career pathways label is relatively new. The CP model offers “a series of education and training programs and support services that enable individuals to get jobs in specific industries and advance over time by successfully completing higher levels of education and work” (Strawn, 2011, p. 1). CP programs are intended to help adults—including immigrants, refugees, dislocated workers, and adults with limited income and education—progress along academic and career “ladders” (Estrada & DuBois, 2010).

However, the research base on CP is thin, especially concerning programs that are operated by community-based organizations (CBOs) and that are designed for adults with limited education. As discussed below, most studies have focused on CP programs for adults who are community college students or high school graduates, which excludes more typical adult basic education (ABE) students. As such, there is scant research to guide adult educators’ decisions about how to design and implement CP programs so that adults are better prepared for postsecondary education and employment.

This paper addresses these gaps by analyzing the current state of CP programming in adult education organizations in Chicago, Houston, and Miami, drawing on mixed-methods data from a three-year researcher-practitioner partnership. Funded by the Institute of Education Sciences, the project included researchers at the Institute for the Study of Adult Literacy at Penn State and partners at the Chicago Citywide Literacy Coalition, Houston Center for Literacy, and Miami-Dade County Public Schools. The purpose of the project was to map the landscape of CP in these cities. This article uses survey data to describe salient features of CP across the cities and then uses qualitative focus group and case study data to analyze support services in greater detail. We selected this programmatic feature because it cuts across all case study sites and because the findings suggest it was crucial for helping students access and persist in CP programs. We argue that mental bandwidth is a useful way of conceptualizing how wraparound supports minimize the cognitive load of poverty, thereby expanding adult learners' ability to focus on their studies.

RELEVANT LITERATURE

Career Pathways for Adult Learners

Several federal agencies, including the Office of Career, Technical, and Adult Education, Health and Human Services, and the Department of Labor, have invested in CP implementation and research, indicating policy makers' widespread interest in this topic. However, most federal research and other studies have focused on CP programs in better-resourced settings such as community colleges or workforce organizations, minimizing the role of adult education agencies as CP providers (Anderson, Hall, & Derrick-Mills, 2013; Anderson, Kuehn, Eyster, Barnow, & Lerman, 2017; Carroll, Kersh, Sullivan, & Fincher, 2012; Liebowitz & Taylor, 2004; Mazzeo, Rab, & Alssid, 2003; Zeidenberg, Cho, & Jenkins, 2010). Accordingly, many studies include students who already have a secondary diploma. For example, adults without a high school degree comprised less than 8% of participants in one federally funded CP study (Fountain et al., 2015) and 1% to 40% of participants in another (Fein, 2016). Less academically prepared adults face greater barriers to entering and succeeding in postsecondary study and employment (Reder, 1999), so their outcomes are likely to diverge from those of CP students with a stronger academic base and credentials. Thus, previous studies have limited relevance for practitioners serving adult learners with lower levels of education or unmet literacy, numeracy, and English language needs.

Many CP providers face disincentives to serving these types of students because they "require additional services and a longer timeframe to succeed in postsecondary education and the labor market" (CLASP, 2014, p. 27). Also, their interim gains and achievements are not captured by most existing federal and state outcome measures (CLASP, 2014). In sum, adult education programs are more likely than other types of CP providers to serve adults who have the greatest educational and socioeconomic challenges and who need the most support to

attain their educational and employment goals.

Experimental and non-experimental longitudinal studies show that CP programs have helped low-income adults achieve promising educational and employment outcomes such as full-time employment status, earnings, length of employment, financial stability, participation in subsequent education and training, and completion of academic credentials (Anderson et al., 2017; Chase-Lansdale et al., 2017; Conway, Blair, & Helmer, 2012; Elliott & Roder, 2017; Fountain et al., 2015; Gardiner, Rolston, Fein, & Cho, 2017; Maguire, Freely, Clymer, Conway, & Schwartz, 2010; Zambrowski & Gordon, 1994). Although most of these programs tended to enroll high school-educated adults, the findings highlight how CP programs can support adults' educational and economic well-being.

Support Services

Policy makers, researchers, and funders have increasingly emphasized support services for low-income students in adult education and community colleges (Bettinger, Boatman, & Long, 2013; Weissman et al., 2009). Wraparound supports are also considered a key CP service strategy (Fein, 2012) because they help adults resolve financial and social barriers to education and employment, including transportation, childcare, housing, health, and financial instability (see e.g. Seefeldt, Engstrom, & Gardiner, 2016 on students' financial and other challenges). However, there is scant research on what kinds of support services are offered by CP programs in adult education.

The limited research on wraparound supports in job training and adult and higher education suggests that they are linked to better employment and education outcomes such as earnings, employment status, and college enrollment and retention (Hess, Mayayeva, Reichlin, & Thakur, 2016; Maxwell, Hock, Verbitsky-Savitz, & Reed, 2012). In addition, exploratory evidence indicates that bundling supports—"provid[ing] a set of coordinated services in one location" (Hess et al., 2016, p. 3)—yields better outcomes (Price, Long, Quast, McMaken, & Kioukis, 2014, p. 24), and that financial counseling improves job placement and retention (Rankin, 2015), college degree attainment, and job advancement (Kaul, Burnett, & StGeorge, 2011). Research on other support services such as transportation and childcare shows similarly positive results (Hess et al., 2016). These studies underscore the importance of support services in adult education and CP.

METHODS

Partnership Background and Site Selection

The project focused on Chicago, Houston, and Miami because our adult education partners in these cities had previously collaborated on the U.S. Department of Education's Adult Education Great Cities Summit Project (2009-11). These cities and their respective counties are also home to a high percentage of adults with unmet educational needs, demonstrating the relevance of their CP practices and policies for other regions. Collectively, the counties

account for over 5% of the nation's adults without a high school degree and nearly 10% of U.S. residents with limited-English proficiency. Although the counties have 20% of their states' total adult population, they represent 25% of adults without diplomas and over 35% of limited-English speakers (U.S. Census Bureau, 2011).

Research Questions and Design

The research questions examined (1) the key features of adult education career pathways in each city, (2) CP outcome measures (including any common measures and which interim- and long-term outcomes programs are measuring), (3) how selected programs design and implement CP; (4) how policies and practices shape CP programming and coordination across systems; and (5) the programmatic features, policies, and other factors that contribute to student success. This article provides selected survey findings on research question 1 and then uses qualitative data to analyze support services (one programmatic component of research questions 3 and 5). The other findings can be accessed in our final report (Prins et al., 2018)

The study employed a sequential, mixed methods research design (Collins, Onwuegbuzie, & Jiao, 2007). We first gathered *survey* data to answer research questions 1-2 and to inform the use of *focus groups*. Survey and focus group data were then used to select programs and design research instruments for a *collective case study*. Qualitative focus group and case study data were used to answer questions 3-5. In the sequential sampling design (Collins et al., 2007), the case study and focus group samples were derived from the previous phase.

Survey

Designed collaboratively by the research team, the survey included closed-ended questions about organizational and student characteristics, program design and delivery, data collection systems and outcome measures, and aggregate student outcomes, and several open-ended questions (e.g., identify organizations with successful CP programming) pertaining to the 2014-15 program year. An "in development" option allowed respondents to indicate initiatives that were in progress. The survey was pilot-tested with several practitioners, including a data analyst, and revised accordingly.

Our city partners created a list of all known ABE providers in their cities, including community colleges, CBOs, libraries, workforce development organizations, K-12 schools, correctional institutions, and other organizations (n=184). We excluded organizations that serve only or primarily in-school youth. The final list of organizations reflected each city's structure of adult education provision: In Chicago and Houston, CBOs and community colleges are the main providers, whereas the key providers in Miami are the public school district and Miami Dade College. Chicago and Miami each have a single, multi-campus community college system, whereas Houston has six community college systems.

The confidential, web-based survey was administered in late 2015 to early 2016 by a university survey research center, using strategies proven to increase response rates, such

as incentives (\$2 bill, chance to enter a raffle for a \$50 gift card) and repeated contacts (Dillman, Smyth, & Christian, 2009). We also held a webinar to explain the project and survey completion. Follow-up contacts included emails, phone calls, and letters.

Of the final eligible sample (n=147), 106 agencies returned a complete (n=102) or partial (n=4) survey, for a 72% response rate.¹ The principal investigator contacted respondents to provide missing data and correct inaccuracies. The data were analyzed by calculating descriptive statistics and Chi-square statistics to identify significant differences between cities and between agencies that offered CP (per the definition below) versus those that said “no” or “in development.” (See Prins et al., 2018 for survey questions and detailed analyses.)

Focus Groups

Focus groups with adult education providers were used to investigate how policies and practices have shaped CP implementation and coordination in each city. We selected providers that were nominated by survey respondents, recommended by city partners, and/or reported successful outcomes on the survey; that represented the city’s main adult education providers (community colleges, CBOs, or school district); and that served different neighborhoods and student populations. In spring 2016 staff from five to seven providers in each city participated in a focus group (18 providers total). The two-hour focus groups were audio-recorded, transcribed, coded, and analyzed to answer the research questions.

Collective Case Study

In a collective case study, several cases are studied jointly “to inquire into the phenomenon, population, or general condition” (Stake, 1994, p. 237). Extreme case sampling (Collins et al., 2007) was used to identify two successful programs per city. Through a review of survey and focus group data and discussion with city partners, we chose organizations with exemplary CP programs and a large percentage of students without a secondary degree. Organizations also represented different organizational types, occupational sectors, student populations, and neighborhoods. These “instrumental” cases were chosen because they would yield insights into an issue that transcends each case (Stake, 1994, p. 237): the role of adult education in helping adults and immigrants access CP services and how successful programs design and implement these initiatives.

In organizations with multiple CP classes, we selected classes with better outcomes (e.g., program completion, job placement) and that either did not require a secondary diploma or had a higher proportion of students without a college degree. The CP classes also included a mixture of male- and female-dominated occupations such as manufacturing and healthcare, respectively.

1 Twenty agencies were deemed ineligible because they no longer offered adult education services, only provided wraparound services but no direct adult education, or did not offer career pathways. Seventeen agencies were classified as “other” because one entity (community college or school district) collects and reports data for all of its sites or campuses. To avoid duplicative data, these additional sites and campuses were not included when calculating the response rate.

Two university researchers spent 2 to 2.5 days at each site in fall 2016. The following data were collected:

- 18 class observations (3-5 per site, for a total of 11 hours), recorded in field notes.
- 44 interviews with 56 people (6-9 interviews per site), including vocational and basic skills teachers, administrators, support staff, and key partners (e.g., employers). Interviews lasted 17-73 minutes (42 minutes average).
- three focus groups with 53 students (3-13 per site) and one interview with an additional student. Focus groups lasted 44 to 77 minutes (63 minutes average). All but a few students were U.S.-born minorities, immigrants, or refugees. Ages ranged from late teens to 50s.
- program documents (e.g., curricula, promotional materials, reports, class schedules).

The focus groups and interviews were audio-recorded, transcribed, and analyzed in NVivo qualitative data analysis software. We began with a set of general codes pertaining to the research questions (e.g., support services, partnerships, coordination) and refined the codes as needed, for example, by deleting, adding, combining, or renaming them.

Permission was granted to use the organizations' real names. Although all the agency staff and most students gave permission to use their personal names, in this article we identify them only by their role. The case studies included the following organizations:

1. Malcolm X College (City Colleges of Chicago) is one of six campuses that offer Career Bridge programs. Each campus specializes in one or two occupational sectors. The Healthcare Career Bridge at Malcolm X is the largest Bridge program. Students with lower or higher Tests of Adult Basic Education (TABE) scores can enroll in Career Foundations or Gateway classes, respectively.
2. Jane Addams Resource Corporation (JARC; Ravenswood location) offers sectoral training in three types of manufacturing classes, along with a bridge class for lower-scoring students and adult literacy tutoring.
3. Alliance for Multicultural Community Services (Alliance) in Houston is the largest refugee resettlement agency in Texas. Among Alliance's CP offerings, we selected CNA (certified nursing assistant) and AutoCAD because both were being offered in fall 2016 and CNA attracts more participants without college degrees.
4. Houston Community College's Community-Based Job Training Program is a state-funded CP program that included eight "training pathways." All classes were offered at CBOs; we selected two CBOs with CP classes that enrolled students with lower levels of education: AVANCE's General Office Support Specialist (GOSS) class and Chinese Community Center's CNA class.
5. Lindsey Hopkins Technical College is one of more than two dozen adult education centers governed by Miami-Dade County Public Schools. Lindsey Hopkins has more than 20 short-term certificate programs that can be completed in a year or less. We chose

three CP classes that do not require a secondary degree and that have 90-100% job placement rates: nutrition and dietetic clerk, automotive service technology (a regular class and an on-site class and paid internship at Braman Motorcars), and commercial foods and culinary arts.

6. Miami Dade College offers numerous CTE classes. We chose the Hialeah campus because it serves lower-income students, primarily Latinos. The case study focused on the FICAPS (Florida's Integrated Career and Academic Preparation System) program, which included three occupational tracks in 2015-16: TRAMCON (manufactured construction, offered only at North campus), business (School of Business college credit certificates), and healthcare (Behavioral Health Technician or Community Health Worker non-credit certificates). We collected data on TRAMCON and business.

Key features of the organizations' CP program design are shown in Table 1.

ADULT LEARNER PROFILES

To situate the findings, we describe three participants and their CP classes. Their backgrounds are typical of the adults who attended the focus groups, including ex-offenders, dislocated workers, immigrants, and refugees. Tanisha, Francisco, and Farah (pseudonyms) are three of more than 100,000 adult CP students in Chicago, Houston, and Miami. Tanisha, a 51-year-old African American woman, was studying to take the GED® exam and learning about health careers through Malcolm X College's Healthcare Career Bridge Program in Chicago. She was passionate about working with the elderly in nursing homes and hoped to become a CNA social worker. As a self-described recovering addict and former offender, Tanisha stated, "I just want to give back...to let young people know you don't have to do what I did and wait as long as I waited to get your life together. You can do it today while this opportunity is here." Although her dream of being a CNA was initially "cut short" by addiction, Tanisha saw the Malcolm X program as a second chance to fulfill this dream. Tanisha and the other students took math and language GED® classes that incorporated health-related content and then took a credit-bearing class in the second semester.

Francisco, a native of the Dominican Republic, began taking ABE classes at Lindsey Hopkins Technical College in 2014 and then enrolled in the Automotive Service Technology program. If he passed the certification exams, he would earn 24 credits toward an associate degree. Reflecting on his goal of becoming an engineer, he stated, "I really want to be a success in life....I don't want to stop at this."

Farah, a Pakistani woman, began taking ESL classes at Alliance for Multicultural Community Services soon after arriving in the USA and then enrolled in the 8-week CNA class, which qualifies students to take the state CNA exam. Students attested that Alliance staff guide refugees who "don't know the way" and feel "confused" by helping them access support services, enroll in ESL or basic skills class, identify career goals, and select short-term, career-

technical programs in CNA, AutoCAD, child development, commercial truck driving, or other occupations. Due to these services and career guidance, Farah asserted, “Now we are not confused.”

OVERVIEW OF CP FROM SURVEY DATA

This section reports survey findings on selected features of CP programming in the cities.

Organizational Type

The majority of survey respondents (58%) were CBOs, followed by school district adult education programs (22%), all of which were located in Miami (Figure 1). Nearly half (48%) of CBOs were located in Chicago. Community colleges are under-represented in the percentages below because one survey each was completed for all campuses in the Miami Dade College and City Colleges of Chicago systems. Other organizations included correctional facilities and homeless shelters, among others.

CP Provision

Respondents were asked whether they offer CP, according to the Center for Law and Social Policy’s (CLASP, 2013) definition. The career pathways approach

connects progressive levels of basic skills and postsecondary education, training, and supportive services in specific sectors or cross-sector occupations in a way that optimizes the progress and success of individuals—including those with limited education, English, skills, and/or work experience—in securing marketable credentials, family-supporting employment, and further education and employment opportunities (p. 2).

Per this definition, 83% of respondents offered CP and another 11% were developing such programs. There were no significant differences among cities. This finding indicates that CP is widespread among ABE providers in these cities. The types of organizations that offer CP were similar to the overall survey sample (58% CBOs, 22% school district programs, etc.).

The most common types of CP classes or services were ESL (84%), employability or work readiness (76%), and classes to transition to postsecondary education (75%). In our analyses, we categorized seven of the classes or services as “core” CP because they emphasize postsecondary transitions, job preparation, or obtaining certificates or credentials more so than GED or ESL classes, for example. These core classes and services are marked with an asterisk in Figure 2. With the exception of classes to transition to postsecondary education, far fewer agencies offered these core services (16% to 54%).

On average, agencies offered 7.5 adult education classes, services, or regular activities. Agencies that said they offer CP provided significantly more classes and services, on average, than those that said “no” or “in development.” Agencies that said they offered CP were significantly more likely to provide 12 out of the 15 classes or services, particularly career

exploration or awareness, classes to transition to postsecondary education, and classes combining basic skills and CTE. Miami agencies offered significantly more services, on average, than those in Chicago or Houston.

Occupational Sectors

Each occupational sector was offered by at least one organization. Education, child, and family services (44%), health and medical technology (38%), and information technology (30%) were the most common sectors (see figure 3). Miami agencies offered the largest number of sectors, and manufacturing programs were most common in Chicago.

Student Demographics

Agencies reported demographic characteristics of CP students as a sub-set of all adult learners.² Due to missing data and inaccurate reporting of some demographic data, these figures are rough estimates. About 59% of CP students were women and 41% were men. Approximately 67% were foreign-born. Hispanics comprised about 57% of the U.S.-born CP students, followed by 22% black, 8% white, and 7% Asian. Overall, about 44% of CP students were receiving cash or in-kind public benefits. The majority (55%) of students were working at least part-time and approximately 45% were unemployed. Nearly two-thirds of CP students (63%) did not have a secondary degree, 21% had a high school/GED® diploma, 6% had some college, and 11% had a postsecondary or post-graduate degree.

Entry Requirements

More than 50% of agencies had grade level, test score, or language entry requirements for each of the classes or services they offered. These requirements were most common for classes to obtain an industry-recognized credential (86%), to access specific job opportunities (86%), and to obtain a postsecondary or stackable credential (85%), and least common for apprenticeships (53%) and employability or work readiness classes (53%). The case studies show that two organizations required a secondary degree plus a minimum TABE score. Three organizations did not require a secondary degree but had a minimum TABE score, ranging from 5.0 to 9.0. Finally, Lindsey Hopkins had exit requirements (TABE score or pass industry certifications), which enabled lower-level students to enroll in CP classes.

Support Services

The most frequently offered support services were tutoring or other academic support (80%), job search assistance and placement activities (68%), career counseling or planning (63%), and case management (62%), as shown in Figure 4. Fewer than half of the agencies

2 These included students participating in: (1) classes to assist students in transitioning to postsecondary education; (2) classes that enable students to obtain a postsecondary or stackable credential; (3) classes required for completion of a short-term certificate program needed for advancement in education or employment; (4) classes that result in an industry-recognized credential; (5) apprenticeships; and (6) internships.

provided childcare or transportation assistance, two of the chief barriers to enrollment and persistence, although agencies that offered CP were significantly more likely to provide these services.

Agencies that offered CP were significantly more likely than other agencies to provide nine out of the 12 support services (Figure 4). The largest differences between CP and non-CP agencies were for career counseling or planning (71% versus 20%; $p \leq .000$), case management, (70% versus 20%; $p \leq .001$), and financial aid advising and application support (52% versus 7%; $p \leq .001$). These differences indicate that support services are far more common at agencies that offer CP.

On average, agencies provided 5.3 kinds of support services. The average number of services was significantly higher for agencies that offered CP than those that did not (5.9 versus 2.2; $p \leq .001$). Also, Miami agencies offered significantly more support services, on average, than respondents from other cities (6.6 versus 5.1 in Chicago and 4.0 in Houston; $p \leq .01$). The largest differences were for disability and veterans' services ($p \leq .001$), which we attribute to the comprehensive services available through the public school district's adult education centers.

These findings underscore the prevalence and importance of support services in CP programs, which the next section describes in more detail using focus group and case study data.

SUPPORT SERVICES: A CLOSER LOOK

Each case study agency provided non-academic support services to address students' financial and social barriers to education and employment. Our data suggest that these support services were essential for helping students access and complete CP programs.

Students' Material Needs

Adult education programs serve students with high levels of poverty, and the case study agencies in our study were no exception. Teachers and support staff described various problems that students face, many of them rooted in poverty, including housing, homelessness, food insecurity, physical and mental health, domestic violence, transportation, child care, debt, criminal records, and more. The following excerpts from interviews with CP staff illustrate students' material needs—and why support services are vital:

There was a single parent [in the CNA class and] the women's shelter would allow women only. [They told her,] "You have to find somewhere else for your child." She had to find a distant, distant relative for the preadolescent son while she went through the program [while living] at shelters. And it boils down to basic need. I'll be honest, some of them are hungry. Don't have food to eat. It will tug at your heart. And this is not made-up stuff. This is real. Some of them are embarrassed about it. (Houston)

I had a student that was homeless [and living in a car]. And so then, yes, I did call the rescue mission. I was glad we had that relationship....They were full at the time...but [they told me,] “Here’s what you do.” (Miami)

I think there’s definitely consensus among us that we’re seeing people with a lot more barriers to employment. Much, much bigger gaps in employment history, much less stable personal lives, much less work experience, and so that’s where the soft skills and support services really are kind of the make or break. They can get the job. That’s not really a problem. We can teach them how to use the machines to get the job. You know, perfect example: we had a guy, phenomenal, did great in the press brake program, things were looking pretty good. He got a great job working over the weekends at a manufacturing place. And the car that he had access to, the person needed it back. And he couldn’t get to that job without it. And he had kind of no other real backup. So it was basically he had to take a job next door. He couldn’t follow through with it. So there’s a lot of that part too. Or even something as basic as if you’ve got a lot of court dates. (Chicago)

Support services enable students to resolve and cope with not having a home, car, or sufficient food—problems that would otherwise impede their ability to enroll, attend classes, complete the program, or meet goals such as finding and retaining a job or applying for college. Not all CP students face such dire conditions, but poverty and material hardship are a reality for many. Indeed, the problems described above echo those of CP students in other studies (Seefeldt et al., 2016).

IMPLEMENTATION OF SUPPORT SERVICES AT CASE STUDY SITES

Voluntary Versus Bundled, Required Services

Adult education agencies typically address non-academic problems through a combination of support services, provided on-site or via referrals. Case study organizations used two support service models: voluntary or bundled. In contrast to the voluntary model, the bundled model not only coordinated support services at one location, but also required participation in two or more services (Kaul et al., 2011, p. 2). The Center for Working Families (CWF) and Financial Opportunity Center (FOC) are national, bundled support models developed by the Annie E. Casey Foundation and Local Initiatives Support Corporation, respectively (Dietz et al., 2016; Hess et al., 2016; Kaul et al., 2011; Rankin, 2015).

The three case study organizations that aimed to increase adults’ financial stability—JARC, Alliance, and Chinese Community Center—each offered bundled supports, including financial coaching, employment coaching, and access to income supports, that is, screening for public benefits such as food stamps, health insurance, rental and utility assistance, and child care subsidies. Income supports enhance socioeconomic stability, but many low-income adults do not know that they are eligible for these benefits or know how to apply (McKean, 2002).

Participants in the bundled support agencies received more intensive services and a wider array of financial supports, including credit-building products (e.g., secured loans and credit cards), small business loans, credit reviews, one-on-one financial counseling, and more. They were also eligible for other, voluntary supports as needed.

Located at JARC, the Center for Working Families (Kaul et al., 2011) provides financial counseling and education (e.g., credit score review, access to credit-building products, medical debt reduction), digital literacy classes, and access to income supports. Manufacturing students are also required to meet with a job developer and employment and financial coaches. A designated fund for women is available, along with other supports from JARC. CWF clients are eligible for a lifetime of services; even after exiting the program they can return for assistance with buying a home, improving their credit rating, or other services.

Alliance and the Chinese Community Center are home to two of the five FOCs in Houston. FOCs provide employment and career planning assistance, financial education and coaching, and access to income supports (Dietz et al., 2016). FOC services are also available to income-eligible Houston residents. An Alliance staff member explained that students must choose at least two out of three services because “research has found out that if students are engaged in more than one service, they stay in the program longer, so we can provide them better services.” Students meet with their coach(es) at least monthly. Additional support services are available from the organization, apart from the FOC.

The other case study sites also offered various wraparound services. In particular, CP students at community colleges had access to support centers related to veterans, students with disabilities, academic tutoring, physical and mental health, financial aid, and other needs. However, the non-bundled supports model was voluntary, had eligibility requirements (income, age, etc.), or did not include financial literacy or counseling. Table 2 summarizes the key support services at each agency.

Staffing for Support Services

As shown in Table 1, organizations had different constellations of instructional and support staff. The three organizations that provided bundled services had designated employment, financial, and/or income support coaches who met regularly with participants, and JARC also had job developers. These additional staff enabled the organizations to provide a hands-on, tailored, intensive support system with individualized case management. By contrast, support staff at the other organizations included transition specialists, case managers, counselors, and career readiness advisors. Community colleges’ wellness centers and centers for veterans and students with disabilities had staff who served CP and credit students. Due to differing student populations and limited staffing, in some organizations support staff had caseloads of 300 or more students. These heavy caseloads raise concerns about the organizations’ ability to adequately meet students’ non-academic needs. In sum, the case studies suggest that to offer more extensive and intensive support services for CP students, organizations must hire

specialized staff, especially if a programmatic goal is to increase students' financial stability.

Meeting Students Where They Are At

Although the support service model and variety and intensity of services differed, most agencies offered some form of case management to meet students' comprehensive needs. This approach was articulated by a Chicago provider:

We have a philosophy of trying to meet the student where the student is at. Which means that, you know, if the student needs the citizenship, or if the student needs the job, or if the student needs the drug counseling, or if the student needs the domestic violence referrals and case managers—we feel if the student leaves, there's something that we didn't do.

An example from Miami illustrates what case management looks like in practice:

I had student [who] was going to go homeless last year around this time. She was having trouble with her mom, she didn't have a job, her mom kicked her out of her house. And then no one was trying to help her in the family. She came to me, she was crying that she didn't know what to do. I called 411...and I get the different agencies in Miami Dade County, see if I can help that student get a place to live. We called different agencies. I went also to Single One Stop [on campus] to see if they had any agencies that could help me...since they deal with foster care students, to assist me with that student. Thankfully, her grandmother, at the end, opened her house for her. But in the meantime, I'm also a part of the AFC [Association of Florida Colleges] on campus, and I spoke to one of the directors...and we got that student clothes, bunches of clothes, so she had business attire to go to job interviews....And instead of giving her money, what we did, we collected clothes from some of the staff at the school, and we gave it to her....And we all worked together to help her out and eventually, we helped her write her resume and she got a job at Panera Bread, where she's working there now.

Housing, clothing, job searching, interviewing, preparing resumes: these are just a few of the issues that staff members help students resolve.

For the agencies with bundled supports, meeting students where they are at also meant increasing their financial security. For example, the Center for Working Families helped students reduce medical debt, a key driver of poverty. The director estimated that they initially helped five or six people eliminate \$40,000 to \$50,000 in collective medical debt, a figure that had climbed to more than \$150,000 at the time of the study. The Financial Opportunity Center offered small business loans; in fact, a former refugee who taught the commercial driver's license class at Alliance began his successful trucking business with a loan from the FOC. These kinds of services are vital for supporting adult learners' economic well-being.

Wraparound Supports and Mental Bandwidth

We propose that wraparound supports work because they expand participants' "mental

bandwidth” (Mullainathan & Eldar, 2013; Schilbach, Schofield, & Mullainathan, 2016). Our mental bandwidth is finite, and for people in poverty, thinking about and managing financial problems imposes a massive cognitive load (Schilbach et al., 2016). In field and laboratory studies, the cognitive impact of thinking about financial concerns was the equivalent of losing a night of sleep—even for people without real financial problems (Mani, Mullainathan, Shafir, & Zhao, 2013). When CP programs help students apply for food stamps, pay for transportation, obtain health insurance or childcare, or reduce debt, they increase students’ bandwidth for focusing on academics.

Our data support this interpretation. For instance, during the focus group with JARC students, a dislocated worker stated that because of the agency’s support services,

we don’t have to stress about all those actual life problems. All we have to do is concentrate on our school work....It takes a big burden and a big load off the mind when you don’t have to worry about that, and you just concentrate on the school work, which is very helpful.

In his own words, this student articulated the concept of mental bandwidth: support services reduce the cognitive load of “life problems” and allow students to devote more mental energy to their studies.

Another student had a similar perspective:

They don’t give you no excuse for not being here. You’re going to get here because you get either a bus card or a gas card....I mean, you don’t got no excuse for how you don’t want to be here, because they going to help you with something. I just signed up for [health] insurance the other day. I’ve never had insurance. I didn’t even sign up for insurance. I sat there and gave the guy my information. And then before I knew it, I was [like], oh, wow, now I got insurance!

A third student needed to get her son’s eyes checked and had been “waiting for *weeks*” for the insurance company to send a list of in-network doctors. She marveled that a JARC employee supplied this information in a matter of minutes.

The CWF director explained that they provide bundled support services “in order for people to be able to focus on the end goal, which is to remain in training:”

Through the relationships they build with support staff, students end up coming to us with whatever their challenges are because they know that we’ll try to figure something out for them. And that is a thing that kind of keeps them coming back. Because they can see that it’s starting to make sense and they want to kind of stay on the training at that point because they know there are supports in place and there’s no judgment.

The students’ and director’s comments suggest that bundled support services help students cope with the tangible, non-academic problems that undermine success in education and employment. They also allow students to *focus on their goals* and *enhance relationships with staff*, thereby increasing program completion.

DISCUSSION

This was the first study to chart the landscape of career pathways in Chicago, Houston, and Miami. Given the paucity of research on CP among adult education providers, this study elucidates how these organizations are designing and implementing CP, especially for adults with lower levels of education. The survey findings show that CP is widespread, with 94% of adult education providers offering or developing CP classes and services. Given WIOA's emphasis on employment and coordination between the adult education and workforce development systems, we expect this trend to continue. (Policy implications and providers' perspectives on policies that shape CP programming, including concerns about disincentives for serving lower-level students, are discussed in our final report.) Agencies were also offering a wide range of classes, but overall, "core" CP classes (e.g., classes combining basic skills and career-technical education) were less common. Further research is needed to determine whether classes labeled as CP have substantial career and employment content or whether career-oriented topics are a minor add-on, especially in smaller organizations that are new to CP.

CP students were disproportionately women, foreign-born, and Hispanic, with high levels of economic vulnerability, as measured by unemployment and use of public assistance. In addition, nearly two-thirds of adult learners did not have a secondary degree, yet more than 50% of the classes or services that were offered had academic entry requirements such as a secondary diploma or minimum TABE score. These requirements—especially having a secondary degree—raise concerns about entry-level students' ability to access substantive CP classes, an issue that we explore in more detail in the final report (Prins et al., 2018).

Consistent with the CP model (Fein, 2012), support services were a common feature of the agencies in this study. Indeed, organizations that said they offered CP were significantly more likely to provide nine out of 12 types of support. The case study data reveal that agencies offer myriad supports to address the underlying, persistent problems that often undermine participation and success in education and employment. In particular, bundled supports—including financial literacy education and coaching, employment coaching, access to income supports and credit-building products, and more—appear to be a promising model not only for increasing persistence and program completion, but also for enhancing students' longer-term financial stability. We posit that wraparound support services help students cope with tangible problems, thereby decreasing the cognitive load of poverty and increasing their mental bandwidth for academic pursuits. Further research should explore whether CP participants who use support services are more likely than their peers to complete their program and to achieve positive postsecondary and employment outcomes.

In conclusion, this article documents the prevalence and salient features of career pathways among adult education providers in three large U.S. cities. In particular, the findings underscore the importance of providing comprehensive support services to help adult learners address the cognitive and material burden of poverty. ☞

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TABLE 1: KEY FEATURES OF CASE STUDY ORGANIZATIONS

	City Colleges of Chicago – Malcolm X	JARC	Alliance	HCC: AVANCE	HCC: Chinese Community Center	Lindsey Hopkins Technical College	Miami Dade College – FICAPS
Occupational Sector	Health	Manufacturing Computer numerical control (CNC) Press brake Welding	AutoCAD CNA	General Office Support Specialist (GOSS)	CNA	Automotive Service Technology (AST – General or Braman) Commercial Foods & Culinary Arts Nutrition & Dietetic Clerk	Business Manufactured construction (TRAMCON) Health (not included in study)
Primary Goal(s)	Postsecondary education	Job placement, financial stability	Job placement, financial stability	Job placement	Job placement, financial stability	Job placement	Job placement, postsecondary education
Primary CP Components	Career Bridge: Health-contextualized math & language arts classes (GED® prep) Free credit course (2nd semester)	Bridge class (contextualized math & reading) OR Manufacturing class (includes digital literacy)	Contextualized basic skills class AND CTE class (AutoCAD: concurrent; CNA: sequential)	Basic skills class (not contextualized) AND CTE class (GOSS: concurrent; CNA: sequential)		Orientation & CP exploration CTE class AND Practicum (dietetic clerk) practicum Paid internship (Braman AST) Internship (General AST) GED® class (optional); remediation lab (if needed) – not contextualized	Orientation & CP exploration Online GED® class (not contextualized) AND CTE class
Enrollment Model	Cohort (semester)	Open enrollment	Cohort	Cohort		General AST & Culinary: open Others: cohort	Cohort (semester)
Program Length	32 wks. (2 semesters, 512 hrs.)	Bridge: 12 wks. (192 hrs.) CNC: 20 wks. (500 hrs.) Press brake: 10 wks. (250 hrs.) Welding: 14 wks. (350 hrs.)	CNA: 8 wks. (180 hrs.) AutoCAD: 10 wks. (160 hrs.)	12 wks. (272-292 hrs.)	2 mos. (188-208 hrs.)	Culinary: 18 mos. (1200 hrs.) Dietetic Clerk: 4 mos. (300 hrs.) Braman AST: 13 mos. (1050 hrs.) Gen'l AST: 18 mos. (1800 hrs.)	Business: 16 wks. to 1 year TRAMCON (4 levels): 23 mos. (880 hrs.) (fewer credentials = shorter)

TABLE 1: KEY FEATURES OF CASE STUDY ORGANIZATIONS (CON'T)

	City Colleges of Chicago – Malcolm X	JARC	Alliance	HCC: AVANCE	HCC: Chinese Community Center	Lindsey Hopkins Technical College	Miami Dade College – FICAPS
Credentials, Certifications, & Other Outcomes	GED® diploma Transfer to credit courses	Industry credentials Manufacturing jobs	CNA: eligible for state exam, certificate of completion AutoCAD professional user certification	Office skills certifications (e.g., Microsoft Office Specialist Certification, IC3 Digital Literacy Certification)	Eligible for state CNA exam	AST: industry credentials Transferrable credits Certificates Occupational completion points	GED® diploma Business: college credits TRAMCON: industry credentials, transferrable credits
Key Instructional & Support Staff	Language arts teacher Math teacher Transition specialist	Bridge teacher CTE teachers (most program graduates) Program coordinators Employment coaches Job developers Financial coaches	Basic skills teacher CTE teachers Employment coaches Financial coaches Income support coaches	Basic skills teacher CTE teacher Program manager Workforce director	Basic skills teacher CTE teacher Employment coaches Financial coaches Income support coaches	Basic skills/ GED® teachers CTE teachers Counselors Case managers	GED® teacher (support) CTE teachers Career readiness advisors

TABLE 2: SUPPORT SERVICES AT CASE STUDY AGENCIES

Support Services	City Colleges of Chicago – Malcolm X	JARC	Alliance	HCC: AVANCE	HCC: Chinese Community Center	Lindsey Hopkins Technical College	Miami Dade College – FICAPS
Child Care	On-site child care (sliding scale) & Head Start*	Referrals	Referrals	Referrals On-site Early Head Start, Head Start*	Referrals	On-site child care (~\$50 per week)	Referrals, including subsidized child care*
Transportation	Public transit card* Free campus shuttle	Public transit or gas card Bike share discount*	Discounted public transit*	No	No	Discounted public transit	Case-by-case basis Discounted public transit
Access to Financial Support	Referrals Case management to apply for public aid	Access to income supports & credit-building products** Emergency fund (women)*	Access to income supports & credit-building products***	Referrals	Access to income supports & credit-building products***	Referrals	Referrals Public benefits screening (via Single Stop)
Financial Literacy or Coaching	No	Yes**	Yes***	No	Yes***	No	Yes (voluntary, via Single Stop)
Employment Coaching, Job Search or Placement	No (other than Career Planning & Placement Center)	Coaching, job search & placement**	Coaching, job search***	Career readiness, job search workshops	Coaching, job search***	Career readiness CareerSource Job search assistance	Career readiness, some job search & placement (CareerSource)
Financial Aid for Tuition, Fees, Supplies	Free non-credit classes 1 or 2 free credit courses	Free classes & equipment (e.g., boots)	Low registration fee (\$20-\$120)	Low registration fee (e.g., \$170 for CNA) Free tuition, books, supplies (e.g., uniforms, exam fees)		Pell grants* Scholarships* Test fees* Free tuition*	Free books & supplies Free tuition*
Disability Services	Yes (disability center)	No	No	No	No	Yes	Yes (disability center)
Other	Wellness Center, services for homeless students	Financial incentives for job placement & retention, etc.	Affordable Care Act navigators; Dress for Success; Career Gear	Dress for Success; Career Gear	Dress for Success; Career Gear	Services for homeless students, veterans, inmates	Single Stop (food pantry, free tax prep, legal referrals, etc.)

*Only for students who meet eligibility requirements (e.g., income, age, or other demographic characteristics; type of CP class; attendance; test scores).

**Mandatory.

***Clients much choose at least two out of three services.

FIGURE 1: TYPE OF ORGANIZATION (N=104)

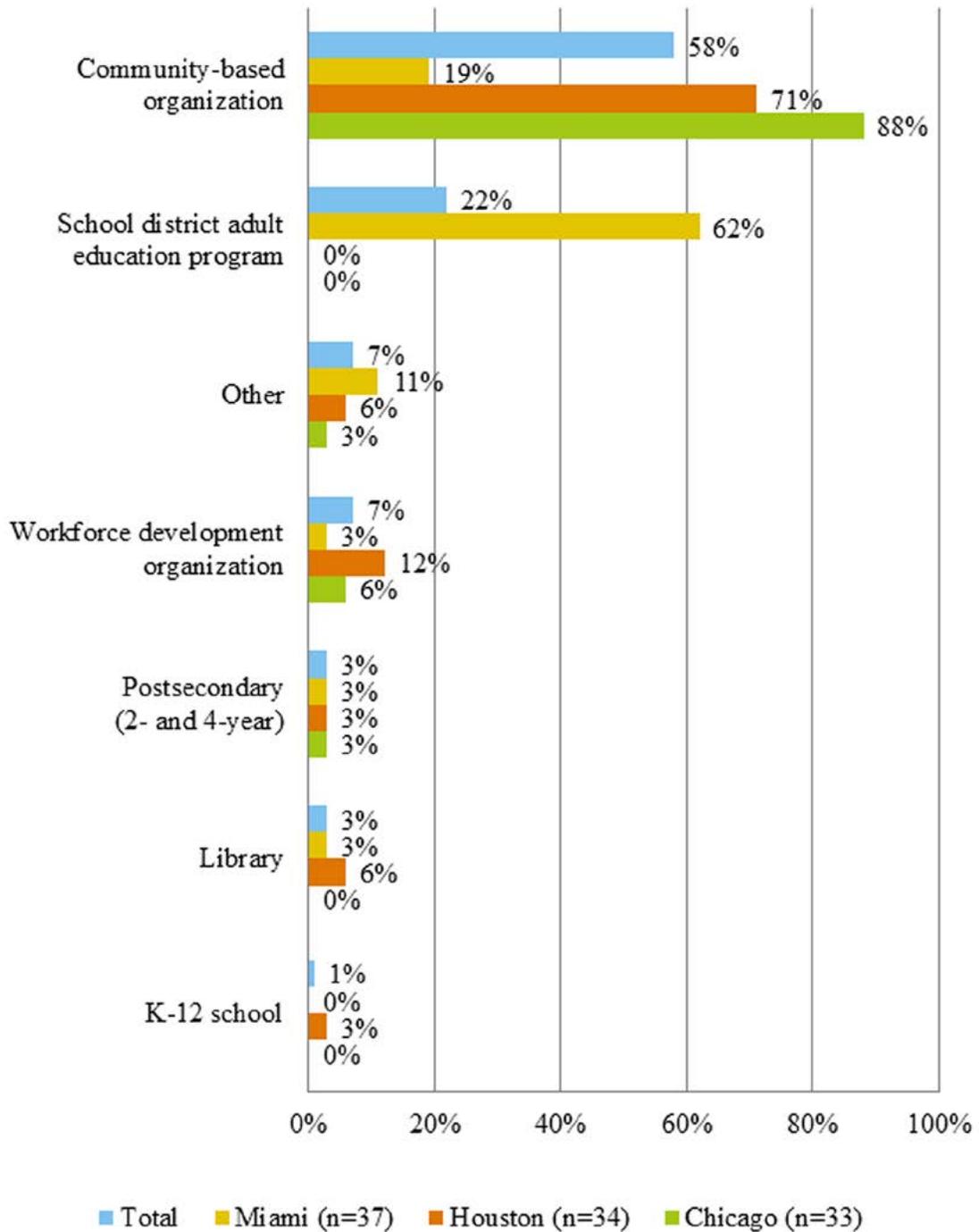


FIGURE 2: TYPES OF CAREER PATHWAY SERVICES (N=80 TO 103)

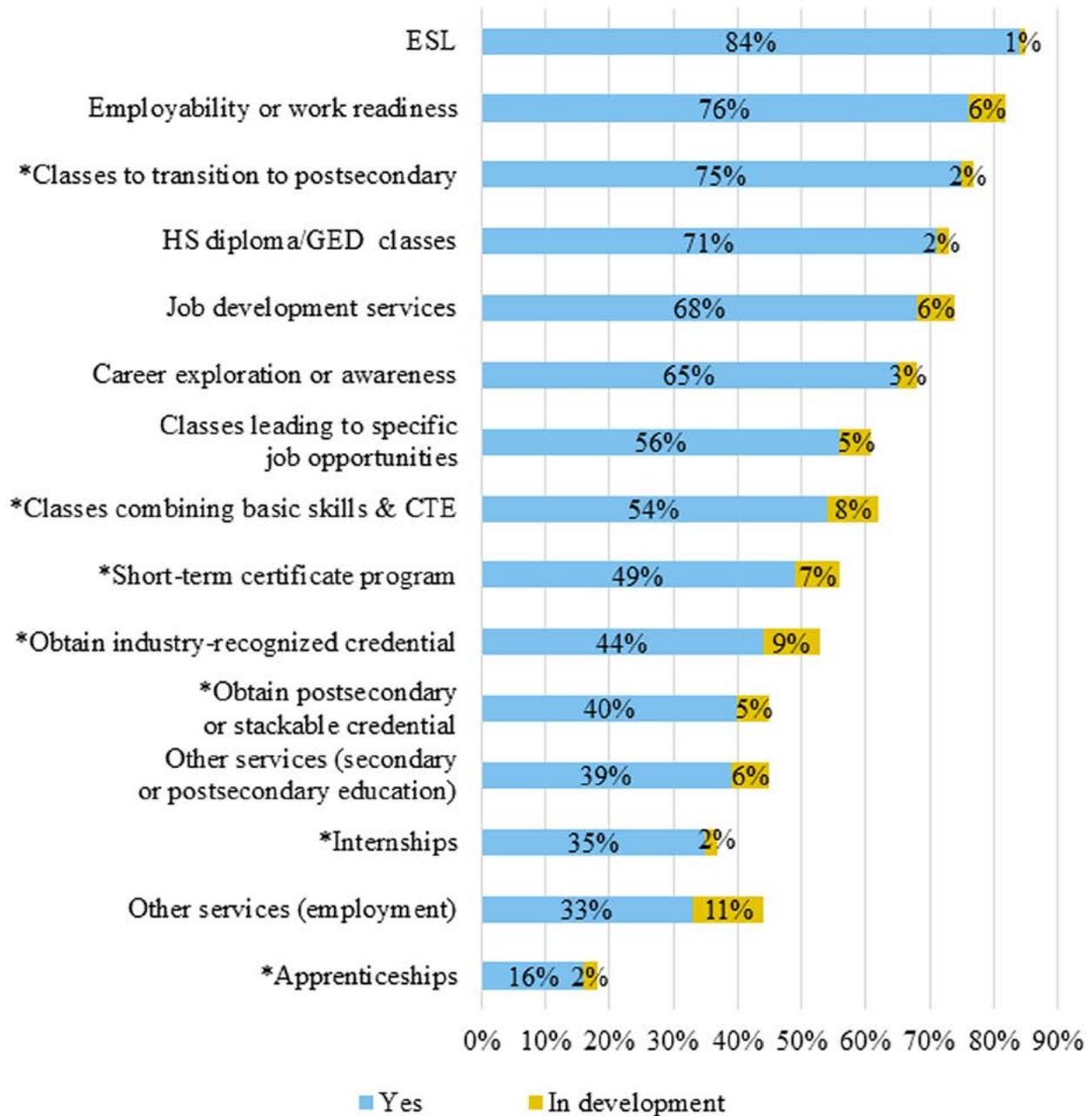


FIGURE 3: OCCUPATIONAL SECTORS (N=47 TO 100)

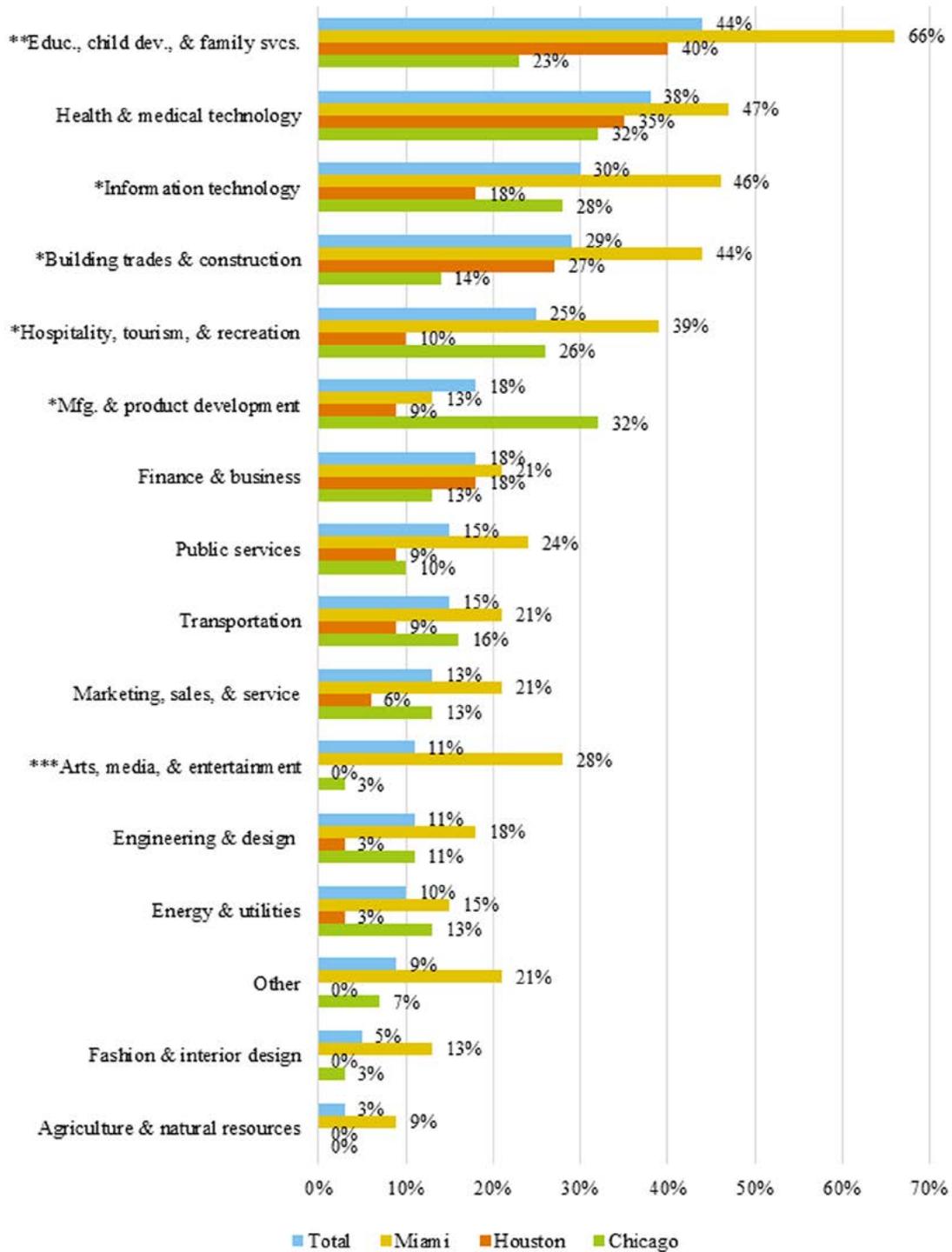


FIGURE 4: SUPPORT SERVICES BY WHETHER AGENCIES OFFER CP (N=32 TO 100)

