

# Integrated employment or sheltered workshops: Preferences of adults with intellectual disabilities, their families, and staff

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**Abstract.** Despite national and state policies promoting integrated employment, the majority of adults with intellectual or developmental disabilities (76%) are served in facility-based programs. This article focuses on whether or not this gap between policy and practice is in part due to the lack of interest of adults with intellectual disabilities and their families for employment outside facility-based programs. Results are based on the answers given by 210 adults with intellectual disabilities in 19 sheltered workshops, their respective families or caregivers ( $N = 185$ ), and staff members in these workshops ( $N = 224$ ).

Results show that the majority of respondents would either like employment outside sheltered workshops or at least consider it an option. Moreover, the majority of respondents believe that adults with intellectual disabilities can perform outside workshops, if support is made available if needed. It is noteworthy that the preference for employment outside of workshops is not associated with the severity of the disability.

Based on these findings, this study supports the literature that advocates for system change policy promoting the employment of adults with intellectual disabilities in the general labor market.

Keywords: Sheltered workshop, employment, intellectual, disabilities, developmental, families

## 1. Introduction

Dramatic improvements in cultural attitudes, scientific progress, and legislation on behalf of citizens with developmental disabilities have come to pass in the past few decades. As a result, actions have been taken to enhance the participation of people with disabilities in social and economic activities. For instance, between 1985 and 1994, the Office of Special Education and Rehabilitative Services (OSERS) awarded grants to 47

states for statewide special employment demonstration programs. These programs were aimed at increasing the conversion of facility-based day services for people with developmental disabilities into programs promoting integrated employment [86].

As a result of these and other efforts, the percentage of individuals with intellectual or developmental disabilities served through employment services increased from 9% in 1988 to 24% in 2002. Some states such as Connecticut, Washington, and Oklahoma reported percentages as high as 51%, 55%, and 71%, respectively. Unfortunately, although the percentage of people in integrated employment increased significantly, the percentage of people served through facility-based programs is still relatively high: in 2004, overall, 76%

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of adults with intellectual or developmental disabilities were served in facility-based services [10].

Based on these figures, system change initiatives have been criticized for resulting in a dual system where integrated employment is offered as an option along with traditional facility-based services rather than replacing them [21,46,48,50,56,93].

This article explores whether or not the impact of system change policies in the area of day services for people with intellectual disabilities (ID) can be attributed in part to a lack of interest on the part of the people with ID themselves and their families or caregivers (from now on referred to as families for simplicity) for integrated employment or the perception they have that people with ID are unable to perform in community jobs.

The rationale for focusing on adults with ID, families, and staff is that they have the most experience with the provided services. Second, disability advocates recommend that research regarding disability issues seek answers by involving people with disabilities [3,23,60,83,97].

The research questions addressed in the study reported here were:

1. Would adults with ID in workshops and their families prefer that adults with ID work in employment outside of workshops? What do staff members think the adults with ID would prefer?
2. Do adults with ID, families, and staff in workshops believe that adults with ID are able to perform outside workshops?
3. Do adults with ID, families, and staff respond differently to the above questions?
4. Do specific circumstances (e.g. respondents' demographics, previous work experiences and/or residential circumstances of adults with ID, and the staff's professional experiences) influence the respondents' preferences and perceptions regarding employment outside workshops?

The next sections summarize the literature about the topics discussed in this article, describe the research methodology, present the results, and discuss the main findings.

## 2. Review of the literature

This section reviews the literature about sheltered workshops, integrated employment, system change policy, and preferences of adults with intellectual disabilities (ID), families, and staff members regarding types of employment for adults with ID.

### 2.1. Sheltered workshops

Several definitions and labels have developed over time to indicate what is referred to as workshops in this article. Examples include the following: sheltered workshops, workshops, industries, industrial workshops, affirmative industries, training workshops, vocational workshops, and rehabilitation workshops. The core attributes of workshops can be identified by looking at what activities are being offered, what work environment is taking place, and what wages are being paid. Activities in workshops tend to be relatively easy to learn and perform. Typically, they involve repetitive tasks such as assembling, packing, woodworking, manufacturing, sewing as well as those tasks associated with agriculture [57,88]. The environment of workshops differs from typical workplaces based on how hierarchy is defined. In workshops, hierarchy is established by the status assigned to people. For instance, because of their conditions, adults with disabilities in workshops are always subordinated to staff members. In contrast, in typical workplaces, subordination is defined by contract depending on the applicants' roles and work skills [30]. Finally, adults with disabilities in sheltered workshops are typically paid below the minimum wage in accordance with a certificate issued by the Department of Labor as established by the Fair Labor Standards Act (FLSA) in 1938.

The goals of workshops may vary, ranging from assessment and rehabilitation geared toward transition into the general labor market [8,50,52,54,71,81,82] to long-term placement in the workshops [88,94]. Therefore, the status of the people attending workshops can vary. Adults with ID, in some instances, may be considered as trainees preparing for outside employment or in other situations may maintain the permanent status of recipients of day services. The boundaries separating these different levels of status are not always clear. In fact, it is not uncommon for workshops to claim to be providing rehabilitation geared toward transition into the general labor market, when instead, what they are actually offering is long-term placement in the workshop [30].

The rationale for supporting workshops is often based on the assumption that some people have conditions that are too challenging for regular jobs [63, 82], and therefore, employers will not hire them [44]. Conley et al. [15] draw attention to the fact that placing individuals in workshops is much easier than finding them jobs in the open labor market. Moreover, placement in workshops is more predictable. Although

waiting lists may result in delay, once individuals are accepted into workshops, they are unlikely to ever lose that placement. In addition, workshops are open five days a week throughout the year, even in the case of a recession. When there is no work, people served in workshops engage in non-paid activities, take classes, or participate in leisure events [82]. Finally, experts have found that many people with disabilities have not complained about workshops [22,71].

However, the concern exists that workshops have not proved successful in providing rehabilitation geared toward transition into the general labor market [39,54,72,75,80,94,98]. Workshops rarely succeed in functioning as actual employers in terms of the level of wages paid and the benefits offered [28,44]. Furthermore, workshops do not comply with regulations requiring that individuals with disabilities be served in the most integrated setting possible as the Supreme Court stated in the *Olmstead v. L.C and E.W.* case in 1999.

The number of workshops for people with disabilities has multiplied beginning since the first half of the 1930s. Between 1948 and 1976, the number of workshops increased from 85 to about 3000 across the nation [85]. However, between 1988 and 2004, the number of adults with intellectual or developmental disabilities served in sheltered workshops decreased from 131,000 to 117,000 [10].

## 2.2. *Integrated employment*

Integrated employment can be defined as work in the general labor market where the proportion of workers with disabilities does not exceed the natural proportions in the community and where wages are at or above the minimum wage. Depending on the nature of the disability, individuals may need support with finding jobs, training, and retaining jobs [62,90]. The goal of attaining integrated employment for the person with ID is to have them reach the social position of active citizens who gain skills and status, contribute toward public wealth, and earn a fair wage [77,89].

Marc Gold, one of the pioneers promoting work for people with ID, developed the notion that a person's lack of learning should be interpreted as "a result of inappropriate or insufficient use of teaching strategy, rather than inability on the part of the learner" (Gold, 1980 as reported by Henderson [35, p. iii]. During the '70s in his father's bike repair shop, Gold began successfully teaching people with ID to work, albeit sometimes in segregated settings.

During the '70s and '80s, universities such as the University of Washington, the University of Wisconsin, the University of Illinois, the Virginia Commonwealth University, and the University of Oregon carried out projects employing people with severe disabilities in regular work settings. The results of these experiments prompted the federal government to issue national grants promoting a nationwide implementation of employment programs for people with severe disabilities [6,74].

The advantages that integrated employment has over sheltered employment include the following: (a) better financial outcomes for people with disabilities [45,71], (b) increased opportunities for personal growth for people with disabilities [7,9,16,41,69,77], (c) compliance with the paradigm shift from fitting people into programs to adapting services to people's needs [19,37], (d) adherence to the values of social justice in which western democracies claim to have their roots [29,68,51,87], (e) fulfillment of the preferences of people with disabilities [27,31], (f) satisfaction of families' preferences [26,27,42,93], and (g) greater social integration of people with disabilities [25,47,52,53].

Though the advantages are many for integrated employment, some people have raised the following concerns: outside jobs may entail a higher risk of discontinuity, especially in times of economic recession [8,52,57]; transportation to and from the workplace may limit the choice of jobs [5,16]; personal safety of people with disabilities may be at risk [13,22,24,32,57,69]; and social relationships with coworkers might be less frequent as compared to those developed in workshops [22,27,39].

The number of employment providers service increased from an estimated 324 in 1986 to as many as 3,739 in 1993 [91]. The percentage of service providers offering both employment services and facility-based services increased from 42% in 1986 to 90% in 1991 [49]. The percentage of individuals with intellectual or developmental disabilities served through employment services increased from 9% in 1988 to 24% in 2004 for a total of about 118,000 people, nationally [10].

## 2.3. *System change*

Beginning in the '70s, national and state policy has been favoring the employment of people with disabilities in the general labor market as opposed to their placement in facility-based programs. For instance, the Rehabilitation Act of 1973 required that federal con-

tracts be granted with preference given to those businesses employing workers with disabilities. The Developmental Disabilities Assistance and Bill of Rights Act in 1984 included supported employment as an instrument to assist people with disabilities to enter the typical labor market. The American with Disabilities Act (1990) prohibited discrimination against people with disabilities in a number of areas including employment. In 1999, the Supreme Court stated that people with disabilities have a right to services provided in the most integrated setting possible (*Olmstead v. L.C. and E.W.*). Also, in January 2001, the Rehabilitation Services Administration stated that placements of job seekers with disabilities in workshops were no longer considered as successful employment placements, and therefore, were no longer going to be funded by dollars from the Rehabilitation Services Administration [73]. In 2001, President Bush announced the New Freedom Initiative as a nationwide endeavour aimed at removing the obstacles that prevent people with disabilities from fully participating in life including employment in the typical labor market [84].

In conformity to national initiatives, a number of states made clear their preference for integrated employment versus facility-based programs. For instance, between 1985 and 1996, the state of Colorado triggered a significant growth of employment programs by discontinuing the flow of new funding toward workshops [95]. Similarly, the state of Vermont no longer funds workshops [70]. The state of Washington issued a policy stating that individuals with developmental disabilities are expected to work in integrated employment. No funding is provided to serve them in facility-based day services unless they have a plan geared toward integrated employment [20].

A number of authors have explored the extent to which system change occurs [47,56,93], its process of implementation [13,31,53,71,93], and the major obstacles to its success [46,55,58,70,92]. However, few studies have specifically asked people with disabilities in workshops and their families about their preferences and then compared the findings with the opinions of staff members in workshops. This article contributes to this literature by providing comparative perspectives of the preferences and perceptions of adults with ID, families, and staff members regarding integrated employment. Findings shed light on whether or not system change policies in favor of integrated employment have the support of individuals with disabilities, their families, and staff in workshops.

## 2.4. *Participants' preferences and perceptions*

### 2.4.1. *Individuals with disabilities*

The literature shows no evidence of adults with disabilities resisting employment outside workshops [31, 82]. On the contrary, the literature reveals that they would like to work outside workshops and that they do not oppose the conversion of facility-based day services into community employment programs [14,27].

Murphy and Rogan [52] found that about half of the adults with disabilities involved in the conversion of a workshop into an employment agency were interested in exploring integrated employment immediately. Others were interested but were unsure or afraid of some aspect of community work. Dudley and Schatz [22] found that 5 out of 16 consumers wanted integrated employment. Burchardt [12] reported that in the UK about 1 in 6 unemployed people with disabilities would like to work whereas only 1 out of 25 unemployed without disabilities wish to work.

### 2.4.2. *Families*

Families are important parties involved in making decisions about the future of their sons or daughters with disabilities. Therefore, knowing what families think about day services is critical [36,59,63,76,83]. The literature indicates that families have mixed feelings about abandoning the option of facility-based services for their sons and daughters with disabilities. In the '70s, Whitehead [94] reported that families were happier with workshops and believed that people with ID could not make choices about employment [8]. More recently, Fawcett [26] found that about 44% of the people with disabilities surveyed attributed the reason for not working outside workshops to their families' views, among other factors. West et al. [93] found that 37% of a random sample of employment providers indicated that families were not necessarily in favor of integrated employment for people with disabilities. Loprest and Maag [27] found that 14% of adults with disabilities in the National Health Interview Survey on Disability was discouraged by their families from moving into integrated employment. Fesko and Butterworth [11] discovered that resistance to system change initiatives by families was not very strong, but families were not really supporters of system change in favor of integrated employment either. In a 5-year longitudinal study of people with disabilities in 53 workshops who transitioned into integrated employment, Brickey et al. [11] found that 100% of the people who were still employed after 5 years had families who were in favor of integrat-

ed employment. In contrast, only 60% of the people who returned to the workshops had families supportive of work outside workshops. It is interesting to note that younger families of students in high school were more positive about system change initiatives [31].

#### 2.4.3. Staff

Knowing the staff members' opinions about employment is important because the staff may influence individuals' choices through their daily interactions with them, especially in the case of those who no longer have ties with their families [1,8,36,40]. Because of their role in the system of services, staff in workshops may be biased in favor of workshops [33,52,63]. Perhaps this is not surprising, given that, in order to continue to operate, workshops need to promote their existence [1, 2].

Hagner and Murphy [31] found that staff members were a major roadblock to organizational change. One study found that 70% of staff operating in 57 adult services did not approve, or were in doubt about, delivering employment services [66]. A number of authors have indicated that the fear of the consequences and the uncertainty of the future of their professional careers made staff in workshops less willing to promote jobs in the community for those they served [5,23,27,43,52]. On the other hand, West et al. [93] found that only 24% of personnel in 385 employment agencies considered staff a barrier to conversion.

### 3. Method

In this study, survey research was used to investigate the preferences of adults with intellectual disabilities (ID), their families, and staff in workshops who knew the people with disabilities. The following sections focus on sampling, instrumentation, procedure, and validity issues.

#### 3.1. Description of the sample

The sample included 619 participants distributed as follows: 210 adults with ID attending 28 workshops across a mid-western state, the respective families or care givers ( $N = 185$ ), and staff in workshops who knew the people with disabilities ( $N = 224$ ). Participants with disabilities were selected according to the following criteria:

a) have intellectual disability as a primary condition.

- b) have been placed in the workshops most recently, as compared to others, and after January 1<sup>st</sup> 2000.
- c) do not have a job outside the workshop as a secondary activity.

The workshops were selected with the assistance from personnel knowledgeable about disability policy and practice in a mid-western state. The choices made favored organizations that were likely to collaborate by selecting the participants, mailing the surveys to the guardians, allowing the investigator to interview the participants in the facilities, and allowing the staff to complete the surveys. Twenty-two organizations were contacted, and nineteen agreed to collaborate. The three organizations that declined to participate did so because none of the people they served met the required criteria. Some organizations operated programs in multiple locations, bringing the total number of workshops to 28 distributed as follows: 11 in the Northern regions (39%), 9 in the Central regions (32%), and 8 in the Southern regions (29%) of the state.

#### 3.1.1. Adults with intellectual disabilities

The 28 workshops identified 364 adults with ID of whom 215 were their own guardians and 149 had appointed guardians. Of the 364 people identified, 210 (58%) participated. The reasons the other 154 adults with ID did not participate included the following: (a) their guardians did not return the consent forms (64 cases, 42%); (b) they were not at work on the days of the interviews (28 cases, 18%); (c) they did not show an understanding of the consent form, and therefore, their responses were considered invalid (16 cases, 10%); (d) they no longer attended the workshops (16 cases, 10%); (e) they were mistakenly selected from among people attending non-work day programs (10 cases, 7%); (f) they were nonverbal (8 cases, 5%); (g) there was no explanation made available (5 cases, 3%); (h) they declined to participate (4 cases, 2%), or (i) they had a job as a secondary activity (2 cases, 1%); and (j) there was a mistake in the selection process (One person; 1%).

The 210 adults with ID were almost equally distributed between women (51%) and men (49%). Their ages ranged from 18 to 79 years ( $M = 38.5$ ;  $SD = 13.5$ ). Of the 205 individuals whose diagnosis was known, 95% were diagnosed with an intellectual disability as either primary or secondary condition. Of those 195 individuals, 60% were labeled as mild ID, 29% as moderate ID, 3% as having severe ID, and none were considered to have profound ID. The degree of the intellectual disability was not available for 2% of the participants.

The majority of the individuals were their own guardians (78%), whereas 22% of the participants had appointed guardians ( $N = 210$ ). Of the 204 people for whom information about race was provided, most were white (90%). The remaining participants were either African American (9%) or Hispanic (1%).

The majority of the participants (44%) did not have behavioral issues that interfered with work, 37% were considered to have mild behavioral issues, 16% had moderate behavioral issues, and 2% exhibited severe behavioral issues ( $N = 204$ ). The level of support was only reported for 135 individuals. Of these, 49% required occasional support, whereas 28% of them required continuous support. Intermittent support was deemed necessary for 23% of the individuals.

Individuals with disabilities performed between zero and forty-five hours per week of paid work ( $M = 20.8$  hours,  $SD = 13.35$ ). Their hourly wage ranged between \$0 and \$8.50 ( $M = \$1.6$ ,  $SD = 1.78$ , 25;  $N = 185$ ). Residential arrangements consisted of housing without roommates with disabilities to having 40 roommates with disabilities living in the same residence ( $M = 3.8$ ,  $SD = 4.18$ ,  $N = 157$ ). Although workshops were almost equally dispersed throughout the Northern, Central, and Southern regions of the state (39%; 32%, and 29%, respectively), half of the adults with ID participating in the study (52%) attended workshops located in the Northern part of the state. Also, almost half of the adults with ID were from workshops located in cities with populations of 20,000 to 150,000 inhabitants.

### 3.1.2. Families

This article uses the term 'family' to refer to either actual family members of the participants with disabilities or their professional caregivers. Professional caregivers were identified by the workshops' referents in the case of participants with disabilities who no longer received care from family members. Of the 364 families, 185 participated in the study (51%). Reasons for 179 families not participating included that they declined to respond (66%), adults with ID consents were not available (30%), or surveys were returned as undelivered (4%).

The large majority of the family respondents were females (81%). Their ages ranged between 22 and 83 ( $M = 51.4$ ,  $SD = 13.6$ ,  $N = 177$ ). The role of respondents included that of parents (43%), extended family (19%), and professionals (38%).

### 3.1.3. Staff

Of the 246 surveys that staff members were asked to complete, 224 were returned (91%). On average, each staff member completed 1.9 surveys ( $SD = 2.09$ ) with a range of 1 to 18 surveys per each staff member.

The gender of most staff respondents was female (79%), whereas males comprised 21% of the total. Ages ranged between 20 and 71 ( $M = 39$ ;  $SD = 11.4$ ;  $N = 212$ ). Of the 219 staff members indicating their roles in workshops, 41% were supervisors, 14% were program managers, 5% were job coaches, 7% were quality specialists, and 6% were qualified mental retardation professionals (QMRP). The remaining 28% of the staff members had other various roles including coordinators, specialists, administrative personnel, and team leaders. Staff had been working in the disability field ranging from a minimum of less than one year to a maximum of thirty years ( $M = 9.5$ ;  $SD = 6.9$ ). Staff ( $N = 222$ ) knew the adults with ID about whom they were completing the survey for either less than one year (41%), between one and five years (51%), or more than five years (7%).

### 3.2. Instrumentation

Three instruments were developed for the purpose of collecting data: a structured interview protocol for adults with ID and written surveys for families and staff, respectively. The interview protocol included 2 sections of 10 and 30 questions, respectively. The first section inquired as to how adults with ID decided to work in the workshops, their preferences about employment, and their perceptions about their ability to perform in outside employment. The second section inquired about the considerations that made workshops a preferable option as compared to employment outside of workshops. This article focuses on the first section of the survey, that is, the preferences and perceptions of the individuals with disabilities about employment outside workshops.

The surveys for families and staff explored the same themes as presented in the interviews of the participants with ID. The questions, however, were customized to be consistent with the respondents' role as either a family or staff member. For instance, question # 6 in the interview protocol read: "Would you like to work outside a workshop?" The corresponding question to families read: "Would you like your son/daughter working outside a workshop?" Finally, this question to staff read: "Do you think that this participant would like to work outside a workshop?"

In addition, the surveys for families and staff asked specific questions such as what was the role of the family members completing the surveys (e.g. parents, extended family, or professionals), how long had the staff worked in the disability area, and how long had the staff known the adults with ID about whom they were completing the surveys.

Demographic information about the participants with disabilities was obtained from the state's day and employment services data system, a web-based information management application required by the state Vocational Rehabilitation Services (VRS) and the Bureau of Developmental Disabilities services (BDDS).

### 3.3. *Validity*

In order to enhance and control the validity of this study, the following aspects were considered: social validity, instrument validity, and inter-observer agreement.

#### 3.3.1. *Social validity*

The first way the validity of this study was enhanced was to seek social validation by asking members of the disability community as well as other experts in the field their opinions about the importance of the study, the appropriateness of the method, and the relevance of the questions [4,18,60,97]. Overall, 17 people were involved in this phase of the study: two parents of individuals with ID, their respective son and daughter, three advocates and members of the disability community, four faculty members at the University (three experts in disability policies/good practices and one in inquiry methods), three professionals who provide training and technical assistance to employment agencies, a director of a supported employment agency, a person responsible for a transition program designed for high schools students, and a professional in the area of social services pursuing a doctoral degree in special education. The people contacted supported the importance of the study and provided feedback on the instruments.

#### 3.3.2. *Instrument validity*

A second way the validity of the study was enhanced was through the development of an instrument that was as straightforward and simple as possible. In particular, the interview protocol for the participants with ID required special attention because the nature or format of the questions could affect the content and, therefore, the validity of the responses [61]. For instance, acquiescence may occur when respondents are uncomfortable

asking for clarification or when adults with ID wish to please the investigator. In both cases, they may respond in the way they think the investigator would like the questions answered [34,67,79,96]. To improve clarity, questions were kept as short, specific, and simple as possible [65]. All questions included the option of 'do not know/not applicable' to discourage respondents from guessing among the available options in case they did not know the answer.

Open-ended questions such as asking the participants how they decided to work in workshops were used as icebreakers at the beginning of the survey [67] as well as toward the middle and at the end of the survey. The intention of the open-ended questions was to facilitate focus by the respondents on the topics of the survey, yet still offering them an opportunity to expand on the information given in the close-ended format. Most of the questions, however, had a multiple-choice format, and they were supported with icons or drawings representing their answers graphically [36,64,65]. For instance, smiling faces were used to assist respondents in answering whether or not specific considerations were important concerns in the choice made between sheltered workshops and employment outside workshops.

To keep track of the respondents' level of comprehension, and therefore the validity of the information obtained, the investigator rated his impression of each answer given by the adults with ID. During the interview, the investigator would assign each answer a number using a 4-point scale (1 being complete comprehension, and 4 being no comprehension of the question at all). Answers rated either a 3 or 4 were discarded from the analyses.

#### 3.3.3. *Inter-observer agreement*

Finally, the inter-observer agreement, Cohen Kappa, was computed to measure the extent to which the investigator recorded the respondent's answers consistent with how external observers would have done it [100, 101]. This indicator was computed on the responses recorded from 38 interviews (18% of the total interviews) conducted with four external observers in five workshops. All observers spoke English as their first language. Two observers were doctoral students in Special Education, one was a doctoral student in Education Psychology, and one was a professional with extensive experience providing technical support to employment agencies as well as being a parent of an adult with developmental disabilities successfully employed in competitive employment. The Cohen Kappa coefficient yielded a score of 0.79, considered high agreement in the literature [38].

## 4. Results

This section describes the preferences of respondents for the type of employment and the perceptions they have about the ability of adults with ID to work in the community.

### 4.1. Preferences of respondents

Most of the respondents across the three groups were in favor of employment outside workshops, and they perceived that people with disabilities could perform outside workshops. Specifically, 74% of adults with ID ( $N = 203$ ) and 67% of families ( $N = 181$ ) would have preferred employment outside workshops, or they at least considered it as an option. Similarly, 66% of the staff ( $N = 224$ ) thought that adults with ID would have liked employment outside workshops or that they at least considered it as an option. In contrast, only 14% of adults with ID and 27% of families were not interested in employment outside workshops, and only 29% of staff thought that individuals with disabilities were not interested in it (see Fig. 1).

It is interesting to note that the preference of adults with ID for employment outside workshops was not associated with the severity of their disability or any other demographic variable such as gender, guardianship status, years spent in workshops, residential status, and location of the workshops. However, adults with ID who were in favor of outside employment were on average 11 years younger ( $M = 36$ ,  $SD = 12.4$ ) than participants opposing it,  $F(1, 171) = 18.083$ ,  $p = 0.000$ . Moreover, adults with ID with one or more previous paid work experiences were 15% more often in favor of employment outside workshops as compared to individuals who never had paid work experiences  $\chi^2(1, N = 111) = 4.869$ ,  $p = 0.027$ .

Similarly, the families' preference for employment outside workshops was not associated with the severity of intellectual disability of their sons or daughters or any other demographic variable such as respondents' gender, number of years spent in workshops of adults with ID, residential status of adults with ID, or location of the workshops. However, families in favor of outside employment consisted more often of individuals responding about participants with one or more past paid work experiences (31%) rather than about people without it,  $\chi^2(1, N = 151) = 16.430$ ,  $p = 0.000$ . In addition, family members in favor of employment outside workshops were more often than not professional caregivers (+18%) rather than the actual parents or rel-

atives of the adults with ID,  $\chi^2(1, N = 170) = 6.270$ ,  $p = 0.012$ . Finally, families in favor of outside employment were more often than not individuals acting as the appointed guardians (14%) rather than members of the families who were not appointed guardians,  $\chi^2(1, N = 170) = 4.176$ ,  $p = 0.041$ .

Staff members' perception about preferences of adults with ID for employment outside workshops was associated with staff members' age. Staff members who thought that consumers did not prefer work outside workshops were on average four years older ( $M = 42$ ,  $SD = 12.1$ ) than staff who believed that consumers wanted outside employment,  $F(1, 199) = 6.209$ ,  $p = 0.014$ . Moreover, staff members who thought that consumers would not like employment outside workshops had on average three years more work experience in disability services ( $M = 12$ ;  $SD = 7.6$ ) than staff who thought that consumers were in favor of outside employment,  $F(1, 211) = 7.381$ ,  $p = 0.007$ . Also, staff members who completed surveys about adults with mild ID were 15% more likely to believe that individuals served in workshops preferred outside employment than those who completed surveys about people with more significant disabilities,  $\chi^2(1, N = 192) = 4.502$ ,  $p = 0.034$ . Moreover, staff members responding about people who had one or more previous paid-work experience were 26% more convinced that these adults with ID would like employment outside workshops,  $\chi^2(1, N = 137) = 10.316$ ,  $p = 0.001$ .

Comparisons performed for each pair of adults with ID-family, adults with ID-staff, and family-staff, respectively, using McNemar test and binomial tests, confirmed that the majority of respondents agreed on the preference for employment outside workshops. Specifically, 70% of the pairs of adults with ID-family ( $N = 111$ ) responded consistently about their preferred types of employment with 95% of these pairs including adults with ID and their respective families expressing a preference for outside employment and only 5% opposing it,  $Z(1, 77) = 7.81$ ,  $p = 0.000$ , two tail. Similarly, 72% of the pairs of adults with ID-staff ( $N = 113$ ) responded consistently about their preferred types of employment with 88% of these pairs expressing a preference for employment outside workshops and 12% opposing it,  $Z(1, 80) = 6.67$ ,  $p = 0.000$ , two tail. Finally, 68% of the pairs composed of family and staff ( $N = 124$ ) responded consistently about their preferred type of employment with 81% of these pairs including family and respective staff members expressing support for employment outside workshops and 19% opposing it,  $Z(1, 83) = 5.56$ ,  $p = 0.000$ , two tail.



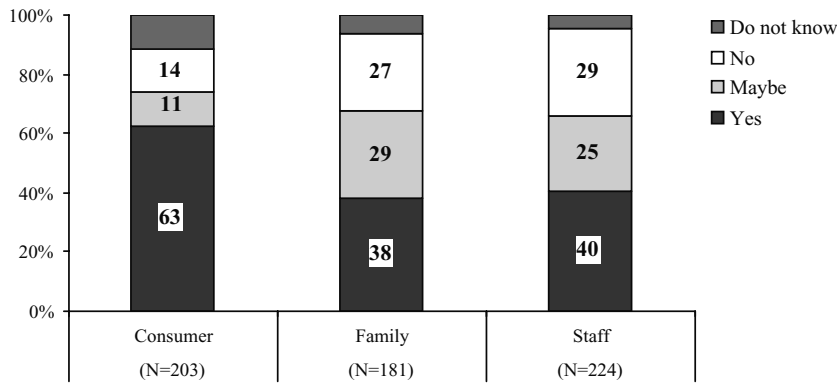


Fig. 1. Respondents' preferences for employment outside workshops.

#### 4.2. Perceptions about work skills of adults with intellectual disabilities

Consistent with their preferences for outside employment, the majority of participants with ID (82%;  $N = 202$ ), families (75%;  $N = 182$ ) and staff (78%;  $N = 224$ ) were optimistic that adults with ID could work outside workshops, with support if needed. Only a minority of adults with ID (9%), families (19%), and staff (17%) thought that adults with ID could never work outside workshops, even if support was provided (see Fig. 2).

Individuals with disabilities who were optimistic about their ability to work outside workshops were on average seven years younger ( $M = 37$ ,  $SD = 12.5$ ) than respondents who believed that they could not perform outside workshops,  $F(1, 177) = 5.618$ ,  $p = 0.019$ . Moreover, adults with mild ID were more often optimistic about their ability to work outside workshops (+12%) than individuals with moderate or severe ID,  $\chi^2(1, N = 168) = 5.664$ ,  $p = 0.017$ . Also, adults with ID who were optimistic about their ability to perform outside workshops were more likely to be individuals with one or more experiences with paid work in the community (+14%) rather than individuals who never had integrated paid work experience,  $\chi^2(1, N = 116) = 6.024$ ,  $p = 0.014$ .

Noteworthy is the fact that the families' perceptions about their sons' or daughters' ability to perform outside workshops were not associated with the severity of their intellectual disability. Families who were optimistic about the ability of adults with ID to work outside workshops were more likely to be caregivers (+14%) rather than actual family members,  $\chi^2(1, N = 171) = 4.600$ ,  $p = 0.032$ . Moreover, respondents who were optimistic about the work skills of adults with

ID were more often found among family members of people with paid work experiences in the community (+29%) rather than among family members of individuals who never had such experiences,  $\chi^2(1, N = 154) = 18.793$ ,  $p = 0.000$ .

As for the staff members, they were more optimistic about the ability of adults with mild ID to perform in employment outside workshops (+12%) than they were of the ability of those adults with moderate or severe ID,  $\chi^2(1, N = 193) = 4.398$ ,  $p = 0.036$ . Moreover, staff members were more often optimistic (+20%) about the work skills of adults with ID with one or more previous paid work experiences than they were of the work skills of adults with ID without this past experience,  $\chi^2(1, N = 140) = 7.894$ ,  $p = 0.005$ . It is interesting to note that the staff members' perception about individuals' work skills was not associated with the number of years that the staff members had known the adults with ID nor with the duration in years of the staff members' career in the disability field.

Comparisons performed at the level of each pair of adult with ID-family, adult with ID-staff, and family-staff, respectively, using the McNemar test and binomial tests, confirmed that the majority of respondents were optimistic about the ability of adults with ID to perform outside workshops, given that support would be provided if necessary. Specifically, 79% of the pairs of adults with ID-family ( $N = 117$ ) responded consistently about their perceptions regarding the ability of the adults with ID to work outside workshops. Of these pairs, 98% included adults with ID and their respective families who both believed that performing work outside workshops, with support if necessary, was feasible. Only 2% of these pairs included adults with ID and respective families members who both believed working outside workshops was not feasible,  $Z(1, 91) = 9.07$ ,  $p = 0.000$ , two tail.

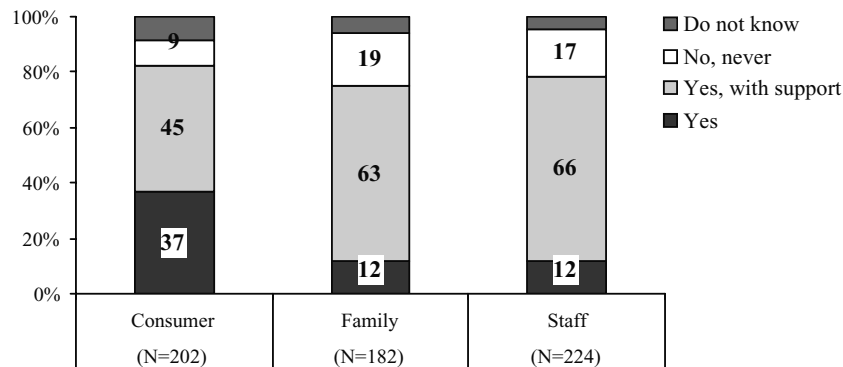


Fig. 2. Respondents' perceptions about adults with ID's ability to work outside workshops.

Similarly, 79% of the pairs of adults with ID-staff ( $N = 122$ ) responded consistently about their perceptions regarding the ability of the adults with ID to perform outside workshops. Specifically, 96% of these pairs included adults with ID and respective staff members both optimistic about the ability of adults with ID to work in the community. Only 4% of these pairs included adults with ID and staff who both believed the opposite,  $Z(1, 95) = 8.88, p = 0.000$ , two tail.

Finally, 72% of the pairs of families-staff ( $N = 125$ ) responded consistently about their perceptions regarding the ability of the adults with ID to work in the community. Specifically, 94% of these pairs included families and respective staff members both optimistic about the ability of adults with ID to perform in employment outside workshops. Only 6% of these pairs included families and staff who both believed the opposite,  $Z(1, 89) = 8.33, p = 0.000$ , two tail.

## 5. Discussion

The results of this study support the literature that advocates for system change policy in favor of employment for adults with intellectual disabilities (ID) in the general labor market [13,17,46,70,81,92]. The major implication for policy and practice drawn from the findings of the study is that greater emphasis should be placed on making integrated employment the first option for adults with ID.

The next sections discuss the following reasons why the findings of this study supports system change policy: (a) respondents across the three groups of participants (i.e. adults with ID, families, and staff members) have a preference for employment outside workshops and are optimistic that adults with ID can perform in employment outside workshops; (b) a positive associa-

tion exists between the previous paid work experience of adults with ID and the respondents' preferences for employment outside workshops, and (c) evidence suggests that the degree of disabilities of the individuals in workshops does not prevent them from performing in integrated employment.

### 5.1. Preferences and perceptions about employment outside workshops

A key reason for supporting system change policy is that adults with ID, families, and staff in workshops are largely in favor of it. A number of studies have shown that adults with disabilities would like to work in integrated employment [12,22,52]. According to the results of the study on which this article is based, only 14% of adults with ID who recently began attending workshops would not be in favor of employment outside workshops ( $N = 203$ ). Also, 82% of adults with ID believed that they could perform in employment outside workshops with support if needed ( $N = 202$ ).

The literature indicates that families have mixed feelings about integrated employment [8,26,27,42,93,94]. The study described in this article shows that families support employment outside workshops, although they are usually less enthusiastic about it than their sons and daughters are. However, only 27% of the families opposed employment outside workshops ( $N = 181$ ). Also, the majority of families (75%) believed that their sons and daughters could perform outside workshops with support if needed ( $N = 182$ ).

Knowing the opinions held by staff in workshops about employment is critical because of the important role staff may have in influencing the choices of adults with ID [1,8,36,40]. In general, staff members working in workshops are in favor of workshops [1,2,31,52,63], but they do not necessarily oppose integrated employ-

ment [93]. The study described in this article found that staff members were aware that a large percentage of adults with ID has a preference for employment outside workshops. Overall, only 29% of the staff believed that individuals with ID opposed employment outside workshops ( $N = 224$ ). Also, the majority of staff members (78%) believed that adults with ID could become employed outside workshops, given that support was provided if needed ( $N = 224$ ).

It is noteworthy that the preference for employment outside workshops was confirmed by pair-wise comparison across adults with ID-families, adults with ID-staff, and families-staff pairs, using McNemar and binomial tests [78,101]. For instance, 95% of the pairs composed of adults with ID and families who answered consistently (70% of the total pairs) included individuals with ID and families who both preferred employment outside workshops or at least considered it as an option. In contrast, only 5% of the pairs included adults with ID and families who both opposed employment outside workshops. A similar pattern emerges when comparing the matched pairs of adults with ID and staff with the pairs of families and staff.

Pair-wise comparison across adults with ID-families, adults with ID-staff, and families-staff pairs, using McNemar and binomial tests [78,101], also confirmed that participants shared optimism about the ability of adults with ID to become employed outside workshops. For instance, 79% of the pairs composed of adults with ID and their families responded consistently about whether or not individuals with ID could perform outside workshops with 98% of the pairs including adults with ID and families both believing that individuals with ID indeed could work in the community, given that support be provided if needed.

### 5.2. *Previous paid work experiences of adults with intellectual disabilities*

Another finding that supports system change policies is that those adults with ID who had paid work experience did not consider employment outside workshops a negative experience. Individuals with ID who had had paid work experiences before returning to workshops were 15% more often in favor of employment outside workshops than their peers without work experience. Similarly, families of people with paid work experience were 31% more often in favor of employment outside workshops than families whose sons or daughters did not have this same experience. Finally, staff members supervising adults with ID with paid work experiences

were 24% more positive about the participants' preference for employment outside workshops than staff supervising adults with ID who never had paid work experiences.

### 5.3. *Severity of disability and type of employment*

Another rationale for supporting system change initiatives in the area of day services is based on the fact that individuals in workshops include those with the same levels of disabilities as people who are already working in integrated employment. For instance, Mank et al. [45], in a study involving 650 people with disabilities in integrated employment, sampled people with mild ID (48%), moderate ID (27%), and severe ID (9%). These types of disabilities were similar to those of the 205 adults described in this article: mild ID (60%), moderate ID (29%), and severe ID (3%). Although a straightforward comparison of the two studies is not feasible within the context of this article, it should be noted, based on the discoveries revealed by both, that people with disabilities currently in workshops appear to have diagnoses comparable to those of people with disabilities already working in integrated employment.

### 5.4. *Limitations*

Caution should apply if generalizing the results to a population larger than the sample in this study because the participants were not randomly selected. Rather, adults with ID were selected from among individuals attending 19 workshops, which were in turn selected from among services providers who were most likely to collaborate with the data collection process. One problem presented by using this method of sampling is that results might be influenced by responses from adults with ID who have characteristics different from those of the general population of people attending workshops nationally. For instance, workshops that serve adults with more severe disabilities than what is considered the average would have contributed participants to the sample with a greater impact of disability than a random sample would have provided. This, in turn, could have determined answers biased toward the preferences and perceptions of people who have more significant disabilities. Similarly, workshops with specific policies either in favor of or opposed to integrated employment could have contributed to the sample with participants mirroring these workshop policies.

Another threat to external validity was the fact that the investigator did not have full control over determining which adults with ID were selected or excluded from the sample. Although the investigator provided specific guidelines for selecting the participants, they were in fact selected by the staff of the workshops in order to protect the confidentiality of the participants. As a result, there was also a possibility that staff selected the participants based on other criteria unknown to the investigator.

Finally, another limitation threatening external validity is the fact that the sample underrepresented adults with disabilities who had appointed guardians. This is because only about 60% of the guardians returned the signed consent forms that allowed the investigator to proceed with interviewing their sons or daughters with disabilities. In contrast, the investigator could interview almost all the participants who were their own guardians because there was no need to have another's consent to talk to them. Ironically, in the cases where guardians failed to return consent forms, they were, in essence, acting as an obstacle to the self-determination of the people they intended to serve.

In conclusion, whether or not the results of this study can be generalized to a population larger than the sample examined, it seems clear that there are many adults with ID currently being served in facility-based programs that would prefer to work in integrated employment. National and state policies and practices must shift funding and the direction of services away from facility-based to integrated, community-based employment and related services. Only then will we be honoring the desires of individuals being served and those who support them.

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