ABSTRACT
The ongoing workforce crisis in the intellectual disability field is examined from a supply and demand perspective. Author argues that a significant pay increase is needed to establish an equilibrium between the demand for Direct Support Professionals and the supply of Direct Support Professionals. The impact of government price controls on the intellectual disability industry is highlighted as a contributing factor to the workforce crisis.

KEYWORDS: Intellectual Disability, workforce crisis

INTRODUCTION
In 1914, Henry Ford was faced with a workforce crisis. Ford Motor Company was experiencing massive turnover, typically requiring them to hire over 50,000 employees in order to maintain a workforce of about 14,000. (Worstall, 2015). At this point in time, Ford factory employees were being paid about $2.25 for each nine-hour work day. Ford increased employee pay by about 122%, instituting a $5 per eight-hour work day pay rate. It has been suggested that the rationale for Ford’s actions were to enable workers to buy Ford cars and to essentially increase the middle class of the United States. Worstall (2015) suggests that while multiple motivations were evident in the Ford decision, a primary concern was the issue of turnover. The salaries were increased to help address the turnover issue.

The impact of Ford’s actions was to essentially eliminate the workforce crisis. According to Raff and Simms (1987), Ford had lines of people waiting to work for Ford after the increase in pay. In a sense, Ford used increased wages to create an equilibrium between supply of employees and the demand for the same. Not only was the workforce crisis resolved, but employees were able to afford to buy new Ford cars, and the middle class experienced a significant expansion (Nilsson, 2014).

Ford’s early 20th century workforce crisis parallels the ongoing workforce crisis that is evident in the Intellectual Disability/Autism field. The Intellectual Disability/Autism field is unable to hire sufficient number of employees who provide direct support, service, and habilitative instruction to people with Intellectual Disability and/or Autism. The generic name for people working in those positions is Direct Support Professionals.
Support Professional, although Aide, Client Care Worker, Counselor, or a variety of others might be used. Conroy (2017) revealed that the demand for Direct Support Professionals has grown an average of 6% per year over the past 30 years, while supply has tended to consistently remain about 10% short of the required number of Direct Support Professionals when estimated from various research studies that report vacancy rates. Spreat (2021a) reported that as many as one (1) in five (5) Direct Support Positions in Pennsylvania were vacant. Turnover, calculated from 2018 pre-pandemic data (NCI, 2019) suggested a national turnover rate of 51.3%, with considerable variability. The COVID-19 pandemic has only worsened these figures (Davis, Spreat, & Gruber, 2021).

These conditions are not new. Long standing concerns about a workforce crisis can be easily traced to the report of the President’s Commission on People with Intellectual Disabilities (2012), leading Hewitt (2013) to suggest that we are dealing with a way of life, rather than a crisis.

It would appear that there are multiple explanatory factors that have contributed to this longstanding workforce crisis. A pattern of systematic underfunding of social services (Harvey & Tropman, 2010) would seem to be one culprit. Walker (2015) presented data comparing the Pennsylvania general budget with the Pennsylvania spending on ID/A services over a 22 year period certainly supports Harvey and Tropman’s observations. These data suggest that while overall spending in the general budget increased by 90%, spending on ID/A services during the same time period increased only 23-24%. Other factors include the fact that more people with intellectual disability/autism are receiving out of home supports (Lulinski, Jorwic, Tanis & Braddock, 2018; Conroy, 2017). The dominant model of out of home services is the group home, which is demonstrably more labor intensive than older institutional warehouse models (Conroy, 2017). People with intellectual disability/autism are living longer (Dolan, Lane, Hillis, & Delanty, 2019). Spreat (2021b) has suggested that the most significant cause for the workforce crisis is the fact that providers of supports and services have little to no control over their price structure. These services are typically purchased by the government (typically state) at a price determined by the purchaser. This confluence of challenging factors result in a situation in which the demand for Direct Support Professionals exceeds the supply of individuals willing to work in that position at current compensation levels.

These hiring difficulties result in massive use of overtime along with growing employee burnout and increased training and recruitment costs. Also of concern is the fact that this industry is based on the development of relationships between the consumer and the caregiver. The maintenance of these relationships is threatened to the extent that employment becomes a revolving door. The workforce crisis clearly jeopardizes service quality.

**Supply & Demand**

The complementary concepts of supply and demand are a foundation of economic theory. Adam Smith (1776) linked the concepts, calling them the “invisible hand” that controls the economy. Economists (cf. Marshall, 1890; Pettenger, 2017) generally suggest that price is the factor that creates an
equilibrium between supply and demand. When the demand for a product or service exceeds the supply, price will increase, leading eventually to a balance between supply and demand. It then follows that if the demand for Direct Support Professionals within the ID/A field exceeds the current supply, this imbalance can best be rectified by increasing the price (i.e., wage) for Direct Support Professionals. One must note that many Direct Support Professionals love the job (Ritter, 2022), but are driven from it by the poverty level wages. The figure below illustrates this relationship between supply and demand.

![Diagram of supply and demand equilibrium](image)

The excessive number of open Direct Support Professional positions (up to 20% per Spreat, 2021a) strongly suggests that an increase in the wages paid to Direct Support Professionals is needed to approach equilibrium status. The determination of what level of wages paid to Direct Support Professionals will actually establish an equilibrium, however, is an empirical question. Current efforts to secure a $15 minimum wage (Johnson, 2015) or a “Living Wage” (NJACP, undated) or pay rates similar to state workers holding similar jobs (Blumenthal & DeMico, 2022) are reasonable political steps to take, but there are no guarantees that either will be sufficient to create an equilibrium between supply and demand. It has been argued (Spreat, 2021b) that the right wage for a Direct Support Professional is that wage that enables providers to fill almost all positions with qualified employees. Outcome is the only meaningful measure through which an employer can judge the adequacy of wages.

The logic seems simple enough. If you don’t have enough Direct Support Professionals, raise their wages to attract additional applicants. It seemed to have worked for Ford Motor Company back in 1914 (Raff & Simms, 1987). It worked with San Francisco trash haulers in the 1960s (Perry, 2017). Implementing meaningful DSP wage increases, however, may be beyond the fiscal capacity of most providers. Note that providers within the intellectual disability / autism field do not operate within a free market, and they do not have control over their prices. Unlike Ford Motor Company, they cannot raise the prices of their product to cover the cost of increased wages. Providers within the intellectual disability/autism community are essentially paid what the buyer (government and/or managed care organization) is able and willing to pay them. Providers are free to pay Direct Support Professionals
any rate they wish, but note that at current funding levels, most providers already spend between 75% and 85% of their annual revenue on employee wages. This doesn’t leave a lot of room for adjustments.

There have been some government led efforts to increase wages for Direct Support Professionals. In New Jersey, funding was provided to ensure that Direct Support Professionals are paid at least $15/hour (NJ Department of Human Services, 2021). A New Jersey provider association is preparing a survey to assess the impact of these efforts. New adjustments to the rate structure in Pennsylvania (Davis, Elliott, Gruber, & Spreat, 2022) should enable most Pennsylvania Intellectual Disability/Autism providers to reach the $15/hour threshold. Unfortunately, it appears that the pandemic and the subsequent inflation burst has overridden these efforts, with little improvement being noted in the workforce crisis (Davis, Spreat, & Gruber, 2021).

There have been smaller, non-economic efforts to minimize the workforce crisis. The Philadelphia College of Osteopathic Medicine offers a masters degree in non-profit management in conjunction with Woods Services, a Pennsylvania provider agency. That same provider has a similar arrangement with Harcum College to offer an associate’s degrees. Both programs are heavily subsidized by the provider, and good employment retention is reported among the participating students (Diamond & Drummond, 2020). These efforts, while admirable and evidencing a positive outcome, are unlikely to impose a significant correction factor into the workforce crisis.

Targeted immigration is being explored. ANCOR (2018) has proposed a structured immigrant worker visa program that would be strictly dedicated to the filling of direct support professional (DSP) jobs. A number of independent providers, noting the already large percentage of immigrants currently holding DSP jobs, are working on a similar mission (Farry & Clark, 2020). It must be acknowledged that there is promise to this approach. It provides an alternative means with which to increase the supply of potential Direct Service Professionals, enabling the establishment of an equilibrium between supply of and demand for individuals in this job classification. One must, however, wonder about the appropriateness of this approach in that it simply perpetuates the practice of paying individuals working in the Direct Support Professional position a wage that still qualifies them for a variety of forms of social welfare (Torres, Spreat, & Clark, 2017). One might go as far as to suggest that it is a form of imperialism.

An Imbalance between Buyer and Seller
Not only is there an imbalance between supply of DSPs and demand for DSPs, there is an imbalance in the power of buyer and seller of ID/A services. As noted above, sellers of ID/A services (i.e., the service providers) have little say in the price they receive for their work. That price is determined by the purchaser of the services, and while governmental efforts to establish prices must be considered good faith efforts, they largely serve to perpetuate current unsatisfactory conditions. Pettenger (2017) states that the price of a service or product should be the result of a negotiation between the buyer and seller. There is little such negotiation in the ID/A service system.
The governmental practice of fixing prices is not universal across all governmental purchasing. When a governmental agency needs to build a highway or a building, they issue a Request for Proposal (RFP), inviting sellers to propose to provide the service at a seller specified price. The seller is intimately involved in the price negotiation process, largely bypassing the many troubles caused by the practice of fixing prices. The state of New Jersey employs a somewhat similar model to secure services for certain groups of children. The RFP process could be adapted to the ID/A world. The adoption of this approach, however, would certainly introduce increased risk and uncertainty in government budgeting processes.

The Alternatives
Considerable talk has been devoted to various alternative payment models to improve the fiscal situation that drives the workforce crisis. It is difficult to envision that some unique way of cutting the same sized fiscal pie will result in greater levels of satisfaction. It is possible to consider five basic alternatives:

1. Maintain the practice of governmentally fixed prices and providing occasional increases - One might argue that this approach has been in place since the start of the deinstitutionalization movement, and there are still agencies willing to provide supports and services. Doomsayers suggest that the continuation of the current practice will eventually collapse the system. Perhaps more realistic is the assumption that families will be increasingly incentivized to keep their family members at home, thereby saving the government entity considerable money.

2. Enhance related benefits to make the job both more attractive and more of a stepping stone to higher level employment. Education in particular seems to be a benefit that would attract employees to the field, and of course, the provision of education, would prepare them to leave the field. Whether or not this approach would help the workforce crisis, it would certainly enhance the quality of provided services.

3. Promote increased immigration and continue the process of underpayment. In a sense, this model would create an indentured servitude program, in which employees could work toward citizenship in return for providing labor at under market cost. This approach is both brilliant, and somehow flawed, in that it perpetuates the practice of paying people in the intellectual disability field less than a living wage.

4. Raise the rates sufficiently to permit payment of a necessary wage, and ensure that that increased rate is maintained via inflation markers. This approach would at least enable employees and employers to keep up with inflation, however, it would perpetuate the underfunding that has plagued the field.

5. Institute and RFP process in which the seller and buyer are equal participants. In this model, the price for provision of services (and ultimately, the cost of a Direct Support Professional hour) is determined by negotiation between buyer and seller.
It’s going to be expensive

Economist offer statistical methodology with which to estimate the price at which supply and demand reach an equilibrium. This model, however, rests on assumptions regarding the interaction of high and low employment demands and high and low wages. Within the ID/A field, both demand and supply of DSPs have grown in a largely parallel fashion, with roughly 90% of the demand being met over the past 30 years. This parallel growth prevents the use of traditional equilibrium calculators because these calculators assume an interaction between supply and demand.

Any serious effort to correct the workforce crisis in intellectual disability and ensure quality services for persons with intellectual disability is going to be expensive. It is estimated that there are 55,000 Direct Support Professionals working in the intellectual disability system in Pennsylvania alone. To increase them to the MIT Living Wage (MIT & Glasmeier, 2003) for Pennsylvania (estimated to be $23.28 per hour for a working couple with 2 children) would cost in excess of $2 billion. While this figure could certainly be viewed as outrageous, one might equally consider it to be the consequence of long term systematic underfunding, or perhaps the consequence of deferred maintenance of the workforce.

A workable solution, if there is to be one, will only come when that solution is made to the advantage of state and federal legislative bodies. The identification and provision of fiscal support (legally) to disability advocates in the legislatures will be essential to the sustainability of the intellectual disability system. The long term systematic underfunding of intellectual disability services needs to end, and this will occur only when it is in the best interests of legislators to make it happen.

REFERENCES

Accessed 6/7/22.


