

Intellectual and Developmental Disabilities

Incentives, Wages and Retention among Direct Support Professionals: National Core Indicators Staff Stability Survey

--Manuscript Draft--

Manuscript Number:	IDD-D-20-00100R1
Article Type:	Research
Keywords:	Direct Support Professional; Turnover; Incentives; IDD; National Core Indicators
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Manuscript Region of Origin:	UNITED STATES
Abstract:	Direct support professionals (DSPs) provide a range of supports in a variety of settings to people with intellectual and developmental disabilities (IDD) who count on these supports to live, work, and contribute in their communities. Despite this, high annual DSP turnover rates are problematic. To retain DSPs, organizations offer incentives (e.g., bonuses, retirement plans, health insurance). This study utilized National Core Indicators® (NCI®) Staff Stability Survey 2018 data to examine the relationships of incentives and wages to annual turnover in participating states in the US. Results indicated that incentives were not positively associated with DSPs retention. Staff wages was the most notable factor associated with differences in DSP retention rates along with the state in which the organization was located.

NCI Staff Stability: Incentives & Turnover
05-21-21

Incentives, Wages and Retention among Direct Support Professionals: National Core Indicators

Staff Stability Survey

Abstract

Direct support professionals (DSPs) provide a range of supports in a variety of settings to people with intellectual and developmental disabilities (IDD) who count on these supports to live, work, and contribute in their communities. Despite this, high annual DSP turnover rates are problematic. DSP turnover is disruptive to people who receive supports as the lack of stable, reliable supports can negatively impact their important day-to-day outcomes (e.g., safety, community participation, and choice). Turnover also comes at a cost to provider organization in the hiring and training of new employees. To retain DSPs, organizations offer incentives (e.g., bonuses, retirement plans, health insurance). This study utilized National Core Indicators® (NCI®) Staff Stability Survey 2018 data to examine the relationships between wages, different types of incentives, including benefits (e.g., paid time off, access to health insurance, disability insurance, wage bonuses, health incentives programs, etc.) to annual turnover in participating states in the US. Results indicated that incentives were not positively associated with DSPs retention. Staff wages were the most notable factor associated with differences in DSP retention rates, along with the state in which the organization was located as well organization vacancy rates.

Keywords: Direct Support Professional, Turnover, Incentives, IDD, National Core Indicators

Incentives and Annual Turnover among Direct Support Professionals: National Core

Indicators Staff Stability

It is no secret that wages are closely associated with work retention, performance and outcomes across many different service fields, including direct support professionals (DSPs) (Anderson-Hoyt et al., 2010; Houseworth et al., 2020), homecare (Butler et al., 2014), long-term care nursing (Andersen, 2009), nursing home care (Ruffini, 2020), teaching (Grissom et al., 2016; Guarino et al., 2006), etc. Along with wages, other factors impact staff retention in both positive and negative directions. A work environment can be a decisive factor in whether an employee stays or leaves the company (Andersen, 2009; Harris, 2000). Donoghue (2010), in a study of retention of staff in nursing homes, found that longer management tenure and a lower staff-client ratio contributed to longer staff retention. Employee burnout has been identified as another major factor in front line workers leaving their jobs (Gray-Stanley & Muramatsu, 2011; Linos et al., 2019). In his paper on motivation of employees to stay in jobs, Ramlall (2004) outlined several factors beyond wages that motivate job retention, including responsibility on the job, advancement, personal achievement, meaning, recognition, and growth and learning.

A number of employer incentives that directly relate to the motivations of employees outlined by Ramlall (2004) have been found to improve retention. Kashyap & Verma (2018) categorized employer incentives into three dimensions: psychological (i.e., diversity of tasks, good work relations); functional (i.e., professional development, application of skills); and economic (i.e., salary and related benefits). In a study by Connor et al. (2008) in residential treatment programs, they found that the use of incentives, such as tuition reimbursement, positive performance evaluation and promotion were strongly related to duration of staff employment and predictive of staff retention. Innovative work schedules have been found to incentivize nursing

staff to stay on the job (Young et al., 2007). Wieck et al. (2009) stress that in order for incentives to positively impact staff retention, they have to coincide with what the staff desire. In their study on the Nurse Incentives Project, Wieck et al. (2009) found that incentives can make a positive impact on the job retention of nurses provided the following are in place: (1) Menu of benefit choices from which every employee can select; (2) Benefit packages are flexible and transparent; (3) Keeping up to date with what type of benefits and staff prefer; and (4) Paying attention to generational differences in benefit preferences.

For the purposes of this paper, employer incentives are used as a broad term that includes employer benefits (e.g., health insurance, paid time off, etc.) as well as other incentives (e.g., professional development opportunities, health incentives programs, etc.). Wages or salary are treated as a separate construct (compensation). Currently there is a lack of information about what role employer incentives play in retention and turnover of DSPs working with people with disabilities. The definition of a DSP used in this study is an employee with the primary job responsibility of providing training, support, personal assistance, and supervision to adults with intellectual/developmental disabilities (National Core Indicators, 2019). The purpose of this study was to examine the incentives that are offered by organizations employing DSPs, their relationships with DSP annual turnover, and how those relationships are impacted by DSP compensation (wages) using data from the 2018 National Core Indicators (NCI) Staff Stability Survey. More specifically, the purpose of this study was to investigate the provision of incentives in the form of paid time off (PTO), health insurance, disability insurance, life insurance, and retirement plan benefits and incentives like bonuses (general, pay incentive/referral bonus program), tuition reimbursement, job-related training, health incentive programs, and flex

spending accounts, and DSP wages by organizations, while accounting for covariates, on the outcome of annual DSP turnover.

Turnover in the Direct Support Workforce

High levels of turnover (i.e., staff departures in the last year) among DSPs who provide services and supports for people with intellectual and developmental disabilities has been documented now for some time and is expected to continue to rise (Anderson-Hoyt et al., 2010; Braddock & Mitchell, 1992; Houseworth et al., 2020; Larson et al., 1998). In 2018, the average annual DSP turnover rate across organizations in 26 states was 48.4% (National Core Indicators, 2019). It is estimated that there were 880,000 full-time equivalent DSP positions supporting people with IDD in the United States in 2013 (President's Committee for People with Intellectual Disabilities, 2017). There is not currently a Bureau of Labor Statistics Standard Occupational Code for DSPs that provide services and supports to people with IDD. Instead, DSPs are subsumed under other categories such as home health aides, personal care assistants, nursing assistants, and others. These occupational codes are some of the highest in demand and with the most expected job growth that are tracked by the Bureau of Labor Statistics (Bureau of Labor Statistics, 2020). Demand to recruit and retain DSPs are already at critical levels, and expected to rise in the next decade. It is vitally important to understand the factors at play to increase the efficacy of these efforts.

DSP turnover is disruptive to people who receive supports. It impacts quality of life among people who rely on DSPs. People with IDD have indicated that lack of stable, reliable supports negatively impact peoples' sense of safety, health, participation in community life, developing and maintaining friendships and intimate relationships, being treated with fairness and respect, choice in where and with whom to live, choice in services, and others (Friedman,

2018). When stable and consistent supports cannot be located, people with IDD and their families miss out on opportunities including work (Anderson et al., 2011; Anderson et al., 2002). In addition to costs related to missed work and opportunity for people who receive services, DSP turnover is costly for human service organizations in terms of recruitment, on-boarding and training of new employees. In 2004, Larson and colleagues estimated turnover costs at \$3,278 per DSP who leaves their position (Larson et al., 2016). Adjusting for inflation to costs in 2021, these estimated turnover costs are close to \$4,630 (Bureau of Labor Statistics, 2021). With turnover rates close to 50% annually, costs related to turnover of staff working with people with IDD are estimated at \$2.3 billion nationally (President's Committee for People with Intellectual Disabilities, 2017). The balance of competitive wages with incentives that support DSPs to stay in this line of work may reduce costs related to turnover, including recruiting and training new staff.

There are some factors that have been identified to relate to DSP turnover. A randomized control study of DSP participation in a training program with work based learning reduced DSPs turnover by a difference of 16.4% compared to the control group that did not receive the training program (Bogenshutz et al., 2015). The state of Wyoming has invested into training and career development of DSPs and found positive results related to DSP retention (Lynch et al., 2005). Training, career development and professional recognition for DSPs has been acknowledged and discussed as an important issue in the field for several years in relation to staff turnover, wages, and the overall status of the profession. A specific effort to improve the professional standing of DSPs at a national level has been led by the National Alliance for Direct Support Professionals (NADSP).

A higher unemployment rate in a geographic area is also suggested to decrease turnover (Powers & Powers, 2010; Wiener et al., 2009). Serving clients with challenging support needs, including people who utilize wheelchairs or are dually diagnosed (Powers & Powers, 2010) or whose behaviors can be challenging (Friedman, 2018) may also increase staff turnover. In a study of DSPs providing support in residential settings in Canada, DSPs were motivated to remain in their job because their relationship with the person supported, the nature of the work including a high level of flexibility and control over their environment, and their desire to make a difference in the lives of people who can be marginalized in our society (Hensel et al., 2015).

Higher wages have been related to lower turnover in several studies. Utilizing data from 2,221 certified nursing assistants, a \$1 increase in wage was associated with 2.1 additional months tenure or length of stay on the job (Wiener et al., 2009). In another study, organizational turnover and wage data were collected from over 500 organizations that provide community based services to people with IDD. A \$1 per hour increase in entry wage predicted a 3.61% decrease in turnover (Anderson-Hoyt et al., 2010).

In an exploratory study utilizing National Core Indicators Staff Stability data from 2016 with 3,222 provider organizations in 20 states and the District of Columbia, Houseworth and colleagues (2020) utilized hierarchical linear modeling to explore state and organizational level factors that contribute to early DSP turnover (defined as turnover within six months of hire) and annual DSP turnover. Different factors were related to each type of turnover (early and annual turnover), but lower wages paid to DSPs and lack of health insurance offering to some or all DSPs were significantly related to increased turnover of both types. Provision of paid time off and a lower percentage of part time DSPs were also related to less DSPs turnover within six months of hire.

National Core Indicators Staff Stability Survey

Beginning in 2014, National Core Indicators (NCI), a measurement effort of the National Association of State Directors of Developmental Disabilities Services (NASDDDS) and the Human Services Research Institute (HSRI), started collecting annual data at the organizational level on the direct support workforce (National Core Indicators, 2014). National Core Indicators staff, with input from the University of Minnesota's Institute on Community Integration and the National Direct Service Resource Center, developed the NCI Staff Stability Survey to evaluate relevant and critical information about DSP workforce stability, benefits, incentives, wages, and retention and recruitment (National Core Indicators, 2014). It is important to note that this is the only instrument at the national level that includes these variables of interest, which made it possible for us to address the limited documentation about the relationship between incentives, wages and turnover in the DSP workforce. Data from the NCI Staff Stability Survey (NCI-SSS) focus on DSPs employed by agencies of all types (county/local government run, private non-profit, private for-profit, etc.) in residential, in-home, and non-residential settings.

The following paragraphs provide contextual information for factors investigated in this study using NCI-SSS, including different types of incentives, DSP characteristics, vacancy rates, etc. within participating organizations, and the impact of being located within a certain state. The variables included reflect the different types of incentives (including benefits) service provider organizations may make available for their staff as well as contextual variables we hypothesize based the literature may affect the relationship between incentives, wages, and staff turnover (e.g., DSP staff size and types of services provided). In addition, the state in which the individuals live and are receive services is included here based previous NCI research (Ticha et al., 2012; Houseworth et al., 2018).

DSP Employer Incentives

The NCI Staff stability Survey includes a number of questions related to different types of incentives that have traditionally been classified as benefits (e.g., paid time off, access to health insurance, disability insurance, life insurance, a retirement plan, etc.) and other types of incentives (e.g., wage bonuses, referral bonus programs, health incentives programs, etc.) for DSPs. These questions are described in greater detail below.

Paid time off. Organizations offer paid time off for DSPs in an assortment of ways including pooled paid time off that is not specifically linked to or administratively tracked as paid vacation time, and paid sick leave. In 2018, over three-quarters (77.5%) of agencies offered some type of paid time off to their employees (National Core Indicators, 2019). Sixteen percent offered pooled paid time off (hours are banked and employees use the time as they wish) to all or some DSPs. Of those who did not use pooled paid time off, 89.0% offered paid vacation time, 85.4% offered paid sick leave, and 30.7% offered paid personal time. These were offered to some or all DSPs, depending on the agency. These are indications of workplace burnout among direct support workers (Skirrow et al., 2007). This is especially true for full-time workers (Vassos et al., 2012). Offering paid time off may be a critical way to keep DSPs in their job when they experience exhaustion, illness, personal issues, or burnout.

Access to health insurance benefits. Health insurance is another type of benefit that service provider agencies struggle to make accessible to DSPs because of associated costs. Some organizations find it financially challenging to pay for health insurance for all their staff. In 2018, averaged across 27 reporting states 70.6% of agencies offered health insurance to some or all of their DSPs (National Core Indicators, 2019). In Minnesota in 2017, 56% of organizations that provided Medicaid-funded long-term services and supports offered health insurance to their

full-time DSPs, and 11% offered them to part-time workers (Pettingell et al., 2019). However, even when DSPs are eligible for health insurance, only a portion of DSPs enroll in the benefits. Thirty-eight percent of DSPs enrolled in the health benefits available to them (Pettingell et al., 2019). Others may use public assistance, coverage through an additional job, or coverage from a spouse's job as alternative health benefits sources (Hewitt et al., 2019). In addition to health insurance, over half of the agencies reporting in 2018 NCI data provided on average vision coverage (56.7%) and dental coverage (66.1%) to some or all of their DSPs (National Core Indicators, 2019).

Access to retirement benefits. Retirement benefits vary by employer and may include options with matching, pensions, vesting requirements, and other options. Offering contribution options to 401K, 403b and other plans can be part of an employee's contribution package. In 2018, an average of 65% of organizations offered an employer sponsored retirement plan to some or all DSPs, but this percentage varied widely from 16% in Florida to 100% of organizations in South Dakota (National Core Indicators, 2019).

Access to other incentives and benefits. Organizations offer other benefits to DSPs, including reimbursement for post-secondary education or employer related job training. Recruiting college students to become DSPs has been a successful recruitment method for some organizations, and providing training and tuition reimbursement opportunities has been a strategy to help them professionalize and increase the skills of their workforce (Kramme & Hewitt, 2018). Employer-sponsored disability insurance and life insurance provide benefits to the worker and their family in the case of an unexpected injury or death of the DSP. Flexible spending accounts have been used to help DSPs stretch their wages by providing tax benefits for eligible expenses. Health incentive programs can be formally established through an insurance company,

or an informal program offered through the provider organization for progress towards healthy behaviors, such as weight loss, increasing physical activity, or smoking cessation. Some provider organizations offer informal walking, running or other clubs to support their DSPs to manage stress and increase healthy behaviors (Rhoads, 2019).

Wage bonuses. Some organizations offer bonuses to DSPs that are supplemental to their regular wages. These can be offered for a variety of reasons, including tenure, positive performance evaluations, or attaining competencies. Utilizing such practices are typically organization-specific; they are based on the requirements set up within the organization's policies. Prevalence of organizations that indicated giving DSPs bonuses varied widely by states (National Core Indicators, 2019).

Referral bonus program. Some organizations that hire DSPs have found success in recruiting new candidates to this field by utilizing referral bonuses. Referral bonuses are monetary incentives paid to the referring employee when a referred candidate is successfully hired into a DSP position (Schlachter & Pieper, 2019; Larson & Hewitt, 2012). The referrer is a current employee who is not a recruiter in the organization, but utilizes their own social network to provide information to the potential job candidate about the job opening. Some organizations offer bonuses at the time of the referred candidate's hire, while others pay the bonus when the employee has stayed for a designated length of time (e.g., three or six months). Some organizations split the bonus into two portions to be paid at the time of hire and after a designated length of time. With their familiarity for the skills required in direct support, current employees may serve as great recruiters when they identify candidates whose skills and interests are a match for this work.

DSP staff size. The demands DSPs experience in their work depend, in part, on the size of an organization and number of staff it employs. Among states participating in the 2018 NCI Staff Stability Survey, the average number of DSPs on an agency's payroll was 80.2 (median = 41) with a range of 20.2 to 238.5 DSPs (National Core Indicators, 2019). Powers and Powers (2010) found that turnover rates increased 29% to 40% with an increase of 20 employees added to the staff. The size of an organization may also affect benefit plan options accessible to the staff.

Percentage of part time DSPs. The direct support workforce is built largely on part-time workers. In Minnesota in 2017, over half (54%) of direct support workers were part-time positions (Pettingell et al., 2019). On average, one-third (31.5%) of the direct support workforce employed by agencies participating in the Staff Stability Survey were part-time status (National Core Indicators, 2019). In these studies, rates of turnover (Minnesota) and vacancy (NCI) are higher among part-time DSPs. In addition, availability of benefits may be limited to DSPs that are part-time.

Types of services provided. Agencies that deliver home and community-based services provide different types of services, including in-home supports, residential and non-residential, and vocational or day services. Agencies vary in the number of types of services they provide. Some offer only one service type, while others offer two or more types. Historically, wages in vocational and non-residential programs that support people with IDD have been higher (Bogenshutz et al., 2014). In 2018, DSPs providing residential supports and in-home supports earned an average hourly wage of \$12.25 and \$12.08, respectively, compared to those providing non-residential supports who earned an average hourly wage of \$12.98 (National Core

Indicators, 2019). Non-residential supports includes employment services that are often incentivized via higher rates.

Vacancy rates. As the demand for community-based supports increases, the result is that provider organizations are under pressure to recruit enough workers to meet the demand. Changes in the economic and demographic composition of the United States, including the availability of competitive wages, play a role in high vacancy rates for DSP positions. Increasing demand for this type of worker in long-term services and supports is directly related to the increasing aging population. Organizations may be unable to meet the demand for services due to high vacancy rates (Hewitt et al., 2015). For people receiving services, a high vacancy rate reduces opportunities to go to work, participate in community activities, enjoy time with family and friends, improving health and safety, and to live fully in the community for people. In 2018, vacancy rates among full-time DSPs averaged 11.9% while part-time vacancy rates were higher at 18.1% (National Core Indicators, 2019).

State. Benefits availability and wages vary considerably across states as well as between providers between and within states. These regional differences are a result of multiple factors, including, minimum wage differences, sometimes within the state, cost of living in a state, proportion of private vs. public providers, etc. (Hewitt et al., 2015; Bogenschutz et al., 2014). Cost of living includes what wages will buy a worker in a particular geographic area related to average costs for housing, food, clothing, transportation, childcare, and other living essentials. Reimbursement rates set by state DD systems and state Medicaid agencies paid to providers for DSP services have also been documented to vary widely across states who provide services utilizing Medicaid waivers (Friedman, 2019).

DSP Wages. The average hourly DSP wage reported in the NCI 2018 Staff Stability Survey was \$12.26 per hour (National Core Indicators, 2019). For a DSP working full-time, this is below the federal poverty line for a family of four in the same year (Assistant Secretary for Planning and Evaluation, 2019). Support staff wages are defined by reimbursement rates set by state DD systems and state Medicaid agencies. Over half of all DSPs utilize public benefits (e.g., childcare assistance, housing assistance, energy assistance, etc.) because they cannot meet their basic expenses (Hewitt et al., 2019; PHI, 2015). When adjusted for inflation, wages paid to DSPs have not increased in over a decade (Campbell, 2018). This makes it increasingly difficult for DSPs to keep up with living expenditures, particularly if wages in other fields are increasing. Employers have difficulties competing with workers when other fields pay better and offer more benefits.

Purpose of the Current Study

The purpose of the current study is to examine the impact of DSP incentives on annual DSP turnover in relation to staff wages, using secondary data analysis of 4,400 organizations that provide supports and services to adults with IDD in 26 states and the District of Columbia using the NCI 2018 Staff Stability Survey data. This study seeks to describe and evaluate trends in the relationship between organization-provided incentives, staff wages, and the rate of annual DSP turnover in 2018. The research questions included:

1. What types of incentives are organizations offering their DSPs?
2. To what extent do the incentives that provider organizations offer impact staff retention in relation to wages?

Method

Instrument: NCI 2018 Staff Stability Survey

National Core Indicators (NCI) is a combined effort of over 20 years between the Human Services Research Institute (HSRI) and the National Association of State Directors of Developmental Disabilities Services (NASDDDS). The NCI Staff Stability Survey is an additional effort to collect data on DSP workforce quality and stability from provider agencies affiliated with state DD systems that deliver direct support to adults with IDD. The survey was first released to collect data in 2014 (National Core Indicators, 2014). The number of states participating in the NCI Staff Stability Survey has increased with each administration since its pilot in 2014. In 2018, 26 states and the District of Columbia, with a combined total of 4,400 provider agencies, administered the NCI Staff Stability Survey (National Core Indicators, 2019). The survey is administered via an on-line portal. Organization leadership of provider organizations in participating states answer questions related to their current direct support staff, staff separations, status of staff (part- or full-time), wages, hours worked, incentives, etc. The survey data provide information on state improvement in service workforce and they provide the only national level report on these variables.

Sample

State Selection

Data were collected from 26 states and the District of Columbia that voluntarily participated in the NCI program in 2018. States included: AL, AK, AZ, CO, CT, FL, GA, HI, IL, IN, LA, MA, MD, MO, NC, NE, NJ, NY, OH, OK, OR, SC, SD, TN, UT, WY, and DC. Data were gathered for the timeframe between January 1, 2018 to December 31, 2018. Sampling methods varied by state; however, most states surveyed all agencies providing direct support services to adults with IDD. See Appendix D in the NCI Staff Stability 2018 Report for specific state methods (National Core Indicators, 2019).

Participants

Across the states, 4,400 provider agencies completed the 2018 Staff Stability Survey. Due to missing data and the use of listwise deletion in multivariate regression, the number of providers for this study was 2,608. Using this study's sample, the average number of DSPs working in an organization was 106 (ranging from 1 to 2,285) with 275,379 across all organizations. For the organizations included in this analysis, DSP tenure was variable: 18% of their DSPs had been employed 6-months or less, 16% had been employed for 6-12 months, 29% had been employed for 12-36 months, and 37% had been employed 36-months or longer. Over one-third (35%) were part-time status. Organizations were asked which supports (Residential, In-Home, and Non-Residential) their DSPs provided to individuals with IDD. Of the organizations who answered the question, 28% provided residential and/or in-home supports, 13% provided non-residential supports, and 59% provided both residential/in-home supports and non-residential supports.

Variables

Covariate Variables

State. There were 26 states and the District of Columbia that participated in the 2018 survey. In order to account for state variation, dummy codes were created for each state. Ohio was the referent group as it was the state with the largest sample.

Number of Service Types Provided. Each organization was asked if it provided: (1) residential supports, (2) in-home supports, and/or (3) non-residential supports. Residential and in-home supports were combined into residential supports. This variable was categorical: residential/in-home, non-residential, and both residential/in-home and non-residential. Dummy

codes were created for use in multivariate models. Providing both support types was the referent group as it was the largest.

DSP Staff Size. This was a single variable that asked the total number of DSPs on the organization's payroll as of December 31, 2018. On average, organizations had 106 DSPs (SD = 199 DSPs) on staff with a range of 1 to 2,285.

Percent Part-time DSPs. This was a single variable that represents the percent of DSPs on the organization's payroll who are part-time status. On average, 35% of DSPs (SD = 28%) were part-time with a range of 0% to 100%.

Vacancy rate. Vacancy rate represents the percentage of DSP positions that were vacant as of December 31, 2018 for all DSP positions. It was computed using the formula: the total number of vacant full-time DSP positions plus the total number of vacant part-time DSP positions divided by the total number of full-time DSP positions plus the total number of part-time DSP positions. This was multiplied by 100 to yield a percentage of DSP vacancy. The average DSP vacancy as of December 31, 2018 was 10% (SD = 12%) with a range of 0% to 78%.

Incentives Variables

Offer Paid Time Off. A single item asked if the organization provided any paid time off to DSPs supporting adults with IDD. If an answer of 'yes' was provided, a code of 1 'yes, offers paid time off' was assigned. If an answer of 'no' was provided, a code of 0 'no, does not offer paid time off' was assigned. This was the only variable related to Paid Time Off used in this analysis.

Offer Health Insurance. This was a single item asking if the organization offered some or all DSPs health insurance coverage. If an answer of 'yes' was provided, a code of 1 'yes,

offers health insurance coverage’ was assigned. If an answer of ‘no’ was provided, a code of 0 ‘no, does not offer health insurance coverage’ was assigned.

Offer Retirement Plan. A single item asked if the organization offered some or all DSPs an employer-sponsored retirement plan (401K, 403b, or other plan). If an answer of ‘yes’ was provided, a code of 1 ‘yes, offers retirement plan’ was assigned. If an answer of ‘no’ was provided, a code of 0 ‘no, does not offer retirement plan’ was assigned.

Offer Other Benefits. A single question with a check all that apply format asked about other benefits offered to some or all DSPs. The additional benefits included employer-sponsored disability insurance, and life insurance. Each of these was created as an individual variable. If an answer of ‘yes’ was provided, a code of 1 ‘yes, offers [the benefit]’ was assigned. If an answer of ‘no’ was provided, a code of 0 ‘no, does not offer [the benefit]’ was assigned.

Give Wage Bonuses. This was a single item asking if the organization gave DSPs wage bonuses. A wage bonus was defined as compensation that is supplemental to wages or salary usually given at intervals less often than payroll. If an answer of ‘yes’ was provided, a code of 1 ‘yes, gives wage bonuses’ was assigned. If an answer of ‘no’ was provided, a code of 0 ‘no, does not give wages bonuses’ was assigned.

Pay Incentives/Referral Bonus Programs. This was a single item asking if the organization had a pay incentive program or referral bonus program for current DSPs to bring in new employees. If an answer of ‘yes’ was provided, a code of 1 ‘yes, offers pay incentive program/referral bonus program’ was assigned. If an answer of ‘no’ was provided, a code of 0 ‘no, does not offer pay incentive program/referral bonus program’ was assigned.

Offer Other Incentives. A single question with a check all that apply format asked about other incentives offered to some or all DSPs. The additional incentives included reimbursement

or other support for post-secondary education, employer paid job-related training, flexible spending accounts, and health incentive programs (e.g., gym and/or yoga memberships, smoking cessation incentives, etc.). Each of these was created as an individual variable. If an answer of ‘yes’ was provided, a code of 1 ‘yes, offers [the incentive]’ was assigned. If an answer of ‘no’ was provided, a code of 0 ‘no, does not offer [the incentive]’ was assigned.

Compensation Variable

Wages. A single item asked the average wages for DSPs across all services and settings. The average DSP hourly wage was \$12.22 (SD = \$2.48) with a range of \$7.25 to \$29.90.

Outcome Variable

Annual DSP Turnover. Annual DSP turnover represents the percentage of DSPs who left their DSP position in the past year. It was computed using the formula: the number of DSPs who left their position for any reason in the calendar year divided by the total number of DSPs employed in 2018. This was multiplied by 100 to yield a percentage of DSP turnover. The average DSP turnover in 2018 was 46% (SD = 44%) with a range of 0% to 643%.

Analysis

Descriptive statistics, correlations, and a stepwise multivariate regression were computed using SPSS version 24 (IBM Corp, 2016). Descriptive statistics were produced from frequency distributions. Correlations were run to examine incentives to be included in multivariate models and to look for multicollinearity. Dental and vision insurance were highly correlated with health insurance ($r = 0.785$ and $r = 0.673$, respectively) as well as with each other (0.802) and were not included in the multivariate regression model. Stepwise multivariate regression was run to examine the relationship between DSP incentives, DSP wages, and annual DSP turnover after accounting for covariates, and specifically to look at the impact of wages over and above

incentives. State was entered as the first step, followed by covariates, benefits incentives, and wages. Other reports may indicate different frequencies or results due to issues of weighting (particularly, differences in sampling numbers vs. service users per state). Here, we report raw, unweighted numbers.

Results

Descriptive Statistics

The first question of interest was exploring what incentives were offered by organizations (See Table 1). Eighty percent of the organizations that participated in this survey offered paid time off (PTO). Sixty-nine percent of organizations offered health insurance coverage while 65% and 57% offered dental and vision coverage, respectively. Additionally, 30% employer-sponsored disability insurance, 55% life insurance, and 55% offered a retirement plan (401K, 403b, or other plan). Forty-four percent gave wage bonuses, and 45% offered pay incentive or referral bonus programs. Many organizations provided additional benefits to their DSPs. Twenty-one percent offered reimbursement or other support for post-secondary education (such as tuition assistance), 57% employer paid job-related training, 27% flex spending accounts, and 17% health incentive programs (gyms, yoga, smoking cessation incentives, etc.).

Insert Table 1

Multivariate Regression

The second question of interest was whether incentives were more important than wages in predicting annual DSP turnover. The NCI-SSS is the only instrument at the national level that includes these variables, and there is limited documentation of the relationship between DSP

incentives, including benefits, wages and turnover in the literature. Therefore, we wanted to look at many of the incentives the literature has identified as important. DSP hourly wages were \$12.22, on average, ranging from \$7.25 to \$29.90. The average annual DSP turnover was 46%. Organizations in the sample reported a turnover rate of 38% within DSPs who had been continuously employed less than 6-months, 21% employed between 6-12 months, 17% employed between 12-24 months, 8% employed between 24-36 months, and 16% employed 36 months or more. Of the DSPs who turned over in the last year, 72% left voluntarily, 22% were terminated, and for 6% the reason they left was unknown. These results reflect unweighted calculations.

Insert Table 2

As seen in Table 2, each step in the regression analysis added significant amount of variation explained for turnover ($R^2_{adj}=0.022$, $p<0.001$; $R^2_{adj}=0.083$, $p<0.001$; $R^2_{adj}=0.087$, $p=0.025$; $R^2_{adj}=0.101$, $p<0.001$). In relation to our research purposes, wages explained almost two times the variance than did incentives ($R^2_{adj}=0.087$ vs. $R^2_{adj}=0.101$). In fact, incentives contributed the least to explaining staff turnover from all blocks of variables ($R^2_{change.}=0.008$). Overall, the final model explained 10% of variance in turnover.

Insert Table 3

Table 3 shows three variables that were significantly related to DSP turnover. Vacancy rate ($p<0.001$), a covariate, was positively related to turnover. This means that as the vacancy

rate increases, so does the turnover rate. Only one of the incentive types was significantly related to DSP turnover, but in an opposite direction. Agencies offering pay incentives/referral bonus programs was significantly associated with higher turnover rates ($p=0.012$). With respect to compensation, lower DSP wages were significantly related to lower turnover ($p<0.001$). As DSP wages increase, turnover decreases. Based on the added smaller contribution to the overall model by the offering of incentives compared to the contribution of DSP wages, the lack of significant relationships between incentives and turnover (with the exception of pay incentives/referral bonus programs which was positively associated), and the significant negative relationship between DSP wages and turnover, the results indicated that wages are more important in retaining DSPs than the offering of the incentive types included in the analysis.

Discussion

The results of this study support existing literature indicating that it is wages, more than other factors, such as employer incentives, that predict staff retention, including in service fields (Andersen, 2009; Butler et al., 2014; Grissom et al., 2016; Guarino et al., 2006; Ruffini, 2020) and for direct support professionals (DSPs) in particular (Houseworth et al., 2020; Powers & Powers, 2010; Anderson-Hoyt et al., 2010). It is also important to note that higher vacancy rates at provider organizations further increased staff turnover rates.

One of the plausible reasons for this finding specifically in the field of the provisions of services and supports for people with IDD is the fact that the average hourly DSP wage in 2018 of \$12.26 per hour (National Core Indicators, 2019) falls below the federal poverty line for a family of four in the same year (Assistant Secretary for Planning and Evaluation, 2019). Moreover, DSP wages have not increased in over a decade when adjusting for inflation (Campbell, 2018). In addition, organizational vacancy rates tend to naturally increase with higher

staff turnover, which is directly related to staff likely to leave an organization because of low wages.

These low wages do not reflect the experience and expertise DSPs can be expected to develop as a result of their training and working with clients as would be expected in many other fields that value professionalism and human capital. There is, however, an additional discussion that relates to the opportunities and quality of training of DSPs. The lack of recognition of DSPs providing services for people with disabilities has been a persistent problem in the field. DSPs come from many different backgrounds, including college students, retirees, those looking for extra income already in a low-paying job, etc. As might be obvious from this list, people do not become DSPs to enter a career, even though some have stayed for a number years for other reasons (Hensel et al., 2015; Hewitt et al., 2018). There are generally few requirements to become a DSP beyond a high-school diploma, a drivers' license, and passing a background check (Marquand & Chapman, 2014). This lack of recognition of the direct support workforce indicated by low wages and lack of professional status are clear indicators of under-appreciation of the human capital of the direct support workforce. The theory of human capital posits that people possess skills, experience and knowledge, and therefore have economic value to organizations through increased productivity (Ramlall, 2004). According to this theory, some workforces tend to be more productive than others as a result of more resources invested into the training of that particular workforce (Ramlall, 2004). Until the government or organizations recognize DSPs as their human capital, it is highly unlikely that they will invest into DSP wages to reflect their added value to the agency.

Under the current situation of a lack of recognition of DSPs and their work as reflected in their sub-standards wages, the purpose of this study was to investigate whether incentives DSPs

receive as part of their job have a positive impact on their job retention. The incentives reported to be offered most frequently by responding provider organizations included paid time off (PTO, paid sick leave, and/or paid vacation), health insurance, and dental insurance. The results clearly indicated that the incentives examined in this study did not make significant positive impact on DSP job retention. On the contrary, agencies that offered pay incentives/referral bonus programs were significantly associated with higher turnover rates. While this finding is counter intuitive, there are several potential explanations. The incentives included in our investigation are limited to the variables collected via the NCI Staff Stability survey that can be, according to Kashyap & Verma (2018), classified as merely economic, i.e., those related to some form of financial benefit. The survey omits incentives that Kashyap & Verma (2018) called psychological (i.e., diversity of tasks, good work relations) and functional (i.e., professional development, application of skills). The reason that benefits and incentives examined in this study do not make a significant contribution to DSP retention may not necessarily be only due to the fact that benefits and incentives as a whole are unimportant to DSPs, but rather that the specific economic incentives included in the NCI Staff Stability survey do not lead to an increased retention of DSPs.

Another hypothesis for our finding a lack of positive relationship between incentives and staff retention is related to the actual implementation of these incentives programs. In the same way as there is diversity in ways organizations provide services (e.g., type of services, intensity, and delivery), there may be diversity in implementing incentives programs. Consequently, one of the reasons for seeing a reverse or lack of relationship between provider incentives and DSP retention may be due to the differences in how incentives are implemented in organizations, including making staff aware of the program and encouraging them to participate, the extent to

which staff are involved providing input into what incentive are offered, etc. Specifically regarding health insurance, cost may be a barrier to some employers decreasing the number of DSPs actually having access to the benefit. In state studies of health insurance costs, these have varied greatly from organization to organization (Pettingell et al., 2019; Kramme et al., 2019). Some organizations subsidize the employee portion of these costs for DSPs to access the programs, while others do not. Such factors related to compensation may make access to such benefits more desirable to DSPs in some organizations and not in others.

Wieck et al. (2009) found that in order for incentives to positively impact staff retention, they have to reflect staff preferences. The NCI Staff Stability survey does not collect information about staff preferences for their benefits within their agency. Similar to the person-centered approaches utilized when designing a service plan for a person with a disability, it is important to find out the preferences of staff for their work incentives for a better buy-in. This missing information in the survey on whether staff had any input in what incentives the organization provides may have also contributed to the findings of this study indicating that the economic benefits reflected in the NCI Staff Stability survey do not increase DSP retention.

The results of this study also confirmed existing information on incentives and wages varying considerably across states as well as between providers within a state. The state location and characteristics (e.g., cost of living, unemployment rates, etc.) of the organization for which the DSPs worked made a significant impact on their DSP retention. This impact, however, was not as sizeable as the wages that the DSPs were making. When interpreting results across states and regions, it is therefore critical to consider large-scales differences as well as differences between individual organizations.

Conclusion and Future Direction

This study utilized data from the NCI Staff Stability survey from 2018 to find out whether employer incentives had a positive impact on DSPs retention. The types of incentives included in this survey were limited to economic incentives and the survey did not provide information on the preference of staff for a certain type of incentives or on the differences in incentive program implementation. In future research, it is important to expand the menu of incentives investigated to also include incentives that are functional and psychological and to utilize the findings by Wieck et al. (2009), who found that incentives can make a positive impact on job retention provided the following are in place: 1. Menu of incentive choices from which every employee can select; 2. Benefit packages are flexible and transparent; 3. Keeping up to date with what type of benefits staff prefer; and 4. Paying attention to generational differences in benefit preferences. State, region and organization differences need to be taken into consideration when examining the impact of incentives on staff outcomes.

Limitations

Not all states participated in the 2018 NCI Staff Stability Survey and some had small sample sizes. It is unclear as to the degree to which providers are actually providing health insurance for their DSP staff. The NCI Staff Stability Survey 2018 asks the number of full- and part-time DSPs enrolled; however, only those organizations that are able to break their DSPs into full- and part-time are asked the question. The study used a correlational cross-sectional analysis and does not allow for causal claims. The effect changes in these factors over time have on staff stability is unknown. In addition, the NCI Staff Stability survey includes only a limited number of employer incentive types, and leaves out many incentives that have been found in the literature to positively impact retention.

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Table 1. Description of Sample (N=2,608)

Benefits	% Yes	% No
Any Type of Paid Time Off	80	20
Health Insurance	69	31
Dental Insurance	65	35
Vision Insurance	57	43
Employer-sponsored Disability Insurance	30	70
Life Insurance	55	45
Retirement Plan	55	45
Incentives	% Yes	% No
Wage Bonus Given	44	56
Pay Incentives/Referral Bonus Programs	45	55
Reimbursement/Other Support for Post-secondary Education	21	79
Employer Paid Job-related Training	57	43
Flex Spending Accounts	27	73
Health Incentive Programs	17	83

Table 2. Multivariate Regression Model Summary (N=2,608)

Model	Adjusted R ²	R ² Change	F-Change	p-value
State	0.022	0.031	3.23	<0.001
State and Covariates	0.083	0.062	35.50	<0.001
State, Covariates, and Benefits & Incentives	0.087	0.008	2.00	0.025
State, Covariates, Benefits & Incentives, and Wages	0.101	0.015	42.19	<0.001

Note: Model 1: F(26, 2581) = 3.23; Model 2: F(5, 2576) = 35.50; Model 3: F(11, 2565) = 2.00; Model 4: F(1, 2564) = 42.19

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Table 3. Multivariate Regression Coefficients Summary for Final Model (N=2,608)

Variables	B	SE	Standardized Beta Coefficient	t	95% CI		p
					Lower Bound	Upper Bound	
Covariates							
Residential/In-Home Supports	2.572	2.136	0.026	1.204	-1.616	6.760	0.229
Non-Residential Support Residential/In-Home & Non- Residential Supports (Referent)	-0.495	2.782	-0.004	-0.178	-5.950	4.960	0.859
DSP Staff Size	0.002	0.005	0.010	0.423	-0.007	0.011	0.643
Percent Part-time DSPs	-0.022	0.031	-0.014	-0.694	-0.084	0.040	0.488
Vacancy Rate	0.841	0.076	0.220	11.099	0.693	0.990	<0.001
Benefits and Incentives							
Any Type of Paid Time Off	0.985	2.616	0.009	0.377	-4.145	6.115	0.707
Health Insurance	2.836	2.635	0.030	1.077	-2.330	8.003	0.282
Employer-sponsored Disability Insurance	-3.937	2.188	-0.041	-1.799	-8.228	0.354	0.072
Life Insurance	1.134	2.491	0.013	0.455	-3.751	6.019	0.649
Retirement Plan	1.130	2.314	0.013	0.489	-3.407	5.667	0.625
Wage Bonus Given	-2.507	1.743	-0.028	-1.439	-5.925	0.910	0.150
Pay Incentives/Referral Bonus Programs	4.785	1.894	0.054	2.526	1.071	8.499	0.012

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Reimbursement/Other Support for Post-secondary Education	-3.949	2.442	-0.036	-1.617	-8.739	0.840	0.106
Employer Paid Job-related Training	-1.471	1.748	-0.017	-0.842	-4.898	1.956	0.400
Flex Spending Accounts	-1.311	2.393	-013	-0.548	-6.004	3.382	0.584
Health Incentive Programs	0.355	2.529	0.003	0.141	-4.604	5.315	0.888
Compensation							
DSP Wages	-2.892	0.445	-0.163	-6.496	-3.766	-2.019	<0.001
Constant	70.500	5.983		11.783			