

**The Impact of Ongoing Staff Development on the Health and
Safety of People with Intellectual and Developmental Disabilities**

Journal of Developmental and Physical Disabilities

Carli Friedman
CQL | The Council on Quality and Leadership
cfriedman@thecouncil.org
100 West Road Suite 300
Towson, MD, 21204 USA
ORCID: 0000-0002-7150-4041

Acknowledgments:

Thank you to the state developmental disabilities department for their willingness to collaborate. Thank you to Mary Kay Rizzolo for reviewing this manuscript and providing feedback.

Conflict of Interest:

The author declares that they have no conflict of interest.

Citation:

Friedman, C. (2020). The impact of ongoing staff development on the health and safety of people with intellectual and developmental disabilities. *Journal of Developmental and Physical Disabilities*. Advance online publication. doi: 10.1007/s10882-020-09743-z

This is a post-peer-review, pre-copyedit version of an article published in Journal of Developmental and Physical Disabilities. The final authenticated version is available online at: <http://dx.doi.org/10.1007/s10882-020-09743-z>.

Abstract

Direct support professionals (DSPs) provide people with intellectual and developmental disabilities (IDD) with individualized, personal assistance in a wide variety of settings. There is currently a very high turnover for DSPs, due in part to a lack of training for DSPs. The aim of this study is to explore how ongoing staff development impacts the health and safety of people with IDD. Our research question was: how does ongoing staff development, geographic location, and agency size impact the health and safety of people with IDD? To explore this research question, we analyzed data from 74 human service organizations which supported 8,264 people with IDD, particularly examining the relationship between ongoing staff development from the Basic Assurances[®] and health and safety data regarding abuse and neglect, emergency room visits, and injuries. Our findings revealed that by simply offering ongoing staff development, human service agencies can potentially radically improve their service provision, and by extension the health, safety, and human security of the people with IDD they support. Ongoing staff development is an investment not only in the quality of services and supports DSPs provide to people with IDD, but also DSPs themselves.

Keywords: Staff development, direct support professionals, continuing education, abuse and neglect, emergency room, injuries

The Impact of Ongoing Staff Development on the Health and Safety of People with Intellectual and Developmental Disabilities

Direct support professionals (DSPs), often also called personal care assistants, direct support workers, or many other names, provide people with intellectual and developmental disabilities (IDD) with individualized, personal assistance in a wide variety of settings, such as individual homes, group homes, institutions, and employment settings. As of 2011, there were more than four-million DSPs in the United States, one-quarter of which were supporting people with IDD (National Direct Service Workforce Resource Center 2013; Taylor 2008). DSPs participate in a wide range of support activities, such as assistance with personal care, communication, health and safety, relationships, community integration, self-determination, financial duties, household tasks, and transportation (National Direct Service Workforce Resource Center n.d.; Hasan 2013; Robbins et al. 2013). As such, they not only participate in labor intensive work, they are also required to balance a complex set of competencies (National Direct Service Workforce Resource Center 2013). Despite the numerous competencies they must juggle, and the fact that direct support is one of the fastest growing sectors of the labor force, DSPs are still some of the most vulnerable workers in the country (Bogenschutz et al. 2014; Robbins et al. 2013; Micke 2015; Keesler 2016; Hewitt 2014; American Network of Community Options and Resources 2014).

Human service organizations typically see 30-70% turnover in DSPs *annually* (Bogenschutz et al. 2014; Taylor 2008). DSP turnover is often referred to as the ‘workforce crisis’ despite having existed for decades, not because it is a new issue, but because in addition to its negative impact on DSPs themselves, it directly puts in peril the community integration and quality of life of people with IDD.

There are a number of factors which contribute to the DSP workforce crisis, one of the most prominent being DSP wages (Firmin et al. 2013; Hasan 2013; Micke 2015; Wolf-Branigin et al. 2007; Bogenschutz et al. 2014). Not only have DSP wages remained extremely low – close to the federal minimum wage – they have not kept up with inflation (Edelstein and Seavey 2009; Hasan 2013; Wachino 2016). Not only do low reimbursement rates leave many human service organizations competing with the fast food industry for employees, many agencies are also not able to provide DSPs with benefits such as paid leave or healthcare (Raustiala et al. 2015; Hewitt et al. 2008; Bogenschutz et al. 2014).

In addition to low wages, a lack of training also contributes to the workforce crisis (Hewitt 2014; National Direct Service Workforce Resource Center 2013; Hasan 2013). In fact, DSPs who provide the most support often have the fewest qualifications (Hewitt 2014). To be a DSP, the federal government only requires people have a high school diploma (or equivalent), pass a criminal background check with no felonies, and have a driver's license (Hewitt 2014; Wachino 2016). While states may have additional standards, most states do not provide guidance regarding training, which not only results in agencies having to figure out their own training curricula and protocols, but also results in a lack of consistency across agencies and states (National Direct Service Workforce Resource Center 2013).

A lack of training and preparation directly impacts the lives of people with IDD. For example, one of the leading reasons people with disabilities are kept at home is a fear that staff are not prepared to mitigate risks (Britton Laws et al. 2014). Training can not only increase the quality of the services and supports DSPs provide, but may also lead to higher job satisfaction because DSPs have more self-efficacy and feel more in control (National Direct Service Workforce Resource Center 2013; Ejaz et al. 2008; Britton Laws et al. 2014). In addition to

increased confidence and self-efficacy, extended training of DSPs can also provide a pathway for professional growth and advancement opportunities as benefits and wages typically increase when jobs require more qualifications (National Direct Service Workforce Resource Center 2013; Britton Laws et al. 2014; Firmin et al. 2013). For example, when Wyoming placed more emphasis on staff training and career development, they found not only increased staff wages but also decreased staff turnover (Lynch et al. 2005).

Not only are DSPs the “backbone” of long term services and supports (LTSS) for people with IDD in the United States (Bogenschutz et al. 2014), “a competent and stable workforce is a quality indicator in the lives of people with IDD” (McLaughlin et al. 2015). As such, the aim of this study is to explore how ongoing staff development impacts the health and safety of people with IDD. In terms of health and safety, people with IDD are more at risk for abuse and neglect than people with other disabilities, and nondisabled people (Baladerian et al. 2013). Risk factors for abuse include societal attitudes towards disability, exposure to multiple caregivers, more complex needs, and communication difficulties (Fisher et al. 2016). Risk factors for increased injuries, including falls, include people with IDD having seizure disorders, more significant impairments, living in congregate care settings, being older, and polypharmacy (Finlayson et al. 2010; Hsieh et al. 2012; Chiba et al. 2009). In addition, correlates of emergency room utilization for people with IDD include age, multiple chronic health conditions, psychiatric disabilities, cerebral palsy, neurological disabilities, and polypharmacy (Blaskowitz et al. 2019). Yet, less is known about the role can play in causing or circumventing emergency room utilization, abuse and neglect, and injuries. Therefore, our research question was: how does ongoing staff development, geographic location, and agency size impact the health and safety of people with IDD? To explore this research question, we analyzed data from 74 human service organizations

which supported 8,264 people with IDD, particularly examining the relationship between ongoing staff development from the Basic Assurances[®], an organizational assessment for human service providers, and health and safety data regarding abuse and neglect, emergency room visits, and injuries.

Methods

Data

This was a secondary data analysis; the data were originally collected from a single state's developmental disabilities department. The data were from human service organizations who provided services to people with IDD which received the state developmental disabilities department's service programs. Prior to the state developmental disability department transferring the data to the research team, all personal identifiers were removed from the data, and the data were coded with identifiers.

In total, the secondary dataset included 74 human service organizations that supported 8,264 unduplicated people with IDD annually. The majority of organizations (52.70%) were located in both urban and rural areas, with fewer organizations serving in only rural (22.9%) or urban (24.32%) areas (see Table 1). The majority of organizations were a medium agency size (51 to 400 people supported annually; 54.05%), while 41.89% were a small agency (1 to 50 people), and 4.05% were a large agency (401+ people). The organizations in the sample provided a range of different types of services (see Table 1).

Variables

The following variables served as dependent variables (DVs): incidents of abuse and neglect; emergency room visits; and, injuries. Incidents of abuse and neglect included every single allegation of abuse, neglect, and exploitation, both physical and emotional, regardless of

whether they were substantiated or not. Emergency room visits was comprised of every single time a person in the sample visited an emergency room, regardless of the type of incident or severity. Injuries included every single time a person was injured, regardless of the severity of the injury; examples include burns, lacerations, loss of consciousness, fractures, and so on. Each of the DVs were comprised of three years of data: 2016 through 2018. Since some agencies did not operate in all years, we utilized the average number of events across the years for each DV. In addition, each of the DVs was converted into a rate per person supported to address issues of collinearity. For example, the emergency room visit rate was the number of emergency room visits per person supported per year.

This study had three independent variables (IVs): ongoing staff development; geographic location of the agency; and, agency size. Data regarding ongoing staff development came from the Basic Assurances[®] assessment. The Basic Assurances[®] is an organizational assessment that ensures health, safety and human security of human service organizations – they are non-negotiable requirements for service and support providers; “while the Basic Assurances[®] contain requirements for certain systems and policies and procedures, the effectiveness of the system or the policy is determined in practice, person by person” (The Council on Quality and Leadership 2015). The Basic Assurances[®] assessment contain 10 factors: (1.) Rights Protection and Promotion; (2.) Dignity and Respect; (3.) Natural Support Networks; (4.) Protection from Abuse, Neglect, Mistreatment and Exploitation; (5.) Best Possible Health (6.) Safe Environments; (7.) Staff Resources and Supports; (8.) Positive Services and Supports; (9.) Continuity and Personal Security; and, (10.) Basic Assurances[®] System. Underneath the 10 factors are 46 different sub-topics, called indicators.

To determine if factors and indicators within each of the ten Basic Assurances[®] factors are present in both systems and practices, expert reviewers collect a number of data points from multiple sources including focus groups with people with IDD and direct support professional staff, interviews with organizational leadership and people with IDD, data and record reviews, reviews of organizational policies and regulations, and observations of a variety of the agency's settings. All of these data are then utilized to complete decision trees to determine if the indicators and factors are present or not. The expert reviewers typically work in teams of two or three; all decisions are made as a team utilizing interrater reliability.

Factor seven in the Basic Assurances[®] – Staff Resources and Supports – explores how agency staff are trained and treated. More specifically, there is a section that examines if, and how, the organization implements an ongoing staff development program. For the “organization implements an ongoing staff development program” practices to be considered in place, the Basic Assurances[®] examines the following:

- “Does the organization orient new employees to its philosophy, vision, mission, beliefs, goals, organization, programs and practices?”
- Does the initial orientation and future training for employment advancement ensure effective, efficient and competent job performance?
- Are opportunities available for continuing education in best practices within and outside of the organization?
- Does the organization implement an ongoing in-service training program to maintain, update and improve staff competency?
- Is the staff training program developed based on input from support staff, input from people supported, and the results of internal and external findings?

- Is training based on adult learning theory? Does it include mentoring, on the job support and personal development planning?” (The Council on Quality and Leadership 2015)

Utilizing the data collected and these questions, the expert review teams determines if “the organization implements an ongoing staff development program” practices are to be considered in place (yes (1)) or not (no (0)). In our sample, 71.8% of agencies ($n = 51$) had ongoing staff development programs in place, whereas 28.2% of agencies in the sample did not ($n = 20$).

Another IV in this study was geographic location of the agency. Geographic location included an agency being located in rural settings, urban settings, or both rural and urban settings. Geographic location was utilized as an IV because disability service agencies in different settings (i.e., rural versus urban) have been noted for having differences in access to resources, infrastructure, and opportunities (Friedman 2020). For example, agencies in rural and urban settings may have different levels of funding or have a different workforce pool to hire from in terms of not only scope but also characteristics.

In addition, research suggests agency size can impact an organization’s ability to provide services (Carr and Louis 2019). For example, agencies with increased size are often able to take more risks than smaller niche agencies. As such, there may be an association between if, and how, agencies train and treat their support staff based on their size. For this reason, the size of the agency was used as an IV in this study. As a proxy for the size of the agency, we utilized the number of people with IDD served, which fell into the following categories (K. Dunbar, personal communication, October 2, 2019): small (1 to 50 people supported); medium (51 to 400 people supported); and large (401+ people supported). However, because only three agencies fell into the large agency category, they were removed from the sample as they would violate assumptions for the analyses. Therefore, only small and medium agencies were compared.

Analyses

Data were first analyzed using descriptive statistics. Then to explore the research question, we conducted a multivariate analysis of variance (MANOVA) to determine significant differences between ongoing staff development (no, yes), geographic location (urban, rural, both urban and rural), and agency size (small, medium) – our IVs – on the three health and safety outcomes (DVs): incidents of abuse and neglect; emergency room visits; and, injuries. We utilized Pillai's Trace instead of Wilks' Lambda because of unequal cell size and failed homogeneity of variance-covariance. Following the MANOVA, we conducted analyses of variance (ANOVAs) for each of the DVs as follow-up tests. Finally, when applicable, we conducted post hoc analyses using Tukey's HSD to compare ongoing staff development on the univariate ANOVAs for each significant health and safety variable.

Results

Agencies in our sample had an average of 0.19 incidents of abuse and neglect per person supported per year ($SD = 0.21$). Incidents of abuse and neglect per person per year ranged from 0.01 to 0.98 per agency. Agencies had an average of 0.75 emergency room visits per person supported per year ($SD = 0.56$), ranging from 0.001 to 3.21. Agencies had an average of 0.35 injuries per person supported per year ($SD = 0.30$), ranging from 0.005 to 1.54.

We conducted a 2 x 3 x 2 MANOVA to determine the effect of ongoing staff development, geographic location, and agency size on the three outcomes (DVs): abuse and neglect; emergency room visits; and, injuries. There were significant main effects for ongoing staff development, $F(3, 50) = 9.28, p < 0.001$, Pillai's trace = 0.36, partial $\eta^2 = 0.36$, geographic location, $F(6, 102) = 6.13, p < 0.001$, Pillai's trace = 0.53, partial $\eta^2 = 0.27$, and agency size, $F(3, 50) = 10.92, p < 0.001$, Pillai's trace = 0.40, partial $\eta^2 = 0.40$. There were also significant

two-way interaction effects between ongoing staff development and geographic location, $F(6, 102) = 4.34, p < 0.001$, Pillai's trace = 0.41, partial $\eta^2 = 0.20$, between ongoing staff development and agency size, $F(3, 50) = 4.69, p = 0.006$, Pillai's trace = 0.22, partial $\eta^2 = 0.22$, and between geographic location and agency size, $F(6, 102) = 3.67, p = 0.002$, Pillai's trace = 0.36, partial $\eta^2 = 0.18$. Finally, there was a significant three-way interaction effect between ongoing staff development, geographic location, and agency size, $F(3, 50) = 6.45, p < 0.001$, Pillai's trace = 0.28, partial $\eta^2 = 0.28$.

We conducted ANOVAs of the three-way interaction (ongoing staff development X geographic location X agency size) on the DVs as a follow up test for the MANOVA using the Bonferroni method (.017). The following ANOVA was significant with the interaction term: abuse and neglect, $F(1, 52) = 10.05, p = 0.003$, partial $\eta^2 = 0.16$. We calculated post hoc analyses for the interaction term on abuse and neglect using pairwise comparisons using Sidak correction (Figure 1). Of small agencies located in both urban and rural areas, those which had ongoing staff development had significantly fewer instances of abuse and neglect than those small agencies in urban and rural areas without ongoing staff development ($p < 0.001$). Medium agencies located in urban areas which had ongoing staff developmental also had significantly fewer instances of abuse and neglect than those medium agencies in urban areas without ongoing staff development ($p = 0.006$).

We conducted ANOVAs of the two-way interaction (ongoing staff development X geographic location) on the DVs as a follow up test for the MANOVA using the Bonferroni method (.017). The following ANOVA was significant with the interaction term: injuries, $F(2, 52) = 7.98, p = 0.001$, partial $\eta^2 = 0.25$. We calculated post hoc analyses for the interaction term on injuries using pairwise comparisons using Sidak correction (Figure 2). Agencies located in

both rural and urban areas which had ongoing staff development had significantly fewer injuries than agencies in both rural and urban locations that did not have ongoing staff development ($p = 0.012$). In addition, agencies located in urban settings which had ongoing staff development had significantly fewer injuries than agencies without ongoing staff development located in urban settings ($p < 0.001$).

We conducted ANOVAs of the two-way interaction (ongoing staff development X agency size) on the DVs as a follow up test for the MANOVA using the Bonferroni method (.017). The following ANOVA was significant with the interaction term: injuries, $F(1, 52) = 6.59$, $p = 0.013$, partial $\eta^2 = 0.11$. Small agencies with ongoing staff development had significantly fewer injuries than small agencies without ongoing staff development ($p < 0.001$; Figure 3). Medium agencies with ongoing staff development also had significantly fewer injuries than medium agencies without ongoing staff development ($p = 0.009$).

There were no significant ANOVAs for the interaction between geographic location and agency size using the Bonferroni method (.017).

We also conducted ANOVAs on the dependent variables as follow up tests to the MANOVA for the significant main effects for ongoing staff development. Using the Bonferroni method, we tested each ANOVA at the 0.017 level. The following ANOVAs were significant with ongoing staff development: abuse and neglect, $F(1, 52) = 15.07$, $p < 0.001$, partial $\eta^2 = 0.23$; emergency room visits, $F(1, 52) = 9.66$, $p = 0.003$, partial $\eta^2 = 0.16$; and, injuries, $F(1, 52) = 24.73$, $p < .001$, partial $\eta^2 = 0.32$. Controlling for geographic location and agency size, when agencies had ongoing staff development, they had significant fewer incidents of abuse and neglect. When agencies had ongoing staff development, they had an average of 0.16 incidents of abuse and neglect per person supported per year; whereas agencies without ongoing staff

development had an average of 0.42 incidents of abuse and neglect per person supported per year (Figure 4). Controlling for geographic location and agency size, agencies with ongoing staff development also had significantly fewer emergency room visits than agencies without ongoing staff development. Controlling for geographic location and agency size, if agencies did not have ongoing staff development, they had an average of 1.13 emergency room visits per person supported per year, whereas agencies with ongoing staff development had 0.68 emergency room visits per person per year. Agencies with ongoing staff development also had significantly fewer injuries than agencies without ongoing staff development. Controlling for geographic location and agency size, when agencies had ongoing staff development, they had an average of 0.30 injuries per person supported per year; whereas agencies without ongoing staff development had an average of 0.77 incidents of abuse and neglect per person supported per year.

We also conducted ANOVAs on the dependent variables as follow up tests to the MANOVA for the significant main effects for geographic location. Using the Bonferroni method, we tested each ANOVA at the 0.017 level. The following ANOVAs were significant with geographic location: injuries, $F(1, 52) = 11.30, p < 0.001$, partial $\eta^2 = 0.30$. We calculated post hoc analyses to the univariate ANOVA for each factor using pairwise comparisons at the 0.0014 level (Bonferroni correction). Controlling for ongoing staff development and agency size, agencies in rural settings had significantly fewer injuries per person supported per year (0.26) than agencies in urban settings (0.77; $p < 0.001$; Figure 5).

We also conducted ANOVAs on the dependent variables as follow up tests to the MANOVA for the significant main effects for agency size. Using the Bonferroni method, we tested each ANOVA at the 0.017 level. The following ANOVAs were significant with agency size: injuries, $F(1, 52) = 9.99, p = 0.003$, partial $\eta^2 = 0.16$. Controlling for ongoing staff

development and geographic location, smaller agencies had more injuries per person supported per year (0.61) than medium agencies (0.40; Figure 6).

Discussion

DSPs, and the services and supports they provide, directly impact the rights, community integration, and choices of the people with IDD they support (Friedman 2020, 2018). For this reason, the aim of this study was to explore the impact ongoing staff development can have on the health and safety of people with IDD. To do so, we explored the relationship between agencies implementing ongoing staff development and the number of incidents of abuse and neglect, emergency room visits, and injuries amongst people with IDD. Our findings revealed that by simply offering ongoing staff development, agencies can potentially radically improve their service provision, and by extension the health, safety, and human security of the people with IDD they support.

Findings from this study suggest that when agencies implement ongoing staff development, there can be a significant reduction in instances of abuse and neglect amongst the people with IDD they support. In our study, agencies that implemented ongoing staff development had lower instances of abuse and neglect (61% lower). Our findings also revealed ongoing staff development may be particularly beneficial for small sized agencies in urban and rural settings, and medium sized agencies in urban settings. The reduction in abuse and neglect of people with IDD is especially pertinent as people with IDD are significantly more likely to be victims of abuse, neglect, mistreatment, and exploitation than both nondisabled people and people with other disabilities (Baladerian et al. 2013). For example, an exposé by Shapiro (2018) revealed people with IDD are seven times more likely to be victims of sexual assault than nondisabled people. In addition, the U.S. Department of Health and Human Services (HHS),

Office of Inspector General, Administration on Community Living, and Office for Civil Rights (2018) have concluded that people with IDD face a serious risk of harm due to the plethora of abuse and neglect they face.

Our findings suggest implementing ongoing staff development may be one such mechanism to help reduce the abuse and neglect of people with IDD. It may also be that the increased staff competences associated with ongoing development mean DSPs are better at recognizing abuse and neglect and are able to stop it from continuing, or they are better at recognizing risk factors and/or preventing it from happening in the first place. It may be that staff that are more well-trained and competent are less likely to neglect the people they support. It may also be that as a result of better trained staff, people with IDD are more satisfied and participate in fewer harmful behaviors themselves, such as injuring or abusing their housemates or roommates (Friedman 2020). More research is needed to explore the relationship between staff development and reductions in abuse and neglect, as well as the mediating factors involved.

In addition, our findings suggest a relationship between ongoing staff development and a reduction in injuries amongst people with IDD. In fact, agencies that had ongoing staff development had lower instances of injuries compared to those agencies without going staff development (62% lower). We theorize that these findings are likely due better care associated with increased competencies, efficiencies, and efficacies all associated with increased training. In addition, staff with more training, as well as training on more current best practices, may be less likely to participate in behaviors that could result in injuries in the people they support.

While both small- and medium-sized agencies saw decreases in injuries, small agencies had a more drastic decrease, likely because they also had more injuries to begin with on average. In addition, agencies located in urban settings, and those located in both urban and rural settings

saw significant decreases in injuries, especially urban settings which had more injuries overall. More research is needed to explore if there are differences in staff development depending on agency size and geographic location. Perhaps smaller agencies, because of reduced funds, smaller staff, and reduced infrastructures, cannot devote as many resources or as much time to ongoing staff development than medium agencies can. Geographic spread may also impact if, and how, agencies are able to implement ongoing staff training.

In our study, agencies that had ongoing staff development had lower instances of emergency room visits (40% lower) compared to those agencies without ongoing staff development. We believe that increased training is likely associated with DSPs providing better care. In addition, staff may not only offer better preventative care, but also recognize illnesses prior to them escalating to the need for emergency services. While a reduction in emergency room visits not only reflects increased health and safety amongst people with IDD, it also represents a potential for costs savings. In healthcare more broadly, emergency room visits and hospitalizations are a leading cause of expenditures; as such, a reduction in emergency room visits may also lead to reduced costs (Blaskowitz et al. 2019; Centers for Medicare and Medicaid n.d.). The cost-savings associated with a reduction in emergency room visits could then be reinvested into the DSP workforce, such as strengthened training opportunities and increased wages, as well as strengthened community infrastructures for people with IDD.

Implications for Policy and Practice

According to the Basic Assurances[®], quality organizations are tasked with “determin[ing] the individual support needs of each person. To meet those needs, the organization [should] provide whatever staff resources are necessary to ensure appropriate supports and continuity of service” (The Council on Quality and Leadership 2015). As such, human service organizations

should “orient, train and monitor staff in the provision of person-centered and individualized services and supports” (The Council on Quality and Leadership 2015). Findings from this study suggest that by implementing ongoing staff development programs, human service agencies can increase the health and safety of the people with IDD they support. In addition, research suggests increased training can result in decreased DSP turnover, which can also positively impact the health, safety, and quality of life of people with IDD (Hasan 2013; Britton Laws et al. 2014; Hewitt and Larson 2007; Keesler 2016; Taylor 2008; Friedman 2018). Currently, there is a general lack of state training guidelines; as a result, training can not only differ between states, but also across different agencies (National Direct Service Workforce Resource Center 2013; Hasan 2013). These gaps in training guidelines can hinder the quality of supports DSPs provide (National Direct Service Workforce Resource Center 2013; Hasan 2013). Increased training can increase the self-efficacy of DSPs, and it can also help promote professional growth and advancement opportunities (Hasan 2013; Britton Laws et al. 2014; Hewitt and Larson 2007; Keesler 2016; Taylor 2008; National Direct Service Workforce Resource Center 2013; Firmin et al. 2013).

In addition to the training staff receive during onboarding, our findings suggest staff benefit from continuous and *ongoing* staff training and development. Ongoing staff development programs should not only orient new employees to the agencies’ values and their programs and practices, staff should have ongoing opportunities for training in order to maintain, update, and improve their competencies to ensure effective and efficient job performance. Staff should be provided with continuing education opportunities regarding best practices, both within and outside of the organization. In addition, staff development programs should not only be based on

adult learning theory and based on feedback from support staff and people with IDD supported, it should also include mentoring, personal development planning, and on the job support.

We would also be amiss if we did not draw attention to the need to increase DSP wages, particularly if we are to require more training and higher qualifications. States cannot continue providing near poverty reimbursement rates for DSP wages. Doing so not only leads to increased DSP turnover, it also hinders the community infrastructure. The Centers for Medicaid and Medicare Services (CMS) note it is critical states “also consider [in their reimbursement methodologies] business costs incurred by a provider – whether a home care agency or an individually employed worker – associated with the recruitment, skills training, and retention of qualified workers” (Wachino 2016). As low and inadequate wages are one of the leading reasons for DSP turnover (Firmin et al. 2013; Hasan 2013; Hewitt et al. 2008; Micke 2015; Taylor 2008; Wolf-Branigin et al. 2007; Bogenschutz et al. 2014; Robbins et al. 2013), increased wages will not only help increase continuity of people with IDD’s services, but could also, because of increased tenure, help ensure the majority of DSPs have adequate training.

In addition, increased training and increased wages of DSPs are important steps towards the professionalization of the direct support workforce. The professionalization of the direct support workforce could not only improve DSPs’ lives but also the lives of the people with IDD they support (National Association for the Dually Diagnosed 2018; V. K. Smith et al. 2015; National Alliance for Direct Support Professionals 2013; Friedman In press). According to D. Smith et al. (2019), the professionalization of DSPs will result in wage stabilization, expanded tenure of DSPs as a result of a career ladder, and enhanced quality supports as a result of competency-based training.

In addition, as DSPs can play an important role in promoting the health and safety of people with IDD, in addition to ongoing staff development, it is important to reduce DSP burnout and stress. Research suggests one way to do so is by encouraging DSPs to participate in self-care (Keesler and Troxel 2019). In fact, by participating in self-care, DSPs not only have less burnout and secondary traumatic stress, self-care is “both preventative and restorative” (Keesler and Troxel 2019). In addition to developing an organizational culture that encourages self-care amongst employees, one such mechanism to encourage self-care amongst DSPs is to train people about self-care (Keesler and Troxel 2019). As such, we would suggest training on self-care should be one aspect that is incorporated into ongoing staff development.

Limitations

When interpreting the findings from our study, a number of limitations should be noted. The agencies in the sample represented one state. Furthermore, all data about the people with IDD the agencies support represented people receiving services from the state’s developmental disabilities department. In addition, since this was a secondary data analysis, we did not have the ability to add additional questions or variables. For example, ongoing staff development was a binary question – we did not have additional information about the specific training programs. In addition, there may be interactions at play which impacted these findings.

Conclusion

DSPs not only assist people with personal care, but also facilitate community integration and quality of life. While many DSPs receive inadequate training, our findings suggest, ongoing staff development can also help promote the health and safety of people with IDD. In particular, those agencies in our study that implemented ongoing staff development had fewer instances of abuse and neglect, emergency room visits, and injuries amongst the people with IDD they supported. As such, it should be recognized that ongoing staff development is an investment not

only in the quality of services and supports DSPs provide to people with IDD, but also DSPs themselves.

Compliance with Ethical Standards

Conflicts of Interest: The author declares that they have no conflicts of interest.

Funding: This study was not funded.

Ethical approval: This was a secondary data analysis of existing data. As such, [removed for review] Institutional Review Board granted an exemption from human subjects review. All applicable guidelines for the use of secondary data were followed.

Informed consent: Informed consent was obtained in the initial data collection from all individual participants included in the study.

References

- American Network of Community Options and Resources (2014). *Ensuring a sustainable work force for people with disabilities: Minimum wage increases can not leave direct support professionals behind*. Alexandria, VA: Author.
- Baladerian, N., Coleman, T. F., & Stream, J. (2013). Abuse of people with disabilities: Victims and their families speak out. A report on the 2012 national survey on abuse of people with disabilities. Palm Springs: Spectrum Institute.
- Blaskowitz, M. G., Hernandez, B., & Scott, P. W. (2019). Predictors of emergency room and hospital utilization among adults with intellectual and developmental disabilities (IDD). *Intellectual and Developmental Disabilities, 57*(2), 127-145, doi:10.1352/1934-9556-57.2.127.
- Bogenschutz, M. D., Hewitt, A., Nord, D., & Hepperlen, R. (2014). Direct support workforce supporting individuals with IDD: Current wages, benefits, and stability. *Intellectual and Developmental Disabilities, 52*(5), 317-329, doi:10.1352/1934-9556-52.5.317.
- Britton Laws, C., Kolomer, S. R., & Gallagher, M. J. (2014). Age of persons supported and factors predicting intended staff turnover: A comparative study. *Inclusion, 2*(4), 316-328, doi:10.1352/2326-6988-2.4.316.
- Carr, K., & Louis, R. (2019). *Thriving with managed care: An OPEN MINDS executive seminar on organizational competencies & best practices in health plan contract management*. Paper presented at the OPEN MINDS Performance Institute, Clearwater Beach, FL, Centers for Medicare and Medicaid (n.d.). Pay-for-performance rate methodologies in a HCBS FFS environment. <https://www.medicaid.gov/medicaid/hcbs/downloads/training/pay-for-performance.pdf>.

- Chiba, Y., Shimada, A., Yoshida, F., Keino, H., Hasegawa, M., Ikari, H., et al. (2009). Risk of fall for individuals with intellectual disability. *American journal on intellectual and developmental disabilities, 114*(4), 225-236, doi:10.1352/1944-7558-114.4:225-236.
- Edelstein, S., & Seavey, D. (2009). The need for monitoring the long-term care direct service workforce and recommendations for data collection. *Washington, DC: National Direct Service Workforce Resource Center.*
- Ejaz, F. K., Noelker, L. S., & Menne, H. L. (2008). The impact of stress and support on direct care workers' job satisfaction. *The Gerontologist, 48*(suppl 1), 60-70, doi:10.1093/geront/48.Supplement_1.60.
- Finlayson, J., Morrison, J., Jackson, A., Mantry, D., & Cooper, S. A. (2010). Injuries, falls and accidents among adults with intellectual disabilities. Prospective cohort study. *Journal of Intellectual Disability Research, 54*(11), 966-980, doi:10.1111/j.1365-2788.2010.01319.x.
- Firmin, M. W., Orient, K. M., Steiner, H., & Firmin, R. L. (2013). Factors affect the employment longevity of staff working with clients possessing intellectual disabilities. *International Journal of Business Anthropology, 4*(2), 54-65, doi:10.33423/ijba.v4i2.1150.
- Fisher, M., Corr, C., & Morin, L. (2016). Victimization of individuals with intellectual and developmental disabilities across the lifespan. In *International Review of Research in Developmental Disabilities* (Vol. 51, pp. 233-280). Amsterdam: Elsevier.
- Friedman, C. (2018). Direct support professionals and quality of life of people with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities, 56*(4), 234-250, doi:10.1352/1934-9556-56.5.234.

- Friedman, C. (2020). *Housing decision-making of people with intellectual and developmental disabilities and their families*. Washington, DC and Towson, MD: The Arc of the United States and CQL | The Council on Quality and Leadership.
- Friedman, C. (In press). Quality outcomes in managed care: Setting quality standards and expectations for service provision for people with intellectual and developmental disabilities. *Journal of Disability Policy Studies*.
- Hasan, S. (2013). *Will there be a direct support professional for me? Looking at what motivates DSPs (Unpublished Master's thesis)*. Humboldt State University, Arcata, California.
- Hewitt, A. (2014). Presidential address, 2014—Embracing complexity: Community inclusion, participation, and citizenship. *Intellectual and Developmental Disabilities, 52*(6), 475-495, doi:10.1352/1934-9556-52.6.475.
- Hewitt, A., & Larson, S. (2007). The direct support workforce in community supports to individuals with developmental disabilities: Issues, implications, and promising practices. *Mental Retardation and Developmental Disabilities Research Reviews, 13*(2), 178-187, doi:10.1002/mrdd.20151.
- Hewitt, A., Larson, S., Edelstein, S., Seavey, D., Hoge, M., & Morris, J. (2008). *A synthesis of direct service workforce demographics and challenges across intellectual/developmental disabilities, aging, physical disabilities, and behavioral health*. Minneapolis, MN: University of Minnesota, Institute on Community Integration, Research and Training Center on Community Living.
- Hsieh, K., Rimmer, J., & Heller, T. (2012). Prevalence of falls and risk factors in adults with intellectual disability. *American journal on intellectual and developmental disabilities, 117*(6), 442-454, doi:10.1352/1944-7558-117.6.442.

- Keesler, J. M. (2016). *An evaluation of individual and organizational factors in predicting professional quality of life among direct support professionals in intellectual/developmental disability services*. State University of New York at Buffalo, Buffalo.
- Keesler, J. M., & Troxel, J. (2019). They care for others, but what about themselves? Understanding selfcare among DSPs' and its relationship to professional quality of life. *Intellectual and Developmental Disabilities*, online ahead of print.
- Lynch, R., Fortune, J., Mikesell, C., & Walling, T. (2005). Wyoming demonstrates major improvements in retention by enhancing wages and training. *Links*, 35(9), 9-10.
- McLaughlin, C., Sedlezky, L., Belcher, H., Marquand, A., & Hewitt, A. (2015). Workforce: Goals for research and innovation. *Inclusion*, 3(4), 267-273, doi:10.1352/2326-6988-3.4.267.
- Micke, H. (2015). *Causes and solutions for high direct care staff turnover (Master of Social Work Clinical Research Paper)*. St. Catherine University & University of St. Thomas, St. Paul, MN.
- National Alliance for Direct Support Professionals. (2013). *Credentialing guidebook for direct support professionals*. Retrieved from https://www.nadsp.org/wp-content/uploads/2016/08/NADSP_Credentialing_Guidebook_FINAL_8.23.13.pdf
- National Association for the Dually Diagnosed (2018). The NADD accreditation and certification programs. <http://acp.thenadd.org/index.htm>
- National Direct Service Workforce Resource Center (2013). *Understanding your HCBS direct service workforce's strengths and preparing the workforce to serve all populations with*

- core competency training*. Paper presented at the National HCBS Conference, Arlington, VA,
- National Direct Service Workforce Resource Center (n.d.). Direct service worker background handout. Baltimore, MD: Author.
- Raustiala, M., Crosier, B., Drexelius, J. R. j., Schiff, W., Mayo, K., Golden, B., et al. (2015). *Supporting people with developmental disabilities: The impact of low wages and the minimum wage debate on the direct support professionals workforce*. New York: The Alliance of Long Island Agencies for Persons with Developmental Disabilities, Cerebral Palsy Association of New York State, Developmental Disabilities Alliance of WNY, Interagency council of developmental disabilities agencies inc., NYSACRA, NYSARC, and NYSRA.
- Robbins, E., Dilla, B., Sedlezky, L., & Johnson Sirek, A. (2013). Coverage of direct service workforce continuing education and training within medicaid policy and rate setting: A toolkit for state medicaid agencies. Washington, DC: National Direct Service Workforce Resource Center.
- Shapiro, J. (2018). The sexual assault epidemic no one talks about.
<https://www.npr.org/2018/01/08/570224090/the-sexual-assault-epidemic-no-one-talks-about>.
- Smith, D., Macbeth, J., & Bailey, C. (2019). *Moving from crisis to stabilization: The case for professionalizing the direct support workforce through credentialing*. Albany and Newark: Community Bridges Consulting Group, National Alliance for Direct Support Professionals, & National Leadership Consortium on Developmental Disabilities.

- Smith, V. K., Gifford, K., Ellis, E., Rudowitz, R., Snyder, L., & Hinton, E. (2015). Medicaid reforms to expand coverage, control costs and improve care: Results from a 50-state Medicaid budget survey for state fiscal years 2015 and 2016. *Menlo Park, CA: The Kaiser Family Foundation, and National Association of Medicaid Directors.*
- Taylor, S. J. (2008). *The direct support workforce crisis: Can unions help resolve this?* Syracuse, NY: Center on Human Policy, Syracuse University.
- The Council on Quality and Leadership (2015). *Basic Assurances[®]: What really matters — a strong foundation for success enhancing health, safety and human security* (3rd ed.). Towson, MD: Author.
- U.S. Department of Health and Human Services, Office of Inspector General, Administration on Community Living, & Office for Civil Rights (2018). *Joint Report: Ensuring beneficiary health and safety in group homes through state implementation of comprehensive compliance oversight.* Washington, D.C.: Authors.
- Wachino, V. (2016). CMCS informational bulletin: Suggested approaches for strengthening and stabilizing the Medicaid home care workforce. Baltimore, MD: Centers for Medicare and Medicaid Services.
- Wolf-Branigin, M., Wolf-Branigin, K., & Israel, N. (2007). Complexities in attracting and retaining direct support professionals. *Journal of Social Work in Disability & Rehabilitation*, 6(4), 15-30, doi:10.1300/J198v06n04_02.

Table 1
Demographics of organizations in sample (n = 74)

Characteristic	%	n
Geographic descriptor		
Both urban and rural	52.70	39
Rural	22.97	17
Urban	24.32	18
Agency size (annual; people supported)		
Small (1 to 50 people)	41.89	31
Medium (51 to 400 people)	54.05	40
Large (401+ people)	4.05	3
Service categories provided*		
Community-based day	94.59	70
In-home day	85.14	63
Community-based employment	74.32	55
Transportation activities	68.92	51
Staffed residential supports	67.57	50
In-home supports	63.51	47
Facility-based work/day	39.19	29
Respite care	35.14	26
Recreational activities	33.78	25
Therapies	20.27	15
Host home/foster home/companion	20.27	15
Behavioral services and supports	14.86	11
Independent support coordination	4.05	3

Note. * = Could fall into multiple categories

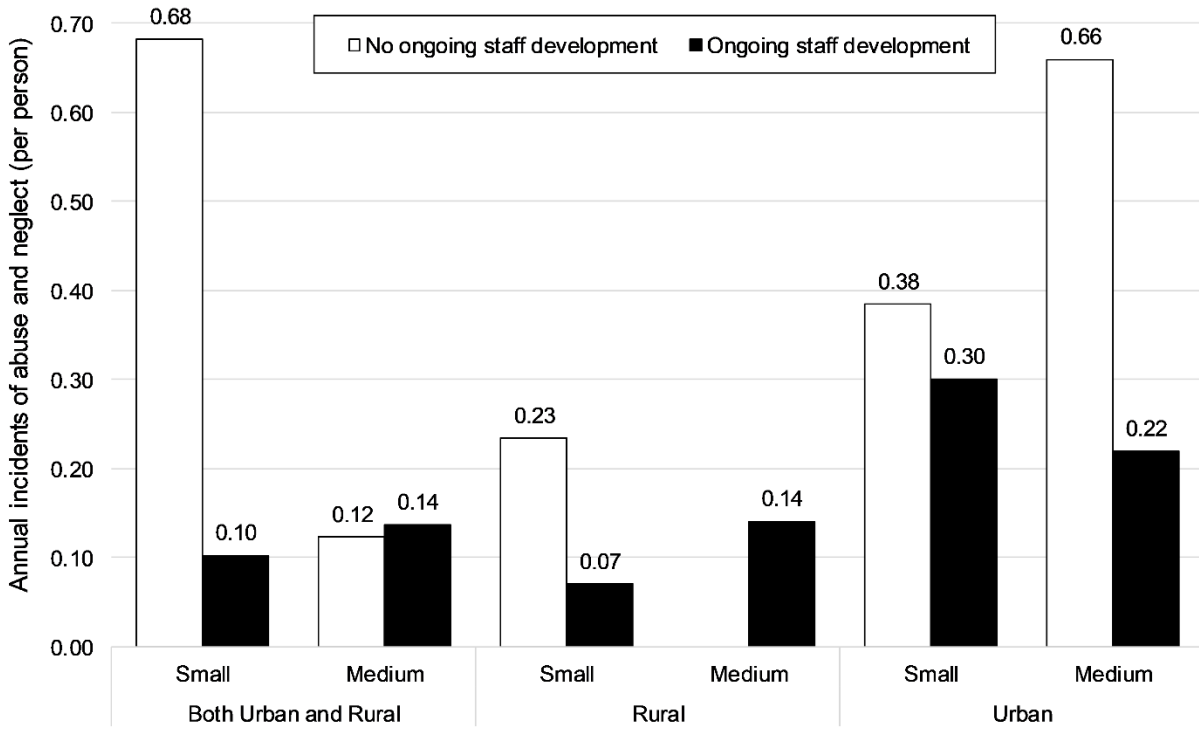


Fig 1 Interaction effect between ongoing staff development, geographic location, and agency size for abuse and neglect

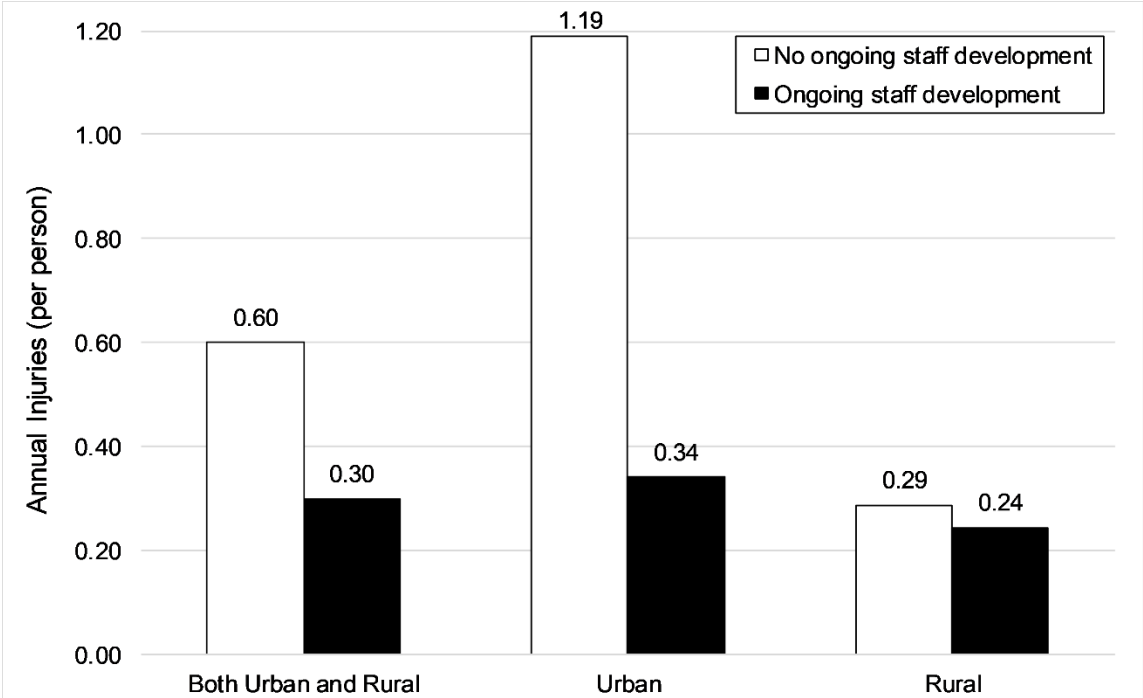


Fig 2 Interaction effect between ongoing staff development and geographic location for injuries

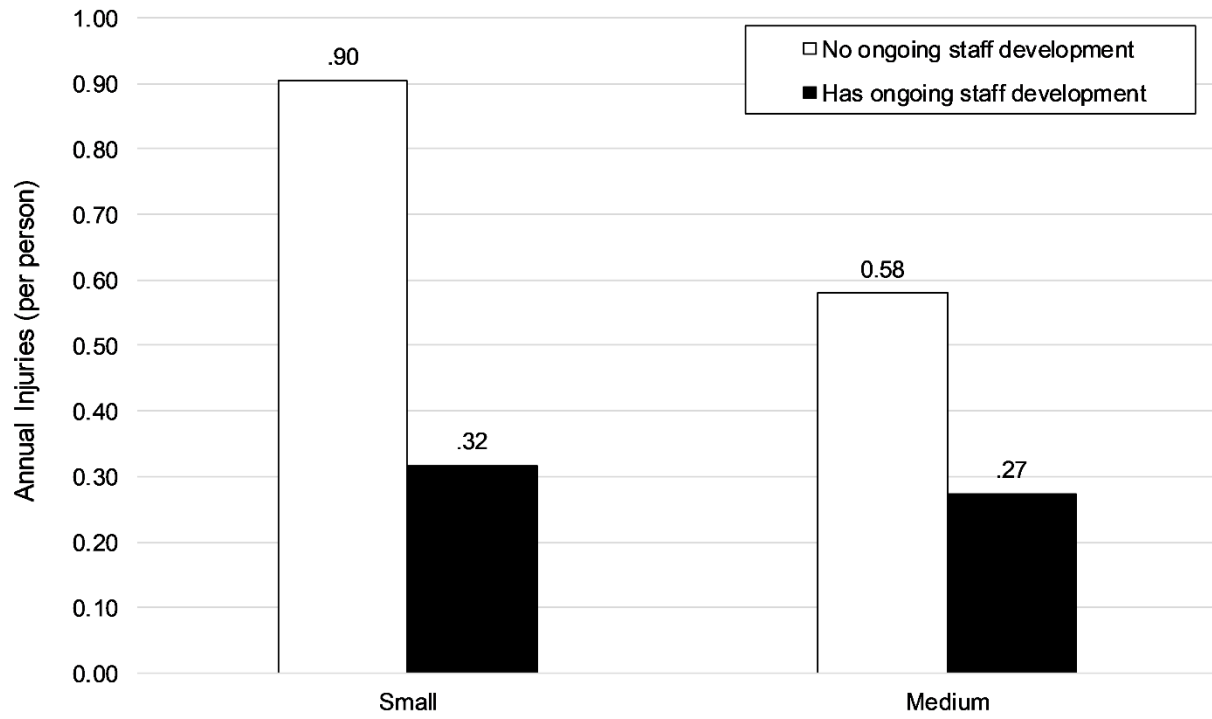


Fig 3 Interaction effect between ongoing staff development and agency size for injuries

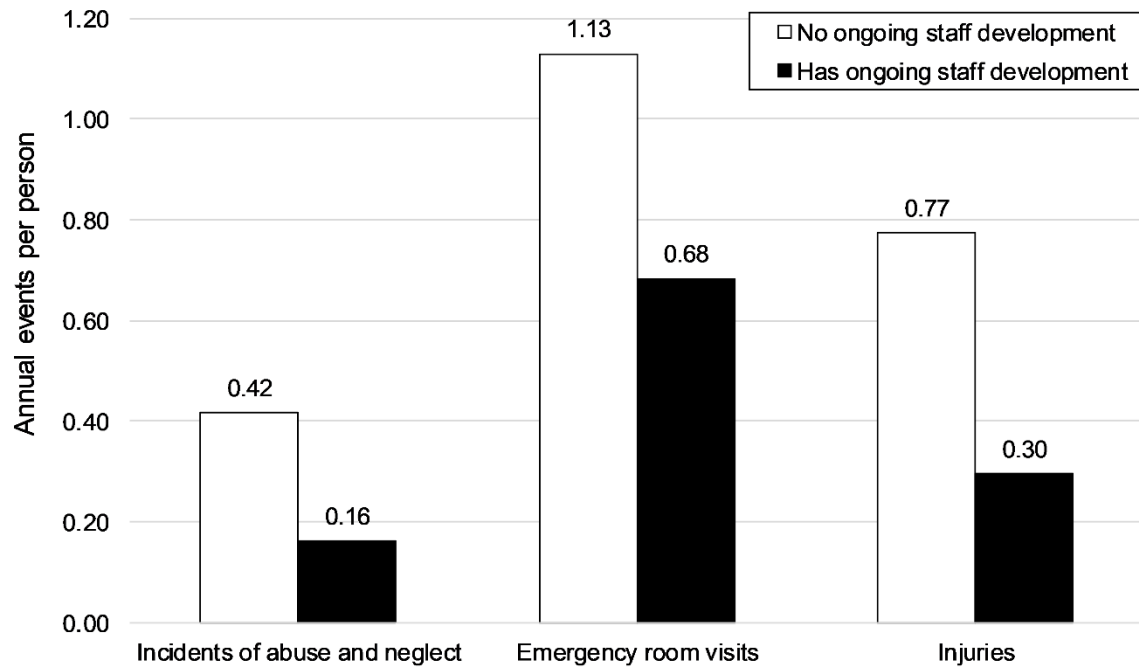


Fig 4 Main effects of ongoing staff development on incidents of abuse and neglect, emergency room visits, and injuries

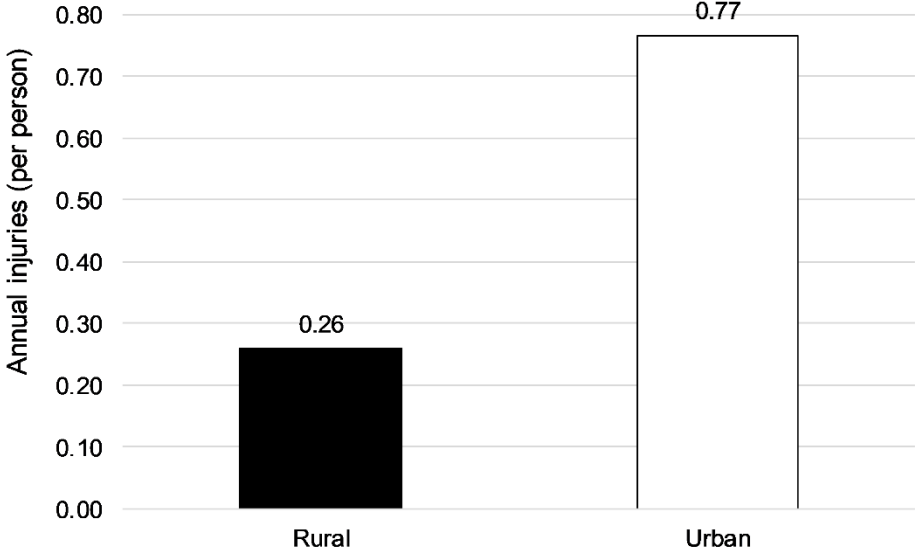


Fig 5 Main effects of geographic location on injuries

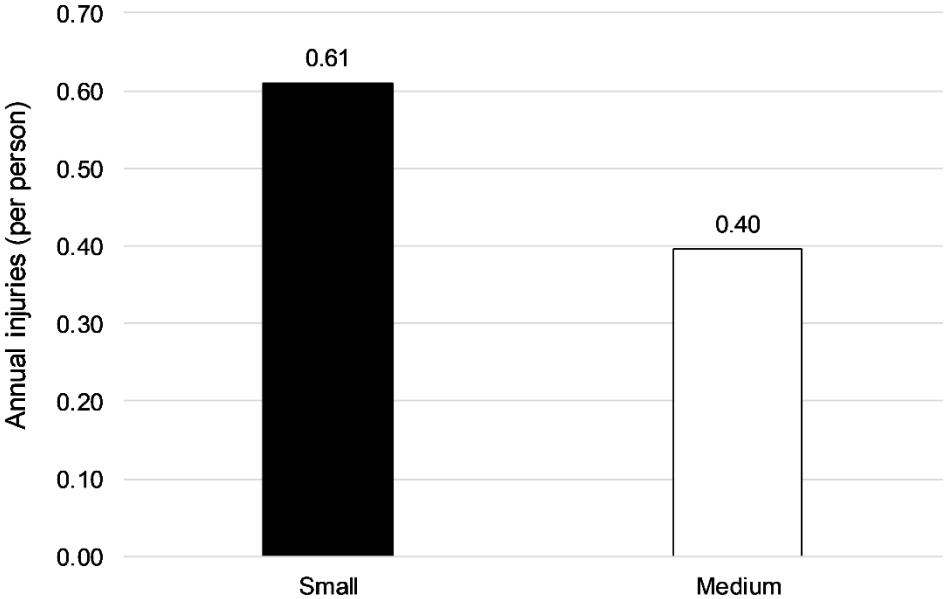


Fig 6 Main effects of agency size on injuries