



Brief Report: A Pilot Investigation of Safety Concerns Among Direct Service Providers for Adults with Intellectual and Developmental Disabilities

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Abstract

We designed and distributed a survey that assessed safety concerns experienced by direct service providers (DSPs) (N=59) of adults with intellectual and developmental disabilities (IDD) in community-based group homes at a single human services organization. Results indicated relatively few safety concerns among the respondents from a list of 25 survey statements. Possible influences on the findings are presented such as safety training of the DSPs, comprehensive safety guidelines in place at the group homes, and conditions occasioned by the COVID-19 pandemic. Current safety research in IDD supports the necessity of assessment to inform prevention and intervention strategies.

Keywords intellectual and developmental disabilities · residential care · safety · social validity · survey assessment

Safety threats from environmental hazards, accidental falls, contacting dangerous materials, abduction, and abusive physical interactions are common among persons with intellectual and developmental disabilities (IDD) (Finlayson et al., 2010; Gravina & Matey, 2021; Lee et al., 2008; Miltenberger & Novotny, 2022; Sherrard et al., 2004). Effective intervention includes teaching individuals to avoid unsafe situations and training direct service providers (DSPs) to arrange conditions that prevent safety risks. For example, behavior analysis research has reported successful out-

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comes from intervention with children and adults that targeted fire safety (Jones et al., 1981), abduction-sexual abuse prevention (Egemo-Helm et al., 2007; Godish et al., 2017; Gunby & Rapp, 2014; Sanchez & Miltenberger, 2015), access to firearms (Morgan & Miltenberger, 2017; Rossi et al., 2017), and touching-ingesting poisonous substances (Gianotti et al., 2021; Morosohk & Miltenberger, 2021; Petit-Frere & Miltenberger, 2021). Studies concerned with health safety during the COVID-19 pandemic are also noteworthy (Gravina et al., 2020; Maguire et al., 2022).

One approach to advance safety research is conducting social validity assessment with care providers who support persons with IDD (Schwartz & Baer, 1991; Wolf, 1978; Abadir et al., 2021) had parents, teachers, and behavior analysts rate the acceptability of procedures for training abduction-prevention skills to four children with autism spectrum disorder (ASD). From a modified version of the Treatment Acceptability Rating Form-Revised (Reimers et al., 1992), respondents replied to 13 questions such as do you feel that these procedures are effective, do you think these procedures are time consuming, and how important would you say it is to teach abduction-prevention safety skills. In a study evaluating behavioral skills training (BST) of poison prevention skills in three children with ASD, Petit-Frere & Miltenberger (2021) asked therapists to rate training outcomes, impressions of child participation, and acceptance of procedures by families, schools, and community centers. These examples illustrate how assessment of direct consumers can inform safety intervention objectives, methods, and satisfaction.

Research thus far has not identified the safety concerns of DSPs for adults who have IDD nor has social validity assessment targeted this area within human services organizations (Gravina et al., 2019; Luiselli, 2021). Perceptions of the direct-care workforce would be relevant for clinicians and supervisors who are responsible for day-to-day management of habilitation plans and the physical environment. As well, human services administrators can benefit from the feedback DSPs provide as to common safety incidents on the job and experiences unique to a particular setting. For example, organization leaders can review social validity measures systematically to evaluate satisfaction and approval of ongoing safety interventions beyond just the rudimentary reporting of accidents and safety threats. New directions and policies for prevention and safety control would also emerge from assessment.

In this brief report, we describe a study that assessed DSPs with regard to safety concerns they experienced in residential care of adults with IDD. The report details construction of a social validity survey from a qualitative and iterative framework resulting in quantitative analysis of DSP responses. We discuss salient features of the study and implications for risk prevention, safety intervention, and future research.

Method

Participants and Setting

The survey targeted approximately 160 DSPs at a human services organization serving adults with IDD located in the northeast region of the United States. From this sample, 59 DSPs completed and returned the survey described below. These partici-

pants were between 18 and 65 years old, 42.3% had received high-school degrees or attended some college, and 57.4% were college graduates. Self-identified sex of the participants was omitted from the survey. The experience of participants working in human services ranged from 0 to 5 years (28.8%), 6 to 10 years (32.2%), 11 to 15 years (11.8%), 16 to 20 years (13.5%), and more than 21 years (13.5%). Within the human service organization, all DSPS received comprehensive orientation training on caring for adults in day-program and residence locations, completing daily assignments, and following safety protocols.

In their role as DSPs, the participants worked in 15 community-based group homes where two to five adults with IDD resided, two to four care providers were present on daily shifts, and one to two staff covered overnight hours. The participants implemented individualized service plans with the adults, assisted with personal care routines, dispensed prescribed medications, recorded program data, and supervised community activities. Most of the participants (61.0%) reported that they had worked day, afternoon-evening, and overnight shifts in the group homes.

Procedures

The authors comprised a research team that designed, implemented, and evaluated the study across survey construction and survey administration phases. The human services organization supported the survey and procedures received Institutional Review Board (IRB) approval.

Survey construction. The research team created a list of safety concerns derived from their professional experiences with adults who had IDD and review of the research literature. The concerns reflected experiences DSPs might encounter in managing safety threats associated with objects (e.g., utensils), interactions (e.g., contact with strangers), community behavior (e.g., public transportation) and life at home (e.g., using the telephone). We presented the list to an administrative safety committee at the human services organization that included division directors and human resources personnel. The committee proposed a revised list of 25 safety concerns that could be posed as statements in a written survey. Next, we presented the statements to a focus group of human services providers ($N=19$) comparable to participants in the study and solicited feedback about content clarity and comprehension. Final revisions to the 25 statements were made and we prepared the survey that requested participants to rate each statement on a five-point Likert-type scale (1: never, 2: rarely, 3: sometimes, 4: frequently, 5: very frequently).

Survey administration. The first author conducted meetings with participants at each group home via teleconferencing during the two-month period from February 2021 to April 2021. Participants were informed that based on their current or previous work in human services, the purpose of the survey “was to gather information about your experiences with safety of adults with disabilities in the community and at home” Further, the participants were told that completing the survey was voluntary, had no bearing on their employment status, and responses were confidential. Next, the first author described the survey and the numerical rating scale that applied to each survey statement. When filling out the survey, the instructions were for the participants to enter non-identifying information (e.g., age, educational background,

human services experience), respond to each statement, and not confer with co-workers. Following presentation of the survey, participants could ask questions or seek clarification if the instructions were unclear.

In the next phase of each group home meeting, the first author sent a survey link to the participants via a digital platform (Qualtrics™). Participants who consented to the survey completed it online during the meeting or on or before a specified deadline date. All outcome data in the study were gathered from the completed surveys.

Results and Discussion

Table 1 presents the rank ordered average rating on each survey statement (sum of ratings per statement/number of participants). The two highest ranked statements were health safety concerns associated with the COVID-19 pandemic. Statements pertaining to walking in the community, emergency situations, public transportation, interacting with strangers, and physical harm at home followed. Many of the other survey statements received relatively low ratings, notably safety concerns about touching-ingesting chemicals, problems in the community, self-administration of first-aid, trouble with law enforcement, and abduction.

The impetus for this study was the increasing attention to personal safety of persons with IDD represented in the clinical and research literature (Gravina & Matey, 2021; Miltenberger & Novotny, 2022). As noted, perceptions about safety concerns, prevention, and intervention have been addressed with disability care providers of children (Abadir et al., 2021; Petit-Frere & Miltenberger, 2021) but not adults. As a pilot investigation, our findings can be interpreted in several ways relative to the experience of care providers within congregate-care settings and the quality of safety programs.

First, the study was conducted during the second year of the COVID-19 pandemic so it was not surprising that participants were most concerned about health safety of the individuals they served. Even so, their average ratings of the statements that specified COVID-19 and PPE fell within the “rarely” category. It should be noted that in managing the pandemic, the human services organization where the participants worked initiated many risk mitigation strategies in the group homes including availability of protective equipment, comprehensive sanitizing, environmental modifications, community restrictions, and social distancing. Accordingly, participants may have recognized the dominant safety concerns of COVID-19 transmission but judged the group home residents to be safe and protected as the result of organizational responsiveness to the health crisis.

Notably, the preceding interpretation aligns with recent COVID-19 safety research. Gravina et al., (2020) reviewed the role organizations play in preventing the spread of infectious diseases and studies occasioned by the COVID-19 pandemic have targeted environmental cleaning-disinfection, wearing a facemask, and social distancing (Kornack et al., 2020; Lillie et al., 2021; Maguire et al., 2022; Sivaraman et al., 2021). Certainly, the current findings would be expected to change when (hopefully) COVID-19 is not a prevailing concern, perhaps revealing more heightened ratings for other safety areas by DSPs. Furthermore, the results of this survey might differ based

Table 1 *Average rating per survey statement*

Survey Statements	Mean	SD
I am concerned for the health of the individuals I support when they enter the community specifically due to COVID-19.	2.91	1.367
I have experienced safety concerns regarding personal protective equipment (PPE) use for the individuals I support in their homes.	2.30	1.336
I have experienced safety concerns with individuals I support walking in the community such as on a sidewalk or in a crosswalk.	2.29	.948
I have experienced safety concerns about individuals I support knowing what to do in emergency situations.	2.28	1.182
I have experienced safety concerns when individuals I support use public transportation.	2.26	0.983
I have experienced safety concerns when individuals I support interact with strangers.	2.24	1.014
I have experienced safety concerns about individuals I support causing physical harm or destroying property at home.	2.24	1.088
I have experienced safety concerns with individuals I support using items in the kitchen.	2.20	1.063
I have experienced safety concerns regarding personal protective equipment (PPE) use for the individuals I support in the community.	2.19	1.317
I have experience safety concerns with individuals I support around cars such as crossing the street or walking in a parking lot.	2.19	1.025
I have experienced safety concerns when individuals I support using the internet.	2.08	1.071
I have experienced safety concerns about individuals I support being home or in the community during extreme weather conditions.	1.93	0.896
I have experienced safety concerns about individuals I support using the phone.	1.92	1.208
I have experienced safety concerns about individuals I support using sharp objects (scissors, razors, knives).	1.86	0.888
I have experienced safety concerns about individuals I support getting lost in the community.	1.73	0.906
I have experienced safety concerns when individuals I support use public transportation.	1.66	0.883
I have experienced safety concerns when individuals I support carry more than \$10 in cash.	1.62	0.914
I have experienced safety concerns about individuals I support causing physical harm or destroying property in the community.	1.61	0.788
I have experienced safety concerns when individuals I support are in or around a swimming pool or other body of water.	1.59	0.853
I have experienced safety concerns when individuals I support administer his or her own medications.	1.54	0.838
I have experienced safety concerns with individuals I support touching or ingesting chemicals.	1.46	0.727
I have experienced safety concerns about individuals I support being physically and/or emotionally harmed in the community by a person or object.	1.46	0.727
I have experienced safety concerns about individuals I support administering first aid to themselves.	1.36	0.663
I have experienced safety concerns about individuals I support getting in trouble with law enforcement.	1.33	0.659
I have experienced safety concerns about individuals I support being taken against their will at home or in the community.	1.27	0.639

Note: 1: never, 2: rarely 3: sometimes 4: frequently 5: very frequently

on the advanced age, health status, and physical limitations (e.g., impaired mobility

and need for assistive devices) of service-recipients, which were not considered in the study.

A second and similar interpretation of the study findings is that participant concerns about safety were minimized due to characteristics of the service setting. For example, as DSPs, the participants had been trained to closely monitor adults during all habilitation activities, prevent access to dangerous objects and hazardous materials, maintain group home security, and follow strict guidelines for medication administration. Community events, when they occurred, required continuous line-of-sight and physical proximity supervision of the adults. In effect, the individuals who the participants cared for were never exposed to conditions or situations that compromised their safety. Hence, the participants may have believed that with this level of prevention, threats to safety would not be encountered, therefore were not a concern.

Nonetheless, identifying the safety concerns of service providers for adults with IDD is necessary in order to plan person-centered and system-wide preventive interventions (Gravina & Matey, 2021; King & Miltenberger, 2017). One factor is that some human services settings may not have the same resources as the organization in this study. Assessment of care providers in those settings would inform the direction and intensity of safety practices. Also, under some conditions such as full staffing within day and residential programs, the safety concerns of care providers may be less pronounced compared to periods with prolonged staff shortages or presence of less proficient substitute employees. This analysis suggests that safety assessment would be beneficial under transient, unanticipated, and unstable contexts common to most human services settings.

The study was limited to a single organization and self-selected participant sample. In future research, assessing a comparison group such as the parents-legal guardians of group-home residents might identify different opinions about safety concerns. Also, we did not determine whether certain participant variables (e.g., human services employment tenure) may have influenced safety ratings. Regarding survey construction, the format did not include narrative entries by respondents that qualified and explained more extensively their numerical responses (Luiselli, 2021). Finally, we followed definitive steps in designing the survey derived from experiential sampling among the authors, expert validation, and peer feedback but not according to an established grounding process or conceptual model.

In summary, this pilot investigation was guided by social validity assessment and focused on the critical area of safety among persons with IDD. Our participant sample responded to multiple safety experiences evident in group-living arrangements with large numbers of care providers. In this context, we identified a priority list of safety concerns, speculated about possible explanations for the findings, and discussed variables that will contribute to the supportive care of a vulnerable population. Practice implications from the study are that safety assessment should be continuous and findings will be susceptible to many setting conditions as well as the past and present experiences of respondents. Research can advance by broadening the scope of assessment to larger numbers of care providers, gathering data in diverse settings, and evaluating administrative safety decisions informed by judgements of the direct-services workforce.

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Declarations

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed with participants in the study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent All participants consented to the survey implemented in the study.

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