

Learning manual handling without direct supervision or support: A case study of home care workers

Abstract

How home care workers (HCWs) adapt their classroom training to their workplaces is central to their own safety and that of their care recipients. A case study approach was adopted for this inquiry into home care worker training in Australia, where new workers were directly observed and interviewed in their workplaces following classroom training. Findings from the study advance four contributions: (a) learning is person-dependent, (b) artefacts in the form of written materials afford a valuable form of learning support; (c) opportunities for these workers to meet, share and refresh their knowledge are important for further development of occupational capacities; and (d) more organisational support for such socially-isolated workers' learning is needed.

Key words

Home care work, learning, manual handling, supervisor

Introduction

This paper explores the personal, situational and instructional bases for realising effective learning of occupational capacities in work settings in the absence of direct supervision or support. Contemporary accounts of learning socially-derived knowledge, such as that required for occupations, often emphasise the importance of immediate guidance from more informed and experienced social partners, such as teachers and co-workers (e.g., Brown & Palincsar, 1989; Collins, Brown, & Newman, 1989; Hughes, Jewson, & Unwin, 2013). However, much of our learning for work necessarily occurs in the

absence of such experts (Billett, 2010; Billett, Ehrich, & Hernon-Tinning, 2003), which is particularly true for home care workers (HCWs), whose initial occupational preparation is perfunctory and who work alone in their clients' homes.

Assisting HCWs transfer and adapt classroom-taught manual handling skills and knowledge to their workplaces (i.e., their clients' homes) is the specific focus for the inquiry that is discussed and elaborated here. These workers are expected learn and complete their work tasks, which are often novel and challenging, in relative social isolation. Understanding how HCWs effectively adapt what they initially learn in their brief classroom training sessions to their workplaces is critical for the quality of support they provide to their clients and also for their own safety. Hence, we need to know more about how these workers learn the requirements for their role, and how to maximise this learning in the absence of expert support.

Principally, this study is concerned with understanding the bases for learning socially-derived knowledge (i.e., occupational competence) in the absence of direct supervision and support. However, it also aims to suggest practical ways to support learning in these circumstances. This aim is realised through, firstly, considering the nature of home care work, and how learning these capacities might best be developed in their clients' home environment. It is followed by an explanation of the methodology and procedures undertaken to gather and analyse data for the study. Findings are then provided, in sections that describe the skills competency of each informant, and distinguish personal, instructional and situational factors that may influence learning for safe and effective home care practice. These findings are then discussed, and conclusions drawn about the kinds of training provisions that may best support learning for HCWs, who conduct their practice without expert guidance.

The nature of home care work

Health and community services is Australia's fastest growing workforce sector, for a range of reasons that include older adults and people with disabilities increasingly opting to remain in their own homes for care rather than move to residential care facilities (Health & Community Services Workforce Council, 2012). Home care work assists such individuals to live as independently for as long as possible in their own homes and communities (Keleher, 2003). A major component of this assistance comprises manual handling, which include "people-handling" activities such as assisting people to bathe, toilet and mobilise; and "non-people handling" activities such as cleaning, general housekeeping, carrying and stowage of equipment. This work, therefore, represents a diverse set of activities that require the application of manual handling skills in different ways, purposes and circumstances, some of which are physically and personally-demanding, and far from what can be prepared for in brief preparation in training rooms.

In Australia, the majority of home care is performed by female, middle-aged, low-paid, entry-level workers (Hugo, 2007, 2009; Martin & Healy, 2010). These workers are also characterised by their low socio-economic status, low levels of English literacy, and may be subject to gendered discrimination ((Markannen, Quinn, Galligan, Sama, Brouillette, et al., 2014; Somerville, 2006a). Moreover, the demographic described here is represented internationally, e.g., in the US, (Markannen et al., 2014; Stone, Sutton, Bryant, Adams & Squillace, 2013); in New Zealand (Jorgensen, Parsons, Gunderson-Reid, Weidenbohm, Parsons et al., 2009) and in the UK (Manthorpe & Martineau, 2008).

Home care work, consequently, is often perceived simply as a mere extension of the nurturing role of mothers (Nay & Garratt, 2002), or based on the moral ideals of family commitment and care (Markannen et al., 2014; Meagher, 2006). Indeed, many of those engaged in paid care work do so as a result of previous experience as an unpaid carer at home with a child, an elderly parent, or family

member with a disability (Somerville, 2006b). This kind of engagement and pathway to the occupation lends itself to blurring the boundaries between unpaid work in the private domain and paid care work which, although in the public sphere, is performed in the relative isolation and privacy of clients' homes. Perhaps not surprising then, are the high rates of musculoskeletal injuries (predominantly back injuries) associated with manual handling in the health and community services sector (Clemes, Haslam & Haslam, 2010; Kay & Glass, 2011). More specifically, concerns about the efficacy of manual-handling training for care workers have been frequently raised, particularly in relation to its duration, content, and ongoing support (Bernoth, 2009; Faucett, Kang & Newcomer, 2013; Markannen et al., 2014). An additional concern here is the lack of time for HCWs to become 'embodied' in their home care role, or form the subjectivities that are aligned with, and value home care work (Somerville, 2006b; Somerville & Bernoth, 2001). Consequently, the challenge in preparing workers for these roles is how best to offer an approach to initially develop their capacities and provide ongoing support in the workplace to develop them further (Stolee, Esbaugh, Aylward, Cathers, Harvey, et al., 2005; Viau-Guay, Bellemare, Feillou, Trudel, Desrosiers, et al., 2013).

This preparation likely needs to include encouraging HCWs to develop their sense of self and reframe themselves as skilled workers who are not reliant on moral bonds and feelings of love (i.e., societal sentiments), but effective occupational capacities to provide safe, quality support to clients in their own homes. A good example of how these capacities can develop can be found in the approach to manual handling training.

Learning manual handling practice

In many ways, home care settings are representative of Schön's (1991) "swampy lowland" of professional practice (p42). That is, they are situations characterised by ambiguity and uniqueness where formalised, positivistic knowledge may be of limited use (Comer, 2013; Hannigan, 2001).

Certainly, classroom-based manual-handling may not prepare workers for undertaking this task in rooms that have a diversity of furniture, perhaps clustered together, carpeted and potentially uneven floors. Moreover, approaches to classroom training in the Australian home care sector vary across organisations. While larger organisations may offer more systematic training programs, smaller agencies tend to provide more ad-hoc and fewer hours of training, citing financial constraints or workers being already skilled as reasons why this is the case (Baldock & Mulligan, 1999). Furthermore, many HCWs report receiving no formal induction training for their roles (Rimfire Resources and National Disability Service Australia, 2010).

Even when classroom training is offered, these sessions are around one to four hours duration (Baldock & Mulligan, 1999; Bernoth, 2009), vary in format, and are often competency-based. That is, where skills are broken down into a series of measurable and observable steps (Franklin & Melville, 2013), despite the notion of competency-based training in ‘caring’ professions being highly contested (Franklin & Melville, 2013; Pijl-Zieber, Barton, Konkin, Awosoga & Caine, 2014). For instance, in competency-based programs, staff may be deemed competent in manual handling after a single assessment in a spacious, unhurried, modern and fully equipped classroom. Yet, their work requires them to transfer their learning to challenging environments in clients’ homes (e.g., with bulky furniture, pets, thick carpets, a non-height adjustable bed and severe time constraints, clients with varying levels and complexity of support requirements). These kinds of environments have long been acknowledged as risks to working safely in health care settings (e.g., Clemes et al., 2010; Swain, Purfahl & Williamson, 2003). Similarly, many studies have made specific recommendations for modifications to the physical environment, such as installing appropriate equipment, room redesign, and heating and ventilation adjustments (Alexander, 2008; Viau-Guay et al., 2013). However, these recommendations stand as ideals rather than what these environments ultimately comprise: people’s homes.

Consequently, the provision of high quality home care cannot be limited to the mere acquisition of skills by HCWs; it also includes adapting the context of care to suit the needs and preferences of both clients and caregivers (Cohen-Mansfield & Bester, 2006). Yet, these kinds of capacities are what HCWs have to develop themselves, because these outcomes are beyond the scope of much of initial training.

Existing manual handling training is often not taken up or sustained in practice by HCWs, because of: (a) personal preferences for learning without direct support; (b) inadequacies of education experiences being offered in classrooms and workplaces; and (c) the extent of organisational support (Palesy, 2015). In particular, the format and brevity of classroom training creates a unique set of challenges for HCWs as they seek to apply what they are learning in the classroom to clients' homes and, in the absence of direct supervision. Therefore, understanding and informing how best to assist these workers to learn their occupational practice represents an important and worthwhile task. It is one taken up in this article.

Method

A case study approach was chosen as an appropriate method for this inquiry, as it aims to understand and identify solutions of actual, complex and current problems in the real world (Yin, 2009). Moreover, the case study approach aims to improve practices and support or influence better decision making (Merriam, 2014), which is the focus here.

The case

The case reported and discussed here is Service Care (a pseudonym): a community service organisation responsible for providing high levels of support to people with physical disabilities living in their own homes. Typically, HCWs practice alone in clients' homes, without direct supervision or support. Prior

to or soon after commencing their employment with Service Care, however, new workers attend an in-house classroom training day, where they are orientated to their work requirements, including manual handling activities.

The HCW informants

Low staff retention and high turnover of these workers remains a challenge for researchers wanting to understand their work and its learning (Radford, Shacklock & Bradley, 2015), as does the issue of gaining access to clients' private homes for data collection. Therefore, informant selection was non-random and based on convenience. Although the intention was to obtain qualitative data from ten informants, only seven expressed an interest and remained committed to the 12-week study period. These seven informants comprised two males and five females varying in age, cultural background and previous life (including education and work) experience. The informants, who were assigned pseudonyms, had a range of previous life experiences, yet all were new to home care work, and offered various motivations for taking up this role. So, different genders, diversity of age and experience may contribute to the richness of data.

The service clients

Although not direct informants in this inquiry, it is important to outline the nature of the clients in this study, who were requested to afford access to their private homes, and very personal aspects of their support, for the study to take place. All clients of Service Care were adults (i.e., aged ≥ 18 years), with varying physical disabilities (e.g., spinal cord injury, cerebral palsy). Age ranges and other client-related were not collected as part of the study. However, some volunteered that they had received home care services for many years, while others were relatively new to the service having transitioned from hospital-based units. The only stipulation for this study, however, was that they required assistance to be pushed in their wheelchairs, and used mechanical hoists for transfers.

As Service Care coordination staff considered these clients to be without compromised decision-making ability, the organisation was amenable to the researcher contacting them directly once HCW informants had been recruited for the study. The information provision and consent process will be discussed in the “ethical considerations” section. Noteworthy here, however, is that all six clients approached regarding this study, and any family members or co-habitants present in their homes at the time of direct observation data collection, expressed enthusiasm at the prospect of (indirect) participation in the study, as a means of improving the learning outcomes for HCWs overall.

Data collection

Primary data were gathered from the classroom and workplaces (i.e. clients’ homes). Information about the existing training provisions at the site was gathered through interviews with Service Care’s manager and manual handling trainer, and direct observations of the classroom training. Qualitative data were obtained from HCWs through semi-structured interviews and direct observations aiming to capture their experiences of learning and applying their classroom learnt manual handling training. These interviews and direct observations were conducted at two points over a period of 12 weeks: 4 weeks after commencing unsupervised work in the client’s home, and then 12 weeks after commencement of their unsupervised work for Service Care.

Interview questions at both of these points were used to gather retrospective data of informants’ attitudes and reactions to this training and intentions to apply what they had learnt to their workplaces, and to identify how informants were transferring and adapting their newly learned manual handling skills in their clients’ homes. The informants were also observed performing home care tasks, such as pushing wheelchairs and using mechanical hoists against pre-determined criteria that were deemed to underpin successful manual handling (Varcin-Coad, 2003). These data were collected by a researcher who is very familiar with the criteria for manual handling competence and with extensive experience in

supporting clients in home care settings. In addition to verifying manual handling competency, these observations were used to support and guide the interview questioning. So, it was anticipated that analysis of data derived from dual sources and at two different points provides richness and depth to the data gathered and validity for the findings.

Data analysis

Data analysis began after both of the collection points. The interview data were analysed using inductive reasoning principles, with segments of information identified in relation to pre-determined categories (i.e., personal, situational, instructional bases for HCWs' learning), along with any other emerging and relevant categories (Thomas, 2006). Ultimately, data analysis aimed to determine whether HCWs were applying their classroom-taught manual handling techniques, understand how learning and development progresses in the absence of direct supervision and to propose suggestions for better supporting these workers to learn and enact safe home care.

Research issues and limitations

Measures were taken to strengthen the study design and mitigate its potential limitations, including ethical considerations, and measures to promote validity, reliability, and trustworthiness. One limitation of the qualitative approach can be the small number of informants recruited. However, Blaikie (2009) suggests that qualitative research methods are by nature resource-intensive, and therefore smaller samples are appropriate. Still, to mitigate this potential limitation, approaches were taken to make the inquiry systematic and valid. These approaches included one researcher only collecting data, development of data collection guides, trialing and honing of semi-structured interviews with two "test" HCWs, and the same pre-determined questions/observation criteria for all informants. Moreover, an additional researcher was engaged to independently analyse all data as an inter-rater reliability

strategy. So, data collected at all points during the study were rich, trustworthy, and analysed with sincerity.

There are also limitations to the case study approach taken for this study. The selection of only one organisation to explore and analyse HCWs restricts any claims for generalising findings to other home care situations (Blaikie, 2009). To mitigate this risk, Service Care was selected as a case because its features were representative of many community service providers in Australia in terms of training programs and level of workplace guidance offered to new workers. By making these features explicit, along with providing clear guides (i.e., observation checklists, interview guides) for data collection, this study may be easily replicated elsewhere.

Ethical considerations

Ethical clearance was granted prior to conducting the research. Information packages were provided to all relevant parties (e.g., the service provider, manager, trainer, new HCWs, clients), and interested persons were invited to contact the researcher for further information and consent to participate in the study. Written and/or verbal consent was obtained from all relevant parties prior to collecting data for the study.

In addition to the study informants, it was also important to consider the potential impact of the study on the home care clients, in whose private homes took place. Furthermore, as part of the direct observation of the HCWs, these clients were also observed (albeit indirectly), at a time when they were potentially receiving the most personal aspects of their support, such as being hoisted from their beds. So, in view of the potentially unequal balance of power in the relationship between the worker and the client (i.e., client dependent on worker for personal support), these clients were considered to be vulnerable subjects. Standard practices and protocols were employed to ensure that these clients were

protected and did not feel coerced into allowing the researcher into their homes. These strategies included strict adherence to the guidelines set out in relevant state legislation (NSW Disability Services Act, 1993), particularly as they relate to receiving support in a safe environment, respecting confidentiality of personal information, and receiving equitable treatment. Moreover, the disability service standards of the organisation were upheld, including individual rights to freedom of expression, self-determination and decision-making, active prevention abuse, harm, neglect and violence, and meaningful participation and inclusion. The University's human research ethics guidelines were also observed.

Findings

Findings are presented in two sections: firstly, data collected from the direct observation of the manual handling skills of the HCWs is presented, followed by the findings from the semi-structured interviews.

Direct observations

Table 1 compares the manual handling skill competency of HCWs at 4 and 12 weeks post-classroom training, and provides some comments about the overall progression of the abilities of these workers. The left-hand column indicates, with a tick or a cross, whether each informant met the pre-determined observable manual handling criteria at 4 weeks post-initial classroom training. The middle column indicates whether the informants met the same criteria at 12 weeks, and the right-hand column provides a description of how the learning of each informant progressed over the 12-week period.

Table 1: Comparison of Findings from Direct Observation Checklists at 4 and 12 Weeks Post-training

| | Skills competency 4 weeks | Skills competency 12 weeks | Overall progression |
|-------------|----------------------------------|-----------------------------------|---|
| Joe | x | x | No marked change in observable manual handling criteria over 12 weeks, however increased confidence noted in worker and this was reflected by client's father's behaviour, who interrupted the support routine far less at 12 weeks. Easier rapport with client observed, and in view of this, was happier, more willing to assist with his support, resulting in fewer physical manual handling tasks for the worker. Worker did not appear to be focusing on the tasks at hand, but rather incorporating them into a very relaxed support routine. |
| Di | ✓ | ✓ | Excellent manual handling skills noted at both points over 12 weeks, carried out in a challenging physical environment (e.g., obstacles, poor ventilation, etc.). Client very directive of support at 4 weeks, however at 12 weeks seemed more trusting of the worker and allowed the support to flow. At 12 weeks worker had identified a potential hazard (i.e., two small dogs) and confined them during manual tasks which may indicate a concern for workplace health and safety, and a more even distribution of power in the client-worker relationship. |
| Jen | ✓ | ✓ | Highly competent worker noted at both points over 12 weeks. At both points very focused in breaking the manual tasks down in to steps, however this was at the insistence of client. Client very safety conscious and mindful of worker following rules for manual handling. |
| Meg | ✓ | ✓ | Highly competent worker noted at both points over 12 weeks. Very clinical style, task-oriented type of support, directed by client and willingly carried out by worker. Almost hospital-style environment and nurse-patient relationship observed. |
| Bree | x | x | No improvement observed at all over 12 weeks. Disorganised worker, used lower back to power manual tasks. Appeared confident and relaxed however, despite working with a very challenging client (verbally aggressive, dictatorial). |
| Rick | x | x | Poor manual handling techniques observed at both points, although appeared more stable and balanced at 12 weeks, and observed to be wearing appropriate footwear. Disorganised, uneconomical with movement, more concerned with handling the client safely and following client's mother's instructions than own health and safety. |
| Kate | x | x | Remained very disorganised and used poor working postures for manual tasks at both points of observation. However, at 12 weeks was noted to have slightly more relaxed knees and to be powering movements through the pelvis rather than over-working the upper body. |

In summary, direct observation of HCWs yielded some interesting stand-alone data and findings. Aspects of the physical environment, such as space, obstacles, equipment, and the pace at which the work proceeded, appeared to affect how these workers safely enacted the manual handling tasks of hoisting clients and pushing wheelchairs. These same tasks were, for the most part, performed more competently on clients who understood the various requirements of the tasks and who provided direction to their workers, and who kept their interpersonal interactions with these workers strictly limited to tasks being undertaken at the time. A comprehensive consideration of the environmental aspects when learning in socially-isolated workplaces is reported in Palesy (2016). However, for the purposes of this overall inquiry, these direct observations assisted in providing additional cues for the interview guides, and aimed to gather even more specific data around the factors that influence how HCWs learn manual handling tasks without expert guidance. These interview data, also gathered at 4 and 12 weeks post-classroom training, are presented in the next section.

Semi-structured interviews

Semi-structured interviews yielded data for three pre-determined categories of: (a) personal, (b) instructional and (c) situational bases affecting how HCWs learn in the absence of expert guidance. Table 2 presents these data under these three aforementioned categories. The left-hand column establishes the base, the centre column identifies themes emerging from the data, and the right-hand column provides sample interview responses supporting each base.

Table 2: Summary of Semi-Structured Interview Responses

| Base | Theme | Sample responses |
|---------------|---|--|
| Personal | Workers consider their own circumstances, experiences or situations when learning the requirements for home care work. | I was relating [the classroom training] to what I already knew about cranes and pallet jacks to people hoists...thinking about the hydraulics...(Rick) I just thought “well there’s the bathroom, it’s like mine...” Plus I cared for my elderly parents right up until they passed on ... I just made simple comparisons. (Di) |
| | Workers will apply their classroom training only if they believe it to be effective and workable. | Thinking about [my daughters] makes me [enact the techniques]. Plus I’m not getting any younger. (Meg) I lifted [the client] from the wheelchair to the bed ... I know I’m not supposed to ... but I knew I could do it faster and easier without the hoist. (Kate) |
| | Resilience and life experience as essential traits for learning in the absence of direct supervision and support. | You’re on your own so much you have to be practical and a bit tough...You have to kind of work it out for yourself. (Jen). I can cope on my own, I have a lot of life experience and...I am assertive ... I can always work out the right thing to do. (Joe). |
| Instructional | Written materials are important for HCWs’ learning of safe practice | [The trainer] gave us the... rules and policies, the reasons why we should follow them and all the terrible things that could happen to us and the client if we don’t. That’s why I [enact safe manual handling techniques] all the time now. (Di) Pictures...step-by-step on how to put someone in a hoist, with photos of their actual house...that’ll spell it out for us...help cement the training. (Rick) |
| | A return to the classroom for ‘refresher’ training would help HCWs extend and consolidate their learning | I...liked being in the classroom and learning all the new stuff, but it’d be great to go over it again...The more you do things, the more times you go over them with an expert, the more likely you are to retain it. (Meg) We need to be able to discuss things after we’ve been out there for a while. (Di) |
| | Increased organisational support (e.g., supervisor, peer, trainer) is needed to assist HCWs to learn in the absence of expert guidance. | [The coordinators] need...to check up on what we’re doing and...help us to apply what we’ve learned in the classroom, rather than sending us out to work and forgetting about us. (Kate) I thought about...asking [a more experienced colleague] to meet me for coffee, so I could actually talk...about what was going on and get some practical ideas. I think more of the training would have sunk in then. (Bree) What I’d really like ...are...meetings, where we can...say “listen, I’ve got this situation, what do you think I should do?”...that kind of back-up ... that’d really help. (Di) |

Findings presented in Table 2 suggest that: (a) learning without direct supervision or support is largely person-dependent; (b) written materials offer a valuable form of learning support for these workers; (c) after initial, brief classroom manual handling training, a refresher session may further consolidate learning; and (d) more organisational support for training both in the classroom and the workplace is needed to promote safe manual handling in clients' homes. These findings are discussed in the next section.

Discussion

In this section, the implication of findings associated with person-dependence, supportive artefacts such as written materials, increased organisational support, and the need for classroom refresher manual handling training are identified and discussed as important in supporting the learning and safe practice of HCWs. While the focus here is on HCWs learning and enacting safe manual handling techniques, the recommendations discussed here potentially extend to other elements of training for HCWs, and indeed, to many other groups of workers who conduct their practice without direct supervision or support.

Person-dependence

Pea (1987) claims that learning and transfer are selective, in that individuals will only transfer what they consider to be appropriate and aligned to their individual and cultural practices and values. In this way, learner dispositions - personal attitudes, values, affect, interests and identities (Prawat, 1989), come to the fore. Dispositions may influence the differences between what learners are capable of doing and what tasks they actually undertake (Collin, Paloniemi, Virtanen & Eteläpelto, 2008; Collin, 2009; Perkins, Jay & Tishman, 1993). They are central to how individuals choose to take care of their

bodies and work in ways which permit them to avoid hurting themselves through inappropriate manual handling.

Moreover, when considering the learning processes used to adapt knowledge from classroom to workplace settings, an individual's agency is a key determinant. Described as the process by which individuals critically evaluate and choose their course of action (Emirbayer & Mische, 1998), agency is premised on learner dispositions and intentionality. These arise from past personal experiences, are influenced by social practices, and consequently shape how people participate and, consequently, learn in the workplace (Eteläpelto, Vähäsantanen, Hökkä & Paloniemi, 2013; Smith, 2005). An individual's agentic action is strongly linked to their identity or sense of self, and workers may conduct their working lives and learning in view of their own personal interests and goals (Billett & Pavlova, 2005; Collin, 2009; Collin et al., 2008).

It follows, therefore, that workplace preparation programs should not only focus on skills acquisition, but should also emphasise the value of their role, and encourage trainees to embrace their personally-unique occupational identities (Aylward, Stolee, Keat & Johncox, 2003; Collin et al., 2008; Liveng, 2010; Somerville, 2006a; Viau-Guay et al., 2013). Classroom processes should include those that support and encourage new workers to share personal histories and experiences related to the home care worker role. A specific period of time should be allocated in classroom sessions for this type of learning, where trainees are invited to share their stories and experiences, including their motivations and expectations in taking up the role. In this way, new employees who work without direct supervision may gain a better sense of themselves and develop a positive disposition for their home care role.

Schön (1991) suggests that in work situations characterised by uncertainty, professionals should "reflect". In doing so, a form of tacit knowledge is used, in which the theory informing the activity is

embedded in the activity itself (Schön, 1991). Considerable claims have been made about the benefits of what is referred to reflection-in-action, in relation to caring professions (e.g., Atkins & Murphy, 1993; Johns, 1996), and such activities have been increasingly integrated into nursing courses (Hannigan, 2001). Yet, more than introspection, given their circumstances of working in relative social isolation, opportunities for securing insights from sharing experiences with others may well be more appropriate. Consequently, classroom manual handling activities that encourage HCWs to discuss with their peers, on the importance of keeping their own bodies safe before attempting to care for the body of another, may further facilitate HCWs' appreciation for the significance of their role and enhance learning in these situations. Moreover, through these kinds of interactions and engagements with their peers in the classroom, novice HCWs may be encouraged to appraise and reappraise what they are doing in the workplace. These kinds of processes may, in turn, assist them in to negotiate the types of non-routine manual handling problems they may encounter in clients' homes.

The processes suggested here support and encourage the person-dependency of learning in isolated circumstances. However, there are potentially hazardous outcomes here, in that these workers may develop and sustain bad habits which could lead to injuries to both themselves and their clients. Consequently, the recommendations here should be considered alongside other training provisions which mediate the degree by which personal experiences and knowledge come to dominate how individuals enact safe manual handling techniques. These training provisions include the supportive artefacts which are discussed in the following subsections.

Written materials

Reliance on policies and procedures as a major source of practice knowledge is illustrated and supported in studies of nurses (Hauck, Winsett & Kuric, 2013; Melnyk, Gallagher-Ford, Long & Fineout-Overholt, 2014). Isolation (e.g., of nurses in remote settings), limited access to computers, and

time constraints may be factors which contribute to this trust in written resources as the main source of information from an organization (Estabrooks, Floyd, Scott-Findlay, O’Leary & Gushta, 2003). The same may be true for HCWs. In clients’ homes, where shifts are often only of 2-3 hours duration and consist largely of physical support provision, there is little time to access other sources of information, such as journal articles and on-line clips.

According to the informants, written materials provided in both classroom training and clients’ homes assisted their learning. These materials seem to have acted for some as “instructional scaffolding” (Bruner, 1975; Wood, Bruner & Ross, 1976), namely, a form of support to assist these workers to progress their learning (Sawyer, 2006). A typical trajectory is for this scaffolding to be removed once individuals become competent with the task (Brown & Palincsar, 1989; Wertsch, 1985) and for a gradual removal, or “fading”, to be initiated by the teacher (Collins, Brown & Newman, 1989). However, in the absence of expert guidance, learners may be required to manage or mediate their own learning (Billett, 2014). Given what these informants report, it could be reasonable to expect that workers will be selective about how they engage with artefacts, such as written materials. That is, as discussed above, they will come to value and engage with them in different ways and frequencies according to the worth they find in them. However, their presence provides a form of scaffolding and support in the work setting that these workers might variously find reassuring, to simply be there or with which to actively engage.

Hence, the provision of supportive artefacts, such as written materials, both in the classroom (e.g., training handout, policies and procedures), and clients’ homes (e.g., step-by-step instructions for key manual handling tasks) is important for supporting new workers’ learning. In view of individuals’ personal learning capacities and preferences, it may be helpful to provide these materials without rigid stipulations about how and when they are to be accessed. The suggestion here is to make available a

uniform set of supports, and provide a clear explanation and directions for their use and access.

However, beyond these instructions, rather than following a rigid formula of usage, learners themselves might be encouraged to decide how they engage with these forms of support, and to access or withdraw from them as required. In this way, each individual's unique and personal pathway to expertise is acknowledged.

Classroom refresher training

Refresher classroom training after a period of initial occupational practice was found likely to further facilitate learning and adaptability for HCWs. Liveng (2010) considers that in the health and community services sector, supervision groups, network groups and interdisciplinary conferences constitute valuable learning settings where individuals and groups of workers are able to develop their competencies. In these settings, individuals' contributions are acknowledged, professional knowledge is shared and exchanged, and collegiality is promoted. The value of these exchanges is reflected in Orr's (1990) observations of Xerox photocopier technicians' learning, another cohort of workers whose practice occurs in relative social isolation. He found that the sharing of experienced photocopier technicians' "war stories" (e.g., difficult tasks and work heuristics) with newer technicians, led easily to a shared understanding and creation of new knowledge. In this case, the HCWs will have had authentic experiences of their work, and this provides bases to engage with peers to share and compare their experiences, including what approaches seemed more or less effective in particular circumstances.

Therefore, the format of these refresher training sessions appears to be particularly significant. The presentation, discussion and solving of authentic (i.e., selected by the workers themselves) manual handling problems may further develop concepts and also assist workers to safely perform more complex manual tasks. The group work, interactions, and story sharing in these sessions means that for each manual handling problem, a broader range of solutions may be offered. So, when working alone

and faced with challenging manual handling tasks, these workers may be able to recall from their classroom refresher training how solutions were achieved.

Organisational support

While brief classroom training sessions for direct care workers appear to be the norm (Braun, Cheang & Shigeta, 2005), a lack of follow up from these sessions remains a longstanding concern. This is because there are no understandings about whether the training objectives are being achieved and sustained in the workplace (Aylward et al., 2003; Braun et al., 2005; Clarke, 2013). Yet, training programs for care workers that provide new information to staff, without any organisational or system support to facilitate application to the workplace, will, in many cases, return limited outcomes in terms of learning and transfer to practice (Aylward et al., 2003). Consequently, the issue of organisational support in relation to manual handling training in the classroom and workplace must be addressed.

In relation to organisational support, findings from this study lead to two main recommendations: (a) ensure that 'workplace' coordinators attend classroom manual handling training sessions; and (b) ensure that these coordinators visit workers regularly in their workplaces. Coordinator efforts directed at fully understanding the training content and the operational requirements of the home care role may provide better organisational support for new HCWs, through the provision of immediate feedback and guidance. In this way, coordinators become an additional source of support both in the classroom and clients' homes, assisting new workers to address client-specific manual handling situations, contributing to a more authentic learning experience and, thereby, assisting them to learn and enact techniques in their clients' private homes.

Conclusion

In sum, this exploratory study proposes that for HCWs' learning safe manual handling techniques in the absence of expert guidance: (a) an ability to transfer knowledge and skills from the classroom to clients' homes is largely person-dependent and, therefore, classroom training sessions should support the development of positive dispositions for the home care role; (b) written materials in the form of workplace policies, procedures and instructions provide a valuable form of learning support, and should be provided both in the classroom and workplace; (c) a return to the classroom after a period of time on-the-job, to workshop authentic manual handling problems with peers and experts may help to consolidate and extend skills and knowledge; and (d) support, in the form of coordinator presence at classroom training and in clients' homes, to provide further "expert" guidance as required, may also enhance these workers' learning outcomes. In these ways, learning outcomes for these workers may be enriched, thereby leading to increased safety in these workplaces for both the workers and those for whom they care.

Finally, as the home care workforce continues to grow (Health & Community Services Workforce Council, 2012), a significant effort needs to be invested into providing appropriate job preparation, continuing education and training that will prepare HCWs to meet the challenges associated with learning and working safely in home care settings. This effort may include more comprehensive profiling of HCWs as learners, and further investigation into the types of training experiences which best support them to learn and work safely in the absence of expert guidance. Moreover, consideration of the experiences of home care clients themselves in relation to learning the requirements for the HCW role, may add a different dimension and advance the inquiry in this field.

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