Title:

Independence: proposing an initial framework for occupational therapy

Abstract:

Background: The concept of *independence* is common in occupational therapy theory and practice but has rarely been clearly defined or conceptualised within in occupational therapy literature and there seems to be no standard definition. This can result in ambiguity, which potentially jeopardises client-centred practice.

Aim: This paper proposes an occupational therapy independence framework (OTIF) that synthesises the range of characterisations of independence in a practically useful and occupation-centred manner.

Methods: A review of literature, clinical experience, doctoral research and conversations with occupational therapists and disabled people has led to the development of the OTIF.

Results: Independence and interdependence, as characterised in the OTIF, occur when an individual exerts choice over occupational performance and can engage in occupations in a manner acceptable to the individual. Interdependence results when occupations are performed with another person whereas independence involves solitary occupational performance.

Dependence typically results from inability to choose occupations or a mismatch between performance capacity and environmental factors.

Significance: The OTIF has the potential to clarify the conceptualisation of independence within occupational therapy theory and practice. This initial proposal is presented to stimulate debate and discussion.

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Keywords: choice, dependence, disability, interdependence, occupational therapy theory, practice,

Introduction

Independence is a term commonly used in occupational therapy but it is not always clear what *independence* actually means. For example, consider the following note in clinical files: 'independent with personal self-care'. Does this mean that the person can wash and dress without help from others or equipment? Or, does it mean that the person can wash and dress without help from another person but maybe using adaptive techniques or equipment? Or, does it mean that the person has control over how they wash and dress and choose how to undertake the activity, potentially with personal assistance? Any of the above interpretations could be justified, based on concepts of independence found in the literature. However, they are clearly different in practice.

The author's clinical experience in a rehabilitation hospital in the early 2000s highlighted the above confusion and involved using measures such as the functional independence measure (FIM) and Barthel Index (BI), both of which purport to measure *independence* and impact of disability [1, 2]. As an occupational therapist, this typically involved observing specific tasks that form part of the measures and judging the individual's performance. These measures of independence were requested by medical consultants and were considered a good indicator of inpatient progress and whether an individual could return home. Despite the scores not always relating to the individual's ability in their home environment, the multi-disciplinary team wanted

a measure of the patient's *independence* prior to discharge and to track progress in rehabilitation. It seemed that the multi-disciplinary team assumed that independence (as rated using these tools) was the goal of treatment and *therefore* important to the patient. Discussion with clients about their values and wishes frequently suggested that higher scores in either the FIM or BI were not necessarily valued by clients or considered a sign of success to them.

The emphasis on independence as measured in practice seemed troubling, particularly in light of subsequent research and service user engagement. Within doctoral research undertaken by the author, people with physical disability described independence differently [3, 4]. One participant who described herself as an *independent woman* would certainly not have been measured as such using the FIM or BI: she required personal assistance and equipment for all self-care tasks with the exception of being able to eat some finger food. What did she mean by *independent* and how could it be so different from the results of clinical measures?

Consultation and discussion with occupational therapists further revealed challenges with the concept of independence across a range of clinical areas. One occupational therapist described how the term 'independence' was not allowed in clinical notes in her place of work due to its ambiguity. It became apparent that some way of explaining independence consistently within occupational therapy is needed and that this concept is relevant beyond the author's clinical practice areas of physical disability and older people.

Within occupational therapy literature, there seems not to be a clear, consistent conceptualisation of independence that acknowledges the range of interpretations within different discourses

beyond the profession. The meaning and conceptualisation of independence is critically important as occupational therapists are increasingly required to justify practice and funders increasingly value *independence*, typically defined by those funders in terms of reduction of need for assistance. It is proposed that a discussion of independence within occupational therapy would be most useful if it: were underpinned by occupational therapy's core philosophy; informed by recognition of the importance of client-centredness, and rooted in the practicalities of day-to-day practice.

A number of conceptual frameworks have been introduced to explain and depict aspects of occupational therapy theory and practice, including generic models of practice. There is recognition that common terminology and concepts within occupational therapy are not always consistent [5]. To address the need for common terminology, a European Network of Occupational Therapists in Higher Education (ENOTHE) project group created the European Conceptual Framework for occupational therapy [5]. Within this conceptual framework, independence was defined as 'the ability to perform everyday activities to a satisfactory level' [5, p. 15], but this does not clarify whether the activity is performed alone or with other people and it is not clear who decides what satisfactory means. A potentially more interesting aspect of the ENOTHE project is that the team found that definition of occupational therapy concepts was insufficient. Instead, they articulated the need for a more complex framework of how these concepts interlink [5]. In a similar manner to the ENOTHE group, initially, an aim for the current work was to create a useful and inclusive definition of independence. However, in developing definitions, it became apparent that a framework that links independence with related concepts such as interdependence, dependence, autonomy, choice, self-determination, competence and

function was needed; some of these important concepts are beyond the scope of the current paper. Definition alone would not and could not capture the complexity of the lived experience of independence nor could it act as a guide for practice.

The development of the framework has been organic rather than a deliberate sequence of well-defined steps. It has largely resulted from reading and undertaking research, conversations with clinicians (including presentation of earlier drafts of this framework) and discussion with disabled people about their perspectives on independence. Therefore, the framework has not arisen out of a pre-determined process but rather has emerged as a potential way to manage different perspectives about independence to promote client-centred practice.

This paper first presents existing perspectives of independence articulated in the literature. It then proposes a synthesis of these approaches in the Occupational Therapy Independence Framework (OTIF). Applications of the OTIF, including how it could be used in occupational therapy to facilitate independence or interdependence, are discussed.

Perspectives on Independence

The different views of independence have been described as follows:

Professionals tend to define independence in terms of self-care activities. So, independence is measured against skills in relation to performance of these activities. Disabled people however, define independence as an ability to be in control of and make decisions about one's life. Independence is then not linked to doing things alone or without help, but by obtaining assistance when and how one requires it. [6, p. 353]

This delineation is echoed by others [7]: the definition of independence is based on the underpinning model of disability, for professionals this is likely to be the medical model and for disability activists, the social model of disability.

The professional view

Within rehabilitation and medical literature, independence relates to the ability to perform tasks alone or 'in a manner considered normal' [6, 7]. In some occupational therapy settings, the approach to promoting independence is to improve physical competence to reduce the need for assistance [8]. Measures, such as the FIM and BI, are used to rate a person's independence in terms of their physical capacity [2].

Several authors have criticised this professional approach to independence [e.g. 6, 7, 9, 10, 11]. Another limitation of the medical perspective, less rehearsed in the literature, is that it is assumed that independence relates to physical and cognitive functioning: the impact of mental health issues on a person's independence seems to have been largely ignored. Some rehabilitation professionals have also criticised the dominance of independence as an outcome of rehabilitation, particularly when this may be an assumption that is rarely questioned [1].

The disabled activist view

For some disabled people, physical competence may be irrelevant to the individual's definition of their independence [9].

Independence does not refer to someone who can do everything themselves, a feat that no human being can achieve whether they have an impairment or not, but indicates someone who is able to take control of their own life and to choose how that life is to be led. It is a thought process not contingent on physical abilities. [12]

Within the Independent Living Movement, independence has been re-defined to focus on a person's choice and control: the emphasis is not on doing alone, but rather on having the control and choice to seek assistance when and how a person wants [6]. From an independent living perspective [13], a person is independent if they have the opportunity to exert choice, control their lives and participate as fully as they wish in society. The factors that render a person not independent relate to a physical or social environment that does not support this choice, control and participation [13]. As Barnes highlights in the quote above, the construct of independence is not dependent on either physical function or a concept of normality, therefore independence is about taking control of and making choices in one's own life.

The difference in definition between professionals, concerned with functional ability, and disabled people, concerned with control and choice, has resulted in continuous conflict with respect to service priorities [14]. Disabled people, particularly within the Independent Living Movement, have called for changes in social and governmental policies so that choice and control are emphasised rather than the reduction of assistance [11,13]. The independent living philosophy, like the medical model, could also be criticised for taking inadequate account of cognitive and mental health factors on independence.

Independence in occupational therapy literature

In occupational therapy, independence has been described as combining autonomy and competence [15]. For a disabled person to be independent there is a need for a level of physical, cognitive and affective competence as well as the ability to decide, *autonomy*. This conceptualisation of independence comprising of autonomy and competence, proposed by Rogers [15], recognises that physical or cognitive ability alone is inadequate to enable a person to be independent; the person needs to be able to decide what they want to do as well as physically do it [15]. This concept of independence appears to straddle the medical and social model views and remains one of the more coherent definitions of independence found within occupational therapy literature. Yet, in the thirty years since it was written, there has been little elaboration or discussion. Rogers' work identifies two important components of independence but does not clarify how they may interact, nor does it describe the role of the environment, nor the process of *how* someone becomes independent. Indeed, independence itself is not clearly defined in the work.

As previously described, the ENOTHE conceptual framework for occupational therapy includes a definition of independence [5], which also seems to straddle the medical and social models but retains ambiguity in two ways: firstly, it is not clear whether or not everyday activities are performed with others and secondly, to whose satisfaction the level of performance relates. Within the ENOTHE framework, there are also definitions of interdependence and dependence. While dependence could be seen as the inverse of independence in that it is stated that 'support' is needed to perform everyday activities, the nature of this support is not explicit and again the ambiguity of 'to a satisfactory level' remains.

A scoping review was conducted to ascertain how independence has been described in occupational therapy journal articles between 1980 and 2013 [16]. Independence was a keyword, in the title or abstract of 185 articles found in seven journals. Of these, the vast majority assumed a medical model definition of independence, i.e. independence being synonymous with physical capacity. Even in some of the articles that discuss independence as a concept [e.g. 17] independence is poorly defined. One paper [18] reported how a persons' self-conceptualisation of independence changed from 'independence' (competence) in specific tasks to being able to make autonomous decisions [19], thus mirroring the professional /disability activist debate. Similarly, individuals' self-characterisations of independence were strongly linked to home [19], which further reinforces the importance of considering the environment for disabled people in occupational therapy.

Another paper that raised the question of independence and, through a critical review of the literature, highlighted the range of definitions and concepts [19] identified concepts of independence including personal factors, environmental factors and what is described as 'continuum'. This work highlighted the diversity of definitions of independence in occupational therapy literature and, based on the analysis of the literature, proposed the range of concepts associated with independence but did not propose a framework that could be clinically useful for occupational therapists.

Other descriptions of independence found in rehabilitation literature

There are a number of descriptions of independence found within rehabilitation literature; two of these extend beyond the professional/activist dichotomy. One such description [9, 10] originated

from observations that physical ability does not adequately account for differences in social and psychological functioning. Independence was subdivided into four components: perceived control; psychological self-reliance; environmental resources and physical functioning. Empirical study of the model and development of a measure (the Personal Independence Profile, PIP) revealed that the component of control is least related to physical functioning but has the greatest influence on a person's eventual level of independence [10]. This PIP differs greatly in its approach to assessing independence from the FIM or BI. It evaluates all four components of independence in the model, whereas the FIM and BI focus only on the physical competence aspect.

In an effort to address the lack of a clear definition of independence, Gignac and Cott [20] proposed a framework based on the distinction between dependence and independence. In any given situation, an individual can be 'independent', 'dependent', 'not independent' or experience 'imposed dependence' depending on whether physical assistance is needed and used/available. This model is firmly based within a medical model perspective and relates to the physical ability to perform tasks and the availability and use of assistance. It states that a person's *perception* of their situation is integral to whether or not independence is achieved [20].

To summarise, independence is described differently in the literature and fundamental differences relate to the underpinning medical or social model of disability. Within occupational therapy theory, there is a framework that includes aspects of both [15], but this is far less developed than the model proposed by Nosek and Fuhrer [9]. The inverse of independence, dependence, has been defined by Gignac and Cott [20], however this definition focuses on physical competence and defines when someone is or is not able to perform tasks alone. Within

more recent occupational therapy theory, there has been limited development in descriptions of independence; the recent papers reviewed, for the most part assume a medical model interpretation of independence [16].

Descriptions of independence focus on different priorities. Prioritising physical capacity in clinical practice (as per medical model descriptions) may be inappropriate when working with people who subscribe to a social model perspective [21]. Therefore, to be client-centred when working with those who subscribe to a social model of disability, recognition of perspectives from disability studies is needed [21, 22, 23]. Yet, on the other hand, occupational therapists need to recognise that there is a practical difference between someone who can perform a task alone and someone who requires assistance. Thus, for occupational therapy, a framework of independence is required that includes both the individual's choice and their ability to function. Core occupational therapy theory, such as the person-environment-occupation (PEO) model [24], guides us to consider the environmental influences on occupational performance. Also, convinced by Gignac and Cott's [20] arguments that clear definitions of independence are required, the OTIF also seeks to define independence.

A synthesis of approaches: the Occupational Therapy Independence Framework (OTIF)

Drawing on the range of literature, research and practice experience, an occupational therapy independence framework (OTIF) is proposed. The underpinning values of the framework are summarised and the components of independence are discussed. The dynamics of independence are proposed and finally independence, interdependence and dependence are defined.

Eight core principles underpin the OTIF, as described below.

1. The importance of occupation

The first core principle underpinning the OTIF is the centrality of occupation, defined as the range of meaningful tasks and activities that an individual performs on a daily basis and which contribute to sense of identity and well-being [25]. The OTIF could be described as occupation-centred, using the definition of occupation-centred proposed by Fisher [26], i.e. it adopts a world view of occupation and what it means to be an occupational being' [26, p. 163]. Being independent or not independent relates to the manner in which a person performs and engages in occupation. Independence therefore is not a state of being, a personal trait or characteristic, rather it describes the manner in which occupations are performed.

2. Independence is situation-specific

As well as the OTIF being occupation-centred, it is also situation specific: independence relates to if and how a specific occupation in a specific environment is performed by the individual. Personal traits can influence an individual's desire for independence, autonomy, control and self-determination, but in day-to-day practice a global assessment of independence is likely to be far less useful than a framework that enables accurate description of specific occupational performance.

While objective measurement of factors contributing to independence in a given occupation, (such as physical, cognitive or psychosocial capacity) is possible, independence is also affected by a person's lived experience and perceptions, as was first suggested by Rogers [15] and has been since echoed in research [e.g. 3, 9, 10].

Similarly, a person's affect, motivation and social ability (their psychosocial capacity) can influence their independence. While a person may have the physical and cognitive abilities to perform a given task in a given environment, it may be that they do not have the emotional resources (such as self-confidence) or motivation and thus may be unable to perform the occupation at all or alternatively may undertake it in partnership with another person. Thus, it is also the person's perception of the occupation and environment, as well as their own performance components, that can influence independent performance in any given situation, as proposed by Rogers [15].

3. Independence is an individualised experience, open to interpretation Independence is an individualised experience that is open to interpretation. Two people may perform a similar occupation in a similar manner and environment and yet perceive it differently. The OTIF concerns the subjective experience of independence and interdependence rather than an objective measurement of the nature of performance.

4. Independence is a continuum

A key feature of the OTIF is the recognition that independence is not absolute. Rather there is a continuum from a sense of total dependence at one end to either total independence or total interdependence at the other, with either extreme being rare. The OTIF aims to clarify both what constitutes independence and the contexts in which a person can be independent, interdependent or dependent in any given occupation. This is depicted in Figure 1.

5. Independence and Interdependence are similarly valued

Unlike other frameworks, there is no assumption that independence is necessarily *better* than interdependence. However, dependence is not considered to be positive because, as will be described in the following sections, it implies an inability to make or enact one's choices. There is no value judgement based on whether it is better or worse to undertake occupations with the assistance or support of people or the environment, in line with perspectives from disability studies [12].

Nevertheless, the OTIF recognises and respects the reality that there is a difference between being able to perform occupations alone or requiring assistance for these. Therefore, the independent living description of independence that solely relates to a person's choice is equally insufficient for occupational therapy practice. Hence, in the OTIF, the terms independent and interdependent are equally valued as positive states. There are many situations where it is desirable to be undertaking occupations with other people and being interdependent may be positive; the growing exploration of co-occupations in occupational science [27] is testament to this. Co-occupation has been defined as occupations undertaken with others; co-occupations are those in which the 'occupational experiences of the individuals simply could not occur without the interactive responses of the other person or persons with whom the occupations are performed [27, p. 199].

6. Not disability specific

Much of the background presented in this and other papers focuses on disabled people rather than non-disabled people. The assumption that independence relates to disability is based on a medical model approach that assumes standards of normality [6]. Within the OTIF, independence is considered to be relevant to an individual with or without the presence of impairment. As will be described in the next section, one component of independent function is the interaction between one's personal capacities and the environmental demands and supports available. One reason why disabled people have been limited in independent function is that the social and physical environments are not designed to support people with impairments, as expressed within a social model of disability [11]. While there clearly are situations when it would be very difficult to create an environment where someone with a significant physical impairment could perform some tasks without assistance, there are similarly environments in which a person with no such impairment also needs assistance or participation from others. A non-disabled person may be dependent if they cannot exert their choice to reach something from a high shelf, for example if they do not have the physical capacity to reach high enough and the environment is unsupportive – there is nothing available to stand upon. For disabled people, the environment is more frequently unsupportive than for non-disabled people, as is articulated within a social model of disability [11]. The theory of co-occupations [27] may be relevant in the debate about independence, as this theory highlights that the very nature of some occupational performance is dependent on the presence and co-operation of others.

7. The OTIF draws on both medical model and social model perspectives

The OTIF recognises that both the medical and social models of disability have useful contributions to add to a concept of independence. Thus the OTIF recognises that independence

involves both physical, cognitive and affective functioning and control over one's life, and is also impacted by environmental factors. Thus, the OTIF aims to synthesise the range of literature about independence.

8. Aim to be practically useful

Another core principle underpinning the OTIF is the aim to be practically useful and applicable in occupational therapy practice. Much of the underpinning theory has been synthesised to enable the framework to be straightforward for use in practice. A limitation of this is clearly that situations are complex and the OTIF, particularly as presented in a relatively short paper, risks over simplification. However, a limitation of previous work is that it is either too simple to be useful or it is too complex and detailed so therefore cannot have clinical usefulness or relevance: it is hoped that this introduction to the OTIF provides enough information to enable it to be at the same time complex enough to provide adequate understandings and simultaneously condensed enough to be practically useful.

Components of Independence

Within the OTIF, independence is possible when a person has control over situations and can make and enact their choices. Choice, however, is insufficient: there also needs to be a balance between the physical, cognitive and psychosocial capacity of the individual and the environmental support and demands. Thus, the five components of independence described in the OTIF are:

- Choice and control
- Physical capacity

- Cognitive capacity
- Psychosocial capacity and
- Environmental support and demands.

[Insert figure 2 around here]

The components of independence within the OTIF have a dynamic relationship, each influencing the other. There is a dynamic process that enables independent or interdependent occupational performance: first requiring choice and decision about how a task is performed, then in order to perform it, a balance is needed between the individual's capacity and the environmental factors. So, in the OTIF, the ability to make a decision occurs before occupational performance but influences, and is influenced by, the person's ability and the environment.

Choice and control

In order to be independent, a person needs to be able to make choices about occupational participation and to enact those choices [as per 15]. Two forms of choice are required; the ability to make a choice in the first place and the ability to then enact that choice. These mirror concepts of decisional autonomy and executional autonomy proposed by Cardol et al [28]. Choice-making clearly requires a cognitive component and it also requires psychosocial capacity: if a person's mood is too low or they are extremely anxious or psychotic or are feeling judged by others, the ability to make choices could be limited, thus impacting their experience of independence. Thus, even though the reason for inability to participate in occupations may be

very different for a person with a physical, cognitive or psychosocial impairment, the effect, in terms of occupational participation is similar, and thus of concern in the OTIF.

Once a person has made a choice, the enactment of that choice may be limited by external factors. This may be, for example, due to an inadequately supportive environment for their individual physical, cognitive or psychosocial capacity. In other situations, individuals may be unable to communicate that choice to others, which could in turn result in an inability to participate in occupations. There may also be situations when choice is limited due to an individual not being fully aware of the options available.

If a choice can be made and enacted, this can result in the ability to perform a task without social interaction (including support or assistance from others) - independence; with social interaction (including support or assistance from others) - interdependence.

Physical capacity

The physical capacity of an individual are most commonly assessed within the medical model approach to independence. Physical capacity clearly influences the extent to which an individual can perform occupations in a given manner and environment and is the focus of existing tools (such as the Barthel and FIM). The OTIF draws on much occupational therapy knowledge as well as that associated with medicine and rehabilitation to interpret physical ability: it is suggested that this aspect of independence is assessed and, where appropriate, ameliorated in occupational therapy, underpinned by appropriate evidence and theory.

Cognitive capacity

As with physical capacity, cognitive capacity is readily understood to influence occupational performance. A person is likely to need to attend to appropriate stimuli in the environment, concentrate, use memory. plan and sequence tasks, and use executive functions to perform occupations. Occupational therapists have skills in assessing cognitive capacity and either improving capacity or enabling the individual to use adaptive strategies to enable occupational performance despite cognitive impairment. These approaches remain essential to promote occupational participation in the OTIF.

Psychosocial capacity

In the OTIF, psychosocial capacity is equally important to physical and cognitive capacity as a component of independence but is not typically included in either the medical model or social model views of independence.

In occupational therapy and psychology literature, there is much discussion of measurement of affective components of function as well as assessment of social functioning. As with physical and cognitive capacity, if psychosocial capacity is limiting occupational performance, this may form an important part of intervention and therefore should be assessed as part of understanding the individual's independence using the OTIF.

Environment

Much occupational therapy theory provides detailed description of the environment and the OTIF draws on such description from core occupational therapy theory. As within the Canadian

Model of Occupational Performance and Engagement [29], the environment is characterised as consisting of physical, social, cultural and institutional factors. All of these factors can support an individual to perform occupations or hinder that performance.

The physical environment is most readily understood as a potential limiter of occupational performance, particularly for a person with a physical impairment. If, for example, a person uses a wheelchair and there are steps in the physical environment, they are necessarily not independent in negotiating that environment. If, on the other hand, the physical environment has been well designed, environmental barriers may not pose a difficulty.

Social environments can equally limit an individual's ability to enact their occupational choices, as can an individual's perception of those environments. For example, an individual may not be able to perform a chosen occupation due to the presence of others and possibly the perception of that presence. Stage-fright, where an actor previously able to perform a role becomes 'stuck' may be an example of this and there are many other examples where, a person's psychosocial ability within a more challenging social environment may limit the person's ability to perform occupations without the support or encouragement of others.

Dynamics of Independence

The OTIF proposes dynamics of independence, in other words, the sequence of events that lead to independence, dependence or interdependence that could be useful in occupational therapy practice (see figure 2). These are:

- 1 Individual decides what to do and how (choice)
- 2 Individual evaluates their own ability to perform the occupation

3 Individual considers environmental support and barriers

It is expected that for the most part, individuals consider their abilities and the environmental contexts unconsciously and it is only when an issue occurs that consideration of these elements is conscious. Indeed, narratives from people with physical disabilities document the extra work in constantly needing to consider one's own abilities and the physical environment [3, 4].

In occupational therapy intervention, the above dynamic could be followed, with the therapist supporting any of the stages of choosing occupations, assessing physical, cognitive and psychosocial ability and assessing the environmental supports.

Definitions of independence

The characteristics of independence defined in the OTIF are as follows:

A person is *independent* performing a given occupation when they have choice over their actions, which are performed in supportive environments and with the physical, cognitive and psychosocial capacity to undertake the occupation in that environment.

A person is *interdependent* in performing a given occupation when they have choice over their actions, which are performed in supportive environments with interaction of others or assistance to overcome physical, cognitive or psychosocial capacity issues or environmental barriers. A person is *dependent* in performing a given occupation when they are unable to make, exert or communicate their choice to engage in that occupation, or are unable to engage in a chosen occupation due to an unsupportive environment or inadequate assistance to overcome physical, cognitive or psychosocial capacity issues.

A 'supportive environment' is one that does not limit occupational performance for an individual with a given physical, cognitive and psychosocial capacity. For a wheelchair user, for example, a level access environment would be considered supportive whereas one with steps would not. For a person with a learning disability, simplified controls on equipment could be considered a supportive environment and for a person with a mental health issue an environment that is perceived to be non-judgemental may be considered supportive. Assessment of the various aspects of the environment is an important skill of the occupational therapist and remains important within the context of the OTIF.

While it is recognised that some people choose to access unsupportive environments to overcome the challenges posed by these, for example climbing a mountain, these environments do not always inhibit occupational performance or engagement, they may simply change the nature of the engagement and require different performance components. Likewise, in the presence of disability or health issues, a person may choose or experience less supportive environments in which to undertake occupations but these may not necessarily inhibit occupational engagement. For simplicity within the OTIF, a 'supportive environment' is then one that does not inhibit occupational engagement for an individual. Clearly, as with all aspects of independence in the framework, this is occupation- and situation-specific and individualised.

The extent to which an environment is supportive of occupational performance may relate to any feature of the environment. For example, an unsupportive environment for a person with a mental health issue or learning disability may be one that provides inappropriate levels of stimulation or unfavourable social contexts. Similarly, the institutional environment, as described in the CMOP-E [29] may be unsupportive of occupational performance due to process or regulatory characteristics.

The definitions above relate to the more extreme ends of the continuum of independence / interdependence and dependence. Clearly, there are situations when an individual is partially independent, in which case, occupational therapy intervention can be used to support the individual to reach their optimal level of independence or interdependence.

The term interdependence is used in recognition of the independent living movement's definitions of independence, which emphasise choice and control and are considered valuable in any construct of independence. It would replace the 'not independent' concept proposed by Gignac and Cott [20] which does not fit with a social model perspective. Interdependence is also more relevant to occupational therapy as it could be examined in the context of the growing literature about co-occupation [27]. Performing an occupation with another person, whether it be physical assistance for self-care tasks or moral support during a leisure occupation could be defined as a co-occupation and interdependent occupational performance.

The definition of independence proposed in the OTIF recognises both the medical and social model perspectives and also recognises the influence of the environment on occupational performance. However, it is broader than both the medical and social model definitions and in an attempt to combine both runs the risk of being unacceptable to both. Throughout the development of the OTIF, the definitions and 'acceptability' of a definition that synthesises both approaches has been discussed by advocates of both medical model and social model approaches, with the conclusion that, provided that the definition is clear, it could be accepted. Those who subscribe to medical model approaches may wish to use 'competence,' 'capacity' or 'ability' to replace 'independence' as previously used and social model subscribers may wish to use terms such as 'choice', 'control' 'autonomy' or 'self-determination' to replace 'independence'.

Applications of the OTIF

A feature of the OTIF is that it recognises that a balance between the environmental supports/demands and the person's capacity is required for independent occupational performance. This framework could as easily be applied to non-disabled people, as described in the sixth underpinning principle.

The concept of interdependence is important because performing occupations alone may not be the goal of an individual, rather it may be preferable to undertake occupations with others. For a person with a disability, this interdependence may be in the form of using assistance, but the OTIF could equally apply to non-disabled people. Someone who would like to exert their choice

to play tennis cannot do so without the physical, affective and cognitive capacity to do so as well as a supportive environment, including the assistance (or co-operation) of another person.

Interdependence is an essential construct within the OTIF as it recognises that not every individual will necessarily want to perform occupations alone. For many disabled people, using assistance to perform self-care tasks is preferable to performing them alone [6]. Nevertheless, whether or not interdependence in daily activities is a goal for an individual, as occupational therapists, distinction needs to be made between someone who can actually perform a task in a given environment without assistance and someone who cannot.

Using the OTIF in practice would recognise that there are multiple ways to enhance a person's independence, and that this is not simply a case of enhancing physical, cognitive or psychosocial capacity. Drawing on the definitions of independence, interdependence and dependence and the dynamics of independence, the therapist could assess each element in turn, e.g. whether the person can make a choice, exert or communicate that choice, what physical, cognitive and psychosocial abilities they have and how supportive the environment is. The OTIF could be used to support and articulate the breadth of legitimate and valuable occupational therapy practice, recognising that environmental adaptation or provision of support may be as important in promoting independence as enhancing physical, cognitive or psychosocial ability.

Facilitating independence in occupational therapy practice using the OTIF

The dynamics of independence suggest that for a person to be independent or interdependent, the first requirement is that a choice is made. The OTIF therefore suggests that the first step to enabling a person to become independent or interdependent is to enable them to exert control and make choices in daily life. This may be challenging in some circumstances, for example with people with limited cognitive ability or severe depression. An aspect of choice-making may involve the ability for choices to be understood by others in the environment. The choices that need to be understood relate both to the occupations that individuals wish to perform and also how these are to be performed. For example, an individual may want to cook a meal, and may want to do this alone or with assistance.

The next step of the process involves exploring the physical, cognitive and psychosocial abilities of the individual to ascertain whether their choice is manageable. At the same time, the environmental resource or support also needs to be evaluated.

Intervention is based on matching capacity with environmental supports and may involve negotiation of what may be realistic in terms of changes in capacity and environment. This approach to evaluating and facilitating independence mirrors traditional occupational therapy processes and could be done in conjunction with a standard occupational therapy process. For example, following the identification of occupational performance issues, an individual could be asked how they wish to perform occupations, whether they value doing alone or with other people more and what independence means to them. Understanding how an individual wants to perform tasks may be more client-centred than assuming the desire for performing occupations alone.

Traditional occupational therapy could then follow, with assessment of personal capacity and environmental demands/supports. Intervention would be informed by knowledge of the individual's preference of whether they would prefer to perform a task alone or with others and an understanding of their preference for support to develop personal capacity or environmental adaptation, a consideration for client-centred practice [21].

Discussion: the potential use of the OTIF; practical implications

The OTIF is proposed to provide a more client-centred means to promoting independence or interdependence for people with disabilities, even though the framework has broader application. The proposed framework is true to occupational therapy's core values of holism and client-centred practice and takes account of a much broader view of independence than is typically found in the literature. The framework aims to be relatively simple and so useful for practice. Work to identify the factors involved in the definition of independence by other authors [e.g. 16, 30, 12, 15] is helpful and recognised; the OTIF provides a synthesis of theory that aims to be useful in practice and also recognises literature beyond occupational therapy that may be relevant to service users.

The OTIF is closely aligned with occupational therapy theory: it draws on the personal, environmental and occupational focus and recognises the inter-relationship of physical, cognitive and psychosocial components of function. It does this by recognising that independence is situation-specific and requires an interaction of the person with the environment to perform

occupations. It also considers individual values in determining intervention goals, whether these are independence or interdependence.

A limitation of the OTIF is that it draws heavily on existing literature and approaches to independence, which have been highly influenced by Western, individualised ideals and assumptions, which may not be applicable or appropriate in some situations. The alternate approach would have been to create a new lexicon. While there may be some merit in using different language, it would not necessarily resolve the issue of ambiguity in the language of independence and certainly would not support interdisciplinary communication. Another limitation, already discussed, is that in synthesising ideas from multiple sources, the conceptualisation of independence is different from all previous descriptions, be they derived from medical or social models of disability. This means that the approach may be a compromise for all.

One aspiration for the OTIF is that it could provide some clarity in language: clinical notes could be more specific, detailing whether an individual has made a choice and whether they are independent, interdependent or dependent with the given occupation and the environmental characteristics. The term *competent* could be used to differentiate the ability to perform a task alone; independent would necessarily mean that a person can do the task alone and indeed has chosen this course of action whereas interdependent could mean that an individual undertakes the task with interaction from others and that this is a satisfactory solution.

The OTIF conceptualisation of independence could better position OTs to explain our role in independence – at times we work with people to promote physical competence, at other times we help people develop emotional strategies, we adapt the environment and aim to make it more possible for them to exert control. It would be a more holistic view of independence that encompasses the broad range of practice, including focusing on strategies to enable choice. Similarly, an individual's own conceptualisation of independence may change over time [3, 10, 15]): using the OTIF could better equip therapists to support people through the transition of associating independence with performing tasks alone to an understanding of interdependence and maintaining their choice and control in occupations.

A striking finding of this work and that of others [16, 19] is how little debate there has been about what independence means in practice. The term seems to be liberally used, without clear definition and most typically assuming a medical model approach. It is questioned why the debate has not moved on further and why a simple, user-friendly framework that encompasses both a professional and a disabled activist approach has not been previously articulated.

The next steps for the OTIF include research into its practical usefulness in therapy, and whether it enables a clearer, more client-centred articulation of the concept for service users.

Development of tools to implement the framework in practice (e.g. assessment tools) would also be an asset.

Conclusion

The range of conceptualisations of independence found within occupational therapy, disability studies and rehabilitation literature highlights a conflict in underpinning philosophical

assumptions, broadly based on either medical or social models of disability. With few exceptions, the theory of independence in occupational therapy has been under-scrutinised in the past twenty years. This paper proposes a framework to conceptualise independence in practice, based on a synthesis of theories, research and clinical experience and grounded in core occupational therapy theory.

The framework proposes firstly that independence requires a person to make choices and have control in occupational performance. Secondly, a balance is needed between environmental factors and the person's physical, cognitive and psychosocial ability. Thirdly, independence, interdependence and dependence are defined.

The framework contributes to occupational therapy knowledge by providing an over-arching conceptualisation of independence that takes account of the range of definitions in the literature, yet is simple enough to be relevant and useful in practice. This could be influential in future occupational therapy theory development and clarification of practice.

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List of Figures:

Figure 1: Independence Continuum

Figure 2: Dynamics of Independence