



The Ecology of Human Performance

Recommended reading:

Dunn, W., Brown, C. & McGuigan, A. 1994. The Ecology of Human Performance: A Framework for considering the effect of context. *The American Journal of Occupational Therapy*. 48(7):595-607.

Introduction

The Ecology of Human Performance was founded by occupational therapists at the University of Kansas in 1994. A gap had been identified within occupational therapy theory and practice, that context had not yet been considered as an important factor in occupational performance. Therefore, the aim of the framework was to highlight the complexities of context and its impact on human performance. The framework provides a structure for incorporating context as a key aspect in intervention planning.

Theoretical underpinning

Theoretically the framework merges ecological principles, occupational therapy and social sciences theories. The main focus is on the interdependent nature of the relationship between the person and the environment; and how this relationship impacts on human performance. Emphasis on ecology is the distinguishing factor from other occupational therapy theories.

Assumptions

The relationship between the person and the environment is interdependent and it is the founding concept of EHP. According to EHP context/environment encapsulates cultural, temporal, social and physical factors. The fundamental assumption of EHP is that human performance and behaviour are affected by the interaction between the person and the context. Another assumption is that occupational performance can only be studied and understood within context. Apart for that, people and the contexts within which they exist are unique and dynamic in nature, hence the difference between contrived and natural contexts (Dunn et al., 2003:224).

The framework

Components of the framework: the person, the context, tasks and performance. As depicted below.

The person

The person is a unique being that has experiences, skills and abilities. Is embedded in context and cannot be understood out of the context. The skills include sensorimotor, psychosocial and cognitive.

Context

This can be cultural, physical, temporal and social in nature. It is affected by the person as much as the person is affected by it. The context is not static. As it changes, shifts in behaviour have to occur to enable performance. Context is the place where the person draws meaning.

Task

People perform tasks within a context using their skills and abilities. Tasks are defined as objective sets of behaviour necessary for goal attainment. The context is utilised to support performance of these tasks. A range of possibilities for task performance are available within the context and the person chooses specific tasks to perform according to inherent skills and abilities. Roles can determine tasks that the person chooses to perform.

Performance

Each person has a performance range that is dependent upon past experiences and resources available. Limited abilities and skills could limit performance range as much as contextual barriers.

Pictorial illustration of framework

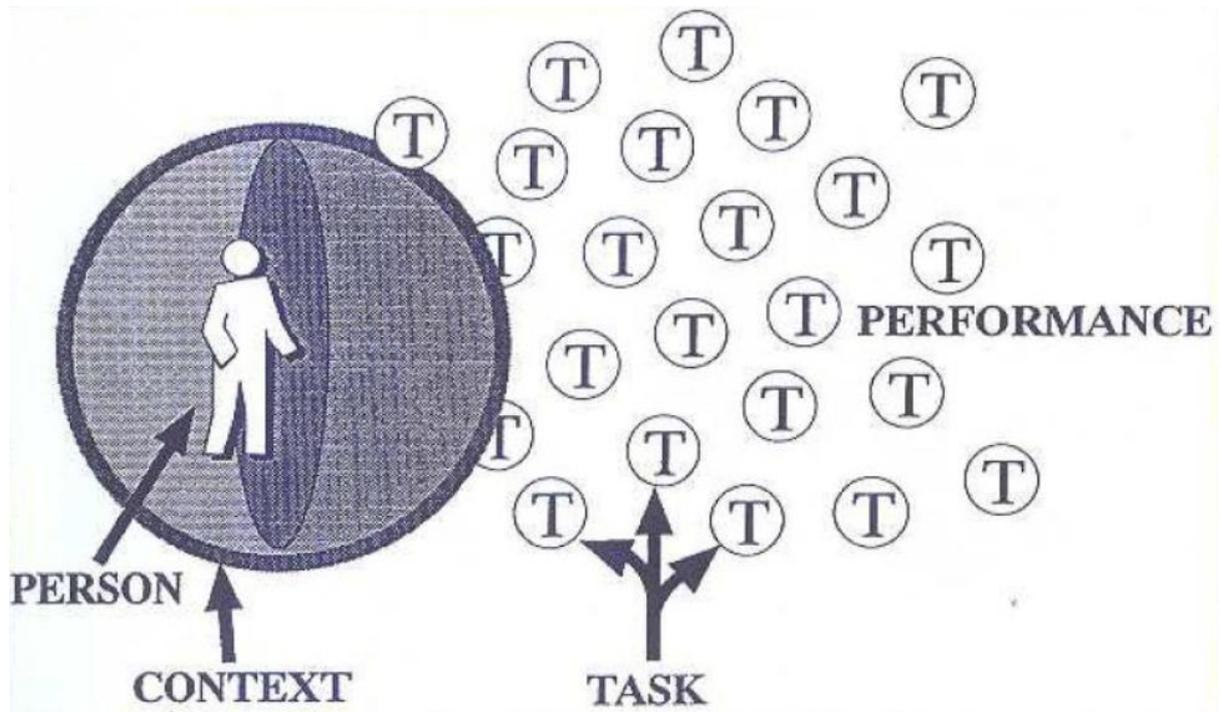


Figure 1. Schemata for the Ecology of Human Performance. Persons are embedded in their contexts. An infinite variety of tasks exists around every person. Performance results when the person interacts with the context to engage in tasks.(Used with permission from the [American Occupational Therapy Association](#))

Implications for practice

Addressing the features of context would enable occupational therapists to plan and execute appropriate intervention measures. Intervention is a collaborative process between the person, the family and the occupational therapist and the main goal is to facilitate occupational performance.

There are five therapeutic intervention strategies presented by the framework. These are, **establish/ restore, adapt, alter, prevent** and **create**. The intervention process is a collaborative one.

1. **Establish/Restore-** this occurs at the level of the person, where skills and abilities are the focus of intervention. The aim is to restore function by

improving abilities and skills. This remediation process takes place within context.

2. **Alter-** intervention focuses on selecting a context that would enable performance with the person's current skills and abilities. This entails finding a suitable context rather than changing the present context to meet abilities.
3. **Adapt-** the context manipulated and structured to support performance. Task demands can also be adapted to enable performance.
4. **Prevent-** the occurrence or evolution of maladaptive performance is prevented. Prevention is the main focus of intervention. This could be done through addressing features of the person, task and context that could lead to occurrence or evolution of maladaptive performance.
5. **Create-** circumstances that promote more adaptable or complex performance within context are created. This intervention strategy is orientated towards overall promotion of functional performance without the assumption that disabilities could occur or interfere with performance.

Function- dysfunction continuum

Performance range can denote function or dysfunction. A wide performance range depicts optimal performance therefore function.

Depiction of function

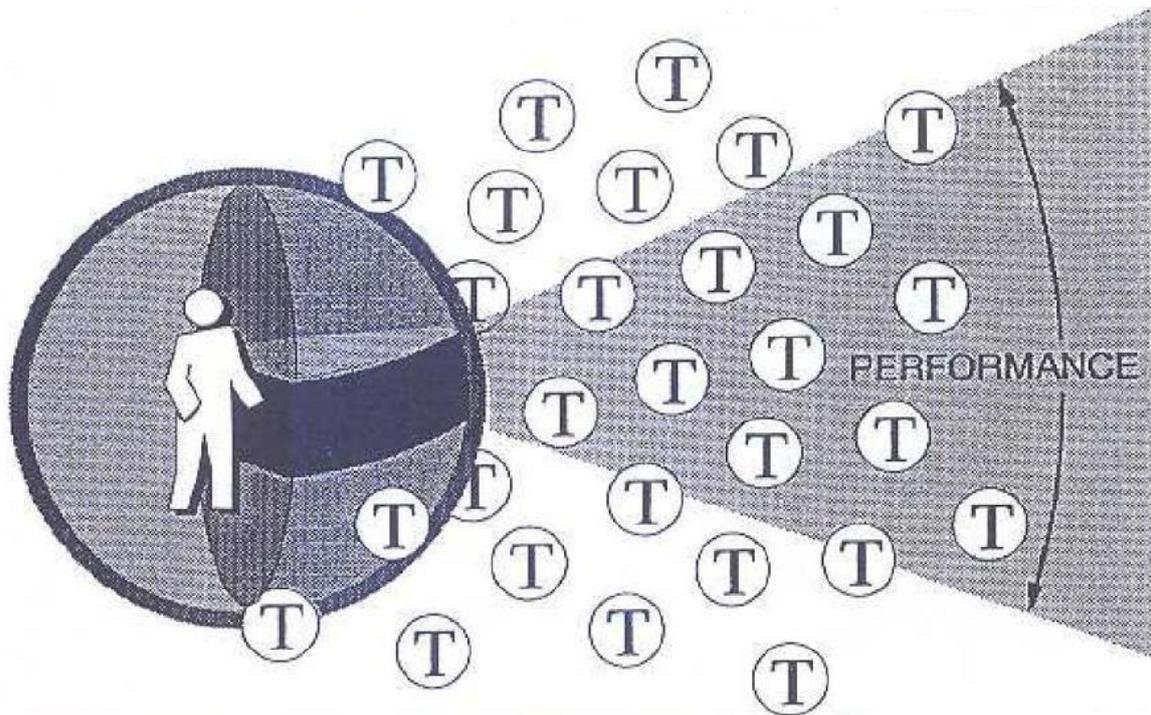


Figure 2. Schemata of a typical person within the Ecology of Human Performance framework. Persons use their skills and abilities to look through the context at the tasks they need or want to do. They derive meaning from this process. Performance range is the configuration of tasks that the persons execute. (Used with permission from the [American Occupational Therapy Association](#))

A limited range could indicate dysfunction, therefore need for intervention. This could occur when there is a mismatch between person variables, task demands and/or contextual features.

Depiction of dysfunction

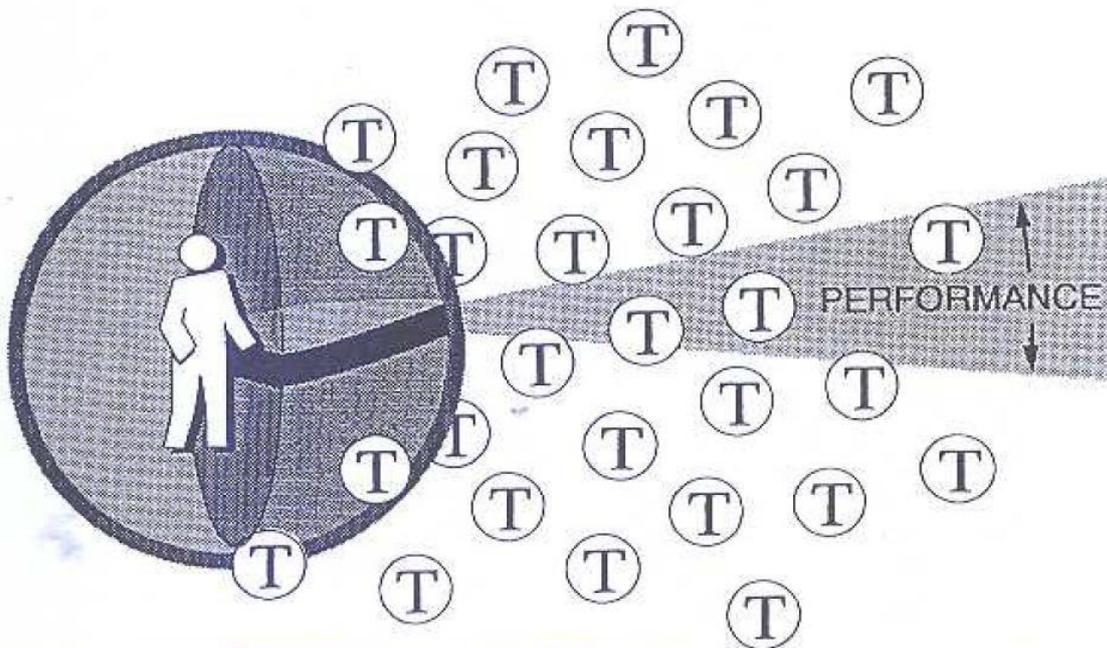


Figure 3. Schemata of a person with limited skills and abilities within the Ecology of Human Performance framework. Although context is still useful, the person has fewer skills and abilities with which to look through context and derive meaning. The lack limits the person's performance range. (Used with permission from the [American Occupational Therapy Association](#))

References:

Dunn, W., Brown, C. & McGuigan, A. 1994. The Ecology of Human Performance: A Framework for considering the effect of context. *The American Journal of Occupational Therapy*. 48(7):595-607.

Dunn, W., McClain, L.H., Brown, C. & Youngstrom, M.J. 2003. The ecology of human performance. In E.B. Crepeau, E.S. Cohn & B.A.B. Schell, Eds. *Willard and Spackman's Occupational Therapy*. 10th ed. Philadelphia: Lippincott, Williams & Wilkins. 223-227.



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