

Specialized and updated training on supporting advanced technologies for early childhood education and care professionals and graduates



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technologies for early childhood education and care
professionals and graduates**

MODULE VI.2

Development of personal autonomy

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I. Introduction

In this topic we develop the idea of personal autonomy and independence, highlighting the differences between the two concepts. We also address the concept of activities of daily living and include a brief classification of them before considering the importance of context and surroundings in the development of personal autonomy. Lastly, we look at the main activities of daily living, how they are defined, the tasks involved in each one, and more specifically, which are the most important chronological development milestones.

II. Objectives

The objectives of this unit are:

- To understand the concept of personal autonomy and activities of daily living.
- To understand the role that environments and contexts play in the development of personal autonomy.
- To learn the most important developmental milestones in the acquisition of independence in activities of daily living.

III. Specific contents of the theme

1. III. Concept of personal autonomy and independence

The concepts of autonomy and independence are usually synonymous; however, they differ in the detail.

Personal autonomy refers to people's capacity to make decisions related to their life on their own initiative. For Bornas (1994), an autonomous person is "one whose self-regulation system functions in such a way as to enable him/her to successfully meet both internal and external demands placed on him/her".

In contrast, the concept of independence focuses on the capacity to carry out activities by oneself or with the help of support devices, not expressly mentioning the idea of higher abilities implicit in the concept of autonomy.

Thus, people may be independent in dressing (puts on clothes without help), but may not be able to select clothes according to the weather or an event, which would affect their autonomy; and conversely, some people may need to be dressed, but decide what to wear (limited independence, but retained autonomy).

Therefore, the concept of personal autonomy focuses more on the higher cognitive capacities that allow decision making, and independence is more about not being dependent on a third person in doing activities.

In early and late childhood, both autonomy and independence develop in parallel, and as children develop, they acquire the capacities they need that allow them to be independent and autonomous. Both skills continue to develop into adulthood.

2. III. The concept of activities of daily living

Activities of daily living (ADLs) are daily activities that are performed frequently that allow people to function with autonomy and independence (Pérez de Heredia Torres and Oudshoorn Giaccaglia, 2022). Different authors are not unanimous in how they classify these activities, but in general there are three main groups according to complexity and frequency: basic, instrumental and advanced activities.

Basic activities of daily living are about care of one's own body and basic needs such as feeding, grooming, showering, toileting, dressing, or moving from one place to another (Pérez de Heredia Torres and Oudshoorn Giaccaglia, 2022). They are performed every day and are considered the first level of occupational functioning. Independence in these activities is acquired little by little naturally. As people grow and develop, parents gradually give up the support they provide in these activities, so that children can take on a greater role and do them themselves. It is estimated that autonomy and independence in these activities is acquired around 9 years of age.

Instrumental activities of daily living are more complex activities, and therefore begin to be done in later infancy and childhood, but definitive acquisition takes place in young adulthood. They are also related to personal care, but focus on more complex aspects, such as food preparation, shopping, household management, clothing management or health management (taking medication, making appointments, etc.).

Finally, advanced activities are related to independent living and are even more complex, being typical of adulthood. Examples include money management, renting an apartment, organizing trips.

3. III. Role of environments and contexts in activities of daily living

These activities are done in contexts and environments which establish their characteristics and specific elements.

The environment and context correspond to the circumstances surrounding children. The environment can be defined as the physical and social environments surrounding children where they do their daily activities, while context refers to fewer tangible conditions that surround us, such as **culture**, socio-economic levels, and educational levels.

Various studies have emphasized differences in acquisition of these activities, influenced by both contexts and environments (Santamaría-Vázquez, Guijo-Blanco, 2016). For example, dressing is not the same depending on where one lives as the climate determines the type of clothes to wear, as does the **culture** one belongs to (for example the use of



veil in Muslim **cultures**). Another example is the type of food one eats and the utensils used (cutlery, chopsticks, eating with hands, etc.).

Similarly, social contexts also influence the performance of these tasks. For example, family dynamics may encourage children's participation in tasks and therefore their development. In contrast, the dynamics may produce minimal participation, leading to slower development. Examples of this might include a parent who cleans a child's bottom because they do it badly and stain their clothes (if they do not practice, it will be more difficult for them to do it successfully), or who does not let them handle a spoon, because they spill food and eats less.

We must also consider the role played by the **physical environment**. If we talk about dressing, the **physical environment** would refer to the type of clothes that can be bought for the child to wear. In Europe, for example, it is difficult to find children's shoes with laces, and this limits the opportunities for children to acquire this skill. Circumstances such as having a bathtub or shower, the height of the toilet bowl, the type of faucet, and the length of children's hair, are examples of physical elements that can facilitate or limit children's independence in different tasks

4. .III. Development of activities of daily living

It is difficult to establish typical developmental sequences for activities of daily living, when we have already seen the huge influence of contexts and environments on them. However, it is possible to establish some general lines of development for basic activities, establishing basic chronological milestones, but it is important to emphasize that the periods indicated are large, because of the significant variation within a single country and the even greater differences that between different countries and **cultures**.

4.1 Development of feeding (eating)

Development of the skills to manipulate and keep foods or liquids in the mouth occurs according to the maturation of the oro-facial structures. The development of these skills is described by various authors, however, there are differences between children's abilities and dietary recommendations for children. For example, the World Health Organization (WHO) recommends exclusive breastfeeding until 6 months of age, but children may be able to eat other pureed foods earlier, since the development of oro-facial structures allows it.

The following is a summary of the main milestones and their age of acquisition (Schuberth L, Amirault L, Case-Smith J., 2010; Román Sánchez J, Sánchez S, Secadas F., 1997; WHO, 2010):

- 6-8 months: children are able to hold a bottle with both hands and drink. They can also hold a cookie in their hand(s) and bring it to their mouth. If presented with a spoon, they can pick up puree on the spoon.
- 9-12 months: they are able to eat soft food with their fingers (cooked ham, omelette).
- From 12 months: they begin to pick up spoons and bring it to their mouth. They grasp it in **palmar pincer grasp** and **pronation** of the hand, and gradually move to **tridigital pincer grasp**. Complete spoon handling (good grasp and no spilling) is established at around 3 years of age.



- 24 months: they drink alone from a normal cup (without lid or spout), although they pick it up with both hands.
- Between 24 and 30 months, they show interest in forks.
- 3 years. They handle spoons and forks and begin to use a (blunt) knife to cut omelettes, fish, etc.
- 4-5 years. They are able to spread butter or cocoa butter on bread.
- 6 years. They use a knife to cut meat.

4.2 Dressing-undressing development

Dressing and undressing is an activity that children begin to participate in from a very early age, starting simply by taking their socks off as a game, standing still or stretching out their arms to put on a jacket.

The different skills are acquired naturally little by little, but it is essential to give children the opportunity to do it alone. Rushing before going to school can mean parents not allowing children the space to do it by themselves, and therefore delay the acquisition of these skills.

The sequence of acquisition of the different milestones on the way to independence are as follows (Romero Ayuso DM, 2006; Romero Ayuso DM, 2006 (bis); Bluma S, Sherer, M., Frohman, A. and Hilliard, J., 1978; Mulligan S., 2006; Secadas F., 2009; Shepherd J., 2010):

- From the age of one, they cooperate by putting arms through sleeves and stretching legs. They can take off their shoes and socks, although only as part of a game (they enjoy taking them off).
- At two years old, they are able to pull down zippers, take off a coat if it is unbuttoned, undo Velcro-type fasteners, help pull up their pants, and are able to identify where to put their arms in shirts.
- At 3 years old, they put on socks (wrong heel), shoes (on wrong foot), and reach into sleeves without help. They need help to take off a sweater or T-shirt, and to button on the front (school gown). They can hook, unhook and use zips.
- Undressing is learned before dressing.
- 3 and a half years old. They handle hooks, untie bows and belts, put on gloves, shirts and coats.
- 6 years. They button almost everything, and begin to tie laces. It is important to note that although at 6 they would already have the skills to tie laces, it is really difficult to find children's shoes on the market with laces; they have been replaced by elastic bands, Velcro, etc., which means that this skill is delayed until the need to wear laces arises.

Outside of this stage (0-6) there are still a few more tasks to be acquired in later childhood:

- Full dress-undressing at around 8-9 years of age, which includes taking clothes out of the closet and the ability to select appropriate clothing for the occasion.

4.3 Development of grooming

Personal hygiene is a complicated activity due to the large number of tasks it includes: face and hand hygiene, combing hair, nail care, tooth care, and nose care, among others; therefore, acquiring independence in this activity will also take longer than the 0-6 stage.



The following table (Table 1) shows the main milestones in the development of this activity (Bluma S, Sherer, M., Frohman, A. and Hilliard, J., 1978; Hanson M., 1979; Mulligan S., 2006; Romero Ayuso DM., 2006; Secadas F., 2009):

Table 1. Milestones in the development of the personal grooming activity.

Age (years)	Milestones
1.5	Turn on the mixer tap, and leave hands in the water jet
2	Wash and dry hands with help
3-4	Hand and face washing are taken for granted
3	Wipes nose with a handkerchief when reminded
4	Blows their nose with a handkerchief when reminded
6	Brushes teeth without supervision (learning this requires many skills that are acquired from the age of 3 onwards)
7-8	Combs their own hair without help and can make a ponytail
9	Begins nailcare using nail clippers.

It is important to note again that for children to achieve autonomy, they must gradually participate in the tasks, going through phases in which the caregiver has to redo the task. Children will wash their hands, but the result will not be entirely good, and adults will think that they have to wash them again. But it is important for them to do it on their own, even if they do it badly, so that they can gradually improve their skills and abilities.

4.4 Bathing/showering development

Bathing and showering are an activity in which the child's participation is greatly delayed due to the dangers involved.

In the first few babies are usually bathed instead of being showered. If a home has a shower rather than a bath, babies are usually bathed in basins or sinks. Therefore, children have no role in this activity until 6 months of age, at which time they begin to participate, at most, by remaining seated. However, in accordance with what we have mentioned in the previous topic, although children aged between 6 and 9 months are able to remain seated without support, extreme care is taken in the bath to provide physical help to avoid accidents. Hence it is a little later on when children remain alone in a bath without physical help. Various products are available that offer this support and can help the baby to sit safely in the bath, such as small "potty" type chairs.

As children acquire a stable gait, parents stop using basins or other containers and the activity can be performed in the resources available in the house, whether the bath or shower. At this point, children help getting in and out of the bath or shower, with their parents' assistance.



The **physical environment** of the bathtub or shower again plays a crucial role in transfers, for example the presence of non-slip floors or bars for children to hold on to, are key points for parents to reduce the support they offer.

The following table (Table 2) describes the chronology of the most important tasks of this activity (Shepherd, 2010; Bluma S, Sherer, M., Frohman, A. and Hilliard, J. 1978):

Table 2. Milestones in the development of the bath-shower activity

Age	Milestones
4 -5 years	They start to take responsibility: they lather the parts of his body that they can: arms, legs, belly, ... Parents help with their back and hair. Begin to help in drying the body, but do not dry well at all, and parents have to redo part of the task.
8 years	Independent for bathing including hair washing and complete drying. Can prepare the bath water.

4.5 Bladder and bowel care development (sphincter control)

Until almost 24 months of age, it is the parents who control children's **sphincters**, limiting themselves to performing necessary diaper changes. However, from 18 months of age, children begin to give signals about their bowel or bladder needs, with gestures or words.

Bowel control is acquired earlier than bladder control, at around 18 months.

Bladder control is more difficult and there is great variability in the age of acquisition. In addition, there is evidence that girls acquire bladder control up to 6 months earlier than boys. Trying to give some age, 50% of boys and girls have daytime sphincter control at the age of two and a half years, and at night 80% have it at the age of 3 and a half years. However, the remaining 20% do not acquire nocturnal control until the age of 6 years.

As a final thought, there is evidence that putting children on the potty before 15 months of age has an influence on reaching bladder control earlier.

(Romero Ayuso DM, 2006; Marugán de Miguelsanz J, Lapeña López de Armentia S, Rodríguez Fernández L, et al., 1996; Schum TR, Kolb TM, McAuliffe TL, et al., 2002; Sesa S, Frassoni A, Sabulsky J, et al., 2001; Secadas F., 2009).

4.6 Toilet hygiene development

Toilet hygiene refers to children's ability, not only to clean themselves after urinating or defecating, but also involves handling clothes (putting them on and taking them off), being able to sit alone on the toilet bowl, flushing the toilet and washing their hands, hence it involves other activities such as dressing and personal hygiene.

The most important milestones in the 0-6 years stage are as follows (Romero Ayuso DM, 2006; Schum TR, Kolb TM, McAuliffe TL, et al., 2002; Bluma S, Sherer, M., Frohman, A. and Hilliard, J., 1978):



- - Between 2.5 and 3 years of age, they begin to wipe only their "bottom".
- - At 3 years of age, boys urinate standing up in the toilet and pull down and pull up their pants if they do not have buttons.
- - Between the ages of 3 and 5, they begin to be able to flush the toilet. This variability depends on the flushing system, as sometimes force is needed, and even if children can reach, they may not be able to squeeze hard enough.
- - Between 4 and 5 years of age, they are able to clean themselves properly after defecating. Using wet wipes makes it easier for them to clean themselves properly.

IV. Summary

This topic addressed the concepts of autonomy and independence, as well as activities of daily living, it considered the role that environments and contexts play in the development of both, and reviewed the main developmental milestones in the acquisition of independence in basic activities of daily living in the period from 0 to 6 years of age.

V. Glossary

ADLS: Activities of daily living.

Culture: Set of beliefs, ideas, customs, traditions of a region, social class or time.

Physical environment: It is the strictly material and tangible part that surrounds the human being.

Sphincters: ring-shaped muscles that close and open certain natural ducts of the body such as the bladder sphincter (which regulates the opening and closing of the bladder) and the anal sphincter (which regulates the opening and closing of the rectum).

Palmar pincer grasp: grip with the whole hand.

Tridigital pincer grasp: grip with three fingers, as for example to pick up a fork.

Pronation: position of the forearm, with the palm of the hand downward.

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VII. Resources/Web

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