

The Competence of an Infant *Dr. Emmi Pikler*

In the last decades, those studying the rearing of infants and young children have made a number of highly important discoveries. In actual practice, however, only some of them have been utilised. Some of the new findings, perhaps because they questioned ancient traditions, have not become a matter of common usage. Practice and theory are not yet in tune.

It is widely believed, even in medical literature, that newborn infants are helpless creatures. Allegedly, when something is bothering them the only thing they can do is cry. And if they cry, one should comfort them. If they are hungry we feed them. Infants like physical closeness, so we cuddle and caress them.

As regards to upbringing, in recent years infants and small children are being "taught" more and more. It is assumed that the more knowledge is fed into a baby – as into a computer – the better. It is generally expected that babies will remain in the same position in which they are placed. One expects them to imitate simple things they are shown and to repeat syllables and words after us. Thus, not only food, but also knowledge is fed into a baby.

As a rule, an adult decides what babies should know how to do, when they should do it and how. This is what they are taught. They are expected to do the above upon demand, with much or little adult help. Less and less notice is taken of the infants' own initiatives and signals; hence, they grow scarcer. The infant becomes used to imitation and mechanical repetition in practically every area of life.

As a result of this kind of education, an infant becomes completely dependent on adults, lacking self-reliance. This is generally considered a natural condition instead of a consequence. This method of bringing up children contradicts what has been brought to light by most modern research into the psychological development of children.

Since the early sixties, many papers have shown the dominant role of self-initiated and self-realised motor activities, and the feedback from motor-induced changes in the development of psychic functions: in learning, becoming acquainted with the world, in the formation of the body-schema and volitional controls. (5,6,7,8,9)

As early as 1950, R. White (13) pointed out that not only self-initiated, active movement, but the changes brought about by it - the feeling of effectiveness, of competence – constitute basic human needs which can already be observed immediately after birth. The confidence in one's own abilities

and effectiveness, which can be weakened or reinforced through day to day experience, has a fundamental effect on a child's way of action, behaviour and goals; ie. on the entire structure of his/her later personality.

Important elements of competent behaviour are independent initiation of action; independent performance of action; and the effectiveness of the action. Precisely these elements are realised for the infant through: the formation of contacts with adult; motor activity based on the infant's own initiative; self-started and performed manipulation.

According to R. White (1974): "Competence will refer to an organism's capacity to interact effectively with its environment." (13).

Connolly and Bruner define competence as follows:

"In one respect, when we talk about competence, we are talking about intelligence in the broadest sense, operative intelligence, knowing how rather than simply knowing what. For competence implies action, changing the environment as well as adapting to the environment.

It seems in a sense to involve at least three things. First, being able to select features from the total environment that provide the relevant information for elaborating a course of action. This activity goes by several names; forming a schema, constructing a programme, etc. Secondly, having planned a course of action, the next task is to initiate the sequence of movements, or activities, in order to achieve the objective we have set for ourselves. And, finally, we must utilise what we have learned from our successes and failures in the formulation of new plans.

It is apparent that all three aspects of the problem are concerned with development, but it is the last of them that is most central to it."

And to quote from the introduction of the chapter:

"Competence has many features. But our object is not only to examine the nature of competence, but also to explore how it is that one can cultivate competence in the young. We have much before us." (3)

We would like to call attention to some questions which might seem insignificant, but in fact are quite essential.

We have acquired a great amount of knowledge about newborns and infants in recent decades. The numerous reports on certain capacities and skills possessed by newborns and infants disprove century – old beliefs. For instance, on the basis of constant observations in the first 18 hours of life, B. Wolff (1959) proved that on the first day of life newborns are capable of following a light that

catches their attention. They are capable of turning their head and eyes in the direction of the light on the first day even if only for a few seconds. (14)

It has been experimentally shown (Bower, 1971) that, if babies only a few days old are held in a particular way, they already reach out with both hands toward what seems to be a shining object that has caught their interest. If they do not meet an object with their hands, because it is only a projection in the air and not real, they will begin to cry. In contrast to this, if there is a real object to be grasped, they will not cry. (2).

In addition, it has been experimentally proven (Fantz, 1961 [4]) that newborns when only a few days old perceive forms and objects. They turn their head significantly more often in the direction of the object of preference. A baby of this age is able to distinguish the size of objects, even when the picture of two objects are experimentally projected in equal size onto the retina (Bower, 1966 [1]). It has also been demonstrated that a one - week - old baby can distinguish different sound signals (Papousek, 1975 [10]). This research leads to the conclusion that human beings are born with numerous capacities which, until now, were believed to be attained only later in the course of development.

The following questions may be posed: What role is played in the daily life of the children by the capacities disclosed in these studies? How do the children utilise these capacities? How do these capacities develop? When do these capacities become integrated and differentiated? How do they fit into the course of development? How do they contribute to the child's personality? The above-mentioned studies offer new answers to these questions.

We are familiar with various methods of examining the main stages of development – in which the infant's actions are recorded at various points of time in identical and similar situations. These examinations do not usually take into account a child's independent behaviour. Instead they concentrate on the child's responses to an adult's actions or words. This is most apparent in motor-development tests during the first six months of life. Hardly anyone examines what an infant can do independently, or how s/he moves in everyday life. Instead, the curvature of the spine, for instance, is measured; or the way the infant holds his/her head when placed in a sitting position, etc., by an adult.

Many of the activities and movements that make up most of the child's daily life go unnoticed in such examinations. Hence, they fail to give information about the infant's abilities, and to reveal to what extent s/he is able to initiate and carry out what s/he has initiated; how we are to deal with the child regarding his/her preferable physical environment; and how to further help the child's initiatives and their accomplishments.

If we want to find out to what degree newborns or infants are capable of effective interaction with their environment, it is not enough to change the methods of examination. We must also provide

appropriate surroundings and treat the children in a way that enables their abilities to develop. In this respect, our nursery is in a special position. Since its establishment in 1946, it has ensured the kind of care and educational conditions which have proved themselves valid in families, but still differ from what is usual practice. So, at Loczy, from the first days of life, a course of development could successfully take place that allowed the children to initiate contact and interact more effectively than usual with the adults caring for them, and with their whole physical environment.

Under these circumstances it could be proven that, in day-to-day life and not only in experimental situations, infants are capable of more than has been expected under conventional modes of upbringing. They are capable of accomplishing fuller, richer contacts both with the adult who is caring for them, and with the environment.

A newborn, for instance, is already able to respond to the touch of an adult's hand – by either relaxing or becoming tense. When lifted, s/he can contract, or s/he can give to the form of the adult's hand, thus indicating whether the touch is pleasant or unpleasant. S/he can be handled in a way that causes no resistance, so that the muscles do not contract when the neck or armpits are washed. It only takes a few days for this interaction to develop: depending on the way we handle the infant, s/he will react with ease or become tense – not only in response to our touch, but already when we only approach. Thus, from the very beginning, positive or negative contact comes about between an infant and the caretaking adult.

Infants are active when they are being nursed. If they are given something else to drink – herb-tea for instance – newborns can clearly express whether they like it or not. If they like it, they will suck and swallow actively, even if fed with a spoon. We may even hear them smacking their lips. Should Sari not like it, she will let the liquid run out of her mouth or push it out with her tongue. If we were more attentive to these early, subtle signals, the alarm signals such as spitting and vomiting would occur less and less often. The infant, even the newborn, informs the adult quite clearly – before beginning to cry – whether or not s/he enjoys the food.

Gestures and mimicry show whether Tomi is content. For instance, he will clearly express whether the temperature of the bath water is comfortable, and whether he is content with the way he is dressed or undressed. Very early he will take the initiative, if we are attentive to his signals and react to them.

If the care is always performed in a similar way, and if we perceive the child's signals and respond to them, it will be only a matter of days before the leg or arm will become relaxed as we wash it. After a few weeks, the child will shape the mouth in a particular way when spoken to. S/he will make sounds, smile at us when we talk to him/her. With sounds and gestures s/he will more and more actively call for the adult's attention, and will cooperate and interact with the adult more and more during the care. Later s/he will help in this care. S/he will lift up and offer us the arm or leg in the accustomed sequence.

Infants who actively participate in their daily care and are emotionally balanced are also active and full of initiative beyond the care situation. They are capable of picking out from their surroundings objects which interest them, independently getting to know these objects and occupying themselves with them.

Infants and children who are brought up this way do not demand the same amount of help from adults. For example, the process of motor development does not entail going from helplessness to independence. During each phase of their development, these children are capable of certain independent motor activity; they are capable of initiating and mastering new postures and movements without the immediate help of an adult. They are mobile in each new position which is attained independently. They can leave these positions and find them again. *

These children will come to lying on the stomach by turning themselves over, not by being put on the stomach by an adult. They do not learn to sit by having been set up with a support. Having independently come up to half-sitting, they then sit up on their own. They do not learn to stand because we take them under the arms and stand them up. Having independently come up onto their hands and knees to kneeling, then to standing while holding onto something, they can later stand up without holding on and then take their first free steps on their own. They are continually practising many different motor activities. This way they move from one place to another, or move to a toy and manipulate it. All of this changes in the course of development.

But the child's joy and desire to take the initiative persists throughout infancy and is a source of motivation to be forever trying out new and different types of movement and activities. This means, in other words, that there is no need for an adult to demonstrate and teach these things. With endless interest an infant regards his/her hands, then picks up objects and examines them; s/he moves about and gets to know the world on his/her own initiative. (Tardos, 1966b, 1967) [12]

Thus, a pattern of progress may be realised in the course of motor and manipulative development, in which the child is characterised by being the master of her/his actions, ie. by competent behaviour.

To make competent behaviour possible, an appropriate physical environment is needed, including the appropriate behaviour on the part of the adult caring for the child. An infant can only play independently and handle his/her toys with competence if the toys are within reach and have a shape which is easy to grasp; if they can be used freely, ie. if they are neither tied nor fastened in some way; and if it is not forbidden for the child to put them in the mouth; and so on. Infants can develop, practice and use their motor skills only if they have enough space to do so.

**There are some exceptions. It takes awhile for most children to be able to leave certain new positions: for instance, when they have turned over onto the stomach for the first time, or stood up for the first time. (Anna Tardos)*

The amount of needed space corresponds to the stage of development. At the ages of four, five and six months they are moving independently from one place to another: turning over on the side, on the stomach; rolling; creeping on the stomach; crawling; etc.

Under conventional modes of upbringing an infant's activities are, however, limited by a variety of circumstances. The newborn is often put on the stomach, which already limits movement. In this position s/he cannot freely move either arms or legs during the first weeks of life. At approximately six months of age, when the infant could be able to try out a variety of movements possible when lying on the stomach, s/he is hardly given the opportunity to do so. A large number of infants spend their days either in a crib or in a smaller, round playpen measuring less than one metre diagonally or at best in a square playpen with an area of barely one square metre.

Chairs, seats and various contraptions for standing are being designed in which to put children for a good part of the time. In all of these contraptions, a child cannot roll over, crawl on the stomach or on hands and knees. In these seats s/he cannot even change position enough to bend over and pick up a toy that has fallen.

Children's independence and feeling of competence is also hindered by adult's thinking they have to help their development. Under the pretext of "helping" and "teaching", they deprive a child of the possibility of taking the initiative, of trying things out and bringing them to a finish. This idea, and the attitude that arises from it, is in need of revision. With the so-called bit of help – "I will just give Kati a hand in completing what she has begun" – we deprive the child of the joy in having achieved something on her own. It takes away the feeling of effectiveness, as does the sort of traditional "helping" in which an adult does something with, or to, the child as though s/he were an object.

Those children whose pace of development in one or more areas is slower than usual are particularly endangered. These children are passive in being placed in positions belonging to more advanced development and ever more highly developed achievements are expected from them – something they are not yet ready to do on their own. In this way, we take sound and healthy children who are just developing more slowly than others, and make them awkward and clumsy.

We now think that it is better for a child to start school later than to be behind year after year, always "not understanding" or "understanding poorly" what the others are learning. It is better for children actively to realise their manifold potential on their own level, the level of their own development, than to be forever lagging behind themselves. This may be even more applicable to infants and small children.

Teachers, and even more so scientists, are seriously concerned over the lack of initiative shown by many children. These children prefer to imitate others rather than to be creative and develop their own ideas because, from earliest childhood on, they were taught this way; their initiatives were stifled and they were deprived of the pleasure of exploring on their own. Some schools of thought

even instruct mothers to "teach" their infants systematically a fixed body of knowledge, according to a timetable, as is done in schools. Thus, the areas in which these children can initiate something and carry it out on their own are reduced more and more.

We must become aware of the effects that early care and education of infants and small children has on their whole lives. The paediatrician's responsibility is particularly great, since ultimately it is the doctor whose instructions – directly or indirectly – determine the mother's attitude toward the developing human being. * Paediatricians should not sanction habitual traditions and practices that demand less care but are harmful. They can help parents to recognise how essential for their children is independent motor activity. They can help a mother to view her child as an active partner and not as an object for her activity, one to whom she must teach everything. The paediatrician can help mothers realise that in addition to all else that is involved in caring for a baby, a task of great importance is to further the infant's competence.

If both the paediatrician and the mother would devote attention to furthering competence, this could bring about a revolution in the bringing up of infants and small children, one which might lead to the prevention of certain later psychological and somatic disturbances. If we would pay more attention to children's signals and initiatives, thus supporting their sense of competence, we could raise more peaceful children with fewer problems, children who would know more precisely what interests them, and what they need in the way of food and sleep. They could play and occupy themselves independently. They would have a sound and active relationship to their mothers and other adults – which does not mean being attached to the warmth of arms. It means a positive human relationship that starts with mutual adaptation. With this kind of relationship as a basis, the child's adjustment to society would be a healthy process with fewer conflicts. The emotional life would be richer and more balanced, social adjustment more satisfying. All this would eliminate the need for many subsequent corrective educational measures, and render unnecessary somatic intervention and its consequences.

**Emmi Pikler considered a paediatrician responsible for preventing and healing illness, but also for the overall healthy development of a child. As a paediatrician Emmi Pikler made regular visits to families with small children – not only when the children were sick. It was her goal to support the entire family in its everyday existence. (Anna Tardos)*

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