ANIMATION OF FREE TIME AND SUPPORT FOR PSYCHOMOTOR DEVELOPMENT OF INFANTS AGED OVER 3 MONTHS

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Abstract This article constitutes a desk study regarding animation of free time and its influence on the psychomotor development of infants aged over 3 months. The article discusses the concept of free time of infants. The motor and psychological development of children between the age of three months to one year is presented. Moreover, different ways of spending free time by the parent and child are shown. The aim of this article is to raise awareness of the role of supporting early child development through appropriate selection of games and other activities in line with the individual stage of development of an infant. The article has been prepared based on a literature review (including PubMed, Research Gate, EBSCO) as well as analysis of selected offers of commercial animation activities available in the city of Poznań, taking into account the individual stages of development and their impact on the comprehensive development of infants. Moreover, a list of activities recommended for children which are adequate to specific periods of their development was also prepared.

Key words animation, free time, psychomotor development, infants

Introduction

The concept of "free time" raises many controversies regarding its meaning and definition. Some consider it as time "left after completing all necessary activities related to a person's professional, family and social duties, as well as after performing all necessary activities related to the physiology and functioning of the body" (Kiełbasiewicz-Drozdowska, 2011, p. 9). On the other hand, others argue that such time simply does not exist. The time that a person has may be divided into 'occupied' and 'unoccupied' time, with the former being spent on obligations, and the latter being dedicated to pleasure. This time is not called free time, as there are always some activities that are carried out during it (Kosiewicz, 2012). Therefore, how can the above definitions be related to infants? Is it reasonable to address the topic of free time in this age group of children? It is believed that 'free time' of infants will be the time 'available' to them after fulfilling all the physiological-hygienic-emotional duties, i.e. after feeding, sleeping, changing, bathing, and hugging. On the other hand, infants cannot decide for themselves

what they want or will do at a given moment. Most often, it is the parent – caregiver that chooses a specific form of activity to which they encourage their child. Nevertheless, voluntary participation in activities raises doubts, as free time is considered "time without obligations, which is spent on any type of activity" (Pięta, 2014, p. 11), unless voluntariness is assessed in the context of whether the child is interested or not in a given activity, by e.g. eye tracking. In that case, may it be more accurate to refer to the activity of infants to that described by J. Kosiewicz (2012)? Or is it worth looking at it strictly from the pedagogical perspective and supplement the classic definition with a child's free time, when the parent-caregiver decides on the reasonableness and type of specific activity in the so-called free time? For this reason it is worth addressing this issue and defining such time as a period in the lives of infants which remains after all the physiological, hygienic and emotional activities, most often provided by their mother (e.g. lying in a cot or on a mat and getting to know the world from this perspective), or also arranged by the parent – caregiver, are carried out in line with the age and capabilities of the individual, while supporting their comprehensive psychological, motor and emotional development. However, it should be stipulated that with age, the children themselves will choose free time activities with the help of their parents. The way in which an infant functions in the first months of life will be reflected in their future behaviour (Carson et al., 2019). Therefore, it is important to provide a child with maximum safety and numerous types of activities that can encourage them to take up interests in the future, e.g. reading books, musical appreciation, and willingness to discover the world. By observing specific behaviours, the child begins to imitate them (Delafield-Butt, Trevarthen, 2015). Hence the great responsibility of parents for the development of future interests of their children.

The source literature underlines the importance of early stimulation of child development through play and mutual communication for their further growth. There are specials programs that are intended to help parents in this area (Gladstone et al., 2018). However, one cannot forget that a child must be ready for such stimulation. The responsiveness of a small child is very strong, hence it seems worth providing them with a diversity of stimuli that may affect their future lives (Kowaluk-Romanek, Bieganowska, 2013).

Unfortunately, literature on the subject does not present homogeneous studies in the field of recreational activities for children aged 3–12 months. This is due to the fact that the issue of 'free time' in this age is controversial, as described above.

In the context of the above, the following research questions were formulated:

- how should 'free time' be organized for infants aged over 3 months to support their psychomotor development?
- which areas of child development are most significantly influenced by properly organized activities?
- who should implement animation activities with the child, and why?
- should commercial offers for infants be the only source of developmental games?

Moreover, relevant hypotheses were formulated.

Material and methods

This article attempts to determine the type and scope of animation of free time and support for the psychomotor development of infants aged over 3 months, defines and explains the validity of the concept, as well as presents a list of activities depending on the age and individual development of the child. A review of literature (including PubMed, Research Gate, EBSCO) and analysis of selected commercial activities for the aforementioned age group of children in the city of Poznań were carried out.

Psychomotor development and types of activities of infants aged over 3 months

As early as fetal life, a child grows and develops, most often for 38 weeks, to the point of finally appearing in the world and becoming an individual. This little person will have to learn about their own existence, first with the help of their caregiver, and later numerous institutions (e.g. nursery, toddler club). The way a child develops affects the behaviour of caregivers and vice versa. Therefore, it seems necessary to learn more about this stage of a toddler's life from both physical and psychological aspects.

Table 1. Psychomotor development of infants

Motor development	Psychological development
Uncoordinated movements	Ability to process visual information
Sensorimotor movements	Development of the sensory sphere
Development and improvement of locomotion	Development of manipulation
Gripping movement	Development of the emotional-social sphere
Head lifting	Development of social interactions
Sitting	
Standing	
Creeping, crawling, walking	

Source: Brzezińska, Appelt, Ziółkowska (2016); Osiński (2011); Słaboń-Duda (2011).

During infancy, the baby is characterized by uncoordinated movements that serve no purpose. These are unconditioned movements that the baby has no control of. Due to the fact that the sensory sphere is closely related to the motor sphere, attention is paid to the initially weak sensorimotor movements, which are improved thanks to the repetition of specific stimuli. The baby's locomotion, which starts from the upper to the lower parts of the body, is the most visible sphere of development for the parent. Initially, this includes turning the head to the right and left, and then lifting it. Next, the body is rotated in a lying position and grasping movements occur. The baby begins to touch various objects, clenching the hands, grasping with the entire hand, and ending with the so-called pincer grip. It is the highest-ranked movement that reflects the maturity of the nervous system in the area of grasping. The next stage is sitting, creeping, crawling, and walking (Brzezińska, Appelt, Ziółkowska, 2016; Osiński, 2011). However, it is impossible to determine which movement, be it sitting or crawling, should happen first. Some babies start sitting first, whereas others find it easier to do so from a crawling position.

Although specific developmental stages are assigned to a particular month of a baby's life, individual abilities as well as the fact that each baby develops at its own pace must be taken into account. One will raise its head at the age indicated in textbooks, i.e. 3 months, while others will reach this stage at the age of 4 months. Nevertheless, if any of the stages is overreached by several months, qualified personnel – a pediatrician, physiotherapist or osteopath – should be consulted.

Motor skills progress simultaneously with psychological development. The earliest years of a child's life are characterized by the fastest development, in particular of the nervous system, which is responsible for every sphere of life (Irwin, Siddigi, Hertzman, 2007). S.L.C. Veldman et al. (2019) believe that the development of cognitive and motor spheres are mutually dependent. Moreover, the ability to process any visual stimuli is also developed (Jacewicz, Zabłocka, 2015). The child begins to concentrate first on people it knows ('face-to-face' interaction appears) and then objects. First, they recognize the facial expressions of their parents (smile, sadness), which they

begin to imitate. Then they recognize objects from the closest surroundings, and through gripping movements, begin to develop the sensorimotor sphere. By touching, a child gets to know various structures and becomes more sensitive to, among others, a prick, or hard or soft surface. It is also the time when manipulation skills develop connected with gripping movements. This does not serve any purpose, which means that the child moves objects "just to move something". The purposefulness of such behaviour is developed at the end of the first year of life (Brzezińska, Appelt, Ziółkowska, 2016).

At this stage, it seems extremely important to shape the bond between the parent and the child. Depending on the type: safe, avoiding, or ambivalent, not only is the relationship here and now, but also the foundation of all social interactions, including with other family members or peers (Słaboń-Duda, 2011), is shaped. Therefore, various games or fun activities are an inseparable element of the parent (in particular mother) – child interaction (Markova, 2018).

R. Przewęda (1995, p. 23) emphasizes that "a child's knowledge about the world acquired in this period permanently enters the treasury of motoriness, as it is the basis for further activities and actions", while the lack of exercises "impairs motor development" (Schaffer, Kipp, 2015, p. 215). In turn, a lack of intimacy means that the child will not learn how to be caring and attached to other people. The research carried out shows that infants should be encouraged to exercise freely. In order to achieve this, it is necessary to properly educate their parents (Hewitt et al., 2018). Therefore, various types of free-time activities are proposed in the caregiver (mother) – child relationship.

Table 2. Types of activities of infants over 3 months of age[1]

Age	Type of activities
1	2
3rd month	Getting to know contrast pictures (black and white, red, green, yellow) Exercises while lying on the belly that motivate the child to lift their head Music education, playing with a rattle Reading fairy tales (also with the use onomatopoeia) 'face-to-face' interaction Activities in water
4th month	**Short stories associated with contrast pictures (blue colour can be included)** **Music education (thematically related to a given activity)** **Games with rolling, massaging feet** Reading fairy tales (also with the use onomatopoeia) 'face-to-face' interaction Activities in water
5th–6th months	**Short stories related to contrasting pictures along with the use of thematic music and poems (it is worth using the movement illustration method) – while playing, it is worth using different props (e.g. toys)** **Games on a ball (fitball)** **Grabbing games (e.g. with sensory balls)** Music education Rolling games Reading fairy tales (also with the use onomatopoeia) 'face-to-face' interaction Activities in water **Socialization with peers**

[1] The bold font indicates new activities for a given age or extension of previous ones

1	2
7th–12th months	**Longer thematic stories (cards/educational books) using music, poems; relating to the situation of everyday life** **Creeping games** **Games requiring the child to crawl (e.g. using a roller)** **Games related to the change of body position (getting up, walking)** Music education Activities in water 'face-to-face' interaction Reading fairy tales (also with the use onomatopoeia) Socialization with peers

Source: own work based on Brzezińska, Appelt, Ziółkowska (2016); Silberg (2010); Wasilewicz (2015).

The first activities from the 3rd month of life should take place at home where the child feels safe. Most often, they will consist of activities carried out by the mother and child together. Initially, the child is introduced to the outside world by being shown cards or books in white-black and black-white. Due to the formation of the organ of sight, from the third month of life, additional colours can be added in the following order: red, green, and yellow. First, the child should be laid on its back in the bed with the cards on both sides of the head, put at a distance of more or less 20 cm. The child, curious about the world, would turn its head from one side to the other. It is important to present the same picture for a few days and not change it every day. After about 5 days, it is a good idea to add a new picture. Since the child takes a relatively long time to familiarize themselves with one object, they will remember it better. In order to motivate the baby to lift their head, the child should be laid on their belly in front of a contrast card to make them interested and encouraged to lift their head. Moreover, a card or a contrast book can be put higher up. Identical exercises can be carried out with the child on an educational mat. It is important to remember that it should not be too colourful in order to not distract the child. An indispensable element of children's activity is music, the impact of which is noticeable in the prenatal period (Kołodziejski, 2018). A child who listened to certain music during the fetal period will remember it afterwards. Beyond the 3rd month of life, it is also worth concentrating on relaxing music, especially when the infant shows signs of tiredness. While playing, rhythmic children's music with frequent repetition of lyrics, e.g. *Mucha w mucholocie* (A fly in the flyplane) or *Idziemy do zoo* (We are going to the zoo) can be used. "Music stimulates the development of the brain and the nervous system. Listened to in childhood, it affects the reception of sound stimuli throughout life, as well as helps build neuronal pathways that affect language learning, memory development and the sense of space. It also improves concentration, helps memorizing, facilitates reading, and writing, increases motivation, delays symptoms of fatigue, harmonizes muscle tone, and improves motor coordination. Frequent contact with music shapes the child emotionally and affects their willingness to learn about the world around them. Music classes conducted in groups can socialize, prevent loneliness and promote cooperation" (Wolińska, 2017, p. 262). Interest in music is the foundation for further human development in this direction (Trehub, Cirelli, 2018). At this stage, games with rattles are introduced. Reading fairy tales, poems and short stories with onomatopoeia will teach the child to focus, as well as contribute to the development of speech. It is necessary to talk to the child as much as possible so that it can create its own set of words that it will understand and identify. Over time, it will start to repeat them, initially on its own and then in the proper way. If the child is not spoken to, it will not talk back either (Wolińska, 2017). Using words such as "baa", "bleat", "bow-wow", can help children learn about the world. These words are easier for them to say than words like a "dog" or "cat". In addition to the fact that the parent helps the child learn about the world by tailoring the activity to the stage of its development, the important element is the 'face-to-face' interaction with the

parent-caregiver. The child has a sense of security, feels protected and thus creates a bond. This also affects the emotional sphere. Thanks to the fact that the parent knows their child best, they can adapt the form of activity to its individual abilities (Ferenz, 2018).

At the next stage, i.e. in the fourth month of life, short stories with contrast cards that the child has already met can be introduced. For example, cards with feet and a bear can be used to tell a short story about going on a trip to the zoo, where we will meet a bear. When using the foot motif, we can gently grab this part of the child's body and start toddling. Moreover, a prop in the form of a mascot can be used. The whole story should end with a theme song. In this case, for example, *Idziemy do zoo* (We are going to the zoo). This is the stage when child's current knowledge is broadened. The story can be implemented by movement games related to rolling and touching different parts of the body (e.g. massaging feet). This is the period when infants deliberately interact with their mother, which indicates the development of social skills of a child (Ruvolo, Messinger, Movellan, 2015).

In the 5th–6th months of life, some children are able to sit by themselves, i.e. when motor skills are more developed. It is worth enriching short stories incorporating contrast cards with the imitative method (procreative, playful) in the form of a movement story (Bronikowski, 2012), when the parent tells a story about e.g. going for a walk and saying goodbye to other family members, shows the "bye-bye" gesture, and makes the same move using the child's hand. The aforementioned story about the trip to the zoo can also be diversified by adding cards related to the weather on that day (e.g. the sun), as well as enriched with a fragment about what can be seen outside the window. Of course, the earlier motifs and props (you can add more), such as feet (the toddling motion), should be repeated. While growing up, the child will start to imitate individual movements. At this stage, the child should be strongly stimulated by movement, e.g. using a *fitball* to keep the balance of the body. Since it is the time when gripping abilities are increased, all the games associated with balance should be introduced, while taking into consideration the fact that the toddler will initially seek contact with a toy or object, and then will roughly squeeze it, and finally clench its hand (Osiński, 2011). This is also the stage when interest in peers begins – some children start going to crèches, toddler clubs, or participate in various workshops, while others spend time on the playground.

Between the 7th and 12th months of age, many changes in the child's development take place, with the main achievement being learning how to walk, taking into account all previous stages of motor development – from creeping through crawling. It is worth using rehabilitation or educational rollers to motivate the child to crawl. Due to the fact that the child is able to change position independently, they should be encouraged to exercise and make use of this ability. All basic motor skills that the child acquires during the various stages of its life, provide the basis for learning more complex movements in the future (Kordi, Nourian, Ghayour, Kordi, Younesian, 2012).

Furthermore, the child becomes more rational at this stage. Therefore, the use of this ability to socialize with others is an indispensable element of education. The infant learns to live with others, to have fun, but also to set its boundaries and territory.

In addition to the so-called 'home' activity, it is worth using the rapidly disappearing swimming reflex (Dybińska, Gedl-Pieprzyca, 1989) as well as the memory of the infant, and provide them with activity in water (Table 3), as it is the first environment in which the child began to function. Swimming lessons under the supervision of an instructor are always carried out with a parent, and this stage is characterized by "a strong need for emotional bonding with parents in children" (Dybińska, 2000, p. 13). Above all, this strengthens the bond, while ensuring a maximum sense of security. Participation in such classes improves motor activity as well as motor skills (including motor coordination), hardens the body (mentally and physically), teaches openness to others, and enables children to

interact (Sobczak et al., 2016) All classes in water start at the 3rd month. In literature, the conviction that children up to the age of 4 are not ready to take up swimming lessons can be found. This is related to, among others, safety reasons and possible drowning of the child. Nevertheless, these classes are a source of joy for children (Prevention Committee on...).

Table 3. Activities in water for infants from 3 months of age (on the example of Fregata swimming)

Offer	Supporting the development of infants
Familiarizing infants with water (3–6 months)	Familiarizing with water Integration with peers Strengthening the parent-child relationship Learning to dive, lying on back with support
Familiarizing infants with water (7–12 months)	Socializing Strengthening the parent-child relationship Acquiring new skills (independent diving, holding the edge of the pool, jumping from the edge of the pool into the water, kicking on command, breaststroke with the help of a parent)

Source: Fregata Swimming.

In addition to taking up paid activities in water (Table 3), there is also the possibility of participation of infants with their parents in animation workshops (Table 4).

Table 4. Commercial animation activities for infants aged over 6 months (examples of selected offers in Poznań)

Offer	Supporting the development of infants
Rozwojowe grupy zabawowe (Warsztaty Agaty)	Parent-child playing together (making bonds, being close) Educational and developmental games (development of the sense of balance, sight, hearing, touch, smell) Sensory games using natural materials
Zajęcia rozwojowe Taaka Głowa (Taaka Szkoła)	Strengthening the parent-child relationship First social experiences, establishing relationships Providing various stimuli Sensory games using natural materials
Niemowlandia (mammaija)	Development of the dexterity of arms and legs (the use of the movement story method, movement games) Integration with peers Strengthening the parent-child relationship
Zajęcia rozwojowe/Gordonki (Kompozytornia)	Games and singing with the use of various means (e.g., Klanza sheet, soap bubbles, gym bags) Improving musical skills Supporting speech development

Source: Warsztaty Agaty, TAAkA SzkolA, Mammaija, Kompozytornia.

Table 4 presents examples of commercial animation activities for children from the age of 6 months and their impact on their comprehensive development. It can be noticed that the most important element of such activities is deepening of the emotional sphere by increasing the bond between the parent and the child. In addition, the child integrates with others and acquires a variety of skills that lead to its independence. Moreover, motor, sensory and speech development is supported.

The methodological basis of each lesson is in the repetition of given activities, games, exercises, and thus a long-term action with one stimulus that helps the child learn it. Too fast a change of the existing game rules

may, for various reasons, cause less involvement on the part of the child (Fantasia, Fasulo, Costall, López, 2014). Furthermore, it is not advisable to use too many toys. All activities should be accompanied by music, reading and telling various stories. The most important element is to support the parent-child relationship. At this stage, "the family plays a fundamental role (mother, father, siblings). It is the first environment of socialization and upbringing that introduces a small child into the world of physical activities..." (Paczyńska-Jędrycka, Cieślik, 2010 p. 291). At the beginning, all activities should be carried out at home by the mother and child. Such introduction of the child into social interactions will allow it to gradually experience different behaviours and accompanying emotions (Kammermeier, Paulus, 2018). At further stages, different workshops can be used, however they should be supplemented with other activities during which the child receives and experiences a variety of stimuli. In addition to acquiring new skills and competences and gaining knowledge, a child also shapes its personality.

Regardless of the type of activity that is offered to the child, attention should be paid to the level of fatigue and the number of stimuli during one day, so that this number is not excessive. When the fatigue of an infant is noticeable, the game should be immediately stopped and the child should rest. Everything should be done in accordance with the child's biological clock and lifestyle to positively affect the child and make sure that all activities are to their benefit, not detrimental. Too many stimuli lead to so-called overstimulation, which may have negative effects on the future life, such as, for example, the lack of ability to cope in various situations, or dealing with different emotions (Piorunek, 2013).

Summary

The concept of "free time" of infants has not yet been agreed upon in literature on the subject. However, attention has been paid to particular elements of children's activity, namely smile games (Ruvolo, Messinger, Movellan, 2015), social games (Markova, 2018), physical activity (Hewitt et al., 2018) and music activities (Trehub, Cirelli, 2018). Moreover, literature presents opinions on the need for education of the parents in the field of broadening their awareness and skills related to activities that affect the development of a small child (Hewitt et al., 2018; Czub, Appelt, 2013). Widely understood play creates great opportunities for the development of cognitive skills – develops thinking, teaches how to express emotions and respond to various situations, including cause and effect relationships (Scott, Cogburn, 2019). It is through play that children learn to communicate, gain experience and develop imagination (Goodship, 1990).

This article is a theoretical study regarding the broadly understood topic of animation of the "free time" of infants. TDRC Pinto, DC Castro (2018) believe that animation is an innovative form of education whose objective is to support parents' education. The aim of this paper is first and foremost to show the importance of well-organized leisure time in the psychomotor development of a young child. On one hand, the goal of the paper is to make parents and caregivers aware of the need to properly select the correct content of everyday activities. On the other hand, the paper may constitute the foundation for business entities involved in animating the time of infants. Perhaps the offer of animation courses should include exercises devoted to infants. From a practical point of view, it seems necessary to conduct research on this subject.

Conclusions

1. In regards to literature as well as the analysis of exemplary workshops, free time for infants aged over 3 months should be organized in order to support their psychomotor development.

2. Free time activities of infants aged over 3 months should be fun as well as be adapted to the individual development of the child, taking into account the aspect of versatility – the motor and psychological sphere (including emotional and interpersonal interactions). Moreover, the pace of child development, which cannot be accelerated but can be supported, should be taken into consideration.

3. All animation content with an infant should be carried out in the closest environment between the child and the parent. This is where the child is in its comfort zone and feels safe.

4. All offers regarding free time activities of infants which are available on the market may be used, provided that they do not constitute the only source of entertainment. Free time activities can be carried out at home from the 3rd month of life, and during workshops from the 6th month. The exceptions are classes related to familiarizing the child with water. Providing a sufficient amount of new stimuli to the child will affect them positively and influence the physical, psychological and spiritual spheres. All these spheres are strongly connected with each other. A deficiency in one will affect the other. Therefore, the child should not be influenced unilaterally but rather comprehensively.

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