Self-efficacy at preschool children

Summary of the dissertation project

Psychology - social psychology

Guidance

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Introduction

This study concerns self-efficacy, which in our culture appears as a convenient component of self-concept in order to successfully cope with our social environment. The concept of self-efficacy is concerning both psychology of personality and social psychology. Self-efficacy is part of the self-concept, but is developing and defined in interaction with the social environment. The focus of interest is on the development of self-efficacy at pre-school children (aged 3 to 6 years), which concerns not only themes of social psychology and psychology of personality, but also including developmental psychology.

From the research point of view I direct my work on the examination of the level of self-efficacy and the influence of experience provided by the parents on self-efficacy at pre-school children. It concerns mainly the description of possibilities, how to “harden” the child, how to support its healthy development, and which mistakes to avoid, in order balancing protection and risk in the favor of protection. This way we may anticipate problems in the further development, which would then demand more complex means of intervention with a lower probability of positive results.

The way, how we conduct the child through various situations of life is important for supporting a healthy development, especially in stress situations. In principle, stress situations are not undesirable or hostile (as is sometimes understood because they are affecting homeostasis and may even cause psychical damage). In contrary, one can say that stress mobilizes the organism, stimulates learning and searching of new ways, leads to higher performance of muscles, nerves, intellect, emotions and will and stimulates the development of personality. Though, at the same time and under certain circumstances, when the difficulty of the situation surmounts the capacity of a person, stress situations become the source of undesirable states, reactions, or conditions for the further development of a person.¹

¹ Čáp, Dytrych, 1968
1 Theoretical contexts and state of research

The process of social development of children is based on paradoxes. The paradox is, that we are social and at the same time individual creatures, that we are attached to others and related in various ways, but despite in conclusion we are alone. During the development our ability to engage in relationships with other people is improving, but at the same time the perception of our own separation and difference from others is becoming more distinct. Synchronously we socialize and form our individuality. These two seemingly contradictory functions are in reality connected and each of them is contributing to an increasing and successful social adaptation of the individual. The processes of self-recognition and the recognition of others, however, are different and cannot be compared in all cases.\(^2\)

Discussing the development of self-efficacy, we are confronted with this paradox. Self-efficacy is defined as a person’s confidence in his own ability to behave in a way that allows control of the events, which influence his life. Self-efficacy belief represents the basis of human agency. The lesser the trust in success, the weaker is the stimulus to do something.

Self-efficacy is part of the self-concept and is developing in the process of individuation. Understanding the process of individuation and forming of self-concept enables us to recognize the process of development of stress-resistance (as a component of self-concept). Therefore in the dissertation there are introduced concepts dealing with stress-resistance. Besides personality theories related to resistance further aspects of resistance to stress are mentioned, which complement to the picture of development of a resistant personality.

The terminology concerning questions of individuation and forming of self-concept is remarkably unclear and divergent and the operationalization of the different constructs is very divergent too. In addition, especially the investigation of individuation of small children is accompanied by various methodological problems. In the development of personality we are able to define certain developmental stages, but at the same time we can observe, that the self-concept of children of the same age group is deferring distinctly. Problematic are also the temporal stability of self-concept, the dependence of results on the methods applied and the language skills

\(^2\) Damon, 1989
of the children. One must count with distinct intercultural differences of self-concept and its development.\textsuperscript{3}

The development of self-efficacy is closely connected with the process of socialization and is more essentially interacting with it than other aspects of the arising personality. Man is gaining his conviction of his self-efficacy from four main information sources:

- \textit{Experience of success when coping with difficulties} (mastery experience) – is obtained either by imitation of a successful model, by own performance, or by lowering the level of sensitiveness to certain stress-situations;
- \textit{Social modeling} – requires the chance to observe successful behavior of persons resembling the observer, symbolic modeling;
- \textit{Social persuasion in efficacy} – includes the application of suggestion, encouragement, instruction what to do and how to act, stop self-accusation, interpretation of the situation by another person;
- \textit{Reduction of stress and depression} – is achieved by handling the signs of the own body, care for the own physical condition, relaxation, “hardening.”

In order to take advantage of these sources in favor of strengthening self-efficacy in children, one must regard to the momentary developmental stage as well as to the intellectual abilities. The means of intermediating experience to children should correspond to the sources of self-efficacy mentioned above.\textsuperscript{4}

Not only self-efficacy is changing during the development of the child. From the beginning of the development child and environment are interacting as reciprocal elements. Parents facilitating the child’s activities increase its competence, and the acquired abilities of the child in return stimulate increased sensitiveness and access of the parents. In order to employ self-efficacy it is necessary to join in many cognitive, social, manual, and motivation abilities. A child with broader experience has better understanding of itself and its usual environment. Through this knowledge it is able to more realistically judge its own efficacy in single areas of activity.

Investigating already existing work in the field I found many research on self-efficacy from various aspects at school-children, but less for pre-school aged. In his book „Self-efficacy“\textsuperscript{5} Bandura emphasizes the great importance of searching the ba-

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\textsuperscript{3} Neubauer, 1993
\textsuperscript{4} Bandura, 1997
\textsuperscript{5} Bandura, 1997
\end{flushleft}
sis of the origin of self-efficacy earlier than at school-age, but indicates that such research is methodologically demanding, mainly in developmental stages, when the child’s verbal communication is insufficient. Children, who do not fully understand the language, cannot be interrogated and cannot fully evaluate their abilities to deliver certain results.

2 Research Questions

My first general question is how to support the healthy development of a child in a way to precede difficulties in its psycho-social development. This formulation of the question is, of course, too broad to find the answer in one research project.

The theory of self efficacy is in this case used as a source of concepts for the description of phenomena or in order to make us more sensible to certain problems (Hendl, 1999). In the study the terminology of this theory and the approach to the problem, how people cope with and learn how to cope with life’s requirements or stress-situations, is used. People with higher self-efficacy are better equipped for coping with stress, the maintenance of mental and physical health; they manage better in various social situations, as are employment a.s.o. The inborn preconditions of children for the achievement of a high degree of self-efficacy vary. As our educational aim and support is strengthening the self-efficacy enabling to cope presently and in future with the problems of life, we are interested in the conditions, which have influence on this development.

According to my opinion the key time to cultivate self-efficacy is pre-school age, which in this study means children aged 3-6 years (six-years, when they do not yet attend school).

One of the research tasks aims at finding possibilities of measuring or describing self-efficacy in children (there is no verified method for pre-school children, Bandura, 2001) in order to follow up, what is influencing its level. Among the influential factors I concentrate to the area of experience in coping with various situations (mastery experience), which in this phase of development are intermediated mainly by the parents.

The study is oriented to a healthy population, so it represents salutogenesis, support of healthy development. The findings obtained can result in recommenda-
tions for parents, how to support self-efficacy of their child. These recommendations may be utilized also by further persons participating in the education of the child. In addition the study is contributing to finding ways, how to examine self-efficacy at pre-school children.

The aim of the study is:

- Finding a possibility to comprehend the level of self-efficacy in pre-school children.
  ⇒ Is the set of methods in use relevant for the survey of self efficacy of the child?
  ⇒ Which of the methods in use is the best to examine the level of the child’s self-efficacy?
- Examination of the level of self-efficacy of pre-school children.
- Examination of the relation between experience in coping with tasks (mastery experience) and self efficacy of the child.
  ⇒ To which extent and quality are pre-school children given chances to gain practical experience?
  ⇒ In which way parents react to their children when they are solving a task?
  ⇒ Which extent and quality of exposure to experience is contributing positively to the cultivation of self-efficacy?

3 Final research-design

With regard to the character of the questions investigated the pilot study revealed the advantage of a qualitative approach of the study. After elimination of weak spots in the set of methods, which became obvious in the pilot project, the final design was made as follows:

- Collection of data

  1) The parents have been contacted by phone and briefly informed about the research project. An appointment for a visit was arranged. By letter an information explaining the research project was sent to the parents, which included the questionnaire FPSS (questionnaire concerning practical and social independence) for the parents and one further person having educational influence on the child, but not belonging to the family, and the questionnaire Generalized Per-
ceived Self-Efficacy Scale for the father and mother – these questionnaires the parents were to deliver at the personal meeting.

2) Realization of a personal visit in the family – at least one of the parents (preferably both) and the child had to be present. The meeting took 1, 5 to 2 hours.

a) After a short introduction the filled-in questionnaires were collected and a supplementary interview to the questionnaire FPSS, filled in by the parents and one independent educator, took place.

b) A half-structured discussion over a set of photos was held.

c) Task for the child – jumping.

d) Joint task for parents and child – construction with building bricks (video-recording).

e) Giving a reward to the child - and the child goes shopping by itself – observation.

3) Transferring the data to anonymity and computer registration, transfer of the video-records into a computer file, completion of the file of each child examined.

4) Rating of the self-efficacy of each child by three independent observers.

➢ Elaboration of data

1) Qualitative analysis of video-records

2) Coding of video-records and quantitative evaluation

3) Calculation of mean-values and other supporting quantitative evaluation.

➢ Evaluation of qualitative and quantitative results

4 Answers to research-questions

4.1 Possibilities of evaluation of self-efficacy at pre-school children

➢ Is the set of methods applied relevant for the comprehension of self-efficacy?

The set of methods applied proofed to be relevant for the evaluation of self-efficacy. The methods applied gave sufficient information for three independent observers to evaluate the level of self-efficacy of the children. The individual evaluations of the observers showed considerable agreement among each other, which allows the conclusion, that the attribute is evaluated and understood conformingly.
The set of methods applied is suitable for testing self-efficacy of children, however, it is demanding from the aspect of time and personnel needed.

⇒ Which method proofed most convenient for testing the level of self-efficacy?

There was no evidence that one of the methods applied could substitute all the others for the evaluation of self-efficacy. The indication value of the various methods within the set from the point of view of incremental validity\(^6\) appears to be balanced. The close relationship of the concepts of independence and self-efficacy was verified. The method registering the situation of the jumping-task tends to classify self-efficacy of the child too high. However, one may allege, that the method is showing the child’s possible potential for a simply structured task.

After further verification of the high degree of agreement of the independent observers it might be possible to reduce the evaluation of self-efficacy to one observer, when a list of questions for the observer is prepared and a sufficient degree of independence is guaranteed.

4.2 Level of self-efficacy of pre-school children

⇒ What is the level of self efficacy of the pre-school children tested

The usual pre-school child (as far as it does not need special care) is showing self-efficacy at a level, that allows an active approach to problem solving, having a feeling of controlling the situation, expecting positive results of its own activity and showing sufficient effort to overcome difficulties. In the situations inducted for the study the children showed high capability which exceeded the expectations. They had considerable joy fulfilling the tasks, which gave them the chance to show their independence. Children express great keenness to undertake and try various things, to collect experience. Most of them do not experience failure as something to worry about.

There was no evident connection between self-efficacy and neither sex nor age.

\(^6\) as far as we can use this term in connection with the small number of children investigated
4.3 Connection between the experience given and self-efficacy of the child

⇒ To which extent and quality parents offer pre-school children the chance to get practical experience?

The parents’ approach is very diverse. There were significant differences in the parents’ approaches to children with a high level of self-efficacy against children with a low level. There was agreement that children regularly participate in housework and generally they like it. Children have regular duties, among others mainly clearing away of toys. The parents showed similarities in certain areas where they do not support the child’s independence – managing money, consuming food in-between the main meals, a tendency to distance in contact to unknown adults.

Especially the distance in contacts to unknown adults seems to be characteristic for our culture. In our country adults usually do not react spontaneously positively to unknown children and vice versa parents lead their children to be careful. The unknown adult is perceived rather as potential danger than as person who might be helpful.

⇒ How parents react to their children while they solve a task?

According to the reactions to the child while it is solving a task we can distinguish parents, who in principle believe in their child and those who in advance express their doubt. When parents are accompanying a smaller child while it is solving a task one can observe a bigger desire to structure the task for the child. Mothers divide the task into single smaller steps, which enable the child to manage.

Parents offer space for task-solving to their children, which is bigger (the child is working by itself and calls the parents when it needs them) or smaller (the child is not allowed to act as to manage the task or it is consequently under supervision). Parents who offer more space to their children, have children with a higher level of self-efficacy (the contrary can take place, or there is rather a reciprocal dependence of the two variables).

There are differences how quick mothers react to success or failure of their child.7 – According to their reactions mothers could be divided into two groups, if they either reacted more quickly to success of the child or faster to failure. For the child it

7 it would be desirable to analyze these rates more detailed
is advantageous, when the mother does not interfere in the activity of the child, as long as it is successful. But she should be ready to support the child when it experiences failure. The child should not be left alone for longer time with its failure. However, it is not the point to immediately repair the mistake of the child and to leave it with its feeling of failure. It is essential showing the readiness to help and being able to support the child so it can solve the task itself.

The number of positive evaluations of the child varies among mothers, negative evaluations appeared rarely, and were connected with children, whose self-efficacy was classified as low. This is in accordance with findings from the literature, that it is helpful to commend the child and to use general formulations of approval, e. g. “You are skilful!” The evaluation of failures should be objective and restricted regarding to time and place. “You did not succeed with this building, but it is really rather difficult for a child of your age. This is made for big children as is John. Until you grow up as he, it will be easy for you too.” An unsuitable formulation for a negative evaluation in this case would be: „You are clumsy, you never put together anything worthwhile. “ The parents’ way of evaluation is the basis for the way in which children later think about their success or failure.

⇒ What extent and quality of experience passed on to the children contributes to the cultivation of self-efficacy?

Children with high self-efficacy have many opportunities to try various things; parents open these possibilities to them and lead them through these opportunities. The parents believe in their children, they do not feel tension, despite some activity might be risky. One distinct indicator proofed to be reliable, the index of safe distance, i.e. how far apart are the parent from the child when the activity of the child is potentially unsafe. Parents of children with a higher level of self-efficacy allow a bigger distance, they choose the distance so to give the child a chance to manage a task by its own, but at the same time are close enough to notice, if the child needs help. They are weighing the greater freedom and the possible risk (“it might cut the finger a bit, that’s not so bad.”) When they notice the child’s failure, they react very quickly – they do not leave the child alone with the frustrating situation. In case of a failure of the child the most convenient reaction would be to ask:”May I help you?” or “Would you like me to help you?” Instead of a detailed instruction, what it should do to get the thing right („You must put the long, white brick right here! “) it is preferable
to lead the child to the right solution asking („It seems to me that the white brick should be placed differently, what do you think?“), in a way, which makes the child feel, that it found the solution by itself. In this way experience in mastering tasks (mastery experience) is given to the child, which is so valuable for the cultivation of self-efficacy.

When fulfilling a task children are without exception evaluated positively, there is no negative evaluation.

Children profit from the possibility of frequent and manifold contacts with other children and adults. Parents of children with high self-efficacy are sharing various activities with groups of other adults and children, they frequently visit each other. It is an advantage, when parents are able to compensate for eventual unfavorable conditions in their environment, e. g. the children do not have friends close to their home, their playground is not sufficient etc.
5 Summary - Self-efficacy at preschool children

The concept of self-efficacy has approved as useful for studying preschool children. The procedure of examination of self-efficacy in preschool children is methodologically demanding and time-consuming, but it is possible when using model situations and ratings by three independent observers.

Children show high self-efficacy, optimism and will to get new experience. It is useful to support children in a positive way, because we build a good and steady base to resist in various life-events and situations. Self-efficacy in adults is a quite stable part of the personality that cannot be changed easily. For this reason the chance to cultivate self-efficacy in preschool age should not be missed. In this age self-efficacy is formed in the process of individuation and especially socialization.

Parents are the most important factor for cultivating self-efficacy of their children. The manner, how parents intermediate different experiences to children and how they conduct their children through new and stressing situations, basically influences the style, how it will deal with new and stressing situations when it is grown up. Parents are a model and also moderators, which in the positive case transmit the experience of coping and mastering new situations (mastery experience). For the child it is important to get experience with autonomy, but it should not experience frustration and lack of success for longer time.

This study opens numerous questions and themes, which should be studied more thoroughly. For a quantitative research the difference between the time of the mother's (parents) reaction to success and failure of the child can be most inspiring. We see also a perspective in developing the "Test of parent's confidence", which was constructed for this research. The output of this test - the index of save distance seems to be a promising indicator of the influence of this aspect in parenting on children's self-efficacy.
6 Zusammenfassung - Selbstwirksamkeit bei Vorschulkindern


Eltern sind der wichtigste Faktor bei der Förderung der Selbstwirksamkeit. Die Weise, auf die Eltern ihren Kindern verschiedene Erfahrungen vermitteln und wie sie ihre Kinder durch neue oder schwere Situationen begleiten, hat grundlegenden Einfluss auf die Art, wie das Kind neue und schwere Situationen im späteren Alter lösen wird. Eltern stellen hier ein Modell dar, aber sie sind auch Begleiter, die im positiven Fall dem Kind helfen, neue Situationen zu meistern und dadurch positive Erfahrungen zu machen (mastery experience). Für Kinder ist es in diesem Alter wichtig, Selbstständigkeit zu erleben, aber gleichzeitig nicht allzu lange die Frustration im Fall eines Misserfolges ertragen zu müssen.

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