Chapter 8

Baloo und Du ("Baloo and You") –
A Mentoring Program:
Conception and Evaluation Results

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Abstract

This chapter provides insight into the principles of the mentoring program Baloo and You, and the impact it has had on previous participants. The mentees are mostly disadvantaged primary school children, usually living in a precarious environment. The mentors – called Baloos – are young adults (aged 17 to 30) who voluntarily care for a mentee – their Mowgli – once a week for a whole year. The terms are based on characters from Rudyard Kipling’s ‘The Jungle Book’ (1894/95) involving a ‘man cub’ Mowgli, abandoned in the jungle, and his big bear-friend Baloo, who is thoughtful, humorous, witty, caring, and protective.

So far, 4650 children have taken part in the program as mentees. Since the program is based on one-on-one relationships, the same number of Baloos have also participated in the project. There are around 50 locations across Germany where Baloo and You is offered to children. Baloos are mainly high school, college or university students and are closely accompanied by local coordinators of the program. These coordinators are organized in a network that is responsible for ensuring program standards specified below.

Baloo and You focuses on ‘informal learning’, a concept that emphasizes and integrates learning process in everyday life. Understood as such, learning simply happens in everyday life, challenged by countless occasions in the normal course of life, provided that an adult caring person recognizes and makes use of the situation.

Evaluation studies are undertaken to identify how both Mowglis and Baloos benefit from the program. Since the program is personalized and tailored to each Mowgli, the aims, interaction, and activities differ in every tandem, which the evaluation design must

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take into account. To this end, a vast array of tests and assessments have been conducted. Positive results are reported in the following areas: self-organization, motivation and participation, self-assessment, personal hygiene, health-related evaluation, the ability to concentrate, and to cope with stress. The sustainability of the findings has also been proven. *Baloo and You* is a selective primary-preventive mentoring program, funded chiefly by a number of private founders and donors.

**Keywords:** Informal learning, impact of mentoring, evaluation design, evaluation results

**INTRODUCTION**

Mentoring programs are implemented with high hopes that they will achieve positive results. Unfortunately, such expectations are not always mirrored in the results of accompanying evaluation studies. In fact, the sobering conclusion of a recent meta-analysis concerning school-based mentoring for adolescents found that “these interventions were ineffective” (Wood & Mayo-Wilson, 2012, p. 265). To find out whether or how desired outcomes can be achieved, firstly, a comprehensive description of the design and structure of the mentoring program *Baloo and You* is presented below, and secondly, its outcomes are described.

It is hereby essential to depict the population of both the mentees and mentors and how they are recruited and supervised, to describe the objectives of the mentoring program, and to control the outcome for various aspects using a number of methods. If we consider all the diverse aspects of mentoring, it might be possible to approach the somewhat diffuse concept of ‘best practice’. There is pressing need for research about these ‘ideal’ conditions and practices of mentoring programs, because “where such practices are neglected, there is potential for programmes to have negative effects on youth” (Brady, Dolan, O’Brien, & Canavan, 2005, p. 29). On the other hand, there are a lot of positive experiences and evaluation results in various programs, which show desirable effects. Conclusions about the usefulness or harmfulness of mentoring should therefore be drawn carefully.

**THE SPECIAL SETTING OF BALOO AND YOU**

*Mowglis*

*Baloo and You* is a selective primary-preventive program for underprivileged primary school children aged 6 to 10. The criterion for participation appears general and vague at first glance: teachers are asked to recommend children who they are ‘worrying about’. There are no additional keywords such as ‘aggressive’, ‘hyperactive’, ‘single-parent family’, or ‘timid’. In a series of interviews conducted with primary school teachers, we determined that their sensitivity to children’s problems encounters all kinds of difficulties. But, although teachers are familiar with a wide range of deficiencies and problems that children have to cope with, it is difficult for them to address non-academic (eg. social) issues. Hence, teachers are usually willing to recommend a mentor to a child’s parents and to highlight the advantages of mentoring. Teachers are therefore effective ‘advertising media’ because they have often had
positive experiences with the impact of mentoring. A telephone survey involving 20 teachers revealed that 82% of parents agreed to allow their children to become involved in the program (Müller-Kohlenberg, 2012, p. 191).

The non-specific selection of children (‘to worry about’) leads to a heterogeneous group of mentees, Mowglis. Due to the heterogeneity of the group, it would be counterproductive to introduce a standard mandatory curriculum or training courses for all mentors. Tandems, which are individually matched, find their own emphasis and sailing speed, and sometimes change their focus as the relationship develops. For this reason, the mentors, Baloos, require a special kind of companionship.

Baloos

All of the mentors involved in the Baloo and You program are volunteers, which does not mean that they do not benefit from their commitment. On the contrary, these young people – aged between 17 and 30 – benefit in a number of ways. As evaluation studies show, Baloos gain valuable key competencies (see below) and, if they are students at a university or college associated with the Bologna network, they are awarded ECTS credits. Some high schools also run the program as part of their curriculum. Educational institutions usually guarantee reliable supervision and attendance for mentors. Generally speaking, Baloos are more reliable and compliant if the program is integrated into a university, college or high school course.

Young working people are also welcome to join the program as Baloos. In this case, special guidance is required. In any case, Baloo-Mowgli tandems are never left without assistance once they have been matched. Instead of earning credits, young working mentors are awarded a certificate attesting their voluntary work.

Conditions and Resources

Mowglis and Baloos spend one afternoon a week together, engaging in a variety of leisure activities of their own choice, such as doing handicrafts, cooking, baking, exploring nature, going swimming, or playing games and chatting. It is a one-on-one relationship that gives the participants the opportunity to become trustful, confiding acquaintances. The name Baloo and You originates from 'The Jungle Book' (Kipling, 1894/95), a story about a bear called Baloo who befriends the young boy, Mowgli, and shows him how to assert himself in the jungle, while patiently and jovially explaining both the obvious and the hidden world of the wilderness. In this program, Baloos are young people who act as role models in the jungle of cities, providing advice where required.

The voluntary Baloos’ commitment comprises three elements:

- Firstly, there is the simple fact that Baloo and Mowgli spend time together. They meet for two or three hours a week together and jointly decide on what they will do. The activities should reflect their mutual interests; Baloos should motivate their mentees to plan for the upcoming meetings, to avoid hasty decisions that could lead to less fruitful activities. At the start of the tandem, Baloo is often asked to put
forward a proposal. *Mowgli’s* experience in life (and his or her familiarity with the ‘jungle’) is initially limited.

- The second element of the program is a weekly guidance group that *Baloo* attend. These are small working groups under the direction of a ‘coordinator’. This role is assumed by qualified professionals who help the mentors to reflect on their experiences, giving them advice and ideas, especially if the mentors do not yet have enough experience to deal with a child. The meetings are a combination of supervision, intervision, and pedagogical input.

- Thirdly, *Baloo* are asked to write a weekly diary (online version, password-protected). Only the coordinator has access to these private notes. Coordinators then give prompt written individual feedback through the ‘diary tool’ of the *Baloo and You* website (www.balu-und-du.de). The diaries form the basis for discussions in the guidance groups, and make it possible to communicate in the event of urgent cases in between meetings (also by telephone).

Only the first element – spending time with *Mowgli* – is voluntary, as attested in an authorized certificate (for volunteers). Keeping a diary and attending the guidance group are additional program constituents for which credits are awarded, if desired/required.

Non-student mentors who are otherwise employed receive only the aforementioned certificate; students who require confirmation for an internship are also welcome to participate, and are also given attestation accordingly.

During their scheduled meetings, *Baloo* and *Mowgli* are both covered by insurance. They are encouraged to undertake activities that go beyond merely ‘consuming’ (such as shopping, eating fast food, going to a movie …). An amount of 10 Euros is available each month (for four meetings). This way, *Mowgli* has the chance to learn how to budget with little funds and to discover the pleasures nature and everyday life offer within those limits. It is hoped that discovering fun activities within a very restricted budget will help to make children from poor backgrounds aware of a number of affordable activities which they can continue after the end of the program.

**The Network**

The *Baloo and You* network is a web linking circa 50 locations in Germany. Representatives (coordinators) from these sites meet regularly to develop the program further on the basis of their experience. For example, manuals, readers and other materials for use in guidance groups are drawn up and agreements are made about quality and standards. Digital materials can be downloaded from the network’s intranet, where coordinators can find data files such as FAQs, prototypes of letters to teachers, parents, sponsors, etc., slides for presenting the program, a contract document, and information for parents in eight languages.

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1. In an anonymized version, researchers are permitted to analyze the data; otherwise they have to sign a data privacy statement.
2. The first author is a member of the board.
A collection of program-related papers for pedagogical input is accessible under the heading ‘memos’. Subjects that are often discussed can be downloaded, printed, and distributed to Baloos. Examples of such topics include:

- Resilience
- Playing in woods and discovering nature
- Locus of control (Mowglis’ belief that they can control events that affect them)
- Dealing with lies
- Bullying
- Personal hygiene

The list of memos is continually growing. The network coordinators propose topics, submit drafts, browse in diaries for good practice, and modify the portfolio of memos.

Members of the network also have access to movies and publications about the program. *Baloo and You* is not a franchise system and does not have commercial objectives. Apart from the net costs for didactical material and a voluntary donation there is no request for fees. So far, local sites and the central office have been financed by charitable contributions.

If coordinators are members of the permanent council of a school or university, their working time covers the program (assuming the principal’s consent is given).

**The Basic Philosophy: Informal Learning**

To balance out the inequality of educational opportunities, *Baloo and You* focuses its efforts on strengthening Mowglis’ basic competencies. It is not a ‘school-based’ mentoring program. The target is not primarily to enhance achievement at school, but to enable them to acquire skills and non-academic abilities that make success in life (and school) more likely. These basic skills include enjoying learning, self-organization, ‘grit’, optimism, curiosity (cf. Tough, 2012, p. 76). There are many occasions in everyday life that require effort to cope with, sometimes minor, challenges. This learning in the normal course of life is called ‘informal learning’, learning that happens by chance and en passant, sometime not even intentionally or consciously. It is estimated that informal learning makes up 70% of adults’ knowledge and abilities (rough estimation, cf. Dohmen, 2001). In any case, if children are lacking people in their early social environment who are willing or able to explain the world in all its facets and diversity, they will be disadvantaged when starting school. Even in young years, a well-regulated personality is required to succeed at school – at least regulated in an emergent, juvenile version. A lack of such abilities can be compensated by good mentoring. Success at school and in life is not only dependent on cognitive skills, such as intelligence and practicing to read and calculate at an early age. There are other more important traits, which are often summed up as ‘character’. The discussion about the “hidden power of character” (Tough, 2012) emphasizes a concept to complement or replace the ‘cognitive hypothesis’ with the ‘character hypothesis’. Basic competencies such as power of endurance or conscientiousness enable children to benefit more from school life and subjects in class. Children who are able to strive for distant goals, for instance, will be more successful even if lessons are sometimes tedious.
For this reason, basic skills that sometimes appear trivial are the heart of Baloo and You. Hence meetings between Mowglis and Baloos are usually unexceptional. The mentors should learn to recognize everyday-type situations as useful occasions for the Mowgli to learn from.

Although the various children who are suggested by their teachers to be Mowglis naturally differ with regard to their deficiencies and handicaps, there is one noticeable objective for Baloos: care of the hidden character!

EVALUATION

The Evaluation Design: Challenges, Postulations, Characteristics

Baloo and You is a broadband offer for all kinds of disadvantaged children who have different strengths and weaknesses. To reflect this wide range, evaluation studies should be designed accordingly. Some children are nominated owing to their lack of social skills; others are enrolled because they are hyper-active. Hence if we consider the group of Mowglis in total, the educational objectives are very dissimilar. A child who is comparatively attentive in class is unlikely to improve in this dimension, but may benefit in physical well-being. The evaluation procedure therefore should analyze not only the entire group of Mowglis, but also each group of children according to their identified special needs and requirements (cf. Martschinke, & Kammermeyer, 2003; Bauer & Bittlingmayer, 2007). Each single ‘extreme group’ of unfavorable beginners includes only those who are disadvantaged in this particular field. The term ‘extreme group’ refers to the percentage of cases that demonstrates particularly low or undesirable results at the time of the first survey.

An evaluation study, funded by the German Federal Ministry of Education and Research (BMBF), was conducted from 2009 to 2011. The survey involved 299 children (n=141 Mowglis and n=158 control group); the dropout rate was 3.7%. It was an almost complete regionally defined sample of all of the children who had been accepted onto the Baloo and You program in spring and autumn 2009 (two cohorts) within a radius of 125 km of the city of Osnabrück in Lower Saxony, Germany. The children averaged 8 years at the time of the first appraisal (t1). Teachers denominated the control group children with equal/similar problems. Thus the stratified control group was in accordance with the intervention group with regard to migrant backgrounds, age, sex (intervention group: 60 male: 40 female; control group: 50:50). A significant difference appeared in the family backgrounds. Teachers judged the Mowglis’ family situations at t1 to be somewhat difficult in 40% and even very difficult in 20% of all cases. The family situations of the children in the control group were considered less difficult. Teachers assessed only 25% and 5% of all cases as difficult and very difficult, respectively. Two class periods were required for the survey, in which the children – some of whom could not yet read or write properly – were interviewed and tested in one-on-one situations. Both scientifically established survey methods and those developed specifically for the project were used to appraise the children. A second assessment was undertaken at the end of the mentoring year (t2) (Drexler, Borrmann, & Müller-Kohlenberg, 2012).

In addition to the research study described above, an earlier survey was conducted (retrospectively) with 102 Mowglis and two control groups (n = 51 and n = 36), which were regionally different (Schlüter & Müller-Kohlenberg, 2010). The teachers were asked to use a
scale to assess the children’s progress in a number of social and achievement categories. This evaluation served as a pilot study for channeling research questions.

In order to learn about how the children benefit from the mentoring program, it is of course essential to compare the progress made by the intervention group (Mowglis) with a control group. Although both the intervention and control groups may develop beneficially, the reason for determining the effect of Baloo and You – if there is one – is to find out how the program’s participants fared compared with the children in the control group. The calculation of the effect sizes should therefore include and take into account non-treatment effects. Net effects are usually less than mere longitudinal effects if the non-treatment group develops positively. The effects of mentoring were measured using Cohen’s effect size measurement (Cohen, 1988). The measures cited below are net effects.

What are the criteria of Mowglis’ ‘development’ and how are they recorded? Baloo and You was evaluated using both quantitative and qualitative methods such as questionnaires, standardized tests, interviews, and physical checks. The teachers involved were primarily asked about how they assess Mowglis and the control group, as were the parents and children themselves. The mentors – ‘Baloos’ – were not interviewed or asked to assess their mentees because the aim of the evaluation was to depict an external perspective to the greatest extent possible, with the exception of Mowglis’ own assessment.

The results regarding development were obtained using a prospective design: Mowglis were asked, tested, or assessed at the beginning of the mentoring period and at the end. Effect sizes are conventionally denominated ‘low’ or ‘high’ – low effect size: d>0.2; moderate effect size: d>0.5; high effect sizes: d>0.8 (Cohen, 1988, 1992).

The following tables are based on Cohen’s definition, to which a further level is added: very high: d>1.0

**Evaluation Results: How Do Mowglis Benefit?**

Since the benefits to Mowglis are varied and the aims cannot by predestined clearly, the evaluation results are divided into six clusters, each of which presents these various dimensions separately from which mentees in Baloo and You benefit.

**Self-organization**

The ability to organize themselves helps children to structure their intentions and to act with foresight. It belongs to the set of basic competencies that form an important requisite for scholastic success and life accomplishment.

Mowglis’ self-organizational ability was measured by their teachers’ assessment and correlated with activities carried out together with their Baloos. The children’s positive development concerning self-organization is correlated with special actions that took place over the course of the project. These topics are described in the diaries Baloos write online every week. Analysis of the total of 2,772 mentor diary entries revealed that the children mainly honed their self-organizational abilities during arts and crafts activities, when cooking together and dealing with concrete, everyday activities such as purchasing a bus ticket or
lending a book from the library (Borrmann, Drexler, & Müller-Kohlenberg, 2011). The more often the protégés did arts and crafts in their meetings, the less often they forgot their books and materials at school \((r=0.54^{**})\). A similar statistical connection \((r=0.42^{*})\) can be seen with regard to the frequency of playing games/board games (Drexler, Borrmann, & Müller-Kohlenberg, 2012).

### Table 1. Self-organization

<table>
<thead>
<tr>
<th>Subject</th>
<th>Net effect size: total group</th>
<th>Net effect size: extreme group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child wrote down homework, if homework was given</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Child brought his/her classroom materials (books…) to school</td>
<td>0.41</td>
<td>0.55</td>
</tr>
<tr>
<td>Child could complete homework, because he/she took material home</td>
<td>0.62</td>
<td></td>
</tr>
</tbody>
</table>

Teacher’s assessment of self-organization (progress after one year of mentoring).

### Motivation and Participation in School

Adult people’s educational biographies are shaped by an array of basic attitudes towards learning and new life situations. If children are well grounded in inquisitiveness, interest, and curiosity their level of proficiency is likely to increase in the years they attend school and thereafter.

Hence it is important to evaluate motivation, participation and self-confidence when assessing the impact a mentoring program has on young people’s lives.

### Table 2. Motivation and participation

<table>
<thead>
<tr>
<th>Subject</th>
<th>Net effect size: total group</th>
<th>Net effect size: extreme group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s general scholastic ability</td>
<td>0.29</td>
<td>0.52</td>
</tr>
<tr>
<td>Child was motivated to learn</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Child took part in class</td>
<td>0.26</td>
<td>0.70</td>
</tr>
<tr>
<td>Child could complete tasks independently</td>
<td>0.23</td>
<td>0.65</td>
</tr>
<tr>
<td>Child was confident with new tasks</td>
<td>0.25</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Teacher’s assessment of motivation and participation at school (progress after one year of mentoring).
The self-esteem of children who live in precarious conditions is often considered to be low. Educators are usually afraid that children suffer from a low self-esteem and that they are unable to pursue their goals effectively, generating dissocial behavior. To test this hypothesis, Mowglis were asked at the start of the mentoring period to assess their achievement in sports. The results were compared with the teachers’ assessment (Nolte & Meyer, 2008, unpublished). The study revealed a noticeable over-estimation of their athletic abilities on average. Hence Balooos were advised not to ‘strengthen’ Mowglis’ self-esteem, but to aim for them to achieve a ‘realistic’ level of self-esteem (which in some cases may mean ‘strengthening’ it). The following prospective survey shows that – in particular the children who overestimated themselves at the beginning of the mentoring period – became more realistic with regard to their self-image.

### Table 3. Realistic self-assessment

<table>
<thead>
<tr>
<th>Subject</th>
<th>Net effect size: total group</th>
<th>Net effect size: extreme group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>low</td>
<td>mode</td>
</tr>
<tr>
<td>Child appraises his/her athletic ability realistically</td>
<td>0.27</td>
<td></td>
</tr>
</tbody>
</table>

Teacher’s assessment of Mowgli’s realistic self-assessment (progress after one year of mentoring).

Concerning scholastic abilities, this convergence to reality failed to emerge (Drexler, Borrmann, & Müller-Kohlenberg, 2012).

### Ability to Concentrate

The effect sizes of the total group of Mowglis differ significantly from the results of the extreme group concerning concentration. According to the teachers, the total group of Mowglis improved slightly compared to the total group of control group children. The extreme group, again, shows much more considerable effects. That means that Mowglis who tended to be unable to concentrate at the beginning of the project improved and were able to concentrate much better by the end of the program.

This result was confirmed in a concentration test conducted with the younger children. The Kaseler Concentration Test (Krampen, 2007) was used in a modified form for younger children. It became apparent that the whole group of Mowglis were able to benefit slightly (positive net effect of d=0.21) from the mentoring program. The extreme group of Mowglis who were unable to concentrate well at the beginning of the project benefited greatly (positive net effect of d=1.25, Drexler, Borrmann, & Müller-Kohlenberg, 2012).
Table 4. Ability to concentrate

<table>
<thead>
<tr>
<th>Subject</th>
<th>Net effect size: total group</th>
<th>Net effect size: extreme group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>low</td>
<td>mode</td>
</tr>
<tr>
<td>Child did not appear to drift during class</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Child could concentrate well in class</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Willingness of the child to make an effort</td>
<td>(0.14)(^3)</td>
<td></td>
</tr>
<tr>
<td>Kaseler Concentration Test (modified)</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

Teacher’s assessment of ability to concentrate; results of the Kaseler Concentration Test (progress after one year of mentoring).

Health-related Quality of Life

*Mowglis* assessed themselves with regard to their subjective health and well-being by completing the KIDSCREEN questionnaire (medium-sized version with 27 items). The items contained in the KIDSCREEN are allocated to five dimensions: physical well-being, psychological well-being, autonomy and parents, social support and peers, and school environment (The KIDSCREEN Group Europe, 2006). The items in the ‘physical well-being’ dimension refer to fitness, activity, energy, and self-estimated (subjective) health. ‘Psychological well-being’ comprises items concerning emotional satisfaction/dissatisfaction, such as unhappiness or loneliness. The relationship to parents and the children’s level of autonomy are subsumed under ‘autonomy and parents’, while ‘social support and peers’ asks the participants to assess the quality of their social relationship to classmates and friends. ‘School environment’ refers to teachers and school, their own appraisal of cognitive achievement and ability to learn.

Table 5. Health-related quality of life (KIDSCREEN)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Net effect size: total group</th>
<th>Net effect size: extreme group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>low</td>
<td>mode</td>
</tr>
<tr>
<td>Physical well-being</td>
<td>(0.16)</td>
<td></td>
</tr>
<tr>
<td>Psychological well-being</td>
<td>(0.09)</td>
<td></td>
</tr>
<tr>
<td>Social support and peers</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Autonomy and parents</td>
<td>(0.04)</td>
<td></td>
</tr>
<tr>
<td>School environment</td>
<td>0.27</td>
<td></td>
</tr>
</tbody>
</table>

Teacher’s assessment of health-related quality of life (progress after one year of mentoring).

\(^3\) Data <0.2 are in brackets
Personal Hygiene

Some of the mentees are deficient when it comes to personal hygiene, such as oral hygiene or showering regularly. If Baloo notice a deficiency in this area, they endeavor to support Mowglis in this delicate field of interaction (material is available in seminar rooms, such as picture books, games, implements suitable for children…). Again, the children who suffer the greatest from an unclean appearance benefit most of all. The example of washing their hands after having used the bathroom is presented here: Mowglis were asked whether they wash their hands after going to the toilet (Drexler, Borrmann, & Müller-Kohlenberg, 2012).

<table>
<thead>
<tr>
<th>Subject</th>
<th>Net effect size: total group</th>
<th>Net effect size: extreme group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you wash your hands after going to the toilet?</td>
<td>low</td>
<td>mode rate</td>
</tr>
<tr>
<td></td>
<td>0.25</td>
<td></td>
</tr>
</tbody>
</table>

Children’s self-assessment of their personal hygiene (progress after one year of mentoring).

Stress Relief – Coping with Stress

Research related to Mowglis’ ability to cope with stress demands a specific methodical approach. Since stress is associated with physical reaction, the hormone cortisol is considered an indicator of stress level. It can be tested by taking saliva or hair samples. Hair cortisol reveals the chronic stress status over a number of weeks or months; saliva discloses the current state of stress. Many children undergo stress, even in the early years of their schooling. A chronically raised cortisol level has a negative impact on how brain and nerve cells develop (Rothenberger & Hüther, 1997; Kirschbaum, 2001). It was therefore interesting to learn about the mentees’ exposure to stress. Can mentoring help to reduce Mowglis’ stress – or help them to cope with stress? How does the style of mentoring affect the stress level, as indicated by hair cortisol?

The study was funded by the ‘Niedersächsisches Institut für frühkindliche Bildung und Entwicklung’ (Kuhl & Müller-Kohlenberg, 2012).

Well-defined procedures for obtaining data are to cut a strand of hair and to analyze it in a chemistry lab. But how can the style of mentoring be ‘measured’? Fortunately, extensive written material about the activities and interaction of the Baloo-Mowgli tandems was recorded in the diaries. As each Baloo writes an entry in the online diary (nearly) every week, the underlying approach and tenor of the mentoring tandems are documented. The hair of 20 Mowglis was analyzed and their corresponding 20 diaries read and codified. Two researchers developed a system of codes – a code manual – and conducted reliability training (Angermann & Ohlemann, 2012).

In addition to other codes (which showed no correlative connection to the hair cortisol, such as ‘humor’, ‘self-disclosure’, and ‘intimateness’), two codes gave important indications of ‘good mentoring’ – or, to be more precise, what not to do! These findings are ‘insecure mentoring’ and ‘non-directive mentoring’. The latter styles fare similar to what is called...
'laissez faire' in educational theory and practice. A too compliable style of mentoring – possibly combined with a lack of assertiveness and erratic meandering – fails to reduce Mowglis’ pressure of stress: the correlation was calculated between the extent of ‘non-directive’ mentoring and ‘insecure’ mentoring as located in the diaries on the one hand, and the difference in cortisol level (starting point and 6 months after mentoring) on the other hand.

\[
\text{non-directive: } r = .55^{**}, \ p = 0.013 \\
\text{insecure: } r = .45^{**}, \ p = 0.045 \\
\text{(** high level of significance, n = 20)}
\]

These discoveries lead to a more verified and helpful method of enabling mentors to be supervised by their coordinators/directors/leaders. As mentioned above, Balooos meet their coordinators every week for supervision purposes. The advice given in these meetings is that Balooos should not try to be ‘on a par’ with Mowgli, but should guide them as a big benevolent friend – reliable, sure, clarifying, leading, secure.

This is one of the reasons why Balooos themselves benefit from the mentoring program. A laissez-faire style of mentoring appears to be easy and effective at the time; but many situations demand an assertive attitude. If Balooos become gradually familiar with various styles of mentoring or interaction in general – which are respectively appropriate – they acquire useful skills that can also be used later in life.

**Sustainability**

For preventative purposes, it is essential to know whether the actual findings are of a long-term nature. How do mentees develop after the year of mentoring?

Baloo and You conducted a three-part evaluation study to learn about the sustainability of the attained outcome. The comprehensive study consisted of (i) an online-survey with Balooos who had completed their mentoring years ago; (ii) interviews with parents whose children were Mowglis some time ago; (iii) repetition of assessment by teachers who evaluated Mowglis when they took part in the program (Bartl, Drexler, Weniger, & Müller-Kohlenberg, 2012).

The online survey provides insight into the continuance of friendship and communication between Mowgli and Baloo. If this contact lasts over time, it is likely that positive impulses remain vivid. The retrospect stretched back 10 years (20 cohorts). 1772 former Balooos were asked by e-mail to answer a number of questions about the length of time and kind of contact they had to their Mowgli (after the official project-time was finished). About every fourth addressee responded to the e-mail. Surprisingly, there was a break between the 12th and 13th cohort.

The earlier tandems (2002–2007) stayed in contact over 6 months in 39.13% of cases; from cohort 13, the contact persisted in 53.59% of cases. This may be related to celebrated rituals at the end of the mentoring year in which the appeal to continue the friendship was emphasized, and support offered. Although Mowglis were asked to actively get in touch with their Baloo, most of the impetus came from Baloo.
To find out the parents’ point of view, 27 interviews were conducted on the basis of an interview guide. The data were divided into two groups:

Group A: mentoring completed < 6 months prior to interview (1–12)
Group B: mentoring completed >6 months prior to interview (13–27)

The interviews conducted in both groups yielded similar results, regardless of the time when mentoring took place. Parents described their children as more autonomous, secure, open-minded, relaxed, and happy. There was no relapse in parents’ perception. The teachers who had already assessed their pupils at the start and end of the mentoring year (t1 and t2) were asked once again to assess the children who had been Mowglis at least 12 months back (t3). Out of 132 children at t1 and t2, there were only 32 at t3 to be assessed. This was a high dropout rate in the time after mentoring.

The teachers assessed the children’s ability to concentrate. In their view, the former Mowglis’ ability to concentrate (cf. Tab. 4) improved, even beyond the end of the mentoring year (mean: t1 = 2.89; t2 = 3.08; t3 = 3.14). The improvement t1 – t3 is significant; Wilcoxon test p = 0.44 (Weniger, 2013).

Further Evaluation Results: What Are the Benefits for Balooos?

Mentors in the Baloo and You project are young people aged between 17 and 30. This is one of the reasons why a close companionship in small groups of mentors is mandatory. The expectation is that Balooos will develop positively on their way. For this reason, a study was conducted to measure how their key competencies increased at university.

74 Balooos at Osnabrück University were compared with 208 ‘non-Balooos’ using a 50-item scale concerning self-assessment in various aspects. Students with different levels of experience were compared: beginners, intermediate and advanced students (cross-section). Does a socially engaged student develop in a different manner compared to a ‘traditional learner’?

A factor analysis was calculated on the basis of the intercorrelation matrix of the items. Different factors are identified when the configuration after two semesters of mentoring is explored: Balooos describe themselves as self-controlled and stronger in work ethics. Furthermore, they feel prepared to act in situations requiring crisis management and in challenges brought about by difficult circumstances. The factor revealed in the factor analysis of non-Balooos was satisfaction with the conditions pertaining to their studies and with their own achievements (Szczesny, Goloborodko, & Müller-Kohlenberg, 2009).

A number of single items illustrate how the two groups differ. Significant differences to their fellow students are visible once Balooos have been involved in the mentoring program for about one year.

- “I notice if somebody needs a bit of encouragement”;
- “I learned that stamina and persistence is worthwhile, when dealing with uncommunicative and withdrawn people”;
- “You can learn a lot, without being aware of the learning process”;
- “I can establish contact to official persons to put my plans into action”.

A control item (“I know ways and means to research study-related information”) provided no significant difference. This competence was neither requested nor trained in the program.

**Expectations That Did Not Come True**

While evaluation results might not mirror the expectations of the researcher, surprising results may be discovered. The latter depends mainly on the evaluation design. It should not be too constricted, otherwise unforeseen outcomes could remain undiscovered. Unfortunately, not all of the expected effects came to fruition in *Baloo and You*. For example:

*Mowgli’s* verbal expressiveness – written or at least oral – was plausibly expected to improve due to interchange between *Mowgli* and *Baloo*. In the teachers’ opinion, however, there was no notable improvement. Maybe *Baloos* failed to make use of the weekly chitchat to correct or expand *Mowgli’s* verbal skills. Arguably, *Baloos* often have to make a delicate choice between stimulating a conversation and correcting mistakes. These targets could be inconsistent with one another.

Regrettably, the propensity to consume media, such as TV and computer games, did not decrease in the extreme group of children, who started out as extensive users. Although the total group of *Mowglis* reduced the time they spent in front of the monitor or television screen to a moderate extent (as assessed by teachers and themselves), there was only a minimal reduction in the extreme group.

Also contradictory to expectation is the finding that gross motor skills (tested with the “Körperkoordinationstest für Kinder”) could not improve and that fine motor skills even weakened when tested by a ‘lego test’ and ‘pearl test’. Both ‘tests’ compared performance at the beginning and after one year of mentoring. The decline was not trivial, but a moderate negative effect size!

**Limitations, Uncertainties, and Further Research**

In order to be able to declare a mentoring program as ‘preventive’, it must induce long-term effects. A longitudinal study is essential – the longer the better. In this respect, any short-term follow-up study will fail to deliver insight into the crucial questions such as: What grades do *Mowglis* get at high school? What is the rate of unemployment amongst former *Mowglis*? What is their proportion of delinquency compared with a control group? Because the public is understandably interested in knowing about the cost-effectiveness in the long run, answers to the above questions could outline the ‘return on investment’ of a program like *Baloo and You*. Since the long-term study of ‘Perry Preschool’ demonstrated a high return on investment over 40 years (Schweinhart, Montie, Xiang, Barnett, Belfield, & Nores, 2005), it would be of interest to follow *Mowglis* and their control counterparts over a number of years.

In addition to economic benefits, mentoring evaluation should also include more non-monetary factors such as “life satisfaction” (DuBois, 2013).
Another shortcoming is the group size of some studies mentioned here. The “extreme group” consists of only few children. An expanded extreme group provided more reliable results but, apart from some exceptions, also slightly smaller numerical results in relation to Cohen's d. In some cases, the results should be considered as pilot studies only.

**CONCLUSION**

Mentoring offers the opportunity to promote children with special regard to their individual personalities. As a wide range of deficiencies are to be addressed through the mentoring of a "group" of heterogeneous mentees, the outcome evaluations should consider the "extreme groups". Otherwise, rather different individual goals, such as decreasing improper/overactive behaviour in child A and enhancing liveliness in child B counteract or offset each other in evaluation results. On the whole, there is reason to be optimistic about the effectiveness of mentoring. If mentors are guided and accompanied closely, many of the objectives and hopes that mentoring programs have for the progress of disadvantaged children will be fulfilled.

**REFERENCES**


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