Is the Old Adage ‘Practice is the Best Teacher’ Applicable to
the Improvement of Nonverbal Skill?
Two Experimental Investigations on the Effects
of Laboratory Practice

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Abstract

As in traditional teacher preservice education, positive effects of the practice component in laboratory training approaches of laboratory training approaches is unclear, not only for the verbal but also for nonverbal aspects of communication and teaching. Therefore, based on a 3.5 day training program for the improvement of nonverbal skill two replicated experimental investigations were conducted to examine the potential of practical laboratory experiences to the improvement of the accuracy of nonverbal decoding abilities and encoding abilities. Besides significant improvements in nonverbal sensitivity significant differences for “Expressiveness”, “Other-Orientation”, and Unambiguosity of De-/Encoding, could be obtained in both studies due to the focused practical experiences.

Keywords: nonverbal communication; systematic training; laboratory practice; microteaching; teaching competence.

Introduction

The development of laboratory experiences, like microteaching and related approaches, grew out of dissatisfaction with traditional teacher education. They were designed as a means to enlighten theory (e.g., Davis & Smoot, 1969), “to bridge the gap between principles and practices” (Copeland, 1982, 1008), particularly to improve general competence and/or technical skill of personnel after their academic studies and before they take responsibility for teaching or other tasks (e.g., Allen & Ryan, 1969; Zifreund, 1983; Metcalfe, 1995; Klinzing, 1982). Later they were also used widely in connection with academic courses (e.g., general methods courses or courses in educational psychology) and in inservice programs (Klinzing, 1998). They usually consist of attainment of theoretical background knowledge, opportunities to acquire behavior particular behaviours (by eg., discrimination training, opportunities to practice sufficiently the behaviors previously learned in simplified microtraining-situations or experimental real practice settings, and processes of intensive feedback (video-recordings, direct observation or ratings of nonverbal behavior, group discussion).

Microteaching and related methods as an innovative approach to teacher education (Gall, 2006) spread quickly in the United States and to other countries, including Australia, England, and Germany; surveys conducted in different countries may illustrate this dissemination (see Figure 1):

Figure 1: Surveys of Microteaching

Microteaching was used in...
**USA:**

1967: in over 100 AACTE-affiliated institutions (AACTE - American Association of Colleges of Teacher Education) (Allen & Ryan, 1969, 79);  
1969: 141 of 442 NCATE Accredited Secondary Education Programs (31.9%) (Ward 1969);  
1978: 237 of 541 NCATE Accredited Secondary Education Programs (43.8%) (Jones 1978).

**Australia**

1972: 21 (or 27) Colleges (Turney et al., Clift, Dunkin, & Traill, 1973)

**United Kingdom (British Isles):**

1979: 113 Colleges (63.8%) (25 additional Institutions planned to integrate MT into their teacher education program, Hargie & Maidment, 1979);  
1981: 24 of 64 (38%) (Brunner, 1985).

Teaching Laboratories produced a substantial body of research. More than 200 studies could be located, and more than about 80% turned out to be successful, demonstrating impressively their effectiveness (Peck & Tucker, 1973; Turney et al., 1973; Butcher, 1981; Cruickshank & Metcalfe, 1990; Klinzing & Tisher, 1993). Klinzing (2002) concluded from his review of about 240 studies:

“The effectiveness of micro-teaching and related procedures is judged differently in articles on educational research and in textbooks. A review of more than 200 studies on these procedures via vote counting, however, reveals that only a very small number of the studies inspected really support the pessimistic point of view regarding the effectiveness of such training approaches, despite the fact that this view is propagated quite often. By far the majority of the research results, however, support the assumption that the employment of these procedures in both, pre- and inservice education will lead to positive and long-term effects in the acquisition of verbal and non-verbal behavioral patterns, in the integration of what has been learnt during training into the individual behavioral repertoire, and in the transfer into professional practice. This applies for “classic” microteaching (practical exercises in small student groups) as well as for the by far less expensive variant, the training in small groups formed by fellow students or fellow teachers (peerteaching).” (Klinzing, 2002, 214).

Projects using a *combination* of the techniques mentioned above generally achieved significant positive results. But it remains unclear which of the components were decisive for training success.

**Rationale/Review of Research**

**The Effectiveness of the Practice Component in Laboratory Settings**

As in traditional teacher preservice education (Klinzing & Gerada Aloisio, 2006), often
controversially discussed was and still is the practice component in laboratory approaches (characterized as “the opportunities they afford participants to apply or ‘try out’ professional behaviours or ways of thinking in controlled or simplified settings”, Metcalfe, 1995, 580).

Previous research on the effectiveness of the practice component in laboratory settings has concentrated on its contribution to the acquisition of a large variety of communication skills and technical skills of teaching. From their review of related research, Klinzing, Klinzing-Eurich, & Floden (1989) provided an optimistic view of the contribution of laboratory experiences not only for the acquisition of verbal skills but also for the enhancement of teachers’ analytical skills, reflection, and decision making, as examined with global ratings of communication quality. The authors found positive effects of laboratory practice in 15 studies (e.g., Nuthall, 1976), and no or only little effects in four studies.

In their comprehensive review of studies on the effects of teacher training methods, Joyce & Showers (1981) provide a strong case for the inclusion of controlled practice in training. The authors argued that sufficient opportunities to practice the target behaviors in a laboratory (with feedback) are particularly important for the transfer of what was learned in scaled-down situations into the normal practice situation.

Other authors, however, question the positive contribution of focused laboratory practice to the improvement of desired abilities. Hargie & Maidment (1978) cite several studies in their research review appearing to suggest “that perhaps the practical element of microteaching could be eliminated, with greater emphasis being placed on the ability of trainees to discriminate the relevant behaviours being trained.” (Hargie & Maidment, 1978, 91). Also, Metcalfe (1995, 580) doubts that practice in laboratory settings is a critical factor in the success of laboratory experiences. “However, research indicates that extensive, repetitive practice appears to produce only slight or nonsignificant improvement in desired outcomes.” The author refers to Gliesmann & Pugh (1991, see also Gliessman, Pugh, Dowden, & Hutchins, 1988) who concluded from their meta-analysis of 26 selected studies on the acquisition of verbal teaching behaviors (questioning behaviors) that “the number of practice sessions was unassociated with level of skill acquisition.” (Gliesmann & Pugh, 1991, 10).

Thus, as for traditional teacher preservice education, the contribution of focused laboratory practice remains controversial, for the verbal and also for the nonverbal aspects of communication and teaching. Hargie & Maidment (1978) recommended more research on the role of controlled laboratory practice as well as for practice teaching in teacher education.

The Importance of Nonverbal Skill in Communication and Teaching

Accuracy of Decoding Nonverbal Cues. Understanding of socially agreed meanings for nonverbal cues is one of the key competencies for effective communication. For example, research on relationships between nonverbal judgment ability, clinical ability, or teaching excellence (Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979) correlated positive with the accuracy of decoding in three samples (median correlation was 0.38; Rosenthal et al., 1979, 372). Also, Profile of Nonverbal Sensitivity scores of physicians were positively related to the satisfaction and appointment-keeping records of actual patients (DiMatteo, Taranta, Friedman, & Prince, 1980; DiMatteo, Hays & Prince, 1986).

The importance of one’s ability to judge nonverbal cues is also evident in research examining personal traits and psychosocial variables associated with nonverbal decoding.
Skilled decoders of nonverbal signs and signals have been found to possess the following personal characteristics: “better adjusted, less hostile and manipulating, more interpersonally democratic and encouraging, more extraverted, less shy, less socially anxious, more warm, more empathic, more cognitively complex and flexible.” (Knapp & Hall, 2002, 85). In keeping with possession of these desirable characteristics, skilled nonverbal decoders are more self-monitoring, are considered more popular and sensitive to the needs of others, and report higher levels of warmth and satisfaction in their own personal relationships (Hall, 1998; Knapp & Hall, 2002).

All these findings document the importance and suggest the desirability of nonverbal sensitivity among professionals (Knapp & Hall, 2002).

**Expressiveness and Unambiguousness in Nonverbal Encoding.** From the rich body of research it can be concluded that nonverbal encoding skills play a crucial role in face-to-face communication and teaching. Two aspects of nonverbal encoding are of particular importance: its expressiveness (frequency, intensity and variety) and unambiguousness of sending.

The expressive use of nonverbal cues is often investigated and discussed as an ingredient of more general, sometimes elusive terms like: buoyancy, enthusiasm, or charisma. Research reviews of Barr (1948), Rosenshine (1970), Klinzing (1984), Klinzing & Gerada Aloisio (2004b) concluded that high-inference measures of these variables as well as frequencies of low-inference variables such as movement, gesture, eye contact, and variations in voice are related to measures of desired student/audience behaviors, attitudes and achievement.

Overlapping and complementary with expressive nonverbal encoding is the degree of accurateness/unambiguousness of nonverbal sending. The potential to send more than one message at a time through nonverbal and verbal modes of communication in varying degrees of consistency with one another can, when judiciously used, contribute to the subtlety, and unambiguousness of communication. For example, interestingness, attentiveness and participation of groups were improved and dysfunctional behavior was reduced through the use of more than one message at a time (Woolfolk & Brooks, 1983). Also, adequacy of nonverbal communication was related to marital happiness and patients’ satisfaction. When, however, multiple simultaneous messages are misused or overused they can lead to undesired and even harmful effects (Knapp & Hall, 2002).

Unambiguousness of communication can be seen as inextricably connected to both the sender and receiver. Nonverbal sensitivity and sending is reflected in the degree of correspondence between one’s perception of one’s own behavior and the perception of the same behavior by the interactants. Thus, reduction of the discrepancy between experienced and observed performance requires not just change in perception, but also in behavior.

**Purpose of Studies**

Because it remains controversial whether the positive effects are related to the cognitive components (presentation of theoretical knowledge, concept attainment, discrimination training), or to the practical experiences in a laboratory, two quasi-replicated experimental studies were conducted to examine the potential of practical laboratory experiences for the improvement of the two important aspects of communication and teaching: nonverbal sensitivity and nonverbal encoding abilities (expressiveness, other-orientation,
unambiguousness of sending).

These studies were based on training program for the improvement of nonverbal skill (which was already successfully tested on its effectiveness and evaluated, see Klinzing, 2004; Klinzing, & Gerada Aloisio, 2004a, Klinzing, Koehler, Laupp, & Gerada Aloisio, 2004). Following a tradition in projects regarding laboratory approaches to improve communication, like microteaching (Klinzing, 1982; Klinzing et al., 1989), the opportunity was taken to investigate the research questions regarding the design of programs. Experimental laboratory setting designed to improve aspects of communication and teaching are well suited to be a tool of experimental examination since they inherently provide control and manipulation of variables (Allen, & Ryan, 1969, 110).

“Originally, microteaching was devised as a procedure for facilitating behavioral control. Further, it was used as a way of creating a more effective experimental paradigm which for the first time made it possible to use sophisticated experimental designs in learning studies. The purpose of these learning studies was to assess the relative effectiveness of modelling and reinforcement variables in facilitating the acquisition of teaching behaviours.” (McDonald, 1973; 71).

The purpose of the present studies was to assess the relative effectiveness of practice in laboratory settings in facilitating the acquisition of nonverbal skill. The findings for Nonverbal Sensitivity were already reported at the 30th annual conference of the Association for Teacher Education in Europe (Klinzing, & Gerada Aloisio, 2005). In this paper the results for encoding abilities are presented.

The Studies

The Program

Based on research on nonverbal communication, and educational techniques for improvements in nonverbal skill, a 32 hour 3.5 day training program was developed for the improvement of the accuracy of decoding and the expressiveness and unambiguousness of nonverbal encoding (for a detailed description of the program see Klinzing & Gerada Aloisio, 2004a; Klinzing, 2004).

The Contents of the Program were organized into sub-tasks to be acquired stepwise: the cognitive functions of nonverbal cues in kinesics (para-semantic and para-syntactic) represented Part 1 of the program. The affective functions in kinesics (expression of emotions, interpersonal attitudes), and regulation functions represented Part 2. Part 3 was devoted to the improvement of nonverbal vocalizations. These functions were again decomposed into sub-components by relating them to communication modes (e.g., facial expression) and then described in terms of their low inference constituents (Gage, 1972).

The Structure and Components of the Training Program were designed using a Teaching Laboratory approach (“Interacting as Experimenting”) which combines different educational techniques aimed at the improvement of the following interrelated and overlapping knowledge and abilities: acquisition of theoretical knowledge, hypothesis-generation/decision-making, skillfully carrying out the actions, and reflection on the execution of behaviors (Klinzing & Floden, 1990).
**The Experimental Treatments.** The training of the experimental groups was conducted with all training components in both studies. The comparison groups received the same treatment as the experimental groups, except that they lacked the laboratory practice. Instead, in Study 1, they worked on written materials expanding their knowledge on nonverbal behaviour. In Study 2 participants had no compensatory treatment, therefore their treatment was five hours shorter. (The trainees of the comparison group had the opportunity to practise in experimental settings with feedback, and reflective discussions after their posttests).

**Hypotheses**

The hypotheses for both studies addressed the contribution of focused practical laboratory experiences on the improvement of decoding abilities and encoding abilities, and accuracy on de-/encoding/self-realism.

**Encoding Ability: Expressiveness and Other-Orientation:**

1.1 There will be no significant (p< 0.05) differences between treatment conditions (nonverbal behavior training with focused practical laboratory experiences versus no practical laboratory experiences) in the performance tests at the time of the posttests on self-rated and alter-rated competence: Expressiveness.

1.2 There will be no significant (p< 0.05) differences between treatment conditions in the performance tests at the time of the posttest on self-rated and alter-rated competence: Other-Orientation.

**Accuracy of Decoding and Encoding: Reduction of Discrepancies between Experienced Performance and Observed Performance:**

1.3 There will be no significant (p< .05) differences between treatment conditions (nonverbal behavior training with focused practical laboratory experiences versus no practical laboratory experiences) at the time of the posttest on Accuracy of De-/Encoding (Self-Realism = reduction of discrepancies of self-rated and alter-rated competence) for Expressiveness.

1.4 There will be no significant (p< .05) differences between treatment conditions at the time of the posttest on Accuracy of De-/Encoding (Self-Realism) for Other-Orientation.

**Methods and Data Source**

**The Design of the Studies.** The relative effectiveness of the program with and without opportunities of focused and controlled practice in a laboratory setting was investigated using a posttest-only-comparison-group-design, with random assignment of the participants to the experimental conditions in both studies (Campbell & Stanley, 1963): The experimental treatment in both consisted of the same program as sketched above. The studies only differed in the treatments of the comparison groups: in Study 1 the comparison group got extended theoretical background knowledge on nonverbal aspects of communication instead of laboratory practice, whereas in Study 2 trainees had no compensatory treatment.

**Subjects.** 61 (Study 1) and 29 (Study 2) undergraduate education students in a large German University signed up to participate in the projects. Figure 1 gives a profile of the
participants of both studies based on age, gender, number of semesters completed, and majors studied at the university.

Figure 2: Characteristics of the Participants of Study 1 and 2: Gender, Age, Majors and Average Number of Semester Completed at the University.

Study 1: University Students

Experimental Group: N=32 (21 female; 11 male; age: M=23.5, s=3.28; semester completed: M=5.94, s=3.13). Four of the participants were PONS-test repetitioners; because strong retest effects of the PONS could be expected (Klinzing, 2003), the data of the participants who got the PONS the first time were analyzed separately. The data of three of the performance tests were not available. One female participant was ill at the time of the performance tests.

<table>
<thead>
<tr>
<th>Majors</th>
<th>Diploma or MA-</th>
<th>Student Teachers (Secondary)</th>
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<tbody>
<tr>
<td></td>
<td>Pedagogy, Sports/</td>
<td>Philol- Science</td>
</tr>
<tr>
<td></td>
<td>Sociology, Sports/</td>
<td>Mathm./ Science</td>
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<td>gogy Economy,</td>
<td>ogy Science</td>
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<td></td>
<td>(Dipl.) Rhethoric Art History, Culture Science, +Pedagogy (MA)</td>
<td>Philol- ogy</td>
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<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
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</tbody>
</table>

Comparison Group: N=29 (22 females, 7 males; age: M=22.55, s=1.24; semester completed: M=5.07, s=1.93). Four of the participants were PONS-test repetitioners; again, the data of the participants who got the PONS the first time were analyzed separately. The data of the performance test of one participant were not available.

|        | 1 | 7 |
|        | 11 | 2 |
|        | 4 | 3 |

Study 2: University Students (March 2005)

Experimental Group: N=15; (9f, 6m; age: M=23.47, s=2.23; semester completed: 4.4, s=3.0);
Data Source. All participants in both studies were asked to conduct a performance test to determine if they were able to apply the behaviors taught. It consisted of a three-to-four-minute introductory lecture and a six-to-eight-minute moderation of a discussion on topics trainees were to select from one of their subject matter areas which had to be, however, sufficiently general so as to not interact with the trainees’ area of study. The participants were given 45 minutes to prepare the lectures/discussions to be conducted in (randomly assigned) groups of four to seven peers. The laboratory performances were videotaped for feedback purposes. Students rated themselves and others using the Self Rated Competence and the Rating of Alter Competence.

For the assessment the Self-Rated-Competence (SRC: 27 items, with five point-scales) and the Rating of Alter Competence (RAC: 27 items with five-point scales) were used, both developed and tested by Cupach & Spitzberg (1981). Both instruments represent global ratings of verbal and nonverbal behavior. Factor-analyses revealed that these instruments measure “Expressiveness” and “Other Orientation”. Reliabilities of these instruments range from 0.90 to 0.94 (Spitzberg, 1988). Indications for validity of these instruments are promising (Spitzberg, 1988; Spitzberg & Cupach, 1983; 1985). Findings for treatment validity (Popham, 1975) can be derived from the studies of Klinzing & Rupp (1999), Klinzing et al. (2002a; 2002b), and Klinzing & Gerada Aloisio (2004a).

3. The Assessment of Accuracy of De-/Encoding or Self-Realism was determined by computing the differences between the Self-Rated-Competence and the Rating of Alter Competence (SRC – RAC).

Results

1. Results for Encoding Abilities: Self-rated Competence and Rating-of-Alter-Competence for Expressiveness and Other-Orientatio. The results for Self-Rated Competence and Rating of Alter Competence are summarized in Table 1.1 and 1.2.

Table 1.1: Results for Self-rated Competence (SRC) and Rating of Alter Competence (RAC). Means (M), Standard Deviations (s), t-Tests, and Effect Sizes (ES) for Study 1 and 2: Expressiveness.
### Study 1:

<table>
<thead>
<tr>
<th></th>
<th>EG (N=28)</th>
<th>CG (N=28)</th>
<th>EG vs. CG</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>M (s)</td>
<td>4.27 (0.30)</td>
<td>3.31 (0.62)</td>
<td>7.42 (p = 0.0000)</td>
<td>1.55 (1.98)</td>
</tr>
<tr>
<td>Self Rated Competence</td>
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<tr>
<td>Expressiveness</td>
<td></td>
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</tr>
<tr>
<td>M (s)</td>
<td>4.57 (0.17)</td>
<td>4.17 (0.33)</td>
<td>5.77 (p = 0.0000)</td>
<td>1.21 (1.54)</td>
</tr>
<tr>
<td>Rating of Alter Competence (Rating of the Group)</td>
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<td></td>
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<tr>
<td>Expressiveness</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>M (s)</td>
<td>4.02 (0.58)</td>
<td>3.01 (0.77)</td>
<td>3.96 (p = 0.0002)</td>
<td>1.31 (1.47)</td>
</tr>
<tr>
<td>Study 2:</td>
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<td></td>
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</tr>
<tr>
<td>EG (N=15)</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>M (s)</td>
<td>4.48 (0.35)</td>
<td>3.98 (0.28)</td>
<td>4.22 (p = 0.0001)</td>
<td>1.43 (1.57)</td>
</tr>
<tr>
<td>CG (N=14)</td>
<td></td>
<td></td>
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<tr>
<td>ES Cohen’s D</td>
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*One-tailed tests; EG: Experimental Group; CG: Comparison Group

As the results in Table 1.1 indicate, there are significant differences between the treatment conditions in both studies for self-rated as well as for alter-rated competence in *expressiveness* due to the focused practical laboratory experiences. The large effect sizes (ES=1.47 – 1.98) show that the findings are also practically significant.

**Table 1.2: Results for Self-rated Competence (SRC) and Rating of Alter Competence**
(RAC). Means (M), Standard Deviations (s), t-Tests, and Effect Sizes (ES) for Study 1 and 2: *Other-Orientation*.

<table>
<thead>
<tr>
<th>Study 1:</th>
<th>EG (N=28)</th>
<th>CG (N=28)</th>
<th>EG vs. CG</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (s)</td>
<td>M (s)</td>
<td>t (p)</td>
<td>Cohen’s D</td>
</tr>
<tr>
<td>Self Rated Competence</td>
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</tr>
<tr>
<td><em>Other Orientation</em></td>
<td>4.34 (0.34)</td>
<td>3.79 (0.42)</td>
<td>5.27 (<em>p = 0.0000</em>)</td>
<td>1.31</td>
</tr>
<tr>
<td>Rating of Alter Competence (Rating of the Group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Other Orientation</em></td>
<td>4.43 (0.25)</td>
<td>4.10 (0.21)</td>
<td>5.33 (<em>p = 0.0000</em>)</td>
<td>1.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study 2:</th>
<th>EG (N=15)</th>
<th>CG (N=14)</th>
<th>EG vs. CG</th>
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<tr>
<td></td>
<td>M (s)</td>
<td>M (s)</td>
<td>t (p)</td>
<td>Cohen’s D</td>
</tr>
<tr>
<td>Self Rated Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Other Orientation</em></td>
<td>4.15 (0.29)</td>
<td>4.07 (0.39)</td>
<td>0.61 (<em>p = 0.27</em>)</td>
<td>0.21</td>
</tr>
<tr>
<td>Rating of Alter Competence (Rating of the Group)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><em>Other Orientation</em></td>
<td>4.34 (0.30)</td>
<td>4.15 (0.23)</td>
<td>1.85 (<em>p = 0.04</em>)</td>
<td>0.64</td>
</tr>
</tbody>
</table>

*One-tailed tests; EG: Experimental Group; CG: Comparison Group

The results for *other-orientation* as summarized in *Table 1.2* also show differences between the experimental and the comparison group in favour of the experimental group. These differences became statistically significant in both studies except in *Study 2* for self-rated competence: Other Orientation (*p=0.27*). Again, effect sizes (except in Self Rated Competence in *Study 2*) show that the findings are also practically significant.
### 2.1 Results for Unambiguousness of En-/Decoding/Self Realism.

The results of these analyses are summarized in Table 2.1 and 2.2.

**Table 2.1: Results for Accuracy of En-/Decoding/Self Realism (SR = RAC – SRC). Means (M), Standard Deviations (s), t-Tests, and Effect Sizes (ES) for Study 1 and 2: Expressiveness**

<table>
<thead>
<tr>
<th>Study 1:</th>
<th>EG (N=28)</th>
<th>CG (N=28)</th>
<th>EG vs. CG</th>
<th>ES Cohen’s D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (s)</td>
<td>M (s)</td>
<td>t (p)*</td>
<td></td>
</tr>
<tr>
<td>Expressiveness</td>
<td>0.36 (0.24)</td>
<td>0.88 (0.47)</td>
<td>5.27 (p = 0.0000)</td>
<td>1.11</td>
</tr>
</tbody>
</table>

*One-tailed tests; EG: Experimental Group; CG: Comparison Group

**Table 2.2: Results for Accuracy of En-/Decoding/Self Realism (SR = RAC – SRC). Means (M), Standard Deviations (s), t-Tests, and Effect Sizes (ES) for Study 1 and 2 (University Students): Other-Orientation**

<table>
<thead>
<tr>
<th>Study 1:</th>
<th>EG (N=28)</th>
<th>CG (N=28)</th>
<th>EG vs. CG</th>
<th>ES Cohen’s D</th>
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<tbody>
<tr>
<td></td>
<td>M (s)</td>
<td>M (s)</td>
<td>t (p)</td>
<td></td>
</tr>
<tr>
<td>Other Orientation</td>
<td>0.35 (0.25)</td>
<td>0.43 (0.31)</td>
<td>1.16 (p = 0.13)</td>
<td>0.26</td>
</tr>
</tbody>
</table>

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As the results in Table 2.1 and 2.2 demonstrate, there are significant differences between
the experimental and the comparison group in Accuracy of En-/Decoding/Self Realism for
expressiveness (Table 2.1) but not for other orientation (Table 2.2).

Discussion

The positive results in both studies suggest that focused laboratory practice can be an
effective component in the training of nonverbal skill.

Nonverbal Sensitivity. In both studies (as reported at the 30th conference of the ATEE,
Klinzing & Gerada Aloísio, 2005) trainees having focused practical laboratory experiences
outperformed significantly those not having these opportunities in nonverbal decoding
abilities (assessed with the PONS-test; Rosenthal et al. 1979).

Encoding Abilities. There are significant differences in encoding skills in terms of self-
rated as well as alter-rated “Expressiveness” in both studies due to the focused practical
experiences. The large effect sizes show that the findings are also practically significant. Null-
Hypothesis 1.1 can be rejected.

The results for other-orientation also show differences between the experimental and the
comparison group in favor of the experimental group. These differences became statistically
significant in both studies (except in Study 2 for self-rated competence: Other Orientation).
Again, effect sizes (except for Self Rated Competence in Study 2) show that the findings are
also practically significant. Null-Hypothesis 1.2 can be rejected in most parts.

Significant differences occur also in Unambiguousness of De-/Encoding for
expressiveness in both studies. Thus, Null-Hypothesis 2.1 could be rejected. These findings
support those by Fuller & Manning (1973) and results of training programs in which focused
and controlled practical experiences with self confrontation by video recordings have been
used (e.g., Klinzing & Rupp, 1999; Klinzing et al., 2002a; 2002b; Klinzing & Gerada, 2004a;
Klinzing et al., 2004). For Other Orientation the differences between the experimental
conditions are in the hypothesized direction, but didn’t achieve statistical significance. Hypothesis 2.2 could not be rejected.

Although the treatments of the comparison groups in the studies differed in respect of the
amount of theoretical background knowledge provided during the training, the small and
inconsistent differences in decoding and encoding skills between the comparison groups of
Study 1 and 2, indicate that there might be no or only small effects of extended provision of
theoretical background knowledge on the improvement of nonverbal aspects of
communication.

Participants of both studies evaluated the training program very positively with little
In conclusion, the findings of both studies suggest that focused, controlled, safe, encouraging, and empowering practical laboratory experiences can play an important role in programs designed to improve nonverbal skill. The findings for accuracy of nonverbal decoding (Nonverbal Sensitivity) and encoding abilities contradict studies and writings on unsatisfactory effects of laboratory experiences in preservice teacher education (e.g., Hargie & Maidment, 1978; Metcalf, 1995) but confirm the conclusions in some reviews drawn on studies from related projects in the USA, UK, and Germany (Rosenthal et al., 1979; Joyce & Showers, 1981; Klinzing et al., 1989; Klinzing & Tisher, 1986; 1993; Klinzing Gerada Aloisio, 2004a). Practice components in a laboratory as well as in field based experiences – although they are costly procedures in terms of time and money – can be effective to acquire decoding and encoding skills, and as a base for informed and reflective decision making. Practical laboratory experiences can be easily designed even in University courses.

References


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