

Beiträge zur Pädagogischen und Rehabilitationspsychologie

Herausgegeben von Evelin Witruk

Band 1

Evelin Witruk / David Riha / Alexandra Teichert
Norman Haase / Marcus Stueck (eds.)

Learning, Adjustment and Stress Disorders

With Special Reference to Tsunami Affected Regions



PETER LANG

Internationaler Verlag der Wissenschaften

Beiträge zur Pädagogischen und Rehabilitationspsychologie

Herausgegeben von Evelin Witruk

Band 1



PETER LANG

Frankfurt am Main · Berlin · Bern · Bruxelles · New York · Oxford · Wien

Evelin Witruk / David Riha / Alexandra Teichert
Norman Haase / Marcus Stueck (eds.)

Learning, Adjustment and Stress Disorders

With Special Reference to Tsunami Affected Regions



PETER LANG

Internationaler Verlag der Wissenschaften

**Bibliographic Information published by the Deutsche
Nationalbibliothek**

The Deutsche Nationalbibliothek lists this publication in the
Deutsche Nationalbibliografie; detailed bibliographic data is
available in the internet at <http://dnb.d-nb.de>.

Cover Design:
Olaf Gloeckler, Atelier Platen, Friedberg

ISSN 1865-083X
ISBN 978-3-631-57776-9

© Peter Lang GmbH
Internationaler Verlag der Wissenschaften
Frankfurt am Main 2010
All rights reserved.

All parts of this publication are protected by copyright. Any
utilisation outside the strict limits of the copyright law, without
the permission of the publisher, is forbidden and liable to
prosecution. This applies in particular to reproductions,
translations, microfilming, and storage and processing in
electronic retrieval systems.

www.peterlang.de

TABLE OF CONTENTS

Introductory note Evelin Witruk	IX
Preface Evelin Witruk	XI
Greeting notes Annette Beck-Sickinger, Hans-Helmut König	XV
Chapter 1 BASIC MECHANISMS OF LEARNING	
The Mismatch Negativity (MMN): An electrophysiological indicator of auditory long-term learning in speech and non-speech processing Ursula Kirmse & Erich Schröger	3
Relations between associative learning with coding conflicts and neuropsychological correlates of learning and memory Petra Schepler & Bodo Krause	25
Chapter 2 DYSLEXIA AND ATTENTION-DEFICIT-DISORDERS	
Dyslexia - Assessment and treatment Evelin Witruk	41
Genetische Grundlagen der Legasthenie Arndt Wilcke & Johannes Boltze	59
Brain response in lexical-semantic processing in typically developing children and children with developmental language disorders Beate Sabisch	83

Wechselwirkungen zwischen Lese- und Rechtschreibleistung, Arbeitsgedächtnis und Ängstlichkeit bei marokkanischen und deutschen Schülern Ouafa Raziq & Evelin Witruk	95
Computer-aided assessment of the cognitive processes in learning to read and dyslexia Juan E. Jiménez & Isabel Hernández-Valle	105
Attention-Deficit/Hyperactivity Disorder: Diagnosis, neurobiology and pharmacological treatment Karen Nieber	123
Chapter 3 GENERALIZED LEARNING DISORDERS AND INTERVENTION METHOD	
Self adaptation for children with learning disorders Amitya Kumara	145
Der Einfluss elterlicher Verwöhnung auf Schulfähigkeit und Lese-Rechtschreib-Kompetenz im Grundschulalter Issa Al-Manssour, Constantin Albert & Khaled Al-Ammar	155
Ursachen und Folgen elterlicher Verwöhnung Khaled Al-Ammar	195
Fluglärm als Risikofaktor für die kognitive Entwicklung von Schulkindern Elke Jann-Kluge & Evelin Witruk	207
Suggestopedia and emotional learning factors Ulrike Quast	223
Concepts of disability sport and of rehabilitation sport programs - Emancipation and integration of people with a disability by sport Jürgen Innenmoser	233

Nonparametric analysis of the interaction between gender and linguistic abilities in blind children	247
Juan C. Oliver-Rodríguez	
Chapter 4	
ADJUSTMENT DISORDERS	
Using G. Kelly's Repertory Grid Technique for determining the schoolchild's personality's feeling of self in school perceptive communication in the relationship schoolchild-teacher-schoolchild	261
Guna Svence	
Development of identity and psychological health of Armenians living in Germany – in the process of adaptation	269
Lusine Karapetyan & Konrad Reschke	
Auswirkungen von sozialer Isolation – Chronobiologische Isolationsexperimente zur Vorbereitung internationaler Raumflüge	279
Hans-Ulrich Balzer & Marcus Stueck	
Cancer diagnosis in children and adolescents – Analysing possibilities to encourage and help patients during the course of the disease and afterwards in finding their way back to life	297
Alexandra Teichert & Evelin Witruk	
Significance of preschool teacher training pertaining to peace education & early violence in preschool children: The Sri Lankan Profile	309
Buddhiprabha D. D. Pathirana	
A review of the workshop used as a method of decreasing social adjustment problems in kindergarten	329
Marija Kocijasevic & Ljiljana B. Lazarevic	
Workshop as a treatment method of social adjustment problems of children aged 6 in Belgrade kindergartens	335
Ljiljana B. Lazarevic & Marija Kocijasevic	

Psychologische Präventionsansätze in Handlungsfeldern der sozialen Arbeit	343
Marcus Stueck, Danilo Neumann, Lars Mayer, Kati Rillich, Peggy Dobrig, Berit Lahm, Petra Supplies & Peter Wallenhauer	
Wassergestützte Selbstregulation mit Biodanza für Kinder als präventive Intervention zum Abbau kindlicher Verhaltensbesonderheiten und Traumata sowie zur Stärkung des Bindungsverhaltens	359
Marcus Stueck	
Chapter 5	
STRESS DISORDERS	
Disaster aid activities in Tsunami and earthquake affected regions of Sri Lanka, Indonesia and India	369
Evelin Witruk, Samudra Senarath & Sophie von Lieres	
Post-traumatic stress and coping in children following a natural disaster	399
Gunendra R. K. Dissanayake	
Intercultural competencies for psychological post disaster help	415
Betty Kögel & Konrad Reschke	
Die Einordnung körperorientierter Interventionen in die Behandlung Posttraumatischer Störungen im Kindes- und Jugendalter	427
Marcus Stueck, Sandra Schlegl, Alejandra Villegas, David Riha, Alexander Törpsch & Madlen Duben	
Neuropsychological and psychoemotional symptoms: a clinical perspective	455
Thomas Merten	
„Kommunikation fördern und Identität stärken“ System-bezogene Stressreduktion (SYSRED) in pädagogischen Feldern - eine Zusammenfassung -	465
Marcus Stueck	

Participants of this study were placed in one of two groups: those affected directly, and those not directly affected by the tsunami, and were assessed twice: in February as well as in December, 2005. Both groups were additionally asked to rate someone they imagined had directly experienced the tsunami. Based upon the results using the Impact of Event Scale by Horowitz, Wilner and Alvarez, (1979), both groups reported symptoms consistent with mild to severe PTSD, with the affected group reporting a higher degree of PTSD than participants in the non-affected group. However, the scores for PTSD were highest for the imaginary group, showing a severe degree of PTSD. The degree of PTSD in both groups was highly stable 11 months post tsunami, suggesting a need for psychological interventions to be offered to both groups over a sufficient time period. The authors of the study indicated that the Impact of Event Scale showed high reliability and that the often cited two-factor structure could be found. They also discussed inter-cultural and gender differences regarding the degree of the PTSD and the factor structure.

These consequences inspired the objectives of our activities in Sri Lanka, Indonesia and India.

2 Activities in Sri Lanka

Sri Lanka is a multi-racial, multi-lingual and multi-religious developing country. It has an estimated population of nearly 19.6 million (Department of Census and Statistics, 2001 p.3). There are three main ethnic groups, Sinhalese (74 percent), Tamil (18 percent), Muslim (7 percent), and other (1 percent). (Department of Census and Statistics, 2001, p.4). The country is divided into nine administrative regional provinces and 25 districts.

The collaboration between the University of Colombo and the University of Leipzig was established some days before the tsunami, on December 12, 2004, by a meeting of Prof. Dr. Swarna Wijetunga and Prof. Dr. Evelin Witruk. After the tsunami, the affiliation was further extended, and aid activities of the German academic team were planned for Sri Lanka.

2.1 The first activity lead by the Institute of Psychology II (University of Leipzig) involved tsunami-related mediator workshops at the University of Colombo in February and March 2005. Evelin Witruk, Konrad Reschke and Marcus Stueck conducted lectures, seminars and exercises in counseling, trauma-therapy, Post-traumatic Stress Disorder, psycho-education, art therapy, Biodanza and yoga. The seminar program was held for one week and 30 lecturers from different universities participated.

2.2 The second activity was a “Fact Finding Mission” in August, 2005, in Sri Lanka and was sponsored by the DAAD. Here the above mentioned team from the University of Leipzig visited the University of Colombo, the Open University Nawala and the University of Peradeniya. The report showed the lack of and the need for psychology courses in the whole country. Only in Peradeniya, a Bachelor course in psychology was offered. No Master degree in psychology was available in Sri Lanka at that time.

2.3 The third activity involved a special training program on the subject of “Current Development in Trauma Therapies – International and National Aspects in Disaster Psychology” and was held in June 2006 collaboratively by the University of Leipzig and the Goethe Institute of Colombo and the Open University of Colombo. Here a team of psychotherapists, under the leadership of Konrad Reschke, conducted a one week course.

2.4 The fourth activity took place at the University of Ruhuna in Matara (south Sri Lanka) in March 2007 as a collaboration between the University of Leipzig and the Goethe Institute of Colombo. Evelin Witruk and Konrad Reschke conducted a three days workshop on disaster and rehabilitative psychology, including exercises in disaster response work, trauma therapy, and art therapy.

2.5 The fifth activity involved a Mediator Training Program for School Counselors as an intervention method for tsunami affected children in Matara (South Sri Lanka) as a part of the dissertation project of MA Samudra Senarath. The courses took place from February to August 2008.

2.5.1 Specific situation in Matara District

The total population of the Matara District before the tsunami (as reported by the Department of Census and Statistics, 2005) was 761,236, of which 367,428 were men and the remaining 393,808 women. Of this population, 262,473 were children and adolescents of 18 years and below. As was reported on March 10, 2005, a total of 82,067 persons from 20,675 families were recorded as affected by the tsunami. The death toll for the district according to a report by the government was 1,321. 6,652 persons were injured and 601 reported missing. Altogether, there were 9,491 displaced persons, with 3,086 in 22 camps, while 6,405 were with host families, consisting primarily of relatives and friends. Records show that a total of about 257 children had lost either one parent or both. A total of 2,233 houses were completely destroyed and 6,075 partially

damaged due to the tsunami. Furthermore, 366 other buildings were completely damaged while 1,022 were partially damaged (Department of Census and Statistics, 2005).

The tsunami and its aftermath affected the lives of over 350,000 children in 650 schools in Sri Lanka (Ministry of Education, MOE 2005). The MOE (2005) has pointed out that over 170 schools along the coastal belt from north to south were completely destroyed by the tidal waves, of which 43 schools were in the north-east province. 75 schools were partially destroyed. In Matara District, five schools were totally damaged and ten were partially damaged. Three of these schools have a student population of over 2,000 each, and two of them are national schools. Eight schools needed to be relocated (Department of Census & Statistics, 2005).

The present study intends to investigate the psychological well-being of children and adolescents affected by the tsunami in Sri Lanka. It will examine their psychological adjustment and their coping behavior. In particular, the study investigates long term consequences, such as PTSD, anxiety, and educational and social relationships difficulties. The objective of this study is to identify the psychological needs of children and adolescents that may be met by counseling interventions such as therapeutic counseling. In addition, the objective of the study is to develop a school counseling service. For this purpose, the Mediator Counseling Training Program was implemented (teach the teacher approach) for school counselors as well as a mediator intervention for children. The findings of this research will support initiatives to sustain a balanced, healthy life-style, facilitate psychological adjustment, enable treatment and prevention, strengthen coping abilities, and aid the development of social competence for children and adolescents affected by the tsunami.

2.5.2 Mediator approach

The objective of the mediator approach is to alter the attitudes and educational behavior of parents, teachers, counselors, and educators. Additionally, their role is to act as mediators in problem-solving. For instance, with reference to problematic child behavior, the child who has a close relationship with parents, teachers or counselors can be aided in solving his or her own problems. Thus arises the 'mediator concept' (Perrez et al., 1985). Problems can be solved or approached in two ways:

- The therapist can be directly involved in treating or solving the child's problematic behavior.
- The therapist trains a mediator to treat or solve the child's problem (Perrez et al., 1985, p.33).

The findings of Perrez in 1980 have influenced the choice of the mediator approach for this present study. Taking Perrez' standpoint into account, the

research aim is to develop a counseling service in the school system in Sri Lanka after the tsunami. In particular, the focus is to help tsunami-affected school children by strengthening their ability to cope and to manage disaster emergencies and other kinds of crisis situations. Hence, the author has selected the Mediator Training Program for School Counselors and Mediator Intervention for Tsunami Affected Children by Counselors. Perrez (1980, p.246 cited in Perrez, et al., 1985) explains the 'Expert-Educator-Child-Intervention' model (p.41).

2.5.3 Structure of the mediator model

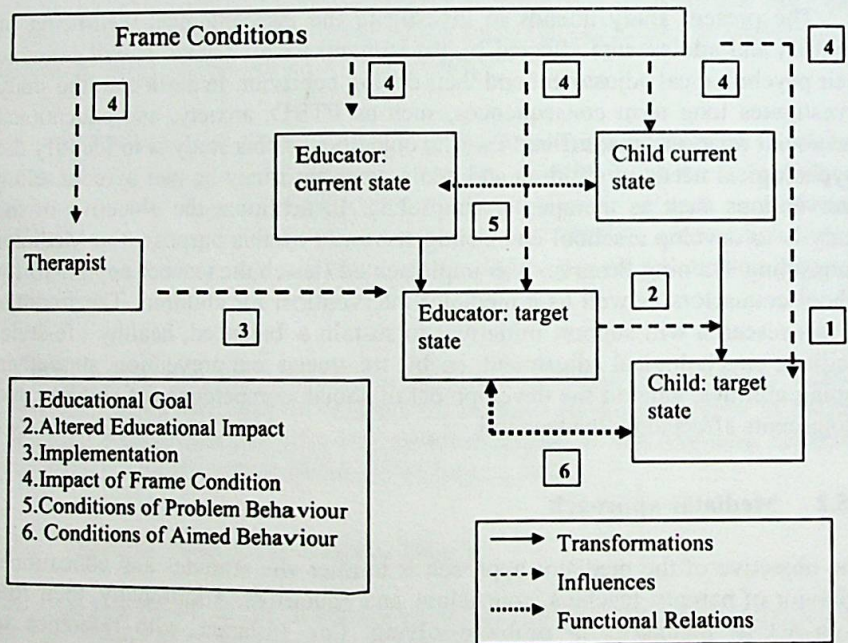


Figure 1. Structure of the Mediator model (Perrez et al., 1985, p.40).

The above mentioned mediator model is represented by the numbers 1 to 6. The author had discussed the process and structure of the model throughout the mediator training program and had explained the numbers and how they relate to and are implemented in the present study. The number one represents the 'Educational Goal'. It shows what the therapist wants to achieve, i.e., the desired

behavior for an individual child (e.g. tsunami-affected child). The therapist must aim at treating or solving the child's behavioral problem, in particular PTSD, anxiety, educational and social relationships difficulties. The target behavior is to develop strong coping abilities, social relationships and the reduction of difficulties with school activities. Thus, the goal is to increase psychological adjustment by reducing children's PTSD and anxiety.

Those involved in this program, whether they be therapist, mediator (counselor) or child will exhibit their own natural behavior (e.g. a child may have a problem and the therapist the right knowledge to solve the problem). This defines the frame conditions of the model (number 4). Furthermore, all participants will have been influenced by different frame conditions. If the influences from the frame conditions are positive, the problem is easier to deal with and if negative influences have been acquired, the problem-solving process is more difficult.

In the actual treatment model, the trained mediator and the child meet with the purpose of solving an identified problem. However, if the mediator's knowledge is insufficient to adequately address the child's problem, a negative interaction is possible, a situation identified in number 5. In order to facilitate a positive change in the child's behavior, the mediator must then increase his or her knowledge base of therapeutic modalities and/or change his or her attitudes.

In situation number 2, the professional therapist trains the mediator in therapeutic modalities, such as counseling and auto regulation methods (art therapy, yoga, and Biodanza) through role play, modeling, and observation (number 3). The mediator then applies these skills in working with the child to change problematic behavior to more positive behaviors. This process continues until a predetermined educational goal has been attained (number 6) (Perrez et al., 1985, p. 40-42).

2.5.4 Mediator training program for counselors

The Mediator model by Perrez (1980) was used in a training program for school counselors in Matara, Sri Lanka. The program was conducted over eight days by academics of the University of Leipzig, Germany, including Prof. Dr. Evelin Witruk, Prof. Dr. Konrad Reschke, and PD Dr. Marcus Stueck. Mediators learned art therapy, yoga, Biodanza, and trauma counseling in a practical and user-friendly way. Mediators were trained in the importance of confidentiality when working with school children. Trainers observed the mediators and helped them to implement the above-mentioned intervention methods for children.

2.5.4.1 Trauma counseling and imagination techniques (safe place exercise)

Trauma counseling interventions were taught to mediators and included micro-skills development and basic counseling skills (such as active listening, empathy, and social skills). Additionally, Roger's person-centered theory and Rational-Emotive behavioral theory was taught. Finally, mediators were taught about the long term consequences of disaster experiences, including PTSD, anxiety, and behavioral problems in school activities and social relationships.

2.5.4.2 Art therapy (Painting)

Art therapy was geared towards children, adolescents, and individuals with no experience in art therapy. As it is helpful to have materials easy to use (Naumburg, 1966), the program offered pastels, wax chalk, water colors, a variety of paper surfaces and adequate working space. Materials should be easy to work with and no source of frustration. For example, newsprint should be avoided, as it tears easily if pressure is applied to it. The environment should be structured and safe, allowing for a free expression of emotions (Wadeson, 1980).



Figure 2. Art therapy (Painting).

2.5.4.3 Yoga for children (Entspannungselement mit Yoga Kinder, EMYK)

This method of yoga was taught to the counselors by Stueck. The yoga style was derived from his own scientific development of "Relaxation Training with Elements of Yoga for Children" (EMYK).

2.5.4.4 Biodanza for children (DANCEPRO-Biodanza)

Biodanza is a group activity involving music, movement, and emotion to stimulate joy, creativity and connecting with others. Dances are performed on three levels: individual, pairs, and group. Children follow several movements modeled by the mediator and sessions generally are less than 45 minutes. Sessions take place indoors and participants need to wear loose clothing.

2.5.4.5 Participants and procedure

The selection of participants to be trained as mediators followed general guidelines as noted by Perrez et al. (1985). Participants were 20 school counselors working at schools between 1 and 2 kilometers from the seaside. They represented 20 schools from the Matara district in Sri Lanka and included 13 females and 7 males. Their educational qualifications in counseling differed, ranging from a diploma in counseling to a post-graduate degree in counseling. Those with a diploma in counseling had additional training from the Ministry of Education. Additionally, all counselors had more than two years of work experience as a counselor. The author wanted to select a mixed group in terms of counseling knowledge and experiences. This was to further one of the research aims which was to develop the counseling service in the school system.

The nature of this research determines the method of sampling as it is not possible to select randomly. The non-probability sampling technique selected for this study is the method of purposive sampling. This method was viable for the present study, because a judgment as to whether the subjects fit the criteria for selection is emphasized.

Counselors were assessed in the third year following the tsunami using a researcher-developed self administered questionnaire. The questionnaire enquired about general information, tsunami experiences (regarding training received for counseling tsunami victims), knowledge about counseling theories, basic counseling skills, trauma counseling, psycho-education, and auto-regulation methods (art therapy, yoga, and Biodanza).

Selected participants were informed about confidentiality and other ethical issues. A pre-test was given prior to training and a post-training test after the

mediator workshops. The post-test measured whether or not skills had been acquired in the areas taught.

In summary, the post-test showed that counselors significantly improved their knowledge as a result of the mediator training program in the areas of counseling theories, trauma counseling, yoga, Biodanza, and art therapy. The pre-test results showed that counselors had no prior knowledge of Biodanza, trauma counseling, and art therapy, but did have some knowledge of yoga. In general, they had some knowledge of Roger's person-centered, Rational-Emotive, psychoanalytic, and behavioral theories, as well as basic counseling skills.

2.5.6 Mediator counseling: Implementation of intervention methods

During the mediator training program, experts taught the structure and procedures of the intervention program for tsunami affected children (general counseling and auto regulation methods), as well as how to assess for problematic behavior, PTSD, anxiety, educational and social relationship difficulties, and coping skills.

Eighty children participated in the study, forty each in the experimental and in the treatment groups. Children were placed in eight small groups with four to six children in each group. Four groups were comprised of four children each and four groups of six children each. Only one group mixed boys and girls. Among those children who were affected by the tsunami, some of them had barely escaped from the tidal waves, were injured, and/or lost family members, and/or their house and other household items. Some lived in refugee settlements, or with a guardian, or with a family allocated for the research purpose. The children's age varied from 9-15 years (age mean, $M=12$). Both boys and girls participated in the study and the children lived 1 to 2 km from the seaside.

Acting as mediators, the school counselors implemented the learned treatment modalities, focusing on the goal of reducing symptoms of PTSD and anxiety and strengthening good relationships among peers, families, and society. Skills to strengthen coping abilities and to promote relaxation and well-being were taught.

An evaluation of the intervention methods was done by measuring the level of the children's PTSD, anxiety, coping skills, and educational and social difficulties three times (pre-test, post-test 1, and post-test 2). The school counselors acting as mediators administered the following psychometric instruments to both the experimental and the control group: the Childhood Post-Traumatic Stress Scale (CPTS-RI), the Revised Children's Manifest Anxiety Scale (RMCAS), the Child Coping Scale (CCQ), and the Educational and Social Relationship Difficulties Questionnaire.

2.5.6.1 General counseling

Altogether five weeks of mediator counseling took place. The counseling process was divided into 10 sessions of 90 minutes each and two sessions were held each week. The first 45 minutes of each session consisted of general counseling using only Rogers' Person Centered therapy and included empathy, active listening, and trauma counseling and safe place exercise. This provided an opportunity for mediators to discuss and teach the intervention, how to conduct activities such as yoga, safe place exercise, Biodanza and painting, and to evaluate how far these helped with psychological adjustments post tsunami. Group activities were crucial for mediators to further improve their knowledge of yoga, Biodanza, painting and safe place exercise.

2.5.6.2 Auto regulation method

In the second part of each of the counseling sessions, three sessions each of Biodanza, yoga, and painting were held. The Biodanza and painting sessions were 45 minutes and the yoga sessions 60 minutes in duration. During, before and after each session, the children were assessed using KUSTA (Kurz-Skala-Stimmung und Aktivierung), to assess their feelings and level of relaxation. This measurement helped to perceive the changes of emotion as a result of the intervention. At the end of each counseling session, the mediators completed an evaluation form.

The quantitative and qualitative analysis of the data is still in the process of being completed. However, the results indicate a significant decrease of PTSD and anxiety symptoms in the tsunami affected children as a result of the mediator intervention. In summary, the mediator training program and mediator intervention achieved their main research goals.

3 Activities in Indonesia

3.1 The first activity took place in March 2005 and involved tsunami related mediator workshops at of the Gadjah Mada University of Yogyakarta. Evelin Witruk from the Institute of Psychology II of the University of Leipzig conducted the following scientific program:

- Workshop on "Crises Intervention" and "Painting Therapy for Post-traumatic Stress Disorders"
- Workshop on "Rehabilitative Psychology"
- Workshop on "Development of a School Psychological Service in Indonesia"
- Workshop on "Dyslexia - Assessment and Treatment"

Practical exercises were the main topic of the workshop "Trauma and Painting".