

Higher Education Quality Assessment Center of Estonia

Joint Final Report

University Research in Psychology in Estonia

Tallinn Pedagogical University

University of Tartu

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General overview

The Higher Education Quality Assessment Center of Estonia has invited three experts from abroad, one from Great Britain, prof Michael Argyle (chairperson of the group), one from Iceland, prof. Jörgen Pind, and one from Sweden, prof. Erland Hjelmquist to review and make recommendations for the research areas and higher education of psychology in Estonia. The final member of the expert team (hereafter Team) was prof. Mare Teichmann from Tallinn Technical University. Research and development were to be reviewed at the University of Tartu and Tallinn Pedagogical University. At the time of the expert group's visit to Estonia, prof. Argyle suddenly fell ill and eventually could not participate in the review process. Prof. Erland Hjelmquist took over the role as chairperson for research evaluation and prof. Jörgen Pind as chairperson for evaluation of education.

The expert team visited the Department of Psychology at University of Tartu Oct. 2-3 and the Department of Psychology at Tallinn Pedagogical University on Oct. 5th.

The Team was given materials with relation to education and research. Documents related to research and development included the following:

1. Self-Evaluation Report for the Scientific Evaluation of Research in Psychology from the Department of Psychology at Tallinn Pedagogical University
2. Research and Development at the Department of Psychology, University of Tartu: Self-Assessment

3. Higher Education Standard (Regulation No 190 of the Government of the Republic of 13 June 2000)
4. Principles and Criteria for Evaluation of Research and Development Institutions, Approved by the regulation of the Government of Republic No 83 of 21 April 1998
5. Sample of Joint Final Report
6. Additional materials

Tallin Pedagogical University

Department of Psychology

Research fields Assessed

Environmental psychology,

Social representations of human rights, power and gender studies,

Comparative study of values

Health studies

Studies of visual perception

Educational psychology, child psychology

Visit date

October 5, 2000

General Overview

The name “Tallinn Pedagogical University” reflects the historical roots in “Tallinn Teacher Training Seminar”, founded already 1919. The tradition of focusing on educational matters was still very much in focus when research in psychology formally started at TPU in the early 1970’s. At that time the first Chair of psychology was established. Since then TPU has developed into a university which no longer has a clear profile in educational sciences, but rather appears as a general social sciences university.

This is true also for psychology which at the end of the 1970's received a group of psychologists, specializing in environmental psychology, from Tartu University. However, it was not until 1993 that a Department of Psychology was started at TPU. The department is thus still rather young, whereas research in psychology has a long tradition.

According to the self-evaluation report there are at present 5 full-time and 2 part-time researchers. The 4 professors and 4 associate professors also have obligations to be active in research.

The Department of Psychology at Tallinn Pedagogical University has two Chairs, one in Social and Environmental Psychology, prof. Mati Heidmets, and one in Personality and Developmental Psychology, prof. Voldemar Kolga. A special feature of the department of psychology is that it is the base for a Non Governmental Organization, the Estonian Women's Studies Information Centre. This unit is connected to research activities via Prof. Kolga.

The self-evaluation report lists the following "Directions of research": 1) environmental psychology, 2) social representations of human rights, power and gender studies, 3) comparative study of values, 4) health studies, 5) studies of visual perception, 6) educational psychology, child psychology. Below we quote from the self-evaluation report where activities and research and development are shortly presented.

- "environmental psychology. Based on the 20 years of tradition in environmental psychology research in TPU, the recent research programs in this field have been focused on the problems of formation of the attitudes towards environment in a transitional society, and attitude-behaviour relations in a field of environmental protection (M. Heidmets, M. Raudsepp), as well as to the analysis of the grassroots environmental movements (T. Niit, K. Liik).
- social representations of human rights, power and gender studies were started by Prof. V. Kolga and M. Raudsepp in 1997. Prof. Kolga stands among those people responsible for the initiation of women's studies in Estonia. He has been the head of the Women's Studies Information Centre at Tallinn Pedagogical University since 1995, the first academic gender studies centre in Estonia.
- comparative study of values, started in Estonia by Prof. T. Niit in 1989 in collaboration with Prof. Shalom Schwartz (Jerusalem, Israel). At the present time more than 50 countries are involved in this project and Prof. Niit and his students have collected more than 15 samples which have been used in international comparisons with Finland, Sweden, Italy, Switzerland, etc. He has participated in four international research programs.
- health studies, including health behaviour, school stress, drugs use. The Laboratory of Health Studies was formed as subdivision under the Dept. of Medical Training. The main directions of work were interdisciplinary health investigations (medical and psychological examination and diagnostics) and health counselling. The target groups were pupils, university students and educators. Since September 1996 the Laboratory belongs to the dept. of Psychology. Its general directions of research are:

- Psychological health (since 1983)
- Music therapy and vibroacoustic therapy (since 1986)

At the moment the Laboratory of Health Studies stands as a main centre for health psychology and health studies in Estonia (E. Rüütel, A. Pehk)

- studies of visual perception, carried out by the Laboratory of Cognitive Neuroscience (T. Bachmann, E. Põder, K. Thomson), established in 1993. This is the only experimentally oriented research unit in psychology at TPU.
- educational psychology, child psychology (M. Veisson, A. Tiko) represent the psychological studies outside the Psychology Department."

The division into general directions of research was however not used in the self-evaluation report when presenting the data on publications, grants, doctoral students or any other type of information. Such information, split on the six directions of research, could be deduced more or less correctly from the information contained in the self-evaluation report, and when it seems feasible we will do so, but still in a less than precise way. The Team choose not to organize the presentation of research according to another possibility, namely the research units mentioned on p. 26; Environmental psychology research unit, Laboratory of health studies, Laboratory of cognitive neuroscience and Women's Studies Information Centre. The Unit structure leave out some directions of research and consequently seemed less appropriate for the purposes of the Team. However, the Unit structure will be commented on below.

Presentations, Visits and Discussions

The Team met with Prof. Mati Heidmets (also Dean of the Faculty of Social Sciences) and Ass. Prof. Toomas Niit, both belonging to the "veterans" from the late 1970's, and with a number of other staff members including Prof. Talis Bachmann, Prof. Voldemar Kolga, Ass. Prof. Eha Rüütel

Activity

As already mentioned, the tradition of educationally oriented research has faded away over the years. Instead other lively research interests have blossomed and put the department of psychology at PTU on the national as well as the international arena. The research staff in general is very active in presenting their research results on conferences and congresses to the international audience particularly after the obstacles for free movement and travelling have been removed. The national and international cooperation is in general on a high level.

Research and development

The research directions will be commented upon in the chronological order, as it appears in the self-evaluation report, in which they have been introduced at the department of psychology.

As is clear from the description above of the six research directions, the environmental psychology studies have the longest and most prominent tradition at the department. Research has been successful in general in terms of getting external money and publishing papers in international journals.

The comparative studies of values was initiated at the end of the 1980's and is impressive in its scope of cross-cultural comparisons. Researchers have been able to attract external grant money and results have been communicated in international journals.

The study of visual perception was established during the beginning of the 1990's and has turned out to be successful. Grants have been awarded and research results reach the research community by publication in international journals. The future of this direction of research is uncertain since the main figure is no longer full time at the department but has moved to another university establishment. This is of some concern since the department runs the risk of losing its main experimental competence.

Health studies moved to the department as recently as 1996 but seem to have found a proper place in the new environment and has a lively activity. One of its specialities is music therapy. It has been recognized in the research community through being given grants and getting papers published in international journals.

The direction of research called "Social representations of human rights, power and gender studies" is a very recent enterprise and has as yet not produced much in terms of internationally publications.

The educational psychology, child psychology direction of research, is mentioned last, not because it is a newcomer at the department of psychology but because the actual research is done by people formally at other departments of TPU but associated with the department of psychology since the researchers have PhD's in psychology and do psychological research. This group has also been successful with respect to grants and international publication.

The Unit structure mentioned above is an asset for the department. However in particular the Laboratory of health studies and the Laboratory of cognitive neuroscience demand special and expensive equipment in proper room facilities.

Altogether, the department combines basic and applied research in a fruitful way and this combination is actually a strong side of the entire enterprise at the department. It has thereby contributed in essential ways to the Estonian society.

Publications

As already has been mentioned, almost all directions of research have been able to publish in international journals, the total number in peer-reviewed ones amounting to 27 during the years 1995/2000, including journals found in the Science Citation Database. Beside that, about 150 other publications are on the record of the department.

Competence of the research group

Given the information presented above it should be clear that the competence of the research group as a whole at the PTU department of psychology is high, or very high.

GENERAL RECOMMENDATIONS

The Team would first of all express its satisfaction on the whole with the research activities at the department of psychology at TPU. We found a number of devoted researchers, some with an extensive career in their fields of investigations. The recommendations in important respects coincides with the ones found in the self-evaluation report and are thus recognized by the department itself.

- keep the combination of basic and applied research
- strengthen the material resources of the laboratories
- develop educational and school psychology
- try to attract doctoral students directly from the master studies; this seems necessary for the survival of the department in a longer time perspective
- even more effort could be put into applications for foreign grants
- though clearly visible on the international scene, the Team feels there is potential for more extensive international publication

Accreditation conclusions

The department of psychology at TPU is in a good shape, generally speaking, at its scope of interest ranges from basic experimental psychology to studies of therapy. This is an impressive picture of a department open to different approaches to psychology. At the same time the department might lose its experimental profile. Measures should be taken aiming at keeping the department's wide competence. Educational and school psychology could be strengthened for the same reasons.

Recommendations

Evaluation judgment of research field psychology at TPU

Good to satisfactory

The team has based its decision on the quality of the information received and the data gathered during the accreditation site visit interviews and information reviewed

University of Tartu

Department of Psychology

Research fields Assessed

Visual Perception

Cultural and Developmental Psychology

Psychology of Personality

Educational Psychology

Biological Psychology

Visit dates

October 2-3, 2000

General Overview

From 1802 psychology has been taught almost regularly as university course at the University of Tartu. The University has been the center for research and teaching psychology in Estonia and *Alma Mater* for Estonian psychology uninterruptedly for 198 years. Most of this time it has been the only Estonian institution for psychological research. The Department of Logic and Psychology was established at the Faculty of History in 1947 and during last 52 years it has evolved into present Department of Psychology at the Faculty of Social Sciences. First publications in English and contacts with the international scientific community date from the middle of the seventies. After Estonia regained its independence in 1991, the University of Tartu has been experiencing crucial changes: intellectual freedom has been restored, a Western-type programs and grading system have been introduced, a diversity of contacts with European and other universities have been flourishing.

The Team discussed presentations given by the following members:

Prof. Jüri Allik, Prof. Jaanus Harro, Prof. Peeter Tulviste, Docent Eve Kikas, Docent Tiia Tulviste, Lecturer Maie Kreegipuu, Lecturer Marika Rauk, other researchers in main research areas and post-graduate students.

In order to get better view of the research activities and laboratory facilities the Team also visited the Biomedical Center at University of Tartu. The Team was given a very complete overview of the research and development directions of the Department of Psychology. The Board of the Department of Psychology has created a five-year developmental plan of the Department (2001-2005). This Plan states that:

"The Department of Psychology aims at being the top centre of Psychology in Estonia as far as education and scientific research are concerned, and that Department intends to base education on research and thus pursues research in all main fields of psychology. This ambitious intention is backed by a strategy to make leading the Department more efficient by forming task forces, increasing public discussion, and making postgraduate training and development of pedagogical skills of most gifted graduates a top priority. This strategy also necessitates more intensive search for funding research and very efficient collaboration with colleagues both in Estonia and abroad."

Research Areas

Visual Perception

Presentations, Visits and Discussions

The Team visited the Laboratory of the Psychology of Vision and discussed with the Chair of Psychophysics Prof. Jüri Allik who also leads the Laboratory. This Laboratory is equipped with 6 working places, 3 of which are used for collecting and processing experimental data. This Laboratory has a library and access to specialized databases on the Internet. The newest research direction deals with registration of conditioned potentials in the brain in different visual tasks, but the money for buying appropriate equipment for the Laboratory is missing at present. It should be noted that the group has extended the earlier basic work on vision to issues of personality as well. This was described by prof. Allik as being partly due to a change of interest in the student population with a dwindling interest on their part in pure psychophysics.

Activity

The research group of visual perception has achieved impressive scientific results in the field. Several grants for research (3 grants from Estonian Scientific Foundation, one long-term "basic financing" grant opened in 1995 and a joint grant with Dr Sverker Runeson from University of Uppsala) have helped to develop the research in the field.

The leading researchers are taking an active part in the educational process at the University of Tartu.

Research and Development

The main topics of research carried out by the research group were:

- Psychological and psychophysiological mechanisms of individual differences

- Basic operations of the description of visual images in human vision
- Extraction of elementary movement information in the human visual system
- Timing of events and latency in mechanisms of motion perception

Publications

The main results in this area were presented in original papers published in indexed journals. Two Ph.D. theses and 11 MSc theses associated with this fundamental area of psychology were published during the last years. The research group has an impressive publication record in high scientific level - 28 original papers were published since 1995.

Competence of the Research Group

Competence of the leading researcher is very high. The research group has good international cooperation and the results of research have been evaluated highly by peers in international society of scientists of this area.

Psychology of Personality

Presentations, Visits and Discussions

Prof. Jüri Allik and prof. Jaanus Harro gave the Team a short introduction on the research activity in this particular field. The Team did not meet with Docent Aleksander Pulver, whose specific research area was personality psychology and who left the University of Tartu to the Tallinn Pedagogical University (Aug. 31.2000).

Activity

Research in this area has historical roots at the Department of Psychology and this direction will satisfy the Developmental Plan of the Department.

Research and Development

The work in the field of psychology of personality is novel and of a high scientific level. In general, in the Department of Psychology, there exist two directions for the personality psychology research:

- Psychophysiological direction to research on human personality
- Assessment and more psychometric direction to research on personality

Combination of the scientific knowledge on these directions could lead the researchers to new findings and theories of personality.

The research of personality were carried on at the Chair of Psychophysics and Chair of Psychophysiology and the researchers have great expertise in this very difficult area.

Publications

The Self-Assessment Report lists an impressive number of original papers with high scientific quality published by researchers of personality in well-recognized psychology journals.

Competence of the Researchers

The research group is quite small, but it is highly competent in its field. Beside the two key persons mentioned there are many post graduate students involved in the research.

Cultural and Developmental Psychology

Presentations, Visits and Discussions

The Team had the opportunity to meet and discuss with the leading members of this research group: Prof. Peeter Tulviste and Docent Tiia Tulviste, both from the Chair of Developmental Psychology.

Activity

The work of this wide scientific research area is mainly focused on cross-cultural studies, social and language development, cultural determination of thinking, developmental psychology of thinking, and historical consciousness.

Research and Development

Research in cultural and developmental psychology is a rapidly developing area, also on the international scene. On the basis of current theories there are numerous possibilities of extending this work and to achieve new theoretical insights and to find applications for this research.

Publications

The Self-Assessment Report lists several publications in international journals reviewed by peers and some of them were published in conference papers as well.

Competence of the Researchers

The competence of researchers is excellent. In this particular area there is a good chance to receive the high goals of the Department of Psychology mentioned in their Developmental Plan of the Psychology Department.

Educational Psychology

Presentations, Visits and Discussions

The team met with Docent Eve Kikas who is active in the field of educational psychology and director of the professional master program in school psychology. There are no specific laboratories associated with this field of study.

Activity

Numerous projects fall under the umbrella of educational psychology construed in a wide sense. Many of these have received support from the Estonian Science Foundation. Among these projects are "The impact of school education on the development of students' thinking", "The impact of the school education on the development and change of concepts", "The Mental Development of Estonian School Children: 1920 – 2000". This research is important for practice in school psychology.

Research and Development

There is active research in some areas of educational psychology (some of it overlapping with developmental psychology). This is important for the further development of these areas in Estonia and fits very well into the recently launched professional master in school psychology. Numerous theses relate to this field so progress is to be expected. Some of the investigators in these areas are also actively collaborating with foreign researchers. However, there does not seem to be much collaboration between the persons working in this field in Tartu and this could undoubtedly be strengthened for the benefit of the research activities.

Publications

There is an acceptable level of publication activity in this area though it is not easy to see the total picture from the self-assessment report since information about studies under this rubric is somewhat scattered in the report. However, there are clearly some publications in internationally refereed publications.

Competence of the Research Group

The researchers in this area are competent and have all contributed publications to international journals. We judge the competence to be good.

Biological Psychology

Presentations, Visits and Discussions

The Team visited the Laboratory of Professor Jaanus Harro which is located in the Department of Public Health at the Biomedical Center of the University. The research

program was described in the visit and there is also an extensive description in the self-assessment report.

Laboratory space for psychophysiological research was allocated in the Department. The designated laboratory inside the department consists of two rooms which have been equipped with laboratory furniture, including hoods. However, there has not been sufficient funding for providing these laboratories with necessary equipment and the space has been used mainly as offices for research students. Their experimental research has therefore mainly been carried out in the laboratories of the Department of Public Health, which is located in the recently constructed Biomedical Center. By a formal agreement with that Department, researchers and students associated with the Chair of Psychophysiology have been allocated two laboratories there and have access to the animal facilities. The equipment belonging to the Chair of Psychophysiology is therefore mainly placed at the Department of Public Health. The equipment amongst other things allows for behavioral studies in rodents, stereotaxic intracerebral manipulation and measurement of tissue levels of neurotransmitters.

There is collaboration with Departments of Pharmacology, Psychiatry, Sports Medicine, Sports Biology, and Chemical Physics which allows some student research to be carried out there.

Concern is expressed in the self-assessment report about the low funding coefficients for research in psychology. The team share that concern.

Activity

The program has one state-financed grant on Depressiveness and depression: alterations in psychobiological adaptive mechanisms which was launched in 1999. The project aims to elucidate the common psychobiological basis of depression as a disorder and trait, and on developing methods for predicting the development of depressed state on the basis of inherent biological and environmental factors. Psychobiological markers in depressed human subjects and disturbed neurobiological mechanisms in animal models of depression are under investigation.

There are two full-time investigators associated with the project in addition to prof. Harro. Three MSc and one PhD thesis are based on this project.

Another project which has received support from the Estonian Science Foundation is entitled "Possibilities to predict excessive risk-taking behavior by means of biological markers".

The group has shown impressive activity as evidenced by the numerous publications of group.

Research and Development

The research done by the biological psychology group is of very high quality and promises to continue at that level. There are numerous collaborative projects with other departments. In addition to the Department of Public Health this collaboration also extends to the departments of Psychiatry, Pharmacology, and Sports Medicine of the Faculty of Medicine among others.

Collaboration with foreign researchers has been established, in particular with the University of Uppsala.

Publications

The publication record is impressive. Eleven papers are listed having been published in Science Citation Index journals since 1999.

Competence of the Research Group

The competence in biological psychology is very good and of international standard. There is every reason to believe that this standard will be maintained in the years to come and further strengthened. The current professor of psychophysiology has just recently been appointed so further gains in scientific competence in this field should be realized as more students are trained.

General conclusion

The foregoing report summarizes the evaluations of the individual research groups. Our view is generally favorable, in some cases the research performed is highly impressive and of the highest character, with many highly-cited papers. There is one field which in the opinion of the team needs to be considerably strengthened and that is the area of Clinical Psychology. This is especially important with respect to the new professional master program in clinical psychology.

Recommendation

Evaluation judgment of research in the field of Psychology at the University of Tartu

Good to Excellent

The team has based its decision on the quality of the information received and the data gathered during the accreditation site visit interviews and information reviewed