



EVALUATION OF PSYCHOLOGY AND BEHAVIORAL SCIENCES

THE TECHNION

COMMITTEE FOR THE EVALUATION OF PSYCHOLOGY AND BEHAVIORAL
SCIENCES DEPARTMENTS IN ISRAEL

August 2020

Section 1: Background and Procedures

1. In the academic year 2018-19 the Council for Higher Education [CHE] put in place arrangements for the evaluation of study programs in the field of Psychology and Behavioral Sciences in Israel.
2. The Higher Education Institutions [HEIs] participating in the evaluation process were:
 - Ariel University
 - Bar-Ilan University
 - Ben-Gurion University
 - The Hebrew University
 - The Open University
 - Technion – Israel Institute of Technology
 - Tel Aviv University
 - Ruppin Academic Center
 - Peres Academic Center
 - Natanya Academic Center
 - Tel Hai Academic Center
 - Interdisciplinary Center of Herzelia
 - Haifa University
 - Institution of Management
 - The Academic Institution of Tel Aviv Yafo
3. To undertake the evaluation, the Vice Chair of the CHE appointed a Committee consisting of¹:
 - [Prof. Elena Grigorenko](#), Department of Psychology, University of Houston & Child Study Center, Yale Medical School, USA (child development, chronic disease, epidemiology, learning disorders, public and global health) – *Committee chair*
 - [Em. Prof. Miles Hewstone](#), University of Oxford, UK (social psychology)
 - [Prof. Deborah Stipek](#), Graduate School of Education, Stanford University, USA (developmental and educational psychology)
 - [Em. Prof. Moshe Zeidner](#), Haifa University, Israel (Educational Psychology, Counseling, and Human Development)
 - [Prof. Sigal Alon](#), Department of Sociology and Anthropology, Tel Aviv University, Israel (sociology)
 - [Prof. Eva Gilboa-Shectman](#), Department of Psychology, Bar Ilan University, Israel (clinical psychology)

¹ The Committee's letter of appointment is attached as **Appendix 1**.

Ms. Alex Buslovich Bilik served as the Coordinator of the Committee on behalf of the CHE.

The evaluation process was conducted in accordance with the CHE's Guidelines for Self-Evaluation (February 2018). Within this framework the evaluation Committee was required to:

- examine the self-evaluation reports submitted by institutions that provide study programs in Psychology and Behavioral Sciences
- conduct on-site visits at 8 out of the 15 institutions participating in the evaluation process, based on predefined criteria.
- submit to the CHE an individualized report on each of the academic units and study programs participating in the evaluation
- outline the Committee's findings and recommendations for each study program
- submit to the CHE a general report regarding the evaluated field of study within the Israeli system of higher education

The evaluation Committee only examined the evidence provided by each participating institution and considered this alongside the distinctive mission set out by each institution in terms of its own aims and objectives.

This report highlights the **Department of Psychology** at The Technion – Israel Institute of Technology

Section 2: Executive Summary

The Behavioral and Management Sciences (BMS) program at the Faculty of Industrial Engineering and Management (IE&M) at Technion (Israel Institute of Technology, IIT) is a graduate only program that is an integral part of an engineering school. It has a narrow, for the psychological sciences, focus on research topics and methods relevant to the behavioral and management sciences, providing students with a broad combination of skills in disciplines such as economics, entrepreneurship, customer relations management, programming, and large-scale data analysis. Importantly, it is administered alongside a traditional MBA program. This co-existence allows BSM students to take MBA courses. Thus, the program has a unique academic profile and a fairly unique, among other Israeli psychology programs, landscape of strengths and difficulties. In the context of this uniqueness and based on the submitted materials, the Committee deemed the performance of the Department as clearly meeting the expected threshold level of performance.

Section 3: Observations

3.1 Mission and goals

The mission and goals of the Behavioral Sciences and Management program at the Faculty of Industrial Engineering and Management (IE&M) at Technion are aligned with that of the IIT itself, namely, to create knowledge and develop human capital and leadership to make an impact both locally, in Israel, and globally. Being in an engineering school is unique and the interdisciplinary mixture of the student body is unusual; the program differs from other graduate programs in Israel. The mission is realized by the coherent and focused program, yet the Committee is concerned that the program's focus appears to be too narrow. In this area of evaluation, the Committee determined that BMS clearly meets the expected threshold level of performance.

3.2 Management and Administration

The Behavioral and Management Sciences program is responsible for the Psychology graduate programs at the Faculty of Industrial Engineering and Management (IE&M). IE&M is a graduate only program and the only graduate psychology program in Israel situated in an engineering school. In 2012, three sub-tracks within the Behavioral and Management Sciences program were created: Organizational Psychology, Cognitive Psychology, Human Factors Engineering, and Behavioral Marketing. The BMS area faculty meet in person for important decisions (e.g., major changes in the program). Decisions taken at the BMS area level are discussed and voted upon in two general faculty committees, the Graduate Studies Committee and the Undergraduate Studies Committee (which addresses courses with undergraduate attendance and general teaching issues). These committees include representatives from each area of the faculty. They are then passed on for further discussion and approval by the Faculty Council. Faculty Council decisions are approved by the Senate Standing Committee for Undergraduate and Graduate Studies. The Dean is in charge of the recruiting policy of new faculty members. The Dean defines the faculty priorities for the number of academic positions available and then searches for appropriate candidates to fill them. In 2017-18 the area was actively searching for researchers in organizational theory, organizational/occupational sociology, and consumer behavior and marketing. During the time that their self-evaluation report was written, they were considering two promising candidates in the field of organizational behavior and a strong candidate in data-driven behavioral economics. The student body is 70% female and 10% non-Jewish. In this area of evaluation, the Committee determined that Technion clearly meets the expected threshold level of performance.

3.2 QA & Self-Evaluation Process

Technion's Behavioral Sciences Area (BSA) is a rather small program nested within a large institution devoted to engineering, life, and other sciences. According to the report, Technion has a policy of self-evaluation conducted every seven years. The

present (2017-18) report was compiled by the head of the BSA. The Dean, senior faculty members, emeriti professors and administrative staff contributed to the present report. The head of the BSA met student representatives from programs at all levels and collected anonymous feedback as well as feedback generated in personal discussions. The obtained information has been discussed with the faculty members from the BSA. Every section of the report was reviewed by at least one faculty member from the BSA, as well as by the Dean. After the final approval of the Dean, the report was approved by the Senior Executive Vice President. Technion authorities monitor the quality of teaching through feedback from students. Senior faculty evaluate the teaching of junior faculty, and the outcomes of these evaluations affect academic promotions. To promote successful teaching, Technion offers instruction and coaching. In addition, each new faculty member is assigned a mentor from the faculty to assist them in course development. Course evaluation questionnaires include general and specific questions related to various aspects of teaching and are given as feedback to the course instructors. The completion rate for these evaluations is estimated to be around 50-60% throughout the last three years. Self-evaluation was reported to be both attentive and effective in completing most of the 2009 recommendations (i.e., proactive faculty replacement; increased number of advanced courses and of hours for research; increased and improved lab space), although not all of them were implemented (i.e., the program was not renamed, although it still offers relatively weak sociology coverage; the development of teaching skills by Ph.D students is still neither provided, nor required; the work with alumni is still underdeveloped). Given the profile of accomplishments and needs, in this area of evaluation, the Committee determined that the Technion clearly meets the expected threshold level of performance.

3.4 Study program

The MSc program includes three tracks: Organizational Psychology, Cognitive Psychology and Human Factors Engineering, and Behavioral Marketing. Students are exposed to an appropriately advanced curriculum, much, but not all, of it in English. Reading lists are typically up-to-date, although Hebrew material is provided in some cases. One exception is the course on Group Dynamics, an idiosyncratic offering that appears to overlook the vast empirical literature on group dynamics in social psychology and organizational psychology. Indeed, this course has no list of readings at all. The course on Judgment and Decision Making covers core areas, but, in an area where Israel has, literally, led the world, the reference list is surprisingly sparse. Students are obliged to or given the opportunity to participate in research in three ways. First, the self-evaluation document reports that participation in behavioral experiments for credit points is part of the requirements in two undergraduate courses: Industrial Psychology and Human Factors Engineering. Second, some researchers employ undergraduate students as research assistants who are paid on a per-hour basis. Third, there is an elective course called Personalized research seminar (099624) which allows undergraduate students to take part in research and receive academic credit for their participation. The MSc

courses and exams appear to meet the criterion of rigor. In this area of evaluation, the Committee determined that Technion clearly meets the acceptable threshold level of performance.

3.5 Teaching and Learning

Overall, the Department appears to provide a competent teaching environment. Courses are evaluated by standard surveys assessing various aspects of the teaching. The survey completion rate has been sufficient (ca. 50-60%) in the last three years. Most, but not all, course materials include clear Intended Learning Outcomes (ILOs) – e.g., what a student should be able to *do*, and not simply *know*, after the course. It is not clear whether ILOs are directly assessed in course evaluations – if not, they need to be added. However, the template used by instructors to provide an overview for their courses includes a cryptic instruction, “Learning Outcomes – Short description (if you don’t have LO’s, then don’t write anything in this part).” Is it possible to have an acceptable course that has no Learning Outcomes? Technion provides an innovative teaching environment, using a variety of advanced teaching methods, ranging from participating in a global team project (with students enrolled in similar courses in other countries), to Technion's Moodle system, as well as active class participation and creative use of the “flipped classroom” method (students learn core materials at home before the class, so that the instructor may use class time for individual and group exercises, and group discussions). Students must complete a range of course projects, such as writing a research proposal, or mastering the results section of a meta-analysis. From the material provided, it can be concluded that the faculty currently provide an effective learning environment. In this area of evaluation, the Committee determined that Technion clearly meets the acceptable threshold level of performance.

3.6 Faculty

Eleven faculty are listed (although two are emeritus) – 4 in organizational behavior, 6 in human factors engineering and cognition and 1 in behavioral marketing. The previous review Committee recommended creating a committee to establish a hiring plan for the program, but the current report indicates that overall responsibility for hiring new faculty lies with the Dean. Since the previous report, they have recruited 6 new faculty. The previous report also recommended hiring a sociologist or dropping “behavioral sciences” from the Department name. The current report explains that efforts to hire a sociologist have failed, but the program includes organizational psychologists and cognitive psychologists who fulfill the Department’s title of “behavioral sciences.” To facilitate a focus on research, all MSc students are entitled to generous fellowships (about 3500 NIS per month and 75% of tuition) and close mentorship (they accept fewer than two new students per year per faculty member). The faculty administrative staff includes one position for graduate studies, one position for MBA programs, two positions for undergraduate studies, one position for teaching affairs (such as course scheduling), three positions

assigned to the Dean's office and half a position for faculty-member support services. In addition, there is a senior administrative executive responsible for overseeing all administrative and technical staff in the faculty and administering faculty budget and personnel matters. The technical staff is comprised mainly of five positions for computer support, and three positions for the office of superintendent, which provide services such as dealing with system and computer problems and allocating technical equipment when necessary (e.g., projectors, videoconference equipment, microphones). In this area of evaluation, the Committee determined that The Technion clearly meets the acceptable threshold level of performance.

3.7 Research

The Behavioral and Management Sciences (BMS) program housed in the Faculty of Industrial Engineering and Management at the Technion is responsible for the graduate programs in Psychology. The BMS program offers three main tracks: Organizational Psychology, Cognitive Psychology and Human Factors Engineering, and Behavioral Marketing. Being an integral part of an engineering school, BMS is unique among the graduate psychology programs in Israel. BMS prides itself in exposing graduate students, from the level of an MSc, to a broad spread of research topics and methods relevant to behavioral and management sciences, thus providing them with a wide combination of skills in disciplines including: economics, entrepreneurship, customer relations management, programming, and large-scale data analysis.

Collaboration with multiple outside systems and sectors is viewed by the administration as the foundation of Technion's academic competitiveness in research and education. Accordingly, the administration views researchers' profound presence in the global ecosystem of higher education as an integral element of Technion's strategic plan. Technion's internationalization strategy prepares graduates for the global ecosystem and for engaging in the international scientific and academic world. Global engagement is accomplished through collaborations, financial and infrastructure resources, and continuous access to outside industries as well as public and government sectors. BMS faculty have shown strengths in combinations of research domains, such as creativity in solving problems in teams, metacognitive judgments in organizations, emotions in operations research (e.g., the effects of angry or irritable customers in customer support services), judgment and decision making in safety contexts, metacognitive processes while performing the challenging task of data-base integration, mixed descriptive and data-driven predictive models for human behavior, etc. The faculty, both those currently in position and those retired but active, include some of the most prominent psychological science researchers in Israel, have a strong record of research productivity, and have obtained competitive external research funds. In this area of evaluation, the Committee determined that Technion exceeds the expected threshold level of performance.

3.8 Students

Behavioral Sciences and Management is a small program for graduate studies. In 2015/16 only 16 students were enrolled, down to 7 in 2016/17, and 9 students in 2017/18. The self-evaluation report attributes this decline to the opening of clinical psychology programs at the colleges. The MS program accepts 49% of applicants (entry requirements: BA Psychology, average score 90; Mitam 100). In this area of evaluation, the Committee determined that BSM clearly meets the expected threshold level of performance.

3.9 Research Infrastructure

The faculty houses two research centers related to the area of behavioral and management sciences: (a) The Bronica Center for Entrepreneurship; and (b) The Knowledge Center for Innovation. Both centers are said to develop, promote, and accompany collaborations between academia, on one hand, and industry, on the other. In addition, four laboratories are available for running experiments. All labs include computer stations in open-space, separated by partitions and designed for experimental participants and 1-3 stations for the experimenters (RAs and graduate students). In this area of evaluation, the Committee determined that the Technion clearly meets the expected threshold level of performance.

Section 4: Recommendations

Essential recommendations

- To provide more autonomy to the program in hiring decisions.
- In the next academic year, learning outcomes should be added for each course, using a uniform template for all syllabi.

Important recommendations

To continue working with alumni to build reliable and continuous relationships between the program and its graduates.


Desirable recommendations

To review the 2009 recommendations that were not fulfilled and either addressed them or demonstrate that they are no longer relevant (e.g., the program was renamed).

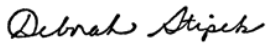
Signed by:



Prof. Elena Grigorenko - Chair



Prof. Miles Hewstone



Prof. Deborah Stipek



Prof. Sigal Alon



Prof. Eva Shehtman Gilboa



Prof. Moshe Zeidner

Appendix 1: Letter of Appointment



February 2020

Prof. Elena Grigorenko
Department of Psychology
University of Houston & Child Study Center
Yale Medical School
USA

Dear Professor,

The Israeli Council for Higher Education (CHE) strives to ensure the continuing excellence and quality of Israeli higher education through a systematic evaluation process. By engaging upon this mission, the CHE seeks: to enhance and ensure the quality of academic studies, to provide the public with information regarding the quality of study programs in institutions of higher education throughout Israel, and to ensure the continued integration of the Israeli system of higher education in the international academic arena.

As part of this important endeavor we reach out to world renowned academicians to help us meet the challenges that confront the Israeli higher education by accepting our invitation to participate in our international evaluation committees. This process establishes a structure for an ongoing consultative process around the globe on common academic dilemmas and prospects.

I therefore deeply appreciate your willingness to join us in this crucial enterprise.

It is with great pleasure that I hereby appoint you to serve as chair of the Council for Higher Education's Committee for the Evaluation of **Psychology and Behavioral Sciences** departments. In addition to yourself, the composition of the Committee will be as follows: Em. Prof. Miles Hewstone, Prof. Deborah Stipek, Em. Prof. Moshe Zeidner, Prof. Sigal Alon and Prof. Eva Shectman Gilboa

Ms. Alex Buslovich-Bilik will be the coordinator of the Committee.

Details regarding the operation of the committee and its mandate are provided in the enclosed appendix.

I wish you much success in your role as a member of this most important committee.

Sincerely,

Prof. Ido Perlman
Vice Chair,
The Council for Higher Education (CHE)

Enclosures: Appendix to the Appointment Letter of Evaluation Committees

cc: Dr. Varda Ben-Shaul, Deputy Director-General for QA, CHE
Ms. Alex Buslovich-Bilik, Committee Coordinator