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Guidelines for the Assessment Process (GAP): A Proposal for Discussion

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Summary: Current existing or proposed standards and guidelines in the field of psychological assessment are confined to psychological tests and psychological testing. But tests constitute only one category of psychological assessment procedures, and testing is only one of many available strategies or classes of actions in the course of the assessment process. Tests and testing are closely linked to a certain approach to psychological assessment, i. e., the psychometric one. This is one reason why it is relatively easy to formulate and establish standards or guidelines in the case of psychological tests and testing. The much more comprehensive assessment process is an indispensable part of any approach to psychological assessment, even of those that do not use psychometric tests. This makes the formulation of guidelines for the assessment process an ambitious and very difficult enterprise. But it can be done, at least at the level of recommendations that could help the assessor to cope with the complexities and demands of assessment processes in various contexts of psychological assessment. The European Association of Psychological Assessment (EAPA) decided to sponsor the development of Guidelines for the Assessment Process (GAP), setting up a Task Force for this specific purpose. The GAP introduced in this paper are intended as a first proposal to initiate a broad discussion about how to improve the practice of psychological assessment and the education and training of psychological assessors.

Introduction

In recent years, interest and involvement in psychological assessment have increased. Several national and international organizations are working on the development of standards, principles, and/or guidelines for regulating and optimizing the scientific and practical activities of the assessor. Modern globalization requires a core of internationally approved principles that allow evaluation of the quality of the teaching, training, and practice of psychological assessment in order to safeguard the interests of clients.

Several principles, norms, standards, and guidelines have been developed; some of them refer to *test construction* (APA, 1999; see, in this issue, Eignor, 2001); some guide *test adaptation,* that is, the translation and adaptation of a given test (constructed in a given language) to other languages and/or cultures (Hambleton, 1994; see, in this issue, Hambleton, 2001); some deal with criteria for *tests providers* (see, in this issue, Muñiz, et al., 2001); some are concerned with the civil rights and responsibilities of *test-takers* (Fremer, 1997); others refer to *test-users* (Bartram, 1997; see, in this issue, Bartram, 2001). But all of the guidelines, standards, norms, or principles listed refer to the different aspects involved in *tests* or *testing* in practical applications. Thus, standards for psychological testing refer mainly to test construction; criteria for test suppliers concern test publication and distribution; guidelines for test translation are

related to the utilization of a given test – developed in one social domain or culture – in another culture; norms for test-users concern the utilization of tests with regard to professional background and accreditation issues and deal with the responsibilities of test-users as well as the rights of test-takers.

Two conceptual issues arise and should be clarified from the beginning. First, authors use various terms for their regulations, for example, "principles," "norms," "standards," or "guidelines." Are all of these terms interchangeable? Second, as it has been stated, these respective regulations refer to the field of tests and testing, but this field is not equivalent to that of psychological assessment! Let us briefly review both issues.

Principles, Norms, Standards, and Guidelines

According to Webster's New World Thesaurus, a *principle* is a fundamental law, a *norm* is a pattern, a *standard* is a regulation, and a *guideline* is an indication of the limits or scope of an undertaking. Thus, from a general point of view, all of these terms belong to the same semantic field, but appear to differ with regard to the level of obligation they imply.

Other authors more precisely define the two most specific and widely used terms: "standards" and "guidelines." Thus, the Joint Committee on Standards for Educational Evaluation (1994) defines "standard" as "a principle commonly agreed to by experts in the conduct and use of evaluation for the measure of the value or quality of an evaluation" (p. 209), and defines "guidelines" as "a procedural suggestion intended to help evaluators and their audiences to meet requirements ...; strategy to avoid mistakes in applying these standards" (p. 206).

In sum, the terms "standards" and "guidelines" appear to be closely related, in the sense that they serve similar functions: *quality assurance* and *quality control*. On the other hand, they differ in that they have different levels or degrees of obligation or demand, standards being more demanding than guidelines. Therefore, when the regulation of a field is starting, the term "guidelines" seems to be more appropriate and could be understood as "proposal for discussion."

Tests, Testing, and Psychological Assessment

A second issue that should be clarified relates to similarities and differences between "tests," "testing," and "psychological assessment." A test is *an evaluative device or procedure in which a sample of examinee's behavior in a specific domain is obtained and subsequently evaluated and scored using a standardized process* (American Psychological Association, 1999; in this article, see Appendix 2: Glossary). In other words, a "test" is an instrument – with certain guarantees – for proper data collection; "testing" is the process of administering, scoring, and interpreting a psychological test. On the other hand, "psychological assessment" is a broader concept than either "tests" or "testing," and refers to "the scientific and professional activity of collecting, evaluating, and integrating information about a subject using, whenever possible, different sources of information according to a previously-established plan in order to answer a client's question" (see Appendix 2: Glossary).

With these definitions in mind, the regulations mentioned above refer only to psychological or psychometric tests, and these are only an element of psychological assessment. Going beyond these semantic definitions, several authors have distinguished between psychological assessment and tests and testing (Cohen et al., 1996; De Bruyn & Godoy, 1998; Fernández-Ballesteros, 1980; Maloney & Ward, 1976; Sundberg, 1976). As the most important distinctive features of he two concepts the following ones have been established:

1. Testing is primarily measurement oriented, while psychological assessment is primarily problem or demand oriented.
2. Testing refers to standardized measurement devices, while psychological assessment includes other data-collection instruments and procedures (not only tests).
3. Testing is frequently concerned with describing and studying groups or samples of persons, while psychological assessment focuses on the description and analysis of individual persons or single cases in a given psychological state or situation.
4. Testing demands specific expertise in the administered test, while psychological assessment is a wider field that requires basic psychological knowledge as well as basic expertise in psychological processes.
5. Testing involves measurement devices for data collection, while psychological assessment refers to a complex process of decision-making – in which data collection is, obviously, one important step. This process, in turn, starts from a given demand of a given subject or group of subjects (client/s).

In sum, psychological assessment implies a decision-making process that includes various tasks, operations, and actions (conducted in a given sequence), in order to answer the client's question, and that requires basic psychological knowledge and professional abilities. This process can, at least to some extent, be standardized and guided by a core of basic steps established and accepted

by the scientific communities and professional audiences concerned. Finally, any regulations on tests may be embedded and integrated into the regulations of corresponding phases of the assessment process.

Of the proposed standards and guidelines referred to at the beginning of this section, none are directly devoted to the assessment process as such. In recent decades, the assessment process itself has been, and continues to be, the scientific subject of basic research in reasoning, decision-making, problem-solving, and artificial intelligence (among other fields), and empirical results are now available with regard to its main steps and basic subprocesses. It is therefore possible to develop guidelines for regulating this process, and these regulations have several advantages: First, they might help to overcome the common dissociation between basic knowledge and professional activity. Second, from an applied point of view, they may also be helpful for optimizing professional practice, improving the evaluation and control of professional activities and facilitating (as well as standardizing) training in assessment.

In summary, the development of procedural suggestions intended to help assessors and their audiences to meet certain requirements (cf. Joint Committee, 1994, p. 206), that is, the development of Guidelines for the Assessment Process (GAP), is our general objective, taking into consideration that these GAP should be presented, disseminated, and discussed by a broad scientific audience before being approved and adopted by professional and scientific bodies. When this occurs, the GAP will be helpful in the following respects:

1. To assist psychological assessors in their efforts to optimize the quality of their work;
2. To assist the client who comes from outside of psychology in evaluating assessment tasks by allowing quality control;
3. To facilitate the teaching of assessment, the standardization of practical considerations, and the design of advanced professional training programs.

General Issues

The Target Group of the GAP

Any guideline that attempts to regulate a specific behavior should be addressed to a target population. The GAP are addressed to *certified psychologists who have been trained in psychological assessment*. Obviously, the assessment processes involve a broad set of activities based both on the scientific method and on research in human cognitive activity, mainly in the areas of decision-making, problem-solving, and artificial intelligence. Although any professional field in which this type of professional activity occurs (e. g., clinical psychology) can benefit from the GAP, they have basically been developed to regulate professional activities within psychology integrating *all* applied fields in which assessment tasks are involved.

Any professional activity can be guided and regulated (by oneself or by others) by two sets of principles: (1) *ethical* and (2) *technical*. The majority of professional bodies have a set of written standards or guidelines that regulate their professional activities in accordance with social standards of conduct that, in turn, govern a given culture or social group (e. g., confidentiality). Moreover, there are other technical principles that emerge from and/or are linked to scientific research within a particular professional field (e. g., the use of multiple methods in assessing a given construct). These principles are important in order to introduce research methods into practice, improving practice by observing research results and through the training of practitioners as *scientist-practitioners*. The GAP refer to these *technical guiding principles* on the assumption that the assessor should observe them, but that any *ethical principles* and *legal requirements* governing the respective context are mandatory. Technical guidelines can in no way replace ethical norms.

The Assessment Context

Psychological assessment is a set of scientific and professional activities within many contexts of application. Thus, when clinical psychologists diagnose or treat a patient, they must carry out psychological assessment; when educational psychologists counsel students, they must use psychological assessment; when an industrial or organizational psychologists screen job applicants, they are performing psychological assessment; when, in forensic psychology, psychologists are involved in court decisions, they make use of psychological assessment. It might even be said that psychological assessment is present, in one way or another, in *all* contexts of applied psychology (Fernández-Ballesteros, 1999).

In accordance with this diversity of practical demands, guidelines for the assessment process should be applicable to and helpful in a variety of contexts of application. This will be possible because, although contexts may vary, the basic phases or steps of the assessment process turn out to be the same.

Assessment Objectives

In science, description, classification, prediction, explanation, and control are the most common objectives, and

these objectives have their counterparts in psychological assessment. Thus, when psychiatrists ask a clinical psychologist to diagnose a patient, they should describe and classify the patient; when personnel selection is being carried out, assessors should be able to predict candidates' future behavior; when a given subject asks for therapeutic assistance, the psychological assessor should proceed step-by-step (and guided by sound assessment hypotheses), eventually diagnosing (where appropriate) and/or predicting behaviors and, on the basis of the relevant data and pertinent hypotheses, make plans and suggestions for the most suitable available and feasible intervention. Even after its administration (by a competent expert), one must verify whether or not the intervention goals have been attained and the client's demands satisfied.

Although, in the history of psychological assessment, description, classification, explanation, and prediction have been the most prominent objectives, control of behavior has been introduced as a relevant step as well as a goal in the assessment process, parallel to the development of effective psychological interventions.

In summary, while the process of psychological assessment should be adjusted to the demands of the client, implied in these demands are various scientific and practical objectives, the pursuit of which makes assessment a lengthy process involving a set of steps and tasks.

Assessment and Evaluation

Although the terms "assessment" and "evaluation" are often used synonymously – both also being close in meaning to "appraisal," "estimation," or "judgment" –, they are concerned with different scientific and professional aspects. As Fernández-Ballesteros (1985) pointed out, while assessment refers mainly to people, evaluation is concerned mainly with objects, that is, assessment refers to the *human subject*, while evaluation refers to the appraisal, estimation or judgment of a concrete *object*, usually a program, project, treatment, or intervention implemented to produce changes in desired targets (Scriven, 1991).

Cronbach (1990) emphasizes that, when referral questions include or require an intervention, this intervention should be planned, and, when implemented, *evaluated*; he defined "evaluation" as "the collection and interpretation of evidence on the functioning and consequences of a social, therapeutic, or educational service" (p. 703).

In conclusion, while the scientific subject of assessment in psychology is a given person or a group of people, the scientific subject of evaluation is a given program or group of actions.

However, despite the fact that assessment and evaluation are independent scientific fields, they have a great deal in common. When a psychological assessment is performed with the purpose of producing changes in target behaviors by means of a given intervention, this intervention should certainly be evaluated. Along the same line, when evaluation of a given program is to be carried out and the program has behavioral objectives, it will be necessary to assess the participants.

As already mentioned, traditional assessment objectives have been description, classification, explanation, and prediction; the assessment process did not include an evaluation phase, since control was not always feasible. Progress made in psychological treatment and intervention has made possible the control of behavior giving rise to the need for evaluation.

Hence, where interventions are required, the assessment process should include an evaluation phase to determine the intervention effects.

Procedure Followed: Working Groups and Steps

The European Association of Psychological Assessment (EAPA) decided to sponsor the development of GAP, setting up a Task Force for this purpose. The acronym GAP is a significant one, since the aim is to remedy the problem of the "gap" between the need for assessment process regulation and the existing standards. The goal of the Task Force was to develop guiding principles for the assessment process.

The GAP have been developed over more than three years in (1) Task Force meetings (seven in total) and (2) expert panel feedback sessions. The first meeting of the Task Force took place during the Fourth European Conference on Psychological Assessment (Lisbon, September 7–10, 1997). Two types of audience were called to this inaugural meeting: *experts* in the assessment process and *members of psychological organizations* (mainly international). The first group of experts consisted of EAPA members whose main research activity is related to the assessment process [E. de Bruyn (Nijmegen Univ., NL), A. Godoy (Malaga Univ., ES), L. Hornke (Aachen Univ, D), J.Ter Laak (Utrecht Univ. NL), C. Vizcarro (Autonoma/Madrid Univ, E), H. Westmeyer (Free Univ. of Berlin, D), J.L. Zacagnini (Malaga Univ., ES), and R. Fernández-Ballesteros (EAPA and IAAP Division 2 Former President and GAP Task Force Chair, Autonoma/Madrid Univ., E).]. Several organizations were invited and have nominated representatives, including the European Federation of Professional Psychologists' Associa-

tions [J. Muniz (Oviedo Univ., E)] and the International Test Commission [D. Bartram (Hull Univ.,UK).].

The procedure for developing the GAP followed two different strategies:

1. A *standing team* of experts (Task Force) on the assessment process met in subsequent workshops. After the first meeting in Lisbon, other meetings of the task force were held in Málaga (September, 1998), Madrid (May, 1999), Patras (September 1999), Nijmegen (May 2000), and Málaga (October 2000). This Task Force was made up of people working with different theoretical approaches and methodologies and in different applied fields. Four drafts of the GAP were developed, the final one being sent to a panel. Following the comments and suggestions of the panel, the Task Force developed the final version, which is presented below.
2. A *panel* of 30 experts and representatives of psychological organizations gave their opinions on the fourth draft of the GAP developed by the Task Force.

The entire process has run through the following phases:

– *Phase 1:* Establishment of a data bank of basic research programs and main experts in the field.
– *Phase 2:* Contacting relevant audiences (experts and international representatives).
– *Phase 3:* Five 2-day meetings of experts (1998, 1999, and 2000).
– *Phase 4:* First draft of the GAP developed in 1999 and sent to the expert panel.
– *Phase 5:* The Task Force drew up the final version of the GAP on the basis of comments and suggestions from the panel.
– *Phase 6:* Dissemination through journals and congresses.

This article represents the first publication for disseminating the GAP within the scientific community.

Foundational Scientific Research

Over the last 30 years, several research groups, with various conceptual and methodological approaches, have studied the processes of diagnosis, assessment, and evaluation. As stated above, assessment involves an extremely complex process in which the assessor – after first receiving a request from the client – asks questions, sets up hypotheses, collects relevant data, tests hypotheses (by means of tests, interviews, observations and other assessment techniques), analyzes and interprets the results. Subsequently, he/she reports the results to the subject/s, makes decisions with and about the subject/s, and responds to the client's demands.

This process has been investigated from several theoretical perspectives (e. g., social judgment and reasoning theory, decision-making models, artificial intelligence paradigm) and through several methodologies (e. g., experimental laboratory tasks, process analysis of thinking-aloud protocols, expert systems), and tested in different applied fields (medical, psychological, educational, and work contexts). For example, Brehmer (Uppsala University, Sweden) linked the fields of assessment and treatment, applying social judgment principles to successive psychological assessment and evaluation processes (cf. Brehmer & Joyce, 1988); Johnson (Brunel University, Division of Cybernetics, UK) has been working in clinical decisions in clinical settings (cf. Johnson, 1982); Clark (Biomedical Computing Unit, Imperial Cancer Research Center, UK) applied the artificial intelligence paradigm to medical diagnosis (cf. Clark, 1992); Montgomery developed research on a dominance model that has been applied to explain failures in decision-making in different types of plant (cf. Montgomery, 1993); DeBruyn (Psychodiagnostic Unit, Faculty of Social Sciences, University of Nijmegen, The Netherlands) evaluated both individual and group diagnostic decision-making and is developing computerized diagnostic knowledge-based decision aids (cf. De Bruyn, 1992); Westmeyer (Department of Psychology, Free University of Berlin, Germany) considered the assessment process from a normative point of view (cf. Westmeyer, 1975) and developed a computer-assisted psychological assessment system (cf. Westmeyer & Hageboeck, 1992); and Adarraga, Zaccagnini and Márquez (Faculty of Psychology, Autonoma University of Madrid, Spain), using expert system techniques, developed computer programs for several psychopathological conditions, testing the completeness of the hypothetico-deductive assessment process model proposed by Fernández-Ballesteros (1980, 1993) (cf. Adarraga & Zacagnini, 1992).

Although the basic knowledge is scattered and, moreover, there is a gap between the knowledge itself and its practical dissemination and application, we eventually compiled a set of 498 research articles. This basic bibliography will be made available in the Internet (http://www.hhpub.com/journals/ejpa). What is most important about these research programs is that they have provided the basic knowledge about common activities, strategies, and heuristics that occur in the course of the assessment process – basic knowledge that has helped us to arrive at a general scheme that has formed the basis for developing the GAP.

In sum, from all research examined, *three main characteristics* of the assessment process are outlined below along with some key references:

1. The assessment process implies a *decision-making* process.

– The assessment process ". . . is concerned with strategies for making decisions, with plans for decision-making. Instead of focusing on the notion of validity, it emphasizes the concept of utility" (McReynolds, 1971, p. 7).
– "The resulting judgment (of the assessment process) is used for decision-making. Decisions are made to solve important practical problems" (Maloney & Ward, 1976, p. 5).

2. The assessment process implies *problem solving.*
   – From the most general point of view, Sloves, Doherty and Schneider (1979, pp. 30–32) have proposed a more complete model of assessment as a scientific problem-solving process: "The problem-solving process consists of six sequential and interrelated phases that psychological assessors can employ: (a) problem clarification, (b) planning, (c) development, (d) implementation, (e) outcome determination, and (f) dissemination" (p. 30).
   – "Psychological assessment is a process of question answering and problem solving" (Maloney & Ward, 1976, p. 5).

3. The assessment process requires *the generation and testing of hypotheses.*
   – Shapiro (1951, 1970) was one of the first authors to emphasize that "in fact, an opinion might well be that it consists of the hypotheses which the applied scientist thinks best account for the data at his disposal, and which he would choose to test next if he had sufficient time and suitable means" (1970, p. 652).
   – Also, even from a behavioral perspective, Fernández-Ballesteros and Staats (1992) stressed that the assessment process "hypothesizes links between behavioral and environmental events, whenever an analysis is made of a new behavior prior to collecting empirical evidence" (p. 5).

These are the basic assumptions that inspired the GAP.

Basic Framework and Steps in the Assessment Process

As already stated, psychological assessment implies *a series of tasks ordered in a specific sequence*. Like a decision-making process, it is conducted with the purpose of answering questions and solving problems. It also includes several steps similar to those involved in formulating and testing scientific hypotheses (e. g., Hempel, 1973). Research from several fields allow us to establish concrete tasks, operations, actions, and their sequencing and order. Furthermore, the scientific literature shows that this process can be standardized, and this standardization has been tested through expert systems (Adarraga & Zacagnini, 1992; Westmeyer & Hageboeck, 1992). In any case, the assessment process can be broken down into an finite number of subphases defined by various authors. For example, Westmeyer and Hageboeck (1992) proposed a prescriptive process model with 11 steps, while Maloney and Ward (1996) proposed a descriptive process with two to seven phases. Thus, even though the process can in some way be standardized, authors fail to agree on either the level of standardization or the number of basic steps.

In sum, after a review of the literature on the assessment process, we arrived at two conclusions:

1. The proposed models of psychological assessment differ widely with respect to the number of steps and rules an assessor has to follow.
1. Authors coincide on the basic assumption that in making decisions and solving problems the assessor generates and tests hypotheses.

Therefore, before setting up the GAP and in order to arrive at a limited set of guidelines, a basic framework (or skeleton) was decided upon. Various demands were made on this framework in accordance with the main issues involved:

– It should be applicable to different assessment contexts; it should integrate all kinds of objectives (description, classification, prediction, explanation, and control).
– It should contain genuine assessment and evaluation operations.
– It should involve the generation and testing of hypotheses.

Table 1 shows the *basic framework and steps of the assessment process*, with four main phases. The first two phases are devoted to three primary objectives, while the latter two are devoted to control. The phases are as follows:

1. Analyzing the case (also called "case formulation" or "case conceptualization"; see Berman, 1997).
2. Organizing and reporting results.
3. Planning the intervention.
4. Evaluation and follow-up.

Each phase has a different number of substeps and is organized from a sequential and rational perspective. Finally, referring to these substeps, 96 guidelines are formulated. These guidelines are presented in Appendix 1. Finally, in order to clarify some of the terms used, in Appendix 2 a Glossary is attached.

Table 1. Assessment process: Basic framework and individual steps.

START OF PROCESS: Process begins when a person/institution (client) asks an assessor to answer a question or give professional advice about a subject/single case.
PRECONDITIONS: Assessor examines whether he/she is qualified to satisfy the demand and whether the demand is in line with ethical criteria.

0. GENERAL PRINCIPLES

1. ANALYZING THE CASE (DESCRIPTIVE ASSESSMENT)

1.1 ANALYZING DEMANDS, COMPLAINTS AND/OR GOALS. Gathering general information about client's and/or subject's referral question.
- 1.1.1 Investigating and evaluating client's and/or subject's questions.
- 1.1.2 Synthesizing client's demands and aspects of the general problem situation.
- 1.1.3 Formal agreement.

1.2 FORMULATING TESTABLE ASSESSMENT HYPOTHESES ABOUT THE CASE: Converting demands, complaints and/or goals into testable hypotheses.
- 1.2.1 Formulating questions in technical terms, based on information gathered.
- 1.2.2 Operationalising technical terms by means of assessment procedures.

1.3 COLLECTING INFORMATION: Gathering information relevant to the questions.
- 1.3.1 Planning administration of assessment procedures.
- 1.3.2 Applying assessment procedures.
- 1.3.3 Evaluating the application of assessment procedures.

1.4 INFORMATION PROCESSING, RELATING DATA COLLECTED TO THE ASSESSMENT QUESTIONS.
- 1.4.1 Analyzing data.
- 1.4.2 Drawing assessment conclusions.

2. ORGANIZING AND REPORTING RESULTS: Technical preparation of results and reporting to client/subject.

2.1 INTEGRATING RESULTS: Answering the client's/subject's questions as completely as possible.
- 2.1.1 Combining results into a comprehensive case formulation.
- 2.1.2 Formulating conclusions with respect to client's/subject's questions.

2.2 REPORTING: Written and/or oral presentation of reports.
- 2.2.1 Requirements for report generation.
- 2.2.2 Including relevant information in the report
- 2.2.3 Making report understandable.

2.3 DISCUSSING AND DECIDING
- 2.3.1 Discussing report with client, subject and/or relevant others.
- 2.3.2 Analyzing whether general circumstances warrant stop, re-start or moving on to an intervention.

3. PLANNING THE INTERVENTION: If the assessor considers that an intervention is required, several assessment operations are necessary before treatment administration.

3.1 SELECTING AND TESTING SPECIFIC INTERVENTION HYPOTHESES:
- 3.1.1 Selecting and operationalizing intervention and outcomes variables.
- 3.1.2 Reviewing and deciding on intervention procedures that best fit the single case.
- 3.1.3 Selecting and assessing relevant variables for monitoring.

CARRYING OUT THE INTERVENTION

4. EVALUATION AND FOLLOW-UP: If an intervention has been carried out, several assessment operations should be conducted.

4.1 COLLECTING DATA ABOUT EFFECTS OF INTERVENTION:
- 4.1.1 Inspecting already available data.
- 4.1.2 Collecting post-intervention data.

4.2 ANALYZING INTERVENTION OUTCOMES:
- 4.2.1 Drawing conclusions from data gathered on the effects of the intervention.
- 4.2.2 Reporting results to client, subject and/or relevant others.
- 4.2.3 If necessary, written report to client, subject and/or relevant others.

4.3 FOLLOW-UP:
- 4.3.1 Planning follow-up in agreement with client and/or subject.
- 4.3.2 Assessing subject according to the established plan.
- 4.3.3 Analyzing results.
- 4.3.4 Discussing results with client, subject and/or relevant others.
- 4.3.5 If necessary, written report to client, subject or relevant other.

END OF PROCESS: The assessment process comes to an end, if the assessor terminates the professional relationship with the person/institution (client) and subject/single case with respect to the assessment tasks.

Conclusions

This paper only outlines our proposal of guidelines for the assessment process and describes their development without going into the details of their justification. A more detailed account of the guidelines is in preparation and will be published as a book.

We would like to emphasize once again that we understand the proposed GAP as procedural suggestions, i. e., as recommendations which could help assessors to cope with the complexities and demands of assessment processes in various contexts of application.

We hope that the efforts made in developing and disseminating these Guidelines stimulate the discussion among interested scientific and professional audiences and, in the long run, will contribute to improve the practice of psychological assessment as well as the education and training of psychological assessors. Such improvements depend upon appropriate feedback, comments and suggestions from the respective communities. Any kind of reaction to this proposal will be highly appreciated.

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Appendix 1: Guidelines for the Assessment Process (GAP)

Process Start

Process begins when a person/institution (client) asks an assessor to answer a question or give professional advice to a subject/single case.

Preconditions

The assessor examines whether he/she is qualified to meet the demand and whether the demand fits the professional criteria. Also, the assessor should observe the ethical principles and legal requirements of his/her country.

0. General Principles

1. The assessor takes the responsibility for the assessment process.
2. The assessor considers possible conflicts of interests between the value systems of the client/subject and his/her own.
3. Assessment is carried out in an interpersonal situation. The assessor treats the client fairly and with respect.
4. The assessor identifies and discusses relevant matters only with those who are involved in the assessment process.
5. During the assessment process the assessor evaluates possible positive and negative consequences, as well as side effects of the investigation for the client and/or subject and his/her social environment.
6. In principle, the assessor follows a science-oriented approach in solving the problem in question.
7. The assessment process must be explicit in order to be followed, evaluated and documented.
8. The assessor optimizes the rationale, utility and quality of the process and checks for conditions that might distort it.

1. Analyzing the Case (Descriptive Assessment)

1.1 Analyzing Demands, Complaints and/or Goals

1.1.1 Investigating and Evaluating Client's and/or Subject's Questions

9. The assessor attains an appropriate level of understanding of the client's/subject's complaints, goals and demands.
10. The assessor considers the level of scope and detail at which the client's/subject's complaints, goals and demands should be dealt with.
11. The assessor enquires about the client's/subject's perception of the urgency/severity of the case.
12. The assessor explores the subject's weaknesses as well as his/her strengths.
13. The assessor restricts himself/herself to matters relevant to the case.
14. The assessor checks completeness and accuracy of the basic information.

1.1.2 Synthesizing Client's Demands and Aspects of the General Problem Situation

15. The assessor checks for sufficiency of the information gathered so far in relation to the questions to be answered.
16. The assessor considers how person and context interact.

1.1.3 Formal Agreement

17. The assessor informs the client/subject of the type of questions that will be explored during further investigation.
18. The assessor obtains the client's/subject's informed consent to the demands and goals that direct the investigation.

1.2 Formulating Testable Assessment Hypotheses about the Case: Converting Demands, Complaints and/or Goals into Assessment Formulations

1.2.1 Formulating questions in technical terms, based on the information gathered

19. The assessor specifies relevant psychological constructs as the most important ingredients of case-related assessment hypotheses.
20. The assessor makes sure that the formulation of assessment hypotheses covers the problem features.
21. The assessor distinguishes between descriptive, classificatory, explanatory and predictive hypotheses.
22. Each hypothesis is formulated in a logically and theoretically sound manner, and with clear empirical referents.
23. For each hypothesis formulated the assessor considers at least one alternative hypothesis.
24. The assessor rank orders the assessment hypotheses according to explicit criteria relevant to the case.

1.2.2 Operationalizing Technical Terms by Means of Assessment Instruments and Procedures

25. The assessor reviews relevant instruments for each construct and selects the most appropriate one.
26. The assessor takes care that the information to be gathered is relevant, discriminative and sufficient with respect to the formulated hypotheses.

1.3 Collecting Information: Gathering Information Relevant to the Assessment Questions

1.3.1 Planning Administration of Assessment Procedures

27. The assessor takes into account the disturbing, obtrusive and reactive nature of assessment procedures.
28. The assessor asks for the subject's consent to the assessment plan and the assessment procedures involved.
29. The assessor prepares settings for assessment and instructs subjects and relevant others according to professional and technical standards.

1.3.2 Applying Assessment Procedures

30. The assessor carries out assessment procedures according to professional and technical guidelines.
31. The assessor considers the factors that interfere with the proper application of the assessment procedures.

1.3.3 Evaluating the Application of Assessment Procedures

32. The assessor checks whether data collection took place in accordance with the established plan.
33. The assessor checks whether any factors interfere with the proper administration of the procedures.

1.4 Information Processing, Relating Collected Data to the Assessment Questions

1.4.1 Analyzing Data

34. The assessor checks whether all data are sound and free of coding errors and biases.
35. The assessor evaluates the quality of the data with respect to the assessment questions.
36. The assessor analyzes and interprets data from tests and other assessment procedures according to the most recent norms, standards and professional knowledge.

1.4.2 Drawing Assessment Conclusions

37. The assessor checks whether the conclusions address the hypotheses.
38. The assessor weights information according to its relevance to the case.
39. The assessor documents how the conclusions follow from the data.
40. The assessor specifies how confident he/she is in each conclusion.

2. Organizing and Reporting Results: Technical Preparation of Results and Reporting to Client/Subject

2.1 Integrating Results: Answering the Client's/Subject's Questions as Completely as Possible

2.1.1 Combining Results into a Comprehensive Case Formulation

41. The assessor substantiates each hypothesis by using data from relevant sources of information.
42. The assessor integrates the data in such a way that they will be relevant, sufficient and useful for responding to client's questions.
43. The assessor takes contradictory information into account.

2.1.2 Formulating Conclusions with Respect to Client's/Subject's Questions

44. The assessor formulates conclusions with respect to the client's/subject's questions.

2.2 Reporting: Written and/or Oral Presentation of Reports

2.2.1 Requirements for Report Generation

45. The report is appropriate in its form of presentation (oral, written or both).
46. The report contains a summary with the relevant conclusions.
47. The report specifies all authors, clients and subjects, and to whom the report will be sent or presented.
48. Data are presented in accordance with the sources of information, instruments or procedures used.
49. Data are structured in accordance with the psychological questions in the results section of the report.
50. Issues beyond the scope of the initial questions of the client are not ignored, but given separate attention.
51. The report includes qualified recommendation in accordance with client's questions.

2.2.2 Including Relevant Information in the Report

52. Client's questions should always be addressed.
53. Sources of information, instruments and tests used are specified in appropriate detail.
54. Details of the assessment steps and procedures relevant to answering the client's questions are provided.
55. The results section of the report reflects the weighting and integration of all information collected.
56. In the results section of the report, each psychological statement is explicitly based on data collected and weighted in terms of its importance with respect to the client's questions.
57. Inconsistencies among data are discussed in the results section of the report.

2.2.3 Making the Report Understandable

58. Each statement is expressed in language that is clear and comprehensible to the client.
59. The scientific background to a statement is provided whenever there is a risk of misinterpretation..
60. Technical terms and terminology are clarified in appropriate terms.
61. Descriptive, comparative and interpretative elements are distinguished from one another.
62. Interpretation of data is not left to the reader.
63. Conclusions are presented clearly, and any tentative inferences noted in the report.

2.3 Discussing and Deciding

2.3.1 Discussing Report with Client, Subject and/or Relevant Others

64. The assessor discusses all sections of the report with the client/subject.
65. The assessor discusses all possible recommendations with the client, subject or relevant others, and ensures that they are understood.
66. The assessor uses additional data from the discussion of the report and the recommendations for the final version of the report.

2.3.2 Analyzing Whether General Circumstances Warrant Stop, Restart, or Moving on to an Intervention

67. If an intervention is required and the assessor is not qualified to carry it out, the subject is referred to an appropriate professional.
68. The assessor sends the report to cooperating professionals where appropriate.

3. Planning the Intervention: If the Assessor Considers that an Intervention Is Required, Several Assessment Operations Are Necessary Before Treatment Administration

69. The assessor states the goals and criteria for successful intervention.

3.1 Selecting Specific Intervention Hypotheses

3.1.1 Selecting and Operationalizing Intervention and Outcomes Variables

70. The assessor formulates intervention hypotheses based on results of the previous assessments.
71. Wherever possible, the assessor rank orders the hypotheses according to explicit criteria useful for the case.
72. The assessor operationally defines those variables related to the intervention hypotheses.

3.1.2 Reviewing and Deciding on Intervention Procedures that Best Fit the Single Case

73. The assessor lists and reviews feasible interventions and, eventually, designs the intervention.
74. The assessor identifies and assesses potential facilitating and inhibiting conditions affecting the intervention.
75. The assessor discusses options and expected consequences of the intervention with the subject/client.

3.1.3 Selecting and Assessing Relevant Variables for Monitoring

76. Wherever possible, the assessor selects measures by which the intervention can be monitored.
77. If required, the assessor monitors the intervention.

Carrying Out the Intervention

Since intervention is not a specific assessment activity, it will not be analyzed here. However, formative evaluation during the intervention may be required.

78. If required, the assessor monitors the intervention/treatment in order to avoid deviations. If deviations are unavoidable, they should be carefully recorded.

4. Evaluation and Follow-up: If an Intervention Has Been Carried Out, Several Assessment Operations Should Be Conducted

79. The assessor determines to what extent the intervention and its implementation allows an evaluation (evaluability assessment).
80. The assessor informs stakeholders about the importance of evaluating the intervention.

4.1 Collecting Data about Effects of Intervention

4.1.1 Inspecting Already Available Data

81. The assessor checks any previously available data from phases 2 and 3 deciding whether they are useful for evaluation and selects the best outcome measures.
82. The assessor checks whether intervention has been implemented as planned.
83. The assessor carefully plans the evaluation taking into account already-collected and available data as well as additional data.

4.1.2 Collecting Postintervention Data

84. The assessor administers those measures selected according to 1.3.
85. The assessor collects, according to 1.3, any other information about positive or negative changes that could be considered as intervention outcomes.
86. The assessor collects information using different indicators and informants.

4.2 Analyzing Intervention Outcomes

4.2.1 Drawing Conclusions from Data Gathered on the Effects of the Intervention According to 1.4

87. The assessor compares outcomes with the client's demands and intervention goals.
88. Before interpreting intervention effects, the assessor checks whether the intervention is really accounting for the effects.
89. The assessor looks for side effects.
90. The assessor considers alternative explanations of the intervention effect.

4.2.2 Reporting Results to Client, Subject and/or Relevant Others

91. The assessor discusses the evaluation findings with the client, subject and significant others.
92. The assessor justifies conclusions with regard to the client's demands, intervention goals and side effects, in such a way that stakeholders can assess them.

4.2.3 If Necessary, Written Report to Client, Subject and/or Relevant Others

See Guidelines 2.2 as they apply.

4.3 Follow-up

4.3.1 Planning Follow-up in Agreement with Client and/or Subject

93. The assessor plans the follow-up, selecting relevant and realistic targets.
94. The assessor discusses and agrees on the follow-up plan with the client, subject and stakeholders

4.3.2 Assessing Subject According to the Established Plan

95. The assessor collects data about the subject and relevant others as planned.
96. The assessor looks for information from subject and/or relevant others about unplanned positive and negative consequences.

4.3.3 Analyzing Results

See Guidelines 4.2.1 as they apply.

4.3.4 Discussing Results with Client, Subject and/or Relevant Others

See Guidelines 4.2.2 as they apply.

4.3.5 If Necessary, Written Report to Client, Subject and/or Relevant Others

See Guidelines 2.2.1 as they apply.

End of the Assessment Process

The assessment process comes to an end, if the assessor terminates his/her professional relationship with the person/institution (client) and subject/single case with respect to the assessment task.

Appendix 2: Assessment Process Glossary

Assessment (Psychological): On the one hand, the scientific and professional activity of collecting, evaluating and integrating information about a subject (single case), using, whenever possible, different sources according to a previously-established plan, in order to answer a client's questions; on the other hand, the development, construction and evaluation of suitable means to gather and process case-related information.

Assessment Process: A sequence of steps the assessor must take in order to answer the client's question.

Assessment Procedures: Instruments, tests, techniques and other measurement devices, including qualitative methods for gathering data.

Assessor: A person qualified to conduct an assessment.

Bias: Systematic error or disposition to errors of a kind that is likely to distort the assessment process.

Case Formulation: A description and analysis of the subject's problem/demand/question.

Client: A person or customer who engages the services of an assessor as expert (Scriven, 1991).

Consent (Informed): Subject's agreement with assessment or intervention activities after being thoroughly informed.

Construct: A conceptual variable that is inferred or constructed but is not directly observable.

Cost-effectiveness: The extent to which the assessment procedures produce equal or better results than those of a competitor (adapted from Joint Committee, 1994, for this text).

Data: Material gathered during the course of an assessment that serves as the basis for information, discussion and conclusions (Joint Committee, 1994).

Evaluability Assessment: To determine whether the program is suitable for an evaluation (1991, p. 138).

Evaluation: Collection and interpretation of evidence on the functioning and consequences of an intervention (adapted from Cronbach, 1990, p. 703).

Ethical Criteria: Professional norms as defined by professional organizations of psychologists.

Follow-up: Assessment of the long-term effects of an intervention.

Formal Agreement: Oral or written contract referring to the assessment tasks.

Guideline: Action rule recommended by experts for improving or optimizing the assessment process.

Hypothesis: An assumption about a state of affairs which seems to be probable in the light of previously established facts. Several types of hypotheses can be considered:
- *Classificatory:* An assumption that a unit of assessment (a subject) is a member of a particular class specified by a set of indicators.
- *Descriptive:* An assumption that a unit of assessment (a subject) has certain characteristics, features, properties or traits (to a certain degree or amount).
- *Predictive:* An assumption about the future state of the unit's characteristics.
- *Explanatory:* An assumption about the cause or set of causes of the unit's characteristics.

Intervention: Set of actions carried out by a professional with a subject for a given purpose.

Monitoring: Checking and keeping track of an intervention for purposes of control or surveillance.

Norm/s: A single value, or distribution of values, representing the typical performance of a given individual or group.

Outcomes: Final or decisive results, post-treatment effects, or changes produced by a given action.

Professional (in Psychological Assessment): A psychologist qualified in the field of psychological assessment (see also Assessor).

Professional Knowledge: Set of theories, methods, procedures and related application conditions used or considered by a professional in the field of assessment.

Professional Relationships: Interpersonal links between a professional and his/her client and subject.

Quality (of Data): Degree to which data meet the best standards available.

Relevant Others: All persons – other than client, assessor and subject – involved in the assessment.

Report: Communication in a written or oral form of information resulting from the assessment.

Side Effects: Unintended effects of assessment and intervention.

Single Case: The subject or situation taken as a unit of assessment (see also "Subject").

Standard: A principle commonly agreed upon by experts in the conduct and use of assessment procedures and instruments (Joint Committee, 1994).

Stakeholders: Individuals or groups that may affect or be affected by an evaluation (Joint Committee, 1994).

Subject: A person, group of persons or organization that is assessed (see also "Single Case").

Test: An evaluative device or procedure in which a sample of the examinee's behavior in a specified domain is obtained and subsequently evaluated and scored using a standardized process (APA, 1999).