

GeNews



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IO2

Set of Gender Neutral Selection Tools and Test

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1.INTRODUCTION

Geneus is a two year project from the Austrian National Agency funded by the European Commission – within the Erasmus+ KA2 Strategic Partnerships for Vocational Education and Training – which started in September 2017. The project aims to develop, promote and disseminate gender neutral selection tools and tests.

These were set down in the project application and can be found in the recently developed „Generic Report on Gender Neutral Testings“, carried out by the five partner countries (Austria, Bulgaria, Italy, Portugal and Spain). The transcript compiles the results of the first intellectual output of the GeNeus project and shows that many organisations perform poorly the selection processes, using mainly interviews, but not structured, enabling all kinds of judgmental distortions such as gender prejudice. These authorities have neither information about the execution of a suitable selection process nor standardised tests regarding central work-related competences and no way of financing them.

Furthermore according to the legal regulations in most of the partner countries intelligence and personality tests can only be conducted, or at least interpreted, by accredited psychologists. The use of standardised tests is limited either by availability, high prices or the necessity of an interpretation by a psychologist.

The main results lead to the conclusion that the best approach to fulfil the needs of the three target groups of this project – Public Administration employment services and organisations, VET education organisations and SME, is the development of a combination of gender neutral selection instruments which are free of charge and easily put into practice, especially focused on the interview process, but also considering several types of competencies tests.

For this reason the project partners developed and tested several selection instruments and tests in this report, which is the GeNeus's Project Intellectual Output 2. The selection instruments and tests can be used in an adaptable way, according to the vacancy, always assuring quality and gender equality. Along with these tools and tests, a detailed manual with instructions will also be available (Intellectual Output 3).

The main objective of this compilation is to collect examples for the use of gender neutral selection tools for various fields, especially focused on the three target groups, but also easily adaptable to other socio-economical sectors, that are free of charge. The current neurolinguistic and scientific research results regarding male and female abilities will be taken into consideration to reach equality of opportunity.

The “Set of Gender Neutral Selection Tools and Test“ contains examples of tests and tools that can be implemented for selection in education and employment contexts. On this report you can also find the solutions and interpretation guidelines them.

These tools were selected and developed have to promote equal access for all in education and employment as it judges performance areas equally as it includes gender neutral test implementation based on latest scientific findings and on empirical evidence gathered during the project development in the five partner countries.

2. THE SELECTION PROCESS

The well planned, high quality selection of staff is of great advantage for both sides – the employer and the applicant. Employees who recognise their potential enjoy their work and are motivated to use their abilities and strengths effectively and are therefore important factors for the success of the enterprise. Unsuitable methods of employment, unconsidered action and missing reflection of the process of recruiting unintentionally exclude good employees, which is not in the sense of a growing economy.

Inferior procurement of staff has an underestimated influence on the economic success of an enterprise and produces lasting burdens. Employees are a direct part of success.

Staff is the largest cost factor in many branches; the procurement of good staff is indispensable.

A lack of high quality staff has multidimensional effects, which can have a negative influence on an enterprise:

- Applicants may seem suitable, but are unsuccessful in the daily work routine
- Employees who leave after a short time due to missing motivation signify wasted resources
- Applicants could seem unsuitable during the application process, because they do not push themselves less to the fore than other competitors and are turned down, could however be suitable employees.

All these mistakes can be reduced by high quality staff procurement. Our investigation has shown that gender is not a component of the planning of the process of staff procurement. The relevance of staff procurement is often overseen and hardly recognised as an influencing factor. However, the contribution of effective/qualified staff is strongly connected with the general condition of businesses and the economy. For example, in times of economic impetus with strong growth it is more difficult to find qualified staff to fill advertised jobs. Among the most important activities of the department of human resources is the search for employees and their motivation to work for their enterprise. The necessary costs to find the suitable applicant can be very high. For this reason it is sensible and necessary to plan in advance, to analyse the job, to choose the applicant by various methods and to give specific support.

This set of selection tools puts the focus on the design of a structured, gender neutral process for staff selection.

2.1. PERSON – JOB FIT

The objective of the selection decision on behalf of the organisation with the help of the requirement analysis and selection test makes sure that the highest possible agreement exists between the individual person and the professional sphere.

A person-job fit, which is the ideal candidate suitable for the occupation and a high person-organisation fit, the fitting of the person in the organisation as a whole is the goal. A high person-job fit guarantees good work performance, a high person-organisation fit the integration and remaining in the organisation.

2.1.1. REQUIREMENT ANALYSIS

A substantial point in the best possible filling of a job is clarity in knowing what activities the job demands and which features the person must bring to be able to fulfill them. A structured approach, broken down to the clear activities and characteristics or competences, is the foundation of a gender neutral selection process. The evaluation of the job and the occupational characteristics are independent of the gender as well as the fact that the expected competences are in no way related to the gender, since they are compiled as concrete specifications and to be seen as independent of the individual person¹.

2.1.2. JOB ANALYSIS

Tasks and characteristic of the job to be filled are the starting point to know what exactly the advertised job demands.

The job analysis is a process which systematically analyses all facts and details relating to the job using various methods. The duties and activities needed to fulfil the job are in the forefront. The job analysis is restricted to the concrete activities regarding the job, not the competences of the applicant.

Defining Objectives

Without strategic planning and the laying down of the objectives no meaningful job analysis is possible.

The first step is to determine the objectives of the job analysis. The objectives could be:

- Redesigning of the job analysis
- Revision of the wage system
- Changes in the structure of the organisation
- Setting ground for a good Human Resource Management system

The relevant department should be responsible for the redesigning. When the aims are determined the top level management should be informed, because changes within the firm can only be made with their support.

Preparing Job Analysis

After determining an objective the jobs are chosen, which should be analysed. That can be office work, managerial activities or department specific activities. The methods and the acting persons are taken into consideration in the analysis. At this point in time a concrete job description offers an overview of the duties, responsibilities; an organisation chart of the work conditions and dangers etc. which are substantial for the individual jobs.

Performing Job Analysis

The next step in the process of the job analysis is the begin of the execution. At the same time sufficient room for the collection of all the data must be available to the employees to include all aspects. The information can be collected by the use of questionnaires, interviews or other observations. Once collected the information is assigned according to its nature, the department or the area.

¹ Methods and Links for further information: <https://job-analysis.net/G000.htm> and http://www.jsw.org.au/elearning/retail/certIV/recruit_and_select_personnel/unit_rs/concepts/rsc_0201.htm

Designing Job Descriptions and Job Specifications

A draft of the job description including an job analysis and a requirement profile (by means of a requirement analysis) is written. After the necessary information has been gathered it is recorded. The draft is checked through by the top level management, superiors and employees.

Controlling Job Descriptions and Job Specifications

The drawing up of a job description is to be seen as a process, since job descriptions should be adapted in regular intervals and scrutinised.

The result of a job analysis should be a job description and a requirement profile. The requirement profile is determined by a requirement analysis. The job description includes the activities, duties and the degree of responsibility as well as the work conditions etc. whereas the requirement profile includes the abilities, competences, training, background, necessary for the advertised job. We present below a template that can be used to as a Job Analysis guide, and that contains the description and the most relevant job requirements to be considered in a selection process².

Selection Process Planning

The first point to meet high quality decisions is an appropriate planning of the process. This includes a targeted analysis of the job (job analysis) as well as a requirement analysis. By doing this gender neutrality can be reached, if the job is analysed and not simply reduced to the person who held the job in the past.

To guarantee that a job can be seen as gender neutral the expected activities must be defined. This assessment is neutral and so there is no danger of determining in advance that the job is suitable for one or the other gender.

Job Analysis Template

JOB NAME

HIERARCHICAL POSITION



² Centro de Bem Estar Social de Figueira de Lorvão (w/date) <https://www.cbes-figueiradelorvao.com/attachments/article/6/143-DESCRI%C3%87%C3%83O%20E%20AN%C3%81LISE%20DE%20FUN%C3%87%C3%95ES.pdf>, (05.2019)

MAIN RESPONSABILITIES

--

KNOWLEDGE, QUALIFICATIONS, AND PROFESSIONAL EXPERIENCE

School level

--

Foreign languages knowledge

--

Computer usage competencies

--

Professional knowledge, professional qualifications and certifications

--

Professional experience

--

COMPETENCIES PROFILE, ABILITIES AND APTITUDES

Transversal Competencies

--

Specific Competencies

--

VALIDATION

Supervisor

--	--

Validation date

___/___/___

Observations

--

2.2. PERSON-ORGANISATION FIT

One person can bring in all the requirements for the job and still not fit into the firm. Perhaps this person simply does not have the fitting mentality which the firm expects. Often a process of trial and error begins. This development is not desirable for both sides. Literature labels this fitting/compatibility of persons and organisations Person-Organisation Fit.

It must be differentiated between two varying requirements. The person can be suitable for the firm because similar and equal features (values, objectives, norms etc.) are available. This is called supplementary fit. The upbringing of a person can be in great opposition to the attitudes and motives of the firm. Therefore similar perceptions of performance readiness e.g. which one has experience at home and is accepted at the firm can lead to a good match.

When the person and the firm complement each other, have the same or similar features this is called complementary fit. That means the person and the firm have differing features which go hand in hand. It is possible that inconsistency in the position of the firm and the person exists the person however very much values certain advantages which the firm offers such as safety. For the enterprise and the process of candidature this can mean that the person is interesting due to his qualifications and the opposing values do not get in the way. Especially when a person has qualifications which nobody else in the firm has he/she is interesting. The person's skills fulfil the needs of the enterprise.

It is obvious that supplementary fit and complementary fit do not exclude one another. The theory arose that supplementary fit had a stronger influence on the recruitment of new employees than the complementary fit. However complementary fit is more relevant for the performance. Both probably work together additively.

A more general conceptual explanation could be:

Person-organisation fit is defined as the compatibility of persons and organisations which exists if:

- a. At least one of both offers something which the other needs
- b. both share fundamental common features or
- c. both is the case.

This definition shows that it is about finding a person, their values and qualifications and best fits the ideas of the firm. With it gender is in no contradiction to any of these requirements. The footing for the success of this process is however that the enterprise considers its bearing regarding gender. This can happen in trainings or targeted job analysis so that the focus is on the job and the requirements of the firm and away from gender. But in contrast to person-job fit regarding a job it is about reflection of attitudes and mentalities within a whole organisation which calls for awareness on many levels. These process changes are mostly prescribed from the highest position (Top Down) and take time.

People and organisations have many aspects. The fit within a comprehensible restricted area is mostly meant when looking at person-organisation fit. For the query as to whether one persons fits into a certain field. 4 levels of action can be recognised:

1. Studies which examine supplementary fit often show that the correspondence of values of the individual person with the values and standards of the enterprise is high. The big

advantage of values is their stability over time. The reference to values in a recruitment process should be looked at more exactly. The enterprise as a whole brings in values attitudes just as the deciding recruiting person and the applicant do. To make values tangible firms can work out a guideline model falling in with and scrutinising their values. Making them visible and being aware of them alters the behaviour and can lead to alterations in staff decisions. It is evaluated during a personality test.

2. The consideration of objectives can also be an approach. The correspondence of the objectives of the person are compared with those of the enterprise. It is also important that individual objectives can be reached. In focus is the fact that recruiting decisions exist by virtue of similarities in objectives and values between the applicant and the deciding person. Those remaining in the firm become more similar over time. It is evaluated during the interview process.
3. As a third possibility for operationalization of Person-Organisation fit, individual personal features are often subjects of consideration. There are two cases to differentiate. In the first case is about supplementary fit. The personal characteristics of an individual overlap with characteristics of the atmosphere of the organisation. The affinity between the personality of an employee and the personalities of the colleagues is a significant predicator for the performance on the job. The second case assigns to the complementary fit. Specific personality characteristics arouse needs, which the organisation can please by certain structures. It is evaluated during the interview process.
4. A fourth field of research solely deals with complementary fit. It verifies the extent to which organisations and their structures correspond with the preferences and needs of the people, who work for them. It is evaluated during the interview process.

Person-Job fit is defined as the conformity between the skills of a person and the requirements of a job or between the requirements of a person and the characteristics of the job. A job is a specific activity, which will be performed for payment. Person-Job fit is based on this limited activity. (Holtmeier&Friends, 2019)

2.3. ONLINE TESTING

On-line testing has had a big evolution with the technological development of the world wide web and associated hardware and software.

On-line testing can be delivered in several modes, the most recent is the remote on-line assessment, also called “at distance” assessment³.

Recruitment is the activity that has been using the most of online testing. It actually has been demanding fast, reliable and valid assement to use in the first moments of the recruitment funnel. Post-hire applications have also been increasing, but not as fast, market demand has not been as strong⁴.

³ Bartram, 2008.

⁴ Bartram, 2008.

There are different modes of online test administration, as identified by the International Test Commission (ITC) Guidelines' on Computer-Based Testing and the testing on the internet⁵:

1. Open mode: the test taker cannot be identified, and there is no supervision. With the growth of 'testing sites' in the internet that do not require identification of the test taker, it may bring up some issues if the tests are used for employment purposes. Therefore, the public should be aware of not properly validated tests.
2. Controlled mode: this is the most used mode of delivery of internet testing: as Open mode, there is no human supervision, but the test taker is known (is given a logon and password). This method is also known as unproctored internet testing (UIT).
3. Supervised mode: there is human supervision, and the test taker is authenticated, as well as the test taking conditions are also controlled. To do this, the test administrator logs in the test taker, and at the end it confirms in the system, as well.
4. Managed mode: this is the method with the highest human control, controlling the test-taker identity, as well as the environment in which it takes place. To do this there are specified locations where the tests take place, where the test taking setting is completely controlled.

Online tests have high costs for publishers. The process of development of traditional paper and pencil tests is costly because of validation of the performance of test items, which includes a big number of participants, as well as a long and often repeated process until it is statistically valid. Publishers also have to provide scoring keys and interpretation⁶.

With internet the tests can be downloaded or copied by users, who pass them on to unauthorised users, and publishers lose the intellectual property, as well as commercial rights very easily. Some issues regarding the online testing arise such as security, intellectual property, and test taker authentication. These issues are being tackled as presented below.

Test security and intellectual property is being protected with not downloadable tests, and random sets of questions to different subjects, making it hard to copy. To protect the quality of tests, and subjects' reliability in the tests they are taking, and firms in the tests that, they are using national psychologists and/or human resources associations that are certifying the tests⁷.

Test taker verification and authentication is also an important issue regarding online testing. This is being handled with all the software sophistication possible (time limitation, random questions, login and password provided), but being unproctored allows cheating, having the help of someone or some source. To deal with 'false positives' there is usually a revivification of the competencies, and that procedure is also announced earlier in the recruitment process⁸.

However, the internet based tests have been having a very big push and growth due to the low cost and efficiency for large firms' recruitment processes. Firms who need large scale recruitment process benefit the most, and are also driving the growth of this kind of tests. They use it at the first stages of the recruitment funnel, as an easy, valid, and cost saving initial screening method.

⁵ ITC, 2005, 2006.

⁶ Bartram, 2008.

⁷ Bartram, 2008.

⁸ Bartram, 2008.

Reaching so much more people at an initial stage of the recruitment process, they are able to make initial levels selection very easily and cheap⁹.

Test takers are also very satisfied with this method, since it is easy, they say they can do it from home, or where they feel is comfortable, and saves them time, if they are not going to be in that recruitment process in further stages.

Most of the research done on online testing focused on the equivalence between traditional and unsupervised test delivery, and it was carried out in large firms, and large samples of subjects. Single studies, as well as meta-analysis suggest that paper and pencil supervised tests results are equivalent to the ones delivered online and unproctored¹⁰.

A recent study reveals that the delivery mode (paper/online) does not affect writing English test scores at B2/C1 level. Test-takers refer that they prefer computer-based delivery of writing tests, and the study also shows that preferences of delivery mode are mostly independent of computer familiarity¹¹.

We can conclude that online testing results, even if the test is taken unproctored are equivalent to the traditional paper and pencil mode. It is a growing trend required by the market, both institutions, mainly big, and test-takers. There are several issues associated, but they are also being tackled, and overcome by technological means and redundant, simple recruitment and selection processes.

GeNeus project's target groups, not being big institutions, can benefit from research and products already developed for them. On IO2 we present several selection tools, some of which online tests that can be used for initial screening, and others, developed by us, that can be used to verify several sets of competencies, according to the selection process at stake.

3.SET OF GENDER NEUTRAL SELECTION TOOLS

This chapter conveys the set of Gender Neutral tests and exercises due in the Intellectual Output 2 (IO2) of the Project. The interview is of much importance and was assigned to the next chapter as also one of the tools developed in IO2.

The first test presented is the General Competencies for Employment Questionnaire Test. We present the implementation and statistical information of the test in all partner countries, as well as its interpretation.

During the project, we also developed three different tools to assess the Problem Solving competence. We also present the implementation and statistical information of the test in all partner countries, as well as its interpretation.

Finally, we gather some examples of tests that can (and should) be used in selection processes regarding several skills, that are available in the web, and that we found appropriate both considering their quality/reliability and, of course, being gender neutral.

⁹ Bartram, 2008.

¹⁰ Bartram, 2008.

¹¹ Brunfaut, Harding, and Batty, 2018.

3.1. TEST – “GENERAL COMPETENCIES FOR EMPLOYMENT QUESTIONNAIRE”

General Competencies for Employment Questionnaire, developed by GeNeus project (Appendix 1) consists of 20 questions regarding three transversal competencies - Initiative/proactivity, Organisation, and Social competence.

These competencies are referred among the top 10 skills required for workers by the World Economic Forum (Gray, 2016) and in the Proposal European Reference Framework of Key Competences for Lifelong Learning (Council of the European Union, 2018) (see Appendix 2: Methodology - Gender Neutral Selection Test and Analysis Exercises).

This test should only be used in the five native languages and countries of GeNeus partners: Austria, Bulgaria, Italy, Portugal and Spain. Results should also be analysed and interpreted according to national specificities.

There are national separate appendices (Appendix 3 – National General Competencies for Employment Questionnaire), and in each appendix, there are three sections: Test, interpretation orientation, and statistical information on the analysis process and results of the standardization process:

- Appendix 3.1. Austria
 - o 3.1.1. Test for Austria
 - o 3.1.2. Test interpretation for Austria
 - o 3.1.3. Statistical information
- Appendix 3.2. Bulgaria
 - o 3.1.1. Test for Bulgaria
 - o 3.1.2. Test interpretation for Bulgaria
 - o 3.1.3. Statistical information
- Appendix 3.3. Italy
 - o 3.1.1. Test for Italy
 - o 3.1.2. Test interpretation for Italy
 - o 3.1.3. Statistical information
- Appendix 3.4. Portugal
 - o 3.1.1. Test for Portugal
 - o 3.1.2. Test interpretation for Portugal
 - o 3.1.3. Statistical information
- Appendix 3.5. Spain
 - o 3.1.1. Test for Spain
 - o 3.1.2. Test interpretation for Spain
 - o 3.1.3. Statistical information.

3.2. ANALYSIS EXERCISE - PROBLEM SOLVING

GeNeus project partners also developed three Analysis Exercise, regarding the competence “Problem solving”: Exercise 1 – Office party; Exercise 2 – Store situation; Exercise 3 – Office situation (Appendix 4: The Three Analysis Exercises), and respective orientation for classification. Each exercise consists of a description of situation that needs action. Respondents have to answer five questions about that situation regarding: Problem identification, Data collection, Generation of ideas and evaluation of ideas, Implementation planning, and Evaluation of the implemented solution (see Appendix 2: Methodology - Gender Neutral Selection Test and Analysis Exercises).

These exercises were developed and standardized for the five GeNeus partners countries: Austria, Bulgaria, Italy, Portugal and Spain. Results and interpretation should only be used in the five countries. However, the exercises can be used in other geographies, using the general intuitive results interpretation, as an orientation, for qualitative proposes with the necessary careful not to be gender biased. Each of the three exercises are independent, therefore can be used one without the others.

There are national separate appendixes (Appendix 5 – National specificities of the Analysis Exercises), and in each appendix, there are three sections: Exercises, Results interpretation, and Statistical information on the analysis process and results of the standardization process.

The standardization process indicated that in some countries one or other exercise cannot be used because they are not gender neutral. The information is in the Appendixes, as follows:

- Appendix 5.1. Austria
 - o 5.1.1. Exercise 1 for Austria, and Results interpretation for Austria
 - o 5.1.2. Exercise 2 for Austria, and Results interpretation for Austria
 - o 5.1.3. Exercise 3 for Austria, and Results interpretation for Austria
 - o 5.1.4. Exercises - Statistical information
- Appendix 5.2. Bulgaria
 - o 5.2.1. Exercise 1 for Bulgaria, and Results interpretation for Bulgaria
 - o 5.2.2. Exercise 3 for Bulgaria, and Results interpretation for Bulgaria
 - o 5.2.3. Exercises - Statistical information
- Appendix 5.3. Italy
 - o 5.3.1. Exercise 1 for Italy, and Results interpretation for Italy
 - o 5.3.2. Exercise 2 for Italy, and Results interpretation for Italy
 - o 5.3.3. Exercises - Statistical information
- Appendix 5.4. Portugal
 - o 5.4.1. Exercise 3 for Portugal, and Results interpretation for Portugal
 - o 5.4.2. Exercise 3 for Portugal, and Results interpretation for Portugal
 - o 5.4.3. Exercise 3 for Portugal, and Results interpretation for Portugal
 - o 5.4.4. Exercise - Statistical information
- Appendix 5.5. Spain
 - o 5.5.1. Exercise 1 for Spain, and Results interpretation for Spain
 - o 5.5.2. Exercise 2 for Spain, and Results interpretation for Spain

- 5.5.3. Exercise 3 for Spain, and Results interpretation for Spain
- 5.5.4. Exercise - Statistical information

3.3. OTHER TESTS

In this section we present several online tests that can be used to assess different competencies / abilities. These tests, even though not developed by GeNeus project's partners can and should be used according to the requirements of the job vacancy / educational / developmental objective.

English Test

The best way to test the level of a language like English is to use an online test, if the recruiter just needs particular knowledge, for e.g. how to use a few sentences in tourism etc. this can be done oral or in a few exercises. An example for an English test is available on <https://www.cambridgeenglish.org/test-your-english/>.

A more complete set of English tests, that includes listening, vocabulary, grammar and reading is available on https://www.oxfordonlineenglish.com/english-level-test?nabm=1&utm_referrer=https%3A%2F%2Fwww.google.com%2F

German Test

The ÖSD (Österreichisches Sprachdiplom Deutsch) – Austrian Language Certificate German – is an internationally accepted examination system for German as foreign and second language. The ÖSD-exams are on the A1 – C2 Level and orientate on the Common European Frame of Reference of Languages¹².

It is often used in case of candidates with migration background and for the interviewer to validate their level and awareness of their german skills. Examples for approved german tests is available on <https://www.osd.at> or <https://www.spidi.at/sprachtest/einstufungstest-deutsch/>

Computer Skills Test

A computer skills test is usually a prerequisite for a job or placement companies. The tests usually include fundamental computer skills like word processing, using email, web browsers and simple databases. In some cases, however, it can be more complex, with a set pass level, and deal with programs such as Excel, Office etc. you may not be familiar with.

At job interviews, the test is usually a simple set of tests of basic job functions, and a few straightforward questions¹³. An example for a computer skills test is available on <https://www.proprofs.com/quiz-school/story.php?title=interview-computer-skills-test>

Exercises using the computer skills are also good selection tools. On the following link, there are some exercises to test knowledge in Excel, Word and PowerPoint <https://www.isograd.com/EN/freetestselection.php>.

Job auditions

Traditional interviews might give the decent idea of how candidates present themselves, think on their feet and answer questions. But unless the role is “professional interviewee” there is no way

¹² OSD Tests, <https://www.osd.at/die-pruefungen/osd-pruefungen/> (04.2019)

¹³ CVTIPS (w/date).

to see how they will actually perform on the job. By throwing the talent in the “deep end and seeing how they swim”, there is a possibility to get a realistic sense of their skills. Job auditions do not just benefit the employer: candidates get a real sense of the day-to-day job.

The most promising benefits of job auditions include more realistic snapshot of candidate's behaviour on the job, candidates can try out job for fit, less bias than traditional formats and the candidates cannot lie about their skills.

These kind of tests must be developed by the recruiter/employer in order to the test have a specific fit regarding the job vacancy.

4. JOB INTERVIEWS

A job interview is a formal conversation between an applicant and a representative of the employer, which is held with the aim of collecting information about the person-job fit and person-organisation fit, which will contribute to the decision of hiring, or not the candidate.

In the selection process there may (and should) be more than one interview with different stakeholders of the job position to be filled.

Interviews may vary in questions are structuration from completely unstructured to a completely structured job interview in which all the applicants are asked exactly the same questions from an appointed list in a certain order.

4.1. TYPES

There are various types of job interviews depending upon the how the structure of the questions is repeated.

4.1.1. STRUCTURED JOB INTERVIEWS

- Carried out in the same way with all applicants
- Also known as steered, systematic or sample talks
- Each conversation includes certain elements
- Standardised in consideration of the content (questions)
- Standardised in consideration of the choice process (evaluation of the answers)

4.1.2. NON-STRUCTURED JOB INTERVIEWS

- Does not include a certain number of elements
- Free flowing (interviewer can interchange and alter questions)
- Different interviewers do not assess identically

- No direction shows how one interacts, during and after the discussion

There are also mixed forms between the two types, which are seen as semi-structured interviews. Unstructured job interviews are the mostly used type.

Research proves that unstructured job interviews are unreliable and contradictory; as for example two interviewers leading a job interview with the same person are not matching although they are interviewing the applicant at the same time.

On the other side, there is a standardised job interview, which improves the probability that the judgement of the interviewer traces back to the quality of the answers of the applicant instead of distracting facts, which are not relevant for the job such as the gender.

4.1.3. CONTENT STRUCTURE FOR A SEMI-STRUCTURED INTERVIEW

- The guarantee that the questions are relevant for the job, as given in the job requirements and analysis
- Ask each applicant the same questions
- all the major questions should be the same, and relevant information for the job should be pursued according to the candidate disclosure
- Ask better questions like questions that don't have already the answer or that include social desirability (you are ok with frequent travelling, aren't you?) as well as asking for the description of behaviour
- Hold a longer job interview
- Check added information which is useful for the applicant, like curriculum vitae

The most useful interview format for conducting qualitative research is often "semi-structured" (sometimes called "moderately scheduled"). This means the interview is not highly structured, as is the case of an interview that consists of making exactly the same questions to all participants (and not explore answers, or making questions not previously defined in the script), nor is it unstructured, such that the interviewee is simply given a license to talk freely about whatever comes up.

Semi-structured interviews offer topics and questions to the interviewee, but are carefully designed to elicit the interviewee's ideas and opinions on the topic of interest, as opposed to leading the interviewee toward preconceived choices. They rely on the interviewer following up with probes to get in-depth information on topics of interest. Two underlying principles of the following suggestions are (1) strive to avoid leading the interview or imposing meanings, and (2) strive to create relaxed, comfortable conversation.

Following are some suggestions for designing such interviews:

1. Carefully plan the interview, even though it is to be only semi-structured. Write down the topics and questions you might conceivably want to ask and consider various ways of arranging them.
2. If it is your first interview with the interviewee, provide an overview of your purpose, your intended uses for the interview data, and the measures you've taken to protect confidentiality and anonymity. Also, discuss and get permission for tape recording or note-taking.
3. If it is your first interview with the interviewee, ask a few background questions first, such as the interviewee's job title and responsibilities, time with the organisation, etc. These often provide necessary information and serve to "warm up" the interviewee; that is, they're easy to answer and allow the interviewee to get in the interviewing mindset.
4. Focus on developing rapport and establishing a relaxed, comfortable climate. Be aware of your nonverbal communication: e.g., smiles, seating position, open/closed body posture, eye contact. In general, be yourself (authentic), positive about the interview, and confident.
5. The questions that focus on the topic(s) of interest should be broad, open-ended questions that allow the interviewee latitude in constructing an answer. Usually, qualitative researchers want to understand the interviewee's language and meanings, and open-ended questions encourage this. For example, if the focus of the interview is an event or episode such as a meeting, you could ask a question such as "Tell me the story of this meeting, beginning when you first heard of it."
6. Prepare, and save until later in the interview, questions on specific facts or other items of interest.
7. If the interview follows up on observation, you may want to ask about specific messages or exchanges. Again, try not to be leading in your questioning. For example, ask "What did you mean when you said...." rather than "When you said...did you mean....?"
8. Use probes carefully to get more in-depth answers or to follow up on points of interest. Many interviewees talk in generalities, so use probes such as "Can you give me an example of that?" or "What did he say?" If the focus is communication, try to elicit the language and specific meanings involved.
9. Sometimes silence is the best probe. Being silent once interviewees pause can encourage them to continue. Also, you may want to avoid interrupting a good story and instead make a note to probe a particular point later in the interview.
10. Think carefully about how to end the interview. It's often a good idea to ask "Is there anything else you'd like to tell me?" near the end. It's also often a good idea to ask if you can contact the interviewee later in case you have additional questions.

4.2. OTHER ISSUES IN INTERVIEWS

Different means of interviews and types of questions of job interviews are available for recruiters, which need to evaluate different skills and knowledge of the candidates.

4.2.1. BRAIN TEASERS

Brainteasers are “a problem for which it is hard to find an answer, especially one which people enjoy trying to solve as a game”¹⁴.

Companies use brainteasers in job interviews because they can elicit perceptions such as creativity, problem-solving capability, apprehension, pattern of thinking and logical reasoning of the candidates.

That means, that brainteasers are a way to let the candidate use lateral thinking and intuitiveness and it needs “out-of-the-box thinking”. When it comes to brainteasers in job interviews, the questions often fall under two categories: questions with correct answers and questions with no correct answer. For example:

1. Questions with correct answers

Questions with correct answers are often used in technical and finance industries, which require food mathematical skills and logical thinking.

Example 1: You roll two fair dice, what is the probability that the sum is 9?

Answer: The possible pairs of dice are: 3+6, 4+5, 5+4 and 6+3. Probability is therefore $4/36=11\%$.

Example 2: You are in a room with three light switches, each of which controls one of three light bulbs in the next room. Your task is to determine which switch controls which bulb. All lights are initially off, and you can not see in one room from the other. You may inspect the room only once. How can you know which switch is connected to which light bulb?

Answer: Assign the switches with numbers 1, 2 and 3. Leave switch 1 off. Turn the second switch on for five minutes and turn it off. Turn switch 3 on and leave it on. Enter the room. The bulb currently on is controlled by switch 3. Feel the other bulbs for heat. The bulb, which is off, and warm is controlled by switch 2. The cold bulb is switch 1.

Example 3: What can you hold without ever touching, or using your hands?

Answer: Your breath.

¹⁴ Cambridge Dictionary (2014).

2. Questions with no correct answers

Questions with correct answers are often used in marketing and artistic industries. They are focused on the logical thinking and creativity of the candidate and designed to find more about the approach to solve a problem and the ability to think on the feet. These questions are not as much about the answer you give, but the way you go about solving them.

Example 1: If you had 5,623 participants in a tournament, how many games would you need to be played to determine the winner?

Answer: There are potentially an unlimited number of answers to this brainteaser. The point here is to ask questions. Questions you need to ask to solve the brainteaser include: Are the participants individual competitors or members of bigger teams? If teams, what is the number of teams? What is the tournament structure? Single elimination rounds or do each team get to play a specific number of games?

Example 2: How many footballs can fit inside a Boeing 747?

Answer: You'll need to consider the size of a Boeing 747 and the size of an average football. Boeing 747 has a passenger volume of around 876 cubic meters, with cargo volume of 159 cubic meters. The average football is 22 inches in diameter. The average would therefore be around 47,000 balls. Since the focus is not on the correct answer, you should consider asking extra questions. For example, are they talking about football (soccer) balls or American footballs? Can you use the fuel tank and does the airplane have seats attached?

Example 3: How would you move Mount Fiji?

Answer: The questions, popularized by Microsoft according to reports, can be answered in a numerous different ways. Here are some of the possible solutions: Mount Fiji is already constantly moving, as the Earth is rotating around its axis; You could create a massive earthquake, which could shift the mountain; Take a picture of it and carry the image elsewhere; Take a piece of the mountain from the right and add it on the left. This would continue to move the mountain.¹⁵

4.2.2. MEANS FOR INTERVIEWING

Meeting in casual settings

Job interviews in casual settings let the interviewer see a more authentic side of the candidate in a low-pressure environment. It puts everyone at ease, allows candidates to show more of their personality, and gives a great impression of the work culture.

Video Interviews

In “on-demand” or “one-way” video interviews, candidates record themselves answering some basic questions for 15 minutes or so. The benefits are clear: busy passive candidates can make

¹⁵ Martin, 2016.

time to record when it's convenient for them, nervous candidates can be more at ease, and recruiters can efficiently see dozens of candidates in the space of a few hours.

Video interviews are particularly useful for roles where communication and presentation are crucial—like sales, account management, and business development. The most promising benefits of video interviews include convenience for recruiters and candidates, extend reach by efficiently screening more remote talent and a more realistic snapshot of the candidate's personality (Lewis, 2018).

Telephone interviews

Telephone interviews are usually done at the beginning of the process, in the screening phase, to assess basic requirements.

On-a-distance interviews

On-a-distance interviews are usually done using conference call software (e.g. Skype) and done in the intermediate phases of the selection process, to assess more relevant information about the person- job fit regarding the personal issues. With digital nomads, international careers, interviewing using this technology is a very good and cost effective solution.

4.3. EVALUATION CHECKLIST APPLICANT

The interviewer can compile the template individually, so that the evaluated questions are job specific and the worth-knowing information for the position is adjusted.

See Appendix 6.

4.4. EXECUTION

- Since stereotypes about men and women especially fall into the weight when only few men/women are included in the deciding team, pay attention to a mixed gender recruiter team.
- Since deciding persons especially bring in stereotypes when they are under time pressure or have little cognitive capacity two aspects are of great importance:
 - Avoid time pressure (e.g. by tightly crammed interviews or other following appointments) as well as distractions
 - Separate observation and evaluation: start with the observation and do the evaluation of behavioural skills from one another by writing notes during the discussion, but make no final judgements of the candidates on the behavioural evaluation scales
- Since deciding persons differ in the strictness and mildness of their evaluations it is important to have the same deciding team for all applicants.
- Create for the deciding team the awareness that the process of decision making must be justified in front of the superiors after the decision since this raises the accuracy of the observation.
- Pay attention to gender neutral language during the job interview.
- Keep strictly to the interview guide so that all applicants receive the same questions in the same order (Welp, 2015).
- Pay attention to the differences of expression between men and women. Research shows that women are more likely to downplay their certainty and men are more likely to minimize

their doubts. “ This difference in the linguistic style of men and women leads to women wrongly being perceived by men as unconfident. Since confidence is a main determinant for the first impression that candidates make on the people that interview them, interviewers have to be sensitized and aware of this problem (Tannen, 1995).

4.5. EVALUATION STRUCTURE

- Evaluate each answer rather than making a complete evaluation at the end of the discussion
- Use established evaluation tables (BARS – behaviour Anchored Rating Scales)
- Allow the interviewer to make detailed notes
- Use different views of several interviewers for each applicant (panel interview)
- Use the same discussion proportion for each applicant
- Train the interviewers

4.6. SPECIALISED FORMS OF JOB INTERVIEWS

4.6.1. PANEL

The applicants are asked by a panel of interviewers, which represents the various stakeholders in the recruiting process.

Advantages: time saving, more concentrated on the discussion and less on small talk, comparing apples with apples – each member of the panel hears the answers to the same questions.

Different methods:

- Presentation format – the applicant is given a theme to which he/she must hold a presentation for the panel. This is often used in academic or marketing related job interviews
- Function format – each member of the panel is instructed to ask questions to a specific function of the position
- “Clay pigeon shooting” – the applicant is bombarded with a row of questions by various members of the panel to test how he/she masters stressful situations

4.6.2. GROUP

Several applicants are questioned by one or more interviewers. Used for the choice, promotion, evaluation of teamwork, stress management or assertiveness. Due to such a group setting the applicant is surrounded by opponents. The interviewer must be more capable of multi-tasking than in a discussion with only one applicant.

Advantage: time saving and less costly than in a one to one ratio.

Disadvantage: This could influence the evaluation negatively. A further problem is that those applicants who are asked later have more time to consider the answers than the others.

4.7. POSSIBLE BASIC STRUCTURE OF A JOB INTERVIEW

To find the most effective way to conduct an interview is to choose a specific structure for a job interview. On this section we propose a possible structure for a job interview. This should be considered as a possibility, it is not mandatory, and can / should be adapted to the various situations that the organisation faces.

4.7.1. PHASE 1: Introduction by the interviewer (1 minute up to 10 minutes)

- Welcome, small talk, introduction
- Creating a positive atmosphere
- Give a short presentation of yourself, the open position (only the title) and the enterprise (do not explain the job requirements, nor the job details, just a small introduction to the job and enterprise)
- Ask what the applicant already knows about the job and the firm¹⁶

4.7.2. PHASE 2: Get to know the applicant/Assess Competencies (15 minutes up to 1 hour)

- Background analysis
- Give the applicant space to express him/herself, after your questions
- Ask about motives: why change the job, what does the applicant know about the enterprise and the open position. Whether they are prepared.
- Build up the depth of the discussion

During a job interview two things must be examined:

Professionality

- Chronological professional career
- Handle the past in a compact way / explore what is relevant to the current job

Personal Characteristics and Motivation

- Competencies
- Skills
- Aims

4.7.3. PHASE 3: Career and Job Vacancy (5 min up to 15 hr)

- Ask about career expectations
- “Sell” the job
- Give measured information about the position and the enterprise
- Talk about financial details, income etc.
- Potential possibilities of further education
- Answer questions of the applicant
-

4.7.4. PHASE 4: Conclusion

- Next steps of the selection process
- Still asking the applicant if he/she wants to give further information or ask another question

¹⁶ Structured Discussion (w/date). Available at http://www.webkb.org/kb/it/o_knowledge/d_structuredDiscussion.html (05.2019)

4.7.5. JOB INTERVIEW TEMPLATE EXAMPLE

PHASE 1: Introduction by the interviewer (1 minute up to 10 minutes)

- Welcome, small talk, introduction
- Creating a positive atmosphere

PHASE 2: Get to know the applicant / Assess Competencies (15 minutes up to 1 hour)

BACKGROUND ANALYSIS (Based on the CV)

- What exactly did you do on that job? (the job most similar to the job vacancy)
- Why did you leave your previous job?
- What attracted you in the job that you are now?

(during this phase behavioural issues based on experience)

PERSONAL / PROFESSIONAL CHARACTERISTICS / COMPETENCIES

Competence 1

Communication Effectiveness / Interpersonal Communication

Demonstrates skills for active and participatory listening with debtors to detect any problems. Evidence oriented behaviours for clear and accurate clear transmission of all ideas, messages and information obtained by ensuring that the recipient understands them.

Concerns with the planning and participation in monitoring and evaluation of communication experiences with individuals and groups gained in life/professional situations, in person or using technological devices.

What do you prefer when you establish a contact? How did you deal with the conflict situation? Description of the situation and result.

Have you ever had to deal professionally with people from other countries? In what situation? What were the main difficulties encountered? How did you deal with them? What was the result?

Have you ever had a professional situation in which the use of electronic messages (email, chat, ...) caused an interpersonal embarrassment or problem? Please describe the situation. How did you dealt with it? What was the result?

Competency evaluation

1	2	3	4	5

Very low level

Standard level

Very high level

Competence 2

Rigor and organization

Demonstrated behaviours for the rigorous accomplishment of the tasks reaching the defined objectives. Ability to determine an effective methodology and organization for good time management, always keeping in mind the fulfilment of priorities.

Have you ever faced a professional stress situation? After describing the situation, state what was your behaviour and the result.

Please describe a situation in which you can show you are organised regarding complex task fulfilment and time management. What were the main difficulties encountered? How did you deal with them? What was the result?

Competency evaluation

1	2	3	4	5
Very low level		Standard level		Very high level

Competence 3

Managing Risk

Concerns an individual's ability to identify, calculate and respond to risks in a variety of settings. It is mostly concerned with risk-taking and assessment.

The performance expectations are:

- an ability to identify risks in everyday behaviour. This can include the risks associated with finances, advertising, unhealthy eating, anti-social behaviour, etc.
- an ability to assess the consequences of risks identified.
- an ability to identify risks in a professional capacity. This can be related to financial management, business expansion, hiring staff, etc.
- an ability to identify the difference between a calculated risk and an unnecessary one.
- an ability to capitalise on a calculated risk, and to implement a plan to manage the consequences of the risk taken.

Have you ever had manage a risk situation professionally? In what situation? Please describe? What were the main difficulties encountered? How did you dealt with them? What was the result?

Competency evaluation

1	2	3	4	5
Very low level		Standard level		Very high level

PHASE 3: Career and Job Vacancy (5 min up to 15 hr)

CAREER

- What would you like to be doing 5 years from now?
- What would you like your career path to be?
- Why did you bid for this company / vacancy?

JOB DESCRIPTION

- "Sell" the job
- Give measured information about the position and the enterprise
- What do you think? Why?

BEHAVIOURAL ISSUES / PRACTICAL TESTS

If pertinent, some behavioural questions can still be made here for completing the information

ADMINISTRATIVE AND FINANTIAL ASPECTS OF THE POSITION

- Availability for starting the job
- Type of contract
- Salary discussion

PHASE 4: Conclusion

- Next steps of the selection process
- Still asking the applicant if he/she wants to give further information or ask another question

4.8. JOB INTERVIEW QUESTIONS

Different kinds of questions shed light on what drives a candidate to succeed and how their motivations can positively impact the position. It also determines their drive and desire to adapt as well as highlights different skills and abilities to see if the candidate would fit to the position. There are different kinds of questions e.g.:

Background questions

Emphasis on work experience, education, training and other qualifications

Job knowledge questions

Description and demonstration of knowledge, skills and abilities (KSAs) which are relevant for the job. These are normally highly specialised questions.

- Situational questions – forward looking

Applicants are asked to imagine a row of circumstances and then announce how they would react in this situation

Advantage:

- Applicants prefer to answer to hypothetical situations than to describe exact experiences from their past
- Can be exactly brought into connection with the job and the interviewer can develop an assessment thread

- Behaviour / Competencies based questions – backward looking

Applicants explain what they did in earlier jobs or situations in life that were relevant for the specific job knowledge, skills and abilities.

Advantage: past behaviour is a very good predictor for future behaviour in the same situation

Example: Give an example of a problem situation you had to solve. What was the problem? What did you do? What was the result?

Other examples of behaviour based questions/competence based questions can be found in the interview script on section 4.7.5. and on the website of the Vintage Project (<http://www.learningcom.it/vintage/>). The competences found in this website are based on the 8 competences on the Council of the European Union (2018) recommendation document. There are “situations” proposed by the authors that can be used directly, and also questions can be formulated based on them.

The answers to these type of questions can be evaluated by the STAR-Method.

4.8.1. STAR METHOD EVALUATION FOR BEHAVIOURAL QUESTIONS

STAR is an acronym for Situation, Task, Action and Result and is a method for evaluating a behaviour-based interview. It is about the past behaviour that predicts future behaviour. The point is to comprehend skills and behaviour patterns of a candidate more specifically.

One should consider the complete answers, that is, the one in which the candidate describes:

S = Situation (lived by the candidate)

T = Task (that is going to develop)
A = Action (done)

R = Result (obtained after the action)

STAR Method - Good Response Example

Question example for Problem Solving competence:

Give an example of a problem situation you had to solve. What was the problem? What did you do? What was the result?

SITUATION: Well, the company where I worked, had supply problems, that is, the suppliers delayed the delivery of material, which caused the entire production process to be postponed.

TASKS: As the new Production Director, the company asked me to solve these supply problems with the suppliers concerned.

ACTION: The first thing I did was to identify exactly which raw materials were late and their suppliers, trying to figure out if the reasons for the delay were their responsibility or because of the internal processes of the company. I discovered that there were problems of the two types! I resolved what was needed internally and talked to suppliers to ask them for preferential treatment on future orders from our company so that delivery would be timely.

RESULTS: The raw materials started to arrive in time and the company improved its profitability, shortening its production processes.

4.8.2. INTERVIEW PROCEDURE

The procedure of a job interview is normally a face-to-face, telephone or video conference between a minimum of two persons. It is an interaction between the behaviour and the thoughts of both parties – continual process in which information is handled and informs subsequently about behaviour, thoughts and evaluation. Consequently the behaviour has a leakage of information in both directions, be it positive or negative.

This could influence the behaviour (self fulfilling prophecy):

- Increasing concern and nervousness
- Support of wellbeing and a better performance

Interviewers must pay attention to what the applicant says and how they behave by taking notes and the evaluation of the answers of the applicants to their questions and handle the spoken and the behaviour afterwards.

The interview process consists of 3 phases:

Pre-interview phase	<ul style="list-style-type: none"> • Definition of the profile of the ideal candidate • Process of contacting candidates – questions such as schedule availability, job location or others may be discouraging for the candidate
	<ul style="list-style-type: none"> • Evaluation of submitted résumés, test scores, social networking site information of interested applicants
	<ul style="list-style-type: none"> • Collection of additional information in social media
	<ul style="list-style-type: none"> • Selection of the most to be contacted to have an interview suitable applicants
	<ul style="list-style-type: none"> • There are already perceptions formed by the interviewers from this information, characteristics that would make an individual ideal or qualified for the position

Interview phase	<ul style="list-style-type: none"> • The actual conduct of the interview, the interaction between interviewer(s) and applicant • Separately form an evaluation of the interviewee's qualifications for the position taking into consideration all information
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Post-interview phase	<ul style="list-style-type: none"> • Selection of the most desirable applicant(s)
	<ul style="list-style-type: none"> • Negotiation of a job offer
	<ul style="list-style-type: none"> • Final decision

4.8.3. EVALUATION

The method of “structured recall” has proven itself to prevent stereotypes from distorting the recollection of the answers of the candidates:

- After the interview go through each question
- Remember first the positive aspects of the answers given by the candidates to the questions
- Then remember the negative aspects of the answers given by the candidates to the questions
- Consult the notes
- Only after, evaluate the performance of the candidates according to the behaviourally based scale
-

Carry out the overall evaluation subsequently by adding up the total of points reached by each candidate¹⁷.

4.8.4. TOOLS IN USE

Prerequisite Form:

Document at the beginning of the process to validate the applicant's access to the Assessment Centre.

Reference profile including the competency the job requires

(Essential – must contain precise definitions of all criteria necessary for the specific position (technical, professional, language skills, experience, know-how, personal skills, values,) therefore has to be adapted per position and enterprise.

Semi-structured and competency-based interview

This is a structured interview with a series of standard questions. Every applicant is going through the same process with exactly the same questions, in order to ensure an objective and fair process. The interviewer may be one person or a panel.

Final individual assessment form: synthesis of assessors' observations

Done by each assessor individually

Final assessment form

Individual evaluation will be discussed and will be put into one common template by all assessors. Signed by all assessors.

¹⁷ Welpe, 2015.

5. GENDER SPECIFIC ASSESSMENT IN THE CASE OF EVALUATION CRITERIA

Full-time employment is the standard for this evaluation. Since women are often found in part-time employment there are two discriminations (performance and worked hours): it is not the performance as a focus for payment decisions but the number of hours worked. The working hours of a full-time employee limit the wage. Lower performance readiness and too much private orientation are attributed to part-time employees.

When drawing up performance criteria the job is of central importance and closely personal criteria. In this case for example assertiveness is not an aspect of gender neutral criteria.

It is important that the criteria are not too detailed (see CTI), so an arbitrary evaluation is possible and choice is not created by means of the diversity of upper and lower criteria which could be argued by the apparent objectivity of the catalogue.

In the choice of the criteria significance it to be put on all skills including the social skills/work related competences. It is important that those skills which are ascribed to women, because of their jobs in the female dominated sector, receive the same assessment and evaluation as others. So that discrimination does not arise again through the avoidance of criteria attention must be paid to the exact description and the relevance of the job. Leadership abilities are too global and clearly refer to male gender stereotypes.

5.1. OBJECTIVITY IN SELECTION PROCESSES SPECIFICALLY APPLIED TO THE GENDER ISSUE

To guarantee a gender neutral stance it is essential that personnel managers are conscious of the mechanisms, which lead to and confirm bias.

5.1.1. NUDGING

To “nudge” means to push or to shove. It describes strategies, which lead to decisions without continually making the same mistakes. By using indirect tips, suggestions and alterations of the surrounding information influence can be taken on motives and decisions. The aim is to steer people into a certain predictable direction.

Re-framing:

The provision of relevant and irrelevant information about a fact influences a certain opinion of the individual. In making decisions people give more importance to information that is easily available. So it is simpler to explain a woman’s behaviour by her biological precondition than by a confrontation with complicated matter like analysing the performance according to certain criteria.

Direction-Nudge:

Nudging aims to encourage or persuade someone to do something in a way that is gentle rather than forceful or direct. For example the offer of childcare by a company. Especially important in the concept Nudging is that no options may be forbidden. The deciding context is changed so women take the required or set direction.

Default-Options:

Starting from a regulation, which is valid for everyone, from which the individual can opt out. For example everyone is enrolled for further training. Those who are not interested can cancel. A much higher rate of acceptance will be reached this way than people asking to sign in voluntarily. An example: person responsible for selection is offered training on sensitisation.

Gender neutral personnel decisions by the Evaluation Nudge:

The distorted perception of gender, which arises from traditional pictures, is called “gender bias”. Stereotypes organise the social values in categories to be able to understand complicated connections. Stereotypes are „a set of beliefs about the personal attributes of a group of people“¹⁸, being that gender stereotypes, are among them, deriving from beliefs about characteristics that differentiate men and women roles in society¹⁹. As soon as a person is seen his/her gender is noticed and it can come to unconscious discrimination, which cannot be explained rationally.

The Evaluation Nudge was tested to react appropriately to this circumstance. The findings were that more objective results are reached when several applicants are interviewed at the same time. By means of the explicit comparison the gender of the applicant moved into the background and the performance into the foreground. The custom of interviewing individual applicants should be altered regarding the search for the best candidate²⁰.

5.1.2. PRIMACY AND RECENCY EFFECTS

Human processing information biases and how it can be mitigated regarding gender in order to highlight effects, inside the topic and how to imitate them.

Primacy Effect – the first impression

Within a split second the brain decides whether a person is trustworthy and likeable. Immediately an evaluation and a judgment is made according to the attitude. “There is no second chance for the first impression” is a popular saying and theory but also applied custom. This small time window decides about the application, the questioning and the setting of tasks during the whole job interview. Once the personnel manager has formed a picture in his/her head, which contradicts a woman in the position the woman, will either have no chance in the selection process or she will have to be very much better than her opponents²¹.

¹⁸ Ashmore and Del Boca, 2015, pp.16

¹⁹ Ashmore & Del Boca, 2015.

²⁰ Wondrak, 2018.

²¹ Wondrak, 2015.

Recency Effect – the final impression:

The Recency Effect is the tendency of a person to evaluate the last points as better than the previous ones. By which the evaluation of the last is similar to the judgment of the first. It relates to the evaluation of the first and the last actions as being far better than those in the middle. Where as the Primary Effect passes more into the long-term memory the Recency Effect applies more to the short-time memory.

Exactly in selection processes this knowledge is decisive. If the personnel manager gives his/her evaluation immediately after the discussion the Primary Effect decides. If he/she evaluates after several discussions the Recency Effect is more conclusive.

Reduction of the Effect:

- Impressions between the first and the last are remembered less. The effort to see all impressions equally and to handle in a reflected manner is the first step to neutral personnel decisions.
- Well prepared documents and the consistent taking of notes can help not to forget what was said or be covered up by emotions/impressions.
- The observation during the interview and the whole selection process should be planned. Well-chosen exercises in an assessment centre facilitate many perspectives and other impressions in different situations.
- As already described in Evaluation Nudge: candidates should be assessed together and not one after the other so that the performance and skills are put to the foreground and the gender to the background and “unconscious biases” can be reduced²².

5.1.3. HALO – EFFECT

As in a halo some characteristics outshine the assessment and lead to a likeable impression of a person. At the same time positive features are assumed. Especially a person's striking features like good looks generate a positive impression and distort the overall impression. Of course the same happens with negative features. Gender stereotypes and role models tower above perception. Performance behaviour and ability as well as other attributes are evaluated according to pictures of the personnel manager. To do a gender free decision, criteria are required.

5.1.4. PROJECTION

The transfer of one's own characteristics onto the candidate and seeing them as their own. Persons who seem to be equal in values, opinions and perspectives are assessed more favourably than others. This can be particularly recognized in the recruitment process of women. Concerning to the issue that the recruiter is male.

²² Wondrak, 2016.

5.1.5. CONTRAST EFFECT

These unconscious biases lead to more intensive realisation of information, which stands in contrast to another. Especially in assessment centres this effect can often be observed. The comparison of a bad performance to a moderate one allows the moderate one to seem better than when compared to a very good one. It is all the more important to apply clear standards, to document these and also to use several different methods²³.

5.1.6. COGNITIVE DISTORTIONS

To trust in intuition is not appropriate in selective processes. There are sufficient selection procedures and methods to find the best applicant. The approach Person-Organisation Fit shows that the danger of the constant reproduction of the same pattern/values can slow down economic growth. Intuition is not verifiable and may have nothing to do with the candidate. The “hedonistic distortion” leads to a conscious evaluation to the benefit of the assessed person²⁴.



²³ Wondrak, (2015)

²⁴ Soll, Milkman & Payne, (2015)

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APPENDICES



APPENDIX 1 – GENERAL COMPETENCIES FOR EMPLOYMENT QUESTIONNAIRE

Below you will find a set of statements about how you act. Identify the frequency at which each statement happens by thinking about how you usually behave and not how you like or should behave. There are no right or wrong answers; there are simply different ways of dealing with situations. Be as true as possible.

1	2	3	4	5	
Hardly Ever	Rarely	Sometimes	Frequently	Almost Every Time	
1) I take the initiative, trying new ways to do my tasks	1	2	3	4	5
2) I like new challenges, which force me to think of new ways to develop my tasks / my work.	1	2	3	4	5
3) I like to present solutions when I see situations that can be improved.	1	2	3	4	5
4) I do not like it when a new method is proposed that forces me to change the way I work.	1	2	3	4	5
5) I need to be motivated for work-related tasks.	1	2	3	4	5
6) I like routines and avoid making changes to my day-to-day life.	1	2	3	4	5
7) I prefer others to set my priorities.	1	2	3	4	5
8) I focus on what is most important and do not get distracted by other activities.	1	2	3	4	5
9) I can not complete the execution of the tasks in the time I initially estimated.	1	2	3	4	5
10) I consider it important to know exactly who is responsible for each task and with whom I should articulate.	1	2	3	4	5
11) When I am developing an important activity, I perform various tasks. It is very difficult to advance step by step.	1	2	3	4	5
12) I always start with the tasks I enjoy less.	1	2	3	4	5
13) During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.	1	2	3	4	5
14) In a situation of tension, I manage my impulses.	1	2	3	4	5
15) I feel at ease when I speak in public.	1	2	3	4	5
16) When someone is not nice to me, I will have a similar response.	1	2	3	4	5
17) When I fail, I moan about it and blame myself.	1	2	3	4	5
18) I consider that seeing how everyone feels in the team is a waste of time, since acting quickly is necessary.	1	2	3	4	5
19) When someone asks me for something inappropriate, I say 'no' easily.	1	2	3	4	5
20) When someone criticizes me, I try to understand if he/she is right in the criticisms.	1	2	3	4	5

Gender M ☐ F ☐; Age _____;

Work experience:

- ☐ No experience or student; ☐ little experience (up to 3 years); ☐ With some experience (3 to 7 years);
☐ With much experience (more than 7 years)

Type of work experience:

- ☐ Work for others; ☐ Self-Employment Experience (self-employed/free-lancer);

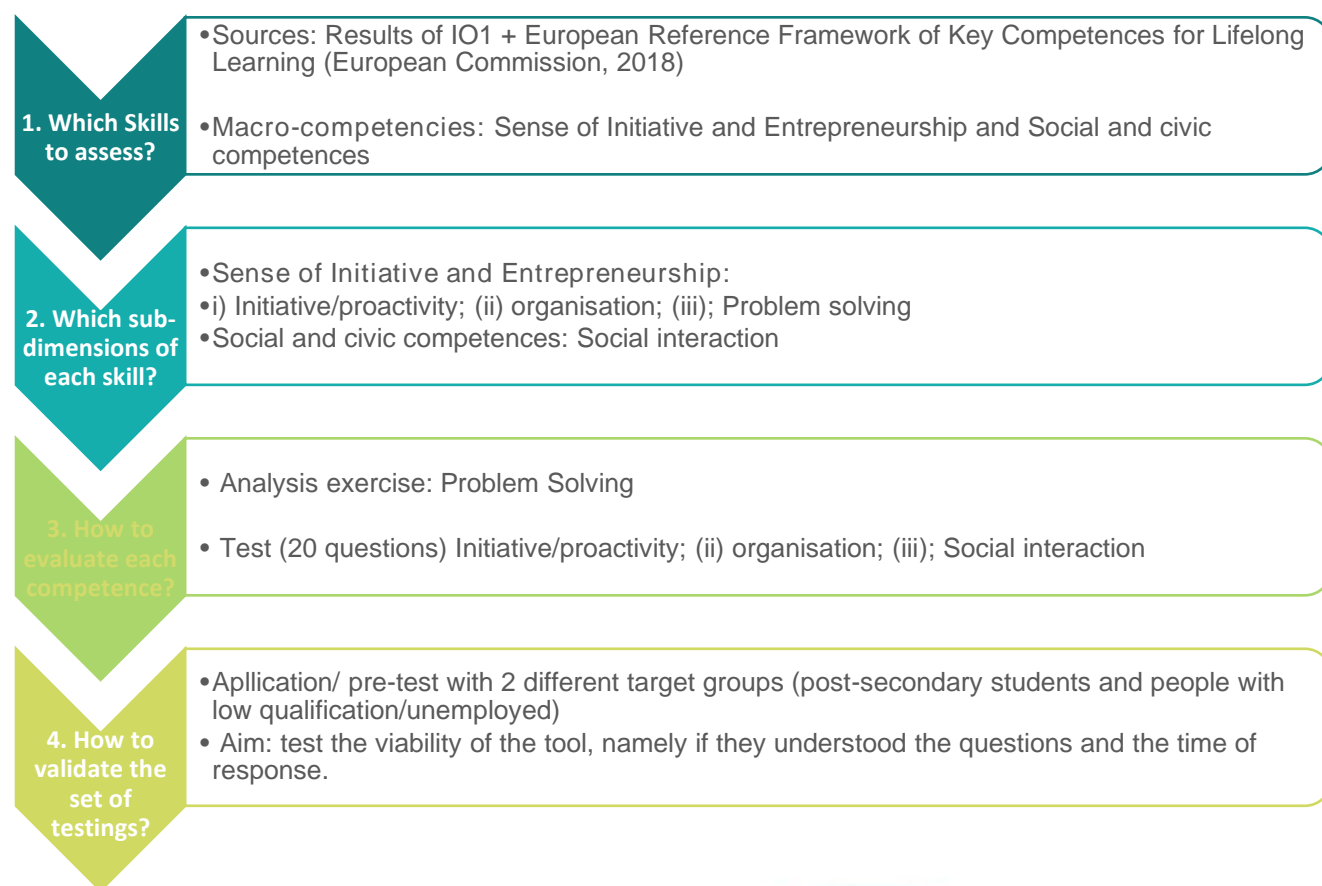
☐ Self-Employment Experience (employer)

Level of schooling:

☐ Incomplete Basic Education; ☐ Basic Education (9th grade); ☐ Incomplete secondary education; ☐ Secondary education (12th grade); ☐ Higher Education Attendance; ☐ Higher Education

We appreciate the participation.

APPENDIX 2 - Methodology: Gender Neutral Selection Test And Analysis Exercises



1. Which skills to assess?

Main sources: from the results of the IO1: interviews + international studies, namely:

a) World Economic Forum (Gray, 2016) top 10 skills required for workers, as defined in Table 4, are: 1. Complex Problem Solving; 2. Critical Thinking; 3. Creativity; 4. People Management; 5. Coordinating with Others; 6. Emotional Intelligence; 7. Judgment and Decision Making; 8. Service Orientation; 9. Negotiation; 10. Cognitive Flexibility.

b) Proposal European Reference Framework of Key Competences for Lifelong Learning (Council of the European Union, 2018) the key skills are: i) Literacy competence; ii) Languages competence; iii) Science, technological, engineering and mathematical competence; iv) Digital competence; v) Personal, social and learning competence; vi) Civic

competence; vii) Entrepreneurship competence; and viii) Cultural awareness and expression competence.

We chose the following macro-competences: Sense of Initiative and Entrepreneurship and Social and civic competences

2. Which sub-dimensions of each competence?

2.1. SOURCES:

- a) Vintage Assessment Tool : <http://www.learningcom.it/vintage/>
- b) O*NET Content Model - <https://www.onetcenter.org/content.html>
- c) Mind Tools – Problem Solving,
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2.2. MACRO COMPETENCE: SENSE OF INITIATIVE AND ENTREPRENEURSHIP

“Sense of Initiative and Entrepreneurship Competence is the ability to turn ideas into action, with an emphasis on creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. By developing your competence in these domains, it will support you in being aware of the context of your work and being able to seize opportunities in your personal and professional lives.

This competence is also a foundation for more specific skills and knowledge needed by individuals who wish to establish or contribute to social and/or commercial activity. In this way, these skills should include awareness of ethical values and promote good governance.” (<http://www.learningcom.it/vintage/>)

From this macro competence, according to our sources, it was adequate to study the following:

- i) Initiative/proactivity;

- ii) Organisation;
- iii) Problem Solving

i) Initiative/proactivity

“Job requires a willingness to take on responsibilities and challenges” (The O*NET® Content Model)

“Taking action to achieve goals; identify opportunities for improvement in their work and propose alternatives and solutions; open to new ideas, work methodologies and challenges; recognizes the creativity and contribution of others; resorts to non-successes as opportunities for improvement and builds constructive debates based on distinct ideas and disagreements”.

"Identify possible needs and / or difficulties so as to minimize them in the future through the presentation of solutions".

Sub-dimensions of the competence: (i) Open to new ideas and work methodologies; (ii) identify opportunities for improvement in their work and propose alternatives and solutions

Sub-dimension	Item
Open to new ideas and work methodologies	Q1. I do not like it when a new method is proposed that forces me to change the way I work Q2. I like routines and avoid making changes in my daily life. Q3. I like new challenges, which force me to think of new ways to develop my tasks / my work.
Identify opportunities for improvement in their work and propose alternatives and solutions	Q4. I like to present solutions when I see that situations can be improved. Q5. I need to be motivated for work-related tasks Q6. I take the initiative, trying out new ways to do my tasks.

ii) Organisation

- Organising your time,
- Establishing a course of action for the self and/or others to accomplish specific goals;
- Effectively managing work, which implies categorizing tasks according to their controllability, defining priorities, makes plans and establishes the time spent in them.
- Performing tasks which show your organisational skills in a semi-professional capacity. This could include organising a local event with the help of others.
- Performing tasks which show your organisational skills in a professional capacity. This could include managing resources, people and/or events, and having confidence in your ability to complete your tasks in an organised and timely manner.

Sub-dimensions of the competence: (i) Identification / Distinction of priorities; (ii) Resource management (time, people, financial resources); (iii) Planning: establishment of organizational and control procedures (with reassessment of the initial plan, integrating contingencies)

Sub-dimension	Item
Identification / Distinction of priorities	Q1. I prefer others to set my priorities. Q2. I focus on what is most important and do not get distracted by other activities.
Resource management (time, people, financial resources)	Q3. I cannot complete the time I initially estimated for the execution of the tasks Q4. I consider it important to know exactly who is responsible for each task and with whom I should articulate
Planning: establishment of organizational and control procedures (with reassessment of the initial plan, integrating contingencies)	Q5. When I am developing an important activity, I perform various tasks. It is very difficult to advance step by step. Q6. I always start with the tasks I like the least. Q7. During the performance of my projects I identify deviations which leads me to adjust the plan to achieve the objectives.

iii) Problem solving

“Complex Problem-Solving Skills — Developed capacities used to solve novel, ill-defined problems in complex, real-world settings. [...] Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.” (O*NET Content Model, pp. 8-9)

Sub-dimensions of the competence: (i) identifying the problem; (ii) data collection; (iii) generating ideas and evaluating ideas; (iv) planning the implementation; (v) evaluating the solution.

Sub-dimension	Item
Problem identification	Q1. Please identify which problem(s) you are experiencing.
Data collection	Q2. Please indicate whether you would need to collect additional information and, if so, what would you do
Generation of ideas and evaluation of ideas	Q3. Please provide several possible alternatives to solving the problem and point out its pros and cons
Implementation planning	Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions would you take to implement your idea.
Evaluation of the solution	Q5. Given the situation, what would you consider a good result? What lessons have you learned from this situation?

2.3. MACRO COMPETENCE: SOCIAL COMPETENCE

“Social competence refers to personal, interpersonal and intercultural competence and all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life. It is linked to personal and social well-being. An understanding of codes of conduct and customs in the different environments in which individuals operate is essential. “

From this macro competence, according to our sources, it was adequate to study the Social interaction competence.

- Evaluates effectiveness in social interaction.

- Measure the extent to which the person can interact with different social actors / actresses in order to achieve the goals he / she proposes at the immediate, short or long term.
- To what extent does the person generate behaviour's, emotions, and thoughts in a way that interacts socially for the purpose of achieving group results.
- It involves dealing with intra and interpersonal conflicts, being honest, respecting others and valuing teamwork.
- It matters to participate, be confident, deal with criticism, be professional, emotionally mature, and consider the points of view of others.

Sub-dimensions of the competence: (i) Social self-control; (ii) Confidence in public speaking; (iii) Coping with negative feedback; (iv) Empathy and social awareness ; (v) Assertiveness.

Sub-dimension	Item
Social self-control	Q1. In a situation of social tension I manage my impulses. Q2. When someone is unpleasant to me, he/she will have a similar answer.
Confidence in public speaking	Q3. I feel at ease when I speak in public.
Coping with negative feedback	Q4. When I fail in group, I'll think about it and blame myself. Q5. When someone criticizes me, I try to understand if it is right in the critical.
Empathy and social awareness	Q6. It is necessary to act quickly. Consider how each one feels in the team is a waste of time.
Assertiveness	Q7. When someone asks me for something inappropriate, I have no difficulty in saying no.

3. How to evaluate each competence?

Analysis exercise: Problem Solving

Test (20 questions) Initiative/proactivity; (ii) organisation; (iii); Social interaction

Problem Solving will be evaluated through 2 analysis exercises.

Initiative/proactivity; organisation; and social interaction will be evaluated through a 20 questions test with a five point Likert scale (1 Hardly ever happens – 5 Happens almost every time)

4. How to pre-validate the set of tests?

Both tools (problem solving exercises and the 20 questions test) were applied to 2 target groups (Post-secondary students; people with low qualification and unemployed) to test the usability of the tools, if it was understandable and the time of response. This was performed between the 4th and the 22nd of June 2018 in Porto, Portugal.

4.1. ANALYSIS EXERCISES (PROBLEM SOLVING)

Results of the validation process:

- ✓ The exercises are understood by people with low qualification (lower than the secondary qualification, with variable work experience and unemployed for a long time), but is difficult for them to write all that is necessary.
- ✓ The exercises took between 20 and 30 minutes to respond (total time 50 minutes for the post-secondary population; it was not written for the low qualification population, the exercise was answered verbally).
- ✓ Some minor changes were made, due to some comments.

4.2. TEST (20 QUESTIONS LIKERT SCALE)

Results of the validation process:

- ✓ The test can be applied to both populations, even the low qualification found it easy to respond
- ✓ The test took between 5 and 10 minutes to respond
- ✓ Some questions were re-written considering the comments.

4.3. VALIDATION WITH ALL PARTNERS

4.4. REVERSE TRANSLATION IN EACH COUNTRY

4.5. ONLINE TESTING ON DEDICATED PLATFORM (DATA COLLECTED BETWEEN 01.08.2018 AND 28.02.2019).



APPENDIX 3 – NATIONAL GENERAL COMPETENCIES FOR EMPLOYMENT QUESTIONNAIRE



APPENDIX 3.1 – General Competencies for Employment Questionnaire (AUSTRIA)

3.1.1. Test

3.1.2. Interpretation

3.1.3. Statistical Information



3.1.1. Test

Bestandsaufnahme der beruflichen Kompetenzen

Untenstehend finden Sie eine Auflistung an Aussagen zu Handlungsweisen. Denken Sie über jede Aussage nach und kreuzen Sie die Häufigkeit an mit der Sie üblicherweise so reagieren, nicht wie sie gerne würden oder wie sie glauben, dass sie sollten. Es gibt keine falschen Antworten, es gibt nur unterschiedliche Wege mit verschiedenen Situationen umzugehen. Bitte antworten Sie so ehrlich, wie möglich!

1	2	3	4	5	
Fast nie	Selten	Manchmal	Häufig	Fast immer	
1) Ich übernehme die Initiative, probiere neue Wege aus, um meine Aufgaben zu erfüllen	1	2	3	4	5
2) Ich mag neue Herausforderungen, welche mich zwingen neue Wege hinsichtlich der Erfüllung meiner Aufgaben nachzudenken.	1	2	3	4	5
3) Ich präsentiere gerne Lösungen, wenn ich feststelle, dass Situationen verbessert werden können.	1	2	3	4	5
4) Ich mag es nicht, wenn eine neue Methode vorgeschlagen wird, die mich zwingt, meine Arbeitsweise zu ändern	1	2	3	4	5
5) Ich muss für arbeitsbezogene Aufgaben motiviert werden.	1	2	3	4	5
6) Ich mag Routine und vermeide Veränderungen in meinem Alltag.	1	2	3	4	5
7) Ich ziehe es vor, wenn andere meine Prioritäten setzen.	1	2	3	4	5
8) Ich fokussiere mich auf das Wesentlichste und lasse mich nicht von anderen Tätigkeiten ablenken.	1	2	3	4	5
9) Ich kann meine Aufgaben nicht in der Zeit durchführen, die ich ursprünglich dafür angesetzt habe.	1	2	3	4	5
10) Ich finde es wichtig, zu wissen, wer genau für welche Aufgabe verantwortlich ist und mit wem ich mich austauschen sollte.	1	2	3	4	5
11) Bei der Durchführung einer wichtigen Aufgabe, erledige ich mehrere Dinge gleichzeitig. Für mich ist es schwierig Schritt für Schritt vorzugehen.	1	2	3	4	5
12) Ich beginne immer mit der Aufgabe, die ich am wenigsten mag.	1	2	3	4	5
13) Während der Umsetzung meines Projekts erkenne ich Abweichungen, die mich veranlassen, den Plan zur Zielerreichung zu ändern.	1	2	3	4	5
14) In angespannten Situationen beherrsche ich meine Stimmungen.	1	2	3	4	5
15) Beim Sprechen vor anderen fühle ich mich angespannt.	1	2	3	4	5
16) Wenn jemand nicht nett mit mir ist, behandle ich ihn ebenso.	1	2	3	4	5
17) Wenn ich scheitere, jammere ich und gebe mir selbst die Schuld.	1	2	3	4	5
18) Ich denke wahrzunehmen wie sich jeder in einem Team fühlt ist zeitverschwendung, da schnelles Reagieren notwendig ist.	1	2	3	4	5
19) Wenn mich jemand um etwas Unangemessenes bittet, fällt es mir leicht "nein" zu sagen.	1	2	3	4	5
20) Wenn mich jemand kritisiert, überlege ich, ob die Kritik berechtigt ist.	1	2	3	4	5

Geschlecht M ☐ W ☐; Alter _____;

Arbeitserfahrung:

☐ Keine Erfahrung oder Student*in; ☐ Wenig Erfahrung (unter 3 Jahren); ☐ Etwas Erfahrung (zwischen 3 und 7 Jahren); ☐ Viel Erfahrung (mehr als 7 Jahre)

Art der Arbeitserfahrung:

☐ Angestellt*r; ☐ Selbstständig /Free Lancer ☐ Unternehmer*in/Arbeitgeber*in

Ausbildung:

☐ kein Pflichtschulabschluss; ☐ Pflichtschulabschluss ☐ nicht abgeschlossene Berufsbildende Schule oder
Gymnasium; ☐ Maturaabschluss ☐ im Studium; ☐ Studienabschluss

Danke für Ihre Teilnahme.



3.1.2. Quotation & Interpretation

In Austria, employers and evaluators can use 6 items, of the total of 20 items of the scale to evaluate the Professional Competencies with statistical relevance: they have discriminative power and sensitivity to compare different candidates. The items to use in Austria are:

Q1. I take the initiative, trying new ways to do my tasks

Q2. I like new challenges, which force me to think of new ways to develop my tasks/my work

Q3. I like to present solutions when I see situations that can be improved.

Q7. I prefer others to set my priorities

Q8. I focus on what is most important and do not get distracted by other activities.

Q9. I cannot complete the execution of the tasks in the time I initially estimated.

Items 7 and 9 should be quoted in reverse.

Considering there are five points of agreement in the scale, and that there are 6 items, the score ranges from 6 to 30 points.

To interpret results, we defined 5 levels of performance regarding average, adapted to Austrian context:

Much below average - 10 to 16 points

Below average - 17 to 19 points

On average - 20 to 22 points

Above average - 23 to 25 points

Well above average - 26 to 30 points.



3.1.3. Statistical information

1. Descriptive statistics

Table I – Frequencies of AUSTRIAN sample (N=200)

VARIABLE	N	%
Gender		
Man	97	48,5
Women	103	51,5
Age		
16 to 25	63	31,5
26 to 35	40	20,0
36 to 45	38	19,0
46 to 55	47	23,5
56 to 65	12	6,0
> 65	--	--
Education		
< Basic	--	--
Basic	45	22,5
Secondary (incomplete)	8	4,0
Secondary	80	40,0
Degree (incomplete)	16	8,0
Degree	51	25,5
Professional Experience		
None or student	64	28.4
Few experience (3 years)	55	24.4
Some experience (3 to 7 years)	30	13.3
Great experience (> 7 years)	76	33.8
Target group		
PA	51	22.5
SME	99	44.0
PSPE	75	33.3

As we can see from the previous table, we have a gender balance (48.5% of men and 51.5% of women), the largest age group being the group of the youngest (16 to 25 years) with 31.5% of the sample, and the least representative group, ranging from 56 to 65 years (6.0%). The vast majority of the sample has completed secondary education (40%), attended higher education (8%) or has a higher education degree (25.5%), with 2.5% having basic education or not completed secondary education (4%). In terms of experience the majority have more than 7 years of professional experience (54%), 20.5% have some experience, 12.5 few and 13% none. The three groups defined as targets are more or less equivalent.

2. Gender differences

Before starting the analyses of validity of the test it is important to verify if men and women are evaluated differently in each one of these items. This procedure aims to ensure that the test to be made available to future selective processes ensure that there is no gender discrimination. We can then see in the following table that women are evaluated more positively and statistically significantly in items: 10. I consider it important to know exactly

who is responsible for each task and with whom I should articulate [Z(U)=5 951,5; p=.015], 11. When I am developing an important activity, I perform various tasks. It is very difficult to advance step by step [Z(U)=5 768,0; p=.049], 14. In a situation of tension, I manage my impulses [Z(U)=6 592,0; p=.000], 15. I feel at ease when I speak in public [Z(U)=3 794,0; p=.003], 16. When someone is not nice to me, I will have a similar response [Z(U)=3 484,0; p=.000], 17. When I fail, I moan about it and blame myself [Z(U)=3 859,5; p=.004], 18. I consider that seeing how everyone feels in the team is a waste of time, since acting quickly is necessary [Z(U)=5 814,0; p=.038] and 20. When someone criticizes me, I try to understand if he/she is right in the criticisms [Z(U)=6 901,0; p=.000]. So, we will have to proceed with the removal of these items from the scale, since the objective will be “present a gender-neutral instrument”.

3. Validity of instrument

The data obtained in this study are not parametric (they do not obey the normal curve). We did analysis of gender differences with the scale items (U of Mann-Whitney) and this analysis identified 8 items with statistically significant differences between men and women (previously described). With the remaining 12 items we proceeded to study the homogeneity of the scale, which revealed a Cronbach alpha of .74, which seems to us a good indicator of internal consistency of the instrument. The greater the values obtained by participants in the scale, the greater their professional skills. Of the 12 remaining items we verified the correlations of the item and exclude all those that were not well correlated, for a confidence interval of 99%. We got a total of 6 items (Q1, Q2, Q3, Q7, Q8 e Q9) to measure the professional skills of the Austrian participants (which revealed a Cronbach alpha of .74.)

In summary, we can say that the 20-item scale evaluated in these 3 Austrian targets groups showed statistically significant differences between men and women, so that 8 items were withdrawn. These 12 remaining items (free of gender bias) were tested in order to have, from a conceptual and empirical point of view, the statistical robustness necessary for the instrument to be considered valid for the purpose of evaluating professional competencies. Employers and evaluators can use these 6 items because they have discriminative power and sensitivity to compare different candidates.

Table II – Reliability (Q1, Q2, Q3, Q7, Q8, Q9 and Q9).

Cronbach's Alpha	N of Items
,74	6

Table III – Items correlations (Q1, Q2, Q3, Q7, Q8 and Q9).

		Q1.	Q2.	Q3.	Q7	Q8..	Q9.
Q1. I take the initiative, trying new ways to do my tasks	Pearson Correlation	1	,455**	,480**	,432**	,234**	,251**
Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work	Pearson Correlation		1	,481**	,374**	,279**	,260**
Q3. I like to present solutions when I see situations that can be improved.	Pearson Correlation			1	,395**	,335**	,283**
Q7. I prefer others to set my priorities	Pearson Correlation				1	,227**	,188**
Q8. I focus on what is most important and do not get distracted by other activities.	Pearson Correlation					1	,249**
Q9. I cannot complete the execution of the tasks in the time I initially estimated.	Pearson Correlation						1

** . Correlation is significant at the 0.01 level (2-tailed).

According to the scores obtained by the participants of the sample for these 6 items, we established 5 levels of performance: 10 to 16 points (very low level); 17 to 19 points (low level); 20 to 22 points (average level); 23 to 25 points (upper level); and 26 to 30 points (well above).

Table IV – Level of competence (Austria)

		Frequency	Valid Percent	Cumulative Percent
Number of Points	10,00	2	1,0	1,0
	11,00	1	,5	1,5
	12,00	2	1,0	2,5
	14,00	3	1,5	4,0
	15,00	3	1,5	5,5
	16,00	11	5,5	11,0
	17,00	18	9,0	20,0
	18,00	21	10,5	30,5
	19,00	22	11,0	41,5
	20,00	13	6,5	48,0
	21,00	13	6,5	54,5
	22,00	16	8,0	62,5
	23,00	23	11,5	74,0
	24,00	7	3,5	77,5
	25,00	9	4,5	82,0
	26,00	13	6,5	88,5
	27,00	9	4,5	93,0
	28,00	8	4,0	97,0
	29,00	4	2,0	99,0
	30,00	2	1,0	100,0
	Total	200	100,0	



APPENDIX 3.2 – General Competencies for Employment Questionnaire (BULGARIA)

3.2.1. Test

3.2.2. Quotation & Interpretation

3.2.3. Statistical information



3.2.1. Test

Оценка на професионалните компетенции

По-долу ще откриете набор от твърдения за това как действате. Определете честотата, с която се случва всяко твърдение, като мислите за това как обикновено се държите, а не как искате или би трябвало да се държите. Няма правилни или грешни отговори; има различни начини за справяне със ситуациите. Бъдете възможно най-искрени.

1	2	3	4	5	
Почти никога	Рядко	Понякога	Често	Почти винаги	
1) Поемам инициативата, опитвайки нови начини, за да изпълня задачите.	1	2	3	4	5
2) Харесвам нови предизвикателства, които ме принуждават да измислям нови начини за изпълнение на моите задачи / работа.	1	2	3	4	5
3) Обичам да представям решения, когато виждам, че положението може да бъде подобро.	1	2	3	4	5
4) Не ми харесва, когато се предлага нов метод, който ме принуждава да променя начина, по който работя.	1	2	3	4	5
5) Трябва да ме мотивират за задачите, свързани с работата.	1	2	3	4	5
6) Харесвам рутината и избягвам да правя промени в ежедневието си.	1	2	3	4	5
7) Предпочитам други да определят приоритетите ми.	1	2	3	4	5
8) Фокусирам се върху най-важното и не се разсейвам с други дейности.	1	2	3	4	5
9) Не мога да приключа с изпълнението на задачите в срока, който първоначално съм определил.	1	2	3	4	5
10) Смятам за важно да знам точно кой е отговорен за всяка задача и към кого трябва да се обръщам.	1	2	3	4	5
11) Когато извършвам важна дейност, аз изпълнявам различни задачи. Много е трудно да се напредва стъпка по стъпка.	1	2	3	4	5
12) Винаги започвам от задачите, които най-малко харесвам.	1	2	3	4	5
13) По време на изпълнение на проектите ми, аз идентифицирам отклоненията, което ми позволява да коригирам плана, за да постигам целите.	1	2	3	4	5
14) В напрегнати ситуации, аз управлявам импулсите си.	1	2	3	4	5
15) Чувствам се спокойно, когато говоря пред публика.	1	2	3	4	5
16) Когато някой не е любезен с мен, аз ще му отвърна със същото.	1	2	3	4	5
17) Когато се проваля, се оплаквам от това и се обвинявам.	1	2	3	4	5
18) Смятам, че проверката на това, как всеки се чувства в екипа е загуба на време, тъй като е необходимо да се действа бързо.	1	2	3	4	5
19) Когато някой иска нещо неподходящо, казвам "не" лесно.	1	2	3	4	5
20) Когато някой ме критикува, се опитвам да разбера дали той / тя има право в критиките.	1	2	3	4	5

Пол М ☐ Ж ☐; Възраст _____;

Трудов опит: ☐ Без опит или учащ ☐ Малък опит (до 3 години) ☐ С опит (3-7 години) ☐ С много опит (над 7 години)

Вид трудов опит:

☐ опита като наето лице ☐ Опит самостоятелно заето лице ☐ Опит като работодател

Образователна степен:

☐ Незавършено основно образование ☐ Основно образование (до 8 клас)

☐ Незавършено средно образование ☐ Средно образование (12 клас) ☐ Незавършено висше образование ☐ Висше образование

Благодарим Ви за участието



3.2.2. Quotation & Interpretation

In Bulgaria, employers and evaluators can use 9 items, of the total of 20 items of the scale to evaluate the Professional Competencies with statistical relevance: they have discriminative power and sensitivity to compare different candidates. The items to use in Bulgaria are:

Q1. I take the initiative, trying new ways to do my tasks

Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work

Q3. I like to present solutions when I see situations that can be improved.

Q7. I prefer others to set my priorities

Q8. I focus on what is most important and do not get distracted by other activities.

Q10. I consider it important to know exactly who is responsible for each task and with whom I should articulate.

Q13. During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.

Q14. In a situation of tension, I manage my impulses

Q20. When someone criticizes me, I try to understand if he/she is right in the criticisms.

Item 7 should be quoted in reverse.

Considering there are five points of agreement in the scale, and that there are 9 items, the score ranges from 9 to 45 points.

To interpret results, we defined 5 levels of performance regarding average, adapted to the Bulgarian context:

Much below average - 14 to 23 points

Below average - 24 to 26 points

On average - 27 to 31 points

Above average - 32 to 37 points

Well above average - 38 to 45 points.



3.2.3. Statistical information

1. Descriptive statistics

Table I – Frequencies of BULGARIAN sample (N=225)

Variable	N	%
Gender		
Man	96	42.7
Women	129	57.3
Age		
16 to 25	67	31.6
26 to 35	77	36.3
36 to 45	39	18.4
46 to 55	21	9.9
56 to 65	8	3.8
> 65	--	--
Education		
< Basic	--	--
Basic	--	--
Secondary (incomplete)	39	17.3
Secondary	6	2.7
Degree (incomplete)	46	20.4
Degree	134	59.6
Professional Experience		
None or student	64	28.4
Few experience (3 years)	55	24.4
Some experience (3 to 7 years)	30	13.3
Great experience (> 7 years)	76	33.8
Target group		
PA	51	22.5
SME	99	44.0
PSPE	75	33.3

As we can see from the previous table, we have gender balance (42.7% of men and 57.3% of women), the largest age group being the group from 26 to 35 years old with 36.3% of the sample, and the least representative group, ranging from 56 to 65 years old (3.8%). The vast majority of the sample has completed a degree (59.6%), or has attended higher education (20.4%), with 17.3% not having completed secondary education and 2.7% with secondary education. Regarding professional experience 33.8% have more than 7 years, 13.3% have some experience, 24.4% few and 28.4% none. The three groups defined as targets are more or less equivalent, with a slight higher representativeness of the SME group.

2. Gender differences

Before starting the analyzes of validity of the test it is important to verify if men and women are evaluated differently in each one of these items. This procedure aims to ensure that the test to be made available to future selective processes ensures that there is no gender discrimination. Gender is evaluated differently and with statistical significance in item: Q12. I always start with the tasks I enjoy less [$Z(U)=-2.047$; $p=.025$]. So, we removed item Q12 from the scale, since the objective will be “present a gender-neutral instrument”.

3. Instrument validity

The data obtained in this study are not parametric (they do not obey the normal curve). We did analysis of gender differences with the scale items (U of Man-Whitney) and this analysis identified 1 item with statistically significant difference between men and women (previously described). With the remaining 19 items we proceeded to study the homogeneity of the scale, which revealed a Cronbach alpha of .75, which seems to us a good indicator of internal consistency of the instrument. The greater the values obtained by participants in the scale, the greater their professional skills.

Although the scale has a good internal consistency, we opted for a more conservative attitude and analyzed the correlations among the items, excluding all those that were not statistically significant at 99% confidence. With this action, we get a scale of 9 items (Q1, Q2, Q3, Q7, Q8, Q10, Q13, Q14, Q20), obtaining a Cronbach alpha of .85. Employers and evaluators will be able to use this 9-item scale to distinguish applicants in terms of professional competencies with greater confidence.

In summary, we can say that the 20-item scale evaluated in these 3 Bulgarian target groups showed statistically significant differences between men and women, so that 1 item was withdrawn. The 19 remaining items (free of gender bias) were tested in order to have, from a conceptual and empirical point of view, the statistical robustness necessary for the instrument to be considered valid for the purpose of evaluating professional competencies: 9 itens were left.

Table II – Reliability (Q1, Q2, Q3, Q7, Q8, Q10, Q13, Q14, Q20).

Cronbach's Alpha	N of Items
.85	9

Table III – Items correlations (Q1, Q2, Q3, Q7, Q8, Q10, Q13, Q14, Q20)

	Q1.	Q2.	Q3.	Q7.	Q8. I	Q10. .	Q13.	Q14	Q20.
Q1. I take the initiative, trying new ways to do my tasks	1	,507**	,388**	,358**	,342**	,382**	,317**	,398**	,424**
Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work		1	,523**	,385**	,391**	,393**	,313**	,395**	,449**
Q3. I like to present solutions when I see situations that can be improved.			1	,347**	,424**	,569**	,317**	,443**	,404**
Q7. I prefer others to set my priorities				1	,235**	,226**	,237**	,208**	,294**
Q8. I focus on what is most important and do not get distracted by other activities.					1	,407**	,359**	,482**	,361**
Q10. I consider it important to know exactly who is responsible for each task and with whom I should articulate.						1	,339**	,410**	,496**
Q13. During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.							1	,374**	,458**
Q14. In a situation of tension, I manage my impulses								1	,376**
Q20. When someone criticizes me, I try to understand if he/she is right in the criticisms.									1

According to the statistical data obtained by the participants of the sample for these 9 items it is possible to create 5 levels of performance: 14 to 23 points (very low level); 24 to 26 points (low level); 27 to 31 points (average level); 32 to 37 points (upper level); and 38 to 45 points (well above).

Table IV – Level of competence (Bulgaria)

		Frequency	Percent	Valid Percent	Cumulative Percent
Total number of Points	14,00	1	,4	,4	,4
	16,00	1	,4	,4	,8
	18,00	2	,8	,8	1,6
	19,00	12	4,6	4,9	6,5
	20,00	3	1,2	1,2	7,7
	21,00	9	3,5	3,7	11,4
	22,00	17	6,6	6,9	18,3
	23,00	4	1,5	1,6	19,9
	24,00	20	7,7	8,1	28,0
	25,00	16	6,2	6,5	34,6
	26,00	18	6,9	7,3	41,9
	27,00	18	6,9	7,3	49,2
	28,00	13	5,0	5,3	54,5
	29,00	7	2,7	2,8	57,3
	30,00	5	1,9	2,0	59,3
	31,00	2	,8	,8	60,2
	32,00	7	2,7	2,8	63,0
	33,00	9	3,5	3,7	66,7
	34,00	5	1,9	2,0	68,7
	35,00	9	3,5	3,7	72,4
	36,00	6	2,3	2,4	74,8
	37,00	10	3,9	4,1	78,9
	38,00	12	4,6	4,9	83,7
	39,00	11	4,2	4,5	88,2
	40,00	10	3,9	4,1	92,3
	41,00	1	,4	,4	92,7
	42,00	8	3,1	3,3	95,9
	43,00	5	1,9	2,0	98,0
	44,00	3	1,2	1,2	99,2
	45,00	2	,8	,8	100,0
	Total	246	95,0	100,0	

APPENDIX 3.3 – General Competencies for Employment Questionnaire (ITALY)

3.3.1. Test

3.3.2. Quotation & Interpretation

3.3.3. Statistical information



3.1.1. Test

Competenze Professionali

Di seguito troverai una serie di affermazioni sui comportamenti adottati in specifiche situazioni. Identifica con quale frequenza adotti realmente tali comportamenti, indipendentemente da come vorresti o da come sarebbe più consono agire in tali situazioni.

Non ci sono risposte corrette o sbagliate. Ci sono solamente diversi modi di affrontare e gestire le situazioni. Sii più onesto possibile nella compilazione.

Quanto spesso si verifica in te il più spesso possibile nella compilazione:						
1	2	3	4	5		
Quasi mai	Raramente	A volte	Frequentemente	Quasi ogni volta		
1)	Prendo l'iniziativa, sperimentando nuovi modi di svolgere i miei compiti giornalieri.	1	2	3	4	5
2)	Mi piacciono le nuove sfide che mi spingono a pensare a nuovi modi di svolgere i miei compiti ed il mio lavoro.	1	2	3	4	5
3)	Mi piace proporre nuove soluzioni quando vedo che una situazione può essere migliorata.	1	2	3	4	5
4)	Non mi piace quando viene proposta una nuova metodologia che mi impone di modificare il modo in qui lavoro.	1	2	3	4	5
5)	Ho bisogno di essere motivato per svolgere compiti inerenti il lavoro.	1	2	3	4	5
6)	Mi piace la routine e cerco di evitare cambiamenti nella vita di tutti i giorni.	1	2	3	4	5
7)	Preferisco che siano altri a stabilire le mie priorità	1	2	3	4	5
8)	Mi concentro su ciò che è più importante e non mi lascio distrarre da altre attività.	1	2	3	4	5
9)	Non riesco a completare l'esecuzione di un mio compito nei tempi inizialmente stimati	1	2	3	4	5
10)	Ritengo importante sapere chi sia esattamente responsabile di ogni mio compito ed a chi dovrei pertanto rivolgermi.	1	2	3	4	5
11)	Quando sto sviluppando un'attività importante eseguo vari compiti. Risulta difficile procedere passo dopo passo.	1	2	3	4	5
12)	Inizio sempre con i compiti che mi piacciono meno.	1	2	3	4	5
13)	Durante lo svolgimento dei miei progetti, identifico gli imprevisti che mi possono spingere a modificare il mio piano d'azione al fine di raggiungere i miei obiettivi.	1	2	3	4	5
14)	In una situazione di tensione, so gestire i miei impulsi.	1	2	3	4	5
15)	Mi sento a mio agio quando parlo in pubblico.	1	2	3	4	5
16)	Quando qualcuno non è gentile con me, adotto un comportamento simile.	1	2	3	4	5
17)	Quando fallisco mi lamento e biasimo me stesso.	1	2	3	4	5
18)	Penso che preoccuparsi di come ognuno si senta all'interno del team sia una perdita di tempo dato che agire rapidamente è ben più necessario.	1	2	3	4	5
19)	Quando qualcuno mi chiede qualcosa di inappropriato, dico di 'no' facilmente.	1	2	3	4	5
20)	Quando qualcuno mi critica, cerco di capire se lei/lui abbia ragione nel pormi tale critica.	1	2	3	4	5

Genere M ☐ F ☐; Età _____;

Esperienze di lavoro:

☐ Nessuna esperienza o studente; ☐ Poca esperienza (fino a 3 anni); ☐ Con alcune esperienze (dai 3 ai 7 anni);

☐ Con molta esperienza (più di 7 anni)

Tipo di esperienza lavorativa:

☐ Lavoro per altri; ☐ Esperienza di lavoro autonomo (lavoratore autonomo/free-lancer);

☐ Esperienza di lavoro autonomo (datore di lavoro)

Livello di scolarizzazione:

☐ Istruzione di base incompleta; ☐ Istruzione di base (9° grado) ☐ Istruzione secondaria incompleta;

☐ istruzione secondaria (12° grado); ☐ Istruzione superiore.

Grazie per la partecipazione.



3.3.2. Quotation & Interpretation

In Italy, employers and evaluators can use 9 items, of the total of 20 items of the scale to evaluate the Professional Competencies with statistical relevance: they have discriminative power and sensitivity to compare different candidates. The items to use in Italy are:

Q1. I take the initiative, trying new ways to do my tasks

Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work

Q6. I like routines and avoid making changes to my day-to-day life.

Q13. During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.

Q17. When I fail, I moan about it and blame myself.

Item 17 should be quoted in reverse.

Considering there are five points of agreement in the scale, and that there are 5 items, the score ranges from 5 to 25 points.

To interpret results, we defined 5 levels of performance regarding average, adapted to the Italian context:

Much below average - 7 to 13 points

Below average - 14 to 15 points

On average - 16 to 17 points

Above average - 18 to 19 points

Well above average - 20 to 25 points.



3.3.3. Statistical information

1. Descriptive statistics

Table 1 – Frequencies of Italy sample (N=208)

Variable	N	%
Gender		
Man	107	51.4
Women	101	48.6
Age		
16 to 25	116	55.8
26 to 35	80	38.5
36 to 45	7	3.4
46 to 55	3	1.4
55 to 65	2	1.0
>66	--	--
Education		
< Basic	1	0.5
Basic	---	---
Secondary (incomplete)	8	3.8
Secondary	46	22.1
Degree (incomplete)	59	28.4
Degree	94	45.2
Professional Experience		
None or student	78	37.5
Few experience (3 years)	65	31.3
Some experience (3 to 7 years)	43	20.7
Great experience (> 7 years)	22	10.6
Target group		
PA	69	33.2
PME	70	33.7
PSPE	69	33.2

As we can see from the previous table, we have a gender balance (48.6% of women and 51.4% of man), the largest age group being the group (16 to 25 years) with 55.8% of the sample, and the least representative group, ranging from 56 to 65 years (1.0%). The vast majority of the sample has completed a degree (45.2%), 28.4% attended higher education, 22.1% completed secondary education and 3.8% don't complete the secondary. In terms of experience 10.6% have more than 7 years of professional experience, 20.7% have some experience, 31.3% few and 37.5% none. The three groups defined as targets are equivalent.

2. Gender differences

Before starting the analyses of validity of the test it is important to verify if men and women are evaluated differently in each one of these items. This procedure aims to ensure that the test to be made available to future selective processes ensure that there is no gender discrimination. We can then see in the following that gender are evaluated differently and statistically significantly in item: Q3. I like to present solutions when I see situations that can be improved., [Z(U)=2.840; p=.005], Q4. I do not like it when a new method is proposed that forces me to change the way I work [Z(U)=-2.757; p=.006], Q7. I prefer others to set my priorities [Z(U)=- 3.737; p=.000], Q8. I focus on what is most important and do not get distracted by other activities [Z(U)=2.270; p=.007], and Q18. I consider that seeing how everyone feels in the team is a waste of time, since acting quickly is necessary [Z(U)=2.896; p=.004]. So, we will have to proceed with the removal of these item from the scale, since the objective will be “present a gender-neutral instrument”.

3. Instrument validity

The data obtained in this study are not parametric (they do not obey the normal curve). We did analysis of gender differences with the scale items (U of Mann-Whitney) and this analysis identified 5 items with statistically significant differences between men and women (previously described). With the remaining 15 items we proceeded to study the homogeneity of the scale, which revealed a Cronbach alpha of .63. We decide to eliminate the item Q11 to improve the alpha and with 14 items the alpha Cronbach is .66₁ which seems to us a good indicator of internal consistency of the instrument. The greater the values obtained by participants in the scale, the greater their professional skills. Although the scale has a reasonability internal consistency, we opted for a more conservative attitude and analysed the correlations among the items, excluding all those that were not statistically significant at 95% confidence. With this action, we get a scale of 5 items (Q1, Q2, Q6, Q13, Q17), obtaining a Cronbach alpha of .67. Employers and evaluators will be able to use this 5-item scale to distinguish applicants in terms of professional competencies with greater confidence.

In summary, we can say that the 20-item scale evaluated in these 3 Italian targets showed statistically significant differences between men and women, so that 5 items were withdrawn. These 15 remaining items (free of gender bias) were tested in order to have, from a conceptual and empirical point of view, the statistical robustness necessary for the instrument to be considered valid for the purpose of evaluating professional competencies: from the initial 15 itens, 5 remained.

Table II – Reliability (Q1, Q2, Q6, Q13, Q17)

Cronbach's Alpha	N of Items
.67	5

Table III – Items correlations (Q1, Q2, Q6, Q13, Q17)

	Q1.	Q2	Q6	Q13.	Q17.
Q1. I take the initiative, trying new ways to do my tasks	1	,611**	,460**	,388**	,201**
Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work		1	,458**	,217**	,151*
Q6. I like routines and avoid making changes to my day-to-day life.			1	,181**	,137*
Q13. During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.				1	,153*
Q17. When I fail, I moan about it and blame myself.					1

According to the statistical data obtained by the participants of the sample for these 5 items it is possible to create 5 levels of performance: 7 to 13 points (very low level); 14 to 15 points (low level); 16 to 17 points (average level); 18 to 19 points (upper level); and 20 to 25 points (well above).

Table IV – Level of competence (Italy)

	Frequency	Percent	Valid Percent	Cumulative Percent
Number of total points	7,00	1	,0	,5
	9,00	2	,0	1,0
	10,00	1	,0	,5
	11,00	7	,0	3,4
	12,00	19	,0	9,1
	13,00	19	,0	9,1
	14,00	16	,0	7,7
	15,00	26	,0	12,5
	16,00	21	,0	10,1
	17,00	25	,0	12,0
	18,00	18	,0	8,7
	19,00	13	,0	6,3
	20,00	18	,0	8,7
	21,00	8	,0	3,8
	22,00	8	,0	3,8
	23,00	3	,0	1,4
	24,00	2	,0	1,0
	25,00	1	,0	,5
Total	208	,0	100,0	

APPENDIX 3.4 – General Competencies for Employment Questionnaire (PORTUGAL)

3.4.1. Test

3.4.2. Quotation & Interpretation

3.4.3. Statitital information



3.4.1. Test

Inventário de Competências Profissionais

Abaixo poderá encontrar um conjunto de afirmações relativas à forma como age no seu dia a dia. Identifique a frequência com que cada uma das afirmações acontece, tendo em consideração como efetivamente se costuma comportar e não como acha que se deveria comportar. Não existem respostas certas ou erradas; são apenas diferentes formas de lidar com as situações. Seja o mais sincero possível.

1						2						3						4						5					
Quase nunca						Raramente						Às vezes						Frequentemente						Quase sempre					
1)	Eu tenho iniciativa, procurando novas formas de fazer as minhas tarefas.																		1	2	3	4	5						
2)	Gosto de novos desafios, que me forcem a pensar em novas formas de desenvolver as minhas tarefas/trabalho.																		1	2	3	4	5						
3)	Gosto de apresentar soluções quando vejo que certas situações podem ser melhoradas.																		1	2	3	4	5						
4)	Eu não gosto quando me é proposto um novo método que me força a alterar a forma como trabalho.																		1	2	3	4	5						
5)	Preciso de ser motivado para as tarefas relacionadas com o trabalho.																		1	2	3	4	5						
6)	Gosto de rotinas e evito fazer alterações ao meu dia a dia.																		1	2	3	4	5						
7)	Prefiro que sejam os outros a definir as minhas prioridades.																		1	2	3	4	5						
8)	Eu foco-me no que é mais importante e não me deixo distrair por outras atividades.																		1	2	3	4	5						
9)	Não sou capaz de cumprir com a execução das minhas tarefas dentro do tempo que inicialmente previ.																		1	2	3	4	5						
10)	Considero ser importante saber exatamente quem são os responsáveis por cada tarefa e com quem devo articular o meu trabalho. (Org)																		1	2	3	4	5						
11)	Quando estou a desenvolver uma atividade importante, faço várias tarefas ao mesmo tempo. É muito difícil para mim avançar passo a passo.																		1	2	3	4	5						
12)	Começo sempre por fazer as tarefas que gosto menos. (Org)																		1	2	3	4	5						
13)	Durante o desenvolvimento dos meus projetos, sou capaz de identificar os desvios que provocaram o ajustamento do plano de atividades de forma a ser capaz de alcançar os objetivos.																		1	2	3	4	5						
14)	Numa situação de tensão, sou capaz de gerir os meus impulsos.																		1	2	3	4	5						
15)	Sinto-me à vontade quando falo em público.																		1	2	3	4	5						
16)	Quando alguém não é simpático comigo, eu terei uma resposta similar.																		1	2	3	4	5						
17)	Quando falho, eu lamento-me e culpo-me por essa situação.																		1	2	3	4	5						
18)	Penso que ver como todos se sentem na equipa é uma perda de tempo, já que agir rapidamente é o necessário.																		1	2	3	4	5						
19)	Quando alguém me pede algo inapropriado, eu digo que “não” com facilidade.																		1	2	3	4	5						
20)	Quando alguém me critica, eu procuro perceber se a pessoa está correta no que disse.																		1	2	3	4	5						

Género M ☐ F ☐; Idade _____;

Experiência profissional:

☐ Sem experiência ou estudante; ☐ Com pouca experiência (até 3 anos); ☐ Com alguma experiência (3 a 7 anos);

☐ Com muita experiência (mais de 7 anos)

Tipo de experiência profissional:

☐ Trabalho em equipa; ☐ Trabalho isolado (trabalhador liberal/trabalhador autónomo/freelancer);

☐ Trabalhador autónomo (empregado)

Nível de escolaridade:

☐ Educação básica incompleta; ☐ Educação básica (9º ano); ☐ Educação secundária incompleta; ☐ Educação secundária (12º ano); ☐ Frequência universitária; ☐ Educação superior

Agradecemos a sua participação.



3.4.2. Quotation & Interpretation

In Portugal, employers and evaluators can use 10 items, of the total of 20 items of the scale to evaluate the Professional Competencies with statistical relevance: they have discriminative power and sensitivity to compare different candidates. The items to use in Portugal are:

- Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work.
- Q4. I do not like it when a new method is proposed that forces me to change the way I work.
- Q5. I need to be motivated for work-related tasks.
- Q8. I focus on what is most important and do not get distracted by other activities.
- Q9. I cannot complete the execution of the tasks in the time I initially estimated.
- Q10. I consider it important to know exactly who is responsible for each task and with whom I should articulate.
- Q11. When I am developing an important activity, I perform various tasks. It is very difficult to advance step by step.
- Q13. During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.
- Q14. In a situation of tension, I manage my impulses.
- Q20. When someone criticizes me, I try to understand if he/she is right in the criticisms.

Items 4, 5, 9 and 11 should be quoted in reverse.

Considering there are five points of agreement in the scale, and that there are 10 items, the score ranges from 10 to 50 points.

To interpret results, we defined 5 levels of performance regarding average, adapted to the Portuguese context:

Much below average - until 32 points

Below average - 33 to 35 points

On average - 36 to 37 points

Above average - 38 to 40 points

Well above average - 41 points and over.

According to the statistical data obtained by the participants in the sum of these 6 items it is possible to create 5 levels of performance: 10 to 16 points (very low level); 17 to 19 points (low level); 20 to 22 points (average level); 23 to 25 points (upper level); and 26 to 30 points (well above).

3.4.3. Statistical information

1. Descriptive statistics

Table I – Frequencies of PORTUGAL sample (N=224)

Variable	N	%
Gender		
Man	89	39.7
Women	135	60.3
Age		
16 to 25	128	58.2
26 to 35	54	24.5
36 to 45	25	11.4
46 to 55	8	3.6
56 to 65	4	1.8
>66	1	.5
Education		
< Basic	1	0.4
Basic	16	7.1
Secondary (incomplete)	17	7.6
Secondary	57	25.4
Degree (incomplete)	35	15.6
Degree	98	43.8
Professional Experience		
None or student	64	34.4
Few experience (3 years)	61	32.8
Some experience (3 to 7 years)	41	22.0
Great experience (> 7 years)	20	10.8
Target group		
PA	72	32.1
PME	71	31.7
PSPE	81	36.2

As we can see from the previous table, we have a gender balance (60.3% of women and 39.7% of man), the largest age group being the group (16 to 25 years) with 58.2% of the sample. The vast majority of the sample has completed a degree (43.8%), 15.6% attended higher education, 25.4% completed secondary education and 7.6% complete the secondary. In terms of experience 10.8% have more than 7 years of professional experience, 22.0% have some experience, 32.8% few and 34.4% none. The three groups defined as targets are more or less equivalent, with a low representativeness of the PEPS group.

2. Gender differences

Before starting the analyzes of validity of the test it is important to verify if men and women are evaluated differently in each one of these items. This procedure aims to ensure that the test to be made available to future selective processes ensure that there is no gender discrimination. We can then see in the following that gender are evaluated differently and statistically significantly in items: Q1. I take the initiative, trying new ways to do my tasks [$Z(U)=-2.743$; $p=.006$], Q3. I like to present solutions when I see situations that can be improved., [$Z(U)=-2.744$; $p=.006$], Q7. I prefer others

to set my priorities [$Z(U)=-4.371$; $p=.000$], Q17. When I fail, I moan about it and blame myself [$Z(U)=2.527$; $p=.011$, and Q18. I consider that seeing how everyone feels in the team is a waste of time, since acting quickly is necessary [$Z(U)=-2.471$; $p=.013$]. So, we will have to proceed with the removal of these items from the scale, since the objective will be “present a gender-neutral instrument”.

3. Instrument validity

The data obtained in this study are not parametric (they do not obey the normal curve). We did analysis of gender differences with the scale items (U of Mann-Whitney) and this analysis identified 5 items with statistically significant differences between men and women (previously described). With the remaining 15 items we proceeded to study the homogeneity of the scale, which revealed a Cronbach alpha of .76, which seems to us a good indicator of internal consistency of the instrument. The greater the values obtained by participants in the scale, the greater their professional skills. Although the scale has a good internal consistency, we opted for a more conservative attitude and analyzed the correlations among the items, excluding all those that were not statistically significant at 99% confidence. With this action, we get a scale of 10 items (Q2, Q4, Q5, Q8, Q9, Q10, Q11, Q13, Q14 e Q20), obtaining a Cronbach alpha of .88. Employers and evaluators will be able to use this 10-item scale to distinguish applicants in terms of professional competencies with greater confidence.

In summary, we can say that the 20-item scale evaluated in these 3 Portuguese target groups showed statistically significant differences between men and women, so that 8 items were withdrawn. The 15 remaining items (free of gender bias) were tested in order to have, from a conceptual and empirical point of view, the statistical robustness necessary for the instrument to be considered valid for the purpose of evaluating professional competencies: from the initial 15 itens, 10 remained which have discriminative power and sensitivity to compare different candidates.

Table II – Reliability (Q2, Q4, Q5, Q8, Q9, Q10, Q11, Q13, Q14 and Q20)

Cronbach's Alpha	N of Items
.88	10



Table III – Items correlations (Q2, Q4, Q5, Q8, Q9, Q10, Q11, Q13, Q14 and Q20)

Q	Q2.	Q4.	Q5.	Q8.	Q9. .	Q10.	Q11.	Q13.	Q14.	Q20.
Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work	1	,279**	,364**	,422**	,576**	,672**	,377**	,601**	,491**	,642**
Q4. I do not like it when a new method is proposed that forces me to change the way I work (1	,280**	,221**	,196**	,298**	,110**	,278**	,376**	,343**
Q5. I need to be motivated for work-related tasks.			1	,373**	,461**	,454**	,284**	,356**	,453**	,417**
Q8. I focus on what is most important and do not get distracted by other activities.				1	,460**	,478**	,347**	,411**	,379**	,430**
Q9. I cannot complete the execution of the tasks in the time I initially estimated.					1	,614**	,517**	,441**	,423**	,521**
Q10. I consider it important to know exactly who is responsible for each task and with whom I should articulate.						1	,480**	,580**	,524**	,701**
Q11. When I am developing an important activity, I perform various tasks. It is very difficult to advance step by step.							1	,302**	,299**	,425**
Q13. During the performance of my projects, I identify deviations which lead me to adjust the plan to achieve the objectives.								1	,403**	,556**
Q14. In a situation of tension, I manage my impulses									1	,495**
Q20. When someone criticizes me, I try to understand if he/she is right in the criticisms.										1

According to the statistical data obtained by the participants in the sum of these 6 items it is possible to create 5 levels of performance: up to 32 points (very low level); 33 to 35 points (low level); 36 to 37 points (average level); 38 to 40 points (upper level); 41 points and over (well above).

Table IV – Level of competence (Portugal)

	Frequency	Valid Percent	Cumulative Percent
Total number of points	23,00 1	,4	,4
	26,00 1	,4	,9
	28,00 4	1,8	2,7
	29,00 10	4,5	7,1
	30,00 7	3,1	10,3
	31,00 8	3,6	13,8
	32,00 11	4,9	18,8
	33,00 9	4,0	22,8
	34,00 18	8,0	30,8
	35,00 19	8,5	39,3
	36,00 27	12,1	51,3
	37,00 20	8,9	60,3
	38,00 25	11,2	71,4
	39,00 13	5,8	77,2
	40,00 12	5,4	82,6
	41,00 13	5,8	88,4
	42,00 11	4,9	93,3
	43,00 6	2,7	96,0
	44,00 5	2,2	98,2
	45,00 2	,9	99,1
	46,00 1	,4	99,6
	47,00 1	,4	100,0
Total	224	100,0	

Red – Very low
Orange - Low
Green - Average
Blue - Above
Purple – Well above



APPENDIX 3.5 – GENERAL COMPETENCIES FOR EMPLOYMENT QUESTIONNAIRE (SPAIN)

3.5.1. Test

3.5.2. Quotation & Interpretation

3.5.3. Statistical information



3.5.1. Test

Inventario de Competencias Profesionales

Debajo encontrarás un conjunto de frases sobre cómo actúas. Identifica la frecuencia con la que te sucede cada frase, pensando sobre cómo te comportas habitualmente y no sobre cómo te gustaría o deberías comportarte. No hay respuestas correctas o erróneas; son simplemente diferentes maneras de afrontar las situaciones. Sé lo más sincero posible.

		1	2	3	4	5
		Casi nunca	Pocas veces	Algunas veces	Frecuentemente	Casi siempre
1)	Tomo la iniciativa, probando nuevas formas de hacer las tareas.	1	2	3	4	5
2)	Me gustan los retos, que me mueven a pensar en nuevas maneras de desarrollar mis tareas / mi trabajo.	1	2	3	4	5
3)	Me gusta presentar soluciones cuando veo que las situaciones se pueden mejorar.	1	2	3	4	5
4)	No me gusta cuando se propone un nuevo método que me obliga a cambiar la forma de trabajar	1	2	3	4	5
5)	Necesito estar motivado para tareas relacionadas con el trabajo.	1	2	3	4	5
6)	Me gustan las rutinas y evito hacer cambios en mi día a día.	1	2	3	4	5
7)	Prefiero que sean otros los que fijen mis prioridades.	1	2	3	4	5
8)	Me centro en lo que es más importante y no me distraigo con otras actividades.	1	2	3	4	5
9)	No puedo completar la ejecución de las tareas en el tiempo que estimaba inicialmente.	1	2	3	4	5
10)	Considero importante saber exactamente quién es responsable de cada tarea y con quién debo tratarla.	1	2	3	4	5
11)	Cuando estoy desarrollando una actividad importante realizo varias tareas al mismo tiempo, porque es muy difícil para mí avanzar paso a paso	1	2	3	4	5
12)	Siempre empiezo por las tareas que menos me gustan.	1	2	3	4	5
13)	Durante la realización de mis proyectos, identifico desviaciones que me llevan a ajustar el plan para lograr los objetivos.	1	2	3	4	5
14)	En una situación de tensión, controlo mis impulsos.	1	2	3	4	5
15)	Me siento cómodo hablando en público.	1	2	3	4	5
16)	Si alguien no es amable conmigo, tendrá una respuesta similar.	1	2	3	4	5
17)	Cuando me equivoco me lamento por ello y normalmente me culpo a mí mismo.	1	2	3	4	5
18)	Considero que ver cómo se siente cada uno en el equipo es una pérdida de tiempo, porque actuar rápido es necesario.	1	2	3	4	5
19)	Cuando alguien me pide algo inapropiado, digo «no» fácilmente.	1	2	3	4	5
20)	Cuando alguien me critica, intento entender si tiene razón en sus críticas.	1	2	3	4	5

Sexo M / F Edad _____

Experiencia laboral:

Sin experiencia o estudiante; poca experiencia (hasta 3 años); con alguna experiencia (de 3 a 7 años); con mucha experiencia (más de 7 años)

Tipo de experiencia laboral:

Trabajo por cuenta ajena; autoempleo (autoempleado / freelance); experiencia como empleador

Nivel formativo:

Educación básica incompleta; educación primaria; educación secundaria incompleta; educación secundaria; educación superior incompleta; educación superior.

Agradecemos tu colaboración

3.5.2. Quotation & Interpretation

In Spain, employers and evaluators can use 6 items, of the total of 20 items of the scale to evaluate the Professional Competencies with statistical relevance: they have discriminative power and sensitivity to compare different candidates. The items to use in Spain are:

Q1. I take the initiative, trying new ways to do my tasks

Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work

Q3. I like to present solutions when I see situations that can be improved.

Q8. I focus on what is most important and do not get distracted by other activities.

Q10. I consider it important to know exactly who is responsible for each task and with whom I should articulate.

Q20. When someone criticizes me, I try to understand if he/she is right in the criticisms.

Considering there are five points of agreement in the scale, and that there are 6 items, the score ranges from 6 to 30 points.

To interpret results, we defined 5 levels of performance regarding average, adapted to the Spanish context:

Much below average: 6 - 20 points

Below average: 21 - 22 points

On average: 23 - 24 points

Above average: 25 points

Well above average: 26 - 30 points



3.5.3. Statistical information

1. Descriptive statistics

Table I – Frequencies of SPAIN sample (N=240)

Variable	N	%
Gender		
Man	115	48,3
Women	123	51,7
Age		
16 to 25	85	36,2
26 to 35	57	24,3
36 to 45	54	23,0
46 to 55	32	13,6
57 o 65	7	3,0
> 65	--	--
Education		
< Basic	7	2.9
Basic	15	6.3
Secondary (incomplete)	11	4,6
Secondary	65	27.3
Degree (incomplete)	30	12.6
Degree	110	46.2
Professional Experience		
None or student	59	24.8
Few experience (3 years)	48	20.2
Some experience (3 to 7 years)	34	14,3
Great experience (> 7 years)	97	40.8
Target group		
PA	90	37.5
PME	83	34.6
PSPE	67	27.9

As we can see from table 1, we have a gender balance (48.3% of men and 51.7% of women), the largest age group being the group of the youngest (16 to 25 years) with 36.2% of the sample, and the least representative group, ranging from 56 to 65 years (3.0%). The vast majority of the sample has completed a degree (46.2%), attended higher education (12.6%) or completed the secondary (27.3%), 6.3% have basic education. In terms of experience the majority have more than 7 years of professional experience (40.8%), 14.3% have some experience, 20.2 few and 24.8 % none. The three groups defined as targets are more or less equivalent.

2. Gender differences

Before starting the analyzes of validity of the test it is important to verify if men and women are evaluated differently in each one of these items. This procedure aims to ensure that the test to be made available to future selective processes ensure that there is no gender discrimination. We can then see in the following table that women and man are evaluated differently and statistically significantly in items: Before starting the analyzes of validity of the test it is important to verify if men and women are evaluated differently in each one of these items. This procedure aims to ensure that the test to be made available to future selective processes ensure that there is no gender discrimination. Women and man are evaluated differently and statistically significantly in items: Q7.

I prefer others to set my priorities [$Z(U)=2.093$; $p=.036$]. So, we will have to proceed with the removal of these items from the scale, since the objective is to develop a gender-neutral instrument.

3. Instrument validity

The data obtained in this study are not parametric (they do not obey the normal curve). We did analysis of gender differences with the scale items (U of Mann-Whitney) and this analysis identified 1 item with statistically significant difference between men and women (previously described). With the remaining 19 items we proceeded to study the homogeneity of the scale, which revealed a Cronbach alpha of .63. We eliminate other items for improve de internal consistency of the scale (5, 6, 9, 11, 12 e 17), and with a final 13 items the alpha de Cronbach is .70, which seems to us a good indicator of internal consistency of the instrument. The greater the values obtained by participants in the scale, the greater their professional skills. Of the 13 remaining items we verified the correlations of the item and exclude all those that were not well correlated, for a confidence interval of 95%. We got a total of 6 items (Q1, Q2, Q3, Q8, Q10 and Q20) to measure the professional skills of the Spain participants (which revealed a Cronbach alpha of .64.)

In summary, we can say that the 20-item scale evaluated in these 3 Spain targets showed statistically significant differences between men and women, so that 1 item were withdrawn. These 19 remaining items (free of gender bias) were tested in order to have, from a conceptual and empirical point of view, the statistical robustness necessary for the instrument to be considered valid for the purpose of evaluating professional competencies. Employers and valutors can use these 6 items because they have discriminative power and sensitivity to compare different candidates.

Table II – Realibility (Q1, Q2, Q3, Q8, Q10 e Q20)

Cronbach's Alpha	N of Items
,64	6

Table III – Items Correlations (Q1, Q2, Q3, Q8, Q10 e Q20)

	Q1	Q2.	Q3.	Q8.	Q10.	Q20.
Q1. I take the initiative, trying new ways to do my tasks	1	,561**	,322**	,186**	,157*	,225**
Q2. I like new challenges, which force me to think of new ways to develop my tasks / my work		1	,477**	,165*	,223**	,212**
Q3. I like to present solutions when I see situations that can be improved.			1	,142*	,192**	,204**
Q8. I focus on what is most important and do not get distracted by other activities.				1	,147*	,171**
Q10. I consider it important to know exactly who is responsible for each task and with whom I should articulate.					1	,201**
Q20. When someone criticizes me, I try to understand if he/she is right in the criticisms.						1

According to the statistical data obtained by the participants in the sum of these 6 items it is possible to create 5 levels of performance: 6 to 20 points (very low level); 21 to 22 points (low level); 23 to 24 points (average level); 25 points (upper level); and 25 to 30 points (well above).

Table IV – Level of competence (Spain)

		Frequency	Percent	Valid Percent	Cumulative Percent
Total number of points	6,00	1	,4	,4	,4
	13,00	4	1,7	1,7	2,1
	14,00	1	,4	,4	2,5
	16,00	2	,8	,8	3,4
	17,00	3	1,3	1,3	4,6
	18,00	9	3,8	3,8	8,4
	19,00	10	4,2	4,2	12,6
	20,00	20	8,3	8,4	21,0
	21,00	16	6,7	6,7	27,7
	22,00	24	10,0	10,1	37,8
	23,00	19	7,9	8,0	45,8
	24,00	40	16,7	16,8	62,6
	25,00	36	15,0	15,1	77,7
	26,00	28	11,7	11,8	89,5
	27,00	9	3,8	3,8	93,3
	28,00	3	1,3	1,3	94,5
	29,00	8	3,3	3,4	97,9
	30,00	5	2,1	2,1	100,0
	Total	238	99,2	100,0	



APPENDIX 4 – ANALYSIS EXERCISES AND ORIENTATION FOR CLASSIFICATION

EXERCISE 1

Every year your company prepares the annual meeting where it presents the new guidelines to the main customers and partners (suppliers, representatives of relevant institutions in your business field, local entities).

Considering that the company recently changed facilities and that this meeting always takes place in the first days of July, they decided to have the meeting followed by a cocktail in the outdoor garden.

As this event has some new features compared to previous meetings (new facilities, meeting in the garden, employees are also invited, presentation of new markets where they are to expand) it was announced in due time, highlighting these innovations. Even pictures of how the meeting was to be held in the garden were announced.

The morning before the event, when the last preparations are taking place, the weather is unstable and there is no clear idea whether it will rain or not during the time of the meeting and the cocktail. Imagine that you are part of the team that is organizing this event, which is so important to the company's image. Given the situation, and not knowing what to do, they asked your opinion on how to act.

Q1. Please identify which problem(s) you are experiencing.

Q2. Please indicate whether you would need to collect additional information and, if so, what would you do.

Q3. Please provide several possible alternatives to solving the problem and point out its pros and cons.

Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions would you take to implement your idea.

Q5. Given the situation, what would you consider a good result? What lessons have you learned from this situation?



EXERCISE 1 - ORIENTATION FOR CLASSIFICATION

	1. Problem identification	2. Collection of information	3. Generation of ideas and evaluation of ideas	4. Implementation planning	5. Evaluation of solution
1. INEXISTENT	Does not identify the problem at all.	Does not refer to gather more information or the information is not pertinent.	No ideas or not adequate	Does not present an answer; or presents something different from what was presented previously; or presents something that is not logical considering the whole context.	No clear idea, or very confusing way to present it.
2. LOW LEVEL	The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue.	Gather an incomplete set of information including non-relevant issues, and/or does not specify the sources.	Presentation only one alternative with no pros or cons.	a) does not select the alternative that seems the most obvious/simple, considering the pros and cons presented; and/or b) does not explain the activities to perform.	The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue.
3. INTERMEDIATE	Identifies the problem but included other non-relevant details.	Gathers an incomplete set of information and/or does not specify the sources.	One idea with pros and cons (or two ideas with no pros or cons).	a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) briefly explains the activities to perform, with not much details.	to present a basic, sometime the initial idea (with no flexibility). To identify partially the lessons to be taken, in a general way.
4. HIGH LEVEL	Clearly identifies the problem.	Refers to gathering enough relevant information also indicating the sources.	Two ideas with pros and cons.	a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) explains in detail the activities to be performed to fulfil the selected option and presents alternatives of situations that might not go so well as the best predictions.	to have the perspective of the client, not necessarily the perspective of the firm. To identify the most important lessons.

1. Problem identification

Q1. Please identify which problem(s) you are experiencing.

1. Inexistent: Does not identify the problem at all

Examples:

The problem is to question the credibility and the organisation image since there were published photos of an event that cannot occur if it rains. Associated with this situation, there are also problems regarding the lack of confidence of clients and the possibility of losing their interest in this firm.

2. Low level: The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue. (don't mentioned the central problem clearly and objectively)

Examples:

The problem is the facilities change, demanding the need for an annual meeting to be performed in an open air garden, which is subject to the weather conditions and may inhibit the meeting occurrence.

The firm's location change might lead to problems with the location. The 2nd problem is that they associated that the fact that the meeting was going to happen in July automatically would be good weather.

3. Intermediate level: Identifies the problem but included other non-relevant details (is not clear)

Examples:

The instability of the weather and the fact that the meeting was already announced in the garden.

4. High level: Clearly identifies the problem (is objective and clear)

Examples:

The weather instability.

The weather instability and not having planned an alternative.

2. Collection of information

Q2. Please indicate whether you would need to collect additional information and, if so, what would you do.

1.Inexistent: Does not refer to gather more information or the information is not pertinent.

Examples:

Would report the situation to the General Manager of the firm, so that he/she could take the necessary measures to solve the situation.

2.Low level: Gather an incomplete set of information including non-relevant issues, and/or does not specify the sources.

Examples:

Debate with the people in charge of the meeting to find other alternatives.

Talk to the firm's employees and with the rest of my team to know exactly what is going on and their ideas.

3.Intermediate level: Gathers an incomplete set of information and/or does not specify the sources.

One example of the level 4.

I would need information on other appropriate locations where the meeting could take place since the weather was not stable.

Would need to have additional data as exact location, number of guests and the way the innovation was going to take place.

4.High level: Refers to gathering enough relevant information also indicating the sources

Examples:

Initially would try to understand how the weather conditions could affect the meeting, visiting the place, talking to the people who are organising each part of the event (meeting + cocktail). Would check for the weather report on a credible website. In a meeting with all involved would try to come up with several alternatives, even if it meant to change the location and some other initial plans for the event, in order to keep the guests comfortable.

3. Generation of ideas and evaluation of ideas

Q3. Please provide possible alternatives to solving the problem and point out its pros and cons.

Examples of adequate ideas:

Changing the location to inside the office building. Pros: presenting the new office building, the weather conditions are not important, bigger comfort. Cons: the participants were counting on the garden, may cause some, disappointment

To buy/ rent a garden tent (or some kind of covering garment). Pros: stick to the initial plan, more room, and fresh air. Cons: it is harder to organise, more costly, and there is no information if there are tents available.

Change the date of the event. Pros: to perform the event as planned; Cons: unavailability of the guests; no guaranty of good weather

To make the event as the other ones before, that is without the employees. Pros: the rest of the guest would fit inside the office building. Cons: the inability of both partners/clients and staff to participate in the same meeting, after they were already invited

1.Inexistent: No ideas or not adequate

2.Low level: Presentation only one alternative with no pros or cons

3.Intermediate level: One idea with pros and cons (or two ideas with no pros or cons)

4.High level: Two ideas with pros and cons.

4.Implementation planning

Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions you would take to implement your idea.

1.Inexistent: Does not present an answer; or presents something different from what was presented previously; or presents something that is not logical considering the whole context.

2.Low level: a) does not select the alternative that seems the most obvious/simple, considering the pros and cons presented; and/or b) does not explain the activities to perform.

Examples:

The cons of buying a tent or garment to protect from the rain was that it might not be enough depending on the intensity of the rain. This was the selected option. The activities were buying the tent /garment and assemble it on site, because it was the easiest way.

3.Intermediate level: a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) briefly explains the activities to perform, with not much details

Example

The cons of changing the location of the event within the facilities' is not fulfilling the guests' expectations. The activities proposed are: to change the event to an indoors room; to find a big and comfortable room; to talk to person in charge and let the person know about that change.

4.High level: a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) explains in detail the activities to be performed to fulfil the selected option and presents alternatives of situations that might not go so well as the best predictions.

Example:

The cons of selecting the tent for the garden was the additional cost. The activities proposed were: to check for budget proposals to rent the tent; to show them to the person in charge of the event (both from the presentation and the cocktail); to select the supplier and to arrange and supervise the assembly of the tent in the facilities, together with the all the person in charge of the event (both from the presentation and the cocktail) in order to have everything according to their requisites.

5. Evaluation of the solution

Q5. Considering the situation, what would you consider a good result? What lessons learned from this situation?

1. Inexistent: No clear idea, or very confusing way to present it.

Example:

A good result would be the success of this meeting and that the message could go through in a clear way. The lesson learnt is that when we need to ask for help, we should be as clear as possible, and we cannot plan something outdoor without thinking of a plan B.

A good result would be that in the day of the meeting would be a day with good weather, so that everybody could enjoy the meeting and the cocktail.

2- Low level: to present a basic, sometime the initial idea (with no flexibility). Is not able to make a generalisation of the lessons learnt, can only apply to that specific situation.

Example:

A good result would be the satisfaction of the guests with the event and that the event would go as planned, with no problems. This situation is important to see how people deal with stress and the quality of the decisions they make.

3- Intermediate level: to present a basic, sometime the initial idea (with no flexibility). To identify partially the lessons to be taken, in a general way.

Example:

A good result would be the participation of the guests that were expected, the meeting going as expected. The lesson to be taken is always have a plan B.

4- High level: to have the perspective of the client, not necessarily the perspective of the firm. To identify the most important lessons.

Example:

A good result would be the satisfaction of the guests that came to the meeting and that they would get a good impression of the firm. With this situation one should learn that should always have an alternative plan, and that should not advertise something that is out of our control.



EXERCISE 2

A colleague of yours has placed an order of € 10,000 for a client. This order was urgent for the customer. Your colleague consulted the supplier (in France), requesting the information about the delivery time and was informed that it would take a maximum of 5 working days. Your colleague indicated that he would inform the client, by SMS, as soon as the order arrived.

After 5 working days, the customer went to the company facilities to collect the order. It had not yet arrived and your colleague was on his day off on that day.

When the customer realized that the order was not available, he was very upset, and said that he really needed those materials not to delay the activity of his business. The customer also said that this situation meant a loss of confidence in the company. Indeed, he was already a loyal and a good customer (he ordered much material and always paid within the time limits).

Considering this situation, indicate how you would act.

Q1. Please identify which problem(s) you are experiencing.

Q2. Please indicate whether you would need to collect additional information and, if so, what would you do.

Q3. Please provide several possible alternatives to solving the problem and point out its pros and cons.

Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions you would take to implement your idea.

Q5. Considering the situation, what would you consider a good result? What lessons learned from this situation?



EXERCISE 2 – Orientation for Classification

	1. Problem identification	2. Collection of information	3. Generation of ideas and evaluation of ideas	4. Implementation planning	5. Evaluation of solution
1. INEXISTENT	Does not identify the problem at all.	Does not refer to gather more information or the information is not pertinent.	No ideas or not adequate	Does not present an answer; or presents something different from what was presented previously; or presents something that is not logical considering the whole context.	No clear idea, or very confusing way to present it.
2. LOW LEVEL	The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue.	Gather an incomplete set of information including non-relevant issues, and/or does not specify the sources.	Presentation only one alternative with no pros or cons.	a) does not select the alternative that seems the most obvious/simple, considering the pros and cons presented; and/or b) does not explain the activities to perform.	The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue.
3. INTERMEDIATE	Identifies the problem but included other non-relevant details.	Gathers an incomplete set of information and/or does not specify the sources.	One idea with pros and cons (or two ideas with no pros or cons).	a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) briefly explains the activities to perform, with not much details.	to present a basic, sometime the initial idea (with no flexibility). To identify partially the lessons to be taken, in a general way.
4. HIGH LEVEL	Clearly identifies the problem.	Refers to gathering enough relevant information also indicating the sources.	Two ideas with pros and cons.	a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) explains in detail the activities to be performed to fulfil the selected option and presents alternatives of situations that might not go so well as the best predictions.	to have the perspective of the client, not necessarily the perspective of the firm. To identify the most important lessons.

1. Problem identification

Q1. Please identify which problem(s) you are experiencing.

1.Inexistent: Does not identify the problem at all

Examples:

The firm should not hire more people because it does not have working conditions.

The client doesn't have privacy.

The day off of the colleague;

Low credibility of the enterprise and its workers;

Lack of information.

2.Low level: The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue (don't mentioned the central problem clearly and objectively).

Examples:

Attempted to satisfy an urgent request;

Did not check if he was working the day the order arrived;

The colleague should have communicated to the other colleagues;

Little responsibility of the colleague;

Lack of the order;

Upset customer.

3.Intermediate level: Identifies the problem but included other non-relevant details (is not clear)

Examples:

The problem is the time in processing the client's order.

To assure delivery times that depend on others.

4.High level: Clearly identifies the problem (is objective and clear)

Examples:

Delay of an order / product for customer; Upset customer

2.Collection of information

Q2. Please indicate whether you would need to collect additional information and, if so, what would you do.

1.Inexistent: Does not refer to gather more information or the information is not pertinent.

Examples:

To make sure several people in the team know about each demand, so they could intervene in case it is needed; Would report the situation to the General Manager of the firm, so that he/she could take the necessary measures to solve the situation.

2.Low level: Gather an incomplete set of information including non-relevant issues, and/or does not specify the sources.

Examples:

I would try to understand with the client what was actually agreed between him and my colleague, and then contact my colleague and confront him with the situation; The reason for the delay (explains what was looking for, but does not specify how); Try to know where the client's order is at and get a way of having it on time (explains what would do, but does not specify how).

3.Intermediate level: Gathers an incomplete set of information and/or does not specify the sources.

One example of the level 4.

4.High level: Refers to gathering enough relevant information also indicating the sources

Examples (2 of these)

Search if there was no email or sms informing the customer of the delay or asking about the delay to the supplier; Call to the supplier to clarify the "state" of the order and asking the specific date to deliver the order; Check with the warehouse if the package already (meanwhile) has arrived.

3.Generation of ideas and evaluation of ideas

Q3. Please provide possible alternatives to solving the problem and point out its pros and cons.

Examples of adequate ideas:

Call the supplier and see what is the best date possible, if not good enough for the client, to try to get that material elsewhere;
Try to offer alternative material;
Try to offer partial satisfaction of the demand, if possible, while trying to get the rest of the demand
Trying to negotiate with the administration a discount to the customer in the face of the delay
(...)

1.Inexistent: No ideas or ideas with no pros and cons.

2.Low level: Presentation only one alternative with pros or cons

3.Intermediate level: Two ideas with pros and cons (or only one, but very complete)

4.High level: Three ideas with pros and cons.

4.Implementation planning

Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions you would take to implement your idea.

1.Inexistent: Does not present an answer; or presents something different from what was presented previously; or presents something that is not logical considering the whole context.

Example:

1st alternative would implement an automatic messaging system. I would choose the first alternative (see above) that would be the most effective. Actions that would develop: 1. to hire an outsourcing company that could work and implant the system in the company and 2 also give training to the employees about the system. Then I would made an agreement with the company to perform a maintenance and update of the system every six months.

2.Low level: a) does not select the alternative that seems the most obvious/simple, considering the pros and cons presented; and/or b) does not explain the activities to perform.

3.Intermediate level: a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) briefly explains the activities to perform, with not much details

4.High level: a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) explains in detail the activities to be performed to fulfil the selected option and presents alternatives of situations that might not go so well as the best predictions.

Example:

Probably, if I could get the agreement with the management, I would choose the solution to make a discount on the order. I would negotiate a discount per day of delay with the supplier, since they had guaranteed that deadline and did not comply. This means the firm probably would not have expenses because it would be compensated by the supplier, would keep the client, and would have a good image for the client. As cons, could have a lower profit margin on that demand or even some costs, if the discount with the supplier was not low enough.

5.Evaluation of the solution

Q5. Considering the situation, what would you consider a good result? What lessons learned from this situation?

1- Inexistent: No clear idea, or very confusing way to present it.

Example:

A good result would be if the order had arrived on time. A lesson to be retained is that solutions are not always in our favour because they do not depend entirely on us..

2- Low level: to present a basic, sometime the initial idea (with no flexibility). Is not able to make a generalisation of the lessons learnt, can only apply to that specific situation.

Example:

Fast and efficient solution of the problem.

3- Intermediate level: to present a basic, sometime the initial idea (with no flexibility). To identify partially the lessons to be taken, in a general way.

Example:

Despite the error, it was important the recognition by the client of our effort. Presents - Never order something important for the day you present it, give some margin.

4- High level: to have the perspective of the client, not necessarily the perspective of the firm. To identify the most important lessons.

Examples:

A good result would be the satisfaction of the client. Always have an alternative plan/ plan B.

To be able to deliver in a timely manner, even if with costs, to be able to charge the costs to the supplier or transporter and restore the trust with the customer. Apprenticeships: Systematically monitor processes in order to anticipate possible delays in advance in order to fill them before they occur and / or keep clients informed of their possibility so as not to lose their confidence or to hinder the functioning of their companies.



EXERCISE 3

Imagine you are working in an import/export firm that owns its office in a good suburb of a big city. Due to the growth of your company in the past 2 years, more people were admitted to work in the office facilities. Two years ago, there were 6 people working in the office, and you had an entrance hall, with a chair, and a meeting room where 6 people could seat comfortably.

In these two years, the company grew to 10 people in the same space, along with their desks, computers and paper files furniture. The meeting room was transformed into an office where 4 people work, and the entrance hall was transformed to receive 2 clients in a small meeting open space room. The space is divided, but it is not possible real privacy, for more sensitive business and brainstorm ideas. Only the manager, has a closed office.

There are some conflicts among staff due to being confined some many people in a stuffed, small space.

The need for more space is absolutely necessary, as a new member was hired and starts in about a month. But the firm made some new investments and is not in a good moment to buy new facilities. Imagine that you are part of the managing team and need to make space for the new hire, keeping in mind that you need to spend as little money as you reasonably can.

Given the situation, let us now your opinion on how to advise the managing director how to act.

Q1. Please identify which problem(s) you are experiencing.

Q2. Please indicate whether you would need to collect additional information and, if so, what would you do.

Q3. Please provide several possible alternatives to solving the problem and point out its pros and cons.

Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions you would take to implement your idea.

Q5. Considering the situation, what would you consider a good result? What lessons learned from this situation?



EXERCISE 3 – Orientation for Classification

	1. Problem identification	2. Collection of information	3. Generation of ideas and evaluation of ideas	4. Implementation planning	5. Evaluation of solution
1. INEXISTENT	Does not identify the problem at all.	Does not refer to gather more information or the information is not pertinent.	No ideas or not adequate	Does not present an answer; or presents something different from what was presented previously; or presents something that is not logical considering the whole context.	No clear idea, or very confusing way to present it.
2. LOW LEVEL	The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue.	Gather an incomplete set of information including non-relevant issues, and/or does not specify the sources.	Presentation only one alternative with no pros or cons.	a) does not select the alternative that seems the most obvious/simple, considering the pros and cons presented; and/or b) does not explain the activities to perform.	The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue.
3. INTERMEDIATE	Identifies the problem but included other non-relevant details.	Gathers an incomplete set of information and/or does not specify the sources.	One idea with pros and cons (or two ideas with no pros or cons).	a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) briefly explains the activities to perform, with not much details.	to present a basic, sometime the initial idea (with no flexibility). To identify partially the lessons to be taken, in a general way.
4. HIGH LEVEL	Clearly identifies the problem.	Refers to gathering enough relevant information also indicating the sources.	Two ideas with pros and cons.	a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) explains in detail the activities to be performed to fulfil the selected option and presents alternatives of situations that might not go so well as the best predictions.	to have the perspective of the client, not necessarily the perspective of the firm. To identify the most important lessons.

1. Problem identification

Q1. Please identify which problem(s) you are experiencing.

1. Inexistent: Does not identify the problem at all

Examples:

The firm should not hire more people because it does not have working conditions.

The client doesn't have privacy.

The manager is a privileged.

2. Low level: The emphasis is on the non-relevant issues, acknowledges the problem but as a detail, not the central issue. (don't mentioned the central problem clearly and objectively)

Examples:

The fact that there are conflicts between workers, because space is confined, affects the environment in the company, and will be aggravated by the entry of the new employee.

More employee's without space conditions is stupid in terms of management.

3. Intermediate level: Identifies the problem but included other non-relevant details (is not clear)

Examples:

Difficulty in placing employees in the available space.

Low space to many workers and an isolated manager.

4. High level: Clearly identifies the problem (is objective and clear)

Examples:

Lack of space to place workers.

2. Collection of information

Q2. Please indicate whether you would need to collect additional information and, if so, what would you do.

1.Inexistent: Does not refer to gather more information or the information is not pertinent.

Examples:

When it was able to expand the company

2.Low level: Gather an incomplete set of information including non-relevant issues, and/or does not specify the sources.

Examples:

Yes, figuring out if the management team could leave the private office, and would work with the rest of the team in the open space.

3.Intermediate level: Gathers an incomplete set of information and/or does not specify the sources.

One example of the level 4.

4.High level: Refers to gathering enough relevant information also indicating the sources

Examples (2 of these)

- Check if it would be possible for some employees to work from home
- Ask the management team for the available budget
- Yes, it would be necessary, to study alternatives to organise the space
- Yes, know the total area available.

3. Generation of ideas and evaluation of ideas

Q3. Please provide possible alternatives to solving the problem and point out its pros and cons.

Examples of adequate ideas:

Change the layout of the desktop

Open space for workers and changes the room with participation for collaborators.

Make financial cuts where you can to buy new facilities.

Rent another space near the place and at an affordable price.

Organise the space throwing away what was not necessary, limiting the space to the essential.

The manager office can be for more persons.

1.Inexistent: No ideas or not adequate

2.Low level: Presentation only one alternative with no pros or cons

3.Intermediate level: One idea with pros and cons (or two ideas with no pros or cons)

4.High level: Two ideas with pros and cons.

4. Implementation planning

Q4. From the alternatives identified in Q3, select the one that you consider most appropriate, indicating what actions you would take to implement your idea.

1. Inexistent: Does not present an answer; or presents something different from what was presented previously; or presents something that is not logical considering the whole context.

Example:

The first, since it would create a better environment in the company, since all would be in the same conditions.

2. Low level: a) does not select the alternative that seems the most obvious/simple, considering the pros and cons presented; and/or b) does not explain the activities to perform.

3. Intermediate level: a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) briefly explains the activities to perform, with not much details

Example

The management team would share the spaces. It would make a survey that would allow to rationalize the available space taking care to the maximum the functionality and the possible privacy.

4. High level: a) Selects the alternative that, within the alternatives presented, and considering the pros and cons identified in the previous question is the most appropriate; b) explains in detail the activities to be performed to fulfil the selected option and presents alternatives of situations that might not go so well as the best predictions.

Example:

The first solution. a) to design the modality (s) in which the workers could choose: 50% at home - half a day a day / 2 or 3 days a week, etc. b) speak to each worker individually, explain the problem, check if the worker would be willing to work from home and if so, in which modality. c) post a plan of everyone's knowledge in the workspace about who will be physically present on each day /

part of the day, so whoever needs to meet with a certain person already knows when to do it. d) provide all the conditions to work from home: if they do not, replace PC's with laptops, company's mobile phones to communicate with clients, etc. e) minimum 3-month experiment time.

5. Evaluation of the solution

Q5. Considering the situation, what would you consider a good result? What lessons learned from this situation?

1- Inexistent: No clear idea, or very confusing way to present it.

Example:

Host the new colleague, everyone can cooperate with that.

2. Low level: to present a basic, sometime the initial idea (with no flexibility). Is not able to make a generalisation of the lessons learnt, can only apply to that specific situation.

Example:

That the new employee could be integrated without the bad environment becoming worse.

3. Intermediate level: to present a basic, sometime the initial idea (with no flexibility). To identify partially the lessons to be taken, in a general way.

Example:

Get more space, without raising the monthly costs too much.

4. High level: to have the perspective of the client, not necessarily the perspective of the firm. To identify the most important lessons.

Example:

Get enough space for all workers, including what's to come, and taking the moment to motivate them. To be able to adapt to the situations and make the most of them.





Appendix 5.1. Austria

Statistical analysis revealed that there are no statistically significant differences between men and women with respect to the results of exercise 1, 2 and 3.

This means that in Austria, exercises 1 and 3 can be used for evaluating the competence „Analysis and problem solving“.



5.1.1. EXERCISE 1 for Austria

Übung 1

Deine Firma bereitet jedes Jahr ein Meeting vor, bei dem die neuen Leitlinien den wichtigsten Kund*innen und Partner*innen (Zulieferfirmen, Vertreter wichtiger Institutionen in ihrem Geschäftsfeld, lokale Dienststellen) vorgestellt werden.

Unter Berücksichtigung, dass die Firma kürzlich den Standort gewechselt hat und dass dieses Meeting immer in den ersten Julitagen stattfindet, wurde beschlossen, das Meeting mit einem nachfolgenden Cocktail im Garten stattfinden zu lassen.

Da dieses Meeting, bezogen auf die vorangegangenen Meetings, ein paar neue Besonderheiten (neuer Standort, Meeting im Garten, Angestellte sind ebenfalls eingeladen, Präsentation der neuen Märkte, in die expandiert wird) zu bieten hat, wurden dieses rechtzeitig angekündigt und diese Neuheiten betont. Sogar Bilder, wie das Meeting im Garten ablaufen sollte, wurden bekanntgegeben.

Am Morgen vor der Veranstaltung, als noch die letzten Vorbereitungen gemacht werden, ist das Wetter instabil und es ist nicht sicher, ob es während des Meetings und des Cocktails, regnen wird oder nicht.

Stellen Sie sich vor, sie sind ein Teil des Teams, das diese Veranstaltung, die so wichtig für das Image der Firma ist, organisiert. In der Situation ohne Plan, was zu tun ist, werden Sie nach Ihrer Meinung wie reagiert werden sollte gefragt.

Q1. Bitte geben Sie an welches Problem/welche Probleme Sie wahrnehmen.

Q2. Bitte zeigen Sie auf, ob Sie zusätzliche Informationen einholen würden und wenn, was würden Sie machen?

Q3. Bitte legen Sie verschiedene alternative Möglichkeiten zur Lösung des Problems vor und heben Sie die Vor- und Nachteile hervor.

Q4. Basierend auf die von Ihnen in Q3 genannten Möglichkeiten, wählen Sie die eine, die Ihnen am passendsten erscheint und zeigen Sie auf, welche Maßnahmen Sie treffen würden, um Ihre Idee umzusetzen.

Q5. Mit dieser Situation konfrontiert, was wäre für Sie ein gutes Ergebnis? Was haben Sie aus dieser Situation gelernt?



Exercise 1 - Results Interpretation for Austria

Considering there are four levels of evaluation of the exercise's answers, and that there are 5 questions, the score ranges from 5 to 20 points.

To interpret results, we defined 5 levels of performance regarding the competence Analysis and Problem Solving, adapted to the Austrian context:

Much below average - 5 to 7 points

Below average - 8 to 9 points

On average - 10 to 11 points

Above average - 12 to 13 points

Well above average - 14 points and over.

Mean – 10,9

Median – 10,5

Mode – 8

Std. Dev. – 3,45

Minimum – 5,0

Maximum – 19,0



5.1.2. EXERCISE 2 for Austria

Übung 2

Ein Kollege von Ihnen erhielt einen Kundenauftrag in der Höhe von Euro 10.000,--. Dieser Auftrag war dringend für den Kunden. Ihr Kollege beriet sich mit dem Zulieferer (in Frankreich), hinsichtlich der Auslieferungszeit, wurde er dahingehend informiert, dass es maximal 5 Werktage dauern würde. Ihr Kollege versprach, den Kunden per SMS zu informieren, sobald die Bestellung eingeht.

Nach 5 Werktagen erschien der Kunde in der Firma, um zu sehen ob seine Bestellung angekommen ist. Sie war nicht da und ihr Kollege hatte an diesem Tag seinen freien Tag.

Als der Kunde bemerkte, dass die Bestellung nicht verfügbar war, war er sehr verärgert und meinte, er würde diese Waren wirklich benötigen, um die Tätigkeiten seiner Firma nicht zu verzögern. Der Kunde sagte ebenfalls, dass diese Situation einen Vertrauensverlust in Ihre Firma bedeuten würde. Tatsächlich war er bereits ein loyaler und guter Kunde (er bestellte viele Waren und zahlte immer innerhalb der Zeitvorgaben).

Stellen Sie sich diese Situation vor. Beschreiben Sie, wie Sie handeln würden.

Q1. Bitte geben Sie an, welches Problem/welche Probleme Sie wahrnehmen.

Q2. Bitte zeigen Sie auf, ob Sie zusätzliche Informationen einholen würden und wenn, was würden Sie machen?

Q3. Bitte legen Sie verschiedene alternative Möglichkeiten zur Lösung des Problems vor und heben Sie die Vor- und Nachteile hervor.

Q4. Basierend auf den von Ihnen in Q3 genannten Möglichkeiten, wählen Sie die eine, die Ihnen am passendsten erscheint aus und zeigen Sie auf, welche Maßnahmen Sie treffen würden, um Ihre Idee umzusetzen.

Q5. Mit dieser Situation konfrontiert, was wäre für Sie ein gutes Ergebnis? Was haben Sie aus dieser Situation gelernt?



Exercise 2 - Results Interpretation for Austria

Considering there are four levels of evaluation of the exercise's answers, and that there are 5 questions, the score ranges from 5 to 20 points.

To interpret results, we defined 5 levels of performance regarding the competence Analysis and Problem Solving, adapted to the Austrian context:

Much below average - 5 to 7 points

Below average - 8 to 9 points

On average - 10 to 12 points

Above average - 13 to 14 points

Well above average - 15 points and over.

Mean – 11,0

Median – 11,0

Mode – 11,00

Std. Dev. – 3,53

Minimum – 5,0

Maximum – 19,0



5.1.3. EXERCISE 3 for Austria

Übung 3

Stellen Sie sich vor, sie arbeiten in einer Import-, Exportfirma, die ihr Büro in einem guten Vorort einer großen Stadt hat.

Da die Firma in den letzten 2 Jahren gewachsen ist, arbeiten mehr Personen in den Büroräumlichkeiten. Vor 2 Jahren arbeiteten 6 Personen im Büro und Sie hatten einen Vorraum mit einem Stuhl und einen Konferenzraum, in dem sich 6 Personen gemütlich aufhalten konnten.

In diesen 2 Jahren wuchs die Firma auf 10 Personen auf gleichem Raum, mit ihren Schreibtischen, Computern und Büromöbeln. Der Konferenzraum wurde in ein Büro umgewandelt, in dem 4 Personen arbeiten, und aus dem Vorraum wurde ein offener Raum, um 2 Kund*innen empfangen zu können. Der Raum ist unterteilt, aber es gibt keine Privatsphäre, für heikle Geschäfte und zum Brainstormen über neue Ideen. Nur die Leitung hat ein eigenes Büro.

Da so viele Personen auf angefülltem, kleinem Raum beschränkt sind, kommt es zu einigen Konflikten zwischen den Mitarbeiter*innen.

Der Bedarf an mehr Raum ist absolut notwendig, da ein*e neue*r Mitarbeiter*in eingestellt wurde und in einem Monat beginnen sollte. Aber die Firma hat gerade neue Investitionen getätigt und es ist kein guter Moment neue Räumlichkeiten zu kaufen.

Stellen Sie sich vor, Sie sind Teil des Leitungsteams und müssen Raum für den Neuzugang schaffen. Vergessen Sie nicht, dass Sie so wenig Geld wie möglich ausgeben sollten.

Sie kennen nun die Situation. Was denken Sie und was würden Sie der Leitung empfehlen?

Q1. Bitte geben Sie an welches Problem/welche Probleme Sie wahrnehmen.

Q2. Bitte zeigen Sie auf, ob Sie zusätzliche Informationen einholen würden und wenn, was würden Sie tun?

Q3. Bitte legen Sie verschiedene alternative Möglichkeiten zur Lösung des Problems vor und heben Sie die Vor- und Nachteile hervor.

Q4. Basierend auf die von Ihnen in Q3 genannten Möglichkeiten, wählen Sie die eine, die Ihnen am passendsten erscheint und zeigen Sie auf, welche Maßnahmen Sie treffen würden, um Ihre Idee umzusetzen.

Q5. Mit dieser Situation konfrontiert, was wäre für Sie ein gutes Ergebnis? Was haben Sie aus dieser Situation gelernt?

Results interpretation for Austria (Exercise 3)

Considering there are four levels of evaluation of the exercise's answers, and that there are 5 questions, the score ranges from 5 to 20 points.

To interpret results, we defined 5 levels of performance regarding the competence Analysis and Problem Solving, adapted to the Austrian context:

Much below average - 5 to 6 points

Below average - 7 to 9 points

On average - 10 to 12 points

Above average - 13 points

Well above average - 14 points and over.

Mean – 10,5

Median – 11,5

Mode – 5,0

Std. Dev. – 3,6

Minimum – 5,0

Maximum – 16,0



5.1.4. EXERCISES - Statistical information

As we can see from the tables and graphs below, there are no statistically significant differences between men and women with respect to the results of exercise 1, 2 and 3. This means that the 3 analysis exercise can be used in selection processes.

Hypothesis Test Summary			
	Null Hypothesis	Test	Sig. Decision
1	The distribution of COMPUTE Exercise1Total=Sum (Ex1Q1class + Ex1Q2class + Ex1Q3class + Ex1Q4class + Ex1Q5class) is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.801,000 Retain the null hypothesis.
2	The distribution of COMPUTE Exercise2Total=Sum (Ex2Q1class + Ex2Q2class + Ex2Q3class + Ex2Q4class + Ex2Q5class) is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.874,000 Retain the null hypothesis.
3	The distribution of COMPUTE Exercise3Total=Sum (Ex3Q1class + Ex3Q2class + Ex3Q3class + Ex3Q4class + Ex3Q5class) is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.83,000 Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

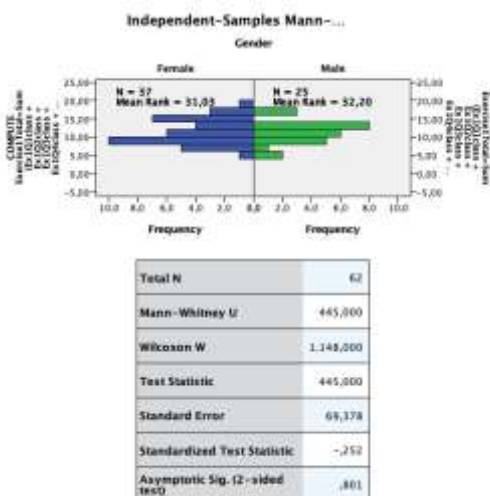


Figure 1- Gender differences in exercise 1,2 and 3

Figure 2 - Gender differences in exercise 1

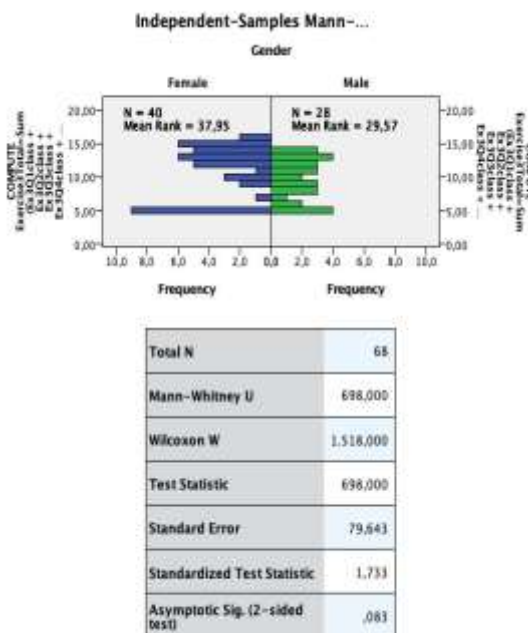


Figure 3 - Gender differences in exercise 2

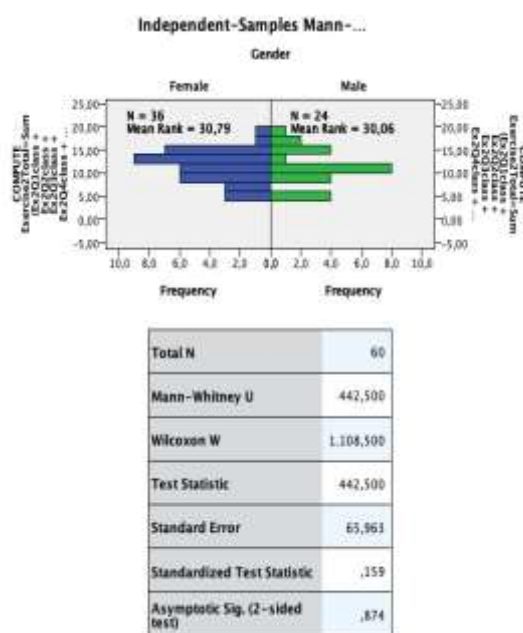


Figure 4 - Gender differences in exercise 3

The descriptive analysis of the total amount of points in each exercise and of each of the questions in the problem-solving exercises is presented below.

EXERCISE 1 - Total number of points distribution

Table 1 – Frequency of results in exercise 1 in AUSTRIA (n=68)

Total number of points	Frequency	Valid Percent	Cumulative Percent
5,00	3	4,8	4,8
6,00	2	3,2	8,1
7,00	4	6,5	14,5
8,00	9	14,5	29,0
9,00	6	9,7	38,7
10,00	7	11,3	50,0
11,00	5	8,1	58,1
12,00	7	11,3	69,4
13,00	5	8,1	77,4
14,00	5	8,1	85,5
15,00	2	3,2	88,7
16,00	3	4,8	93,5
17,00	3	4,8	98,4
19,00	1	1,6	100,0
Total	62	100,0	

Exercise 1 – Descriptive statistics for each question

Ex1-Q1	Frequency	Valid Percent	Cumulative Percent
1	15	21,4	21,4
2	9	12,9	34,3
3	19	27,1	61,4
4	27	38,6	100,0
Total	70	100,0	

Ex1-Q2	Frequency	Valid Percent	Cumulative Percent
1	19	26,8	26,8
2	23	32,4	59,2
3	25	35,2	94,4
4	4	5,6	100,0
Total	71	100,0	

Ex1-Q3	Frequency	Valid Percent	Cumulative Percent
1	36	53,7	53,7
2	7	10,4	64,2
3	19	28,4	92,5
4	5	7,5	100,0
Total	67	100,0	

Ex1-Q4	Frequency	Valid Percent	Cumulative Percent
1	22	34,9	34,9
2	13	20,6	55,6
3	20	31,7	87,3
4	8	12,7	100,0
Total	63	100,0	

Ex1-Q5	Frequency	Valid Percent	Cumulative Percent
1	32	50,8	50,8
2	16	25,4	76,2
3	10	15,9	92,1
4	5	7,9	100,0
Total	63	100,0	

EXERCISE 2 - Total number of points distribution

Table 2 – Frequency of results in exercise 2 in AUSTRIA (n=68)

Total number of points	Frequency	Valid Percent	Cumulative Percent
5,00	7	11,7	11,7
7,00	3	5,0	16,7
8,00	5	8,3	25,0
9,00	5	8,3	33,3
10,00	6	10,0	43,3
11,00	8	13,3	56,7
12,00	3	5,0	61,7
13,00	7	11,7	73,3
14,00	6	10,0	83,3
15,00	5	8,3	91,7
16,00	2	3,3	95,0
17,00	1	1,7	96,7
18,00	1	1,7	98,3
19,00	1	1,7	100,0
Total	60	100,0	

Exercise 2 - Descriptive statistics for each question

Ex2-Q1	Frequency	Valid Percent	Cumulative Percent
1	22	34,4	34,4
2	11	17,2	51,6
3	18	28,1	79,7
4	13	20,3	100,0
Total	64	100,0	

Ex2-Q2	Frequency	Valid Percent	Cumulative Percent
1	11	17,2	17,2
2	15	23,4	40,6
3	25	39,1	79,7
4	13	20,3	100,0
Total	64	100,0	

Ex2-Q3	Frequency	Valid Percent	Cumulative Percent
1	37	58,7	58,7
2	5	7,9	66,7
3	13	20,6	87,3
4	8	12,7	100,0
Total	63	100,0	

Ex2-Q4	Frequency	Valid Percent	Cumulative Percent
1	25	38,5	38,5
2	9	13,8	52,3
3	25	38,5	90,8
4	6	9,2	100,0
Total	65	100,0	

Ex2-Q5	Frequency	Valid Percent	Cumulative Percent
1	19	27,9	27,9
2	30	44,1	72,1
3	14	20,6	92,6
4	5	7,4	100,0
Total	68	100,0	

EXERCISE 3 - Total number of points distribution

Table 3 – Frequency of results in exercise 3 in AUSTRIA (n=68)

EXERCISE 3		Frequency	Valid Percent	Cumulative Percent
Valid	5,00	13	19,1	19,1
	6,00	2	2,9	22,1
	7,00	2	2,9	25,0
	8,00	3	4,4	29,4
	9,00	5	7,4	36,8
	10,00	5	7,4	44,1
	11,00	4	5,9	50,0
	12,00	8	11,8	61,8
	13,00	10	14,7	76,5
	14,00	8	11,8	88,2
	15,00	6	8,8	97,1
	16,00	2	2,9	100,0
	Total	68	100,0	

EXERCISE 3 - Descriptive statistics for each question

Ex3-Q1	Frequency	Valid Percent	Cumulative Percent
1	25	36,8	36,8
2	6	8,8	45,6
3	22	32,4	77,9
4	15	22,1	100,0
Total	68	100,0	

Ex3-Q2	Frequency	Valid Percent	Cumulative Percent
1	30	43,5	43,5
2	24	34,8	78,3
3	14	20,3	98,6
4	1	1,4	100,0
Total	69	100,0	

Ex3-Q3	Frequency	Valid Percent	Cumulative Percent
1	21	30,4	30,4
2	10	14,5	44,9
3	27	39,1	84,1
4	11	15,9	100,0
Total	69	100,0	

Ex3-Q4	Frequency	Valid Percent	Cumulative Percent
1	34	49,3	49,3
2	6	8,7	58,0
3	24	34,8	92,8
4	5	7,2	100,0
Total	69	100,0	

Ex3-Q5	Frequency	Valid Percent	Cumulative Percent
1	26	37,1	37,1
2	25	35,7	72,9
3	15	21,4	94,3
4	4	5,7	100,0
Total	70	100,0	

Appendix 5.2. Bulgaria

Statistical analysis revealed that there are no statistically significant differences between men and women with respect to the results of exercise 1 and 3, but there are these differences in Exercise 2.

This means that in Bulgaria, only exercises 1 and 3 should be used for evaluating the competence „Analysis and problem solving“.



5.2.1. EXERCISE 1 for Bulgaria

Упражнение 1

Всяка година фирмата ви подготвя годишна среща, на която представя бъдещите си планове пред главните клиенти и партньори (доставчици, сертифициращи компании, местни организации).

Като се има предвид, че компанията наскоро е променила местоположението си и че тази среща винаги се провежда в първите дни на юли, е взето решение срещата да бъде последвана от коктейл на открито в градината на новия офис.

Тъй като това събитие ще има някои нови елементи в сравнение с предишните срещи (нова сграда, събитие в градината, служителите също са поканени, представяне на новите пазари, където ще се разраства бизнеса), то е обявено достатъчно рано, като са подчертани новостите. Дори са разпространени снимки на това как срещата ще се проведе в градината.

Сутринта преди събитието, когато тече финалната подготовка, времето е нестабилно и не е ясно дали ще вали или не по време на срещата и коктейла.

Представете си, че сте част от екипа, който организира това събитие, което е толкова важно за имиджа на компанията. Предвид ситуацията и без да знаете какво да правите, се допитват до вашето мнение за това какво да се направи.

В1. Моля, посочете проблемите, пред които сте изправени.

В2. Моля, посочете дали ще трябва да съберете допълнителна информация и ако да, какво ще направите.

В3. Моля, предоставете няколко възможности за решаване на проблема и посочете техните плюсове и минуси.

В4. От възможностите, представени в предишната точка, изберете тази, която считате за най-подходяща, като посочите какви действия ще предприемете, за да приложите идеята си.

В5. Предвид ситуацията, какво бихте приели за добър резултат? Какви уроци сте научили от тази ситуация?



EXERCISE 1 - Results Interpretation for Bulgaria

Considering there are four levels of evaluation of the exercise's answers, and that there are 5 questions, the score ranges from 5 to 20 points.

To interpret results, we defined 3 levels of performance, regarding the competence Analysis and Problem Solving, each representing one third of the responses in the pilot testing in Bulgaria:

Below average - 5 to 7 points

On average - 8 to 9 points

Above average - 10 points and over.

Mean – 8,4

Median – 8,0

Mode – 8,0

Std. Dev. – 2,7

Minimum – 5,0

Maximum – 18,0



5.2.2. EXERCISE 3 for Bulgaria

Упражнение 3

Представете си, че работите във фирма за внос / износ, която има офис в хубаво предградие на голям град.

Благодарение на ръста на вашата компания през последните 2 години, броя на хората в офиса се е увеличил. Преди две години в офиса са работили 6 души и е имало приемна със стол и заседателна зала, където 6 човека са могли да се настанят удобно.

През тези две години компанията се е разраснала до 10 души, които работят в същия офис. Те са настанени там с бюрата си, компютрите и шкафовете за документи. Заседателната зала е станала офис за 4 човека, а приемната е преустроена на отворена зала за срещи, където можете да посрещнете 2 клиенти. Пространството е разделено, но е невъзможно някой да се усамоти за конфиденциален разговор или обсъждане на важни бизнес идеи. Само мениджърът има самостоятелен офис.

Има известни конфликти между хората поради това, че са затворени в малко претъпкано пространство.

Нуждата от по-голям офис се изостря, тъй като е нает и нов служител, който ще започне работа след около месец. Но наскоро фирмата е направила нови инвестиции и моментът не е подходящ за допълнителни разходи за офисно пространство.

Представете си, че сте част от управляващия екип и трябва да намерите място за новия служител, като имате предвид, че трябва да го направите с минимален разход.

Предвид ситуацията, споделете какво ще посъветвате да направи управителят?

В1. Моля, посочете проблемите, пред които сте изправени.

В2. Моля, посочете дали ще трябва да съберете допълнителна информация и ако да, какво ще направите.

В3. Моля, предоставете няколко възможности за решаване на проблема и посочете техните плюсове и минуси.

В4. От възможностите, представени в предишната точка, изберете тази, която считате за най-подходяща, като посочите какви действия ще предприемете, за да приложите идеята си.

В5. Предвид ситуацията, какво бихте приели за добър резултат? Какви уроци сте научили от тази ситуация?



EXERCISE 3 - Results Interpretation For Bulgaria

Considering there are four levels of evaluation of the exercise's answers, and that there are 5 questions, the score ranges from 5 to 20 points.

To interpret results, we defined 3 levels of performance, regarding the competence Analysis and Problem Solving, each representing one third of the responses in the pilot testing in Bulgaria:

Below average - 5 to 6 points

On average - 7 to 8 points

Above average - 9 points and over.

Mean – 7,5

Median – 7,0

Mode – 6,0

Std. Dev. – 2,1

Minimum – 5,0

Maximum – 16,0



5.2.3. EXERCISE - Statistical information

Hypothesis Test Summary			
Null Hypothesis	Test	Sig.	Decision
1 The distribution of COMPUTE EXERC1_TOTAL=SUM (Ex1Q1class + Ex1Q2class + Ex1Q3class + Ex1Q4class + Ex1Q5class) is the same across categories of Género. []	Independent-Samples Mann-Whitney U Test	.564,000	Retain the null hypothesis.
2 The distribution of COMPUTE EXERC2_TOTAL=SUM (Ex2Q1class + Ex2Q2class + Ex2Q3class + Ex2Q4class + Ex2Q5class) is the same across categories of Género. []	Independent-Samples Mann-Whitney U Test	1,000	Reject the null hypothesis.
3 The distribution of COMPUTE EXERC3_TOTAL=SUM (Ex3Q1class + Ex3Q2class + Ex3Q3class + Ex3Q4class + Ex3Q5class) is the same across categories of Género. []	Independent-Samples Mann-Whitney U Test	.942,000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 1 - Gender differences in Exercises 1,2 and 3

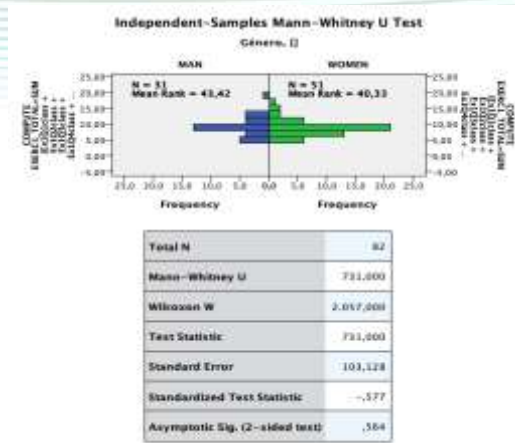


Figure 1 - Gender differences in exercise 1

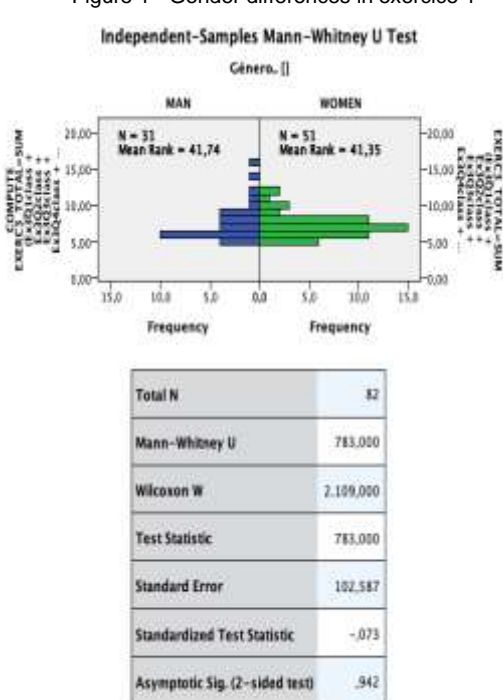
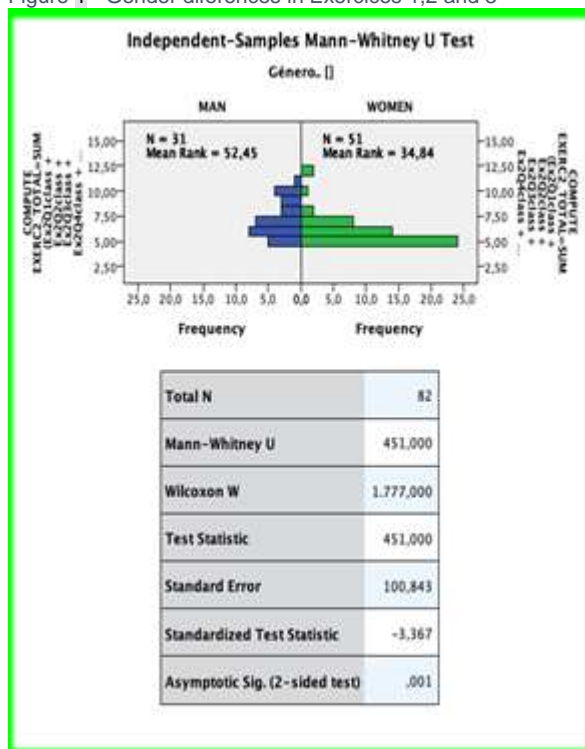


FIGURE 2-GENDER DIFFERENCES IN EXERCISE 2 FIGURE 3 - GENDER DIFFERENCES IN EXERCISE 3

As we can see from the tables and graphs above, there are no statistically significant differences between men and women with respect to the results of exercise 1 and 3, but there are these differences in Exercise 2.

The descriptive analysis of each of the questions in the problem-solving exercises is presented below.

Below average (more or less 1/3)

Average (more or less 1/3)

Above average (more or less 1/3)

EXERCISE 1 - Total number of points distribution

Table I – Frequency of results in exercise 1 in Bulgaria (n=82)

Exercise 1		Frequency	Valid Percent	Cumulative Percent
Valid	5,00	11	13,4	13,4
	6,00	15	18,3	31,7
	7,00	2	2,4	34,1
	8,00	17	20,7	54,9
	9,00	17	20,7	75,6
	10,00	8	9,8	85,4
	11,00	2	2,4	87,8
	12,00	1	1,2	89,0
	13,00	5	6,1	95,1
	14,00	2	2,4	97,6
	16,00	1	1,2	98,8
	18,00	1	1,2	100,0
	Total	82	100,0	

Exercise 1 – Descriptive statistics for each question

Ex1-Q1		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	36	43,9	43,9
	2,00	6	7,3	51,2
	3,00	6	7,3	58,5
	4,00	34	41,5	100,0
Total		82	100,0	

Ex1-Q2		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	43	52,4	52,4
	2,00	24	29,3	81,7
	3,00	10	12,2	93,9
	4,00	5	6,1	100,0
Total		82	100,0	

Ex1-Q3		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	67	81,7	81,7
	2,00	9	11,0	92,7
	3,00	4	4,9	97,6
	4,00	2	2,4	100,0
Total		82	100,0	

Ex1-Q4		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	44	53,7	53,7
	2,00	30	36,6	90,2
	3,00	6	7,3	97,6
	4,00	2	2,4	100,0
Total		82	100,0	

Ex1-Q5		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	61	74,4	74,4
	2,00	15	18,3	92,7
	3,00	4	4,9	97,6
	4,00	2	2,4	100,0
Total		82	100,0	

EXERCISE 3 - Total number of points distribution

Table 3– Frequency of results in exercise 3 in Bulgaria (n=82)

EXERCICE 3		Frequency	Valid Percent	Cumulative Percent
Valid	5,00	10	12,2	12,2
	6,00	21	25,6	37,8
	7,00	19	23,2	61,0
	8,00	15	18,3	79,3
	9,00	6	7,3	86,6
	10,00	4	4,9	91,5
	11,00	2	2,4	93,9
	12,00	3	3,7	97,6
	14,00	1	1,2	98,8
	16,00	1	1,2	100,0
	Total	82	100,0	

Exercise 3 – Descriptive statistics for each question

Ex3-Q1		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	31	37,8	37,8
	2,00	23	28,0	65,9
	3,00	14	17,1	82,9
	4,00	14	17,1	100,0
	Total	82	100,0	

Ex3-Q2		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	53	64,6	64,6
	2,00	20	24,4	89,0
	3,00	9	11,0	100,0
	Total	82	100,0	

Ex3-Q3		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	63	76,8	76,8
	2,00	16	19,5	96,3
	3,00	2	2,4	98,8
	4,00	1	1,2	100,0
	Total	82	100,0	

Ex3-Q4		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	63	76,8	76,8
	2,00	16	19,5	96,3
	3,00	2	2,4	98,8
	4,00	1	1,2	100,0
	Total	82	100,0	

Ex3-Q5		Frequency	Valid Percent	Cumulative Percent
Valid	1,00	59	72,0	72,0
	2,00	22	26,8	98,8
	3,00	1	1,2	100,0
	Total	82	100,0	

Appendix 5.3. Italy

There are no statistically significant differences between men and women with respect to the results of exercises 1, and 2, but in exercise 3 there are differences between gender.

These results indicate that in Italy only should be used for evaluation of the competence “Analysis and Problem solving” exercises 1 and 2.



5.3.1. EXERCISE 1 for Italy

Esercizio 1

Ogni anno la tua azienda prepara l'incontro annuale per la presentazione delle nuove linee guida ai suoi principali clienti e partner (fornitori, società di certificazione, enti locali).

Visto che l'azienda ha recentemente cambiato le sue strutture e che questo incontro ha solitamente luogo nei primi giorni di luglio, si è deciso di organizzare l'incontro, seguito da un breve rinfresco, nel giardino esterno.

Dato che l'evento si caratterizza di nuove componenti rispetto ai precedenti incontri (nuove strutture, riunioni in giardino, la partecipazione dei dipendenti e la presentazione dei nuovi mercati in cui si desidera realizzare una nuova espansione), le novità sono state presentate con un dovuto anticipo. Si sono inoltre presentate delle immagini volte a raffigurare come si sarebbe svolto l'evento.

La mattina prima dell'evento, quando gli ultimi preparativi stanno avendo luogo, il tempo inizia ad essere instabile e non è chiaro se piovverà o meno nel corso dell'incontro e del seguente rinfresco. Immagina di far parte del team che sta organizzando questo evento; che è molto importante per l'immagine dell'azienda. Data la situazione, non sapendo cosa fare, hanno chiesto la tua opinione su come agire.

Q1. Identifica quale problema si sta verificando.

Q2. Indica se per te risulterebbe necessario raccogliere ulteriori informazioni ed in caso affermativo, cosa faresti.

Q3. Fornire diverse possibili alternative per la risoluzione del problema, sottolineando i possibili pro e contro.

Q4. Dalle possibili soluzioni identificate nel Q3, selezionare quella che ritieni più appropriata, indicando quali azioni adatteresti per attuare la tua idea.

Q5. Data la situazione, cosa considereresti un buon risultato? Quali lezioni hai imparato da questa situazione?



Exercise 1 - Results interpretation for Italy

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Italy for Exercise 1:

Much below average: 5 – 8 points

Below average: 9 – 10 points

On average: 11 points

Above average: 12 – 13 points

Much above average: 14 points and over

Mean – 10,9

Median – 8,0

Mode – 11,0

Std. Dev. – 3,0

Minimum – 5,0

Maximum – 17,0



5.3.2. EXERCISE 2 for Italy

Esercizio 2

Un tuo collega ha emesso un ordine di € 10.000 per un cliente. Questo ordine era urgente per il cliente. Il vostro collega ha consultato il fornitore (in Francia), richiedendo informazioni sui tempi di consegna che risultavano essere di un massimo di 5 giorni lavorativi. Il tuo collega ha detto che avrebbe informato il suo cliente, tramite SMS, non appena l'ordine fosse arrivato.

Q1. Identifica quale problema si sta verificando.

Q2. Indica se per te risulterebbe necessario raccogliere ulteriori informazioni ed in caso affermativo, cosa faresti.

Q3. Fornire diverse possibili alternative per la risoluzione del problema, sottolineando i possibili pro e contro.

Q4. Dalle possibili soluzioni identificate nel Q3, selezionare quella che ritieni più appropriata, indicando quali azioni adotteresti per attuare la tua idea.

Q5. Data la situazione, cosa considereresti un buon risultato? Quali lezioni hai imparato da questa situazione?



Exercise 2 - Results interpretation for Italy

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Italy for Exercise 2:

Much below average: 5 points

Below average: 6 – 7 points

On average: 8 points

Above average: 9 – 10 points

Much above average: 11 points and over

Mean – 7,8

Median – 8,0

Mode – 8,0

Std. Dev. – 2,7

Minimum – 5,0

Maximum – 15,0



5.3.3. EXERCISES - Statistical information

Hypothesis Test Summary			
	Null Hypothesis	Test	Decision
1	The distribution of COMPUTE EXERCISE1_TOTAL = SUM (EXERC1_Q1 + EXERC1_Q2 + EXERC1_Q3 + EXERC1_Q4 + EXERC1_Q5) is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	240,000 Retain the null hypothesis.
2	The distribution of COMPUTE EXERCISE2_TOTAL = SUM (EXERC2_Q1 + EXERC2_Q2 + EXERC2_Q3 + EXERC2_Q4 + EXERC2_Q5) is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	479,000 Retain the null hypothesis.
3	The distribution of COMPUTE EXERCISE3_TOTAL = SUM (EXERC3_Q1 + EXERC3_Q2 + EXERC3_Q3 + EXERC3_Q4 + EXERC3_Q5) is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	38,000 Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

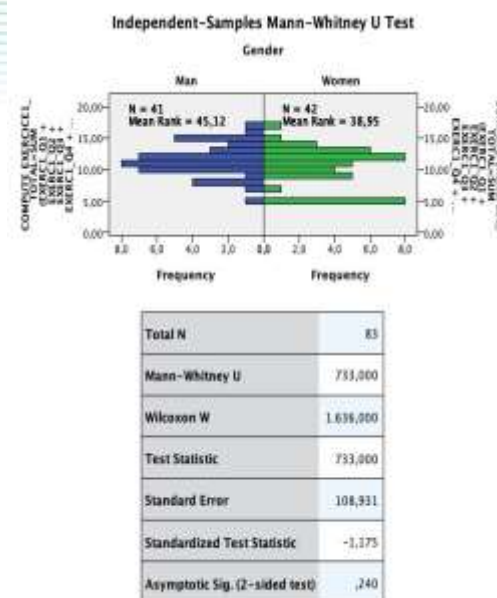


Figure 1- Gender differences in exercise 1,2 and 3

Figure 2 - Gender differences in exercise 1

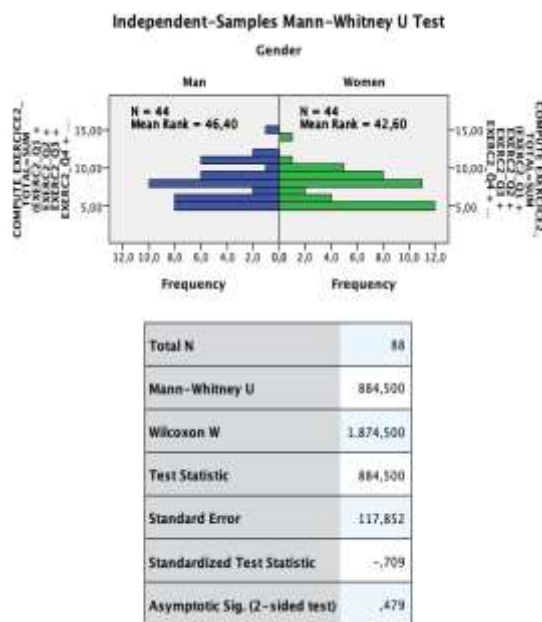


FIGURE 4-GENDER DIFFERENCES IN EXERCISE 2

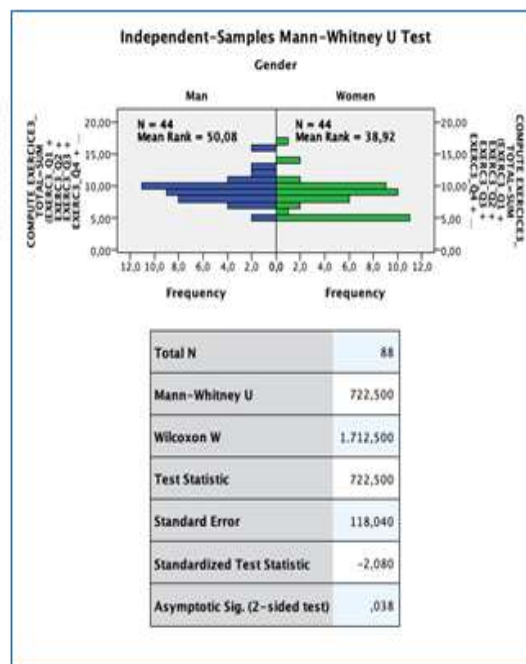


FIGURE 5 - GENDER DIFFERENCES IN EXERCISE 3

As we can see from the tables and graphs above, there are no statistically significant differences between men and women with respect to the results of exercise 1, 2, but in exercise 3 there are differences between men and women.

EXERCISE 1 - Total number of points distribution

Table 1 – Frequency of results in exercise 1 in ITALY (n=83)

Exercise 1		Frequency	Valid Percent	Cumulative Percent
Total number of points	5,00	9	10,8	10,8
	7,00	2	2,4	13,3
	8,00	4	4,8	18,1
	9,00	6	7,2	25,3
	10,00	11	13,3	38,6
	11,00	13	15,7	54,2
	12,00	15	18,1	72,3
	13,00	9	10,8	83,1
	14,00	5	6,0	89,2
	15,00	6	7,2	96,4
	16,00	1	1,2	97,6
	17,00	2	2,4	100,0
	Total	83	100,0	

Exercise 1 – Descriptive statistics for each question

EXERC1_Q1		Frequency	Valid Percent	Cumulative Percent
Valid	1	16	18,2	18,2
	2	13	14,8	33,0
	3	20	22,7	55,7
	4	39	44,3	100,0
	Total	88	100,0	

EXERC1_Q2		Frequency	Valid Percent	Cumulative Percent
Valid	1	21	23,9	23,9
	2	44	50,0	73,9
	3	20	22,7	96,6
	4	3	3,4	100,0
	Total	88	100,0	

EXERC1_Q3		Frequency	Valid Percent	Cumulative Percent
Valid	1	60	67,4	67,4
	2	9	10,1	77,5
	3	12	13,5	91,0
	4	8	9,0	100,0
	Total	89	100,0	

EXERC1_Q4		Frequency	Valid Percent	Cumulative Percent
Valid	1	27	31,8	31,8
	2	29	34,1	65,9
	3	28	32,9	98,8
	4	1	1,2	100,0
	Total	85	100,0	

EXERC1_Q5		Frequency	Valid Percent	Cumulative Percent
Valid	1	19	21,6	21,6
	2	37	42,0	63,6
	3	28	31,8	95,5
	4	4	4,5	100,0
	Total	88	100,0	

EXERCISE 2 - Total number of points distribution

Table 2 – Frequency of results in exercise 2 in ITALY (n=88)

Exercise 2	Frequency		Valid Percent	Cumulative Percent
Total number of points	5,00	20	22,7	22,7
	6,00	12	13,6	36,4
	7,00	4	4,5	40,9
	8,00	21	23,9	64,8
	9,00	14	15,9	80,7
	10,00	6	6,8	87,5
	11,00	7	8,0	95,5
	12,00	2	2,3	97,7
	14,00	1	1,1	98,9
	15,00	1	1,1	100,0
	Total	88	100,0	

Exercise 2 – Descriptive statistics for each question

EXERC2_Q1	Frequency		Valid Percent	Cumulative Percent
Valid	1	44	50,0	50,0
	2	8	9,1	59,1
	3	32	36,4	95,5
	4	4	4,5	100,0
	Total	88	100,0	

EXERC2_Q2	Frequency		Valid Percent	Cumulative Percent
Valid	1	52	59,1	59,1
	2	23	26,1	85,2
	3	11	12,5	97,7
	4	2	2,3	100,0
	Total	88	100,0	

EXERC2_Q3	Frequency		Valid Percent	Cumulative Percent
Valid	1	33	37,5	37,5
	2	34	38,6	76,1
	3	17	19,3	95,5
	4	4	4,5	100,0
	Total	88	100,0	

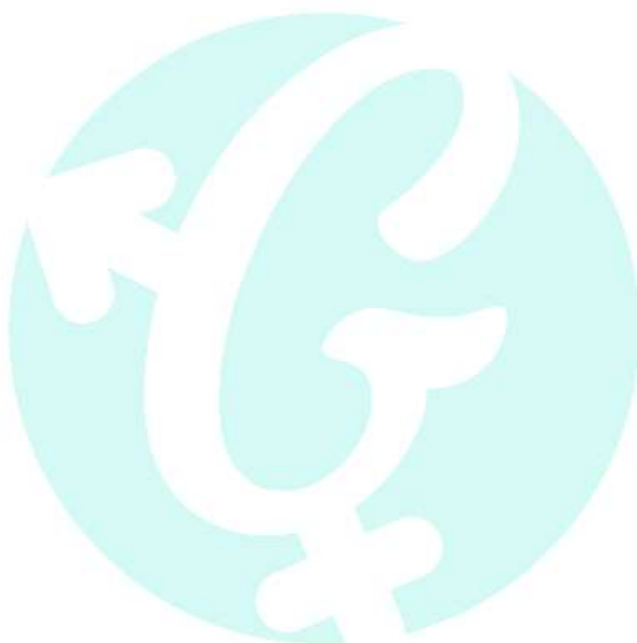
EXERC2_Q4	Frequency		Valid Percent	Cumulative Percent
Valid	1	83	94,3	94,3
	2	4	4,5	98,9
	3	1	1,1	100,0
	Total	88	100,0	

EXERC2_Q5	Frequency		Valid Percent	Cumulative Percent
Valid	1	72	79,1	79,1
	2	15	16,5	95,6
	3	4	4,4	100,0
	Total	91	100,0	

Appendix 5.4. Portugal

There are no statistically significant differences between men and women with respect to the results of exercises 1, 2, and 3.

These results indicate that in Portugal the 3 exercises developed can be used for evaluation of the competence “Analysis and Problem solving”.



5.4.1. EXERCISE 1 for Portugal

EXERCÍCIO 1

Todos os anos a sua empresa prepara uma reunião anual na qual apresenta as novas diretrizes para os principais clientes e parceiros (fornecedores, empresas de certificação, entidades locais). Considerando que a empresa recentemente mudou de instalações e que esta reunião em concreto ocorre todos os anos no início de julho, foi decidido que a reunião seria seguida de um cocktail no jardim exterior.

Uma vez que este evento tem novas especificidades quando comparado com as reuniões passadas (novas instalações, realizada no jardim, trabalhadores também convidados a participar, apresentação dos novos mercados a explorar), tais alterações foram anunciadas com a devida antecedência e destaque. Mesmo fotografias ilustrativas da organização da reunião no jardim foram partilhadas.

Na manhã anterior ao evento, já quando estavam a ser ultimados os preparativos, a meteorologia era instável, não havendo uma ideia clara de se iria chover ou não durante o período da reunião e do cocktail.

Imagine agora que faz parte da equipa que se encontra a organizar o evento (evento esse de extrema importância para a imagem da empresa). Dada a situação, foi questionado sobre como acha que se deveria atuar.

P1. Identifique o(s) problema(s) que está a experienciar.

P2. Indique se seria necessário recolher informação adicional e, em caso positivo, o que faria.

P3. Indique as várias alternativas possíveis para a resolução deste problema, fazendo referência aos prós e contras de cada uma.

P4. Das alternativas identificadas na P3, selecione aquela que considera a mais apropriada, indicando quais as ações que seriam necessárias para a implementação da ideia.

P5. Dada a situação, o que consideraria ser um bom resultado? Quais as aprendizagens que retira desta situação?



Exercise 1 - Results interpretation for Portugal

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Portugal for Exercise 1:

Much below average: 6 - 9 points

Below average: 10 points

On average: 8 points

Above average: 11 - 12 points

Much above average: 13 points and over

Mean – 11,8

Median – 12,0

Mode – 10,0

Std. Dev. – 2,7

Minimum – 6,0

Maximum – 18,0



5.4.2. EXERCISE 2 for Portugal

EXERCÍCIO 2

Um colega seu fez uma encomenda de 10.000€ para um cliente, sendo que a mesma era urgente para o cliente em questão. O seu colega consultou o fornecedor (de França), requerendo informação relativa ao tempo de entrega, tendo sido informado que a entrega demoraria, no máximo, 5 dias úteis. O seu colega indicou que ele iria informar o cliente, por SMS, logo que a encomenda chegasse.

Após esses 5 dias úteis, o cliente foi às instalações da empresa para fazer a recolha da encomenda. No entanto, a mesma ainda não tinha chegado e o colega responsável encontrava-se de folga nesse dia.

Quando se apercebeu da situação, o cliente ficou muito aborrecido, afirmando que esses materiais eram realmente necessários para que as atividades da empresa não fossem comprometidas. Para além disso, o cliente disse também que a situação tinha feito com que ele perdesse a confiança na empresa. De facto, este era verdadeiramente um bom e leal cliente, encomendando muito material e fazendo sempre os pagamentos dentro dos prazos estipulados.

Considerando esta situação, indique como tencionaria atuar.

P1. Identifique o(s) problema(s) que está a experienciar.

P2. Indique se seria necessário recolher informação adicional e, em caso positivo, o que faria.

P3. Indique as várias alternativas possíveis para a resolução deste problema, fazendo referência aos prós e contras de cada uma.

P4. Das alternativas identificadas na P3, selecione aquela que considera a mais apropriada, indicando quais as ações que seriam necessárias para a implementação da ideia.

P5. Dada a situação, o que consideraria ser um bom resultado? Quais as aprendizagens que retira desta situação?



Exercise 2 - Results interpretation for Portugal

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Portugal for Exercise 2:

Much below average: 5 – 7 points

Below average: 8 – 9 points

On average: 10 points

Above average: 11 – 12 points

Much above average: 13 points and over

Mean – 10,2

Median – 10,0

Mode – 11,0

Std. Dev. – 2,6

Minimum – 5,0

Maximum – 17,0



5.4.3. EXERCISE 3 for Portugal

EXERCÍCIO 3

Imagine que trabalha numa empresa de importações/exportações que tem o seu escritório nuns bons subúrbios de uma grande cidade.

Como consequência do crescimento da empresa nos últimos 2 anos, mais pessoas foram admitidas no escritório. Há dois anos atrás, havia apenas 6 pessoas a trabalhar no escritório, sendo o mesmo composto por uma entrada com uma cadeira e uma sala de reuniões na qual 6 pessoas se podiam confortavelmente sentar.

Ao longo desses 2 anos, a empresa passou a ter 10 pessoas no mesmo local, mais toda a mobília necessária e inerente (secretárias, computadores, arquivadores, entre outros). A sala de reuniões foi transformada num escritório onde trabalham 4 pessoas, ao passo que a entrada passou a ser um pequeno espaço aberto para reuniões de até 2 clientes. Ainda que este espaço esteja dividido dos demais, é possível uma efetiva privacidade (especialmente importante para negócios ou partilha de ideias sensíveis). Apenas o gestor tem um gabinete fechado.

Como consequência de haver muitas pessoas confinadas a um espaço pequeno e atolado, vão surgindo alguns conflitos entre os trabalhadores.

A necessidade de mais espaço é então absolutamente vital, até porque um novo trabalhador foi contratado e inicia as suas funções daqui a aproximadamente um mês. No entanto, a empresa fez recentemente alguns investimentos, pelo que agora não é o melhor momento para tal.

Imagine que faz parte da equipa de gestão e que precisa de arranjar espaço para o novo trabalhador, tendo em consideração que tem de gastar o mínimo dinheiro possível.

Dada a situação, diga de que forma aconselharia o director a intervir.

P1. Identifique o(s) problema(s) que está a experienciar.

P2. Indique se seria necessário recolher informação adicional e, em caso positivo, o que faria.

P3. Indique as várias alternativas possíveis para a resolução deste problema, fazendo referência aos prós e contras de cada uma.

P4. Das alternativas identificadas na P3, selecione aquela que considera a mais apropriada, indicando quais as ações que seriam necessárias para a implementação da ideia.

P5. Dada a situação, o que consideraria ser um bom resultado? Quais as aprendizagens que retira desta situação?



Exercise 3 - Results interpretation for Portugal

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Portugal for Exercise 3:

Much below average: 8 – 10 points

Below average: 11 – 12 points

On average: 13 points

Above average: 14 – 15 points

Much above average: 16 points and over

Mean – 13,0

Median – 13,0

Mode – 13,0

Std. Dev. – 2,7

Minimum – 8,0

Maximum – 19,0



5.4.4. EXERCISES - Statistical information

Hypothesis Test Summary			
	Null Hypothesis	Test	Sig. Decision
1	The distribution of COMPUTE Exerc1_total=sum (EX1_1 + EX1_2 + EX1_3 + EX1_4 + EX1_5) is the same across categories of gender.	Independent-Samples Mann-Whitney U Test	.366,000 Retain the null hypothesis.
2	The distribution of COMPUTE Exerc2_total=sum (EX2_1 + EX2_2 + EX2_3 + EX2_4 + EX2_5) is the same across categories of gender.	Independent-Samples Mann-Whitney U Test	.87,000 Retain the null hypothesis.
3	The distribution of COMPUTE Exerc3_total=sum (EX3_1 + EX3_2 + EX3_3 + EX3_4 + EX3_5) is the same across categories of gender.	Independent-Samples Mann-Whitney U Test	.882,000 Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

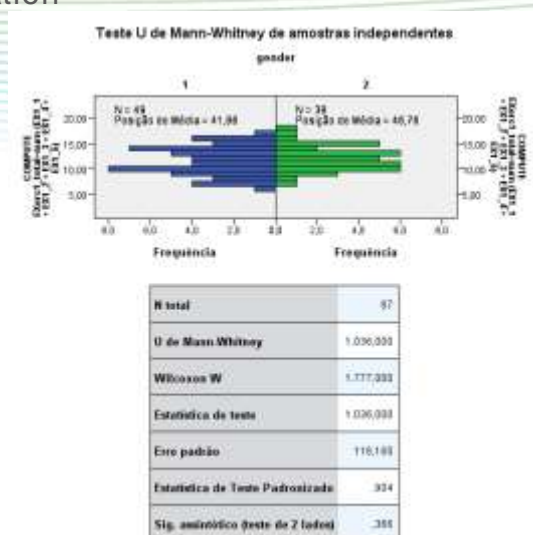


Figure 1- Gender differences in exercise 1,2 and 3

Figure 2 - Gender differences in exercise 1

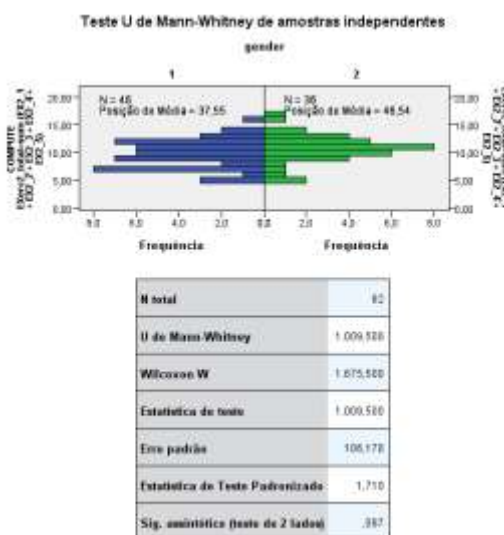


FIGURE 6-GENDER DIFFERENCES IN EXERCISE 2

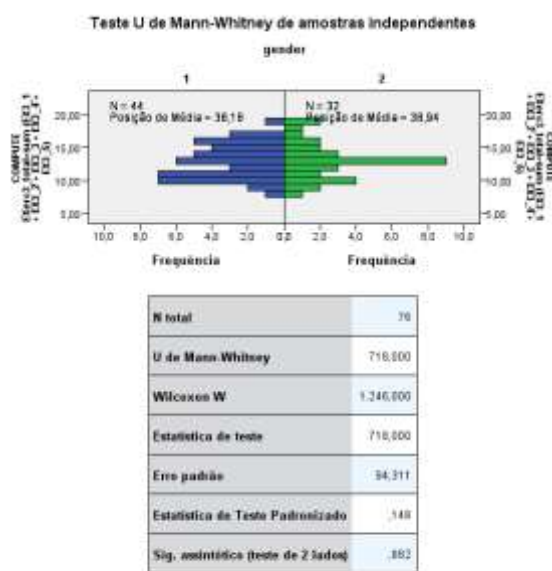


FIGURE 7 - GENDER DIFFERENCES IN EXERCISE 3

As we can see from the tables and graphs above, there are no statistically significant differences between men and women with respect to the results of exercise 1, 2 and 3.

The descriptive analysis of each of the questions in the problem-solving exercises is presented below.

EXERCISE 1- Total number of points distribution

Table 1– Frequency of results in exercise 2 PORTUGAL (n=87)

EXERCICE 1	Frequency		Valid Percent	Cumulative Percent
Total number of points	6,00	1	1,1	1,1
	7,00	5	5,7	6,9
	8,00	4	4,6	11,5
	9,00	8	9,2	20,7
	10,00	14	16,1	36,8
	11,00	10	11,5	48,3
	12,00	9	10,3	58,6
	13,00	11	12,6	71,3
	14,00	9	10,3	81,6
	15,00	8	9,2	90,8
	16,00	5	5,7	96,6
	17,00	2	2,3	98,9
	18,00	1	1,1	100,0
	Total	87	100,0	

Exercise 1 – Descriptive statistics for each question

EX1_P1	Frequency		Valid Percent	Cumulative Percent
Valid	1	13	14,8	14,8
	2	12	13,6	28,4
	3	13	14,8	43,2
	4	50	56,8	100,0
	Total	88	100,0	

EX1_P2	Frequency		Valid Percent	Cumulative Percent
Valid	1	30	33,3	33,3
	2	41	45,6	78,9
	3	16	17,8	96,7
	4	3	3,3	100,0
	Total	90	100,0	

EX1_P3	Frequency		Valid Percent	Cumulative Percent
Valid	1	18	20,0	20,0
	2	31	34,4	54,4
	3	31	34,4	88,9
	4	10	11,1	100,0
	Total	90	100,0	

EX1_P4	Frequency		Valid Percent	Cumulative Percent
Valid	1	31	34,8	34,8
	2	37	41,6	76,4
	3	13	14,6	91,0
	4	8	9,0	100,0
	Total	89	100,0	

EX1_P5	Frequency		Valid Percent	Cumulative Percent
Valid	1	15	16,7	16,7
	2	32	35,6	52,2
	3	34	37,8	90,0
	4	9	10,0	100,0
	Total	90	100,0	

EXERCISE 2 - Total number of points distribution

Table 2 – Frequency of results in exercise 2 PORTUGAL (n=87)

EXERCICE 2		Frequency	Valid Percent	Cumulative Percent
Total number of points	5,00	5	6,1	6,1
	6,00	2	2,4	8,5
	7,00	9	11,0	19,5
	8,00	3	3,7	23,2
	9,00	11	13,4	36,6
	10,00	12	14,6	51,2
	11,00	14	17,1	68,3
	12,00	12	14,6	82,9
	13,00	7	8,5	91,5
	14,00	4	4,9	96,3
	16,00	2	2,4	98,8
	17,00	1	1,2	100,0
	Total	82	100,0	

Exercise 2 – Descriptive statistics for each question

EX2_P1		Frequency	Valid Percent	Cumulative Percent
Valid	1	25	29,1	29,1
	2	10	11,6	40,7
	3	15	17,4	58,1
	4	36	41,9	100,0
	Total	86	100,0	

EX2_P2		Frequency	Valid Percent	Cumulative Percent
Valid	1	30	34,9	34,9
	2	22	25,6	60,5
	3	30	34,9	95,3
	4	4	4,7	100,0
	Total	86	100,0	

EX2_P3		Frequency	Valid Percent	Cumulative Percent
Valid	1	57	67,1	67,1
	2	14	16,5	83,5
	3	10	11,8	95,3
	4	4	4,7	100,0
	Total	85	100,0	

EX2_P4		Frequency	Valid Percent	Cumulative Percent
Valid	1	51	60,7	60,7
	2	25	29,8	90,5
	3	7	8,3	98,8
	4	1	1,2	100,0
	Total	84	100,0	

EX2_P5		Frequency	Valid Percent	Cumulative Percent
Valid	1	20	23,5	23,5
	2	19	22,4	45,9
	3	40	47,1	92,9
	4	6	7,1	100,0
	Total	85	100,0	

EXERCISE 3 - Total number of points distribution

Table 3 – Frequency of results in exercise 3 PORTUGAL (n=87)

EXERCICE 3		Frequency	Valid Percent	Cumulative Percent
Total number of points Mean – 12,9	8,00	2	2,6	2,6
	9,00	4	5,3	7,9
	10,00	11	14,5	22,4
	11,00	9	11,8	34,2
	12,00	6	7,9	42,1
	13,00	15	19,7	61,8
	14,00	8	10,5	72,4
	15,00	6	7,9	80,3
	16,00	7	9,2	89,5
	17,00	4	5,3	94,7
	18,00	1	1,3	96,1
	19,00	3	3,9	100,0
	Total	76	100,0	

Exercise 3 – Descriptive statistics for each question

EX3_P1		Frequency	Valid Percent	Cumulative Percent
Valid	1	6	7,7	7,7
	2	7	9,0	16,7
	3	18	23,1	39,7
	4	47	60,3	100,0
	Total	78	100,0	

EX3_P2		Frequency	Valid Percent	Cumulative Percent
Valid	1	29	37,2	37,2
	2	13	16,7	53,8
	3	13	16,7	70,5
	4	23	29,5	100,0
	Total	78	100,0	

EX3_P3		Frequency	Valid Percent	Cumulative Percent
Valid	1	5	6,4	6,4
	2	34	43,6	50,0
	3	27	34,6	84,6
	4	12	15,4	100,0
	Total	78	100,0	

EX3_P4		Frequency	Valid Percent	Cumulative Percent
Valid	1	15	19,2	19,2
	2	43	55,1	74,4
	3	15	19,2	93,6
	4	5	6,4	100,0
	Total	78	100,0	

EX3_P5		Frequency	Valid Percent	Cumulative Percent
Valid	1	15	19,7	19,7
	2	21	27,6	47,4
	3	29	38,2	85,5
	4	11	14,5	100,0
	Total	76	100,0	

Appendix 5.5. Spain

There are no statistically significant differences between men and women with respect to the results of exercises 1, 2, and 3.

These results indicate that in Spain the 3 exercises developed can be used for evaluation of the competence “Analysis and Problem solving”.



5.5.1. EXERCISE 1 for Spain

EJERCICIO 1

Cada año su empresa prepara la reunión anual donde se presentan las nuevas directrices a los principales clientes y socios (proveedores, compañías certificadoras, entidades locales). Considerando que su empresa recientemente ha cambiado las instalaciones y que la reunión siempre tiene lugar en los primeros días de Julio, han decidido tener la reunión seguida de un cocktail en el jardín al aire libre.

Como este evento tiene algunas nuevas características comparado con las anteriores reuniones (nuevas instalaciones, reunión en el jardín, los trabajadores también han sido invitados, presentación de nuevos mercados para expandir), ha sido anunciado con tiempo, destacando estas innovaciones. Incluso se han anunciado fotografías de cómo va a tener lugar esta reunión en el jardín.

La mañana anterior al evento, cuando se realizan los últimos preparativos, el clima es inestable y no hay una idea clara acerca de si lloverá o no durante el tiempo de la reunión y el cocktail. Imagine que es usted parte del equipo de organización del evento, que es muy importante para la imagen de la empresa. Con esta situación dada y no sabiendo qué hacer, le piden su opinión sobre cómo actuar.

Q1. Por favor identifique los problemas que tiene que afrontar.

Q2. Indique si necesita recopilar información adicional y, de ser así, qué haría.

Q3. Por favor proporcione varias alternativas posibles para resolver el problema y señale sus pros y sus contras.

Q4. De las alternativas identificadas en Q3, seleccione la que considere más apropiada, indicando qué acciones tomaría para implementar su idea.

Q5. Dada la situación, ¿qué consideraría un buen resultado? ¿Qué lecciones ha aprendido de esta situación?



Exercise 1 - Results interpretation for Spain

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Spain for Exercise 1:

Much below average: 5 – 8 points

Below average: 9 – 10 points

On average: 11 – 12 points

Above average: 13 – 14 points

Much above average: 15 points and over

Mean – 11,2

Median – 11,0

Mode – 9,0

Std. Dev. – 2,7

Minimum – 5,0

Maximum – 16,0



5.5.2. EXERCISE 2 for Spain

EJERCICIO 2

Un compañero suyo ha realizado un pedido de € 10,000 para un cliente. El pedido era urgente para el cliente. Su compañero consultó con el proveedor (en Francia), solicitó la información sobre el tiempo de entrega y se le informó que llevaría un máximo de 5 días hábiles. Su compañero indicó que informaría al cliente, por SMS, tan pronto como llegara el pedido.

Después de 5 días hábiles, el cliente fue a las instalaciones de la empresa a recoger el pedido, el cual no había llegado todavía, y su compañero estaba en su día libre ese día.

Cuando el cliente se dio cuenta que el pedido no estaba disponible, se enfadó mucho y dijo que necesitaba esos materiales para no retrasar la actividad de su negocio. El cliente dijo también que esa situación significaba una pérdida de confianza en la empresa. De hecho, él era un buen y fiel cliente (pedía mucho material y siempre pagaba dentro de los límites de tiempo).

Considerando esta situación, indique cómo actuaría.

Q1. Por favor identifique los problemas que tiene que afrontar.

Q2. Indique si necesita recopilar información adicional y, de ser así, qué haría.

Q3. Por favor proporcione varias alternativas posibles para resolver el problema y señale sus pros y sus contras.

Q4. De las alternativas identificadas en Q3, seleccione la que considere más apropiada, indicando qué acciones tomaría para implementar su idea.

Q5. Dada la situación, ¿qué consideraría un buen resultado? ¿Qué lecciones ha aprendido de esta situación?



Exercise 2 - Results interpretation for Spain

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Spain for Exercise 2:

Much below average: 5 – 7 points

Below average: 8 – 9 points

On average: 10 points

Above average: 11 – 12 points

Much above average: 13 points and over

Mean – 9,8

Median – 10,0

Mode – 10,0

Std. Dev. – 2,6

Minimum – 5,0

Maximum – 15,0



5.5.3. EXERCISE 3 for Spain

EJERCICIO 3

Imagine que está usted trabajando en una empresa de importación/exportación a la que pertenece su oficina en un buen barrio de una gran ciudad.

Debido al crecimiento de su empresa en los últimos 2 años, se admitió a más personas en las instalaciones de la oficina. Hace 2 años, había 6 personas trabajando en la oficina, y había un vestíbulo de entrada, con una silla, y una sala de reuniones en la que 6 personas podían sentarse cómodamente.

En estos dos años, la empresa creció en 10 personas en el mismo espacio, junto con sus escritorios, ordenadores y muebles con archivos en papel. La sala de reuniones se transformó en una oficina donde trabajan 4 personas, y el vestíbulo de entrada se transformó en una pequeña sala de reuniones en espacio abierto para recibir 2 clientes. El espacio está dividido, pero no es posible la privacidad real, para negocios más sensibles o una tormenta de ideas. Sólo el gerente tiene un despacho cerrado.

Hay algunos conflictos entre la plantilla debido a que algunos empleados están confinados en un espacio abarrotado y pequeño.

La necesidad de más espacio es absolutamente necesaria, ya que un nuevo miembro ha sido contratado y comienza en aproximadamente un mes. Pero la empresa ha hecho algunas inversiones y no es un buen momento para comprar nuevas instalaciones.

Imagine que es usted parte del equipo de dirección y necesita hacer espacio para la nueva contratación, teniendo en cuenta que necesita gastar tan poco dinero como razonablemente pueda. Con esta situación, permítanos conocer su opinión sobre cómo asesorar al director gerente en cómo actuar.

Q1. Por favor identifique los problemas que tiene que afrontar.

Q2. Indique si necesita recopilar información adicional y, de ser así, qué haría.

Q3. Por favor proporcione varias alternativas posibles para resolver el problema y señale sus pros y sus contras.

Q4. De las alternativas identificadas en Q3, seleccione la que considere más apropiada, indicando qué acciones tomaría para implementar su idea.

Q5. Dada la situación, ¿qué consideraría un buen resultado? ¿Qué lecciones ha aprendido de esta situación?



Exercise 3 - Results interpretation for Spain

Considering that we defined 4 levels for evaluating the exercises and there are 5 questions, the total scoring is between 5 and 20 points. For interpretation of the performance regarding the competence “Analysis and Problem Solving” in Spain for Exercise 3:

Much below average: 5 – 7 points

Below average: 8 – 9 points

On average: 10 – 11 points

Above average: 12 – 13 points

Much above average: 14 points and over

Mean – 10,5

Median – 11,0

Mode – 11,0

Std. Dev. – 3,4

Minimum – 5,0

Maximum – 18,0



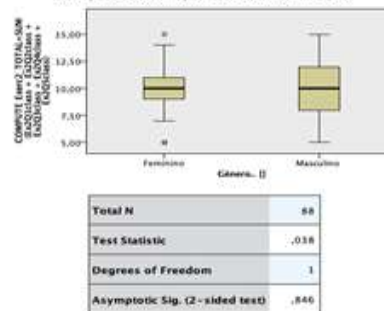
5.5.4. EXERCISES - Statistical information

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of COMPUTE Exer1_TOTAL = SUM (Ex1Q1class + Ex1Q2class + Ex1Q3class + Ex1Q4class + Ex1Q5class) is the same across categories of Género.. []	Independent-Samples Kruskal-Wallis Test	.473,000	Retain the null hypothesis.
2	The distribution of COMPUTE Exer2_TOTAL = SUM (Ex2Q1class + Ex2Q2class + Ex2Q3class + Ex2Q4class + Ex2Q5class) is the same across categories of Género.. []	Independent-Samples Kruskal-Wallis Test	.846,000	Retain the null hypothesis.
3	The distribution of COMPUTE Exer3_TOTAL = SUM (Ex3Q1class + Ex3Q2class + Ex3Q3class + Ex3Q4class + Ex3Q5class) is the same across categories of Género.. []	Independent-Samples Kruskal-Wallis Test	.324,000	Retain the null hypothesis.

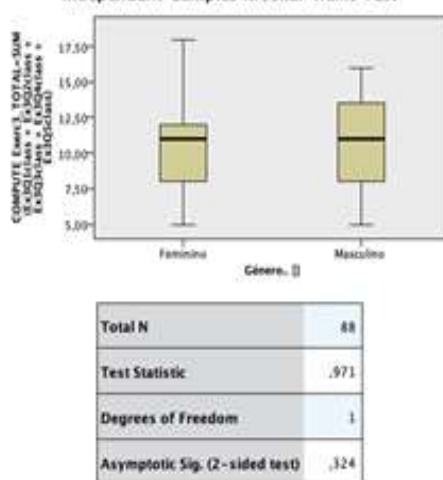
Asymptotic significances are displayed. The significance level is .05.

Independent-Samples Kruskal-Wallis Test



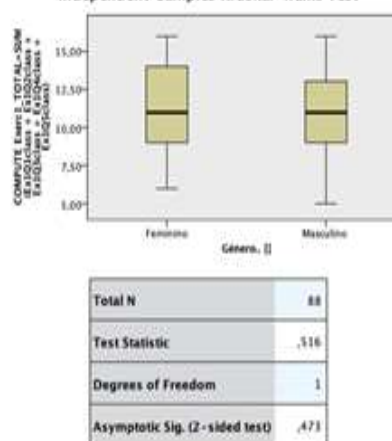
1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

Independent-Samples Kruskal-Wallis Test



1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

Independent-Samples Kruskal-Wallis Test



1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

As we can see from the tables and graphs above, there are no statistically significant differences between men and women with respect to the results of exercise 1, 2 and 3. This means that the exercises are gender neutral.

The descriptive analysis of each of the questions in the problem-solving exercises is presented below.

EXERCISE 1 - Total number of points distribution

Table 1– Frequency of results in exercise 1 SPAIN (n=88)

EXERCISE 1		Frequency	Valid Percent	Cumulative Percent
Total number of points	5,00	2	2,3	2,3
	6,00	4	4,5	6,8
	8,00	8	9,1	15,9
	9,00	13	14,8	30,7
	10,00	10	11,4	42,0
	11,00	11	12,5	54,5
	12,00	11	12,5	67,0
	13,00	9	10,2	77,3
	14,00	10	11,4	88,6
	15,00	5	5,7	94,3
	16,00	5	5,7	100,0
	Total	88	100,0	

Exercise 1 – Descriptive statistics for each question

Ex1-Q1		Frequency	Valid Percent	Cumulative Percent
Valid	1	23	26,1	26,1
	2	10	11,4	37,5
	3	30	34,1	71,6
	4	25	28,4	100,0
	Total	88	100,0	

Ex1-Q2		Frequency	Valid Percent	Cumulative Percent
Valid	1	17	19,3	19,3
	2	11	12,5	31,8
	3	51	58,0	89,8
	4	9	10,2	100,0
	Total	88	100,0	

Ex1-Q3		Frequency	Valid Percent	Cumulative Percent
Valid	1	38	43,2	43,2
	2	27	30,7	73,9
	3	16	18,2	92,0
	4	7	8,0	100,0
	Total	88	100,0	

Ex1-Q4		Frequency	Valid Percent	Cumulative Percent
Valid	1	16	18,2	18,2
	2	50	56,8	75,0
	3	18	20,5	95,5
	4	4	4,5	100,0
	Total	88	100,0	

Ex1-Q5		Frequency	Valid Percent	Cumulative Percent
Valid	1	39	44,3	44,3
	2	29	33,0	77,3
	3	12	13,6	90,9
	4	8	9,1	100,0
	Total	88	100,0	

EXERCISE 2 - Total number of points distribution

Table 2 – Frequency of results in exercise 2 SPAIN (n=88)

EXERCICE 2	Frequency		Valid Percent	Cumulative Percent
Total number of points	5,00	6	6,8	6,8
	6,00	4	4,5	11,4
	7,00	8	9,1	20,5
	8,00	5	5,7	26,1
	9,00	12	13,6	39,8
	10,00	20	22,7	62,5
	11,00	13	14,8	77,3
	12,00	3	3,4	80,7
	13,00	9	10,2	90,9
	14,00	5	5,7	96,6
	15,00	3	3,4	100,0
	Total	88	100,0	

Exercise 2 – Descriptive statistics for each question

Ex2-Q1	Frequency		Valid Percent	Cumulative Percent
Valid	1	41	46,6	46,6
	2	14	15,9	62,5
	3	16	18,2	80,7
	4	17	19,3	100,0
	Total	88	100,0	

Ex2-Q2	Frequency		Valid Percent	Cumulative Percent
Valid	1	38	43,2	43,2
	2	23	26,1	69,3
	3	24	27,3	96,6
	4	3	3,4	100,0
	Total	88	100,0	

Ex2-Q3	Frequency		Valid Percent	Cumulative Percent
Valid	1	34	38,6	38,6
	2	23	26,1	64,8
	3	27	30,7	95,5
	4	4	4,5	100,0
	Total	88	100,0	

Ex2-Q4	Frequency		Valid Percent	Cumulative Percent
Valid	1	41	46,6	46,6
	2	29	33,0	79,5
	3	17	19,3	98,9
	4	1	1,1	100,0
	Total	88	100,0	

Ex2-Q5	Frequency		Valid Percent	Cumulative Percent
Valid	1	21	23,6	23,6
	2	41	46,1	69,7
	3	24	27,0	96,6
	4	3	3,4	100,0
	Total	89	100,0	

EXERCISE 3 - Total number of points distribution

Table 3– Frequency of results in exercise 3 SPAIN (n=88)

EXERCICE 3		Frequency	Valid Percent	Cumulative Percent
Total number of points	5,00	10	11,4	11,4
	6,00	6	6,8	18,2
	7,00	3	3,4	21,6
	8,00	7	8,0	29,5
	9,00	6	6,8	36,4
	10,00	9	10,2	46,6
	11,00	13	14,8	61,4
	12,00	7	8,0	69,3
	13,00	10	11,4	80,7
	14,00	5	5,7	86,4
	15,00	5	5,7	92,0
	16,00	6	6,8	98,9
	18,00	1	1,1	100,0
	Total	88	100,0	

Exercise 3 – Descriptive statistics for each question

Ex3-Q1		Frequency	Valid Percent	Cumulative Percent
Valid	1	27	30,7	30,7
	2	14	15,9	46,6
	3	28	31,8	78,4
	4	19	21,6	100,0
	Total	88	100,0	

Ex3-Q2		Frequency	Valid Percent	Cumulative Percent
Valid	1	44	50,0	50,0
	2	9	10,2	60,2
	3	27	30,7	90,9
	4	8	9,1	100,0
	Total	88	100,0	

Ex3-Q3		Frequency	Valid Percent	Cumulative Percent
Valid	1	28	31,8	31,8
	2	32	36,4	68,2
	3	20	22,7	90,9
	4	8	9,1	100,0
	Total	88	100,0	

Ex3-Q4		Frequency	Valid Percent	Cumulative Percent
Valid	1	33	37,5	37,5
	2	36	40,9	78,4
	3	17	19,3	97,7
	4	2	2,3	100,0
	Total	88	100,0	

Ex3-Q5		Frequency	Valid Percent	Cumulative Percent
Valid	1	24	27,3	27,3
	2	39	44,3	71,6
	3	17	19,3	90,9
	4	8	9,1	100,0
	Total	88	100,0	

APPENDIX 6 – TEMPLATE OF EVALUATION CHECKLIST APPLICANT

INDIVIDUAL REPORT

RECRUITMENT REFERENCE	
Date	

INDIVIDUAL IDENTIFICATION NUMBER	
----------------------------------	--

Evaluation regarding requirements

QUALIFICATIONS		
School level		
Other qualifications		
Certificates		

General Competencies for Employment Questionnaire		
Score		
Regarding the average		
Observations		

SPECIFIC COMPETENCES

Language Knowledge		
English		
Other		

Computer Skills		
Word		
Excel		
PowerPoint		
Other		

Problem Solving		
Score		
Regarding the average		
Observations		

...		
Observations		

...		
Observations		
Practical exercise		
Observations		
Interview		
Observations		
Current situation (employed/employed):		
Desired remuneration:		
Availability to start working:		
FINAL REMARKS & EVALUATION		

