

# **ACT Modular Questionnaire Framework**

**Supplement to deliverable D1.1. Conceptual Framework** 

Project acronym:	ACT	
Project full title:	Communities of PrACTice for Accelerating Gender Equality and Institutional Change in Research and Innovation across Europe	
Type of action:	Coordination and Support Action	
Duration:	1 <sup>st</sup> May 2018 – 30 <sup>th</sup> April 2021 (36 months)	
Contract number:	Grant Agreement Number 788204	
Programme:	Horizon 2020 - Science with and for Society (SwafS-2017-1)	
Deliverable number:	Supplementary material	
Workpackage:	1	
WP lead partner:	Notus	
Other partners involved:	FUOC, AdvanceHE	
Dissemination level:	Public	
Document version:	0.8	
Authors:	Jörg Müller, Amanda Aldercotte, Rachel Palmen	
Due date:	Continuously updated	
Submission date:	Current version: 29 JANUARY 2019	



### **CONSORTIUM**

The ACT consortium consists of 17 partners: Fundació per a la Universitat Oberta de Catalunya (project coordinator, Spain), Portia (UK), NOTUS (Spain), Joanneum Research Forschungsgesellschaft MBH (Austria), Advance HE (formerly Equality Challenge Unit) (UK), Loughborough University (UK), Facultad Latinoamericana de Ciencias Sociales (Costa Rica¹), Technische Universität Berlin (Germany), Karolinska Institutet (Sweden), Science Foundation Ireland (Ireland), Umweltbundesamt (Germany), Stiftung Deutsches Elektronen-Synchroton (Germany), Centre National de la Recherche Scientifique (France), Fundació Centre de Regulació Genòmica (Spain), Uniwersytet Jagiellonski (Poland), Znanstvenoraziskovalni Center Slovenske Akademije Znanosti in Umetnosti - ZRC SAZU (Slovenia), and Haskoli Islands (Iceland).

### **TERMS OF USE**

This document has been developed within ACT, a Coordination and Support Action project funded by the European Union's Horizon 2020 research and innovation programme.



The work contained in this document is subjected to a Creative Commons license (<a href="https://creativecommons.org/licenses/by-nc-sa/4.0/">https://creativecommons.org/licenses/by-nc-sa/4.0/</a>).

These specifications may be freely used, copied, and distributed, provided that full authorship credit is given, that they are not used for commercial purposes and that they are shared under the same license.

To address questions and comments please contact: <u>imuller@uoc.edu</u>.

### **AUTHORS AND CONTRIBUTORS**

FIRST NAME	LAST NAME	ORGANIZATION	CONTRIBUTION
Jörg	Müller	FUOC	Main author 1
Amanda	Aldercottte	Advance HE	Main author 2
Rachel	Palmen	Notus	Main author 2

### **KEYWORDS**

measurement scales; survey; questionnaire;

<sup>1</sup> The action will be carried out in the department of UNESCO Regional Chair on Women, Science and Technology in Latin America FLACSO, located in Buenos Aires, Argentina.

# **ACRONYMS**

ACRONYM	MEANING	
DOI	Digital Object Identifier	
EC	European Commission	
EIGE	European Institute for Gender Equality	
EU	European Union	
EUDAT	European Collaborative Data Infrastructure	
GE	Gender Equality	
GEP	Gender Equality Plans	

# **Table of Contents**

1 Introduction	6
2 Socio-demographic variables a	nd academic position/role9
2.1 Care responsibilities	9
3 Working conditions	9
3.1 Job and career	11
3.2 Working time arrangemen	nts and intensity12
3.3 (Mental) Health, safety, e	nvironment12
3.4 Job satisfaction	14
4 Stereotypes, prejudices, bias	14
4.1 Sexism	15
4.2 Male / female identity an	d gender roles16
4.3 Diversity	18
4.4 Leadership	18
4.5 Gender and Status	18
5 Organizational culture and clin	nate18
5.1 Organizational culture	19
5.2 Organizational climate	19
5.3 Campus climate	20
5.4 Group and team climate	20
5.5 Gender equality (percepti	ons of)20
6 Behavior, experiences (interpe	rsonal)20
6.1 Sexual harassment / Sexu	al assault21
6.2 Stalking, bullying	21
6.3 Bystander behavior	22
6.4 Interpersonal sexism	22
7 Institutional Gender Equality I	Policies23
8 Measurement scales for surve	ys26
8.1 Socio-demographics / aca	demic role and position26
8.2 Working time & intensity.	27
8.3 Mental Health, Safety, En	vironment28
8.4 Job Satisfaction	30
8.5 Culture and Climate	32

8.6 Sexism	37
8.7 Leadership	42
8.8 Male / Female Identity and Norms	43
8.9 Behavior	47
Indicators & tools for institutional Gender Equality monitoring	52
9.1 Statistical Data: staff and students	52
9.2 Organisational Structure for Gender Equality	58
9.3 GEP Implementation and Monitoring	58
9.4 Good Practice	63
	8.7 Leadership

# 1 Introduction

As part of Task 2.1, the ACT project will develop a comprehensive, transferable, transnational, modular Gender Equality Audit and Monitoring tool. In many cases, GEP implementation by different institutions has been conducted in isolation from others, and with processes that differ widely in terms of their scope and effectiveness, and in majority of cases without a proper assessment of gender equality needs and priorities, or the necessary monitoring and evaluation mechanisms. For example, to the degree that questionnaires for initial institutional assessment have been published by past gender equality projects such as GENDER-NET, EGERA, or INTEGER, these questionnaires vary substantially in length, topics treated, and measurements scales used. Results usually do not transcend the immediate project context while quality assessment of the reliability and validity of the generated data has not been conducted. While sensitivity to local (national, regional and organizational) context is key for a successful GEP implementation, a lack of more standardized assessment tools hinder mutual learning. Mutual learning, however is conditioned on the possibility to compare related gender equality measures with their resulting impacts in a meaningful and systematic way. ACT will provide an online, adaptable questionnaire framework that produces comparable data and thus facilitates knowledge sharing benchmarking and dialogue across national- and organizational contexts.

The modular questionnaire framework will be implemented using the Open Source software package Limesurvey. Limesurvey is both, a freely available software package as well as an online survey service. Instead of using the online survey service of the Limesurvey company for a yearly fee, ACT will install the software package on the ACT server and customize it to the project needs. The advantage of such an approach is that a) we own the data, i.e. know where the data is stored and how it is protected, b) we can freely customize the software platform, c) we don't have to pay for using the platform. Limesurvey is the most professional, Open Source (free) software package available for our purposes.

Limesurvey offers the possibility to export and import entire questionnaires or sections of it. This allows CoPs and other users to easily share their questionnaires or sections of it. It also allows us to construct a modular questionnaire framework: ACT will not offer a single, fixed-length questionnaire for GEP monitoring but a flexible set of modules that can be assembled by each CoP and adapted to the specific needs of their institutions.

The modular questionnaire framework is structured according to different thematic blocks. Each thematic block then contains a selection of specific measurement scales and questions/items that ideally have been used and validated in previous studies. The thematic blocks are ordered according to the following logic:

- 1. Socio-demographic variables and academic position targets to gather **factual information** regarding age, gender but also the overall academic position and role
- 2. Working conditions gathers **factual information** regarding the working conditions of the respondent especially in relation to gender issues such as labor contract, working schedules, or wages and information about the safety of the workplace, work-life balance, etc.

- 3. Section three focuses on (social) psychological constructs, i.e. it targets respondents individual **beliefs**, **attitudes and stereotypes** regarding sexism, masculine/feminine norms, diversity, etc.
- 4. Culture and climate extrapolate individual gender related beliefs and attitudes towards the organizational or work group context. Its focus is largely on "perceptions" (targeted as "climate" measures) regarding gender equality but also deeper "cultural" aspects.
- 5. Section 5 focuses on "Behavior" and *factual incidents* related to sexual harassment / sexual assault, stalking. The corresponding items are largely taken from sexual harassment campus climate surveys.

An additional section (6) focuses on institutional policies for gender equality and unlike the previous modules should be filled in by one person per institution. It aims to map the implementation of gender equality policies at the institutional level and is included in the present document in order to provide a more complete picture of all important aspects to be considered for monitoring the implementation of GEPs.

The PLOTINA project<sup>2</sup> has pursued a similar approach, offering the possibility to institutions to use their online platform for GEP progress monitoring. The main difference between the ACT modular framework and the PLOTINA monitoring tool is one of scope: whereas the PLOTINIA tool offers an initial selection of 10 + 40 indicators, the ACT framework aims to offer not just GEP monitoring indicators but a wider array of measurement scales regarding working conditions, social psychological constructs, organizational climate or sexual harassment.

### Relationship with the ASSET 2016 Survey

The Athena Survey of Science, Engineering and Technology (ASSET)

ASSET 2016 aimed to expand and enhance previous iterations of the survey (2003/04, 2006 and 2010) and assess the current state of the association between gender and experiences, expectations and perceptions of the workplace among academics in science, technology, engineering, mathematics and medicine (STEMM).

The survey contained 89 questions in total, including both categorical and continuous items (ie Likert scales) as well as free-text items in which participants could describe their experiences and perceptions in greater detail if desired. These also included a number of items related to participants' academic background and specific subject area which have been excluded from the following analysis.

In addition to including equality monitoring questions (e.g. age, gender, ethnicity, etc), ASSET 2016 covered six distinct sections relating various aspects of experience within UK STEMM academics' working life:

- Perceptions of gender equality
- Recruitment
- Job and career
- Caring responsibilities, leave and career breaks

<sup>2</sup> See http://www.plotina.eu/monitoring-tool/

- Training and leadership
- Promotion and development

To adapt the ASSET 2016 survey to the aims of the ACT project, we considered each of the items included in the above sections individually and allocated them to the appropriate themes (and modules within these themes). Items were assigned to one of the five themes of the ACT modular Gender Equality Audit and Monitoring tool that are meant to be completed at the individual participant level (rather than on behalf of a whole organization, department or faculty). Items were placed within these themes based on what type of information the item intended to obtain; for example, questions related to perceptions of gender equality in the ASSET 2016 survey were (for the most part) allocated to the 'Working culture and climate' theme within the ACT modular Gender Equality Audit and Monitoring tool. References to the ASSET survey are indicated in the corresponding sections below. Since the ASSET items are quite extensive, they have not been included in the present document but are currently managed in an external Excel file.

The ASSET survey items are referenced under the corresponding sub-headings; thus the items from the ASSET 2016 items will be relocated to each theme in the ACT modular Gender Equality Audit and Monitoring tool. None of the items from the ASSET 2016 were allocated to the 'Behavior and interpersonal relationships' theme. It is worth noting that each Table includes the item phrasing used in the ASSET 2016 survey. As such the final column of the table denotes whether the item phrasing or the response options associated with that item will be revised and adapted for use in the ACT modular Gender Equality Audit and Monitoring tool. Allocation to themes was not mutually exclusive; a small number of items that pertained to more than one theme were allocated to both for the time being with the plan to adapt their phrasing in order to make sure that they actually collect the information meant to be uncovered in each theme without being too repetitive. In all Tables, these items are marked with an asterisk. Finally, each Table lists the items from the ASSET 2016 survey that were removed and not allocated to a theme in the ACT modular Gender Equality Audit and Monitoring tool.

### Aim of the current document

The aim of the current document is to provide a catalog of potentially useful measurement scales for the ACT modular Gender Equality Audit and Monitoring tool. As such it provides an overview of interesting scales and their usage in the literature that should <u>not</u> be taken as a definitive list of which scales will be available in the final online tool.

Please also note that this is a "living" document that will frequently be updated as new measurement scales are discussed.

# 2 Socio-demographic variables and academic position/role

Covers basics such as age, gender. Covers religion, ethnicity, disability in the ASSET but this is very country specific.

# 2.1 Care responsibilities

→ See 8.1.1Care responsibilities page 26

Highest qualification

→ ASSET items

Scientific discipline

→ ASSET items

Marital status

→ ASSET items

# 3 Working conditions

Items collected under this heading target working conditions of employees in organizations in general and academic organizations in particular. The items should report largely on objective "facts" instead of perceptions (which are captured in section 3). Wages, type of contract, parental leaves, child care facilities among others, all concern verifiable facts.

Broadly speaking, many items collected under this heading can be found in existing "job quality" or "job satisfaction" questionnaires. The European Working Conditions Survey (EWCS) for example, which is developed by Eurofound (Eurofund 2012; Parent-Thirion et al. 2016) conceptualizes "job quality" along seven dimensions. Each of the listed dimensions in turn is covered by specific indicators that are operationalized through a battery of specific questionnaire items.



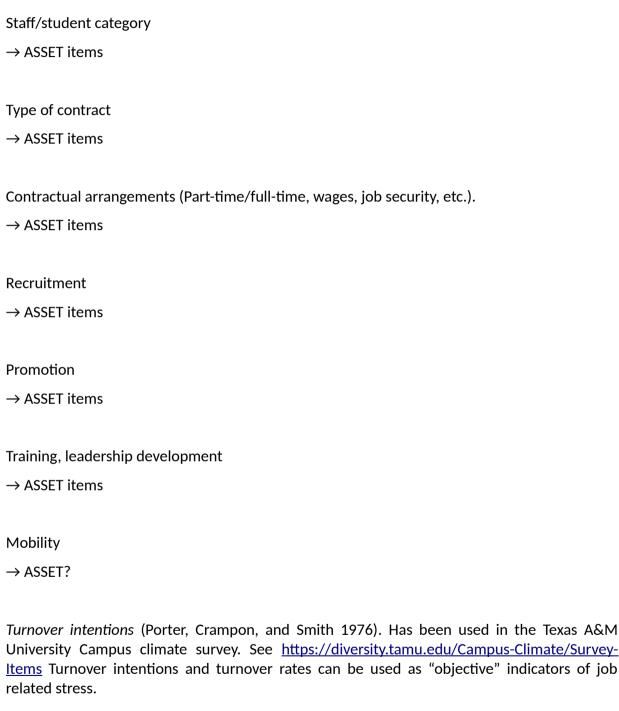
Illustration 1: Overview of Eurofound job quality indices. See (Parent-Thirion et al. 2016)

Since the European Working Conditions Survey is a "all-in-one" solution, it covers not only "factual" working conditions such as earnings but also climate related issues of the social environment such as "adverse social behaviors" or "social support". Given the specific focus on gender equality within organizations, ACT will provide much more targeted and specific measurement scales regarding stereotypes and/or the social relationships within the working environment. The ECWS is nevertheless useful for structuring the questionnaire modules on working conditions. By drawing upon the ECWS scales for our modular framework it will be possible to compare our target population (researchers, staff of higher education or RPF) with the general population of workers in other sectors and for whom data by the ECWS exist.

What makes this section on working conditions especially challenging is not only the variety of measurement instruments available but also differences in terms of the underlying (theoretical and conceptual) interest. On a descriptive level, working conditions are relatively easy to capture in terms of hours worked, pay received, or flexible working arrangements. However, these working conditions produce certain (health) related outcomes. The lack of autonomy and exclusion from decision making processes for example, can be described simply as a "factual" working condition or be captured as part of a more outcome related construct such as "stress", "work engagement" or "job satisfaction". These higher level constructs usually incorporate and draw upon a different set of lower-level, factual data regarding working conditions. "Stress" - to stay with the same example, is a higher level concept, whose measurement items draw upon five different sources including factors intrinsic to the job (physical conditions), role in the organization (role ambiguity, conflict), career development, social relationships, and organizational structure and participation (Johnson et al. 2005; Johnson 2008). As a consequence, whenever higher level constructs are discussed in the following sections, a certain redundancy when it comes to the involved measurements scales will be necessary.

# 3.1 Job and career

Partially, information regarding staff categories, type of contracts, part-/full time can be covered by HR departments in a centralized manner. However, in case the targeted information is hard to come by from a centralize source (e.g. wages), they can be included as individual items in the questionnaire. It also might provide valuable information for carrying out more sophisticated analysis as the available information can be set in relation to variables from other sections.



University Campus climate survey. See <a href="https://diversity.tamu.edu/Campus-Climate/Survey-">https://diversity.tamu.edu/Campus-Climate/Survey-</a> Items Turnover intentions and turnover rates can be used as "objective" indicators of job

→ See 8.4.3Turnover intentions page 31

# 3.2 Working time arrangements and intensity

This concerns usual work-life balance issues but not only. Especially in an increasingly precarious academic context, the work intensity should be included under this section. Related measurement scales are "burnout" or "stress" (see next section).

Parental leave conditions and behaviors		
→ ASSET items		
Childcare provisions		
→ ASSET items		
Flexible hours		
→ ASSET items		
Career breaks		
→ ASSET items		

# 3.2.1 Working hours and intensity

→ See 8.2.2Work intensity I & II page 27

### 3.2.2 Work-life balance

→ See 8.2.1Work-life balance page 27

# 3.3 (Mental) Health, safety, environment

Targets gender specific adaptation of working environment such as lab safety measures (during pregnancy), child care facilities.

### 3.3.1 Stress

Stress assessment tools usually integrate a series of aspects related to work, partially already addressed in this report in other sections such as social relationships at work or work-life balance. Overall, it is easy to see that any work related aspects can become a source of stress. Along these lines, the ASSET<sup>3</sup> stress evaluation tool (Catwright and Cooper 2002; Johnson

<sup>3</sup> No relation to the ASSET survey tool developed by Advance HE (formerly Equality Challenge Unit).

2008) for example incorporates in its model all of the following aspects: work relationships; work-life balance; overload; job security; control; resources and communication; pay and benefits; and job overall. Job satisfaction and organizational commitment, usually conceptualized as outcomes of stress, can be a source of stress in themselves.

The ASSET stress evaluation tool is a relatively short and comprehensive measurement scale for occupational stress. It has been used in studies of the Higher Education sector in the UK for example (Tytherleigh et al. 2005) as well in other, comparative studies (Johnson et al. 2005). The disadvantage is, that is proprietary and the items are not published openly. Nevertheless it is interesting to note that it correlates highly with a Warr's job satisfaction scale (Warr 1990), physical health, and mental health (GHQ12 scale, see below). Thus, even without using the original ASSET stress assessment tool, related concepts can be covered nevertheless by using the underlying scales directly. Faragher, Cooper, and Cartwright 2004 provide an overview of the validity of the ASSET short stress questionnaire.

A second scale is the Stress in General Scale (Stanton et al. 2001) which is a self-reported, general scale that does not ask about specific stressors on the job. It has been picked up by (Yankelevich et al. 2012) developing a 8-item SIG scale from the original 15-item scale. The original scale is not available in the publication.

"Objective", organizational level indicators rather than individual based accounts of of work related stress include tardiness rate, absenteeism, rate and severity of work related accidents, employee turnover rate, etc.

 $\rightarrow$  The stress related measurement scales are not available publicly and have not been included in the this document.

### 3.3.2 Burnout and work engagement

A closely related concept to work related stress is burnout. Burnout relates to a feeling of weariness, disinterest and reduced performance (Maslach and Jackson 1981; Maslach et al. 1986).

The Maslach Burnout Inventory (MBI) is a self-reported, psychometric measurement scale for occupational burnout. It comprises three dimensions, namely emotional exhaustion, cynical and negative approach towards others (depersonalisation) and a growing feeling of work-related dissatisfaction (diminished personal accomplishment) (Watts and Robertson 2011).

Different versions of the MBI do exist, geared towards specific groups including: Human Services Survey (MBI-HSS), Human Services Survey for Medical Personnel (MBI-HSS (MP)), Educators Survey (MBI-ES), General Survey (MBI-GS), and General Survey for Students (MBI-GS (S)).

→ The MBI-GS and MBI-GS (S) scales need to be purchased at <a href="https://www.mindgarden.com/117-maslach-burnout-inventory">https://www.mindgarden.com/117-maslach-burnout-inventory</a>

A related but diametrically opposed concept to burnout is "work engagement". Instead of measuring a negative attitude towards work, it focuses on "a positive work-related state of fulfillment that is characterized by vigor, dedication, and absorption." (Schaufeli, Bakker, and

Salanova 2006). "Contrary to those who suffer from burnout, engaged employees have a sense of energetic and effective connection with their work activities, and they see themselves as able to deal well with the demands of their jobs." (ibid.). It is based upon the 17-item Utrecht Work Engagement Scale (UWES) but has been reduced to a 9-item scale.

 $\rightarrow$  The 9-item work engagement scale is available in section 8.3.5 on page 29.

### 3.3.3 Mental health

General Health Questionnaire GHQ-12 Items; it is the most extensively used screening instrument for common mental health disorders. Several translated versions exist. (D. P. Goldberg et al. 1997; David P Goldberg 1988). Has been used for example in a study on mental health issues with PhD students (Levecque et al. 2017).

 $\rightarrow$  The GHQ-12 items are available in section 8.3.1 on page 28.

### 3.3.4 Lab safety

Source: LIBRA questionnaire

 $\rightarrow$  Items are to be included in section 8.3.2 on page 29.

### 3.4 Job satisfaction

Job satisfaction can be measured in a relatively simple way, giving an overall impression of all other related dimensions. They provide a summary impression how satisfied employees are with their overall job. The European Working Conditions Survey provides two ways to measure job satisfaction, a single item question and a question block composed of 7 items, one for each of its specified dimensions (see Illustration 1 above).

European Working Conditions Survey (Parent-Thirion et al. 2016) contains a single-item and seven-item job satisfaction scale

→ See 8.4.1Single Item - Job Satisfaction on page 30

→ See 8.4.2 7 Dimensions - Job Satisfaction page 31

# 4 Stereotypes, prejudices, bias

This section largely assembles measurement scales from (social) psychology to gauge gender related stereotypes and bias. It provides information about the respondent regarding their beliefs of women/men in general, working men/women and more specifically women/men within science. Most of these self-report instruments on explicit attitudes are complemented by implicit tests measuring reaction times to presented stimulus such as for example the *Implicit Association Test* (IAT) (Nosek et al. 2007). However, the implicit association test cannot be administered by standard survey platforms and have to be excluded for our current project.

### 4.1 Sexism

Several well established measurement scales regarding sexism exist. The following three measurement scales "modern sexism scale", "neosexism" and "ambivalent sexism" are all review in (Fiske and North 2015). Although these scales (see section 6) seem old fashioned, existing and recent research continues to demonstrate that it correlates with "acceptance of stereotyping, dominance, authoritarianism, traditional male roles, unemotional processing, and more fixed, uncomplicated cognitive style" (ibid., 701) for example. A further review of sexism scales can be found in (McHugh and Frieze 1997) which look into the AWS, the Sex Role Egalitarianism Scale, Modern Sexism Scale, Ambivalent Sexism Inventory.

The Attitudes Towards Women (AWS) (Spence, Helmreich, and Stapp 1973) is the most commonly used measure of attitudes towards women. It measures attitudes towards women's rights, roles and responsibilities. It exists in three versions, a 55-item scale, a 25 item scale and an even shorter one with 15 items. However, as (Twenge 1997) meta-analysis finds, response to the scale is dependent upon the year when it has been administered, reflecting a trend towards more liberal/feminist attitudes. Originally developed in the 1970s it has been criticized as outdated and superseded by the following measurement scales below.

→ See 8.6.4 Attitudes towards Women page 40

The *Modern Sexism Scale* (Swim et al. 1995), "one of the first next-generation sexism scales, the modern sexism scale is especially useful for its links to political, employment, and harassment attitudes. It shows good cross-cultural applicability and good psychometric properties, especially predictive validity of gender-related attitudes." (Fiske and North 2015, p. 702). Modern sexism scale measures the extent to which individuals tend to deny the existence of discrimination against women.

→ See 8.6.1Modern Sexism Scale page 37

*Neosexism Scale* (*Tougas et al. 1995*), has an added emphasis on reactions to affirmative action as a function of men's collective interest. NS is especially useful in contexts related to affirmative action, perceived discrimination, employment, and gender rights. Applicable across cultures, NS focuses on gender-related attitudes in society.

→ See 8.6.2Neosexism scale page 38

Ambivalent Sexism Inventory (Glick and Fiske 1996). The ASI appears uniquely to measure subjective benevolence in some aspects of sexism. Relative to MSS and NS, ASI focuses on more intimate, relational aspects of sexism, consistent with its analysis of male-female interdependence. Applicable across cultures, it shows good psychometric properties. The scale on "[...] ambivalent sexism analyzes the interdependent relationships between men and women, to predict the specific sources of ambivalence (Glick & Fiske, 1996). [...] The theory predicts resentment of non-traditional women along each dimension: dominative

paternalism, competitive gender differentiation, and heterosexual hostility. In contrast, women who cooperate with traditional forms of interdependence elicit subjectively benevolent sexism (BS) on the same three dimensions: protective paternalism, complementary gender differentiation, and heterosexual intimacy. Together hostile and benevolent sexism form a coherent ideology that punishes some women and rewards others, so they co-exist." (Fiske and North 2015, 704–5). The benevolent and hostile sexism scale can be used separately.

→ See 8.6.3Ambivalent Sexism Inventory page 38

Two item sexism scale: an interesting study by (Herrero, Rodríguez, and Torres 2017) on the "Acceptability of partner violence in 51 societies" used two short items to measure of sexism assessing the aversion and hostility towards women in stereotypical male domains, i.e. politics and business. The scales have been previously used by (Napier, Thorisdottir, and Jost 2010) while Brandt has shown how this brief measure of sexism correlates significantly with the Hostile Sexism Inventory, AWS, Modern Sexism Scale, Old-Fashioned Sexism Scale (Brandt 2011). The study by Brandt also shows how sexism directly predicts an increase in gender inequality.

→ See 8.6.5Aversion / hostility towards women in typically male domains page 41

# 4.2 Male / female identity and gender roles

There exists a whole repertoire of measurement scales regarding endorsement of masculine (or feminine) gender roles, usually gravitating around opposed poles such as agency and communion, competence and warmth, or instrumentality and expressivity. Research has shown that adherence to these stereotypical norms have implications on the personal, interpersonal and societal level, such as for example negative and hostile attitudes towards women, rape myth acceptance, homophobia, or physical and mental health disorders in men among others (O'Neil 2008). Most of the below mentioned measurement scales are quite large; the Conformity to Masculinity Norms Inventory in its original format has 144 items, the short version 46 items – which makes these scales too large to be administered in a composite questionnaire that is not specifically targeting masculine/feminine gender roles. More interesting are studies that focus on the implications of masculine norms for work organization (see section 5.1 on page 19).

Among the more widely used scales regarding "masculinity" are the Masculinity Gender Role Stress scale (Eisler and Blalock 1991), Brannon Masculinity Scale (Brannon and Juni 1984), Male Role Norms Inventory (Levant et al. 1992), or the Conformity to Masculinity Norms Inventory (Mahalik et al. 2003; Parent and Moradi 2011). The original version includes 144 items; the abbreviate version of Parent & Moradi (2011) includes 46 items (not available in the cited publication). Similar, there exists the Conformity to Feminine Norms Inventory (Mahalik et al. 2005).

Gender Role Conflict Scale (O'Neil et al. 1986). Has produced a wealth of studies (see O'Neil

2008 for review). However, due to their size, the specific measurement scales have not been included in this document.

Separate Spheres Ideology scale. Recently, a new publication regarding the "separate spheres" model regarding women and men has been proposed (Miller and Borgida 2016). It measures the beliefs in stereotypes regarding the "separate sphere" to which men and women supposedly belong. It targets beliefs "that men and women naturally fit in different domains of society and should be restricted to these domains" (ibid., 6). As a belief system the SSI is defined along three dimensions: 1) gender differences in society are innate, rather than culturally or situationally created, 2) these innate differences led men and women to freely participate in different spheres in society, 3) gendered differences in participation in public and private spheres are natural, inevitable, and desirable.

The scale is very solid in terms of test-retest reliability and discriminant validity, but not specifically geared to gender in science, although some items capture competency expectations in relation to gender stereotypical tasks. It also exhibits consistent relationships with other scales, such as the Modern Sexism scale. Interestingly, the SSI scale predicts attitudes: "[...] regarding workplace flexibility accommodations, reported income distribution within families between male and female partners, reported distribution of labor between work and family, and reported workplace conduct." (ibid. 2).

→ See 8.8.1Separate Spheres Ideology page 43

Women in Science Scale. More specifically related to the context of women and science, the Women in Science Scale (Erb and Smith 1984; Owen et al. 2007) exists which measures attitudes of adolescents towards women in science. It measures attitudes toward women in science. A re-evaluation study of the original WiSS scale allowed to shorten it from 27 to 14 items with two underlying factors, namely Equality and Sexism.

→ See 8.8.2Women in Science Scale page 44

A relatively recent, new measurement scale regarding gender stereotypes is the *Traditional Masculinity-Femininity (TMF)* scale, designed to assess central facets of self-ascribed masculinity-femininity (Kachel, Steffens, and Niedlich 2016). It is important to note that this scale focus on gender-related self-assessment and not the general acceptance of gender-role norms. The development of the scale takes as it starting point that gender roles have changed over recent decades what "masculinity" and "femininity" entails. The scale integrates three components: gender-role adoption (i.e. actual manifestation), gender-role preference (desired degree of masculinity-femininity), gender-role identity (comparison of self vs. social norms). The scale captures differences between people of differing sexual orientation. The scale has 6 items.

→ See 8.8.3Traditional Masculinity and Femininity Scale (TMF) page 45

# 4.3 Diversity

Not directly related to gender stereotypes, some research has focused on "diversity beliefs" which captures individuals attitudes towards team- and organizational diversity (Pirola-Merlo et al. 2002; Hentschel et al. 2013; van Dick et al. 2008). However, the scales do not focus on gender specifically but measure attitudes in general to "diversity" in whatever form. Hentschel et al. for example measures "diversity beliefs" with three items without specifying the dimension of diversity at all.

→ See 8.8.4Diversity Beliefs on 45

Other scales that measure attitudes towards diversity are available for example in (van Dick et al. 2008; Kossek and Zonia 1993).

# 4.4 Leadership

Human System Audit Transformational Leadership Short Scale (HSA-TFL) (Berger et al. 2011; Berger, R; Romeo, M; Guardia, J: Yepes-Baldó 2011) Has 4 dimensions, or "four I's": Inspirational motivation (IM) means that the leader is able to create a common vision. This includes a charismatic appearance and the ability to articulate the vision. Individualized consideration (IC) is the enablement to develop individual strengths. A transformational leader refers to each follower as an individual who has his own very personal longings and abilities. Intellectual stimulation (IS) refers to the extent to which a leader motivates his followers to find solutions for intellectual ideas and to find new ways of analyzing and solving a problem. Lastly, Idealized influence (II) includes the emphasis on norms and values. In order to be truly transformational, a leader has to reflect certain moral values (Bass, 1985)." (Berger et al, 2011, p.368)

→ See 8.7.1Human System Audit Transformational Leadership Short Scale on 42

### 4.5 Gender and Status

Work by Rashotte & Webster presented a measurement scale explicitly focused on Gender Status Beliefs as developed by Ridgeway (Rashotte and Webster 2005). The questionnaire has two parts. In part I, it uses photos of men and women and asks respondents to rate the competency of each regarding gender neutral and gender-typical tasks. Part II sets out to detect the propensity of respondents to answer in an egalitarian direction. The instrument measures diffuse and specific status characteristics. So far, it only has been used once and lacks a solid base in terms of reliability and discriminant validity.

→ See 8.8.5Gender Status Beliefs page 46

# 5 Organizational culture and climate

These items focus on the perceptions of the wider working environment. They do not target so much the beliefs (bias, stereotypes) of the individual but rather the her/his perceptions of

the organization, the wider social environment or team. Culture and climate can be assessed on the organizational as well as on the group level.

Climate refers primarily to "how people feel about the organization, the authority system, and the degree of employee involvement and commitment, [...]" (Schein 2000) It is relatively "easy" to create a climate for teamwork and openness, but it is much harder to change the underlying assumptions about "individualism", or "respect for authority". A company in the US as well as in Japan can have a climate for teamwork and inclusion of women, but the underlying cultural notions that inform the "climate" of the company will still be different, especially in terms of gender. These are manifest, observable aspects of organizational climate which stands in contrast to organizational "culture" which refers to more fundamental aspect, i.e. the underlying values, beliefs and assumptions that guide behaviors of individuals in organizations (Martinson et al. 2016).

In many cases, the two concepts are hard to distinguish within the different measurement scales. Especially for gender related aspects, the organizational culture is infused with stereotypes and masculine/feminine norms that are culturally anchored.

# 5.1 Organizational culture

Masculinity Contest Culture Scale (Glick, Berdahl, and Alonso 2018). This scale is related to the masculine norms on the individual level (see section 4.2 on page 16), now applied to the organizational level: how strongly do organizations endorse masculine norms in the organization of work. A good introduction to this topic can be found in the introduction to the special issue in the Journal of Social Issues (Berdahl et al. 2018). Masculine norms conflate masculine traits with successful job performance. It consists of four sub-dimensions: "show no weakness", "strength and stamina", "put work first", "dog eat dog". The masculinity contest norms correlate with greater stress, higher turnover intentions and more work-life conflict (Matos, O'Neill, and Lei 2018). The MCC scale exists as 20-item or 8-item scale as described in (Glick, Berdahl, and Alonso 2018). The scale should correlated with "toxic leadership", "heterosexist culture", "low psychological team safety", "lack of support for work-life balance".

→ See 8.5.1Masculinity Contest Culture page 32

# 5.2 Organizational climate

Survey of Organizational Research Climate (Martinson, Thrush, and Lauren Crain 2013; Martinson et al. 2016)

→ The full scale is currently not included in this document.

Perceptions of the Work Environment for Female Faculty (Riger et al. 1997). Relates to the "chilly climate" in organizations. Based on "dual standards and opportunities", "sexist attitudes and comments", "informal socializing", "work-life balance", "remediation practices and policies" (acceptability of raising gender issues). Settles et al (2006) used three items from Riger et al. to assess departmental sexist climate and show that a positive, non-sexist climate

and effective leadership are related to positive job outcomes (Settles et al. 2006).

→ See 8.5.2Perceptions of the Work Environment for Female Faculty page 33

# 5.3 Campus climate

Campus climate surveys, involve a range of behaviors, environmental factors and occurrences that "promote or hinder student safety, acceptance and ability to learn [...]" (Wood et al. 2017, 1254). However, although these surveys cover students perceptions of the general social environment, their beliefs and experiences about race, gender and sexual orientation, the focus of many surveys is on registering the incidents of sexual assault, dating/domestic violence, sexual harassment, and stalking (ibid.).

- → See 8.5.3Campus Climate (BJS) page 35
- → See 8.5.4#iSpeak Rutgers Campus Climate page 36

# 5.4 Group and team climate

Team Climate Inventory (Anderson and West 1998a). The long, original version includes 38 items. Shorter versions 14 items exist. For a good overview and a Spanish version see (Boada-Grau et al. 2011), for Finnish version (Kivimaki and Elovainio 1999), for Dutch version (Strating et al. 2009). The original version is made up of four dimensions: "vision", "participative safety", "task orientation", "support for innovation".

→ See 8.5.5Team Climate Inventory page 36

# 5.5 Gender equality (perceptions of)

Awareness and knowledge among staff of gender equality issues and measures in the institution.

→ See ASSET.

# 6 Behavior, experiences (interpersonal)

Instead of focusing on perceptions and attitudes towards gender, the following section concentrates on actual behavior and "facts". This is an important distinction, especially in relation to "sexual harassment" surveys: when asked if respondents have experienced "sexual harassment" the answer is predominantly "no". However, if questions ilicit respondents to name and address certain behaviors explicitly, the incident rate is much higher. Again, this question block would target "objective" interpersonal behavior: "did clearly described incidents happen or not".

Many sexual harassment studies take their point of departure from the "Sexual Experiences Questionnaire" (SEQ) developed by Fitzgerald and colleagues (Fitzgerald et al. 1988) and which is based upon three factors a) gender harassment, b) unwanted sexual attention, c)

sexual coercion. SEQ consistently predicts various professional, health and occupational outcomes. "As such, the SEQ presents a flexible but highly reliable and valid approach to assessing unwanted sex-related behavior at work." (Cortina and Berdahl 2008, 474). The SEQ has provided the foundation for many of the current campus climate surveys in relation sexual harassment and assault.

The recent report by the Association of American Universities gives an overview of current incident rates in the USA while summarizing existing definitions, surveys and policies. Several review articles about sexual harassment exist, such as (McMahon et al. 2018; McDonald 2012; Quick and McFadyen 2017; Cortina and Berdahl 2008; Heer and Jones 2017)

### 6.1 Sexual harassment / Sexual assault

Currently three main survey instruments stick out:

The Campus Climate Survey (C. Krebs et al. 2016), carried out by the US Bureau of Justice Statistics which included an extensive validation across nine schools. This survey includes three distinct sections: on sexual harassment and coerced sexual contact, on sexual assault, and on intimate partner violence apart from a general campus climate section and demographic info.

→ See 8.9.1Measuring Campus Climate Related to Sexual Assault page 47

The #iSpeak Rutgers Campus Climate Survey (McMahon et al. 2016). This campus climate survey is accompanied by an accessible guide on the design and preparatory steps necessary for carrying out the survey as part of wider university strategy for a safer campus and against sexual harassment. The survey instrument has not been validated to the degree that the BJS instrument has. The Rutgers questionnaire include section to gauge students awareness and perception of campus policies and response mechanisms to sexual harassment.

→ See 8.9.2#iSpeak Rutgers Campus Climate page 49

AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct (Association of American Universities 2015). Adapts items from "#iSpeak at Rutgers" and has explicit section on "stalking" which other questionnaires lack.

→ See 8.9.5Stalking – AAU Campus Climate Survey page 52

A fourth study *Drawing the Line* has been conducted by the American Association of University Women (AAUW) (Hill and Silva 2005). The measurement scales used are partially documented in Harnois (2013), but there is no easily accessible pdf version. The report gives a good overview of sexual harassment specifically in 2005.

# 6.2 Stalking, bullying

Stalking has been included in the AAU Campus Climate Survey on Sexual Assault and Sexual

Misconduct in section E.

→ See 8.9.5Stalking - AAU Campus Climate Survey page 52

# 6.3 Bystander behavior

Popular sexual violence prevention intervention is bystander intervention education; it frames sexual violence as a community issue. "Peers can express social disapproval for behaviors that are supportive of sexual violence, thereby influencing the social norms in the community" (McMahon et al. 2014, 58)

- → See 8.9.3Bystander behavior BJS Measuring Campus Climate page 50
- → See 8.9.4Bystander behavior #iSpeak Rutgers University page 51

# 6.4 Interpersonal sexism

Schedule of Sexist Events (SSE) (Klonoff and Landrine 1995) in one of the most comprehensive and widely used measure of gender discrimination in contemporary psychology. It targets sexism in women's everyday lives. The scale contains 23 items and asks specific questions about incidences that have occurred to "women because they are women". (Harnois 2013, 50).

→ For full scale see also (Harnois 2013)

# 7 Institutional Gender Equality Policies

Items collected under this heading try to map the state of implementation of gender equality policies at the institutional level. This module is therefore intended to be filled in by one respondent per institution.

This module would enable institutions to map the implementation of gender equality policies. The provision of such a module would also enable institutions to repeat the survey – thereby facilitating the monitoring and assessment of gender related developments over time and would enable them to assess the efficiency, effectiveness and impact of specific measures, thereby facilitating the institutional change process.

Two main surveys in this field include:

- (1) The CESAER Gender Equality Survey 2014 which included questions for identification of the respondent person and institution and 10 detailed questions on the organisational structure for gender equality, Gender Equality Plan implementation and monitoring, initiatives and measures supporting gender equality and barriers. Other sections include statistics: top management, academic staff, students, FP7 and examples of best practice, institutional change and next steps. This survey is aimed at CESAER member institutions which include 53 leading universities in science and technology in Europe.
- (2) The ACT Community Mapping Survey (Reidl and Krzaklewska 2019) aims to map actors practitioners and experts in the EU-28 who are currently active in advancing gender equality in their organisations/ departments and provide the opportunity of becoming part of the ACT Communities of Practice (Part I of the survey); to get information about the status quo of gender equality implementation activities in respondents' organisations and network of collaborators (Part II of the survey); and to identify the expertise and support participants would need to overcome barriers their organisation faces (Part III of the survey) so that ACT can develop suitable support and helpful tools to promote and strengthen existing and future collaborations.

### Other useful measurement tools include:

Advance HE has developed and piloted a self-audit tool for institutions to use in rating their gender equality initiatives related to recruitment and promotion. This tool uses a traffic light system for institutions in which institutions can indicate whether an initiative is completely present (green light), partially present (e.g. in some departments or faculties but not all, amber light), or not at all present in their organization. This tool is based on successful Silver and Gold Athena SWAN applications from the April 2017 round of submissions, and piloted it in the UK and Ireland.

INTEGER data monitoring table is a useful template to collect HR statistics. This is comprised of a glossary, description of staff positions, staff in headcount (total) academic staff in headcount, description of decision-making positions, members of decision-making body, description of bachelor's and masters' degrees, PhD/ doctoral students and graduates, PhD/ Doctoral students by funding, description of forms of employment, staff by form of employment/contract.

Science Europe have developed a practical guide for research performing organisations and research funding organisations across Europe. It lists recommendations for the implementation of appropriate indicators, as well as measures to avoid bias. It then provides recommendations on how to implement an efficient system to monitor gender equality. It identifies useful indicators at an institutional level for both RPOs and RFOs. (Science Europe 2017a, 2017b)

In addition, the PLOTINA project has created a list of 10 core and 40 specific indicators for monitoring GEP implementation and progress (see <a href="http://www.plotina.eu/monitoring-tool/">http://www.plotina.eu/monitoring-tool/</a>).

### Statistical data: Human resources and students

Included in the CESAER survey 2014 are questions regarding the percentages of females at different levels and for different categories of human resources. The INTEGER template provides a comprehensive data monitoring tool for the institutional level which is consistent with She Figures. The Science Europe Report explains how to find out if men or women are under-represented among applicants to a RFO or a RPO – in comparison to the national 'pool' of researchers. Regarding monitoring gender equality the Science Europe report recommends indicators for both RPOs and RFOs.

- → See 9.1.1Human Resources CESAER Survey page 52
- → See 9.1.2Human resources and students INTEGER Excel template page 55

### **Organisational Structure for gender equality**

The CESAER survey examines how gender equality is embedded in the organization – whether there is a special unit, dedicated person etc. How gender equality is embedded in the organisation – can be used to gage the sustainability of gender equality actions.

→ See 9.2.1Organisational Structure for GE - CESAER page 58

### **GEP Implementation and Monitoring**

The ACT community survey probes gender equality implementation activities and asks about the existence of a GEP or relevant strategy. Different stages of the process are identified from assessing the status-quo to enacting a GEP. Gender equality measures can be categorized in a variety of different ways. The ACT community survey taxonomy of measures – uses the term 'fields of action' and provides a comprehensive range of measures. The Advance HE tool provides a check-list to enable the self-assessment of recruitment and promotion initiatives supporting gender equality. The CESAER survey asks about attracting female students, recruitment and promotion policies, balanced composition, flexible career trajectory, breaks, mobility, work-life balance measures, gender competence, networking and guidelines.

Science Europe compared grant management policies and practices which are likely to affect the retention and progression of women in research careers from 17 national RFOs and three RPOs across 15 countries.

Identifying barriers (including resistance) to the effective implementation of gender equality

policies have been highlighted in the literature as a fundamental first step to tackling them, both the CESAER survey and the ACT community survey ask about specific barriers.

- → See 9.3.1GEP Implementation and Monitoring CESAER page 58
- → See 9.3.2GEP Implementation and Monitoring ACT Survey page 60

### **Best Practices**

The CESAER survey and the Advance HE tool ask about institutional best practices. The best (or 'good'/'smart') practice approach has been used extensively in the field of gender equality policies in STI (see PRAGES, GENDERA, EFFORTI, Gender-net etc.). Knowledge sharing of successful institutional practices – is a key strategy for greater impact supported by the European Commission.

→ See 9.4.1Good Practice [Advance HE] page 63

# 8 Measurement scales for surveys

The following section contains the actual measurement scales as extracted from the literature. In some cases, copyright issues are not entirely clear. Once a final decision that a certain scale should be included in the the ACT modular framework, in case of doubt, the copyright issues need to be clarified with the corresponding authors.

# 8.1 Socio-demographics / academic role and position

### 8.1.1 Care responsibilities

Source: GEDII questionnaire. (Callerstig et al. 2018). In the GEDII project, a combination of three items were used to assess current care responsibilities and the impact on academic work.

#### Item

Do you have/ have had care responsibilities for children under 16 years of age or for dependent adults? Select all that apply.

### **Responses:**

- Yes, I currently have care responsibilities for children under 16 years
- Yes, I had care responsibilities in the past for children under 16 years but not anymore
- Yes, I currently care for dependent adults
- Yes, I had care responsibilities in the past for dependent adults but not anymore
- No I have never had any care responsibilities

### Item (follow up from previous)

If you have/ have had care responsibilities: To which extent do/did these care responsibilities affect your work?

- Not at all
- To some extent
- To a large extent

### Item (follow up from previous)

If your care responsibilities affect/ affected your work: In which way do/did your care responsibilities affect your work? Select all that apply.

- More than 6 months of interruption of my professional career (excluding maternity/paternity/parental leave)
- Less than 6 months of interruption of my professional career (excluding maternity/paternity/parental leave)
- I reduced my working hours slightly
- I reduced my working hours significantly
- My work schedules got much more fragmented

- Participation in travel related businesses (such as congresses) dropped
- The amount of my scientific papers/ patents dropped
- I quit my job
- Other, please specify \_\_\_\_\_
- None of the above

# 8.2 Working time & intensity

### 8.2.1 Work-life balance

Source: European Working Conditions Survey, 2015 edition, Question 44

**Question:** In general, do your working hours fit in with your family or social commitments outside work very well, well, not very well or not at all well?

### Response:

- 1 Very well
- 2 Well
- 3 Not very well
- 4 Not at all well
- 5- Don't know / No opinion

### 8.2.2 Work intensity I

Source: European Working Conditions Survey, 2015 edition, Question 46

**Question:** Over the last 12 months how often has it happened to you that you have worked in your free time in order to meet work demands?

### Response:

- 1 Nearly every day
- 2 Once or twice a week
- 3 Once or twice a month
- 4 Less often
- 5 Never
- 7 Not applicable
- 8 DK/no opinion (spontaneous)

### 8.2.3 Work intensity II

Source: European Working Conditions Survey, 2015 edition, Question 37

**Question:** Normally, how many times a month do you work...?

### Response:

- A. At night, for at leat 2 hours between 10.00pm and 5.00 am?
- B. On Sundays
- C. On Saturdays
- D. More than 10 hours a day?

# 8.3 Mental Health, Safety, Environment

### 8.3.1 Mental health

Source: Goldberg, David P, and P. Williams. 1988. User's Guide to the General Health Questionnaire. Windsor, UK: NFER-Nelson.

Note: Check precise question and working!

Assesing the severity of mental problems over the past few weeks.

### **Items**

- 1. Able to concentrate
- 2. Loss of sleep over worry
- 3. Playing a useful part
- 4. Capable of making decisions
- 5. Felt constantly under strain
- 6. Couldn't overcome difficulties
- 7. Able to enjoy day-to-day activities
- 8. Able to face problems
- 9. Feeling unhappy and depressed
- 10. Losing confidence
- 11. Thinking of self as worthless
- 12. Feeling reasonably happy

### Response (check items)

Positive items are corrected from 0 (always) to 3 (never); negative items from 3 (always) to 0 (never)

- 0. Never
- 1. Sometimes
- 2. ??

# 3. Always

### 8.3.2 Lab Safety

NOTE: LIBRA project Lab safety module to be included.

### 8.3.3 Stress

The two cited publications on stress are not publicly available. As stress is a construct that incorporates a variety of other measures such as mental health or job statisfaction, it should be covered by those targeted measurement scales directly.

### 8.3.4 Burnout

Include here General Survey (MBI-GS), and General Survey for Students (MBI-GS (S)). Seems like the survey can only be distributed via the MindGarden survey platform and licenses need to be purchased. See <a href="https://www.mindgarden.com/117-maslach-burnout-inventory">https://www.mindgarden.com/117-maslach-burnout-inventory</a>

### 8.3.5 Work Engagement

Source: Schaufeli, W. B., Bakker, A. B., and Salanova, M. (2006). The Measurement of Work Engagement With a Short Questionnaire: A Cross-National Study. *Educational and Psychological Measurement* 66, 701–716. doi:10.1177/0013164405282471.

**Question:** The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you felt it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

#### Items:

- 1. At my work, I feel bursting with energy.a (VI1)
- 2. I find the work that I do full of meaning and purpose. (DE1)
- 3. Time flies when I am working. (AB1)
- 4. At my job, I feel strong and vigorous.a (VI2)
- 5. I am enthusiastic about my job.a (DE2)
- 6. When I am working, I forget everything else around me. (AB2)
- 7. My job inspires me.a (DE3)

- 8. When I get up in the morning, I feel like going to work.a (VI3)
- 9. I feel happy when I am working intensely.a (AB3)
- 10. I am proud of the work that I do.a (DE4)
- 11. I am immersed in my work.a (AB4)
- 12. I can continue working for very long periods at a time. (VI4)
- 13. To me, my job is challenging. (DE5)
- 14. I get carried away when I am working.a (AB5)
- 15. At my job, I am very resilient, mentally. (VI5)
- 16. It is difficult to detach myself from my job. (AB6)
- 17. At my work, I always persevere, even when things do not go well. (VI6)

Italics is 9-item scale

Note: VI = Vigor scale; DE = Dedication scale; AB = Absorption scale.

### Response

- 0. Never
- 1. Almost never / A few times a year or less
- 2. Rarely / Once a month or less
- 3. Sometimes / A few times a month
- 4. Often / Once a week
- 5. Very often / A few times a week
- 6. Always / Every ay

### 8.4 Job Satisfaction

# 8.4.1 Single Item - Job Satisfaction

Source: European Working Conditions Survey, 2015 edition, Question 88

Question: On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?

# Response:

1=Very satisfied

2=Satisfied

3=Not very satisfied

4=Not at all satisfied

### 8.4.2 7 Dimensions - Job Satisfaction

Source: European Working Conditions Survey, 2015 edition, Question 89

To what extend to you agree or disagree with the following statements about your job?

### **Items**

- 1. Q89-A Considering all my efforts and achievements in my job, I feel I get paid appropriately
- 2. Q89-B My job offers good prospects for career advancement
- 3. Q89-C I receive the recognition I deserve for my work
- 4. Q89-D I generally get on well with my work colleagues
- 5. Q89-E The organisation I work for motivates me to give my best job performance
- 6. Q89-F I get on better with my children because I have a job [conditional!]
- 7. Q89-G I might lose my job in the next 6 months
- 8. Q89-H If I were to lose or quit my current job, it would be easy for me to find a job of similar salary

### Response scale

- 1. Strongly agree
- 2. Tend to agree
- 3. Neither agree nor disagree
- 4. Tend to disagree
- 5. Strongly disagree

### 8.4.3 Turnover intentions

Source: Porter, Lyman W., William J. Crampon, and Frank J. Smith. 1976. "Organizational Commitment and Managerial Turnover: A Longitudinal Study." *Organizational Behavior and Human Performance* 15 (1): 87–98. <a href="https://doi.org/10.1016/0030-5073(76)90030-1">https://doi.org/10.1016/0030-5073(76)90030-1</a>.

### Items:

- 1. I intend to look for a new job in the near future.
- 2. I would be happy to remain at A&M until I am eligible to retire. [reverse scored]
- 3. I am actively looking for another job.

### Responses scale:

- 1. Strongly disagree
- 2. Disagree
- 3. Neither agree nor disagree

- 4. Agree
- 5. Strongly agree

### 8.5 Culture and Climate

### **8.5.1** Masculinity Contest Culture

Source: Glick, Peter, Jennifer L. Berdahl, and Natalya M. Alonso. 2018. "Development and Validation of the Masculinity Contest Culture Scale." *Journal of Social Issues* 74 (3): 449–76. https://doi.org/10.1111/josi.12280.

### In my work environment:

### **Items**

- 1. Admitting you don't know the answer looks weak
- 2. Expressing any emotion other than anger or pride is seen as weak
- 3. Seeking other's advice is seen as weak
- 4. The most respected people don't show emotions
- 5. People who show doubt lose respect
- 6. It's important to be in good physical shape to be respected
- 7. People who are physically smaller have to work harder to get respect
- 8. Physically imposing people have more influence
- 9. Physical stamina is admired
- 10. Athletic people are especially admired
- 11. To succeed you can't let family interfere with work
- 12. Taking days off is frowned upon
- 13. To get ahead you need to be able to work long hours
- 14. Leadership expects employees to put work first
- 15. People with significant demands outside of work don't make it very far
- 16. You're either "in" or you're "out," and once you're out, you're out
- 17. If you don't stand up for yourself people will step on you
- 18. You can't be too trusting
- 19. You've got to watch your back
- 20. One person's loss is another person's gain

Show no weakness (1-5), Strength and stamina (6-10), Put work first (11-15), Dog eat dog (16-20).

Italics is 8 item MCC scale.

### **Responses:**

- 1. Not at all true of my work environment
- 2. Somewhat untrue for my work environment

- 3. Neither true nor untrue
- 4. Somewhat true
- 5. Entirely true for my work environment

### 8.5.2 Perceptions of the Work Environment for Female Faculty

Source: Riger, Stephanie, Joseph P. Stokes, Sheela Raja, and Megan Sullivan. 1997. "Measuring Perceptions of the Work Environment for Female Faculty." *The Review of Higher Education* 21 (1): 63–78. https://doi.org/10.1353/rhe.1997.0015.

### Items:

- 1. In general, senior faculty give candid feedback, including constructive criticism to juior female faculty
- 2. Senior faculty respect junior male and female faculty equally.
- 3. Senior faculty take time to advise junior female faculty how to succeed.
- 4. In meetings, people pay just as much attention when female faculty speak as when male faculty speak.
- 5. Faculty are serious about treating male and female faculty equally.
- 6. Most faculty would be as comfortable with a female chairperson as a male chairperson.
- 7. Female faculty are less likely than their male counterparts to have influence in departmental politics and administration. \*
- 8. Male faculty are as likely to discuss academic issues with female colleagues as with a male colleague.
- 9. It is not uncommon for a female faculty to present an idea and get no response, and then for a male faculty member to present the same idea and be acknowledge. \*
- 10. Faculty who raise issues about the negative treatment of women find themselves disparaged by their colleagues
- 11. After meetings, informal conversations about issues brought up at the meetings tend to exclude female faculty. \*
- 12. Male faculty tend to get more feedback about their performance than female faculty do. \*
- 13. Allegations of sexual harassment are taken seriously
- 14. Male faculty are comfortable having lunch alone with a female faculty member
- 15. Male faculty are as comfortable developing friendship with a female faculty as with a male faculty.
- 16. The working environment for female faculty is about the same as for their male counterparts.
- 17. Sex discrimination is a big problem.\*
- 18. Male faculty are not as comfortable serving as a mentor to a female faculty member as they are to a male faculty member. \*
- 19. Female faculty don't often speak up when they see an instance of sex discrimination for

- fear it will jeopardize their careers. \*
- 20. Faculty members are comfortable raising issues about treatment of women
- 21. Some faculty do not really understand the difficulty many female faculty have in balancing work and family life. \*
- 22. Faculty who raise concerns about balancing familty and career usually would be supported by colleagues
- 23. A female faculty can expect some resentment for her colleagues if she takes an extended maternity leave. \*
- 24. Female faculty who have taken time off to have children are considered just as committed to their careers as those who not taken time off.
- 25. Most faculty are supportive of female colleagues who want to balance their family and career lives.
- 26. Female faculty incur more career disadvantages by having a family than male faculty do \*
- 27. "Did you see the body on that women who just walked by?" \*
- 28. "She seems moody today. It must be that time of the month" \*
- 29. "Some of you may think this joke is sexist, but I think it is funny" \*
- 30. Faculty here tend to comment on the appearance of female job candidates. \*
- 31. "I don't think she would have been hired if she were a man" \*
- 32. Faculty are careful not to say anything that could sound sexist or degrading to women
- 33. It is easier for a male faculty member to develop a mentoring relationship with a senior faculty member.\*
- 34. Male faculty are more likely than female faculty to be involved in informal social networks within the department. \*
- 35. "Small talk" among faculty is geared more to men's interest than women's interest.

Italics is short scale.

Responses, except quotes (27, 28, 29, 31):

- 6. Strongly disagree
- 7. Disagree
- 8. Neither agree nor disagree
- 9. Agree
- 10. Strongly agree

Responses from items 27, 28, 29, 31

Please rate how likely it is for you to hear one of the following comments in your department:

- 1. Not at all likely
- 2. Not likely
- 3. Neither likely nor unlikely
- 4. Likely

# 5. Very likely

### 8.5.3 Campus Climate (BJS)

Source: Krebs, Christopher, Christine Linquist, Marcus Berzofsky, Bonnie Shook-Sa, Kimberly Petersen, Michael Planty, Lynn Langton, and Jessica Stroop. 2016. "Campus Climate Survey Validation Study Final Technical Report." Washington, D.C: Bureau of Justice Statistics. https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5540.

#### Item - School Connectedness

- 1. I feel valued as an individual at this school
- 2. I feel close to people at this school
- 3. I feel like I am a part of this school
- 4. I am happy to be a student at this school
- 5. I feel safe when I am on this school's campus
- 6. I believe there is a clear sense of appropriate and inappropriate behavior among students at this school
- 7. I believe alcohol abuse is a big problem at this school
- 8. I believe this school is trying hard to protect the rights of all students
- 9. I believe this school is trying hard to make sure that all students are treated equally and fairly
- 10. I believe this school is trying hard to make sure that all students are safe
- 11. I believe that students at this school trust one another
- 12. I believe that students at this school respect one another

### Response scale:

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

Item - General Perceptions of Campus Police, Faculty, and School Leadership

The next questions ask your views about three groups at this school: 1) Campus police/security, 2)

Faculty, and 3) School Leadership. Please indicate how much you agree with each of the following

statements, and answer as best as you can.

- 1. Are genuinely concerned about my well-being
- 2. Are doing all they can to protect students from harm
- 3. Treat students fairly

4. Are more interested in protecting the reputation of this school than the students they serve

### Response scale

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

### 8.5.4 #iSpeak Rutgers Campus Climate

Source: McMahon, Sarah, Kate Stepleton, Julia Cusano, Nicole Chaladoff, Julia O'Connor, and Alexis Sellas. 2016. "Understanding and Responding to Campus Sexual Assault: A Guide to Climate Assessment for Colleges and Universities." Rutgers, NJ: Center on Violence against Woman and Children. https://socialwork.rutgers.edu/file/1918/download.

The scale was adapted from (Peterson, Speer, and McMillan 2008)

#### **Items**

- 1. I can get what I need in this campus community.
- 2. This campus community helps me fulfill my needs.
- 3. I feel like a member of this campus community.
- 4. I belong in this campus community
- 5. I can have an influence on other people in my campus community.
- 6. People in this campus community are good at influencing each other.
- 7. I feel connected to this campus community.
- 8. I have a good bond with others in this campus community.

### Response scale

- 1. Strongly disagree
- 2. Disagree
- 3. Neither agree nor disagree
- 4. Agree
- 5. Strongly agree

### 8.5.5 Team Climate Inventory

Source: Anderson, Neil, and Michael A. West. 1998. "Measuring Climate for Work Group Innovation: Development and Validation of the Team Climate Inventory." *Journal of Organizational Behavior* 19 (May): 235–58.

#### Items:

1. How far are you in agreement with these objectives?

- 2. To what extent do you think your team's objectives are clearly understood by other members of the team?
- 3. To what extent do you think your team's objectives can actually be achieved?
- 4. How worthwhile do you think these objectives are to the organisation?
- 5. We have a "we are in it together" attitude
- 6. People keep each other informed about work-related issues in the team
- 7. People feel understood and accepted by each other
- 8. There are real attempts to share information through- out the team
- 9. Are team members prepared to question the basis of what the team is doing?
- 10. Does the team critically appraise potential weaknesses in what it is doing in order to achieve the best possible outcome?
- 11. Do members of the team build on each other's ideas in order to achieve the best possible outcome?
- 12. People in this team are always searching for fresh, new ways of looking at problems
- 13. In this team we take the time needed to develop new ideas
- 14. People in the team cooperate in order to help develop and apply new ideas.

Four dimensions. Vision (1-4), Participative Safety (5-8), Task orientation (9-11), Support for innovation (12-14)

# Response:

- 11. Strongly disagree
- 12. Disagree
- 13. Neither agree nor disagree
- 14. Agree
- 15. Strongly agree

#### 8.6 Sexism

#### 8.6.1 Modern Sexism Scale

**Source:** Swim, Janet K., Kathryn J. Aikin, Wayne S. Hall, and Barbara A. Hunter. 1995. "Sexism and Racism: Old-Fashioned and Modern Prejudices." *Journal of Personality and Social Psychology* 68 (2): 199–214.

- 1. Discrimination against women is no longer a problem in the United States.\*
- 2. Women often miss out on good jobs due to sexual discrimination.
- 3. It is rare to see women treated in a sexist manner of television.\*
- 4. On average, people in our society treat husbands and wives equally.\*
- 5. Society has reached the point where women and men have equal opportunities for achievement.\*

<sup>\*</sup> Reverse scored items

- 6. It is easy to understand the anger of women's groups in America.\*
- 7. It is easy to understand why women's groups are still concerned about societal limitations of women's opportunities.
- 8. Over the past few years, the government and news media have been showing more concern about the treatment of women than is warranted by women's actual experiences.\*

# Responses:

- 1. Strongly agree
- 2. Tend to agree
- 3. Neither agree nor disagree
- 4. Tend to disagree
- 5. Strongly disagree

#### 8.6.2 Neosexism scale

Source: Tougas, F., R. Brown, A. M. Beaton, and S. Joly. 1995. "Neosexism: Plus Ca Change, Plus C'est Pareil." *Personality and Social Psychology Bulletin* 21 (8): 842–49. https://doi.org/10.1177/0146167295218007.

#### \* Reverse scored items

#### Items:

- 1. Discrimination against women in the labor force is no longer a problem in Canada.
- 2. I consider the present employment system to be fair to women.\*
- 3. Women shouldn't push themselves where they are not wanted.
- 4. Women will make more progress by being patient and not pushing too hard for change.
- 5. It is difficult to work for a female boss.
- 6. Women's requests in terms of equality between the sexes are simply exaggerated.
- 7. Over the past few years, women have gotten more from government than they deserve.
- 8. Universities are wrong to admit women in costly programs such as medicine, when in fact, a large number will leave their jobs after a few years to raise their children.
- 9. In order not to appear sexist, many men are inclined to overcompensate women.
- 10. Due to social pressures, firms frequently have to hire underqualified women.
- 11. In a fair employment system, men and women would be considered equal.\*

#### Response:

1=total disagreement to 7 - total agreement.

# 8.6.3 Ambivalent Sexism Inventory

Source: Glick, Peter, and Susan T. Fiske. 1996. "The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism." *Journal of Personality and Social Psychology* 70 (3): 491–512.

Usage of scale requires permission by one of the authors.

For scoring (coding) see (Fiske and North 2015, 707).

#### Items:

- 1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.
- 2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for 'equality'.
- 3. In a disaster, women ought not necessarily to be rescued before men.
- 4. Most women interpret innocent remarks or acts as being sexist.
- 5. Women are too easily offended.
- 6. People are often truly happy in life without being romantically involved with a member of the other sex.
- 7. Feminists are not seeking for women to have more power than men.
- 8. Many women have a quality of purity that few men possess.
- 9. Women should be cherished and protected by men.
- 10. Most women fail to appreciate fully all that men do for them.
- 11. Women seek to gain power by getting control over men.
- 12. Every man ought to have a woman whom he adores.
- 13. Men are complete without women.
- 14. Women exaggerate problems they have at work.
- 15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.
- 16. When women lose to men in a fair competition, they typically complain about being discriminated against.
- 17. A good woman should be set on a pedestal by her man.
- 18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.
- 19. Women, compared to men, tend to have superior moral sensibility.
- 20. Men should be willing to sacrifice their own wellbeing in order to provide financially for the women in their lives.
- 21. Feminists are making entirely reasonable demands of men.
- 22. Women, as compared to men, tend to have a more refined sense of culture and good taste.

# Responses:

#### 8.6.4 Attitudes towards Women

Source: Spence, Janet T., Robert Helmreich, and Joy Stapp. 1973. "A Short Version of the Attitudes toward Women Scale (AWS)." *Bulletin of the Psychonomic Society* 2 (4): 219–20. <a href="https://doi.org/10.3758/BF03329252">https://doi.org/10.3758/BF03329252</a>.

This is the 25-item scale. There exists a 15-item version.

- 1. Swearing and obscenity are more repulsive in the speech of a women than of a man
- 2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day
- 3. Both husband and wife should be allowed the same grounds for divorce
- 4. Telling dirty jokes should be mostly a masculine prerogative
- 5. Intoxication among women is worse than intoxication among men
- 6. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry
- 7. It is insulting to women to have the 'obey' clause remain in the marriage service
- 8. There should be a strict merit system in job appointment and promotion without regard to sex
- 9. A woman should be as free as a man to propose marriage
- 10. Women should worry less about their rights and more about becoming good wives and mothers
- 11. Women earning as much as their dates should bear equally the expense when they go out together
- 12. Women should assume their rightful place in business and all the professions along with men
- 13. A Woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
- 14. Sons in a family should be given more encouragement to go to college than daughters
- 15. It is ridiculous for a woman to run a locomotive and for a man to darn socks.
- 16. In general, the father should have greater authority than the mother in the bringing up of children.
- 17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiances.
- 18. The husband should not be favored by law over the wife in the disposal of family propoerty or income.
- 19. Woman should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.
- 20. The intellectual leadership of community should be largely in the hands of men.
- 21. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been setup by men.

- 22. On the average, women should be regarded as less capable of contributing to economic production than are men.
- 23. There are many jobs in which men should be given preference over women in being hired or promoted.
- 24. Women should be given equal opportunity with men for apprenticeship in the various trades.
- 25. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

# Responses:

- 1. Agree strongly
- 2. Agree mildly
- 3. Disagree mildly
- 4. Disagree strongly

# 8.6.5 Aversion / hostility towards women in typically male domains

Source: Brandt, Mark J. 2011. "Sexism and Gender Inequality Across 57 Societies." *Psychological Science* 22 (11): 1413–18. https://doi.org/10.1177/0956797611420445.

See also Napier, Jaime L., Hulda Thorisdottir, and John T. Jost. 2010. "The Joy of Sexism? A Multinational Investigation of Hostile and Benevolent Justifications for Gender Inequality and Their Relations to Subjective Well-Being." *Sex Roles* 62 (7): 405–19. https://doi.org/10.1007/s11199-009-9712-7.

Herrero, Juan, Francisco J. Rodríguez, and Andrea Torres. 2017. "Acceptability of Partner Violence in 51 Societies: The Role of Sexism and Attitudes Toward Violence in Social Relationships." *Violence Against Women* 23 (3): 351–67. https://doi.org/10.1177/1077801216642870.

#### Items:

- 1. "On the whole, men make better political leaders than women do"
- 2. "On the whole, men make better business executives than women do."

# Response:

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

# 8.7 Leadership

# 8.7.1 Human System Audit Transformational Leadership Short Scale

Source: Berger, Rita, Montserrat Yepes, Juana Gómez-Benito, Santiago Quijano, and Felix C. Brodbeck. 2011. "Validity of the Human System Audit Transformational Leadership Short Scale (HSA-TFL) in Four European Countries." *Universitas Psychologica* 10 (3): 657–68.

#### Items:

- 1. She/he develops ways of motivating us (Motivational Inspiration)
- 2. I feel proud to work with her/him (Charism)
- 3. I have trust in her/his ability to overcome any obstacle (Charism)
- 4. She/he is concerned with training those who need it (Individualized Consideration)
- 5. She/he gives advice to those who need it (Individualized Consideration)
- 6. She/he gets us to rely on reasoning and evidence to solve problems (Intellectual Stimulation)
- 7. She/he promotes the use of intelligence to overcome obstacles (Intellectual Stimulation)
- 8. She/he presents things through an approach that stimulates me (Motivational Inspiration)

#### Response scale

- 1. Strongly disagree
- 2. Disagree
- 3. Neither agree nor disagree
- 4. Agree
- 5. Strongly agree

#### 8.7.2 Authority Openness

Source: Tost, L. P., F. Gino, and R. P. Larrick. 2012. "When Power Makes Others Speechless: The Negative Impact of Leader Power on Team Performance." *Academy of Management Journal* 56 (5): 1465–86. <a href="https://doi.org/10.5465/amj.2011.0180">https://doi.org/10.5465/amj.2011.0180</a>.

The scale used by (Tost, Gino, and Larrick 2012) originally developed by (Grant, Gino, and Hofmann 2011) with the following items.

- 1. Open to new ideas
- 2. Reception to suggestions
- 3. Interested in our ideas
- 4. Rejected new ideas
- 5. Dismissed suggestions

#### Response scale

- 1. Strongly disagree
- 2. Disagree
- 3. Neither agree nor disagree
- 4. Agree
- 5. Strongly agree

This looks at perceived openness of formal leaders. As an alternative the "authority differentiation" items of the short TDI (Team descriptive Index) could be used, see (Lee et al. 2015)

# 8.8 Male / Female Identity and Norms

# 8.8.1 Separate Spheres Ideology

Source: Miller, Andrea L, and Eugene Borgida. 2016. "The Separate Spheres Model of Gendered Inequality." *PloS One* 11 (1). https://doi.org/10.1371/journal.pone.0147315.

- 1. Women can learn technical skills, but it doesn't come as naturally as it does for most men.
- 2. If one person in a heterosexual marriage needs to quit working, it usually makes more sense for the husband to keep his job.
- 3. \* Children with single parents can be just as well off as children with both a mom and a dad.
- 4. When it comes to voting for president, I'm more comfortable trusting a man to make tough political decisions than a woman.
- 5. \* When a married couple divorces, judges shouldn't assume that the mother is the more "natural" parent.
- 6. Most men naturally enjoy a tough and competitive career more than women do.
- 7. I would feel more comfortable if my auto mechanic was a man, rather than a woman.
- 8. \* If we got rid of stereotyping and discrimination, differences between men and women would mostly disappear.
- 9. Women can learn how to be good leaders in the workplace, but it doesn't come as naturally as it does for most men.
- 10. It's natural for a woman to be fulfilled by taking care of her children, but most men feel better when they have a good career, too.
- 11. There are certain caregiving jobs, like nursing, that just naturally fit with women's skills better than men's skills.
- 12. Most kids are better off if their dad is the primary provider for the whole family.

<sup>\*</sup> Reverse scores

- 13. \* I would feel equally comfortable with a repair-man or a repair-woman to fix something in my house.
- 14. \* It's just as important to most women as it is to men to have a successful career.
- 15. When it comes to making tough business decisions, men tend to have special abilities that most women don't have.

# Response:

- 1. Strongly disagree
- 2. Moderately disagree
- 3. Slightly disagree
- 4. Neither agree nor disagree
- 5. Slightly agree
- 6. Moderately agree
- 7. Strongly agree

#### 8.8.2 Women in Science Scale

Source: Owen, Steven V., Mary Anne Toepperwein, Linda A. Pruski, Cheryl L. Blalock, Yan Liu, Carolyn E. Marshall, and Michael J. Lichtenstein. 2007. "Psychometric Reevaluation of the Women in Science Scale (WiSS)." *Journal of Research in Science Teaching* 44 (10): 1461–78. https://doi.org/10.1002/tea.20187.

Original scale by (Erb and Smith 1984).

- 1. Women can be as good in science careers as men can.
- 2. Women can make important scientific discoveries.
- 3. Women are not reliable enough to hold top positions in scientific and technical fields.
- 4. \* A woman with a science career will have an unhappy life
- 5. A woman should have the same job opportunities in science careers as a man.
- 6. \* Women should not have the same chances for advancement in science careers as men do
- 7. Women should have the same educational opportunities as men.
- 8. A successful career is as important to a woman as it is to a man.
- 9. A woman's basic responsibility is raising children.
- 10. A wife should spend more effort to help her husband's career than she spends on her own.
- 11. Women have less need to study math and science than men do.
- 12. Men need more math and science careers than women do.
- 13. It is better for a woman to study home economics than chemistry.
- 14. It is wrong for women to seek jobs when there aren't enough jobs for all the men who want them.

<sup>\*</sup> Reverse scored

# Responses

- 1. Strongly agree
- 2. Moderately Agree
- 3. Agree
- 4. Disagree
- 5. Moderately disagree
- 6. Strongly disagree

# 8.8.3 Traditional Masculinity and Femininity Scale (TMF)

Source: Kachel, S., Steffens, M. C., and Niedlich, C. (2016). Traditional Masculinity and Femininity: Validation of a New Scale Assessing Gender Roles. Front. Psychol. 7. doi:10.3389/fpsyg.2016.00956.

The Traditional Masculinity-Femininity Scale (TMF) in English translation [with original German wording]

- 1. I consider myself as... [Ich empfinde mich selbst als...]
- 2. Ideally, I would like to be... [Idealerweise wäre ich gern...]
- 3. Traditionally, my interests would be considered as... [Traditionellerweise würden meine Interessen angesehen werden als...]
- 4. Traditionally, my attitudes and beliefs would be considered as... [Traditionellerweise würden meine Einstellungen und Ansichten angesehen werden als...]
- 5. Traditionally, my behavior would be considered as... [Traditionellerweise würde mein Verhalten angesehen werden als...]
- 6. Traditionally, my outer appearance would be considered as... [Traditionellerweise würde meine äußere Erscheinung angesehen werden als...]

#### **Responses:**

- 1. Totally masculine
- 2.
- 3. .
- 4. .
- 5. .
- 6. .
- 7. Totally feminine

# 8.8.4 Diversity Beliefs

Source: Hentschel, T., M. Shemla, J. Wegge, and E. Kearney. 2013. "Perceived Diversity and Team Functioning: The Role of Diversity Beliefs and Affect." *Small Group Research* 44 (1): 33-61. https://doi.org/10.1177/1046496412470725.

#### Items:

- 1. "When I am supposed to describe my work team, I automatically think about the differences among my colleagues"
- 2. "I am very aware of the differences among my colleagues"
- 3. "I sometimes think about the differences among the colleagues in our team"

#### Response scale:

- 1. Don't agree at all
- 2. Don't agree
- 3. Neither agree nor disagree
- 4. Agree
- 5. Agree very much

# 8.8.5 Gender Status Beliefs

Source: Rashotte, L. S., and Webster, M. (2005). Gender status beliefs. *Social Science Research* 34, 618–633. doi:10.1016/j.ssresearch.2004.05.004.

The instrument has two parts. Part I is about rating competency of two women and two men based upon an image. Names and affiliation are fictitious. Images are taken from <a href="https://www.hotornot.com">www.hotornot.com</a> - a control question assess attractiveness effect.

#### Question:

- How intelligent do you perceive [Diane] to be?
- How well do you expect [Diane] to do at situations in general?
- In terms of things that you think count in this world, how does [Diane] rate?
- How capable do you think [Diane] is at most tasks?
- How do you rate [Diane] concerning reading ability?
- How do you rate [Diane] at abstract abilities?
- How would you rate [Diane's] grade point average?

#### Response

9 point scale with "Below Average" and "Above average" as end points and "Average" at mid point (5). Blank spaces in-between, non-numbered.

For complete details on all items see Rashotte & Webster (2005).

# Part II

# 8.9 Behavior

# 8.9.1 Measuring Campus Climate Related to Sexual Assault

Source: Krebs, Christopher, Christine Linquist, Marcus Berzofsky, Bonnie Shook-Sa, Kimberly Petersen, Michael Planty, Lynn Langton, and Jessica Stroop. 2016. "Campus Climate Survey Validation Study Final Technical Report." Washington, D.C: Bureau of Justice Statistics. https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5540.

#### Item SH1 - Sexual Harassment Victimization and Coerced Sexual Contact

Since the beginning of the current academic and year [FILL: August/September], [YEAR], has anyone done the following to you either in person or by phone, text message, e-mail, or social media? Please include things regardless of where they happened.

- 1. Made sexual advances, gestures, comments, or jokes that were unwelcome to you
- 2. Flashed or exposed themselves to you without your consent
- 3. Showed or sent you sexual pictures, photos, or videos that you didn't want to see
- 4. Showed or sent sexual photos/videos of you or spread sexual rumors about you that you didn't want shared
- 5. Watched or took photos/videos of you when you were nude or having sex, without your consent

# Response scale:

- 1. Yes
- 2. No

# Item EC1 - Sexual Harassment Victimization and Coerced Sexual Contact

Since the beginning of the current academic year in [FILL: August/September], [YEAR], has anyone had sexual contact with you by threatening to tell lies, end your relationship, or spread rumors about you; making promises you knew or discovered were untrue; or continually verbally pressuring you after you said you didn't want to?

# Sexual contact includes:

- touching of a sexual nature (kissing, touching of private parts, grabbing, fondling, rubbing up against you in a sexual way, even if it is over your clothes)
- oral sex (someone's mouth or tongue making contact with your genitals or your mouth or tongue making contact with someone else's genitals)
- anal sex (someone putting their penis in your anus)
- sexual intercourse (someone's penis being put in [IF D3=MALE, FILL "someone's", ELSE FILL "your" vagina)

• sexual penetration with a finger or object (someone putting their finger or an object like a bottle or a candle in your [IF D3 NE MALE, FILL: "vagina or"] anus.

# Response scale:

- 1. Yes
- 2. No

#### Items—Sexual Assault Victimization

This Sexual section Assault asks about Victimization times when you may have experienced unwanted sexual contact. In these questions, unwanted sexual contact is sexual contact that you did not consent to and that you did not want to happen. Remember that sexual contact includes touching of your sexual body parts, oral sex, anal sex, sexual intercourse, and penetration of your [IF D3=FEMALE OR TRANSGENDER OR SOMETHING ELSE OR MISSING, FILL "vagina or"] anus with a finger or object.

Please check off each point as you read through these descriptions.

Unwanted sexual contact could happen when: [EACH ITEM MUST BE CHECKED TO ADVANCE]

- someone touches or grabs your sexual body parts (e.g., butt, crotch, or breasts);
- someone uses force against you, such as holding you down with his or her body weight, pinning your arms, hitting or kicking you;
- someone threatens to hurt you or someone close to you; or
- you are unable to provide consent because you are incapacitated, passed out, unconscious, blacked out, or asleep. This could happen after you voluntarily used alcohol or drugs, or after you were given a drug without your knowledge or consent.

Please keep in mind that anyone – regardless of gender – can experience unwanted sexual contact. Also, the person who does this could be a stranger or someone you know, such as a friend, family member, or person you were dating or hanging out with.

When you answer the questions in this section, please count any experience of unwanted sexual contact (e.g., touching of your sexual body parts, oral sex, anal sex, sexual intercourse, and penetration of your [IF D3=FEMALE OR TRANSGENDER OR SOMETHING ELSE OR MISSING, FILL "vagina or"] anus with a finger or object) that you did not consent to and did not want to happen since the beginning of the current academic year, regardless of where it happened.

P1. Since the beginning of the current academic year in [FILL: August/September], [YEAR], has anyone had unwanted sexual contact with you?

#### Response scale:

- 1. Yes
- 2. No

P2. How many separate incidents of unwanted sexual contact have you experienced since the beginning of the current academic year in [FILL: August/September], [YEAR]?

- 0 Incidents
- 1 Incident
- 2 Incidents
- 3 Incidents
- 4 Incidents
- 5 Incidents or more

NOTE: The Sexual Assault Victimization section includes further items inquiring about the place and perpetrators in more detail (see source).

Item - Intimate Partner Violence (IPV)

This IPV section Victimization asks more questions about your experiences since the beginning of the current academic year. These questions asks about things that an intimate partner may have done to you. An intimate partner might be a boyfriend, girlfriend, spouse, or anyone you were in an intimate relationship with or hooked up with, including exes and current partners. As you answer the questions, please do not include times you knew they were joking around.

IPV1. Since the beginning of the current academic year in [FILL: August/September], [YEAR], has an intimate partner...

- 1. threatened to hurt you and you thought you might really get hurt?
- 2. pushed, grabbed, or shook you?
- 3. hit you, kicked you, slapped you, or beat you up?

#### Response scale:

- 1. Yes
- 2. No

# 8.9.2 #iSpeak Rutgers Campus Climate

Source: McMahon, Sarah, Kate Stepleton, Julia Cusano, Nicole Chaladoff, Julia O'Connor, and Alexis Sellas. 2016. "Understanding and Responding to Campus Sexual Assault: A Guide to Climate Assessment for Colleges and Universities." Rutgers, NJ: Center on Violence against Woman and Children. https://socialwork.rutgers.edu/file/1918/download.

Part of the following questions have been adapted from (C. P. Krebs et al. 2007) and earlier version to the BJS instrument (C. Krebs et al. 2016).

Section "Experiences"

"Sexual assault" and "sexual violence" refer to a range of behaviors that are unwanted by the recipient and include remarks about physical appearance, persistent sexual advances that are undesired by the recipient, threats of force to get someone to engage in sexual behavior, as well as unwanted touching and unwanted oral, anal or vaginal penetration or attempted penetration. These behaviors could be initiated by someone known or unknown to the recipient, including someone they are in a relationship with.

The following questions below (20-24) are about unwanted sexual contact that involved force or threats of force against you. This could include someone holding you down with his or her body weight, pinning your arms, hitting or kicking you, or threatening to use a weapon against you.

- 20. Did you ever experience any form of sexual violence before coming to Rutgers?
- 21. Since coming to Rutgers, has anyone had unwanted sexual contact with you by using physical force?
- 22. Since coming to Rutgers, has anyone had unwanted sexual contact with you by coercing you or threatening to use physical force?
- 23. Has anyone attempted but not succeeded in having unwanted sexual contact with you by using physical force against you?
- 24. Has anyone attempted but not succeeded in having unwanted sexual contact with you by coercing you or threatening to use physical force against you?

# Response scale

- 1. Yes
- 2. No

NOTE: items continue regarding if certain incidents happened under the influence of drugs, about perpetrators.

# 8.9.3 Bystander behavior - BJS Measuring Campus Climate

Source: Krebs, Christopher, Christine Linquist, Marcus Berzofsky, Bonnie Shook-Sa, Kimberly Petersen, Michael Planty, Lynn Langton, and Jessica Stroop. 2016. "Campus Climate Survey Validation Study Final Technical Report." Washington, D.C: Bureau of Justice Statistics. <a href="https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5540">https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5540</a>.

#### **Items**

SAC6. Please indicate how likely or unlikely you are to do each of the following things. Please think about the situation and answer as best as you can.

1. If your friends are sending sexual pictures, web pages, or messages to someone who

- didn't ask for them, how likely are you to say something to try to get them to stop?
- 2. If people you don't know very well are making unwanted sexual comments, jokes, or gestures, how likely are you to say something to try to get them to stop?
- 3. If you see one of your friends leading someone who is obviously drunk away to have sex with them, how likely are you to say or do something to get them to stop?
- 4. If you suspect that one of your friends might be in an abusive relationship, how likely are you to ask them if they are being mistreated?
- 5. If someone tells you that they had sex with someone who was passed out, how likely are you to report the incident to a campus administrator or police?
- 6. If you see someone you don't know who looks uncomfortable and is being touched, grabbed, or pinched in a sexual way, how likely are you to speak up or help in some other way?
- 7. When you go out with your friends, how likely are you to come up with a plan for checking in with one another throughout the evening?

# Response scale

- 1. Very likely
- 2. Likely
- 3. Not likely
- 4. Not at all likely

# 8.9.4 Bystander behavior - #iSpeak Rutgers University

Source: McMahon, Sarah, Kate Stepleton, Julia Cusano, Nicole Chaladoff, Julia O'Connor, and Alexis Sellas. 2016. "Understanding and Responding to Campus Sexual Assault: A Guide to Climate Assessment for Colleges and Universities." Rutgers, NJ: Center on Violence against Woman and Children. <a href="https://socialwork.rutgers.edu/file/1918/download">https://socialwork.rutgers.edu/file/1918/download</a>.

#### **Items**

- 1. Call the police or authorities if you saw a group of males bothering a female in a parking lot or similar setting
- 2. Confront a male friend who was hooking up with someone who was passed out
- 3. Confront a female friend who was hooking up with someone who was passed out
- 4. Confront a friend if you heard rumors that they forced someone to have sex
- 5. Tell an RA or other campus authority about information you might have about a rape case even if pressured by others to stay silent
- 6. Go with a female friend to the police department if she said she was raped
- 7. Go with a male friend to the police department if he said he was raped

# Response scale

5. Very unlikely

- 6. Unlikely
- 7. Neutral
- 8. Likely
- 9. Very likely

# 8.9.5 Stalking - AAU Campus Climate Survey

Source: Association of American Universities. 2015. "Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct." Rockville, Maryland: The Association of American Universities. <a href="https://www.aau.edu/key-issues/aau-climate-survey-sexual-assault-and-sexual-misconduct-2015">https://www.aau.edu/key-issues/aau-climate-survey-sexual-assault-and-sexual-misconduct-2015</a>.

#### Items

- 1. Since you have been a student at [University], has someone made unwanted phone calls, sent emails, voice, text or instant messages, or posted messages, pictures or videos on social networking sites in a way that made you afraid for your personal safety?
- 2. Since you have been a student at [University], has someone showed up somewhere or waited for you when you did not want that person to be there in a way that made you afraid for your personal safety?
- 3. Since you have been a student at [University], has someone spied on, watched or followed you, either in person or using devices or software in a way that made you afraid for your personal safety?

#### Response scale

- 1. Yes
- 2. No

If YES – questionnaire asks about frequency, the perpetrator, etc.

# 9 Indicators & tools for institutional Gender Equality monitoring

# 9.1 Statistical Data: staff and students

#### 9.1.1 Human Resources - CESAER - Survey

Source: CESAER survey 2014

Question: If possible without too much effort please provide some statistics regarding

**percentages of females** at different levels and for different categories of human resources at your university (if providing data to some of the questions is not possible just do not respond!)

# Top academic management of the [organization type or organization name]

#### Items:

- 1. President, Rector, CEO or equivalent leader of the institution
- 2. If there are more equally responsible persons in the top university leadership team
  - 2.1. [input num] Number of persons in the leadership team
  - 2.2. [input num] Number of women in the leadership team
- 3. Academic management level 2: Vice- Rectors (or equivalent)
  - 3.1. [input num] Number of Vice-rectors
  - 3.2. [input num] Number of female Vice-rectors
- 4. Academic management level 3 (e.g. deans, please define in accordance with the structure of your university).
  - [input num] % of women at academic management level 3
- 5. Academic management level 4 (e.g. department heads, please define in accordance with the structure of your university).
  - [input num] % of women at academic management level 4

# Top administrative management of the university

- 1. Administrative director (or equivalent). [checkbox] female or [checkbox] male
- 2. Administrative management level 2 (please define in accordance with the structure of your university)
  - % of women at administrative management level 2

# Women in appointment committees

- 1. Is there a requirement for gender diversity in appointment committees? [checkbox ] Yes [checkbox ] No
- If yes, is there a rule for a minimum number or a rate of female members [input num] Minimum number? [input num] Minimum rate %
- 3. Is there personnel available for advising appointment committees on gender equality issues?
  - [checkbox] Yes [checkbox] No

#### **Scientific Staff** (as of today)

- 1. Number of full professors: [input num] [input num] % of female full professors
- 2. Number of associate professors [input num] [input num] % of female associate professors
- 3. Number of assistant professors [input num] [input num] % of female assistant professors
- 4. Number of other scientific staff [input num] [input num] % of female other scientific staff

#### **Students**

- 1. Number of entry students [input num] [input num] % of female entry students
- Number of bachelor graduates [input num]% of female bachelors graduates
- 3. Number of master graduates [input num] [input num] % of female master graduates
- Number of doctoral/ PhD graduates [input num]
  of female/ doctoral graduates

#### FP7, H2020, FP9, ERC grantees

- 1. Number of ERC Starting grants [input num] [input num] % of female ERC Starting grantees
- 2. Number of ERC Consolidator grants [input num] [input num] % of female ERC Consolidator grantees
- 3. Number of ERC Advanced grants [input num] [input num] % of female ERC Advanced grantees

#### **Marie Curie Fellows**

- 1. Number of outgoing Marie Curie Fellows [input num] [input num] % of female outgoing Marie Curie Fellows
- 2. Number of incoming Marie Curie Fellows [input num] [input num] % of female incoming Marie Curie Fellows

# FP7, H2020, FP9 Coordinators of collaborative projects and Coordination and Support Actions (CSAs) at your university

1. Number of FP7 coordinators [input num] [input num] % of female coordinators

# 9.1.2 Human resources and students - INTEGER Excel template

The Excel template for the INTEGER Data Monitoring is available online under the following URL:

http://www.integer-tools-for-action.eu/en/resources

# 9.1.3 Human resources for RFO - Science Europe

Source: Science Europe. 2017. "Practical Guide to Improving Gender Equality in Research Organisations." D/2017/13.324/2. Science Europe. <a href="https://www.scienceeurope.org/wp-content/uploads/2017/01/SE">https://www.scienceeurope.org/wp-content/uploads/2017/01/SE</a> Gender Practical-Guide.pdf.

Indicators for the Gender Distribution in the National Pool of Researchers

In order to find out if women or men are under-represented among applicants to a RFO or RPO, or among researchers employed at a RPO, a comparison should be made with a national 'pool of researchers'. This indicator is calculated by looking at national statistics.

- Share of women and men, respectively, among researchers nationally

The indicator should be broken down by:

- Scientific field
- age
- academic age, number of years since obtaining the PhD (if available, the academic age is to replace the age)
- academic position
- sector, if relevant (for example, higher education, government, non-for-profit, or business)

#### **Indicators for RFOs**

The indicators in this section are recommended for gender equality monitoring in RFOs. The first group of indicators below concerns the applications for funding received.

- Share of women and men among applicants
- Share of women and men among successful main applicants
- Success rate for women and men main applicants
- Average size of grant for women and men

The success rate is the number of successful applicants from women/men divided by the total number of applicants from women/men.

These four indicators should be broken down by:

- Scientific field
- Funding scheme
- Age
- Academic age, number of years since obtaining the PhD (if available, the academic age is to replace the age)

If relevant, these indicators can also be broken down by academic position and/ or sector. See Science Europe, (2017: 32) for further information about these indicators.

The last group of indicators for RFOs address the gender balance in funding decision-making bodies, which are usually peer-review panels.

- Share of women and men among reviewers
- Share of women and men among heads of review panels
- Share of women and men in funding decision-making bodies

These three indicators should if possible be broken down by:

- Scientific field
- Funding scheme

These indicators can be used to fund out if women or men are under-represented among reviewers, heads of review panels, or in decision-making bodies respectively.

# 9.1.4 Human Resource Indicators for RPOs - Science Europe

Source: Science Europe. 2017. "Practical Guide to Improving Gender Equality in Research Organisations." D/2017/13.324/2. Science Europe. <a href="https://www.scienceeurope.org/wp-content/uploads/2017/01/SE">https://www.scienceeurope.org/wp-content/uploads/2017/01/SE</a> Gender Practical-Guide.pdf.

The indicators in this section are recommended for gender equality monitoring at RPOs. The first group of indicators concerns the applications for external open research positions.

- Share of women and men among applicants
- Share of women and men among persons to be recruited
- Success rate for women and men applicants

The success rate is the number of women/men recruited divided by the total number of women/men applying for a position.

These three indicators should be broken down by:

- Scientific field
- Academic position
- Temporary or permanent position
- Part-time or full-time position

These indicators can be used to find out if women or men are under-represented among the recruited researchers.

The next group of indicators address internal promotions for research positions in RPOs-

- Share of women and men among applicants for promotion
- Share of women and men among promoted researchers
- Success rate for women and men applicants

The success rate is the number of promoted women7men divided by the total number of women/men applying for promotion. Of course this indicator can only be calculated if there is a formal application process for promotions.

These three indicators should be broken down by:

- Scientific field
- Academic position

These indicators can be used to find out if women or men are under-represented among the researchers applying for promotion and/or among the promoted researchers.

The next group of indicators for RPOs address the gender balance in the recruitment or promotion boards and in the decision-making bodies.

- Share of women and men in recruitment or promotion boards
- Share of women and men among heads of recruitment or promotion boards
- Share of women and men in decision-making bodies

These indicators should, if possible, be broken down by scientific field.

These indicators can be used to find out if women or men are under-represented in recruitment or promotion boards, among heads of recruitment or promotion boards, or in decision-making bodies.

The last indicator addresses the gender balance among the researchers employed at an RPO.

- Share of women and men among employed researchers

This indicator should be broken down by:

- Scientific field

- Academic position
- Temporary or permanent position
- Part-time or full-time position

This indicator can be used to find out if women or men are under-represented among the researchers employed at an RPO. Comparisons can be made with the indicator on the gender distribution in the national pool of researchers.

# 9.2 Organisational Structure for Gender Equality

# 9.2.1 Organisational Structure for GE - CESAER

Source: CESAER survey 2014

Question: How is the topic "Gender Equality" embedded in the organisation of your

university?

#### Items:

1. [checkbox] There is a special organsiational unit focusing on "Gender Equality"

- 2. [checkbox] "Gender Equality" is dealt with among other issues in a unit with broader responsibilities
- 3. There is no special organizational unit established in my university but a single person is
  - 3.1. [checkbox] dealing with gender equality only
  - 3.2. [checkbox] dealing with gender equality among other responsibilities
- 4. [checkbox] There is no special department or person responsible for this topic.
- 5. [checkbox] Other form or organization, please specify: [text field]

# 9.3 GEP Implementation and Monitoring

#### 9.3.1 GEP Implementation and Monitoring - CESAER

Source: CESAER Survey 2014

**Question:** Does your university have a "Gender Equality Plan" (or equivalent)?

#### Items:

1. Is there a sperate Gender Equality Plan? [checkbox] Yes [checkbox] No

- 2. [checkbox] Gender is an integrated part of the university's Human Resource Strategy
- 3. [checkbox] There are plans to develop an institutional Gender Equality Plan/ Strategy
- 4. [checkbox] At the moment Gender Equality is not a priority topic of my university
- 5. Comments [textarea]

**Question:** Does your organisation assess the implementation of the Gender Equality Plan or Strategy? [checkbox] Yes [checkbox] No

#### Item

1. Please specify which measures are used for assessment [textarea]

**Question:** There is an array of activities which may be implemented in connection with gender equality issues: which of the following were implemented in 2012 and 2013? Multiple answers possible.

- 1. [checkbox] Specific measures and/ or programmes for attracting female students to engineering studies
- 2. [checkbox] Specific recruitment and promotion policies for female researchers
- 3. [checkbox] Measures, including quotas, to ensure a balanced composition of females and males in your organsiation's committees (e.g. involved in recruitment, appointment, career progression, or if applicable in evaluation of research programmes or projects)
- 4. [checkbox] Flexible career trajectory (e.g. provisions to allow interuptions of career, returning schemes after career breaks)
- 5. [checkbox] Breaks, gender aware mobility conditions
- 6. [checkbox] Work-life balance measures (e.g. parental leave, flexible working arrangements for researchers)
- 7. [checkbox] Development of gender competence at your university (e.g. specific leadership training, gender/ diversity training for top or middle management, mentoring for female researchers). If there are activities for the development of gender competence, please specify [textarea]
- 8. [checkbox] Networking opportunities for female researchers
- 9. [checkbox] Guidelines of best practices disseminated within your organisation
- 10. Other, please specify [textarea]

**Question:** Does your organsiation face barriers when setting up activites in connection with gender issues?

#### Item

[checkbox] Yes [checkbox] No

**Question:** If your organization is facing barriers how important are the following barriers to setting up activities in connection with gender issues? Please rate accordingly

#### Items

- 1. Regulations or polocies at national or regional level are not specifically supportive of achieving gender equality at universities
- 2. Employment and/ or labout law or policy at national or regional levels do not allow to take action
- 3. Lack of resources for implementing gender equality in science and technology
- 4. Internal resistance against implementing measures supporting gender equality
- 5. Other barriers, please specify: [textarea]

#### Responses

3-items likert scale

- 1. Important
- 2. Somewhat Important
- 3. Not important

# 9.3.2 GEP Implementation and Monitoring - ACT Survey

Source: Reidl, S., and Krzaklewska, E. (2019). ACT Community Survey. doi:10.5281/zenodo.2553070.

**Question:** Does you department have a gender equality plan (GEP) or equivalent document/policy (e.g. a Diversity Plan including gender or a relevant strategy)?

- 1. Yes, there is a GEP or equivalent on the organizational level
- 2. Yes, there is a GEP or equivalent on the department level

- 3. No but we are working on developing a GEP
- 4. No, we used to have one, but it is no longer in place
- 5. No GEP planned or in place
- 6. I don't know

**Question:** Which steps have you already undertaken on the way to implementing a GEP or equivalent document/ policy?

#### Items:

- 1. Status quo-assessment of gender in/equality
- 2. Informal/ formal talks with management
- 3. Informal/formal talks with other stakeholders
- 4. Setting up an informal/ formal committee
- 5. Discussing the needs of the institution/ employees in terms of gender equality
- 6. Draft of GEP or equivalent document
- 7. Enacting of a GEP in process
- 8. Other steps, please specify

**Question:** Gender equality plan (GEPs) can focus on different fields of action. Please indicate which of the following measures are included ijn the GEP of your department and rate their effectiveness. Multiple answers possible. If you are still developing your GEP and therefore cannot assess the effectiveness yet please select I cannot assess this.

- 1. Gender equality office, diversity office, gender equality committee or similar
- 2. Commitment to gender mainstreaming
- 3. Implementation of gender budgeting
- 4. Collection of sex/gender-disaggregated data
- 5. Enhancing women's recruitment
- 6. Equal pay measures
- 7. Enhancing women's promotion
- 8. Promoting equal representation in decision-making
- 9. Flexible career trajectory schemes
- 10. Flexible working arrangements

- 11. Child care support
- 12. Enhancing women's visibility
- 13. Support for dual career couple
- 14. Awareness raising measures
- 15. Measures addressing non-discrimination and gender diversity
- 16. Measures combating sexual harassment
- 17. Measures addressing the integration of gender dimension into research
- 18. Measures addressing the integration of gender dimension in curricula and teaching material
- 19. Other measures, please specify

#### Response scale:

- 1. not effective
- 2. rather not effective
- 3. rather effectiv
- 4. very effective
- 5. I can't assess this

**Question:** Are there any additional measures concerning gender equality that exist in your department which are not included in the GEP?

Items and Response Items are the same as previous question.

**Question:** In your opinion which of the following barriers affect the implementation of gender equality in your department? Multiple answers possible:

- 1. Lack of commitment/ support from organisation management
- 2. Active resistance from organisation management
- 3. Lack of commitment/ support from employees/ staff members
- 4. Active resistance from employees/ staff member
- 5. Lack of coordination
- 6. Lack of necessary data (statistical, administrative) on the issue
- 7. Lack of expertise within the organsiation/ department
- 8. Regulations or policies (e.g. labour law) at national or regional level are not specifically

supportive for gender equality implementation

- 9. Lack of financial resources
- 10. Lack of personnel/time
- 11. Lack of accountability/ monitoring
- 12. Other barriers, please specify (open box)
- 13. No barriers so far
- 14. I can't assess this

# 9.3.3 RFO - Grant Management Monitoring Science Europe

Source: Science Europe (2017)

Surveyed organisations were asked to provide data related to the following aspects of grant management:

- 1) Policies related to fully paid statutaory maternity leave, such as the provision of supplementary grants for researchers on leave, or the possibility to extend research awards following a period of maternity/ adoption leave of the grant holder or a team member
- 2) Policies related to fully paid statutory paternity leave and
- 3) The possibility of undertaking research projects on a part-time basis.

# 9.4 Good Practice

#### 9.4.1 Good Practice [Advance HE]

Source: Advance HE

**Question:** Please provide a brief description of up to five good practice initiatives from your own institution that you feel should be included (optional). [textarea]

# 9.4.2 Good Practice [CESAER]

Source: CESAER survey

**Question:** Which three specific "Gedner Equality2 initiatives of your university would you

define as examples of best practice? [textarea]

**Question:** Why do you remember them, what was special about them? [textarea]

#### References

- Anderson, Neil, and Michael A. West. 1998. "Measuring Climate for Work Group Innovation: Development and Validation of the Team Climate Inventory." *Journal of Organizational Behavior* 19 (May): 235–58.
- Association of American Universities. 2015. "Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct." Rockville, Maryland: The Association of American Universities. https://www.aau.edu/key-issues/aau-climate-survey-sexual-assault-and-sexual-misconduct-2015.
- Berdahl, Jennifer L., Marianne Cooper, Peter Glick, Robert W. Livingston, and Joan C. Williams. 2018. "Work as a Masculinity Contest: Work as a Masculinity Contest." *Journal of Social Issues* 74 (3): 422–48. https://doi.org/10.1111/josi.12289.
- Berger, R; Romeo, M; Guardia, J: Yepes-Baldó, M. 2011. "Psychometric Properties of the Spanish Human System Audit Short-Scale of Transformational Leadership." *Política y Sociedad* 48 (2): 329–52. https://doi.org/10.5209/rev.
- Berger, Rita, Montserrat Yepes, Juana Gómez-Benito, Santiago Quijano, and Felix C. Brodbeck. 2011. "Validity of the Human System Audit Transformational Leadership Short Scale (HSA-TFL) in Four European Countries." *Universitas Psychologica* 10 (3): 657–68.
- Brandt, Mark J. 2011. "Sexism and Gender Inequality Across 57 Societies." *Psychological Science* 22 (11): 1413–18. https://doi.org/10.1177/0956797611420445.
- Brannon, R., and Samuel Juni. 1984. "A Scale for Measuring Attitudes about Masculinity." *Psychological Documents* 14 (Doc. #2612).
- Callerstig, Anne-Charlott, Elisabeth Anna Guenther, Anne Laure Humbert, Sandra Klatt, Jörg Müller, and Ulf Sandström. 2018. "Survey Analysis And Performance Indicator Research Report." *GEDII Project Deliverable D4.3*, March. https://doi.org/10.5281/zenodo.2546551.
- Catwright, S, and CL Cooper. 2002. "ASSET: An Organizational Stress-Screening Tool." Robertson Cooper Limited and Cubiks, London.
- Cortina, Lilia M., and Jennifer L. Berdahl. 2008. "Sexual Harassment in Organizations: A Decade of Research in Review." In *The SAGE Handbook of Organizational Behavior: Volume I Micro Approaches*, 469–97. London: SAGE Publications Ltd. https://doi.org/10.4135/9781849200448.
- Dick, R. van, D. van Knippenberg, S. Hagele, Y. R.F. Guillaume, and F. C. Brodbeck. 2008. "Group Diversity and Group Identification: The Moderating Role of Diversity Beliefs." *Human Relations* 61 (10): 1463–92. https://doi.org/10.1177/0018726708095711.
- Eisler, Richard M., and Janice A. Blalock. 1991. "Masculine Gender Role Stress: Implications for the Assessment of Men." *Clinical Psychology Review*, Special Issue Applied Learning Theory: Research Issues for the 1990s, 11 (1): 45–60. https://doi.org/10.1016/0272-7358(91)90137-J.
- Erb, Thomas Owen, and Walter S. Smith. 1984. "Validation of the Attitude toward Women in Science Scale for Early Adolescents." *Journal of Research in Science Teaching* 21 (4): 391–97. https://doi.org/10.1002/tea.3660210407.
- Eurofund. 2012. "Trends in Job Quality in Europe."
- Faragher, E. B., C. L. Cooper, and S. Cartwright. 2004. "A Shortened Stress Evaluation Tool (ASSET)." Stress and Health 20 (4): 189–201. https://doi.org/10.1002/smi.1010.

- Fiske, Susan T., and Michael S. North. 2015. "Measures of Stereotyping and Prejudice: Barometers of Bias." In *Measures of Personality and Social Psychological Constructs*, edited by Gregory J. Boyle, Donald H. Saklofske, and Gerald Matthews, 684–718. Amsterdam et al: Elsevier. https://doi.org/10.1016/B978-0-12-386915-9.00024-3.
- Fitzgerald, Louise F, Sandra L Shullman, Nancy Bailey, Margaret Richards, Janice Swecker, Yael Gold, Mimi Ormerod, and Lauren Weitzman. 1988. "The Incidence and Dimensions of Sexual Harassment in Academia and the Workplace." *Journal of Vocational Behavior* 32 (2): 152–75. https://doi.org/10.1016/0001-8791(88)90012-7.
- Glick, Peter, Jennifer L. Berdahl, and Natalya M. Alonso. 2018. "Development and Validation of the Masculinity Contest Culture Scale." *Journal of Social Issues* 74 (3): 449–76. https://doi.org/10.1111/josi.12280.
- Glick, Peter, and Susan T. Fiske. 1996. "The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism." *Journal of Personality and Social Psychology* 70 (3): 491–512.
- Goldberg, D. P., R. Gater, N. Sartorius, T. B. Ustun, M. Piccinelli, O. Gureje, and C. Rutter. 1997. "The Validity of Two Versions of the GHQ in the WHO Study of Mental Illness in General Health Care." *Psychological Medicine* 27 (1): 191–97.
- Goldberg, David P, and P. Williams. 1988. *User's Guide to the General Health Questionnaire*. Windsor, UK: NFER-Nelson.
- Grant, A. M., F. Gino, and D. A. Hofmann. 2011. "Reversing the Extraverted Leadership Advantage: The Role of Employee Proactivity." *Academy of Management Journal* 54 (3): 528–50. https://doi.org/10.5465/AMJ.2011.61968043.
- Harnois, Catherine E. 2013. Feminist Measures in Survey Research. SAGE Publications.
- Heer, Brooke de, and Lynn Jones. 2017. "Measuring Sexual Violence on Campus: Climate Surveys and Vulnerable Groups." *Journal of School Violence* 16 (2): 207–21. https://doi.org/10.1080/15388220.2017.1284444.
- Hentschel, T., M. Shemla, J. Wegge, and E. Kearney. 2013. "Perceived Diversity and Team Functioning: The Role of Diversity Beliefs and Affect." *Small Group Research* 44 (1): 33–61. https://doi.org/10.1177/1046496412470725.
- Herrero, Juan, Francisco J. Rodríguez, and Andrea Torres. 2017. "Acceptability of Partner Violence in 51 Societies: The Role of Sexism and Attitudes Toward Violence in Social Relationships." *Violence Against Women* 23 (3): 351–67. https://doi.org/10.1177/1077801216642870.
- Hill, Catherine, and Elena Silva. 2005. *Drawing the Line: Sexual Harassment on Campus*. Washington, D.C: American Association of University Women Educational Foundation.
- Johnson, Sheena. 2008. *Organizational Screening: The ASSET Model*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199211913.003.0007.
- Johnson, Sheena, Cary Cooper, Sue Cartwright, Ian Donald, Paul Taylor, and Clare Millet. 2005. "The Experience of Work-related Stress across Occupations." *Journal of Managerial Psychology* 20 (2): 178–87. https://doi.org/10.1108/02683940510579803.
- Kachel, Sven, Melanie C. Steffens, and Claudia Niedlich. 2016. "Traditional Masculinity and Femininity: Validation of a New Scale Assessing Gender Roles." *Frontiers in Psychology* 7. https://doi.org/10.3389/fpsyg.2016.00956.
- Klonoff, Elizabeth A., and Hope Landrine. 1995. "The Schedule Of Sexist Events: A Measure of Lifetime and Recent Sexist Discrimination in Women's Lives:" *Psychology of Women Quarterly* 19 (4): 439–72.
- Kossek, Ellen Ernst, and Susan C. Zonia. 1993. "Assessing Diversity Climate: A Field Study of

- Reactions to Employer Efforts to Promote Diversity." *Journal of Organizational Behavior* 14 (1): 61–81. https://doi.org/10.1002/job.4030140107.
- Krebs, Christopher, Christine Linquist, Marcus Berzofsky, Bonnie Shook-Sa, Kimberly Petersen, Michael Planty, Lynn Langton, and Jessica Stroop. 2016. "Campus Climate Survey Validation Study Final Technical Report." Washington, D.C: Bureau of Justice Statistics. https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5540.
- Krebs, Christopher P, Christine H Lindquist, Tara D Warner, Bonnie S Fisher, and Sandra L Martin. 2007. "The Campus Sexual Assault (CSA) Study: Final Report." Washington, DC: National Institute of Justice, US Department of Justice.
- Lee, Stephanie M., Joel Koopman, John R. Hollenbeck, Linda C. Wang, and Klodiana Lanaj. 2015. "The Team Descriptive Index (TDI): A Multidimensional Scaling Approach for Team Description." *Academy of Management Discoveries* 1 (1): 91–116. https://doi.org/10.5465/amd.2013.0001.
- Levant, Ronald F., Linda S. Hirsch, Elizabeth Celentano, Tracy M. Cozza, and et al. 1992. "The Male Role: An Investigation of Contemporary Norms." *Journal of Mental Health Counseling* 14 (3): 325–37.
- Levecque, Katia, Frederik Anseel, Alain De Beuckelaer, Johan Van der Heyden, and Lydia Gisle. 2017. "Work Organization and Mental Health Problems in PhD Students." *Research Policy* 46 (4): 868–79. https://doi.org/10.1016/J.RESPOL.2017.02.008.
- Mahalik, James R., Benjamin D. Locke, Larry H. Ludlow, Matthew A. Diemer, Ryan P. J. Scott, Michael Gottfried, and Gary Freitas. 2003. "Development of the Conformity to Masculine Norms Inventory." *Psychology of Men & Masculinity* 4 (1): 3–25. https://doi.org/10.1037/1524-9220.4.1.3.
- Mahalik, James R., Elisabeth B. Morray, Aimée Coonerty-Femiano, Larry H. Ludlow, Suzanne M. Slattery, and Andrew Smiler. 2005. "Development of the Conformity to Feminine Norms Inventory." *Sex Roles* 52 (7): 417–35. https://doi.org/10.1007/s11199-005-3709-7.
- Martinson, Brian C, David Nelson, Emily Hagel-Campbell, David Mohr, Martin P Charns, Ann Bangerter, Carol R Thrush, et al. 2016. "Initial Results from the Survey of Organizational Research Climates (SOuRCe) in the U.S. Department of Veterans Affairs Healthcare System." *PloS One* 11 (3): e0151571. https://doi.org/10.1371/journal.pone.0151571.
- Martinson, Brian C., Carol R. Thrush, and A. Lauren Crain. 2013. "Development and Validation of the Survey of Organizational Research Climate (SORC)." *Science and Engineering Ethics* 19 (3): 813–34. https://doi.org/10.1007/s11948-012-9410-7.
- Maslach, Christina, and Susan E. Jackson. 1981. "The Measurement of Experienced Burnout." Journal of Organizational Behavior 2 (2): 99–113. https://doi.org/10.1002/job.4030020205.
- Maslach, Christina, Susan E Jackson, Michael P Leiter, Wilmar B Schaufeli, and Richard L Schwab. 1986. *Maslach Burnout Inventory*. Vol. 21. Consulting Psychologists Press Palo Alto, CA.
- Matos, Kenneth, Olivia (Mandy) O'Neill, and Xue Lei. 2018. "Toxic Leadership and the Masculinity Contest Culture: How 'Win or Die' Cultures Breed Abusive Leadership." *Journal of Social Issues* 74 (3): 500–528. https://doi.org/10.1111/josi.12284.
- McDonald, Paula. 2012. "Workplace Sexual Harassment 30 Years on: A Review of the Literature." *International Journal of Management Reviews* 14 (1): 1–17. https://doi.org/10.1111/j.1468-2370.2011.00300.x.
- McHugh, Maureen C., and Irene Hanson Frieze. 1997. "The Measurement of Gender-Role

- Attitudes. A Review and Commentary." *Psychology of Women Quarterly* 21 (1): 1–16. https://doi.org/10.1111/j.1471-6402.1997.tb00097.x.
- McMahon, Sarah, Christopher T. Allen, Judy L. Postmus, Sheila M. McMahon, N. Andrew Peterson, and Melanie Lowe Hoffman. 2014. "Measuring Bystander Attitudes and Behavior to Prevent Sexual Violence." *Journal of American College Health* 62 (1): 58–66. https://doi.org/10.1080/07448481.2013.849258.
- McMahon, Sarah, Kate Stepleton, Julia Cusano, Nicole Chaladoff, Julia O'Connor, and Alexis Sellas. 2016. "Understanding and Responding to Campus Sexual Assault: A Guide to Climate Assessment for Colleges and Universities." Rutgers, NJ: Center on Violence against Woman and Children. https://socialwork.rutgers.edu/file/1918/download.
- McMahon, Sarah, Leila Wood, Julia Cusano, and Lisa M. Macri. 2018. "Campus Sexual Assault: Future Directions for Research." *Sexual Abuse*, January, 1079063217750864. https://doi.org/10.1177/1079063217750864.
- Miller, Andrea L, and Eugene Borgida. 2016. "The Separate Spheres Model of Gendered Inequality." *PloS One* 11 (1). https://doi.org/10.1371/journal.pone.0147315.
- Napier, Jaime L., Hulda Thorisdottir, and John T. Jost. 2010. "The Joy of Sexism? A Multinational Investigation of Hostile and Benevolent Justifications for Gender Inequality and Their Relations to Subjective Well-Being." Sex Roles 62 (7): 405–19. https://doi.org/10.1007/s11199-009-9712-7.
- Nosek, Brian A., Frederick L. Smyth, Jeffrey J. Hansen, Thierry Devos, Nicole M. Lindner, Kate A. Ranganath, Colin Tucker Smith, et al. 2007. "Pervasiveness and Correlates of Implicit Attitudes and Stereotypes." *European Review of Social Psychology* 18 (1): 36–88. https://doi.org/10.1080/10463280701489053.
- O'Neil, James M. 2008. "Summarizing 25 Years of Research on Men's Gender Role Conflict Using the Gender Role Conflict Scale: New Research Paradigms and Clinical Implications." *The Counseling Psychologist* 36 (3): 358–445. https://doi.org/10.1177/0011000008317057.
- O'Neil, James M., Barbara J. Helms, Robert K. Gable, Laurence David, and Lawrence S. Wrightsman. 1986. "Gender-Role Conflict Scale: College Men's Fear of Femininity." *Sex Roles* 14 (5): 335–50. https://doi.org/10.1007/BF00287583.
- Owen, Steven V., Mary Anne Toepperwein, Linda A. Pruski, Cheryl L. Blalock, Yan Liu, Carolyn E. Marshall, and Michael J. Lichtenstein. 2007. "Psychometric Reevaluation of the Women in Science Scale (WiSS)." *Journal of Research in Science Teaching* 44 (10): 1461–78. https://doi.org/10.1002/tea.20187.
- Parent, Mike C., and Bonnie Moradi. 2011. "An Abbreviated Tool for Assessing Conformity to Masculine Norms: Psychometric Properties of the Conformity to Masculine Norms Inventory-46." Psychology of Men & Masculinity 12 (4): 339–53. https://doi.org/10.1037/a0021904.
- Parent-Thirion, Agnès, Isabella Biletta, Jorge Cabrita, Oscar Vargas, Greet Vermeylen, Aleksandra Wilcynska, and Mathijn Wilkens. 2016. "6th European Working Conditions Survey." Publications Office of the European Union. https://www.eurofound.europa.eu/publications/report/2016/working-conditions/sixth-european-working-conditions-survey-overview-report.
- Peterson, N. Andrew, Paul W. Speer, and David W. McMillan. 2008. "Validation of A Brief Sense of Community Scale: Confirmation of the Principal Theory of Sense of Community." *Journal of Community Psychology* 36 (1): 61–73. https://doi.org/10.1002/jcop.20217.
- Pirola-Merlo, Andrew, Charmine Härtel, Leon Mann, and Giles Hirst. 2002. "How Leaders

- Influence the Impact of Affective Events on Team Climate and Performance in R&D Teams." *The Leadership Quarterly* 13 (5): 561–81. https://doi.org/10.1016/S1048-9843(02)00144-3.
- Porter, Lyman W., William J. Crampon, and Frank J. Smith. 1976. "Organizational Commitment and Managerial Turnover: A Longitudinal Study." *Organizational Behavior and Human Performance* 15 (1): 87–98. https://doi.org/10.1016/0030-5073(76)90030-1.
- Quick, James Campbell, and M. Ann McFadyen. 2017. "Sexual Harassment: Have We Made Any Progress?" *Journal of Occupational Health Psychology* 22 (3): 286–98. https://doi.org/10.1037/ocp0000054.
- Rashotte, Lisa Slattery, and Murray Webster. 2005. "Gender Status Beliefs." *Social Science Research* 34 (3): 618–33. https://doi.org/10.1016/j.ssresearch.2004.05.004.
- Reidl, Sybille, and Ewa Krzaklewska. 2019. "ACT Community Survey." Zenodo. https://doi.org/10.5281/zenodo.2553070.
- Riger, Stephanie, Joseph P. Stokes, Sheela Raja, and Megan Sullivan. 1997. "Measuring Perceptions of the Work Environment for Female Faculty." *The Review of Higher Education* 21 (1): 63–78. https://doi.org/10.1353/rhe.1997.0015.
- Schaufeli, Wilmar B., Arnold B. Bakker, and Marisa Salanova. 2006. "The Measurement of Work Engagement With a Short Questionnaire: A Cross-National Study." *Educational and Psychological Measurement* 66 (4): 701–16. https://doi.org/10.1177/0013164405282471.
- Schein, EH. 2000. "Handbook of Organizational Culture and Climate." In Sense and Nonsense about Culture and Climate. Thousand Oaks, CA: Sage Publications.
- Science Europe. 2017a. "Practical Guide to Improving Gender Equality in Research Organisations." D/2017/13.324/2. Science Europe. https://www.scienceeurope.org/wp-content/uploads/2017/01/SE\_Gender\_Practical-Guide.pdf.
- ———. 2017b. "Summary of Implemented Indicators and Measures. Survey Results and Data on Improving Gender Equality in Research Organisations." https://www.scienceeurope.org/wpcontent/uploads/2017/01/SE\_SurveyResults\_Gender.pdf.
- Settles, Isis H., Lilia M. Cortina, Janet Malley, and Abigail J. Stewart. 2006. "The Climate for Women in Academic Science: The Good, the Bad, and the Changeable." *Psychology of Women Quarterly* 30 (1): 47–58. https://doi.org/10.1111/j.1471-6402.2006.00261.x.
- Spence, Janet T., Robert Helmreich, and Joy Stapp. 1973. "A Short Version of the Attitudes toward Women Scale (AWS)." *Bulletin of the Psychonomic Society* 2 (4): 219–20. https://doi.org/10.3758/BF03329252.
- Stanton, Jeffrey M., William K. Balzer, Patricia C. Smith, Luis Fernando Parra, and Gail Ironson. 2001. "A General Measure of Work Stress: The Stress in General Scale." *Educational and Psychological Measurement* 61 (5): 866–88. https://doi.org/10.1177/00131640121971455.
- Swim, Janet K., Kathryn J. Aikin, Wayne S. Hall, and Barbara A. Hunter. 1995. "Sexism and Racism: Old-Fashioned and Modern Prejudices." *Journal of Personality and Social Psychology* 68 (2): 199–214.
- Tost, L. P., F. Gino, and R. P. Larrick. 2012. "When Power Makes Others Speechless: The Negative Impact of Leader Power on Team Performance." *Academy of Management Journal* 56 (5): 1465–86. https://doi.org/10.5465/amj.2011.0180.
- Tougas, F., R. Brown, A. M. Beaton, and S. Joly. 1995. "Neosexism: Plus Ca Change, Plus C'est

- Pareil." *Personality and Social Psychology Bulletin* 21 (8): 842–49. https://doi.org/10.1177/0146167295218007.
- Twenge, Jean M. 1997. "Attitudes Toward Women, 1970–1995." *Psychology of Women Quarterly* 21 (1): 35–51. https://doi.org/10.1111/j.1471-6402.1997.tb00099.x.
- Tytherleigh, M. Y., C. Webb, C. L. Cooper, and C. Ricketts. 2005. "Occupational Stress in UK Higher Education Institutions: A Comparative Study of All Staff Categories." *Higher Education Research & Development* 24 (1): 41–61. https://doi.org/10.1080/0729436052000318569.
- Warr, Peter. 1990. "The Measurement of Well-Being and Other Aspects of Mental Health." Journal of Occupational Psychology 63 (3): 193–210. https://doi.org/10.1111/j.2044-8325.1990.tb00521.x.
- Watts, J., and N. Robertson. 2011. "Burnout in University Teaching Staff: A Systematic Literature Review." *Educational Research* 53 (1): 33–50. https://doi.org/10.1080/00131881.2011.552235.
- Wood, Leila, Caitlin Sulley, Matt Kammer-Kerwick, Diane Follingstad, and Noël Busch-Armendariz. 2017. "Climate Surveys: An Inventory of Understanding Sexual Assault and Other Crimes of Interpersonal Violence at Institutions of Higher Education." Violence Against Women 23 (10): 1249–67. https://doi.org/10.1177/1077801216657897.
- Yankelevich, Maya, Alison Broadfoot, Jennifer Z. Gillespie, Michael A. Gillespie, and Ashley Guidroz. 2012. "General Job Stress: A Unidimensional Measure and Its Non-Linear Relations with Outcome Variables." *Stress and Health* 28 (2): 137–48. https://doi.org/10.1002/smi.1413.