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Developing and Validating a Scale for Measuring Sexual Harassment in Higher Education

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Abstract

This research develops and validates a measurement scale for sexual harassment in higher education using Churchill's criteria for scale development to better understand the experience of young female faculty members. For this purpose, the researchers used a sequential mixed methods approach. Following a critical review of the literature, in-depth interviews were conducted with young female faculty members who are in the early stages of their academic careers.

The results informed the design of the research instrument, pretested with a small sample of young female faculty members, and then self-administered to a larger sample of young female faculty members. The data were initially analyzed using exploratory factor analyses before being validated through confirmatory factor analysis (CFA). The three dimensions of the final scale: the extent of the risk, weight of culture, and acts of sexual harassment showed good reliability values of 0.838, 0.816,0.821, respectively. The final scale also showed a satisfactory convergent validity value for the first dimension "0.53", the second dimension "0.56", and the third dimension "0.55".The scale paves the way for future research and awakens the audacity of researchers to better understand the experience of female academic staff, especially young female faculty members.

Keywords Sexual harassment, sexual harassment Scale (SHS), higher education, female faculty members, the paradigm of Churchill

تأثير التعلم عن بعد في أثناء جائحة كورونا في الدافعية الداخلية للطلاب وتحسين اللغة الإنجليزية

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ملخّص

يهدف هذا البحث إلى تطوير وإثبات سلم لقياس التحرش الجنسي في التعليم العالي بالاعتماد على نموذج تشرشل وذلك بغية فهم تجربة عضوات هيئة التدريس الشابات على نحو أفضل. ولهذا الغرض، فقد تم استخدم منهجية الأساليب المختلطة المتسلسلة والتي تشمل مزيج من مراحل البحوث الكيفية والكمية. حيث بدأ بمراجعة نقدية لأدبيات الدراسة السابقة، ثم إجراء مقابلات شخصية مع عضوات هيئة التدريس الشابات. وأودت النتائج إلى تصميم سلم قياس مبدئي للتحرش الجنسي، حيث تم اختباره في مرحلة أولى على عينة صغيرة من عضوات هيئة التدريس الشابات، ثم جرى اختباره في مرحلة أخيرة على عينة أكبر من عضوات هيئة التدريس الشابات. وقد تم تحليل البيانات في باستخدام التحليل العاملى الاستكشافي قبل التحقق من صحتها من خلال التحليل العاملى التوكيدى. وأظهرت الأبعاد الثلاثة لسلم قياس التحرش الجنسي، "شدة وجسامة المخاطر" و"العبء الثقافي" و"أفعال التحرش الجنسي" قيم ثبات جيدة بلغت 0.838، 0.816، 0.821 على التوالي. كما أظهر سلم القياس أيضًا قيمة مرضية للصدق التقاربي للبعد الأول "0.53" والبعد الثاني "0.56" والبعد الثالث "0.55". ويمهد هذا البحث الطريق لأبحاث مستقبلية؛ حيث إنه يثير جرأة الباحثين لفهم أفضل لتجربة عضوات هيئة التدريس الإناث، وخاصة الشابات منهن.

الكلمات الدالة: التحرش الجنسي؛ مقياس التحرش الجنسي؛ التعليم العالي؛ عضوات هيئة التدريس الشابات؛ نموذج تشرشل.

1. Introduction

The notion of human resource management has abundantly changed its features over times (Angrave, Charlwood, Kirkpatrick, Lawrence & Stuart, 2016; Berman, Bowman & Van Wart, 2020). In recent decades, it proved to be increasingly inspired and concerned about the rehabilitation of the human being within the organization (Skempes, 2015; Berman, Bowman & Van Wart, 2020). In consonance with this reasoning, Kaukiainen, Salmivalli, Björkqvist, Österman, Lahtinen, Kostamo & Lagerspetz, (2001, p. 362) supported the idea that "*maintaining good relations with colleagues proves to be an apodictic look to maintain their welfare since we spent most of our lives within the organization*". However, it remains true that some organizations can also become, at the same time, the favorable theater to the emergence of a variety of problems, role conflicts and anti-social behavior (Robinson & Bennett 1995), which may be detrimental to relationships.

Although the issue of violence at work (see for example, Lord, 1998; Chappell & Di Martino, 2006; Gluschkoff, Elovainio, Hintsa, Pentti, Salo, Kivimäki & Vahtera, 2017; Courcy, Morin & Madore, 2019; Rasool, Wang, Zhang & Samma, 2020) has been considered from different perspectives, it remains newsworthy and raises tirelessly growing concern at international level. It is well documented that sexual harassment is among the most common workplace violence (Hirigoyen, 2001; Soares, 2002; Hershcovis, Vranjes, Berdahl & Cortina, 2021; Goh, Bandt-Law, Cheek, Sinclair & Kaiser, 2021). In many countries, i.e. Tunisia, this issue is less addressed by theorists and researchers who might see it as risky and problematic. In this context, it is also noted that vulnerabilities remain under-represented in the literature because victims (those who often suffer from sexual harassment), especially those with lower professional status, rarely make formal complaints, because they do not have the knowledge or resources to challenge the indignities they experience (Berrey, Nelson & Nielsen, 2017).

Harassing female faculty members is shamelessly a well-known abject behavior in higher education (Kayni, 2009; Faulkner & Adams, 2021; Young & Wiley, 2021). Kayni (2009) identified three reasons why female faculty members do not disclose this behavior of harassment. First, female feel convenient that this behavior is much worse elsewhere; hence, indifference affect their discloser decision. Second, they prefer to keep silent and hide the work's merits (Fitzgerald, Shullman, Bailey, Richards, Swecker, Gold, Ormerod & Weitzman, 1988; Goh et al., 2021). Third, in the grip of the protocol "be a teacher and shut up", they feel powerless and lac the right to say "no". Nonetheless, this may cause the destruction of any sense of ethics, morals, or deontology (Fitzgeral & Cortina, 2018). Nonetheless, it is crucial to control this kind of improper and scandalous behavior which deprives the university of its noble aspect and conducts a reification of the female faculty.

In their article "*Measuring Sexual Harassment: Theoretical and Psychometric Advances*" Fitzgerald, Swan & Fisher (1995) argued that the issue of sexual harassment in organizations remains at a rudimentary level and they argued that many questions remain unanswered not because they were not well understood; however, because they were not simply asked. One of the issues identified by the same authors was "*what are the dimensions that need to be assessed?*" (1995, p. 426). The purpose of current article is to focus on this question in an attempt to answer it.

Previous research to date (e.g. Fitzgerald, Swan & Fisher, 1995; Fitzgerald, & Cortina, 2018 Goh et al., 2021; Hershcovis et. al, 2021) often focused on sexual harassment female workers in organizations however, little or no attempts were undertaken to assess the status and experience of young female faculty members in higher education, especially in developing countries context, i.e. Tunisia. Young females are likely to be harassed than other females (e.g. Gutek, 1985; Kamal & Tariq, 1997; Davis, Tucker, Dunbar, Pedersen & D'Amico, 2021). The research bridges a gap in knowledge in relation to the status and experience of female faculty members in higher education in the context of developing countries, e.g. Tunisia.

This research aims to develop and validate a scale for measuring sexual harassment in higher education. The research addresses lack of evidence in relation to the status and experience of young female faculty members, especially in developing countries, i.e. Tunisia despite they encompass a great proportion of academic staff. For example, in Tunisia, female faculty comprise about 50% of the higher education population (Dejoui, 2018). The research develops a measurement scale for sexual harassment, which will help, hopefully, in better understanding of young female faculty members in higher education. This ultimately influences their performance and the overall performance of the higher education sector.

2. Review of literature

2.1. The concept of sexual harassment

Sexual harassment could be defined as a range of behaviors and displaced statements directed generally by a man called "stalker", usually on the premises of an organization in respect of a female on a non-consenting basis, holding a hierarchically lower position than the stalker (Pathé & Mullen, 2018). This encourages him, through this hierarchical disability, towards relationships, or more frequently to incomplete sexual initiatives (Pathé & Mullen, 2018). The term "harassment" refers to the action of subjecting someone to a variety of vexatious provocations (see Table 1), e.g. some recurrent attacks, and iterative attacks. Kaukiainen, Salmivalli, Björkqvist, Österman, Lahtinen, Kostamo & Lagerspetz (2001) supported the idea that the concept of harassment refers to a repetition of acts which considered anti-social, towards a person. In the same vein of ideas, this form of workplace violence includes any abusive behavior and any attitude of a sexual nature made by the stalker, intended on gender; perceived as an offensive aggression intimidating the victim by harming dignity, personality and/or physical and mental integrity (Hirigoyen, 2001). Harassment is synonymous with social alienation (Dejours, 2000). By itself, it can result in harmful consequences more than those generated by the whole range of other stressors gathered in the workplace (Wilson, 1991). It seems needless to say that sexual harassment is likely to undermine any organizational relationship and any type of legal or psychological contract (Gharbi, 2012).

2.2. Behaviors associated with sexual harassment

There are several behaviors associated with sexual harassment. Some examples of these harassing behaviors include touching, fondling, and propositions, however, only few females disclose they were sexually harassed (Fitzgerald, Shullman, Bailey, Richards, Swecker, Gold, Ormerod & Weitzman, 1988; Kirkner, Lorenz & Mazar 2020). It is well-identified that the judgment of sexual harassment depends on behavior involved (Fitzgerald, Buchanan, Collinsworth, Magley & Ramos, 1999). Sexually explicit behavior or behavior associated with threat or warning is more likely to be judged as sexual harassment than other less threatening behavior (Kamal & Tariq, 1997). Interestingly, this inappropriate behavior can be done using technology, e.g. cell phone or internet (Fitzgeral & Cortina, 2018). Studies (e.g. Gutek, 1985; Kamal & Tariq, 1997) showed that young and unmarried female are likely to suffer from sexual harassment compared to older and married female. However, Fitzgeral & Ormerod (1992) found that females at different ages experienced sexual harassment.

The term "sexual harassment" indicates frustrating and humiliating sexual conduct, deemed stimulated to the receiver (Conte, 2020). This means that the sexual harassment can only take place if all of thtwo requirements are present as documented by Conte (2020). First, the presence of the concept of consideration in the relationship between "perpetrator and victim". That is to say, when a professional privilege, be it monetary or intangible, such as a salary increase, a granted promise or if and only if a conservation of one`s work is put into question. In return, the victim nods and cooperates by engaging herself in sexual relationships. Second, the inevitable presence of an unfavorable context, where the victim is subjected to intimidation or humiliation. There are three behaviors associated with sexual harassment (see Table 1).

Table 1: The behaviors associated with sexual harassment

Physical	Unwelcomed and non-accepted physical contacts by the victim, such as pinching which does not take place to be, stolen caresses, inconvenient touches.
Oral	Inadequate elocutions having a sexual nature, solicitation of the victim, with a character of obligation to unwanted sexual purposes, proclaimed comments in relation to the victim herself or regarding her face, attitude, appearance, etc., daring jokes that may harm her physical respectability, annotations or findings related to her way of dressing, her husband, her privacy.

Non-oral	The impudent and cynical expressions given by the stalker`s eyes which may mean a strong inclination for sensual pleasures, especially oriented to the victim`s genital parts, unwelcomed and untimely moans, whistles, showing of pictures or pornographic films to incite the victim to view them.

Adopted from Conte, 2020

2.3. Sexual Harassment Scales

Several attempts have been made to assess sexual harassment at organizations in the last four decades. Early attempts (see for example, Gutek, 1985; U.S. Merit System Protection Board, 1981) developed list of behaviors and were asking respondents whether they experienced any of these behaviors within a period (often two years). Examples of these behaviors include unwelcome letters or phone calls, pressures for date or sexual harassment, deliberate touching…etc. However, this methodology has been criticized by several scholars (e.g. Fitzgerald, Shullman, Bailey, Richards, Swecker, Gold, Ormerod & Weitzman, 1988; Gruber, 1990) due to little consensus among studies about list of behaviors provided to respondents as well as period.

Fitzgerald, Shullman, Bailey, Richards, Swecker, Gold, Ormerod & Weitzman, (1988) developed an instrument to assess the prevalence and frequency of sexual harassment in the military called Sexual Experience Questionnaire (SEQ). The instrument was developed based on the five dimensions of offensive workplace behaviors proposed by Till (1981). These five dimensions of sexual harassment are gender harassment, seductive behavior, sexual bribery, sexual threat, sexual imposition or assault. Fitzgerald, Shullman, Bailey, Richards, Swecker, Gold, Ormerod & Weitzman (1988, p. 1995) have grouped Till's five dimensions into three main factors. The new factors are gender harassment, unwanted sexual attention and sexual coercion. Fitzgerald, Shullman, Bailey, Richards, Swecker, Gold, Ormerod & Weitzman (1988) only used three-point scale for assessing 28 items where 0 = never, 1= once and 2 = more than once. The instrument was shortened to 23 items under four facets Sexist Hostility, Sexual Hostility, Unwanted Sexual Attention, and Sexual Coercion (Fitzgerald, Swan & Fisher, 1995). The instrument has been used in a number of studies (e.g. Cortina, 2001; Kamal & Tariq, 1997). The SEQ instrument has been further shortened to only 16-items measures called SEQ-DoDs for use by military or other researchers (Stark, Chernyshenko, Lancaster, Drasgow & Fitzgerald, 2002).

3. The Research Methodology

For the construction of a measuring scale, it is undeniable to pursue a purely scientific process to ensure the validity and reliability of the measured construct. In this respect, it is important to remember that the primary role of a scale is to reproduce the most original possible extent of the phenomenon in question (Igalens & Roussel, 1998).

3.1. The use of Churchill's paradigm

Churchill`s paradigm (1979) is the most appropriate model for developing valid and reliable measurement scale or instrument. The valid instruments should allow better understanding of the phenomenon that the research seeks to measure. Reliability refers to the same result when repeating the measurement of a phenomenon several times with the same instrument. To condense the random error (R.E.) and the systematic error (S.E.), Churchill (1979) outlines an approach involving eight steps, which are summarized in three major steps in Figure (1). Figure 1 shows how to develop measurement scale and ensure that the obtained value (M) is the most possible representative of the real value (V) for the measured phenomenon. True Score Model or the model of the true value of Churchill`s paradigm (1979) is as follows: M = V + S.E. + R.E. With M = obtained measurement. It is also important to note that V = true value: the ideal measure, that is to say the one that perfectly corresponds to the studied phenomenon. It is often impossible to be reached directly and constitutes the "horizon" of empirical measurement. Additionally, S.E. = systematic error which comes due to the fact that the measuring instrument can have a systematic difference with the studied phenomenon (e.g. a scale that would display 900 grams instead of 1 kilo). Furthermore, R.E. includes the phenomenon measured by the same instrument can be subject to random factors

such as the circumstances, the mood of interviewees. Therefore, to build the scale for measuring the perception of sexual harassment by faculty of higher education, different tests including content validity, face validity, validity of terms and at the reliability of the measurements through the dimensionality of the measured construct were considered.

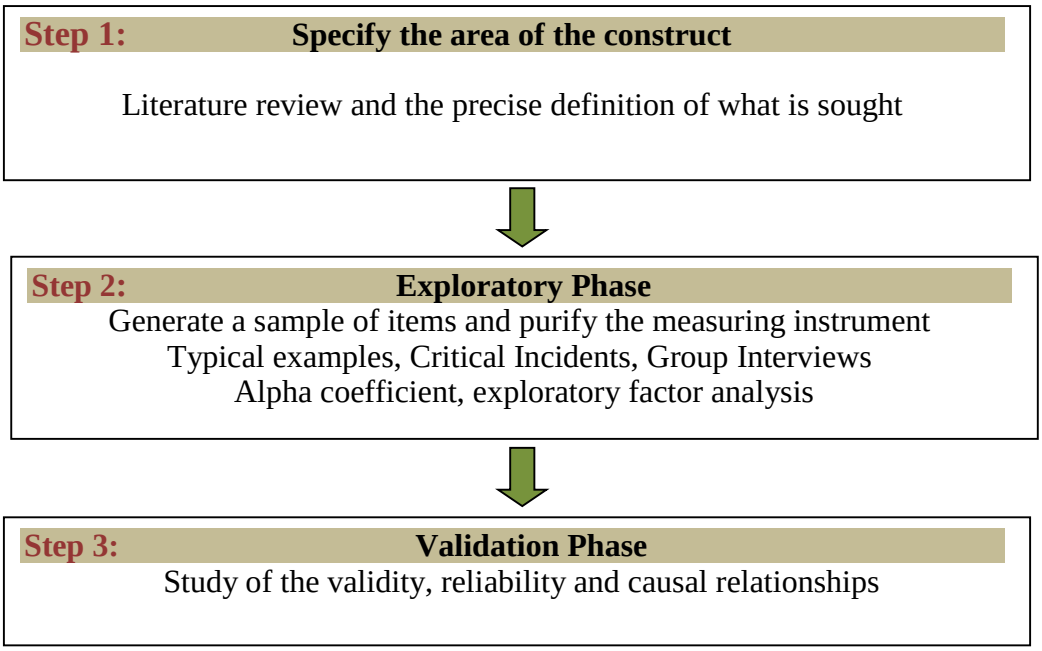

Figure 1: Churchill paradigm Synthesis (1979)

Institutions under the supervision of the Ministry of Higher Education in two countries where data accessibility is possible, i.e. France and Tunisia, were chosen as the research field where data was accessible.. For the first phase of data collection, semi-structured interviews were conducted with sixteen young female faculty members. Young female include all academic female under the age of 40 years old, which is the most common concept for defining young academics (Sobaih, Ibrahim, Gamal, Shaker, Hassanien, Abdelrady & Saleh, 2018). All interviews were undertaken by one of the research team and were one-to-one. Interviews included 9 interviewees from France and 7 from Tunisia. All interviews were conducted in French. Interviews scripts were translated in English by two bi-lingual experts (English/French). Kayni (2009, p. 83), pointed that "*in contemporary organizations, including university campuses, the issues of sexual harassment is increasingly becoming the center of discussion*". In this respect, it was relied stubbornly, as recommended by Schütz (1987), on the common language that contains a treasure trove of social quintessence.

Interviewees were accessed via personal network. Some of the research team were working in the two countries and have had access the research participants. The answers collected during the interviews allowed to list a number of situations describing the daily-lived experience. Interviews were asked about working atmosphere and their perceptions of sexual harassment from their supervisors (PhD Advisors, Jury Members, etc.). According to the redundancy of certain words or phrases mentioned by interviewees when conducting the interviews, it was decided to highlight the gate of their narrative content (See Table 2). The thematic analysis of the interviews allowed highlighting three categories. These categories are organized in order of importance in the words of the respondents.

Based on thematic analysis of interviews, all comments by interviewees are grouped under three categories of behaviors associated with sexual harassment. These categories are: risks perceived in relation to the scale of the challenge, the law of silence due to the cultural weight, sexual harassment acts. Following this thematic analysis, a list of questions were developed.

Table 2: Grid of analysis of the narrative content of the interviewees

Categories	Words or phrases mentioned by the interviewees
Risks perceived in relation to the scale of the challenge	Fear, I will have much to lose, my superiors, my career, lack of devotion, it is not eternal, corrupt atmosphere, appetite, ended careers, set aside, marginalized , bloody career, harassed, intimidated, trust, I throw in the towel, I put the sails, skill, arrogance, indifference, privacy, if I do not cooperate, I could say bye-bye to competitions, doubt, insecurity, words I expect nothing from them, the supervisor instead of my thesis supervisor, thesis brackets.
The law of Silence due to the cultural weight	I have no choice, I have to keep quiet, silence, no, aside, secretly problems, I cash in charge, so I have peace, confidence, use, save my reputation, pointed at, woman, society, culture, we do not accept, we do not accept me, marital conflict, group, that's how sufficient degree, that's enough, perspective, I will not try the free problems, it stresses me to talk about, it should remain buried in me, I am ashamed.
Sexual harassment Acts	Touching, rubbing, contacts prepared legs, discomfort, sexually obsessed, inappropriate spatial proximity, phone calls, dress, disgusted, helplessly, dirty breath, outraged, he offered me a cigarette, dirty looks, bad luck, ill, female nature, daring jokes, uneasiness, insecurity, danger, demotivated, I succumb, I feel his breath, I saw this as a betrayal, I suffer, suggestions for my hair, tired, it hurts, fragile, problem, conflict, stressed, unhappiness, depressed, doubting my skills, intimidating questions, hurtful words, assaulted, my body is not worth a thesis.

Here are some example of the direct quotation from the female faculty interviewees. Among interviewees' comments about the extent of risks perceived by female faculty members:

My life as a divorced woman, mother, teaching, exams, correction, meetings, department, frankly I cannot get out.... I stagnate, it I even forgot my own problem. When I have something like this [harassment], *I have a fear to talk.* (Female faculty X)

Additionally, another comment related to the law of silence due to the cultural weight:

With culture pressure and the incessant offenses, which followed the refusal of sexual approval, my thesis director explicitly told me make sure that your career has gone with the wind. (Female faculty Y).

Furthermore, female faculty also commented about sexual harassment acts, Mrs. Z even said to herself (powerless and scandalized) following inappropriate behavior by her research director, who directed her thesis. She commented:

He came so close to me, while I was in my office. I felt his breath landed on my left cheek. He found a way to use my keyboard supposedly to help me search for research articles. With his right elbow, he brushed my chest. I felt assaulted, I was ashamed and I was disgusted. (Female faculty Z).

3.2. The Development of Initial Scale

The initial measurement scale of sexual harassment perceptions, by young faculty members in higher education, has been administered as a questionnaire to two independent samples in two phases based on the items collected from interviews. The first phase consisted of 45 young female faculty members for a pilot or pre-test study. The second phase consisted of 103 young female faculty members working in various national and international institutions (Tunisia: Sfax, Tunis, Sousse, and France: Paris). Interestingly, participation from the two countries was about 50/50. Respondents were asked indicate their preferences by checking the box that corresponds most to their degree of agreement or disagreement ranging from "strongly disagree" to "strongly agree" using five points Likert scale. The questionnaire was in French. It was translated and checked by two bilingual experts. Respondents were contacted via personal network and asked to participate in the research study. Questionnaires were self-administered and collected by one of the research team. Thus, there was an opportunity to answer

any questions by respondents.

For the pre-test phase, the questionnaire was administered to a sample of 65 respondents. However, only 45 questionnaires were collected with valid responses for analysis. For the second and final phase, 120 questionnaires were distributed and only 103 responses were valid for analysis. The sample is aligned in accordance with the instructions recommended by Roussel (2005, p. 255) who states that "*the sample size must meet from 5 to 10 times more people than submitted items for a factor analysis*".

3.3. Purification and Validation of the Scale

The purification of the measuring scales, corresponding to Churchill`s paradigm, has been of great help to not to highlight the poorly written or misunderstood findings but items which young female faculty members have not explicitly expressed them. Indeed, after organizing a focus group with five experts (econometricians and HRD), it was found that the items that have been eliminated are not stripped of meaning and significance, even if the statistical results do not retain them. It worth mention that for all stages of Churchill`s paradigm, items with a factorial weight of less than 0.5 were eliminated. Using the SPSS Version 26 software, a Principal Components Analysis (PCA) to demonstrate the validity and dimensionality of the scale in question was undertaken. The reliability through the calculation of Cronbach's alpha was also estimated. The dimensionality of the measuring scale of the perception of sexual harassment by university faculty is confirmed with the identification of three components representing 53.14% of the total variance explained for the pre-test sample and 53.16 % for the final sample (see Tables 5 and 6). The extraction of the key factors should return a significant level of variance, more than 50 % of the total variance explained (Igalens & Roussel, 1998).

To answer the question: Are the data factorable? Indeed, using the Kaiser test and Meyer and Olkin (KMO) and Bartlett's sphericity test, to check the capacity of data to be factored. According to Kaiser (1974), a KMO> 0.5 is tolerable, 0.8 <KMO <0.9 is than KMO> 0.9 which is excellent. The KMO indicator for the corresponding data on this construct is of 0.817 for the pre-test and 0.792 in the final sample, which authenticates the relevance of the factor analysis (see Tables 3 and 4). These KMO show that data relating to the measurement of this construct are well suited to the factor analysis.

Cronbach's alpha is acceptable when it is between 0.6 and 0.7, (Nunnally, 1978; Evrard, Pras & Roux, 2000). The reliability analysis shows, for the samples of the pre-test and the final one, respective Cronbach alphas, (Tables 5 and 6) of 0.923 and 0.924. By this, the consistency of this scale of measurement is very satisfactory. In addition, it is important to note that an item (Item 3: Personally, I believe that the change of the research director would result in many more disadvantages than advantages) was eliminated because it has very low representation qualities and factorial contributions. Moreover, the results obtained from the exploratory analysis are also satisfactory.

Table 3: Kaiser, Meuer and Olkin Test Result (KMO) and Bartlett Test (Pre-test Sample, n=45)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,817
Bartlett's Test of Sphericity	Approx. Chi-Square	496,752
	df	78
	Sig.	,000

Table 4: Kaiser, Meuer and Olkin Test Result (KMO) and Bartlett Test (final Sample, n=103)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,792
Bartlett's Test of Sphericity	1190,794	1190,794
	df	78
	Sig.	,000

Table 5: Factor Structure and Scale reliability (Pre-test sample, n = 45)

Communality		Factor		
		1	2	3
Item 1	,784			,797
Item 2	,742			,769
Item 3	,798			,861
Item 4	,755	,765		
Item 5	,829	,893		
Item 6	,754	,844		
Item 7	,831	,864		
Item 8	,681	,781		
Item 9	,858	,804		
Item 10	,773		,813	
Item 11	,863		,871	
Item 12	,787		,836	
Item 13	,807		,676	
The explained total variation		**53,140**		
Cronbach`s Alpha by dimension		**,828**	**,942**	**,884**
Cronbach`s Alpha Scale		**0,923**		

Table 6: Factor Structure and Scale reliability (Final sample, n = 103)

Communality		Factor		
		1	2	3
Item 1	,800			,795
Item 2	,779			,821
Item 3	,800			,871
Item 4	,783	,807		
Item 5	,828	,891		
Item 6	,769	,858		
Item 7	,868	,898		
Item 8	,735	,824		
Item 9	,863	,843		
Item 10	,810		,852	
Item 11	,886		,892	
Item 12	,766		,836	
Item 13	,798		,724	
The explained total variation		**53,162**		
Cronbach`s Alpha by dimension		**,850**	**,950**	**,843**
Cronbach`s Alpha Scale		**0,924**		

4. Results of the Confirmatory Analysis

Structural equation model for the statistical software (LISREL 8.5) was used to undertake the confirmatory analysis. This approach allows analyzing the causal relationships between the variables of the theoretical model. In this respect, El-Akremi, (2000) suggested that the analyses of the structure of covariance allow "*to simultaneously test a large number of relationships between several explanatory variables and several variables to explain*" (2000, p. 340). Furthermore, Didellon & Valette-

Florence (1996) confirmed that researchers should not hesitate to go in this direction by informing the structural equations used to treat several dependent and independent variables observed.

4.1. The Adjustment Indices serving Structural Equation Models

There is a range of indices that may evaluate the quality of models' adjustments for measuring data. To do this, appropriate indicators was selected that correspond to the parameters of the research. In what follows, the selected adjustment indications were spread. The chi-square tests the null hypothesis according to which the model fits the data well. However, the disadvantage of this adjustment indication is that the probability of rejecting the null hypothesis increases within the sample size. To do this, according to Jöreskog & Sörbom (1989), it is strongly stipulated to report chi-square to the number of degrees of freedom (df). The ratio is deemed satisfactory when the x2 / df is less than 5.

GFI indices (Goodness of Fit) and AGFI (Adjusted Goodness of Fit) vary between 0 and 1. These indices represent different variations and covariance of the model. The models acceptance standards, according to Pedhazur & Pedhazur Schmelkin (1991) is of 0.90 for the index of good fit (GFI) and 0.80 for the index of adjusted good degree of the adjustment Freedom (AFM). Hart (1994) located them at the 0.80 while Judge and Hulin (1993) apply the standards of at least 0.70 to 0.80 when the tested complex models (Igalens & Roussel, 1998). The Root Mean Square Residual (RMR) is the square root of the overall average of the squared adjusted residuals. This is an indication of the average value of model residuals, the residues being the difference between the correlations or covariance observed and those estimated from empirical data. This indice is the nearest to 0, the better is the adjustment. Root Mean Square Error of approximation (RMSEA) by Steiger & Lind (1980) is considered as one of the most important indices in the modeling of covariance structures (Byrne, 2001). It informs on the model's poor fit. It is clear that Cudeck & Browne (1993) have explicitly shown that a model with an RMSEA less than or equal to 0.08 is a good model. Any model with an RMSEA superior to 0.1 must be specified again. In the case of the indices of the overall adjustment of absolute measurement, the proposed model is compared to the saturated model (all possible relationships are calculated). These indices allow for the assessment of the model`s parsimony (Hair, Black, Babin, Anderson & Tatham, 1998).

Indeed, the parsimony principle suggests retaining several models that fit the data well, the one with the least structural relationship, the simplest model and the most parsimonious. Among the existing indices, the CAIC (Bozdogan, 1987) seems to be preferable because of the average degree of penalty that it imposes on the models on the basis of their complexity. NFI (Normed Fit Index) is part of the relative indices of comparison determined by Bonett & Bentler (1980). The BSS is satisfactory if it is greater than or equal to 0.90. Regarding the model for measuring the perception of sexual harassment by faculty of higher education, it was noticed that it reveals a very good fit to the data. Indeed, the chi-square is low with the value of "4.22" and the report X^2 / df is equal to "1.068", which is less than "5"; CMA index, shows the value of "0.0149" as excellent as it is very close to zero. RMSEA declares a satisfactory value of "0.03". GFI "0,985" The AFM "0.966" NFI "0.985" and the NNFI "1" are close to 1. The AIC "28.171" and CAIC "68.223" models are much lower respectively than the AIC "32" and CAIC "99.223" of saturated models, indicating good parsimony of the model.

4.2. The Final Scale's Reliability:

The Rho Jöreskog of the three dimensions of the final scale (extent of the risk, weight of culture, acts of sexual harassment) respectively show the following values "0.838", "0.816", "0.821". Hence, the scale shows good reliability.

4.3. The Final Scale's Validity:

The validity shows the effectiveness of a measurement scale to measure the construct to which it refers. To do this, the convergent validity and discriminant validity were examined. The first tests the correlation of different indicators intended to measure the phenomenon in question (Evrard, Pras & Roux, 2000). The Rho convergent validity of the first dimension is "0.53", the second dimension is "0.56", and the third dimension represents a value of "0.55". These values are all greater than "0.5", the tolerated threshold. In light of these results, it could be concluded that the convergent validity is satisfactory.

The discriminant validity can only be proved when two separate constants, theoretically speaking, are so in practice, too: according to Hulland (1999). It turns out that our scale exactly meets this condition, since the square root of Rho convergent validity of each dimension is strictly greater than the correlations shared with other dimensions.

5. Discussion and Implications

Despite there is intensive and growing studies on workplace violence and sexual harassment (see for example, Fitzgerald, Swan, & Fisher, 1995; Chappell & Di Matino, 2006; Courcy, Morin, & Madore, 2019; Conte 2020; Hershcovis et al., 2021; Goh et al., 2021), little attempts were undertaken to actually assess the status and experience of young female faculty members in higher education, especially in relation to the measurement of sexual harassment. This research addresses a gap in knowledge and uses Churchill's (1979) criteria for scale development as a framework for developing a reliable and valid measure for sexual harassment of young female faculty members in higher education. The scale development was started by critically analyzing the literature review. In-depth interviews were undertaken to generate the items. A pre-test was undertaken before the full study with female faculty members. The scale was refined through multiple EFA before CFA. Reliability and validity tests were also undertaken. The three dimensions of the scale (extent of the risk (6 items), weight of culture (4 items), and acts of sexual harassment (3 items)) show the following values "0.838", "0.816", "0.821" respectively, hence, the scale shows good reliability. The Rho convergent validity was satisfactory for the first dimension is "0.53", the second dimension is "0.56", and the third dimension represents a value of "0.55".

This research contributes to organizational relationships, especially higher education context. As mentioned earlier, under the hegemony of the influence of culture (taboos, religion, social stigma); the central question on which this research has focused, remains discussed by researchers who see in such a problem a hazardous and barren land (which will have the impudence to reveal her weakness and to point a finger towards her stalker?). Indeed, the weight of the culture results in languages that will never agree to untie. Unethical behavior adopted by some supervisors (usually male) in respect to colleagues occupying a lower grade than theirs (usually female) can result in negative consequences and may deter them (usually female) from board grades.

The major contribution of this research is the construction and the validation of a measurement scale for the perception of sexual harassment by young faculty members in higher education using the paradigm of Churchill`s. Earlier studies have developed a general scale for measuring sexual harassment, however, this scale measures the sexual harassment experience of young faculty members in higher education. The scale has been tested and validated through a representative sample, revealing notable psychometric qualities. Through this addition, it is hoped that the first elements collected by this research will open the way to future research in HRM and awaken the boldness among researchers from outside the box to apprehend new original issues to improve conditions of work in terms of gender. This is especially true for young female faculty members whose physical and psychological integrity was violated by violence at work which they are subject to- and whose job will be easier through the use of the scale.

6. Conclusion

This research bridges a gap in knowledge in relation to measurement scale for understating the experience of young female faculty members in higher education, especially in developing countries, i.e. Tunisia. The research adopted Churchill's (1979) paradigm for developing a reliable and valid measurement scale for sexual harassment of young female faculty members in higher education. The scale development was started by critically analyzing the related literature review. In-depth interviews were undertaken to generate the items. A pre-test was undertaken with small sample before the full study with female faculty members. The scale was refined through multiple EFA before CFA. The results of this analysis showed three dimensions: extent of the risk (6 items), weight of culture (4 items), acts of sexual harassment (3 items).

The results of current research confirmed that there should be no stigma attached to sexual harassment. A deeper reflection needs to be done in the workplace to put an end to psychological harassment. The main challenge that is posed is to develop workplaces, places of listening, of debate in a safe climate. Despite the growth of documentation on this subject,

a noticeable gap is still maintained between the magnitude of the problem and current knowledge about prevention. Actions should be in place to remedy certain shortcomings in particular to the lack of epidemiological studies on this phenomenon as well as to the lack of interventions tested in the field. It would be relevant to develop violence prevention strategies. More concretely, efforts will have to be made to standardize definitions and develop a clear vocabulary describing the means of prevention and intervention measures.

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