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# Confirmatory Factor Structure Assessment of the French Version of the *Femininity Ideology Scale*

## Achille Vicky Dzuetso Mouafo[1], Sylvestre Nzeuta Lontio[2]

[1]Department of Philosophy and Psychology, University of Maroua, Maroua, Cameroon

[2]Department of Philosophy, Psychology, Sociology, University of Dschang, Dschang, Cameroon

**Email address:**

vicmessanga@yahoo.fr (Achille Vicky Dzuetso Mouafo), nzeutsyl@gmail.com (Sylvestre Nzeuta Lontio)

**Abstract:** Background: The literature assesses feminist ideology using multifactorial scales developed in English and validated only in a Western context on African American, Asian American, European American and Latino American samples. The most recent version of these measures is the Femininity Ideology Scale (FIS), a psychometric method that only exists in the English language and whose factorial structure has not yet been validated; hence the fact that the reliability of the data collected through it is questionable. Objective: To fill these gaps, this study validates the confirmatory factor structure of the French version of the Femininity Ideology Scale (FIS) in the Cameroonian context. Method: The translation of the FIS follows the standardized "back-translation" process and maintains the initial factor structure of the original scale. The French version of the scale is validated with a sample of Cameroonian women (N = 575; $M_{age}$ = 24.50 years; SD = 2.94). The statistical analysis uses a Structural Equation Model method (SEM) to test the confirmatory factors of the instrument. Result: The data collected show that the French version of the FIS is reliable and presents an acceptable confirmatory factorial structure according to the adjustment indices of the structural models ($\alpha$ = .80, $\chi^2$/df= 1.98, CFI = .901, RMSEA < .06). Conclusion: The results show that the confirmatory factorial structure of the French version of the FIS is valid. This instrument is linked to measures of contemporary and internalized sexisms, gender based social dominance orientation and attitudes towards abuse against women.

**Keywords:** Adherence to Feminist Ideology, Structural Equations, Feminist Movements, Confirmatory Validation of the Factor Structure

## 1. Introduction

The literature analyzes egalitarian, differentialist, postcolonial, African, post-modern, "Pop" and Black feminisms as being collective movements against abuse towards women and militant for the abolition of gender inequalities [3, 21, 19, 23, 26, 29, 30, 36, 44]. The explanatory factors of individuals' adherence to these feminist movements have interested researchers for several decades [28, 29, 41]. However, the instruments that serve as reference tools for measuring this adherence are developed in English and validated only in a Western context on African American, Asian American, European American and Latino American samples. The most recent version of these measures is the Femininity Ideology Scale [29]; a psychometric method whose

confirmatory factor structure has not yet been validated, thus making the data collected through it questionable. It is these gaps that the present study proposes to fill, by proceeding not only to the translation of this measuring instrument into the French language so that it can be administered directly to people who express themselves in this language, but also in performing confirmatory validation of its factor structure in an African context.

### 1.1. Adherence to Feminist Ideology

Feminist ideology is a collective movement against inequalities, injustices and abuses against women that claims their rights and freedoms to think and act from being undermined in the gender or patriarchal system, in which men have disproportionate power compared to women [38].

It is therefore a movement for the liberation of women from a traditional patriarchal social system that hinders gender equality in law and in practice [12, 15, 19, 26, 27, 30]. Adherence to feminist ideology implies a desire to challenge social organization based on gendered and racialized power relations; politicization of gender and ethno-racial identities; victimization of women and their subjugation equated with socio-economic and patriarchal exploitation [12, 26].

### 1.2. The Measurement of Adherence to Feminist Ideology by the Femininity Ideology Scale (FIS) and Its Limits

Adherence to feminist ideology is currently assessed using the *Attitudes toward feminism and the women's Movement scale* [14], the *Adolescent Femininity Ideology Scale* [41] and the *Femininity Ideology Scale* (FIS) validated for the first time by Lehman [28] then by Levant et al. [29]. This research focuses on this psychometric method, the most recent in this field. The FIS is reliable (45 items; female sample: α1 = .92 and male sample: α2 = .93) and its dimensions assess traditional norms of femininity [28, 29]. The first (Stereotypical Images and Activities: 11 items, α1 = .79 and α2 = .84) supports the idea that women should keep a particular physical appearance and an ideal image of their bodies. The second (Dependency/Deference: 10 items, α1 = .76 and α2 = .85) suggests that women should play roles dependent on their husbands. The third (Purity: 9 items; α1 = .85 and α2 = .84) analyzes feminine virtue and the passive sexual roles acquired through education. The fourth (Care: 7 items, α1 = .80 and α2 = .72) assesses women's accomplishment. The fifth and last (Emotionality: 8 items, α1 = .81 and α2 = .79) concerns women's emotional affinity for domestic life and their sensitivity. A six-point Likert scale, ranging from 1 (Strongly disagree) to 6 (Strongly agree) is associated with it to assess the positioning of individuals in relation to these factors.

The FIS benefits from exploratory and principal component factor validation with good factor loadings (from .41 to .79), acceptable Kaiser-Meyer-Oklin values (KMO = .86) and significant Barlett's $\chi^2$, eigenvalues exceeding 1.5 and a total explained variance of 50.39. The total correlations (TC) are significant (from .51 to .80) and the factors are significantly related to each other (from .31 to .60) and to the global scale (from .75 to .83). Despite the reliability of these metrological parameters, the current research observes that this psychometric method only exists in the English language; which makes it difficult to administer to individuals who do not speak this language; hence the need to translate it. Similarly, its factorial structure has not yet been the subject of confirmatory validation since its conception. This limitation is such that assessments made using the original version of this scale are questionable.

The contextualization of FIS has been limited to Western samples [29]. Little is therefore known about adherence to feminist ideology in other contexts, including the African context, where the literature does not report empirical data. However, women/girls are as much victims of abuse in Africa as in the West, and African feminist movements are flourishing [11, 13, 19]. To fill these psychometric and empirical gaps, the present study proposes a French version of the FIS and validates its confirmatory factor structure according to current metric procedures [31, 34, 35, 42].

## 2. Method

### 2.1. Participants and Ethical Considerations

575 participants from Cameroon took part in this study. Their main characteristics relate to socio-demographic variables such as: age (M= 24.50 years; SD= 2.94); level of education (primary, secondary and higher); language (French); and marital status (single, divorced, widowed and married). Only women and girls who could read and write the French language were selected. They were contacted individually to take part in the study on a voluntary basis. The anonymity and confidentiality of their responses were guaranteed.

### 2.2. Procedure for Adapting the FIS in a French-Speaking African Context

The translation and validation of the French version of the FIS followed the cross-cultural validation procedure for questionnaires suggested by the International Testing Commission [22] and the Churchill model [8]. This research obtained the tacit agreement of Levant et al. [29] to translate their instrument into French. Indeed, these researchers suggested that further research apply their instrument to other samples; thus giving French-speaking researchers the possibility of translating the original measure into French. The translation was carried out using the standardized "back-translation" process. In this logic, the FIS was first translated independently from English into French by a researcher in social psychology. Then, independently, two bilingual researchers from the same field judged the concordance between its items and its facade validity. Finally, two expert researchers in psychology discussed the versions obtained in line with the original version and a provisional French version was retained. For example, the item which stated that: "Women should have large breasts" becomes: "*Les femmes doivent avoir de gros seins.*" A 7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree) is associated with it. The average item score is 3.5 and the average scale score is estimated by applying the formula $\frac{ni}{2}$ (n= number of FIS items; i= number of Likert solutions). A pre-test was carried out according to Churchill model [8] and proved favorable for a more extensive data collection.

### 2.3. Measures and Procedure of Data Collection

#### 2.3.1. Measures

In addition to the demographic variables (age, sex, level of education and marital status) and the FIS described above, the participants responded to four other measures translated into French following the process of reverse translation. They assess the constructs necessary for the construct validity of the FIS. It's about:

(i). *Contemporary Sexism* (Con-Sexism), the measure of which is developed by Campelli and Charnelle [7]. This study uses a short version of this scale translated into French. It is reliable and has a good structural fit (6-items, $\alpha$ = .63; $\chi^2$(df)= 19.02(9), p < .05, CFI = .93, RMSEA < .08, p>.05);

(ii). *Internalized Sexism* (Int-Sexism): a short 4-item version of the Bozkur scale [5] was translated from English to French and administered to the participants. This version has an acceptable reliability index and its factor structure presents a good fit (4-items, $\alpha$ = .77, $\chi^2$(df)= 12.41(2), p < .05, CFI = .96, RMSEA < .08, p>.05);

(iii). *Gender Based Social Dominance Orientation* (GBSDO): the 4-item version of the Social Dominance Orientation (SDO) scale [1] has been translated into French. The internal and factorial structure of the GBSDO is reliable and presents an acceptable structural adjustment (4 items, $\alpha$ = .74, CFI= 1, RMSEA < .08, p < .05);

(iv). *Attitudes Towards Abuse Against Women* (ATAAW): A short version of the Yoshioka et al. scale [45] has been translated into French. This measure is reliable and has a good structural fit (6-items, $\alpha$ = .75; $\chi^2$(df) = .19.128 (9), p < .05; CFI = .97, RMSEA < .06, p < .05).

# 3. Results

## 3.1. Factor Analysis of the French Version of the FIS

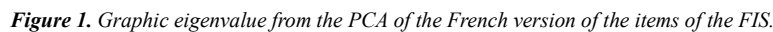**Table 1.** *Summary EFA-PCA Models indices (28 items of FIS).*

| | KMO | $\chi^2$ (df) | Kaiser Criteria (Eigenvalue≥1) | Initial Eigen Values (EV) | |
| --- | --- | --- | --- | --- | --- |
| | | | | % of Variance | Cumulative % (variation) |
| 1. Stereotypic Image and Activities | | | | [32.9; 18.4] | [32.9; 51.3] |
| 2. Dependency/Deference | .846 | 756.2[++] (21) | 2.913 | 41.6 | 41.60 |
| 3. Purety | .808 | 662.2[++] (15) | 2.68 | 44.73 | 44.73 |
| 4. Caretaking | .849 | 943.6[++] (15) | 3.05 | 5.93 | 59.3 |
| 5. Emotionality | .625 | 20.1[++] (3) | 1.70 | 56.68 | 56.68 |
| 6. Adhesion to feminist ideology | .839 | 3605.4[++](378) | [4.6; 1.1] | [16.4; 4.8] | [16.4; 45.9] |

Note: [++]:p < .05; EFA-PCA= Exploratory Factor Analysis and Principal Component Analysis; KMO= Kaiser-Meyer-Oklin; EV= EigenValue.

The FIS factor data (Table 3) collects on average 45.90% ($\lambda\alpha$: 16.4 to 45.9) information about adherence to feminist ideology. The examination of the variables of the scale continues by calculating the KMO index for the overall FIS and for each of its dimensions. This index provides information on the quality of the correlations or the measurement of the adequacy of the sampling [33, 34]. The validated scale has very good validity (.80≥KMO≤.90) and a five-factor structure respecting the Kaiser criterion (EV≥1: 4.6 à 1.1). Given that the observed variables retained in the analysis correlate positively with the whole of the scale and that the test of Sphericity of Bartlett is significant, then the correlation matrix has adequate properties to apply the PCAs. Among the extracted factors, the dimensions Stereotypic Image and Activities and Emotionality have average validities (.60 à .70) and above-average inertia rates ($\lambda\alpha$>50%). On the other hand, the Dependency/Deference, Purety and Caretaking dimensions have very good validities (.80 à .90). The Sphericity test is significant for each of these factors, indicating that the observed variables internal to these factors correlate positively with each other. All these results attest to the validity of the FIS from the point of view of EFA-PCA.

The application of the Cattell test on the Initial Eigen values of the FIS (Figure 1) indicates a clear break between the first and the last factors (EV: 6.45 to 1.01). Items selected on the basis of factor loads (≥.40) can be validated according to reliability and structural models.

## 2.3.2. Administration and Procedure for Filling Scales

The FIS and the four other measures were self-administered face-to-face. The participants were met individually and were invited to participate in the study by completing the self-assessment questionnaires. They had to carefully read the instructions, the socio-demographic information and the items in order to individually and honestly express their point of view. They had to tick a single number corresponding to whether or not they subscribed to the trait evaluated by the scale measuring the target variable, referring to the responses of the Likert scale.

## 2.4. Data Analysis Procedure

Exploratory factor and principal component analyzes (EFA-PCA), descriptive statistics (M., S.E., S.D.), item reliability ($\alpha$), correlations (r), coefficients of determination ($R^2$) and intergroup comparisons were performed using SPSS 23.0 software. FIS confirmatory factor analyzes were performed using SPSS Amos 23.0 software. The fit of the models to the data was assessed via the ratio between the $\chi^2$ and the degree of freedom ($\chi^2$/df<3 ou 5), the comparative fit index (CFI≥.80 ou >.90) and the *Root Mean Square Error of Approximation* (RMSEA < .06 ou ≤.08) [17, 37]. These indices suggest a good fit between the models and the data.

**Figure 1.** *Graphic eigenvalue from the PCA of the French version of the items of the FIS.*

### 3.2. Validity of the Items of the French Version of the FIS

The FIS items contained in Table 2 are selected on the basis of their factor loadings ≥.40 (FC: .40 to .70) and prove that there is a match between the factors of the FIS and its items. They have acceptable reliability indices (α: .79 and .80), at the same level as the reliability of the global scale ($\alpha$ = .80). These contribute significantly to the scale (TC/r: .27++ à .46++) and present good communities (h²: .30 à .62). The shares of the variances observed and explained by the five factors corresponding to the squares of the saturations of the items by the said factors vary between 30 and 62%.
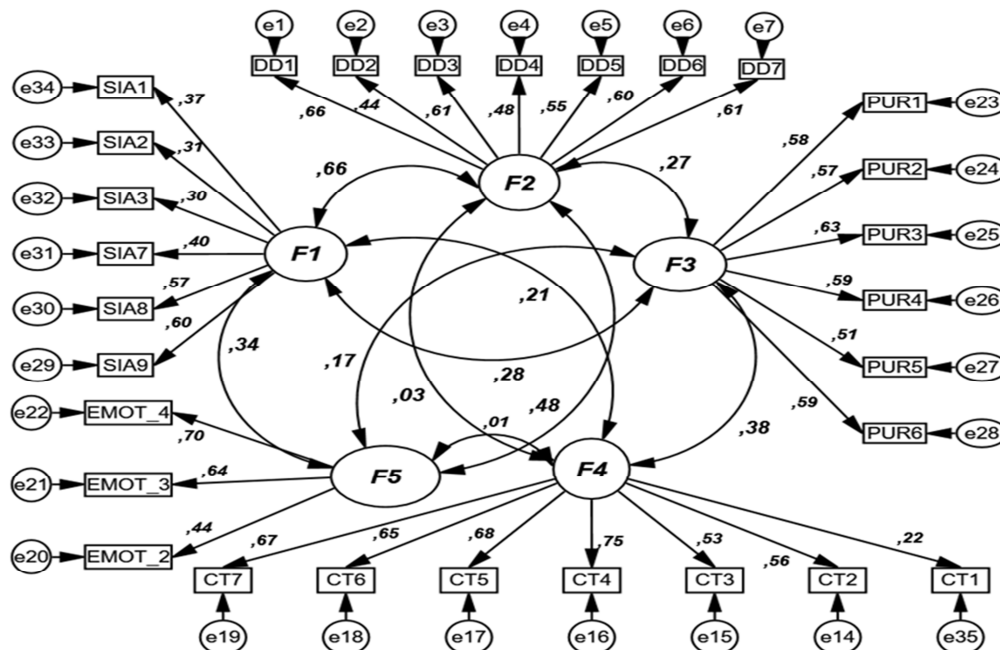
The participants are favorable for the FIS indicators evaluated by the items of the Stereotypic Image and Activities dimension (M: 3 to 5.2). They are unfavorable for the items of the Dependency/Deference dimension (M: 2.2 to 3.3), adhere more to the items of the Purity (M: 3.7 to 4.9), Caretaking (M: 4.6 to 5.5) and Emotionality dimensions (M: 3.2 to 3.7). These items have correct kurtosis and skewness coefficients. These results attest that the 28 items retained for the validation of the FIS are good.

**Table 2.** *Reliability (α), Factorial Charge (FC) or Saturation, Total Correlation (CT/r), Communalities (h²), Mean (M), Standard Deviation (SD) of the items of the french version of the FIS (N= 575).*

| Images et Activités stéréotypées -Stereotypic Image and Activities, α = .59 | α | FC | FIS (TC/r) | h² | M | SD | Sk | Kur |
|---|---|---|---|---|---|---|---|---|
| 1. *Les femmes doivent avoir de gros seins.* <br> Women should have large breasts. | .80 | .43 | .27++ | .48 | 3.1 | 1.7 | .24 | -.91 |
| 2. *Une femme doit avoir un corps mince.* <br> A woman should have a petite body. | .80 | .42 | .30++ | .46 | 3.5 | 1.7 | .18 | -.87 |
| 3. *Les femmes devraient avoir une voix douce.* <br> Women should have soft voices. | .80 | .44 | .35++ | .41 | 5.2 | 1.8 | -1 | -.00 |
| 4. *Les filles ne devraient pas s'adonner à des activités de "garçon manqué".* <br> Girls should not enjoy "tomboy" activities. | .80 | .41 | .35++ | .32 | 3.7 | 1.9 | .07 | -1.0 |
| 5. *Il est plus approprié pour une femme d'être enseignante que d'être directrice.* <br> It is more appropriate for a female to be a teacher than a principal. | .80 | .42 | .43++ | .32 | 3.0 | 1.9 | .55 | -.77 |
| 6. *On ne devrait pas attendre d'une femme qu'elle fasse des choses mécaniques.* <br> A woman should not be expected to do mechanical things. | .79 | .40 | .43++ | .33 | 3.2 | 1.8 | .44 | -.87 |
| *Dépendance/Déférence*-Dependency/Deference, α = .75 | | | | | | | | |
| 1. *Les femmes ne devraient pas vouloir réussir dans le monde des affaires, car les hommes ne voudront pas les épouser.* <br> Women should not want to succeed in the business world because men will not want to marry them. | .79 | .60 | .43++ | .47 | 2.2 | 1.7 | 1.3 | .77 |
| 2. *Une femme ne doit pas s'attendre à être satisfaite sexuellement par son partenaire.* <br> A woman should not expect to be sexually satisfied by her partner. | .80 | .45 | .33++ | .31 | 2.5 | 1.7 | .91 | -.17 |
| 3. *Une femme ne devrait pas gagner plus d'argent que son partenaire.* <br> A woman should not make more money than her partner. | .79 | .58 | .42++ | .44 | 2.5 | 1.7 | 1.0 | .02 |
| 4. *La valeur d'une femme doit être mesurée en fonction de la réussite de son partenaire.* <br> A woman's worth should be measured by the success of her partner. | .79 | .43 | .45++ | .30 | 3.3 | 2.0 | .34 | -1.2 |
| 5. *Une femme ne devrait pas considérer sa carrière comme aussi importante que celle d'un homme.* <br> A woman should not consider her career as important as a man's. | .79 | .53 | .45++ | .39 | 3.1 | 1.9 | .47 | -1.0 |
| 6. *Une femme ne devrait pas être compétitive.* <br> A woman should not be competitive. | .80 | .59 | .41++ | .45 | 2.5 | 1.7 | 1.0 | .19 |
| 7. *Les femmes devraient laisser les hommes prendre des décisions pour elles.* <br> Women should have men make decisions for them. | .80 | .60 | .42++ | .44 | 2.5 | 1.7 | .95 | -.02 |
| *Pureté*-Purity, α = .75 | | | | | | | | |

| Images et Activités stéréotypées -Stereotypic Image and Activities, α = .59 | α | FC | FIS (TC/r) | h² | M | SD | Sk | Kur |
|---|---|---|---|---|---|---|---|---|
| 1. *Les femmes ne doivent pas lire de matériel pornographique.* <br> Women should not read pornographic material. | .80 | .60 | .40[++] | .49 | 4.0 | 2.1 | -.04 | -1.3 |
| 2. *Une femme doit rester vierge jusqu'à ce qu'elle soit mariée.* <br> A woman should remain a virgin until she is married. | .80 | .60 | .33[++] | .49 | 4.9 | 1.9 | -.62 | -.80 |
| 3. *Il n'est pas acceptable qu'une femme se masturbe.* <br> It is not acceptable for a woman to masturbate. | .80 | .61 | .39[++] | .51 | 4.8 | 2.0 | -.55 | -.88 |
| 4. *Une femme ne doit pas raconter de blagues érotiques.* <br> A woman should not tell dirty jokes. | .79 | .50 | .46[++] | .48 | 3.7 | 1.8 | .11 | -.97 |
| 5. *Une femme ne doit pas jurer.* <br> A woman should not swear. | .79 | .43 | .46[++] | .34 | 3.9 | 1.9 | -.03 | -.99 |
| 6. *Une femme ne devrait pas avoir d'enfant avant d'être mariée.* <br> A woman should not have a baby until she is married. | .80 | .60 | .37[++] | .51 | 4.4 | 2.0 | -.29 | -1.0 |
| *Prise en charge*-Caretaking, α = .85 | | | | | | | | |
| 1. *Lorsqu'une personne est blessée, une femme doit essayer de l'aider à se sentir mieux.* <br> When someone's feelings are hurt, a woman should try to make them feel better. | .80 | .55 | .30[++] | .44 | 5.2 | 1.6 | -.86 | -.06 |
| 2. *Une femme doit savoir comment les gens se sentent.* <br> A woman should know how people are feeling. | .80 | .52 | .40[++] | .42 | 4.6 | 1.7 | -.52 | -.68 |
| 3. *Les femmes doivent être douces.* <br> Women should be gentle. | .80 | .70 | .39[++] | .62 | 5.5 | 1.6 | -1.2 | .78 |
| 4. *Le rôle naturel d'une femme devrait être de s'occuper de la famille.* <br> A woman's natural role should be the caregiver of the family. | .79 | .63 | .43[++] | .52 | 5.1 | 1.9 | -.89 | -.30 |
| 5. *Une femme devrait être responsable de l'élaboration et de l'organisation des plans familiaux.* <br> A woman should be responsible for making and organizing family plans. | .80 | .66 | .29[++] | .55 | 5.1 | 1.7 | -.89 | -.11 |
| 6. *Une femme devrait être responsable de l'enseignement des valeurs familiales à ses enfants.* <br> 7. A woman should be responsible for teaching family values to her children. | .80 | .66 | .33[++] | .54 | 5.5 | 1.7 | -1.2 | .66 |
| *Émotionnalité*-Emotionality, α = .61 | | | | | | | | |
| 1. *On s'attend à ce que les femmes aient des difficultés à gérer le stress sans devenir émotives.* <br> It is expected that women will have a hard time handling stress without getting emotional. | .80 | .53 | .29[++] | .57 | 3.7 | 1.7 | -.03 | -.87 |
| 2. *On s'attend à ce que les femmes qui occupent des postes de direction ne soient pas prises au sérieux.* <br> It is expected that women in leadership roles will not be taken seriously. | .80 | .54 | .35[++] | .56 | 3.6 | 1.7 | .86 | -.14 |
| 3. *On s'attend à ce qu'une femme célibataire soit moins épanouie qu'une femme mariée.* <br> It is expected that a single woman is less fulfilled than a married woman. | .80 | .61 | .41[++] | .60 | 3.2 | 1.9 | .42 | -.98 |

*Note:* [++]: p < .01 level (2-tailed); FIS= Femininity Ideology Scale (n = 28-items; N= 575; M= 167.40; mean score of the FIS= 98 score M of FIS; SD= 31.15; FIS α = .807); Factorial charge≥40 have been retained for CFA-SEM; ∑ h2= 12.87; Sk= Skewness; Kur= Kurtosis;

## 3.3. Confirmatory Validation of the French Version of the FIS



Notes: F1= Stereotypic Image and Activities; F2= Dependency/Deference; F3= Purity; F4= Caretaking; F5= Emotionality

*Figure 2. CFA-SEM of the French version of the FIS.*

Model fit indices (see Table 3) are acceptable. The $\chi^2$ value of the model is statistically significant, the CFI value is equal to .901 and the RMSEA value is less than .06 [9, 17, 20, 37]. These indices suggest a good fit of the model to the data and thus confirm the factorial structure of the FIS. The factor loadings of the items of all the subscales vary between .22 and .75 (see Figure 2).

*Table 3. Results of the factor analysis of the multidimensional feminist ideology model.*

|  | Df | $\chi^2$ | p | CFI | RMSEA |
|---|---|---|---|---|---|
| Modèle | 341 | 678.386 | .000 | .901 | .040 |

Note: df= Degrees of Freedom; RMSEA= Root Mean Squared Error of Approximation; CFI= Comparative Fix Index.

### 3.4. Construct and Discriminant Validity of the French Version of the FIS

*Table 4. Summary of the regression model analyzing the predictors of adherence to the Feminist Ideology: Correlation indices (r), Prediction coefficients ($R^2$), confidence interval (CI), Mean (M) and standard deviation (SD) predictors.*

| Variables | M(SD) | Feminist Ideology | | | |
|---|---|---|---|---|---|
| | | r | $R^2$ (SE) | Adjusted $R^2$ (ß) | 95% CI |
| 1. SIA | 21.98 (6.3) | .64++ | .41++ (.10) | .41 (.64++) | [1.9; 2.3] |
| 2. DD | 18.97 (8.2) | .68++ | .46++ (.07) | .46 (.68++) | [1.5; 1.8] |
| 3. PUR | 25.96 (7.9) | .66++ | .43++ (.08) | .43 (.66++) | [1.5; 1.8] |
| 4. CT | 31.26 (7.4) | .54++ | .29++ (.09) | .29 (.54++) | [1.3; 1.7] |
| 5. EMOT | 9.59 (4.0) | .44++ | .19++ (.19) | .19 (.44++) | [1.8; 2.6] |
| 6. ConSex | 21.63 (6.12) | .49++ | .24++ (.16) | .24 (.49++) | [1.3; 1.9] |
| 7. IntSex | 11.64 (4.98) | .31++ | .10++ (.22) | .09 (.31++) | [.84;.1.7] |
| 8. GBSD | 15.15 (3.28) | .18++ | .03+ (.34) | .03 (.18++) | [.43; 1.8] |
| 9. ATAAW | 17.14 (6.71) | .39++ | .15++ (.15) | .15 (.39) | [.87; 1.4] |
| (M(SE)= 107.78 (.86) >98 (Score Means of 28 items scale); SD= 20.786) | | | | | |

*Notes*: ++=:p < .01 level (2-tailed). +:p < .05 level (2-tailed). M= Mean; SD= Standard Deviation; SE= Standard Error; CI= Confidence Interval; SIA= Stereotypic Image and Activities; DD= Dependency/Deference; PUR= Purity; CT= Caretaking; EMOT= Emotionality; IntSex= Internalized Sexism; GBSD= Gender Based Social Dominance; ATAAW= Attitude Towards Abuse Against Women; ConSex= Contemporary Sexism;
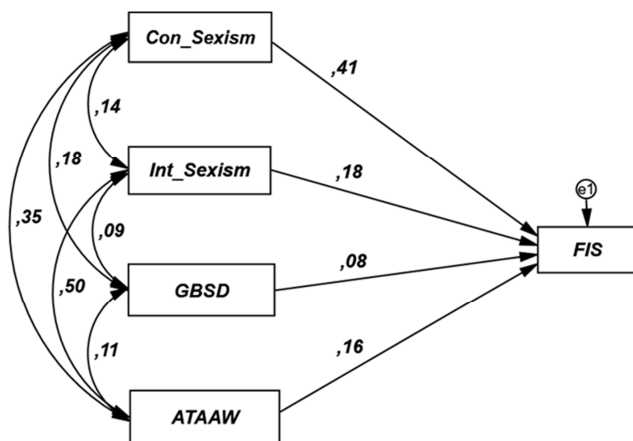


*Figure 3. Construct validity of the French version of the FIS.*

IntSex= Internalized Sexism; GBSD= Gender Based Social Dominance; ATAAW= Attitude Towards Abuse Against Women; ConSex= Contemporary Sexism.

The data collected (Table 4) indicate first of all that the participants adhere to feminist ideology (M= 107.78; SD= 20.786). Then, they reveal that all the dimensions of the scale are correlated with each other. The matrix also analyzes the relationships between the variables included in the model in Figure 3 and adherence to feminist ideology. These are contemporary sexism, internalized sexism and the attitude towards the abuse of women. It is observed that there is a positive link between adherence to feminist ideology, attitude towards abuse against women, internalized sexism and contemporary sexism. The coefficients of determination indicate that these factors are good predictors of adherence to feminist ideology. These are good indicators of the content validity of the FIS.

The model in Figure 3 presents the relationships between feminist ideology and measures of predictive validity. These relationships are positive and significant (p < .001) between feminist ideology and contemporary sexism, internalized sexism and attitudes towards abuse suffered by women. We note a non-significant relationship between feminist ideology and gender based social dominance (p>.05). These relationships show that these variables best explain participants' adherence to feminist ideology and support the construct validity of the French version of the FIS. The CFI index (CFI= 1>.90) validates the relationship model, but with the RMSEA < .08 (p>.05) [17, 37].

### 3.5. Predictive Validity of the French Version of the FIS

The analysis of differences in scores of the French version of the FIS, based on the socio-demographic parameters of the samples, uses the area graphs to summarize the trends of the groups.

This graph (Figure 4) shows that adherence to feminist ideology is observed more among individuals whose age is between 17 and 27 years old. This trend decreases as participants' age increases. It can therefore be said that the

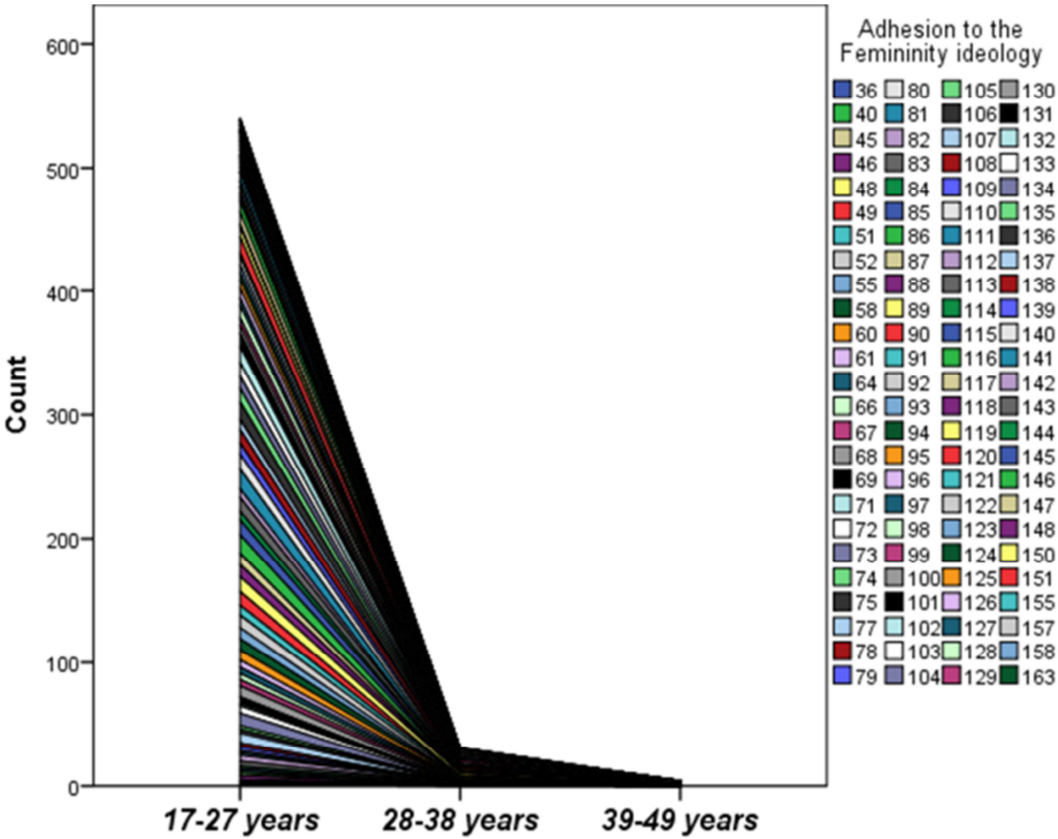youngest participants adhere more to feminist ideology than their older counterparts.



***Figure 4.*** *Surface graph of trends in adherence to feminist ideology based on age groups.*
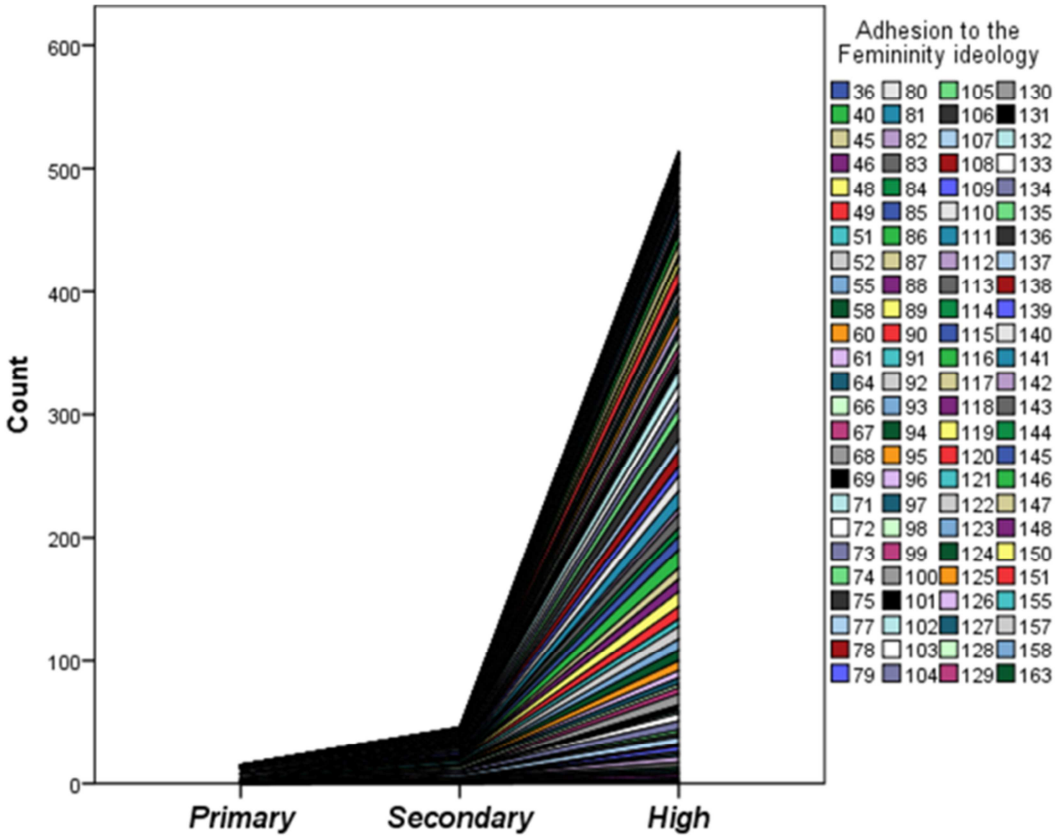


***Figure 5.*** *Surface graph of trends in adherence to feminist ideology based on level of education.*
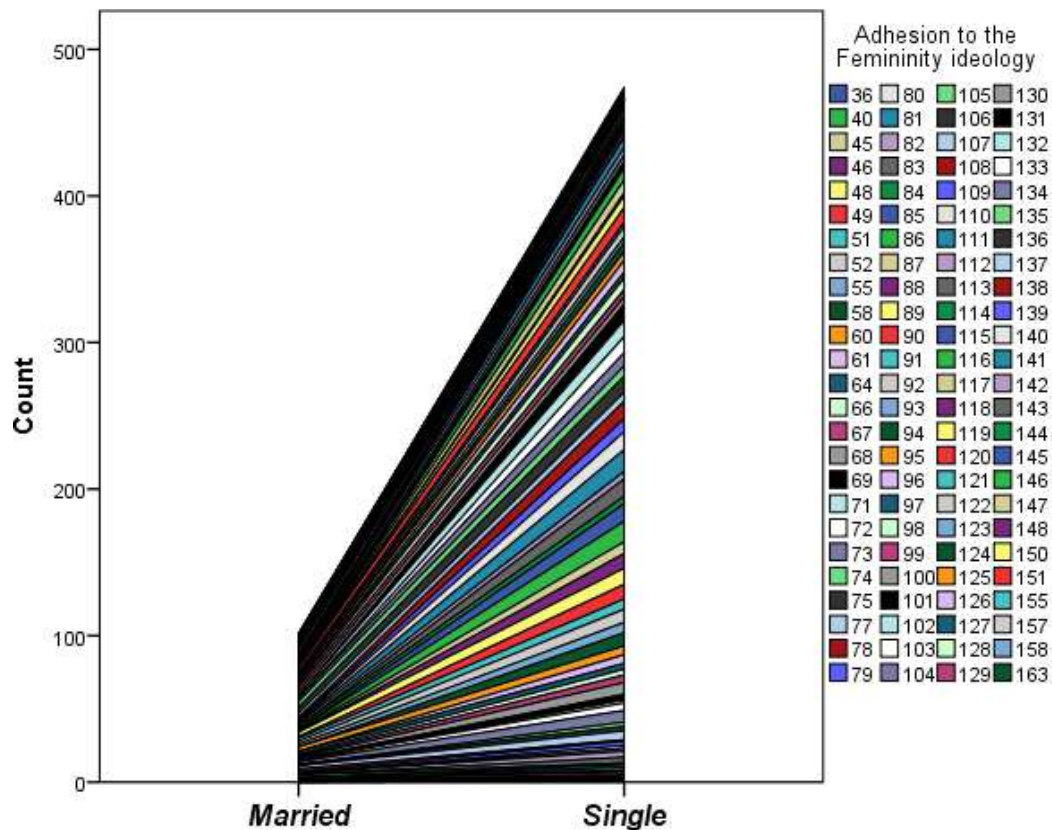
*Figure 6. Surface graph of trends in adherence to feminist ideology based on marital status.*

This graph (Figure 5) reveals that adherence to feminist ideology becomes strong as the level of education rises. In other words, the more educated participants adhere more to feminist ideology than their less educated counterparts.

This graph (Figure 6) reports that single participants adhere more to feminist ideology than their married counterparts.

## 4. Discussion

The objective of the present study was to validate the confirmatory factor structure of a French version of the FIS [29]. After translation and administration, the data collected and analyzed in order to test the qualities of the items, the exploratory (EFA-PCA) and confirmatory (CFA-SEM) factorial structure and the construct, discriminant and predictive validities report that the French version of the FIS is a reliable psychometric method. Its metric parameters are acceptable and are indicators of its validity. They are relatively adequate with the standards defined by the psychometric literature. Indeed, EFA-PCA methods present significantly acceptable eigenvalues (>1), sample adequacy indices (>.60) and Bartlett sphericity tests [24, 25, 33, 34, 39]. The KMO indices obtained are >.60 and are slightly lower than the index (.86) measured by Levant et al. [29]. The five factors extracted are consistent with those obtained by these authors.

With regard to the qualities of the items retained, the calculated Cronbach's alpha indices comply with the defined standards (alphas >.60 or .70) [18, 32, 33, 34, 40]. In addition,

the results of confirmatory analyzes (CFA) by structural equations report that the models developed have acceptable fit indices [2, 6, 9, 16, 17, 20, 33, 34, 37]. These indices reveal the internal structural stability of the French version of the FIS and the confirmatory validity of the five-factor structure of this instrument.

The French version of the FIS validated in this study is positively related to its dimensions [18] and typologically classifies the individuals to whom it is administered [4, 43]. Similarly, the construct and discriminant validities of the instrument are assured, as they are linked to predictors of adherence to feminist ideology, including contemporary and internalized sexisms and attitudes towards abuse against women [10].

## 5. Conclusion

The objective of the present study was to assess the validity of the confirmatory factor structure of the French version of the FIS. The results show that the French version of the FIS is valid and presents an acceptable confirmatory factorial structure. Since the validity of a test is a continuous process using various validation methods that gradually provide evidence of the validity of the measure [34], these results constitute indicators of the validity of the original scale (FIS) translated and administered in an African context to assess women's adherence to feminist ideology. Despite the fact that the present study has established the validity of the FIS factor structure, it would be interesting to obtain test-retest

data and test the cross-national validity of these confirmatory factor structures on other samples.

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