# Women's agency in Egypt: construction and validation of a multidimensional scale in rural Minya

Rania Salem,<sup>1</sup> Yuk Fai Cheong,<sup>2</sup> Stephanie S. Miedema<sup>3</sup> and Kathryn M. Yount<sup>4</sup>

<sup>1</sup>Department of Sociology, University of Toronto Scarborough, Toronto, Ontario, Canada. <sup>2</sup>Department of Psychology, Emory University, Atlanta, Georgia, United States of America. <sup>3</sup>Department of Sociology, Emory University, Atlanta, Georgia, United States of America. <sup>4</sup>Hubert Department of Global Health & Department of Sociology, Emory University, Atlanta, Georgia, United States of America. (Correspondence to: Rania Salem: rania.salem@ utoronto.ca).

# Abstract

**Background:** Measurement of women's agency in specific sociocultural conditions, particularly in Middle Eastern settings, has received limited attention, making its usefulness as an outcome or predictor of gender equality unclear.

**Aims:** This study aimed to construct and validate a multidimensional and context-specific scale of women's agency in rural Minya, Egypt.

**Methods:** Using data from 608 ever-married women in 2012, confirmatory and exploratory factor analysis were used to construct a scale measuring women's agency in rural Minya. The scale was validated through exploratory structural equation models.

**Results:** The 21-item model consisted of three factors (decision-making, freedom of movement and gender role attitudes), each corresponding to a previously-theorized domain of women's agency. The three factors were positively correlated, supporting women's agency as a multidimensional, context-specific construct. The strongest correlation was between decision-making and freedom of movement (0.410), and then between freedom of movement and gender attitudes (0.307); the weakest correlation was between decision-making and gender attitudes (0.211). Although we hypothesized that each domain would be positively associated with age, only decision-making was significantly and positively associated with women's age.

**Conclusion:** Similarities between the items used here and a study at the national level in Egypt suggest these indicators could be used in various Egyptian settings to monitor progress on the United Nations Sustainable Development Goal 5 on empowering women and girls, and to assess the effect of policies and programmes. Future research should build on the findings to identify the best observable indicators of women's agency in Egypt and elsewhere.

Keywords: women, agency, empowerment, decision-making, factor analysis, Egypt

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# Introduction

Women's agency and the broader concept of women's empowerment have interested social scientists for decades (1-4). Empowerment is the process by which women claim new enabling resources, such as schooling, employment and extra-familial support. These resources, in turn, may enhance women's agency (1,5,6), or ability to "define their own life-choices and to pursue their own goals, even in the face of opposition from others" (1, page 438). Resources and agency are thus multidimensional domains of the overarching construct of women's empowerment.

Measures of women's agency have been associated in different contexts with contraceptive use (7,8), and improved child health and nutrition (9–12). Therefore, clarifying the dimensions of women's agency in local contexts and standardizing approaches to its measurement are important priorities for policy and research. It is important to measure women's empowerment generally, and women's agency specifically, to monitor progress towards achieving United Nations Sustainable Development Goal (SDG) 5: to achieve gender equality and empower all women and girls (13). In spite of the need to measure agency effectively for policy and scholarship, its operationalization and measurement have varied, and the choice of items to include has been ad hoc, poorly justified and inadequately described (3).

As conceptualized by existing research, women's agency is multidimensional (1,3,4,14) and context-specific (15). However, some researchers have operationalized agency as unidimensional and constructed measures of agency by summing responses to survey items into a single scale (16). Others have used summary measures of single domains, such as women's decision-making or their contributions to household income, as a proxy for overall agency (17,18). Only a few studies have used advanced statistical methods to examine the latent structure of women's agency (e.g. numbers of factors and relationships between them), while accounting for measurement error and permitting differential weights for observed items (5,6,19–23). Advanced statistical methods, such as factor analysis, allow factor scores for

the multiple domains of agency to be created, which can be analysed in research on the determinants and effects of each domain of women's agency. Such approaches have advantages over single summative score measures of women's agency, which do not account for measurement error and which may hide patterns of association between the domains of agency and other important variables (20). Single summative approaches thus obscure the pathways through which agency and empowerment operate (20).

Problematically, some measures of agency also ignore its context specificity. Prevailing theories of women's empowerment – within which agency is one domain – highlight the relevance of the environment and contextual factors in which women take actions characterized by agency (1). However, emerging evidence suggests that some items that measure women's agency are context-specific while others apply across contexts (19). Still, because of geographical variation in indicators of women's agency (7,24,25), context-appropriate measurement models are needed.

Research has shown how prevailing forms of classic patriarchy in Egypt affect women's agency (26). Women exchange obedience to male guardians for economic support, physical protection, social respectability and eventual authority over junior women. Important household decisions fall to senior men and women are expected to accept their subordination and adopt attitudes that devalue women and elevate men. Women limit their interactions with unrelated men for reasons of sexual purity, a concern also used to justify their restricted physical mobility.

In Egypt, factor analysis has been used to construct scales that capture women's influence in family decisions (27) and to explore the multidimensional nature of women's empowerment (28). More recently, a construct for Egyptian women's agency was psychometrically tested which consisted of three domains: influence in family decision-making (decision-making), freedom of movement in public (freedom of movement), and vocalization of more equitable gender attitudes (gender attitudes) (6). In this study, we aimed to determine how well these three measures capture agency (defined as women's exercise of choice in these three specific domains) in the context of the socially conservative, resource-poor setting of rural Minya, Egypt. In addition, we used factor analysis to explore and confirm a multidimensional and context-specific scale of women's agency in rural Minya. Finally, we assessed the construct validity of the measure by assessing whether women's age was associated in expected ways with each of the three domains of women's agency.

Our examination of the factor structure of women's agency was informed by previous studies of this construct in Egypt (2,6,16,27,28), but it is distinct in its focus on multidimensionality, item selection and retention, and model fit. Based on theory and earlier research (1,3,6,14), we hypothesized that women's agency was a multidimensional construct, and that the domains of women's agency were positively correlated. To assess

the construct validity of the multidimensional measure, we further hypothesized that age would be positively associated with decision-making, because women gain authority with age (26,27). Similarly, we expected a positive association between women's age and freedom of movement, as rural Egyptian women may go more places and are less frequently accompanied as they age (26). Lastly, we anticipated that the oldest and youngest women would have the least equitable gender attitudes, as older women had grown up at a time when gender norms were more patriarchal, and younger women, having less authority in the family, may be less likely to challenge custom (26).

## **Methods**

#### Setting and sample

Our study was conducted in rural Minya (29), a governorate located approximately 250 km south of Cairo. Minya had a population of 4.3 million in 2010, 81.1% of whom lived in rural areas (30). Social conservatism, lack of material resources, limited government investment, and poor infrastructure make Minya a socio-culturally distinct region of Egypt and a useful site to assess the applicability of measurement indicators for women's agency.

Women from rural Minya interviewed in the 2005 Egypt Demographic and Health Survey were eligible to participate in a 2012 follow-up survey (29). In the 2005 Demographic and Health Survey, 1122 ever-married women aged 15-49 years in rural Minya completed the women's questionnaire; of these, 328 from a one-third subset of households completed a module on experiences of intimate partner violence. For the 2012 follow-up survey, we included these 328 women, and randomly selected another 514 households (29), from which we chose one woman per household using the Kish method (31), for a total follow-up sample of 842 women. We were able to find and interview 608 of the 842 selected women, a follow-up response rate of 72%. We conducted the follow-up survey from November 2011 to April 2012 (29). Questionnaire items drew on questions used in previous surveys in Egypt and other resource-poor settings, and were extensively pretested using qualitative and cognitive interviewing methods. Respondents were interviewed by trained female field researchers, who recorded answers using pencil-and-paper questionnaires. As much as possible, interviews were conducted in private, usually in the homes of the respondents.

#### Measures of women's agency

Our choice of items to operationalize women's agency was based on theory, empirical research, and preliminary analyses of the 2012 survey data. The 29 items initially included represented one of four domains of women's agency: decision-making, freedom of movement, gender attitudes and political participation or political agency. Four items representing political agency were removed for reasons described in the analysis section. Descriptive statistics for the 25 remaining indicators are presented in Table 1.

#### Research article

Table 1 Percentage distributions for indicators of women's agency (n = 608 ever-married women aged 22–65 years), rural Minya, Egypt							
Domain	Item	Re	sponse categories <sup>a,b</sup>				
Decision-making (DM)							
Who in your family has the final say in purchasing the following things?		Someone else	You and someone else	You			
Vegetables and fruit	DM_1	12	13	75			
Clothes for yourself	DM_2	20	22	57			
Any kind of medicine for yourself	DM_3	24	28	48			
Toiletries for yourself	DM_4	21	19	60			
Large household purchases	DM_5	42	45	13			
Who in your family usually makes the following decisions/has the final say in the following matters	?	Someone else	You and someone else	You			
Health care for yourself	DM_6	19	58	23			
Large household purchases <sup>c</sup>	DM_7	30	58	12			
Purchases for daily household needs <sup>c</sup>	DM_8	13	42	45			
Your visits to your family or relatives	DM_9	20	57	23			
Whether or not you will work to earn money	DM_10	26	66	08			
Freedom of movement (FM)							
Are you allowed to go to the following places?		Never	Not alone	Alone			
Local market to buy things	FM_1	2	23	75			
Local health centre or doctor	FM_2	1	25	74			
Homes of your friends in the neighbourhood	FM_3	1	22	77			
Nearby mosque or church	FM_4	6	25	69			
Gender attitudes (GA)							
In your opinion is a husband justified in hitting his wife in the following situations		Yes	Don't know	No			
She goes out without telling him	GA_1	57	0	43			
She neglects the children	GA_2	46	0	53			
She argues/debates with him <sup>c</sup>	GA_3	34	0	66			
She refuses to have sex with him	GA_4	54	4	42			
She burns the food	GA_5	24	1	75			
Please tell me if you agree or disagree with each statement		Agree	Don't know	Disagree			
If a wife is working outside the home, then her husband should help her with household chores and raising the children <sup>d</sup>	GA_6	74	6	20			
A wife should be allowed to work outside the home if she wants $to^{c,d}$	GA_7	78	7	16			
A wife has a right to express her opinion even when she disagrees with what her husband is saying $^{\rm d}$	GA_8	72	10	18			
The important decisions of the family should be made only by a husband	GA_9	64	4	32			
A wife should tolerate being hit by her husband in order to keep the family together	GA_10	40	7	52			
If a family doesn't have enough money to send all the children to school, it is better to send a son to school than a daughter	GA_11	15	8	77			

<sup>a</sup>Values shown are percentages.

<sup>b</sup>All items coded from 1 to 3, with higher values representing higher levels of women's agency.

Items not included in final three-factor model.

<sup>d</sup>Reverse coded items (agree = 3, don't know = 2, disagree = 1).

#### Analysis

Because of earlier theoretical and empirical support for women's agency as a multidimensional construct (1,20,27), we began with confirmatory factor analysis. We matched many of our items with those used in previous exploratory factor analyses/confirmatory factor analyses and added four items measuring political agency. However, when we ran a confirmatory factor analysis with a four-factor combined model, the results showed poor model fit. On further inspection, one of the four items for political agency showed little variability and was removed. This left three, possibly too few to represent political agency in a confirmatory factor analysis model (32). Therefore, we removed political agency and ran a three-factor confirmatory factor analysis. The results again showed modest model fit (root mean square error of approximation = 0.067, comparative fit index = 0.915 and Tucker-Lewis index = 0.906), and modification indices suggested significant cross-loadings. Following the recommended approach when the a priori specified confirmatory factor analysis model does not fit (32), we ran an exploratory factor analysis, excluding the four items for political agency.

In the first step of the exploratory factor analysis, we

examined the frequency distributions of the remaining 25 items. We estimated all measurement models using Mplus 7 (33) with mean and variance-adjusted weighted least squares estimators, appropriate for estimating exploratory factor analysis models with ordinal data. For ordinal items, the weighted least squares estimator computes a polychoric correlation matrix and uses it to fit the exploratory factor analysis model. The program calculated standard errors and chi-squared tests of model fit accounting for the survey's complex sampling design, including clustering and unequal probability of selection (33).

Our exploratory factor analysis proceeded sequentially. First, we ran the exploratory factor analysis with all 25 items and examined and interpreted the scree plots, model fit indices and factor pattern loadings after geomin (oblique) rotation for models with one to five factors. We chose oblique rotation because, unlike the orthogonal ones such as the varimax rotation, it allowed the factors to be correlated. We expected the women's agency factors identified to be correlated. The geomin rotation, the default approach adopted by Mplus (33), is the preferred approach over other oblique rotation methods when the goal is to search for solutions with smaller cross-loadings and large associations between factors (34). Results of the model fit indices - root mean square error of approximation = 0.048, comparative fit index = 0.967 and Tucker-Lewis index = 0.952 - indicated an excellent fit for the four-factor model. However, it had four items with negative loadings  $\leq$  -0.300 on one factor, but positive loadings on others. These negative loadings were inconsistent with existing theory, as all items were expected to load positively on the domains of women's agency.

As we wanted to identify the smallest set of items measuring domains of women's agency in rural Minya,

we removed three negatively loading items one at a time, beginning with the most negatively loading item (*32,35*). The items eliminated included one related to gender attitudes (GA\_3) and two related to decision-making (DM\_7, DM\_8) (Table 1). While it is unclear why they had negative factor loadings, the ordering and phrasing of the questions may have been problematic.

Next, based on methodological precedent and the theoretical perspective that women's agency has multiple correlated but distinct domains, we removed items with cross-loadings (substantive loadings  $\geq 0.300$ ) on more than one factor (35). Beginning with the item with the highest cross-loading relative to its primary factor loading, we removed gender attitudes item GA\_7 (Table 1). We then ran an exploratory factor analysis model with 21 items, comparing the fit of models with one to five factors. Results of the root mean square error of approximation (0.057), comparative fit index (0.964) and Tucker-Lewis index (0.949) indicated good model fit for the three-factor model. While the root mean square error of approximation (0.049), comparative fit index (0.976), and Tucker-Lewis index (0.962) demonstrated a better fit for the four-factor model, the scree test (Figure 1) supported a three-factor solution. Moreover, while the three-factor solution had no items with cross-loadings  $\geq$ 0.300, the four-factor solution had four items with crossloadings  $\geq$  0.300. Apart from the cross-loading items, the fourth factor had only two items with factor loadings  $\geq$ 0.300, suggesting a weak factor (32). Based on these results and our goal of identifying the most parsimonious set of items, the three-factor model was more suitable.

In a final step, we explored the construct validity of our measure. We added three categorical covariates for women's age (30-39 years, 40-49 years, 50-65 years, reference 20-29 years) to an exploratory structural



#### Results

#### **Descriptive statistics**

Table 1 shows descriptive statistics for indicators of women's agency according to each of the final three domains.

#### **Exploratory factor analysis**

Geomin rotated factor loadings for the final three-factor model (available upon request) showed that 10 items had significant ( $P \le 0.05$ ) geomin rotated factor loadings  $\ge$ 0.300 on the first factor. The items loading on it included all eight decision-making items, all with factor loadings  $\geq$ 0.481. Two gender attitude items (GA 6, GA 8) also loaded on the first factor, but with lower factor loadings (0.375 and 0.396, respectively) than the decision-making items. Based on the pattern of factor loadings, we called the first factor the decision-making factor. All four freedom of movement items had high factor loadings (0.810-0.904, P  $\leq$  0.05) on the second factor (freedom of movement factor). Seven gender attitude items had significant ( $P \le 0.05$ ) factor loadings on the third factor (gender attitudes factor). The four items measuring women's justification of intimate partner violence (GA\_1, GA\_2, GA\_4, GA\_5) had high factor loadings (0.842-0.949). The three representing patriarchal gender attitudes (GA\_9, GA\_10, GA\_11) had lower factor loadings (0.361-0.454).

Geomin factor correlations between the three domains of women's agency in the final three-factor model (available upon request) showed that all three factors were positively correlated (significant at  $P \le 0.05$ ). The strongest correlation was between decision-making and freedom of movement (0.410), the next strongest correlation was between freedom of movement and gender attitudes (0.307) and the weakest correlation was between decision-making and gender attitudes (0.211).

#### **Construct validation**

Table 2 shows the associations between women's age and domains of women's agency. Older women reported higher levels of decision-making than younger women (20–29 years). This relationship was significant for women 50–65

Table 2	Exploratory structural equation modelling of
associat	tions between women's age and domains of women's
agency	

0 1					
Age (years)	β for decision- making (SE)	β for freedom of movement (SE)	β for gender attitudes (SE)		
20-29 (ref)					
30-39	0.165 (0.123)	0.170 (0.149)	-0.017 (0.131)		
40-49	0.257† (0.134)	0.095 (0.150)	-0.076 (0.116)		
50-65	0.406* (0.157)	-0.166 (0.183)	-0.093 (0.162)		
SE: standard error, ref: reference category.					

†P ≤ 0.10, \*P ≤ 0.05.

years ( $\beta = 0.406$ ,  $P \le 0.05$ ), and marginally significant for women 40–49 years ( $\beta = 0.257$ ,  $P \le 0.10$ ). We did not find significant associations between women's age and freedom of movement or gender attitudes.

# Discussion

Our study contributes to previous literature by using exploratory factor analysis to examine the multidimensional measurement of women's agency in a rural Middle Eastern context. It expands on existing efforts to measure women's agency nationally in Egypt (6), testing measurement models in a largely rural, conservative context. Using a set of questionnaire items similar to those used in a national-level analysis (6), three similar domains captured underlying aspects of women's agency: decision-making, freedom of movement and gender attitudes. Each corresponds to a well-theorized domain of agency identified as an important aspect of women's agency in previous studies in Egypt (2,6,16,27,28,36,37). Our analysis reflects the multidimensional nature of women's agency, unlike earlier efforts to capture agency and related constructs in Egyptian women using single summative indices (16). Our analysis also offers greater parsimony than the only other effort to use factor analysis to develop a multidimensional construct similar to women's agency in Egypt (28), prior to the national validation study mentioned above (6).

Although the number of factors emerging from the national-level analysis (6) is the same as ours, the underlying structure of women's agency differs. Specifically, two factors in the national analysis (women's gender attitudes and freedom of movement) were not significantly correlated (6), whereas all three factors were positively correlated in our current analysis. This difference may reflect that the national analysis exclusively used attitudes related to gender-based violence rather than attitudes to women's roles and rights (6). The difference in the contribution of these attitudes to the latent structure of agency should be investigated further using psychometric testing.

In our exploratory factor analysis, items measuring women's agreement (or not) with patriarchal gender norms (GA\_06 to GA\_11) did not follow anticipated patterns. Whether these items sufficiently represent women's gender attitudes in the context of rural Egypt remains unclear and should be explored in future analyses.

Women's older age, as anticipated, was positively associated with decision-making, but not with freedom of movement and gender attitudes. These findings are best interpreted in light of the patriarchal context in which rural Egyptian women exercise agency; older women have authority over younger ones and more say in household decisions. In contrast, the non-significant association between age and freedom of movement may be because women understood these to relate to actual mobility, and not whether they are allowed to go to various places. We recommend future measures of women's freedom of movement state simply: "if you wanted to, could you go to the following places ... (never, with permission, without permission)." Finally, and unexpectedly, women's age was not associated with gender attitudes. Future research should explore the relationship between this domain of agency and other covariates, such as higher education.

In addition to modifying the freedom of movement items, the measurement of women's agency in rural Egypt could be improved in other ways. Currently, the measurement model does not capture additional domains of women's agency, such as political agency, which may be appropriate for the rural Egyptian context but was poorly measured with the items we had. Likewise, the items for decision-making may reflect "feminine" or relegated domains of decision-making under classic patriarchy (27), and may not capture the full scope of women's decision-making agency in arenas reserved for men. Qualitative research should develop items to explore these and other emerging domains of women's agency in rural Egypt.

Our results carry implications for research and policy in Egypt and internationally. Although there is some overlap, the items we used to measure women's agency differ somewhat from those used to measure similar constructs in south and south-east Asia (20–22), limiting the possibility for comparative research. However, as many of the items used in our analysis may be found in the women's status modules of various demographic and health surveys (38), our detailed description of item selection and retention may guide efforts to measure women's agency in different national contexts in future research. Our analysis thus

contributes to a growing global conversation about how to measure women's agency and similar constructs (37,39). Policies and programmes also may benefit from our analysis. The domains captured by our measure of agency include examples of factors that might impede women from accessing interventions offered in public spaces (lack of freedom of movement), factors that might be necessary conditions for interventions to succeed (equitable gender attitudes), and factors that could be the target outcomes of interventions (greater decision-making within the household). In the absence of methodologically systematic and theoretically grounded approaches to measuring women's agency, it will be difficult to determine which interventions effectively achieve the broader objective of empowering women and girls and their attainment of gender equality. Sound approaches to measuring women's agency are needed to monitor progress and to assess the impacts of the policies and programmes in which countries are investing in order to achieve SDG 5.

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**Competing interests:** None declared.

# Le pouvoir d'agence des femmes en Égypte : établissement et validation d'une échelle multidimensionnelle dans la région rurale de Minya

#### Résumé

**Contexte** : La mesure du pouvoir d'agence des femmes dans des conditions socioculturelles spécifiques, en particulier au Moyen-Orient, n'a fait l'objet que de peu d'attention ; de ce fait, son utilité en tant que résultat ou que facteur prédictif n'est pas claire.

**Objectifs** : La présente étude avait pour objectif d'établir et de valider une échelle multidimensionnelle et spécifique au contexte du pouvoir d'agence des femmes dans la région rurale de Minya en Égypte.

**Méthodes** : Sur la base de données recueillies en 2012 auprès de 608 femmes mariées ou l'ayant été, des analyses factorielles confirmatoire et exploratoire ont été utilisées pour mettre au point une échelle permettant d'évaluer le pouvoir d'agence des femmes dans la région rurale de Minya. L'échelle a été validée à l'aide de modèles d'équations structurelles exploratoires.

**Résultats** : Le modèle constitué de 21 items comprenait trois facteurs (prise de décisions, liberté de mouvement et attitudes sexospécifiques) qui correspondaient chacune à un domaine précédemment théorisé se rapportant au pouvoir d'agence des femmes. Les trois facteurs étaient corrélés positivement, confirmant le pouvoir d'agence des femmes en tant que concept multidimensionnel et spécifique au contexte. La corrélation la plus forte était celle entre la prise de décisions et la liberté de mouvement (0,410), puis entre la liberté de mouvement et les attitudes sexospécifiques (0,307) ; la corrélation la plus faible étant celle entre la prise de décisions et les attitudes sexospécifiques (0,211). Bien que l'on ait émis l'hypothèse que chaque domaine serait positivement associé à l'âge, seule la prise de décisions a été corrélée de manière significative et positive à l'âge des femmes.

**Conclusions** : Les similitudes entre les items utilisés ici et une étude menée au niveau national en Égypte laissent penser que ces indicateurs pourraient être utilisés dans divers contextes égyptiens pour suivre les progrès de la réalisation de l'Objectif 5 du développement durable sur l'autonomisation des femmes et des filles, et évaluer l'impact des politiques et des programmes. Les recherches futures devraient s'appuyer sur ces conclusions pour identifier les meilleurs indicateurs observables du pouvoir d'agence des femmes en Égypte et ailleurs.

# تمكين المرأة في مصر : إنشاء مقياس متعدد الأبعاد والتحقُّق منه في ريف محافظة المنيا

رانيا سالم، يوك فاي شونج، ستيفاني ميديها، كاثرين يونت

#### الخلاصة

الخلفية: هناك أبحاث محدودة أُجريت لقياس تمكين المرأة في ظل أوضاع اجتهاعية وثقافية محددة، لا سيها في السياقات الشرق أوسطية. الأهداف: هدفت هذه الدراسة إلى إنشاء مقياس متعدد الأبعاد ومحدد السياق حول تمكين المرأة في المناطق الريفية بالمنيا، في مصر، والتحقُّق منه. **طرق البحث**: باستخدام بيانات تعود لعام 2012 مستمدة من 608 سيدة سبق لها الزواج، أُجري تحليل عاملي توكيدي واستكشافي لإنشاء مقياس يتيح قياس تمكين المرأة في ريف المنيا. وتم التحقق من المقياس من خلال نهاذج معادلات تركيبية استكشافية.

النتائج: تألف النموذج المكون من 21 بنداً من ثلاثة عوامل (صُنع القرار، وحرية التنقل، والمواقف إزاء الدور الجندري)، والتي توافقت مع واحد من مجالات تمكين المرأة سبق وأن وُضعت له نظرية. وظهرت علاقة ارتباطية إيجابية بين العوامل الثلاثة، ما يدعم تمكين المرأة باعتباره مفهوماً متعدد الأبعاد ومحدد السياق. وكانت العلاقة الارتباطية الأقوى بين صنع القرار وحرية التنقل (40,0)، يتبعها العلاقة الارتباطية بين حرية التنقل والمواقف إزاء الدور الجندري (307,0)؛ بينما كانت العلاقة الارتباطية الأضعف بين صنع القرار والمواقف إزاء الدور الجندري (210,0)، وبالرغم من وضع افتراض بوجود علاقة ارتباط إيجابية بين عمر المرأة وكل مجال من المجالات الثلاثة على حدة، فقد كان صنع القرار هو العامل الأوحد الذي ارتبط بصورة جوهرية وإيجابية بعمر المرأة.

**الاستنتاج**: توحي أوجه التشابه بين البنود المستخدمة هنا والمستخدمة في دراسة أخرى جرت على المستوى الوطني بأن تلك المؤشرات يمكن استخدامها في سياقات مصرية عديدة لرصد التقدم المحرز بشأن الهدف الخامس من أهداف التنمية المستدامة المتعلق بتمكين المرأة والفتيات، وكذلك تقييم الأثر المترتب على السياسات والبرامج في هذا المضمار. وينبغي على الأبحاث القادمة البناء على هذه النتائج من أجل تحديد أفضل المؤشرات القابلة للملاحظة حول تمكين المرأة في مصر وفي غيرها من البُلدان.

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