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Validity of the Measure of Intensive Mothering Ideology

Loyal Déborah, Sutter Anne-Laure & Rascle Nicole

Abstract

Objective. The aim of this study was to test the validity of the Measure of Intensive Mothering Ideology (MIMI) a French scale assessing beliefs about mothering and childcare. **Method.** The MIMI was submitted online to Mothers / mothers-to-be (N = 249) and Childless women (N = 231). To test structural validity, confirmatory factor analyses were conducted in both groups. Then, to test known-groups validity, means comparisons were conducted according to parity (mothers / mothers-to-be and childless women) and employment status (full-time, part-time and housewives). It was also hypothesized that MIMI scores would be negatively correlated with education. **Results.** Model fit was satisfactory for Mothers / mothers-to-be ($\chi^2/df = 2.52$, AGFI = .957, NFI = .937, RMR = .087) and, to a lesser extent, for Childless women ($\chi^2/df = 3.31$, AGFI = .948, NFI = .907, RMR = .104). In both groups, most dimensions were moderately correlated (.22-.70). As hypothesized, Mothers / mothers-to-be and Housewives had higher score than Childless women and Employed women. MIMI scores were also negatively and moderately correlated with education. **Conclusion.** The MIMI shows good structural validity and known-groups validity. This scale offers interesting research avenues notably regarding perinatal parental adaptation.

Keywords: Intensive Mothering Ideology; Motherhood; Scale Development; Validity

Résumé

Objectif. Le but de cette étude était de tester la validité de la Mesure de l'Idéologie du Maternage Intensif (MIMI), une échelle française évaluant les croyances sur le maternage et les soins aux enfants.

Méthode. La MIMI a été soumise en ligne à des mères / futures mères ($N = 249$) et à des femmes sans enfants ($N = 231$). Cette échelle comprend 21 items évaluant 6 dimensions de l'IMI. Pour vérifier la validité structurelle, des analyses factorielles confirmatoires (moindres carrés pondérés) ont été effectuées dans les deux groupes. Puis, pour tester la validité de groupes connus, des comparaisons de moyennes ont été effectuées selon la parité (mères / futures mères et femmes sans enfant) et l'emploi (temps plein, temps partiel et au foyer). Nous avons également fait l'hypothèse que les scores d'IMI seraient corrélés négativement avec l'éducation. **Résultats.** L'ajustement du modèle était satisfaisant pour les mères et les futures mères ($X^2/df = 2.52$, AGFI = 0.957, NFI = 0.937, RMR = 0.087) et, dans une moindre mesure, pour les femmes sans enfant ($X^2/df = 3.31$, AGFI = 0.948, NFI = 0.907, RMR = 0.104). Dans les deux groupes, la plupart des dimensions étaient modérément corrélées (.22-.70).

Conformément à nos hypothèses, les mères / futures mères et les femmes au foyer présentent des scores plus élevés que les femmes sans enfant et les femmes ayant un emploi. Les scores d'IMI étaient également corrélés négativement et modérément avec le niveau d'éducation. **Conclusion.** La MIMI présente une bonne validité structurelle et de groupes connus. Cette échelle offre des pistes de recherche intéressantes notamment en matière d'adaptation au rôle parental dans la période périnatale.

Mots-clefs : Idéologie du Maternage Intensif ; Maternité ; Développement d'Echelle ; Validité

Introduction

Our ideas about family, motherhood and childcare do not stem from nature but are mainly socially built [1–5]. According to Hays [3], in developed nations, contemporary dominant discourse about motherhood constitute an ideology, a collection interrelated of beliefs, that she named Intensive Mothering Ideology (IMI). According to Hays [3], most people think that mothers are intrinsically the best caregivers for children. Childcare is described as a consuming expert-guided and child-centered activity. Child rearing is seen as the hardest job but also as the most meaningful and rewarding one. Finally, children are revered owing to their purity and genuineness.

According to the attachment theory, women deep involvement in mothering is important for the child development and mothers satisfaction and efficacy [6–8]. However normative aspects of motherhood might also be significant contributors to distress in mothers through excessive expectations or idealization [9–13]. Moreover, IMI might also threaten gender equality notably through the belief that the mother is the natural and best caregiver which places an undue burden on mothers [2,3,14–19]. Finally, IMI might also impact work-family balance because of the view that mothering is all-encompassing and much more important than any professional success [3,15,16,20].

However, few quantitative studies focus on beliefs about motherhood. According to Liss et al., the main barrier to understand IMI was the lack of a quantitative measure to assess it [21]. To address this problem, the Intensive Parenting Attitudes Questionnaire (IPAQ) has been constructed in the United States [21]. The IPAQ measures 5 dimensions: Essentialism (mothers are the best caregivers for children), Fulfillment (being a parent is fulfilling), Child-centrism (child-rearing should be focused on the child's needs), Challenge (child-rearing is the hardest job) and Stimulation (children should be properly stimulated). All dimensions were moderately correlated, highlighting that IMI is a set of interconnect beliefs. Various dimensions of IMI have been linked with mothers' anxiety about leaving the child, perception of maternal employment as detrimental to children and more participation in household duties and childcare [21]. It was also found that Essentialism and Challenge were more prevalent in mothers than in childless women. However, Stimulation and Child centrism were more prevalent in childless women [21]. In the same vein, it was found that Essentialism and Challenge

were stronger in housewives than in employed mothers. However, Stimulation was lower in housewives. [21]. Incidentally, one should note that numerous studies have showed that gender ideology was more traditional in less educated women [22]. Our guess is that it might hold true for IMI. Finally, in a cross-sectional study with mothers of preschoolers, Essentialism was linked with less life satisfaction and Challenge was linked with more depressive symptoms and stress, while controlling for social support [23].

In France the Measure of Intensive Mothering Ideology (MIMI) has been built [24]. This scale is made up of IPAQ items and new items generated from French mothers and mothers-to-be speech. All the items have been submitted jointly to exploratory factor analysis. This procedure was undertaken to increase the cultural validity of the scale in the French context. Indeed, parenting is highly culture-bound [4,5]. American and French women might share some ideas about childcare and motherhood but they might also exhibit differences [5,25]. For instance, French women have been found to place less value on bonding, breastfeeding, sacrificing their own needs and responding quickly to baby's ones, and more value on equal task-sharing between parents and child autonomy than American mothers [26]. Moreover, United States and France have very different child and family policies [27]. French parents benefit from childcare provision, paid parental leave and family allowance [28]. On the other hand, United States "has no explicit family policy, nor does it have a coherent package of social policies that are targeted on children and their families" [29]. For instance, in the United States, except for a limited number of exceptions, there is no maternity or paternity paid leave [30]. Nearly 1 in 4 American women go back to work within two weeks of having a child [31].

The MIMI assesses 6 dimensions of IMI: Essentialism, Consuming Fulfillment, Child-centrism, Challenge, Sacrifice and Stimulation. The MIMI shows some differences with the IPAQ. First, a new "Sacrifice" dimension was found and describe how parents should set aside many things (i.e. "When becoming a parent, one must be prepared to put on hold one's personal life."). Interestingly, the idea of sacrifice had been described in Hays seminal work [3]. Secondly, the Essentialism dimension was more nuanced and depicts fathers as uncomfortable rather than incompetent with children matters (i.e. "Mothers are often more comfortable with babies than

fathers”). Moreover, the original Fulfillment dimension has been turned into a “Consuming Fulfillment” dimension about how parenting is fulfilling (“Being a parent brings a person the greatest joy he or she can possibly experience”) but also consuming and all encompassing (i.e. “A parent always fears that something might happen to his children”). Finally, the Stimulation dimension was more about providing nurturing one-to-one interactions (i.e. “One must stimulate children, play with them, talk to them, sing songs to them, read stories to them”) rather than intensive cognitive stimulation. Most dimensions were moderately correlated, highlighting that IMI is a set of interconnect beliefs. IMI, assessed with the MIMI, in conjunction with worries about maternal employment effects on children, has been associated with more depressive symptoms and preoccupied attachment in a cross-sectional study with pregnant women [20].

The MIMI has been created and validated in French women recently [24] and its validity should be explored more deeply [32]. Thus, this study was designed to assess the structural and known-groups validity of this scale. It was hypothesized that the MIMI would show good structural validity through confirmatory factor analysis. It was also hypothesized that the MIMI would discriminate women according to parity and employment status [21]. Finally, it was hypothesized that IMI would be negatively associated with education [22].

Method

Participants

Mothers / mothers to be (N = 249) and Childless women (N = 231) were recruited online. Participants characteristics are presented on Table 1. The questionnaire was hosted with LimeSurvey (<https://www.limesurvey.org/>) and administrated on French forums and Facebook groups (generalist, pregnancy, motherhood, childcare...) using a snowball sampling method.

TABLE 1

Research about online recruitment and data collection is still scarce but it offers very promising avenue [33–35]. First, internet and social media offer a cost effective way to recruit quickly

a large amount of participants. Moreover, participants are responding in their natural context and might be less influenced by social desirability bias. However, some potential disadvantages should be noted. First, it is impossible to control how participants are completing the study (alone or not, noisy surroundings...). It is also impossible to ensure that the person has read thoughtfully and understood the consent form before signing it. Moreover, because of anonymity, online participants might be more prone to conform to group norms and expectations. More importantly, issues have been raised regarding the representativeness of samples recruited online. However, some researchers have observed that online recruitment might in fact lead to more diverse samples than other recruitment methods [33,36].

This study was approved by a national informatics right committee (<https://www.cnil.fr/>) and a regional ethic committee (<http://www.cpp-soom3.u-bordeaux2.fr/>). All procedures were conducted in accordance with the declaration of Helsinki.

Measures

The Measure of Intensive Mothering Ideology (MIMI) was administered [24]. The MIMI contains 21 items assessing six dimensions of IMI: Essentialism (seven items), Consuming Fulfillment (five items), Child-centrism (two items), Challenge (two items), Sacrifice (three items) and Stimulation (two items). Participants were asked to answer each item on a Likert scale ranging from 1 (*disagree very strongly*) to 6 (*agree very strongly*). A higher score is indicative of a stronger endorsement of the IMI component. Internal consistencies assessed with Cronbach's alpha have previously been computed in a sample of mothers and mothers-to-be for Essentialism (.83), Consuming Fulfillment (.74), Child-centrism (.75), Challenge (.61), Sacrifice (.61) and Stimulation (.64) [24].

Statistical Analysis

Statistical analyses were carried out with SPSS 20 and SPSS Amos 20. First, confirmatory factor analyses (Weighted Least Squares) were conducted for Mothers / mothers-to-be and Childless

women. Our sample size was adequate to compute such analyses [37]. Model fit is usually assessed with various indicators such as : $\chi^2/ddl < 2-5$, AGFI and NFI $>.90$ and low RMR [37,38]. Factor loadings ($>.40$) and correlations between variables were examined. Finally, internal consistencies have been computed. Then, IMI scores were compared between Mothers / mothers-to-be and Childless women (Student T test). Then, in Mothers / mothers-to-be, IMI scores were compared between women who were housewives or were employed full-time or part time (Anova). Because most childless women were students (60%) comparison according to their employment status was not computed.

Results

Structural Validity.

According to current recommendations [37,38], model fit was regarded as satisfactory in Mothers / mothers-to-be ($X^2/df = 2.52$, AGFI = .957, NFI = .937 RMR = .087) and, to a lesser extent, in Childless women ($X^2/df = 3.31$, AGFI = .948, NFI = .907, RMR= .104).

Figure 1 displays factor loadings and correlations between variables. Most factor loadings are satisfactory ($>.40$). Only 2 items showed lower factor loadings for Childless women. In both populations, most dimensions are correlated (.22 to .70). Only Stimulation was not correlated with Essentialism and Sacrifice. Internal consistency was satisfactory for Mothers / mothers-to-be regarding Essentialism (.80), Consuming Fulfillment (.81), Child centrism (.70) but lower for Challenge (.60), Sacrifice (.64) and Stimulation (.56). In Childless women, it was satisfactory regarding Essentialism (.72), Consuming Fulfillment (.76), Child centrism (.72) and very low regarding Challenge (.48), Sacrifice (.43) and Stimulation (.38).

FIGURE 1

Known-groups Validity.

First, as expected, IMI (except Stimulation) was stronger in Mothers / mothers-to-be than in Childless women (Table 2). Moreover, IMI (except Stimulation) was stronger in Mothers / mothers-to-be who were housewives than in those who were employed either part time or full time. However,

Consuming Fulfilment was lower in women who were employed part time than in those who were either housewives or employed full time (Table 3).

TABLE 2

TABLE 3

In Mothers / mothers to be, education was associated with Consuming Fulfillment, Child centrism, Essentialism, Stimulation ($r = -.34, -.25, -.24, -.17, p < .01$) and Sacrifice ($r = -.14, p < .05$). This was also observed, to a lesser extent, in Childless women regarding Consuming Fulfillment ($r = -.15, p < .05$) and Essentialism ($r = -.14, p < .05$).

Discussion

As hypothesized, the MIMI showed good structural validity observed through confirmatory factor analysis in Mother / mothers-to-be and, to a lesser extent, in Childless women. Essentialism, Consuming Fulfilment and Child Centrism had good internal consistencies. However, Challenge, Sacrifice and Stimulation dimensions had lower internal consistency but it is well known that Cronbach alpha is highly influenced by the number of items [39–42]. Since those dimensions have few items (2 or 3), getting values above .60 might be seen as satisfactory. Two-item factors are usually considered less reliable [37] but some authors raise questions about this misgiving [41,42]. However, internal consistency of those dimensions in childless women was troublesome ($< .50$). Thus, using the MIMI in childless women requires some caution. On another note, in both groups, dimensions were correlated, showing that IMI is a collection of interconnected beliefs. Only Stimulation was not associated with Sacrifice and Essentialism. Thus, this dimension might be regarded as less central to the very definition of IMI. However, it was clearly correlated to Consuming Fulfillment, Child Centrism and Challenge.

As hypothesized, IMI (except Stimulation) was higher in Mothers / mothers-to-be than in Childless women. Moreover, for Mothers / mothers-to-be, IMI (except Stimulation and Consuming Fulfillment) was higher in those who were housewives than in those who were employed. Finally, IMI

was negatively correlated with education in Mothers / mothers-to-be, and, to a lesser extent, in Childless women. Thus, our hypotheses are confirmed: IMI endorsement is higher in mothers / mothers-to-be, housewives and less educated women. Our guess is that a very interesting research avenue will be to explore if women who are choosing to have children have higher IMI endorsement (self-selection hypothesis) or if women who become mothers exhibit a growth in IMI endorsement (role transition hypothesis). The MIMI might be used to conduct such research. Moreover, IMI was higher in Housewives. One could conclude that IMI might inhibit work engagement in women. Indeed, Liss et al. found that IMI was associated with fear to leave the child and perception that maternal employment is detrimental to children [21]. In the same vein, IMI associated with perception that maternal employment is detrimental to children has been associated with a delayed planned return to work after the birth [20]. However, IMI might also change to accommodate employment status. Indeed, it has been observed that gender ideology is modified by changes in the division of housework [43]. Further research might contemplate using the MIMI to explore the presumably reciprocal influences between work and IMI. Finally, one unexpected result was that Consuming Fulfillment was lower in women who were employed part-time. This interesting result might be explained by the fact that those women are not engaged in either full-time childcare or full-time employment. Those two situations might be associated with the perception that motherhood is a demanding and consuming activity because of the time spend (housewifery) or the difficulty in work and family life balance (full-time employment).

On the whole, our results are far more univocal than Liss et al. ones [21]. They found that only Essentialism and Challenge were higher in Mothers whereas Stimulation and Child-Centrism were higher in Childless women. They found no differences for Fulfillment. Regarding employment, they found that housewives had higher Essentialism and Challenge but lower Stimulation. They found no differences regarding Fulfilment and Child-Centrism. The explanation for those differences between Liss et al. results [21] and ours probably lay in the different measures used. Our guess is that the IPAQ probably assess a more virulent version of IMI. For instance, mothers in Liss et al. study might have been unable to mentally reconcile Stimulation and Child-centrism with their everyday life. This

situation of cognitive dissonance might lead them to reject those ideas [44]. It might also be explained by strong differences between French and American contexts. United States and France have very different child and family policies [27]. French parents benefit from childcare provision, paid parental leave and family allowance [28]. Thus, American and French housewives might be very different. For instance, French mothers have been found to place more value on child autonomy [26], so they might hold a softer understanding of what Stimulation and Child-centrism is about.

Thus study suffers some limitation. First, our participants were rather privileged women, mainly well-educated, young and married or living as a couple, especially for mothers / mothers-to-be. Further research should contemplate using the MIMI in more deprived populations. Moreover, the housewife status might encompass various situations ranging from women choosing housewifery as a lifestyle to women forced to stay at home for various reasons. Getting information about motives for housewifery and employment could provide interesting perspective. For instance, women who are housewives but would like to work are prone to distress [45,46]. In the same vein, even if employment have generally been found to be beneficial to mothers mental health [47], those who are employed but belief that men should be the sole bread-winner have been found to be more distressed [48,49]

Finally, further studies should investigate the test-retest reliability of the MIMI [32] and its association with various related concepts [32] such as beliefs about the consequences of maternal employment on children [20,21] or household and parental duties [21]. Attitude toward highly normative childcare practices such as breastfeeding [50] might also be of particular interest

Disclosure of interest.

The authors declare that they have no competing interest.

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381 **Table 1.** Descriptive statistics

	Mothers Mothers-to-be N = 249	Childless N=231
Age (years)		
Min-max	20 – 47	18 - 48
Mean (SD)	30.49 (5.00)	23.95 (4.29)
Marital Status (%)		
Marriage	55	8
Couple	41	58
Single	3	35
Education (%)		
≥ 2 years of college	62	82
≤ High school diploma	22	13
Employment (%)		
Full-time	38	18
Part time	25	10
Housewives	23	0
Student	1	60
Pregnant (%)	14	0
Not pregnant women		
Number of child (%)		
0	0	100
1	52	0
2	30	0
3	14	0
4 or more	4	0
Youngest child age (months)		
Min-Max	0-60	---
Mean (SD)	15.43 (12.92)	
Pregnant women		
Number of child (%)		
0	42	
1	28	---
2	25	
3 or more	6	
Youngest child age (months)		
Min-Max	6 – 84	---
Mean (SD)	33.10 (20.10)	

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387 **Table 2.** Mean Comparisons between Mothers / Mothers-to-be and Childless Women.

Dimensions	Student T Test	Mothers / Mother-to-be (N = 249)	Childless Women (N = 231)
Essentialism	t(478) = 3.68, p<.01	3.41 (0.93)	3.09 (0.91)
C. Fulfilment	t(478) = 4.04, p<.01	5.09 (0.79)	4.78 (0.87)
Child centrism	t(478) = 3.31, p<.01	4.68 (1.03)	4.34 (1.22)
Challenge	t(478) = 2.11, p<.05	4.91 (1.01)	4.70 (1.11)
Sacrifice	t(478) = 5.42, p<.01	3.38 (1.05)	2.89 (0.93)
Stimulation	t(478) = -0.33, p =.75	5.64 (0.56)	5.65 (0.45)

Table 3. Mean Comparisons between Mothers / Mothers-to-be according to their employment status.

Dimensions	Anova	Full-Time (n = 95)	Part-Time (n = 62)	Housewife (n = 58)
Essentialism	$F(2.212) = 21.43, p < .01$	3.12 (0.89) ^a	3.13 (0.82) ^a	4.01(0.94)
C. Fulfilment	$F(2.212) = 8.59, p < .01$	5.12 (0.73) ^a	4.76 (0.99)	5.34 (0.58) ^a
Child centrism	$F(2.212) = 9.27, p < .01$	4.66 (1.01) ^a	4.30 (1.13) ^a	5.10 (0.92)
Challenge	$F(2.212) = 5.36, p < .01$	4.73(1.05) ^a	4.77(1.07) ^a	5.25 (0.84)
Sacrifice	$F(2.212) = 12.68, p < .01$	3.23(0.95) ^a	3.06 (1.02) ^a	3.92(1.06)
Stimulation	$F(2.212) = 0.623, p = .54$	5.68(0.47)	5.59(0.69)	5.59(0.57)

Figure 1. Validity of the Measure of Intensive Mothering Ideology

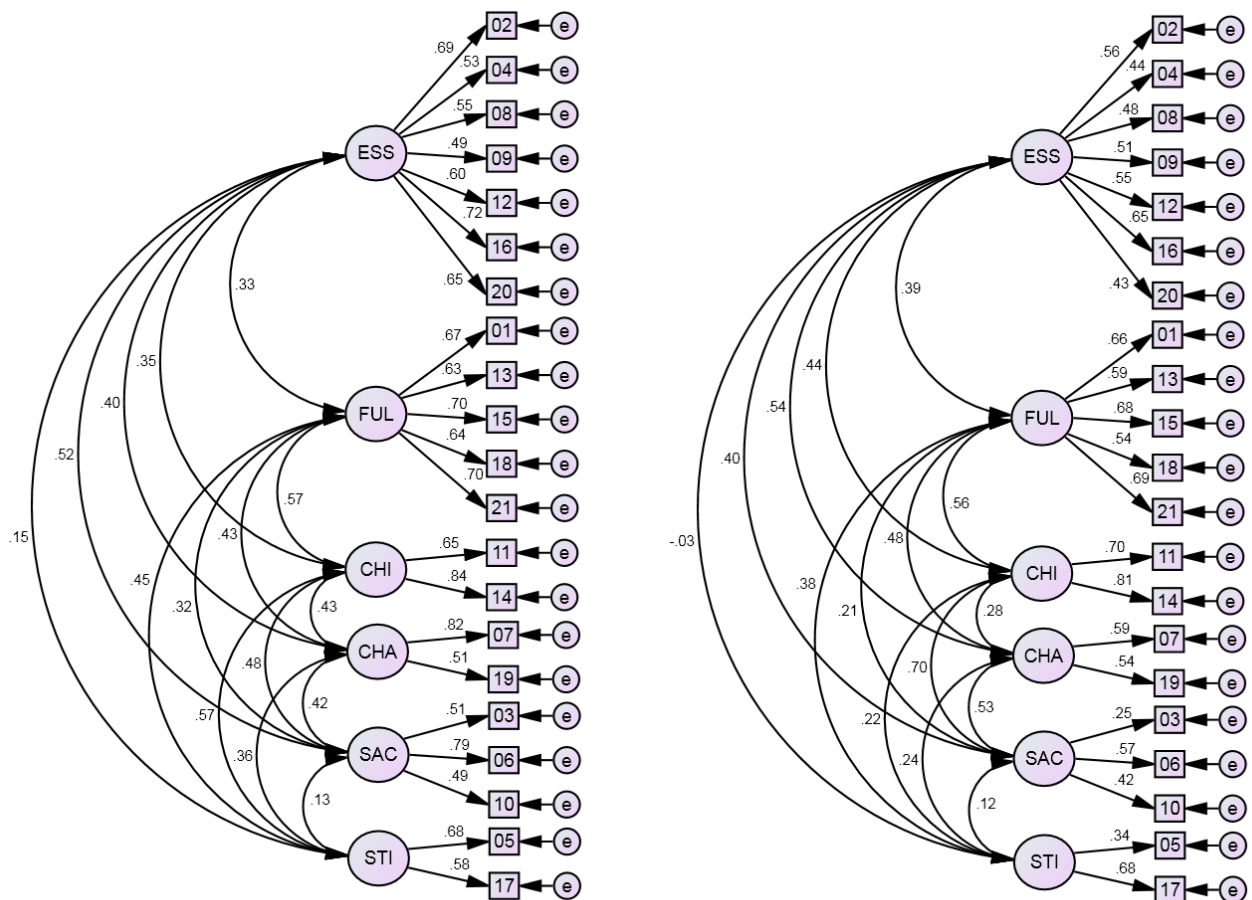


Figure 1. Confirmatory Factor Analysis for Mothers / Mothers-to-be (left) and Childless Women (right). Correlations are significant if they are above .23 (p < .01) or .16 (p < .05). ESS (Essentialism) FUL (Consuming Fulfilment), CHI (Child-Centrism) CHA (Challenge) SAC (Sacrifice) and STI (Stimulation).