





# Adaptation and validation of a French version of the Situational Motivation Scale (SIMS) for skin-to-skin contact: Preliminary findings

Gilles NDJOMO<sup>(1)(2)</sup>; Sylvie BLAIRY <sup>(1)</sup>; Érero NJIENGWÉ<sup>(2)</sup>; Michel HANSENNE<sup>(1)</sup>

(1) Psychology and Neuroscience of Cognition Research Unit (PsyNCog), Liege University, Belgium (2) Laboratory of Behavioral Sciences and Applied Psychology (LAPSA), Douala University, Cameroon.

# INTRODUCTION

The Situational Motivation Scale (SIMS; Guay et al., 2000) is a self-report measure of motivation which comprises 4 dimensions: intrinsic regulation, identified regulation, external regulation, and amotivation. This scale is based on the self-determination theory of Ryan and Deci (2000). However, it only assesses 4 of the 6 motivational factors proposed by the theory. Therefore, the aim of this study is to adapt the original scale by adding the two factors that are not included into the SIMS (i.e., integrated, and introjected regulation) to investigate the role situational motivation for skin-to-skin contact (SSC) practice.

## **METHOD**

We developed 8 new items for assessing integrated and introjected motivation and adapted 4 existing SIMS items to create a 6-factor version. Mothers of preterm infants following Kangaroo Mother Care (KMC) program in 2 hospitals of Cameroon were invited to fill in the questionnaire three times on a weekly basis after their initiation of KMC. At each assessment, the duration of skin-to-skin practice and the baby's weight gain were also evaluated. We calculated the internal consistency of the theoretical subscales and the overall scale at each of the 3 weeks. We also conducted an Exploratory Factor Analysis (EFA) of the scale for each of the 3 weeks. For the week that the EFA demonstrated a 6-factor solution, we calculated the correlations of each of the subscales obtained with the duration of skin-to-skin practice and the baby's weight gain.

L'échelle de motivation situation	nnelle a	ada	pte	ée (	SIN	ΛS)	)			
<u>Consigne</u> : Lisez chaque affirmation avec attention. Puis, cochez la case qui décrit le mieux à quel point vous êtes en accord avec chaque affirmation.										
1 = Ne correspond pas du tout 5 = Correspond assez 2 = Correspond très peu 6 = Correspond beaucoup 7 = Correspond exactement 4 = Correspond moyennement										
Pourquoi faites-vous du peau-à-peau (kangourou) avec votre bébé ?										
Parce que le peau-à-peau est vraiment plaisant.		1	2	3	4	5	6	7		
<ol> <li>Parce que faire du peau-à-peau est cohérent avec mes</li> <li>Parce que j'ai choisi de le faire pour mon bien à moi et</li> </ol>		1	2	3	4	5	6	7		
mon bébé.					4			-		
4. Parce que je me sens coupable si je ne fais du peau-à-p	1	2	3	4	5	6	7			
5. Parce que je dois suivre les recommandations du méde		1	2	3	4	5	6	7		
<ol><li>Je ne sais pas pourquoi je le fais, je ne vois pas ce que o procure.</li></ol>	ela me	1	2	3	4	5	6	7		
7. Parce que je me sens bien en faisant du peau-à-peau.	1	2	3	4	5	6	7			
8. Parce que faire du peau-à-peau correspond à ma vision	de la vie.	1	2	3	4	5	6	7		
<ol> <li>Parce que je crois que le peau-à-peau est important po bébé et pour moi.</li> </ol>	1	2	3	4	5	6	7			
10. Parce que si je ne le fait pas, j'aurais honte de moi.	1	2	3	4	5	6	7			
11. Parce que certaines personnes me mettent la pression fasse.	1	2	3	4	5	6	7			
12. Je fais du peau-à-peau, mais je ne suis pas sûre si cela e peine.	1	2	3	4	5	6	7			
13. Parce que je trouve le peau-à-peau intéressant.		1	2	3	4	5	6	7		
14. Parce que faire du peau-à-peau correspond bien à ce q	ue je suis.	1	2	3	4	5	6	7		
15. Parce que je sens que mon bébé a besoin du peau-à-po	eau.	1	2	3	4	5	6	7		
16. Parce que je me sentirais mal si je ne faisais pas du pea	u-à-peau.	1	2	3	4	5	6	7		
17. Pour ne pas avoir à entendre les reproches de certaines personnes.	S	1	2	3	4	5	6	7		
18. Je fais du peau-à-peau, mais en me demandant si je do	is le faire.	1	2	3	4	5	6	7		
19. Parce que je trouve le peau-à-peau agréable.		1	2	3	4	5	6	7		
<ol> <li>Parce que faire du peau-à-peau fait partie du style de v choisi.</li> </ol>	ie que j'ai	1	2	3	4	5	6	7		
21. Parce que je trouve que faire du peau-à-peau est bon p bébé et pour moi.	our mon	1	2	3	4	5	6	7		
22. Parce que je dois le faire pour me sentir en paix avec m	oi-même.	1	2	3	4	5	6	7		
23. Parce que je sens que je n'ai pas d'autres choix que de	le faire.	1	2	3	4	5	6	7		
24. Il y a peut-être de bonnes raisons pour faire du peau-à- personnellement je n'en vois pas.	peau, mais	1	2	3	4	5	6	7		

# **RESULTS**

EFA (N=119) shows a 4 or 6 factor solution depending on the week of assessment. For the week 3, the eigenvalues for the first six factors are, respectively, 2.608, 2.314, 2.294, 1.704, 1.644, and 1.620. The six factors account for 10.9%, 9.6%, 9.6%, 7.1%, 6.8%, and 6.8% of the variance (51% cumulatively). Items 5 and 6 do not display satisfactory saturation. According to the results of week 3, correlation analyses show that *Amotivation* is associated to the baby's weight gain. In addition, *External regulation* is associated with the duration of skin-to-skin contact with the baby.

1. Internal Consistency (McDonald's ω)								
	Week 1	Week 2	Week 3					
Intrinsic	0.663	0.784	0.790					
Integrated	0.811	0.832	0.843					
Identified	0.663	0.774	0.623					
Introjected	0.790	0.772	0.798					
External	0.513	0.615	0.615					
Amotivation	0.644	0.676	0.699					
SIMS total	0.829	0.841	0.848					

3. External validity (Pearson's Correlations based on Week 3 EFA)									
	1	2	3	4	5	6	7		
1. Weight gain	_								
2. SSC duration	0.158	_							
3. Intrinsic	-0.047	-0.072	_						
4. Integrated	-0.126	0.042	0.412***	_					
5. Identified	0.179	-0.156	0.265**	0.029	_				
6. Introjected	-0.104	0.133	0.392***	0.319***	0.172	_			
7. External	-0.085	0.309**	0.094	0.248**	0.095	0.453***	_		
8. Amotivation	-0.206*	-0.109	0.007	0.246**	-0.096	0.085	0.248**		
* p < .05, ** p < .01,	* p < .05, ** p < .01, *** p < .001								

	2. Ex	plorato	ry Facto	or Anal	ysis (at	Week	3)
Factors	1	2	3	4	5	6	Uniqueness
<b>S1</b>		0.610					0.559
<b>S2</b>	0.725						0.367
<b>S3</b>						0.591	0.479
<b>S4</b>			0.746				0.342
<b>S5</b>							0.741
<b>S6</b>							0.793
<b>S7</b>		0.578					0.394
<b>S8</b>	0.753						0.344
<b>S9</b>		0.435					0.629
<b>S10</b>			0.530				0.488
<b>S11</b>				0.601			0.554
<b>S12</b>					0.634		0.554
<b>S13</b>		0.643					0.535
<b>S14</b>	0.796						0.280
<b>S15</b>						0.637	0.509
<b>S16</b>			0.754				0.369
<b>S17</b>				0.747			0.338
<b>S18</b>					0.428		0.598
<b>S19</b>		0.694					0.337
<b>S20</b>	0.584						0.606
<b>S21</b>						0.618	0.541
<b>S22</b>			0.502				0.515
<b>S23</b>				0.408			0.597
<b>S24</b>					0.788		0.348
		· ·	amax, only lo d; 4=External;				

## CONCLUSION

Preliminary analyses show that the modified SIMS exhibits a satisfactory factorial structure. However, larger samples are needed to confirm the psychometric properties of the scale. The study also suggests that the modified SIMS is a relevant tool for assessing the mother's motivation to practice skin-to-skin contact with her preterm newborn. More interestingly, the present study has identified some types of motivation that are most likely to promote a better mother commitment in the practice of skin-to-skin contact with her preterm newborn.

### **Perspectives**

We are looking for partners who would like to participate in a validation study of this questionnaire in French with a larger sample of participants (see contact below).

Contact: gc.ndjomo@doct.uliege.be