

# Subjective Social Status as a Marker of Breastfeeding Outcomes

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## Background and Significance

Subjective social status (SSS), a marker of socioeconomic status, is a significant marker of physical and psychological health<sup>1</sup>; however, the extent of this relationship is not well understood<sup>2</sup>. Interestingly, SSS has demonstrated a stronger impact on health and behavior than income and education level in new mothers<sup>3</sup>.

Breastfeeding is a strong protective factor in maternal and fetal health<sup>4</sup>. Despite previous studies finding strong correlations between social determinants of health (i.e., marital status, income, education) and breastfeeding outcomes<sup>5</sup>, the specific influence of SSS has yet to be studied.

## Objectives

Assess trends of SSS from pregnancy to 5 years after birth.

Investigate how prenatal SSS predicts breastfeeding outcomes.

**Hypothesis:**  
*Maternal SSS may be a useful indicator of breastfeeding success and outcomes.*

## Methodology

This is a secondary data analysis of a previous cohort study with moms and their neonates.

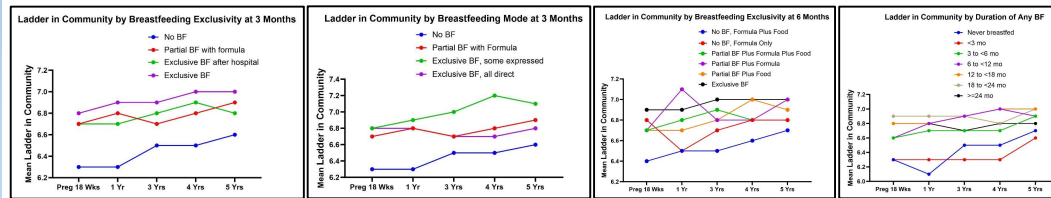
Sociodemographics including SSS and breastfeeding outcomes were assessed at 18 weeks gestation, and 1 year, 3 years, 4 years, and 5 years postpartum. SSS was measured using the MacArthur Scale, which assesses respondents' perceived location on a 10-rung social ladder.

Participants were asked to describe their SSS separately in relation to their community and to their country. Of the 3264 participants in the study, 98% were eligible for analysis.

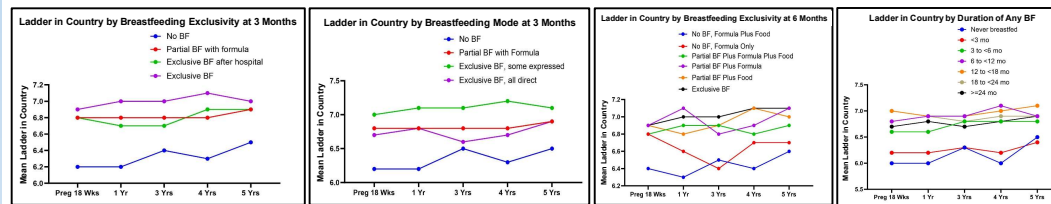
Breastfeeding (BF) behaviors were categorized as: no BF, partial BF with formula, exclusive BF after hospital, exclusive BF, and BF duration. Analyses were conducted using SAS.

## Social Ladder in Community vs. Country

### Social Ladder in Community by Breastfeeding Category



### Social Ladder in Country by Breastfeeding Category



Most participants had at least a college/university degree (73%) and were married (91%). Regarding income, 12% of participants had a household income between \$0 - \$49,999, 29% between \$50,000 - \$99,999, and 46% over \$100,000. Over the 5-year period, there was approximately a 5% increase in SSS in community and 2.8% increase in SSS in country over the 5-year period across all participants. Both SSS in community and SSS in country were the highest in mothers who engaged in exclusive breastfeeding and lowest in mothers who engaged in no breastfeeding.

## Subjective Social Status during Pregnancy and Breastfeeding Outcomes

### Subjective Social Status during Pregnancy and Breastfeeding Outcomes

	BF exclusivity at 3 months		BF mode at 3 months		BF exclusivity at 6 months		Duration of any BF	
Effect	OR (95% CI)	p-value	OR (95% CI)	p-value	OR (95% CI)	p-value	OR (95% CI)	p-value
Social ladder in community	1.11 (1.07, 1.16)	<.0001	1.11 (1.06, 1.16)	<.0001	1.10 (1.05, 1.15)	0.0027	1.12 (1.08, 1.16)	<.0001
Social ladder in country	1.16 (1.11, 1.21)	<.0001	1.13 (1.08, 1.18)	<.0001	1.16 (1.10, 1.22)	<.0001	1.17 (1.12, 1.22)	<.0001

SSS in community and SSS in country were found to have a significant impact associated with breastfeeding exclusivity at 3 and 6 months, and breastfeeding duration. There was approximately a 5% increase in SSS in community and 2.8% increase in SSS in country over the 5-year period across all participants.

According to analysis done with Spearman correlation, education, income, marital status, and employment status were very significant predictors of social ladder rating prior to birth of index child ( $p < 0.0001$ ).

## Study Limitations

Of the eligible participants, 2.9% did not complete high school, 5.6% completed high school, and 14.2% had at least a college/university degree. 12.2% of participants had a household income between \$0 - \$49,999, 28.9% between \$50,000 - \$99,999, and 45.9% over \$100,000. 91% of study participants had a marital status of married or common law.

These participant demographics may limit the generalizability to economically or socially disadvantaged groups.

Another study limitation includes the minimal increase in SSS over the 5 year period, which may not be clinically noticeable.

## Conclusions

SSS may be a useful predictor of breastfeeding. Participant demographics may limit the generalizability to socioeconomically disadvantaged groups. Representative samples and repetitions of these measures in future studies is needed to understand the potential use of SSS as a predictor of breastfeeding outcomes.

With greater use, SSS may contribute to a greater understanding of patients' lives, wellbeing and social and economic circumstances, promoting a more comprehensive approach to breastfeeding education and care.

## Citations

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