

HOW DO PERCEPTIONS OF RELATIVE POVERTY AFFECT WOMEN'S EMPOWERMENT?

Evidence from Papua New Guinea

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RESEARCH OVERVIEW

How do perceptions of one's relative economic status affect gender attitudes, including support for women's economic participation and their involvement in decision-making within their household and community? Increased feelings of relative economic vulnerability may lead to greater intra-household tension under a scenario of women seeking greater advancement economically and socially. In this instance, women's empowerment could be perceived as a threat in a context of limited economic opportunity. On the other hand, to the extent that empowering women can improve household welfare, feeling economically vulnerable could motivate more egalitarian gender attitudes with respect to economic participation. For example, women's labor force participation brings income into the household, and women's involvement in decision-making can facilitate more efficient land management (Dillon and Voena, 2018; Goldstein and Udry, 2008; Seymour, 2017) and bring about better health (Beegle et al., 2001; Dinçer et al., 2014; Sraboni et al., 2014), nutrition (Ekbrand and Halleröd, 2018; Imai et al., 2014; Lépine and Strobl, 2013; Smith and Haddad, 2001; Smith et al., 2003), and education (Qian, 2008) outcomes for household members.

As one of the first papers to investigate the impact of perceptions of relative poverty on gender attitudes, a December 2019 IFPRI Discussion Paper by Katrina Kosec, Cecilia Hyunjung Mo, Emily Schmidt, and Jie Song shows that perceptions of relative poverty translate into greater support for girls' schooling and women's engagement in paid employment. In other words, relative economic insecurity can prompt support for women's economic participation. However, this support is not necessarily accompanied by greater support for women's involvement in community and intra-household decision-making. Feeling relatively poor triggered an increased desire among women to have decision-making authority within the household; however, there was no change in men's attitudes about women's role in decision-making. The paper underscores the complicated nature of gender attitudes, and how support for women's economic participation may rise without simultaneous increases in women's agency in decision-making.

DATA AND METHODS

Our results come from an original survey we conducted in Papua New Guinea during May–July 2018, implemented through IFPRI (Schmidt et al., 2019). We crafted a multi-topic survey titled the Papua New Guinea Household Survey on Food Systems and interviewed 1,026 households across 70 communities in 4 lowland survey areas. The gender module, central to this study, covered a variety of questions related to women’s involvement in economic activities and decision-making in the community and household.

To identify the causal effect of perceptions of relatively low economic status, we randomly assigned half of participants to receive a “relative poverty prime” at the start of the gender module. This subtly made “treated” persons feel as though they may have less total income compared with others in the community. The “control” group were primed to feel typical from the standpoint of economic well-being. Specifically, we asked all respondents the following question: “Annual income is the amount of cash income you earn from all agricultural and non-agricultural activities. It includes the approximate value of items that you produce and consume as a family or give as a gift, or you have sold (i.e. produce from your garden). How much income did your family earn last year in kina (local currency)?” We then randomly assigned respondents to receive one of the following two sets of household income response options:

Table 1: Income brackets for treatment and control groups

Control	Treatment (Relatively Poor Group)
0-250 kina	0-2,000 kina
251-500 kina	2,001-4,000 kina
501-1,500 kina	4,001-8,000 kina
1,501-3,000 kina	8,001-16,000 kina
More than 3,000 kina	More than 16,000 kina

The design of the prime builds on survey experiments conducted in Nepal (Mo, 2012, 2018), Pakistan (Fair et al., 2016; Healy et al., 2017), and the United States (Haisley et al., 2008). The logic of the prime is that respondents frequently assume that the ranges present in a question were purposely selected so that the middle response is the modal or most typical response. As such, the middle response changes the respondent’s reference point, and they then assess their level of economic well-being in relation to that point. The individuals who received the treatment are primed to feel relatively poor and deprived, as they perceive their income to be in the lowest income range in society, while the individuals in the control group are primed to feel more neutral or positive about their relative economic standing.

Immediately following the prime, we asked respondents about their attitudes toward gender-related statements. To examine the impact of perceptions of relative poverty, we estimate the following specification:

$$G_{ijse} = \beta_0 + \beta_1 P_{ijse} + \beta_2 X_{ijse} + \omega_e + \varphi_s + \varepsilon_{ijse}$$

The outcome, G_{ijse} , is the extent of disagreement or agreement with a gender-related statement. The original answers to gender-related statements are on a scale from 1 to 5; we recode as necessary so that larger values indicate more egalitarian, or progressive, gender attitudes. We then standardized the 5-point scale measures using the mean and standard deviation of the control group to facilitate the interpretation of the effects. P_{ijse} is a dummy for receiving a poverty prime. X_{ijse} is a vector of individual-, household-, and community-level controls with imbalance (p-value < 0.10) across treatment and control groups for at least one gender. Given variation in the quality of locally recruited enumerators which led to imbalances between treatment and control groups, we include enumerator fixed effects ω_e . Community

fixed effects, φ_s , are also included to account for variation in gender attitudes across communities to improve the precision of our estimates.

DATA AND METHODS

We group gender attitudes into four categories: economic participation, how women’s work affects others, women in household and community decision-making, and degree of social conservatism.

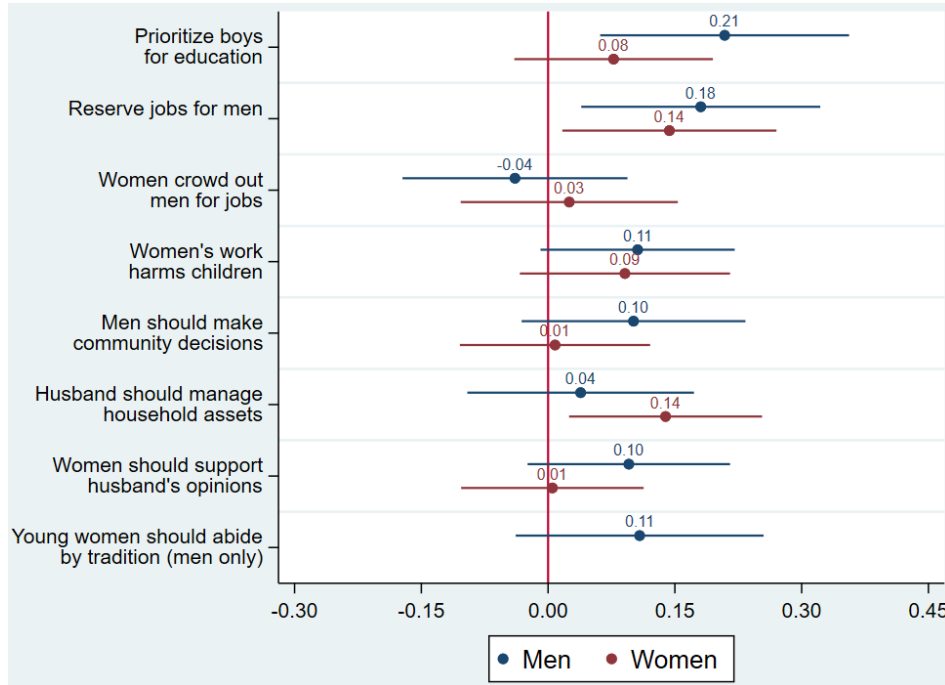


Figure 1 Effect of poverty prime on gender attitudes (90% confidence intervals)

Figure 1 shows the coefficient estimate on the treatment dummy (the poverty prime) and a 90 percent confidence interval for each gender attitude outcome—in all cases using our preferred, fully controlled specification. We find that the poverty prime, on average, increased support for women’s economic participation, including support for building girls’ human capital and having women participate in

paid employment. For the gender-regressive statement “prioritize boys for education,” being primed to feel relatively poor increases men’s disagreement by 0.21 standard deviations, significant at the 0.05 level. We see a positive shift among women as well; however, this shift is not statistically significant. It appears that, at least for men, any feelings of relative economic vulnerability that a poverty prime brings about translate into a desire for women to build their human capital. For the statement “reserve jobs for men,” the poverty prime increased women’s and men’s disagreement by 0.14 standard deviations (significant at the 0.10 level) and 0.18 standard deviations (significant at the 0.05 level), respectively. Thus, for both genders, we find that feelings of relative poverty contribute to a non-trivial, statistically significant increase in support for women’s labor market participation.

We also studied whether increased support for women’s economic participation is driven by simultaneous changes in perceptions of the costs to other individuals associated with their greater participation. For statements regarding women’s work outside the home, “women crowd out men for jobs” and “women’s work harms children,” we find that the poverty prime does not affect respondents’ perceptions of how women’s participation in paid employment affects men or children, regardless of respondent gender.

We analyzed the impact of the poverty prime on women’s decision-making in the household and the community using two outcomes: the extent of disagreement with statements that “men should make community decisions” and that “the husband should manage household assets.” For men, the results are largely null; the poverty prime does not influence their attitudes toward women making decisions in either domain. For women, the poverty prime does not affect their support for women’s involvement in community decision-making but does lead to increased support for women’s involvement in intra-household decision-making.

We did not find any effect of the poverty prime on the level of disagreement with the statements, “women should support husband’s opinions” or “young women should abide by tradition”—measures of social conservatism. We thus find no evidence that support for women’s economic participation is motivated by an erosion of social conservatism.

Overall, for men, these results suggest that making relative poverty more salient by administering a relative poverty prime increases support for women’s economic participation, but is not accompanied by more egalitarian attitudes with regard to women’s roles in community and household decision-making. This is consistent with a pure economic motivation story related to the advancement of the economic bottom-line of the household rather than a broader desire to empower women as the explanation for men’s increased support for women’s participation in paid employment. For women, the results are mixed, and the effects of the prime are centered on women’s economic participation and their involvement in intra-household decision-making, but not on their involvement in community decision-making. It may be the case that women who have been primed to feel relatively poor become increasingly averse to perceived mismanagement of household resources by men, for which costs may be perceived to be higher if there is less income to meet daily consumption needs. This suggests that increases in relative deprivation could create conditions that engender more intra-household conflict.

CONCLUSIONS AND POLICY RECOMMENDATIONS

We present evidence that to the extent that inequality levels within a community alter perceptions of relative economic well-being, these can affect gender attitudes. We find that feeling less well-off relative to others in one’s community can engender more openness to women’s economic participation. In addition, the shift in participants’ beliefs toward prioritizing girls for education and reserving jobs for women is remarkable, given that the relative deprivation prime was very subtle. However, we cannot interpret this as evidence that inequality supports women’s empowerment. The salience of relative deprivation leads to no change in beliefs around women’s decision-making authority among men. Looking at mean responses to questions, we see that there is a strong sense that wives should always agree with their husbands and women need to abide by traditional gender norms. Likewise, shifts in relative deprivation have no effect on men’s perception that women should defer to men with regard to decisions that affect the household and the community. As such, the shifts that we see around economic participation are likely stemming from a desire for women to earn income that can contribute to the household income—and ultimately be controlled by men. Contributing income to one’s household with the expectation that women not renege on their responsibilities to the family, and that they further defer to men’s decision-making authority, is a far cry from women’s empowerment. Our findings are consistent with qualitative studies that speak to the growing expectation that women do it all—contribute financially to the household, while managing household work—with relatively low agency and authority to make decisions.

Moreover, while there is no change in men’s beliefs regarding intra-household bargaining, when relative poverty is more salient, women want more decision-making authority in the household. The differential effects of perceived relative poverty on decision-making power suggest that shifts in feelings of relative deprivation may create greater intra-household tension.

Overall, our findings help us understand the complicated nature of gender attitudes, how asking questions only about economic participation of women would lead to false conclusions pertaining to women’s empowerment, and the effects that economic development and inequality may have on gender attitudes. Our results suggest that interventions to improve women’s participation in community and household decision-making and to change social norms may be needed to achieve greater gender equality.

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REFERENCES

- Beegle, K., E. Frankenberger, and D. Thomas (2001). Bargaining power within couples and use of prenatal and delivery care in Indonesia. *Studies in Family Planning* 32 (2), 130–146.
- Dillon, B. and A. Voena (2018). Widows' land rights and agricultural investment. *Journal of Development Economics* 135, 449–460.
- Diñçer, M. A., N. Kaushal, and M. Grossman (2014). Women's education: Harbinger of another spring? Evidence from a natural experiment in Turkey. *World Development* 64, 243–258.
- Ekbrand, H. and B. Halleröd (2018). The more gender equity, the less child poverty? A multilevel analysis of malnutrition and health deprivation in 49 low-and middle-income countries. *World Development* 108, 221–230.
- Fair, C., R. Littman, N. Malhotra, and J. N. Shapiro (2016). Relative poverty, perceived violence, and support for militant politics: Evidence from Pakistan. *Political Science and Research Methods*, 1–25.
- Goldstein, M. and C. Udry (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of political Economy* 116 (6), 981–1022.
- Haisley, E., R. Mostafa, and G. Loewenstein (2008). Myopic risk-seeking: The impact of narrow decision bracketing on lottery play. *Journal of Risk and Uncertainty* 37 (1), 57–75.
- Healy, A. J., K. Kosec, and C. H. Mo (2017). Economic development, mobility, and political discontent: An experimental test of Tocqueville's thesis in Pakistan. *American Political Science Review* 111 (3), 1–17.
- Imai, K. S., S. K. Annim, V. S. Kulkarni, and R. Gaiha (2014). Women's empowerment and prevalence of stunted and underweight children in rural India. *World Development* 62, 88–105.
- Lépine, A. and E. Strobl (2013). The effect of women's bargaining power on child nutrition in rural Senegal. *World Development* 45, 17–30.
- Mo, C. (2012). Essays in behavioral political economy: The effects of affect, attitude, and aspirations. Ph.D. Diss. Stanford University, Stanford, CA. <http://searchworks.stanford.edu/view/9623096>.
- Mo, C. H. (2018). Perceived relative deprivation and risk: An aspiration-based model of human trafficking vulnerability. *Political Behavior* 40 (1), 247–277.
- Qian, N. (2008). Missing women and the price of tea in China: The effect of sex-specific earnings on sex imbalance. *The Quarterly Journal of Economics* 123 (3), 1251–1285.
- Schmidt, E., R. Gilbert, B. Holtemeyer, G. Rosenbach, and T. Benson. 2019. Papua New Guinea survey report: Rural household survey on food systems. *IFPRI Discussion Paper* 1801. Washington, DC. <https://doi.org/10.2499/p15738coll2.133067>
- Seymour, G. (2017). Women's empowerment in agriculture: Implications for technical efficiency in rural Bangladesh. *Agricultural Economics* 48 (4), 513–522.
- Smith, L. C. and L. Haddad (2001). How important is improving food availability for reducing child malnutrition in developing countries? *Agricultural Economics* 26 (3), 191–204.
- Smith, L. C., U. Ramakrishnan, A. Ndiaye, L. Haddad, and R. Martorell (2003). The importance of women's status for child nutrition in developing countries: International Food Policy Research Institute (IFPRI) Research Report Abstract 131. *Food and Nutrition Bulletin* 24 (3), 287–288.
- Sraboni, E., H. J. Malapit, A. R. Quisumbing, and A. U. Ahmed (2014). Women's empowerment in agriculture: What role for food security in Bangladesh? *World Development* 61, 11–52.

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