Do male and female household heads spend differently on average on household welfare?

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Understanding per-capita food expenditure or consumption can serve as a proxy to understand household welfare.

Some G2P transfers, credit disbursements and pensions alike are directed towards female members of the household, under the assumption that this could increase agency of the female members and prompt the resources to directly contribute to the overall welfare of the household. This is in comparison to male members that may direct the resources towards expenses outside the household, without directly benefiting the household.

Using data compiled from the 2009 National Income Dynamics Study (NIDS), we investigate whether there is a *measurable difference between per-capita food expenditure made by female and male household heads.* Answers to this question could have policy implications for development programs in their prioritizing/targeting of household heads.

Describing the Data

Gender	n	percent
Female	3158	0.4586117
Male	3728	0.5413883

The NIDS dataset contains responses from around 6886 individual household heads in South Africa of which 54.14% are male and 45.86% are female.

Gender	Female	Male	Total
African	2610	2617	5227
Coloured	377	609	986
Indian	26	81	107
White	136	409	545
NA_	9	12	21
Total	3158	3728	6886

Since this dataset has been compiled only on household heads, the mean age of the respondents is quite high. For males the mean age is around 48 years while for females it is 51 years. Males in the data set seem to have completed around 1.5 years more of education than females on average. The average household size among the respondents is 4. However it should be noted that, female household heads tend to have larger households on average even when controlling for their race, age and education. Additionally, on average male household heads tend to earn more income per capita than female household heads.

	Female	Male
Mean Age	51.36	46.82
Mean Years Education	6.03	7.45
Mean HH Size	4.10	3.63
Mean PerCap Income (Rands)	1094.10	2193.43
Mean PerCap Food Expenditure (Rands)	261.62	367.90

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Males in the data set have completed around 1.5 years more of education than females on average. The average household size among the respondents is 4. Additionally, female household heads tend to have larger households on average even when controlling for their race, age and education.

Important to note, on average male household heads tend to earn more income per capita than female household heads.[1]

Appendix

Appendix 1: Data Dictionary

```
##  pos variable     label                col_type values
##  1   hhid         Household identifier dbl
##  2   pid          Individual identifier dbl
##  3   age          Age in Years         dbl
##  4   male         Gender of Respondent dbl+lbl  [0] Female
##                                                 [1] Male
##  5   race         Population Group     dbl+lbl  [1] African
##                                                 [2] Coloured
##                                                 [3] Indian
##                                                 [4] White
##  6   education    Education in Years   dbl
##  7   hsgrad       HS Graduation (Matric) dbl+lbl [0] No
##                                                 [1] Yes
##  8   satisfaction Current Life Satisfacti~ dbl
##  9   hstatus      Self Perceived Health S~ dbl+lbl [1] Poor
##                                                 [2] Fair
##                                                 [3] Good
##                                                 [4] Very Good
##                                                 [5] Excellent
##  10  hhsize       Household Size       dbl
##  11  hhhead       1=Household Head     dbl
##  12  hhpcinc      HH Per/Cap Inc (Rands/M~ dbl
##  13  hhpcinc1000  HH Per/Cap Inc (Thousan~ dbl
##  14  hhpcinc1000sq HH Per/Cap Inc Squared ~ dbl
##  15  pcfoodexp    HH Per Capita Food Expe~ dbl
##  16  lnpcfoodexp  Natural Log of HH PC Fo~ dbl
##  17  province     Province of Residence dbl+lbl [-9] Don't Know
##                                                 [-8] Refused
##                                                 [-7] Same as
##                                                 [-5] Not Applicable
##                                                 [-3] Missing
```

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[1] this is a footnote

```
##                                                    [1] Western Cape
##                                                    [2] Eastern Cape
##                                                    [3] Northern Cape
##                                                    [4] Free State
##                                                    [5] KwaZulu-Natal
##                                                    [6] North West
##                                                    [7] Gauteng
##                                                    [8] Mpumalanga
##                                                    [9] Limpopo
##                                                    [10] Outside RSA
## 18  smoker       Respondent Smokes Cigar~ dbl+lbl  [0] No
##                                                    [1] Yes
## 19  pctransport  HH Per Capita Transport~ dbl
## 20  employed     Employment Status        dbl+lbl  [0] No
##                                                    [1] Yes
## 21  alcohol      Alcohol consumption Per~ dbl+lbl  [1] Never
##                                                    [2] Does not drink anym~
##                                                    [3] Rarely
##                                                    [4] Less than once/week
##                                                    [5] 1 or 2 days/week
##                                                    [6] 3 or 4 days/week
##                                                    [7] 5 or 6 days/week
##                                                    [8] Every day
## 22  cellphone    Cellphone in Household   dbl+lbl  [0] No
##                                                    [1] Yes
## 23  nhcrime      Perceived amount of the~ dbl+lbl  [1] Never
##                                                    [2] Very Rare
##                                                    [3] Not Common
##                                                    [4] Fairly Common
##                                                    [5] Very Common
## 24  religious    Are religious activitie~ dbl+lbl  [0] No
##                                                    [1] Yes
## 25  driver       Has a driver's License   dbl+lbl  [0] No
##                                                    [1] Yes
## 26  Gender       -                        fct      Female
##                                                    Male
```