

raport PISA 1/1

Ilona Grabowicz, Anna Macioszek, Małgorzata Pawlak

Abstract

Influence of mother's working situation on daughters' views on career benefits of learning mathematics and on their own math abilities. Based on data from PISA2012, a survey which tested 15-year-olds in reading, mathematics and science focussing on mathematics in 2012.

Contents

CONTEXT	2
ANALYSIS	2
Albania	3
United Arab Emirates	4
Argentina	5
Australia	6
Austria	7
Belgium	8
Bulgaria	9
Brazil	10
Canada	11
Switzerland	12
Chile	13
Colombia	14
Costa Rica	15
Czech Republic	16
Germany	17
Denmark	18
Spain	19
Estonia	20
Finland	21
France	22
United Kingdom	23
Greece	24
Hong Kong-China	25
Croatia	26
Hungary	27
Indonesia	28
Ireland	29
Iceland	30
Israel	31
Italy	32
Jordan	33
Japan	34
Kazakhstan	35
Korea	36
Liechtenstein	37
Lithuania	38
Luxembourg	39
Latvia	40
Macao-China	41
Mexico	42

Montenegro	43
Malaysia	44
Netherlands	45
Norway	46
New Zealand	47
Peru	48
Poland	49
Portugal	50
Qatar	51
China-Shanghai	52
Perm(Russian Federation)	53
Romania	54
Russian Federation	55
Singapore	56
Serbia	57
Slovak Republic	58
Slovenia	59
Sweden	60
Chinese Taipei	61
Thailand	62
Tunisia	63
Turkey	64
Uruguay	65
United States of America	66
Vietnam	67

CONTEXT

A new working paper by Kathleen McGinn and her colleagues for Harvard Business School purports that working mothers are more likely to raise successful daughters.

“THERE ARE VERY FEW THINGS... THAT HAVE SUCH A CLEAR EFFECT ON GENDER INEQUALITY AS BEING RAISED BY A WORKING MOTHER.”

Kathleen L. McGinn, the Cahners-Rabb Professor of Business Administration at Harvard Business School

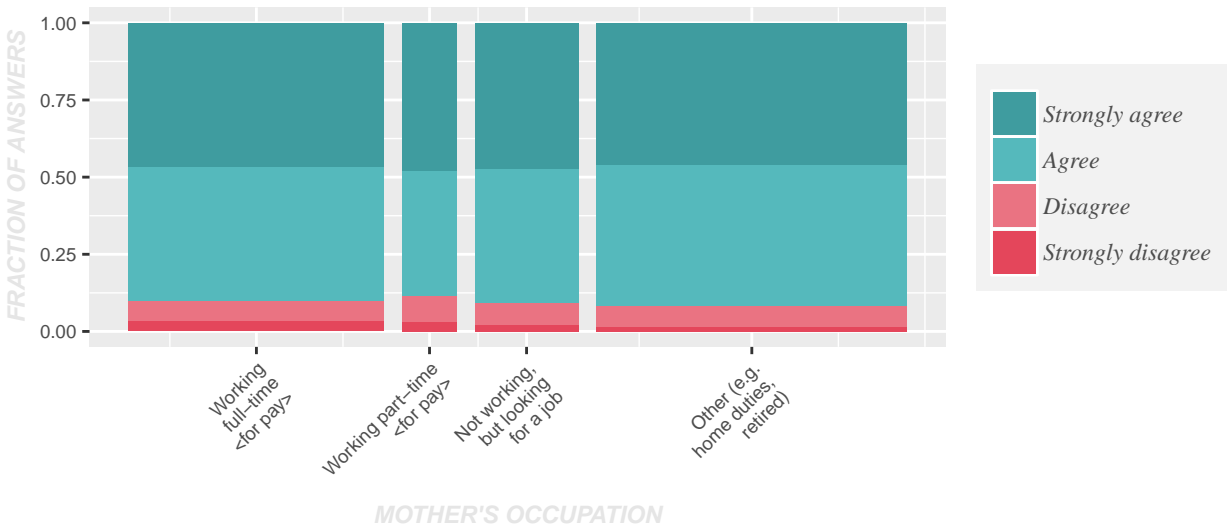
ANALYSIS

We picked girls’ responses to two specific questions and looked at it from a perspective of their mothers’ working situation. Mother’s working situation could be defined as one of the following: working full time (for pay), working part time (for pay), not working, but looking for a job or other (e.g. home duties). The two chosen questions were statements to which the girls needed to state to what extent they apply to them. Response scale had 4 following levels: strongly agree, agree, disagree, strongly disagree. First statement concerned the feeling about the usefulness of mathematics in their future career and read: “Learning mathematics is worthwhile for me because it will improve my career”. The second was about the level of confidence the girls have in their own math abilities: “If I wanted to, I could do well in mathematics”. An interesting result was that the group who tend to have the most different results are girls whose mothers work part-time.

Albania

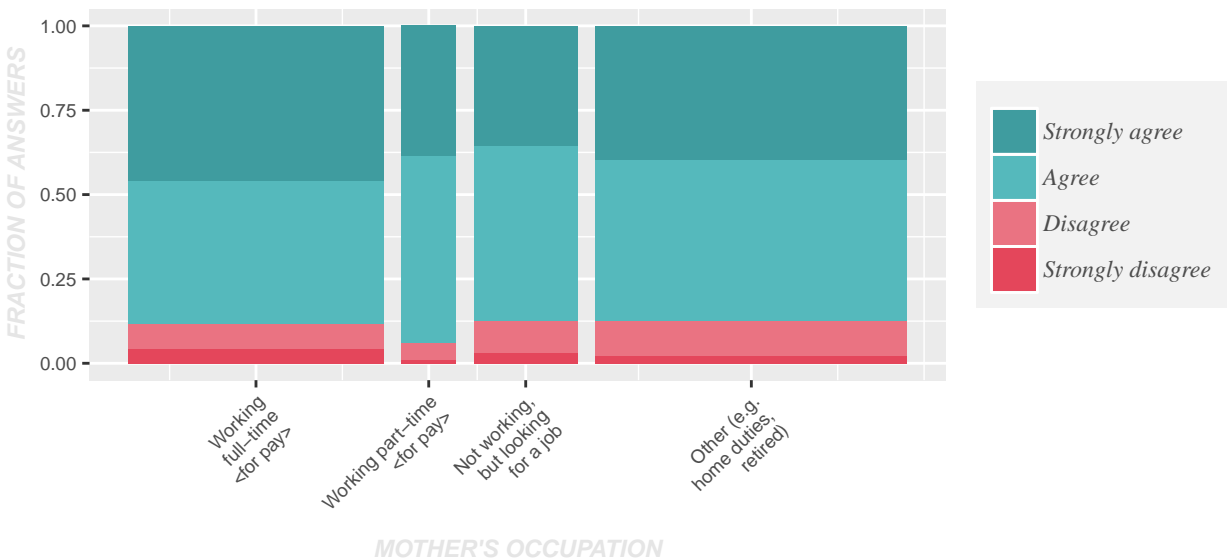
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

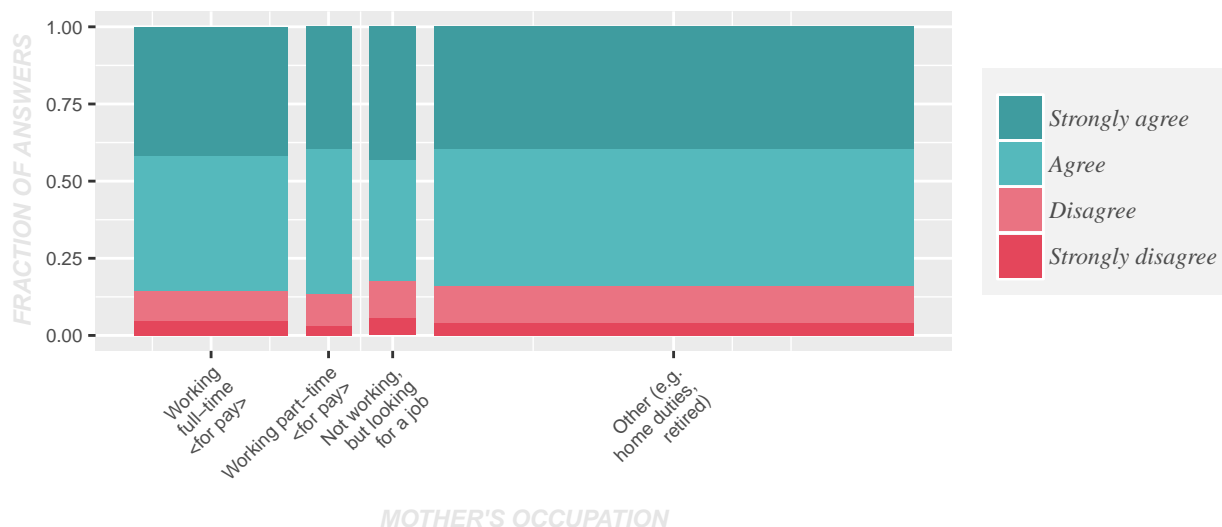
If I wanted to, I could do well in mathematics



United Arab Emirates

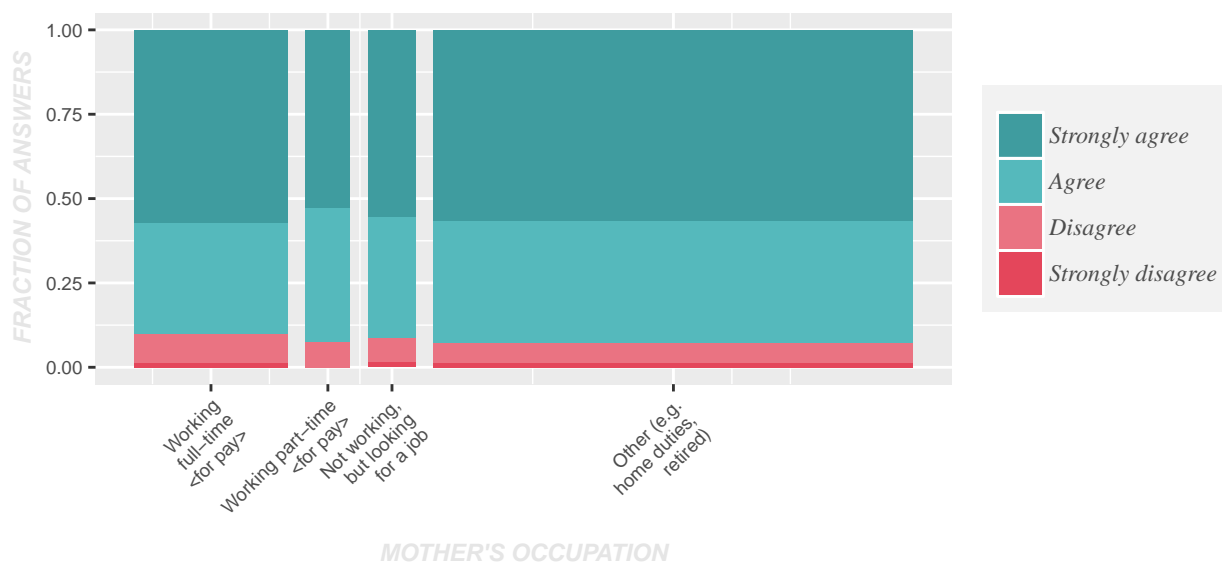
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

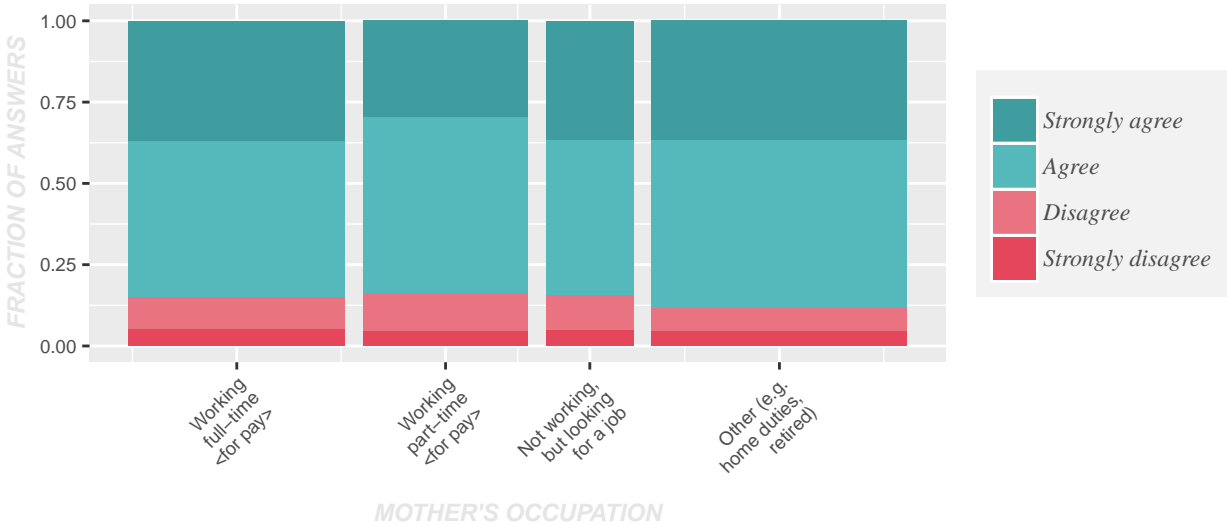
If I wanted to, I could do well in mathematics



Argentina

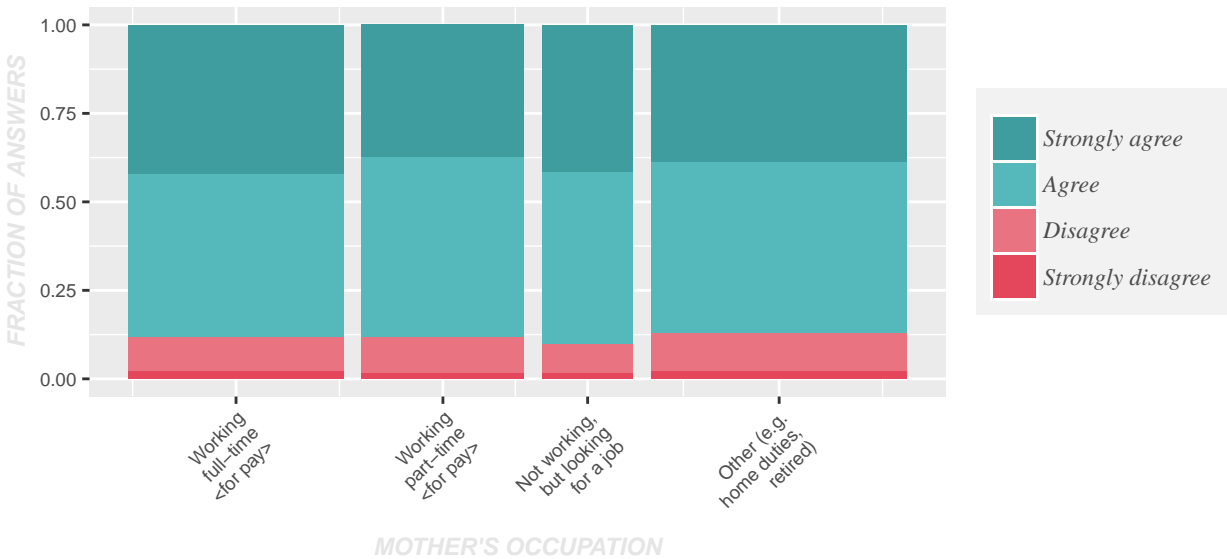
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

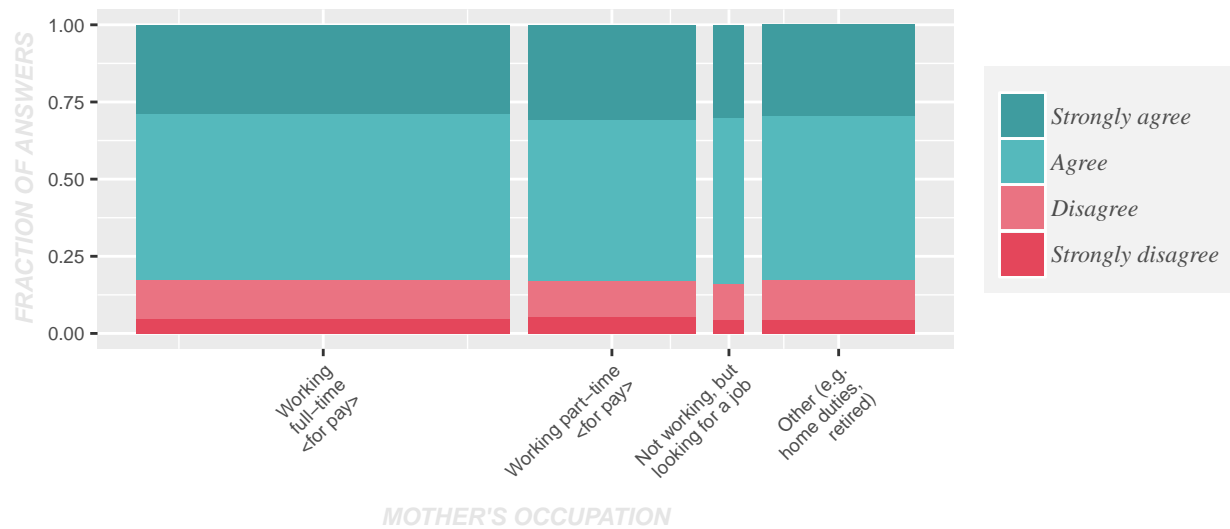
If I wanted to, I could do well in mathematics



Australia

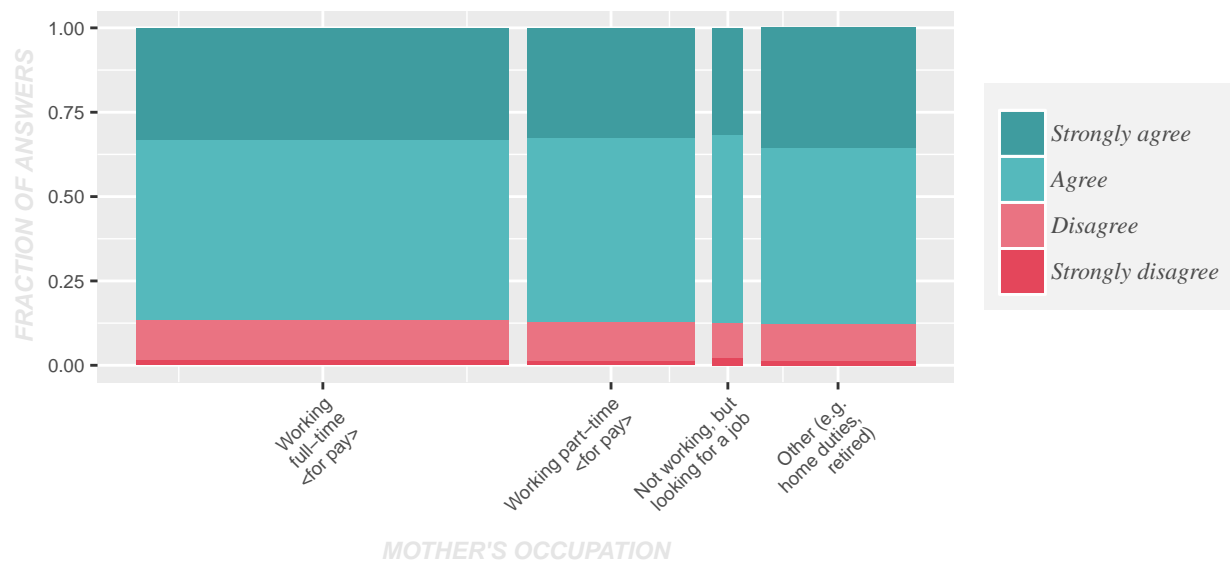
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

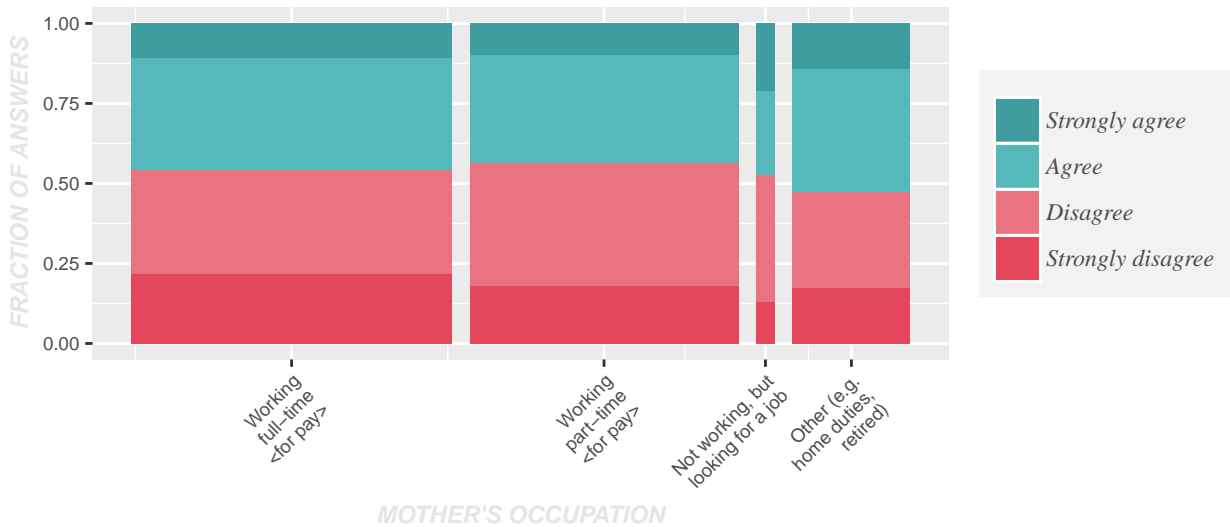
If I wanted to, I could do well in mathematics



Austria

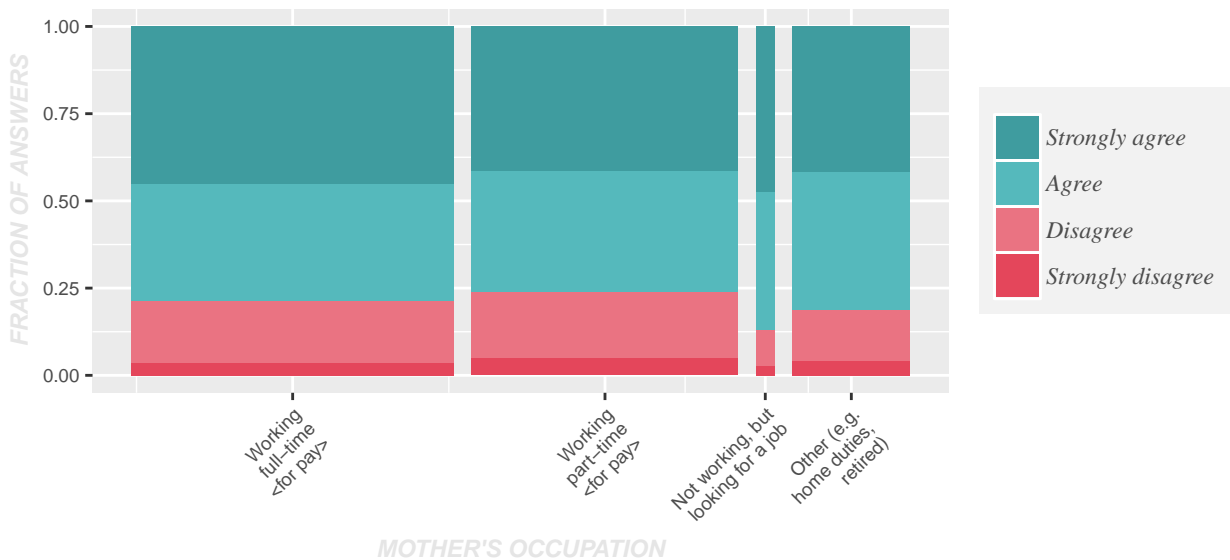
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

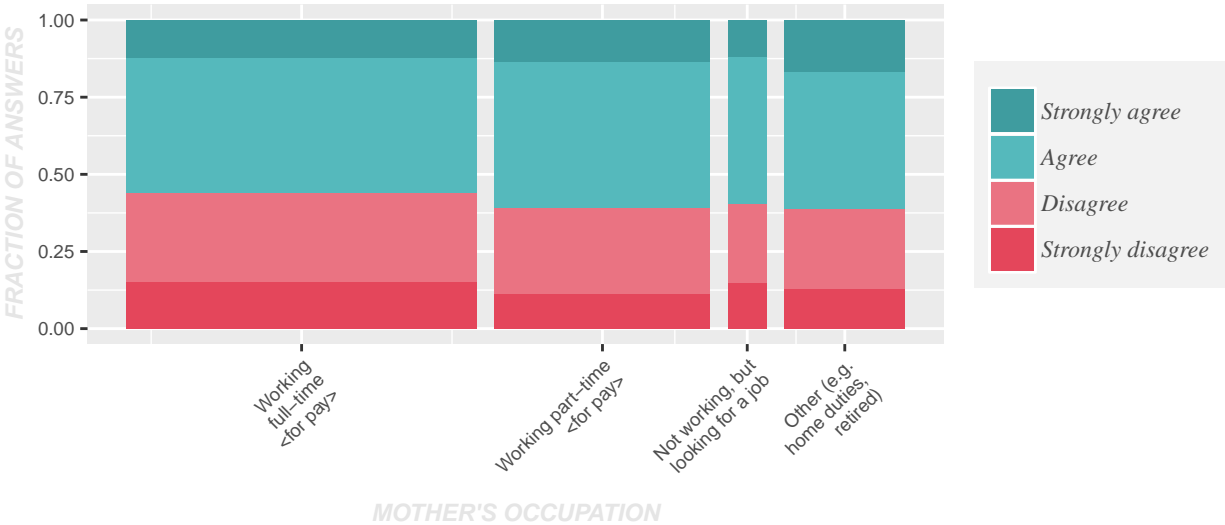
If I wanted to, I could do well in mathematics



Belgium

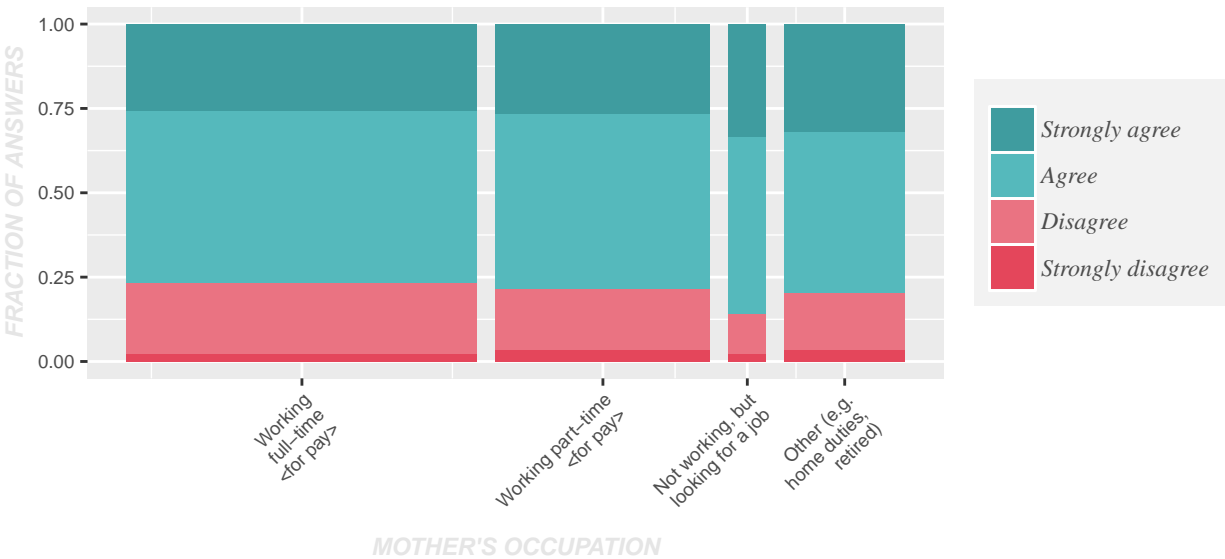
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

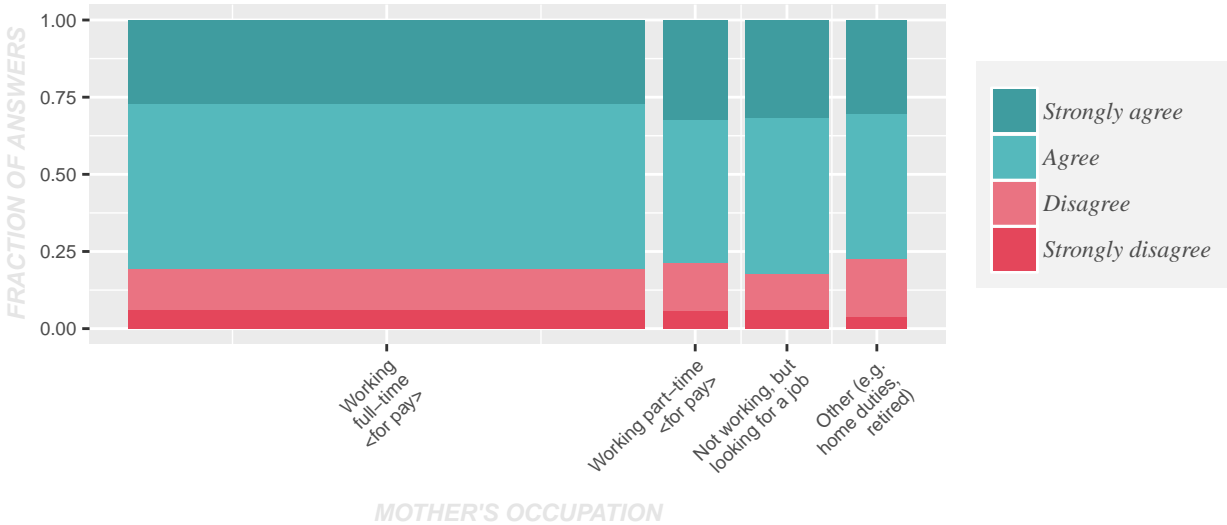
If I wanted to, I could do well in mathematics



Bulgaria

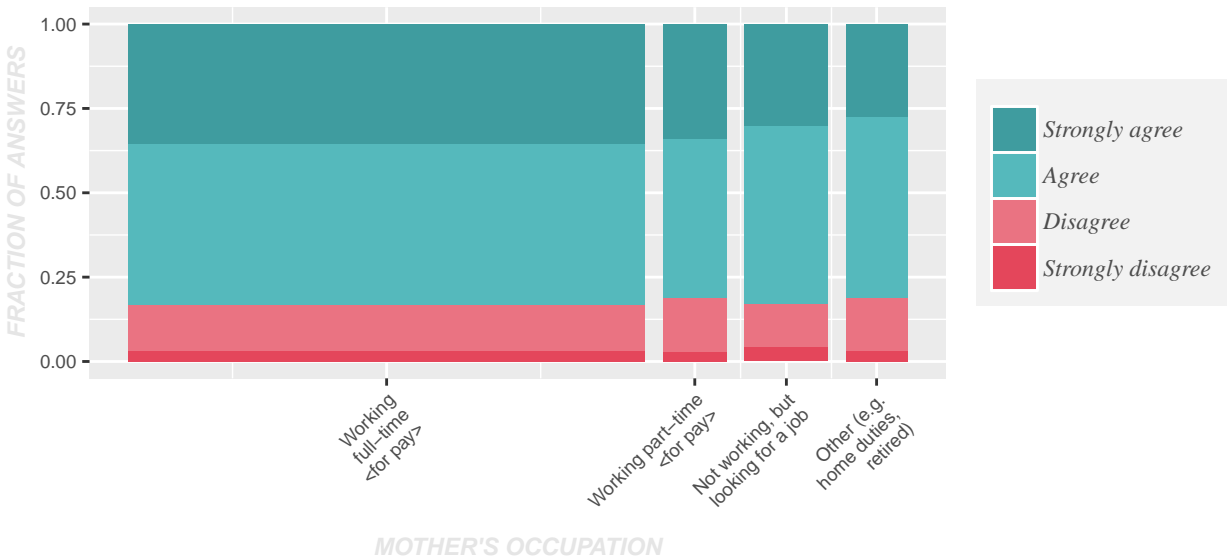
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

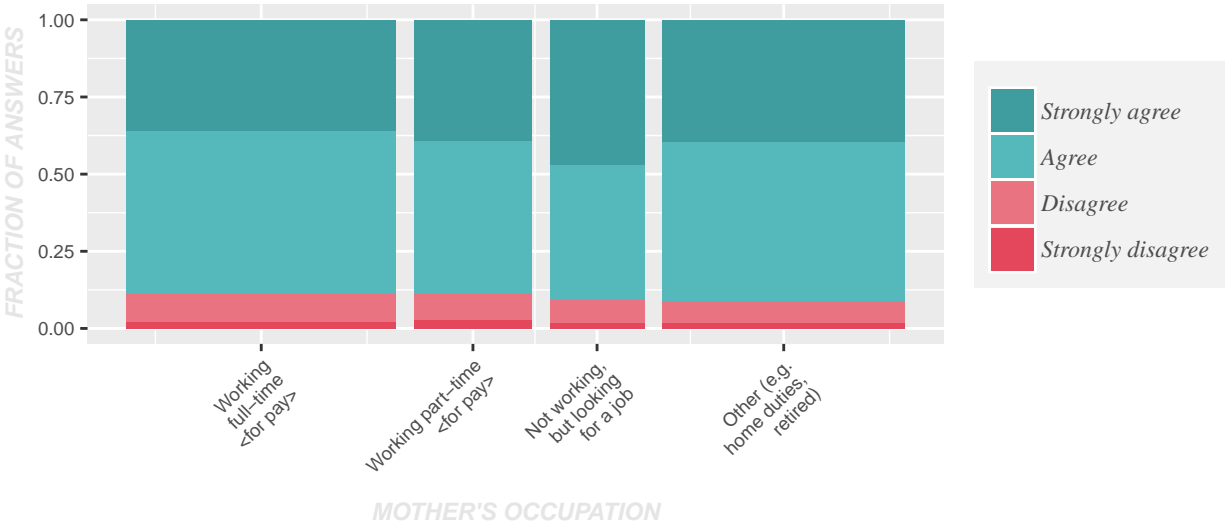
If I wanted to, I could do well in mathematics



Brazil

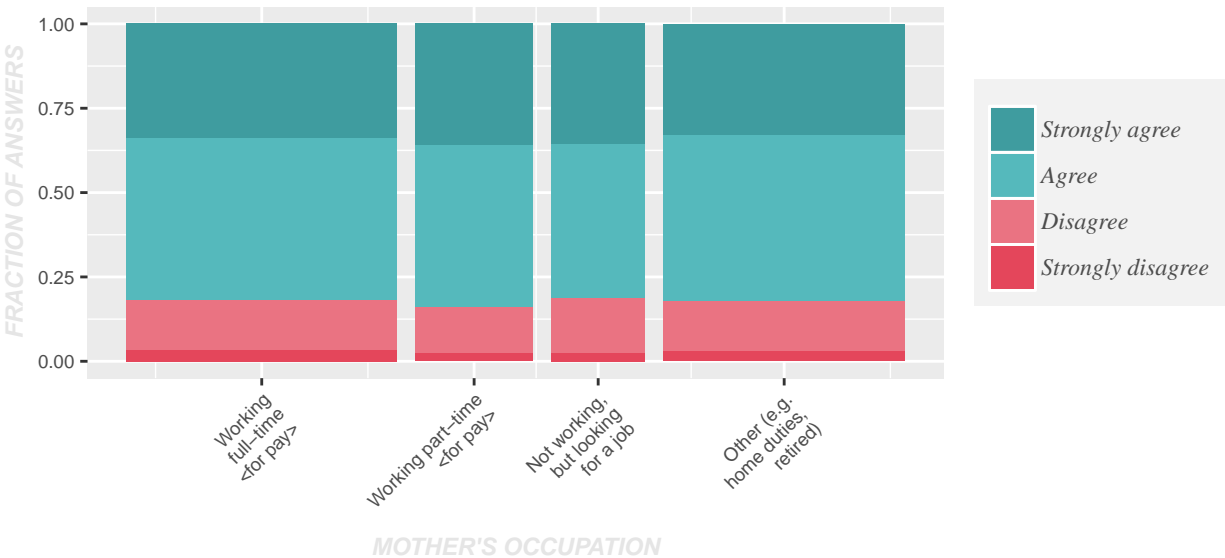
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

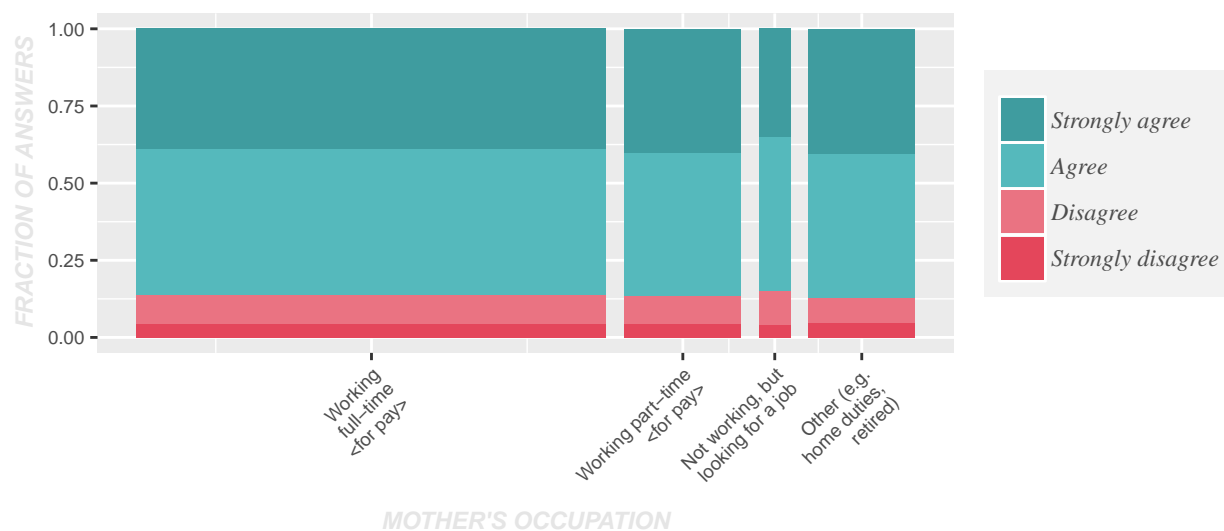
If I wanted to, I could do well in mathematics



Canada

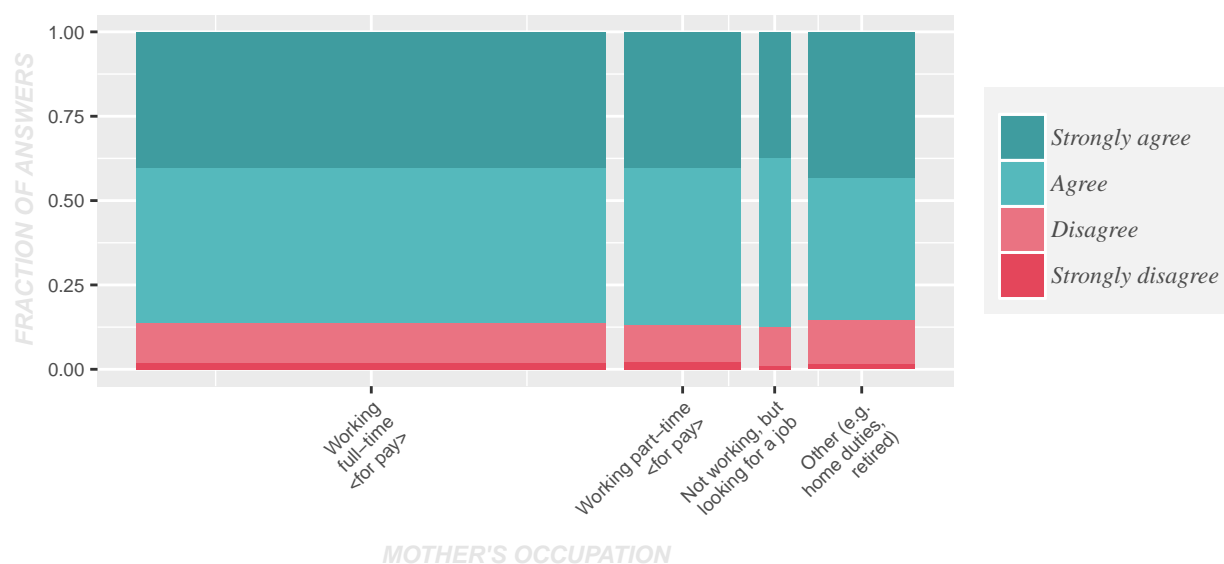
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

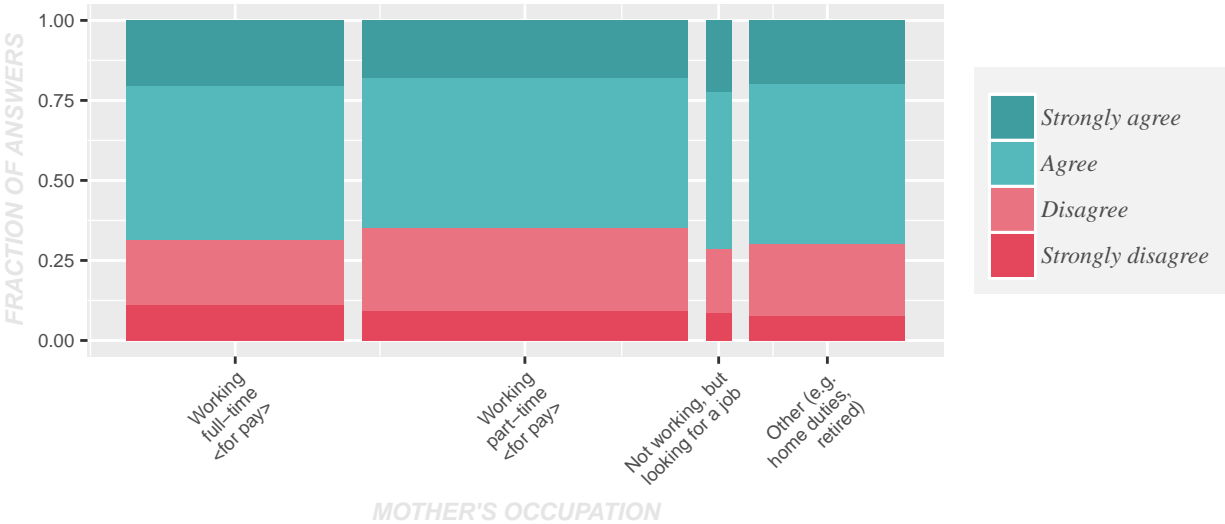
If I wanted to, I could do well in mathematics



Switzerland

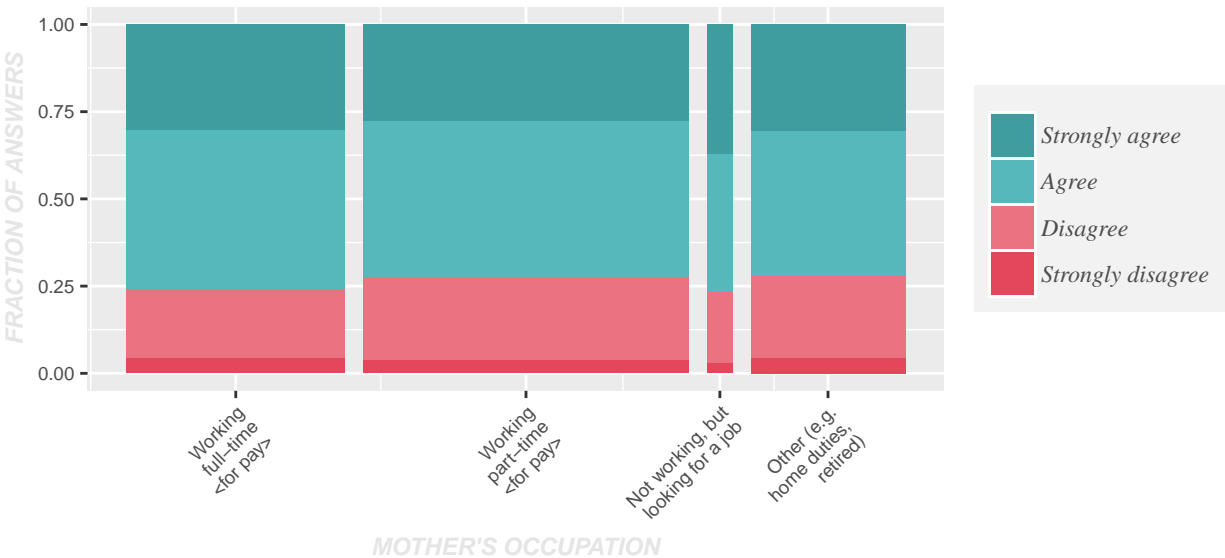
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

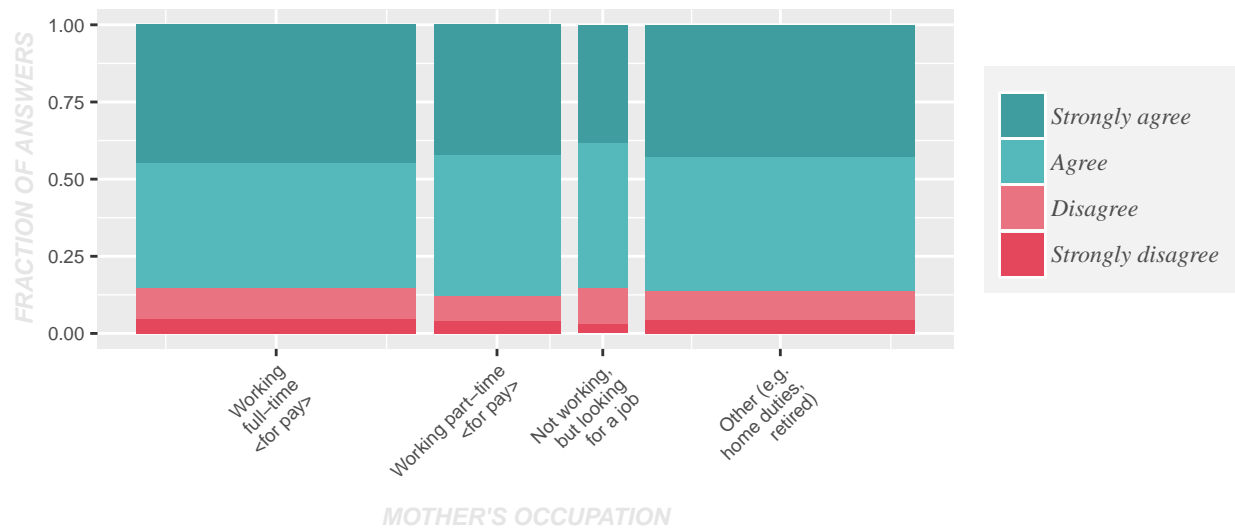
If I wanted to, I could do well in mathematics



Chile

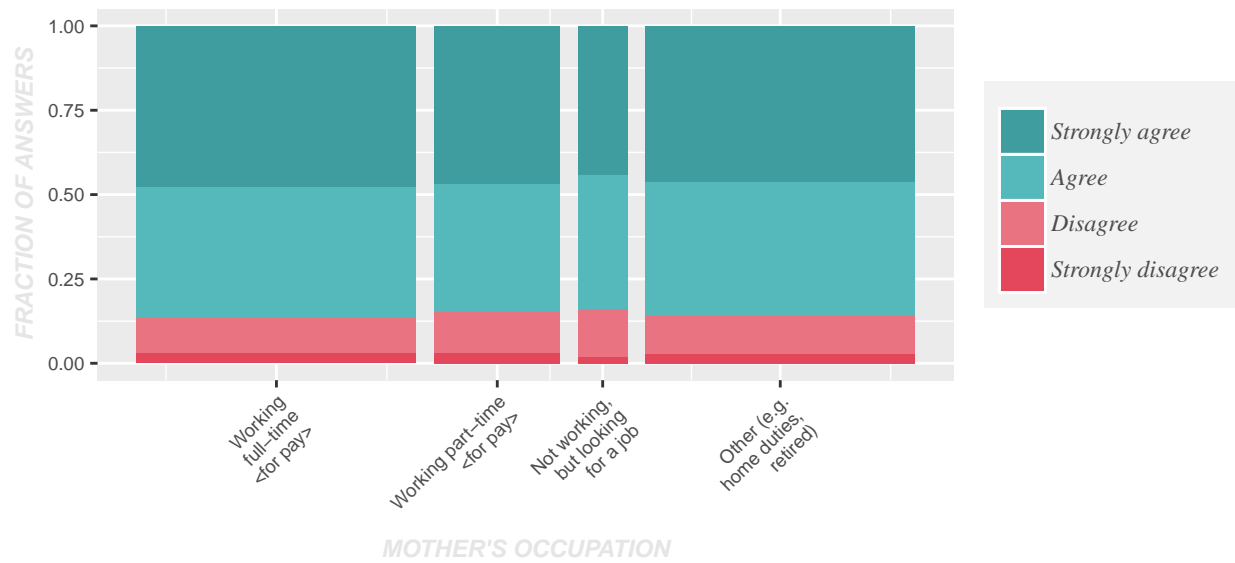
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

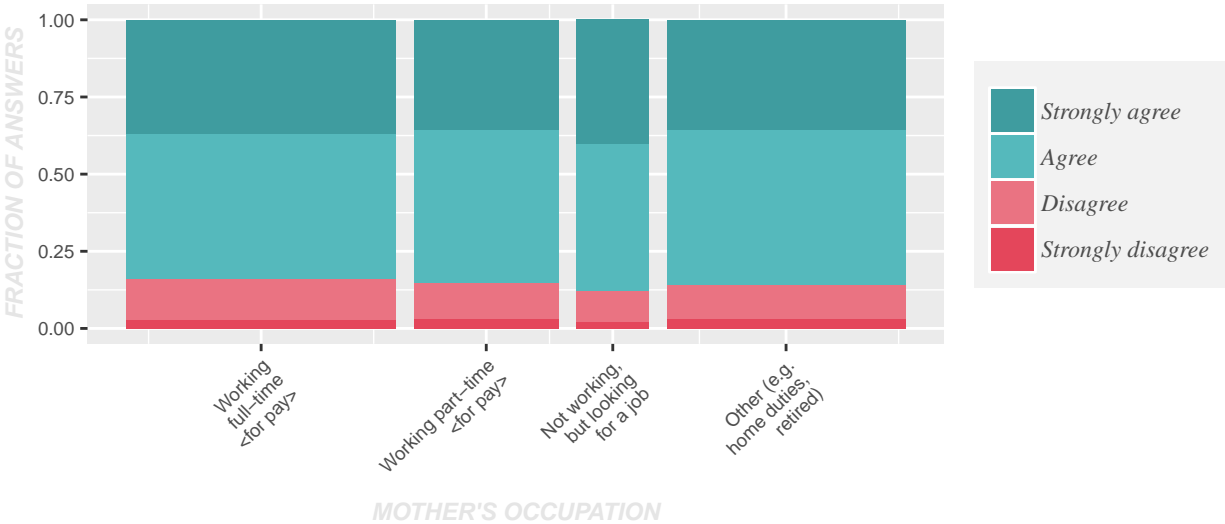
If I wanted to, I could do well in mathematics



Colombia

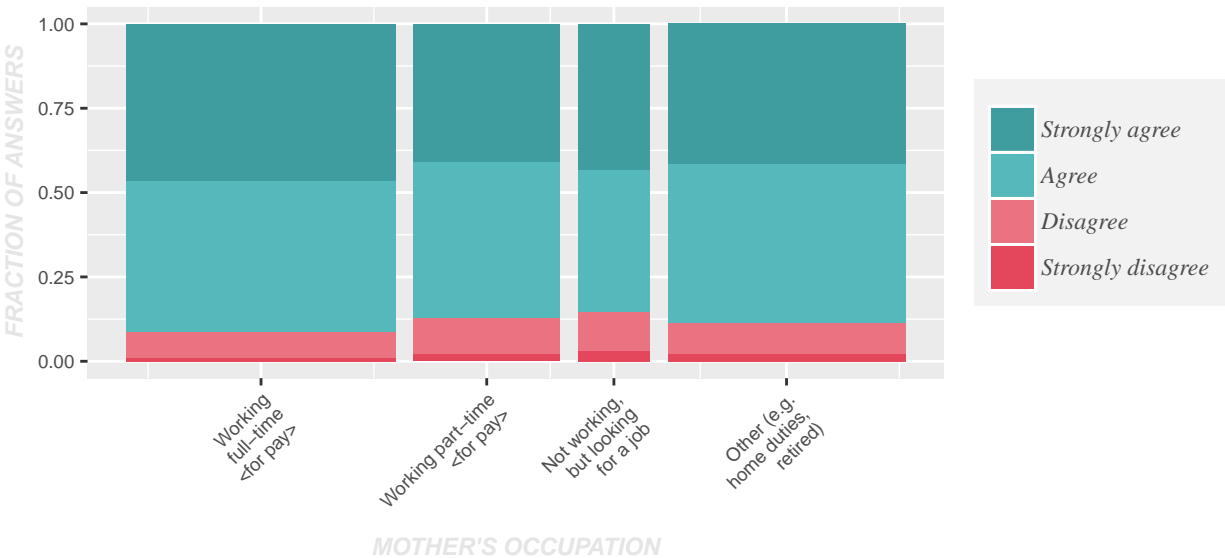
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

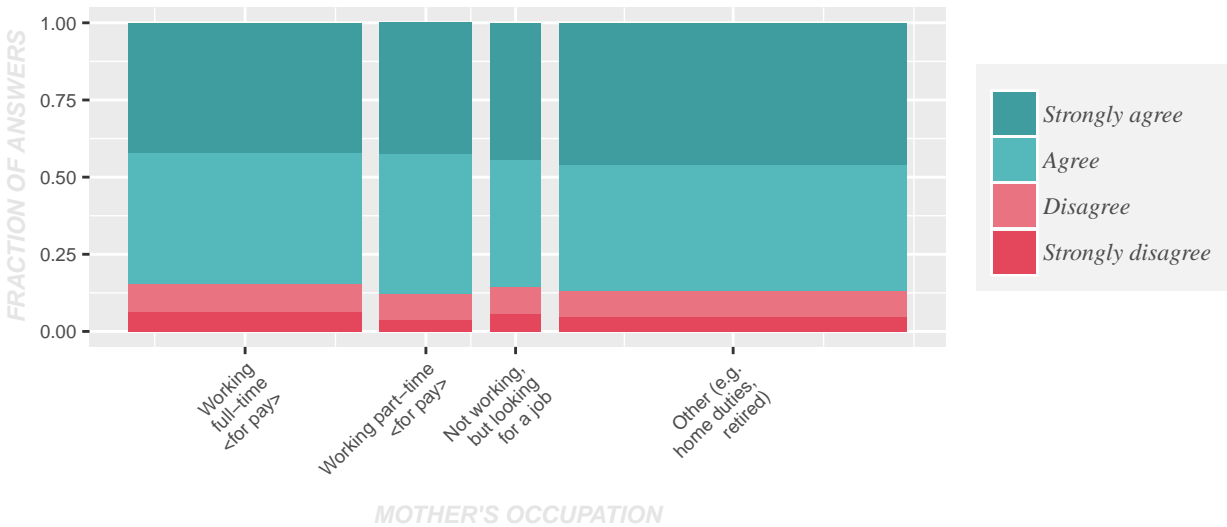
If I wanted to, I could do well in mathematics



Costa Rica

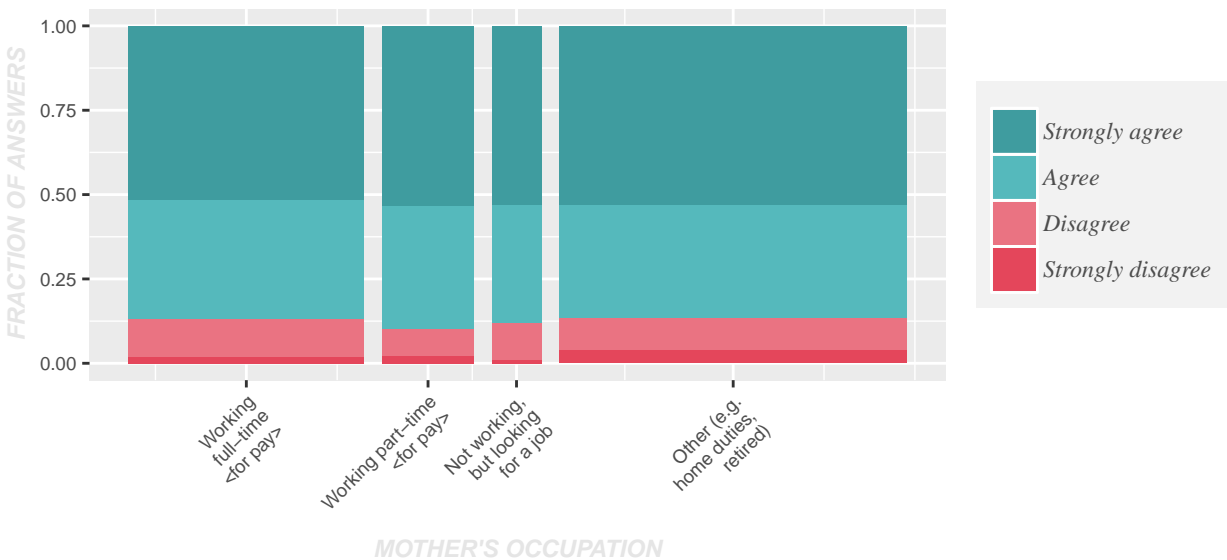
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

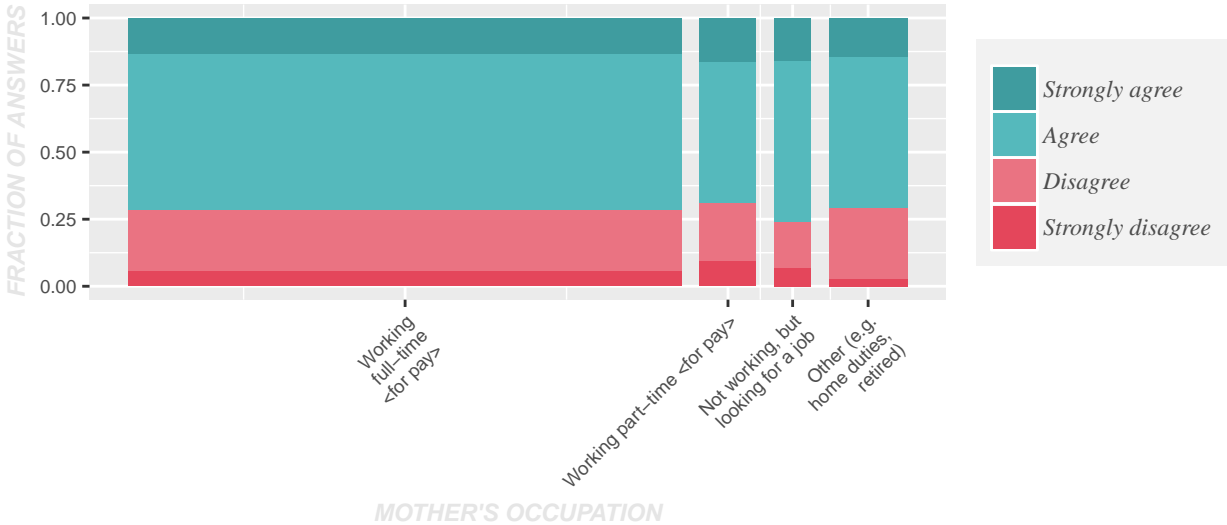
If I wanted to, I could do well in mathematics



Czech Republic

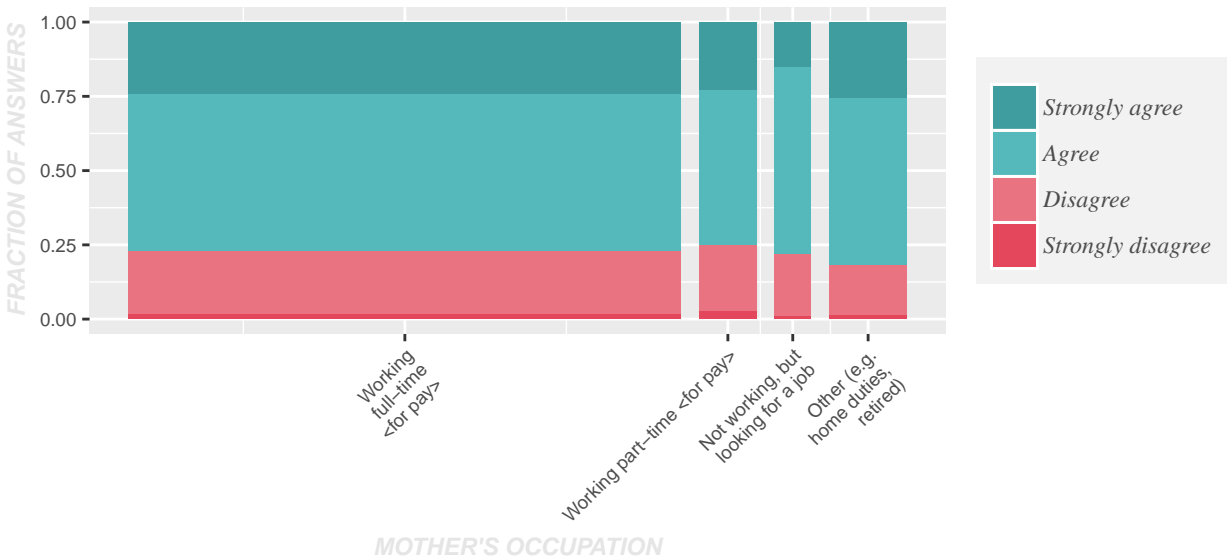
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

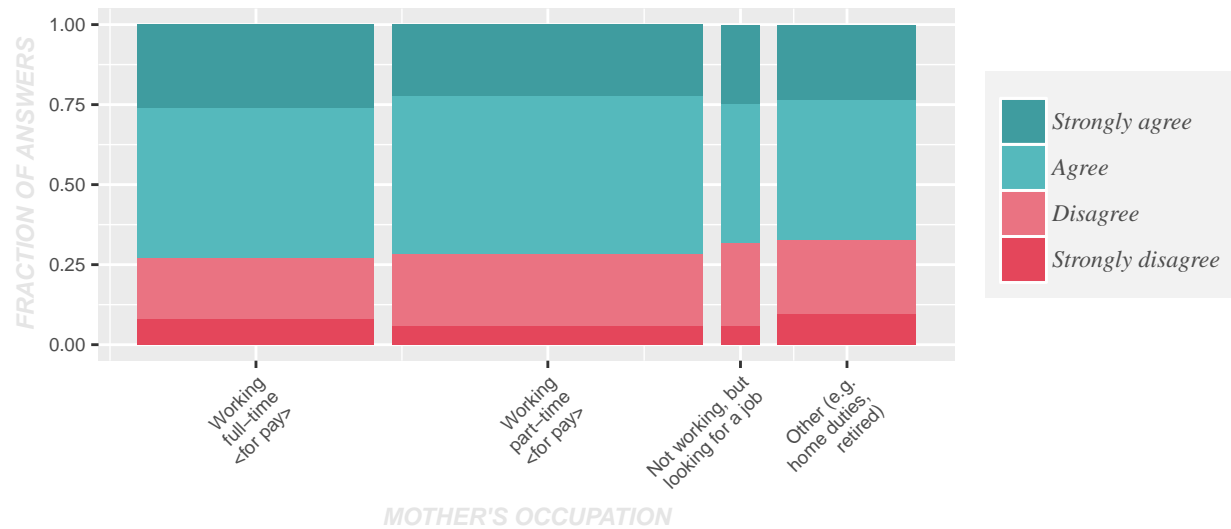
If I wanted to, I could do well in mathematics



Germany

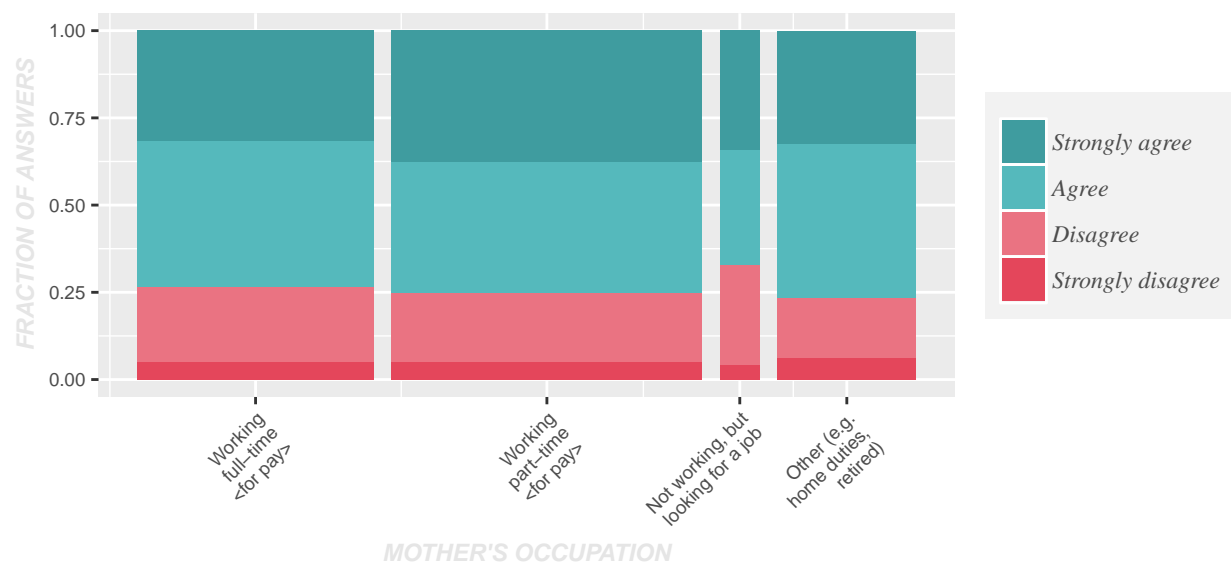
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

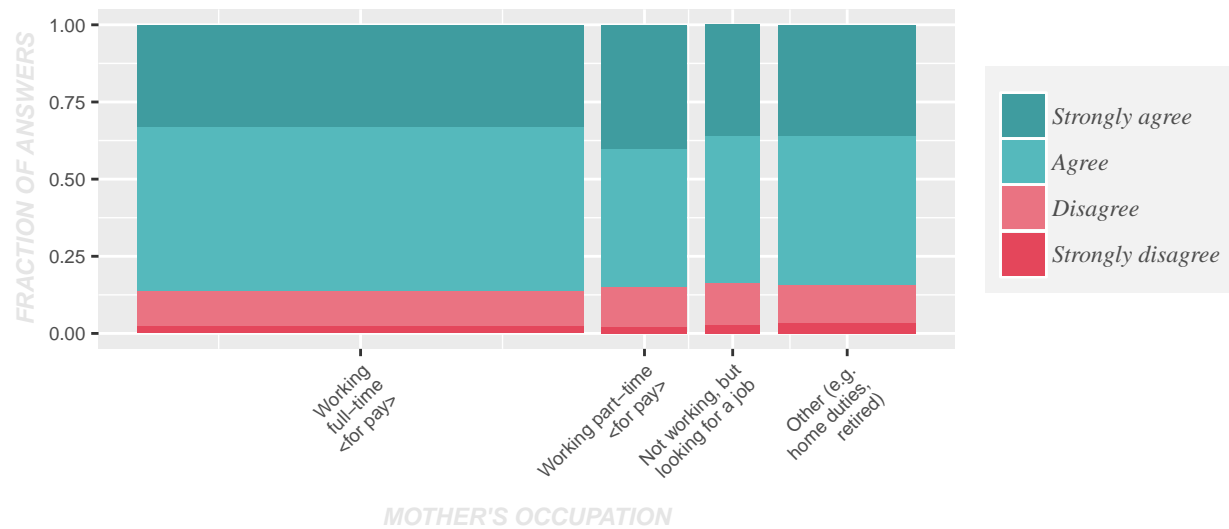
If I wanted to, I could do well in mathematics



Denmark

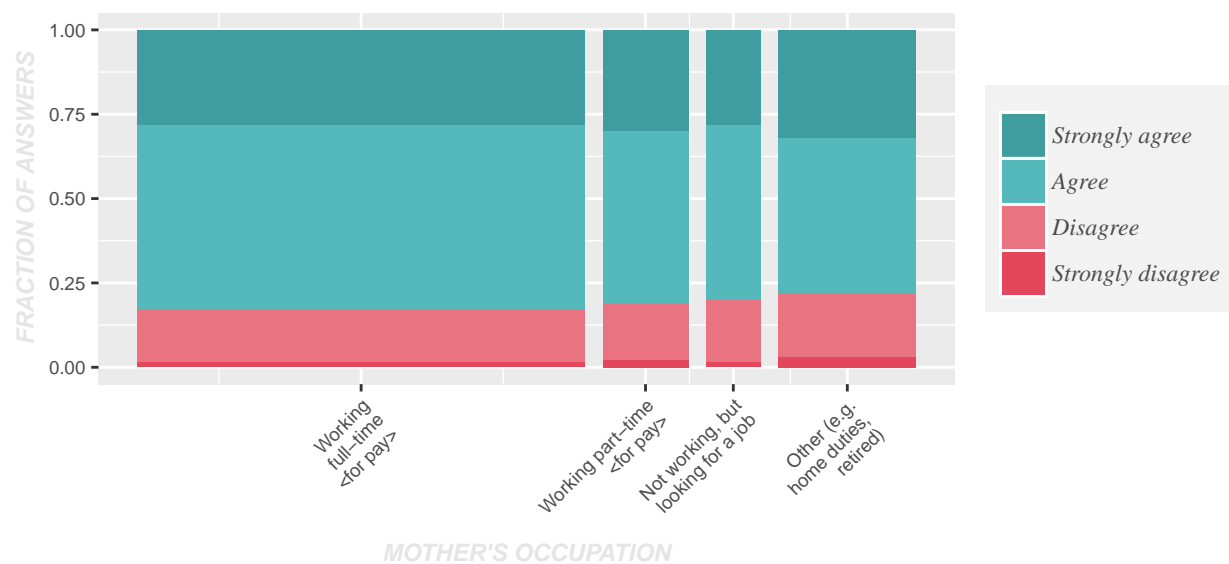
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

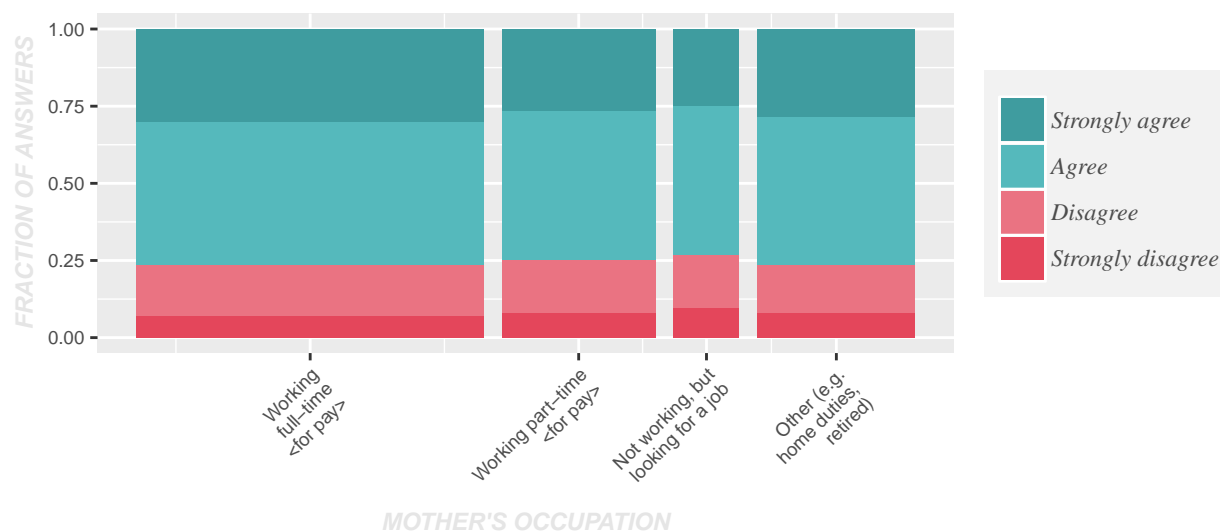
If I wanted to, I could do well in mathematics



Spain

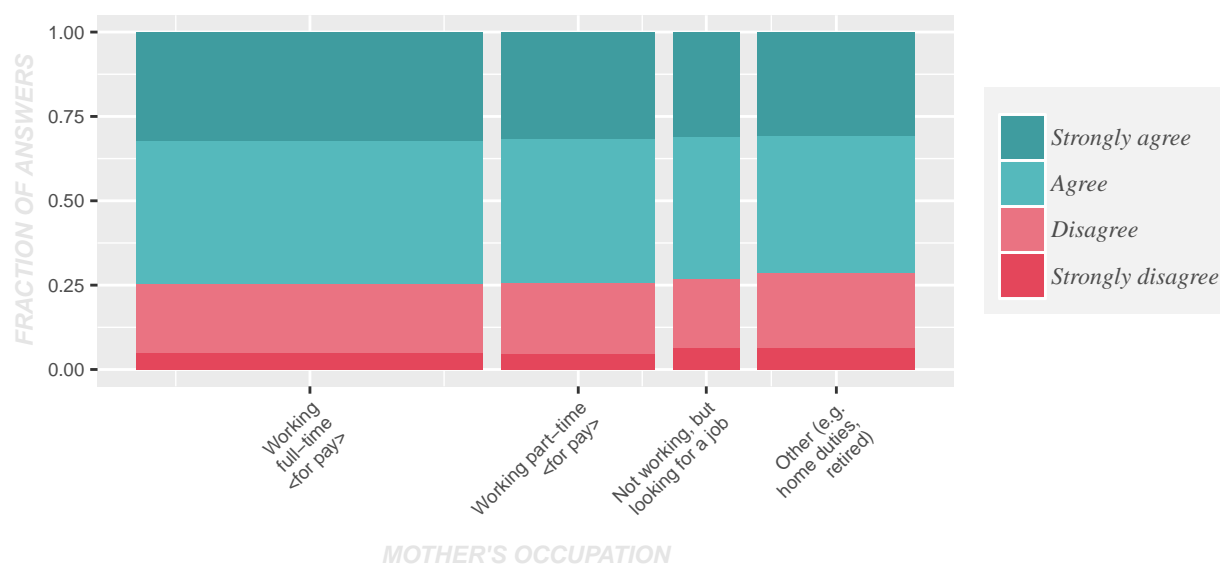
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

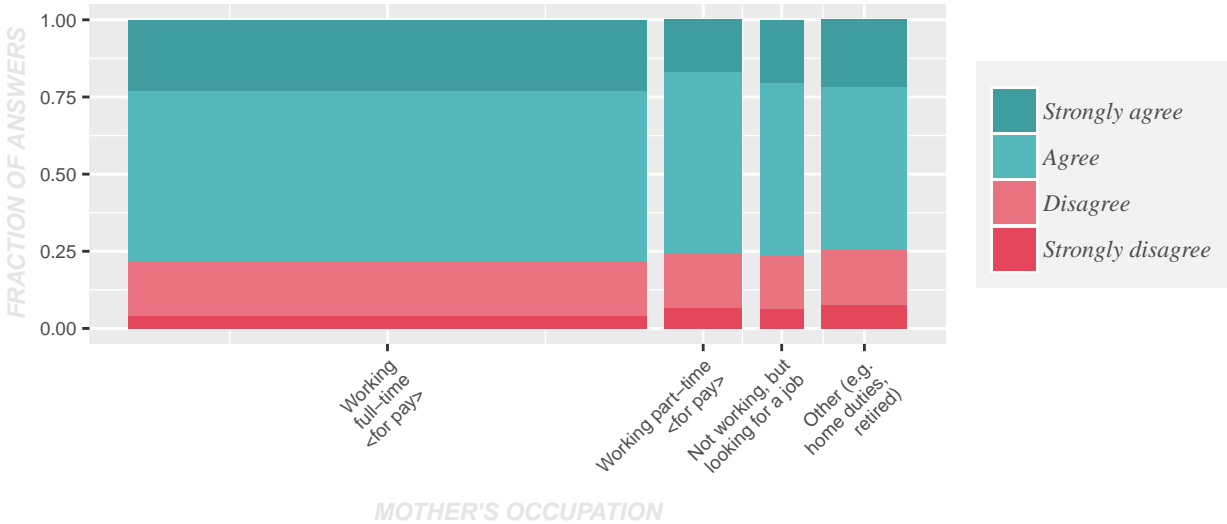
If I wanted to, I could do well in mathematics



Estonia

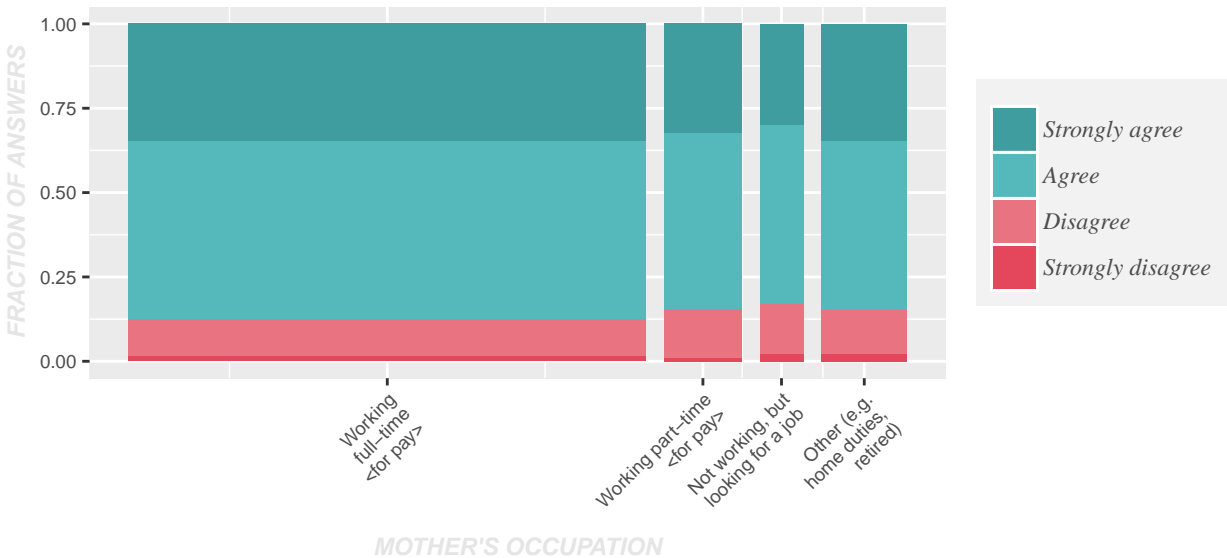
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

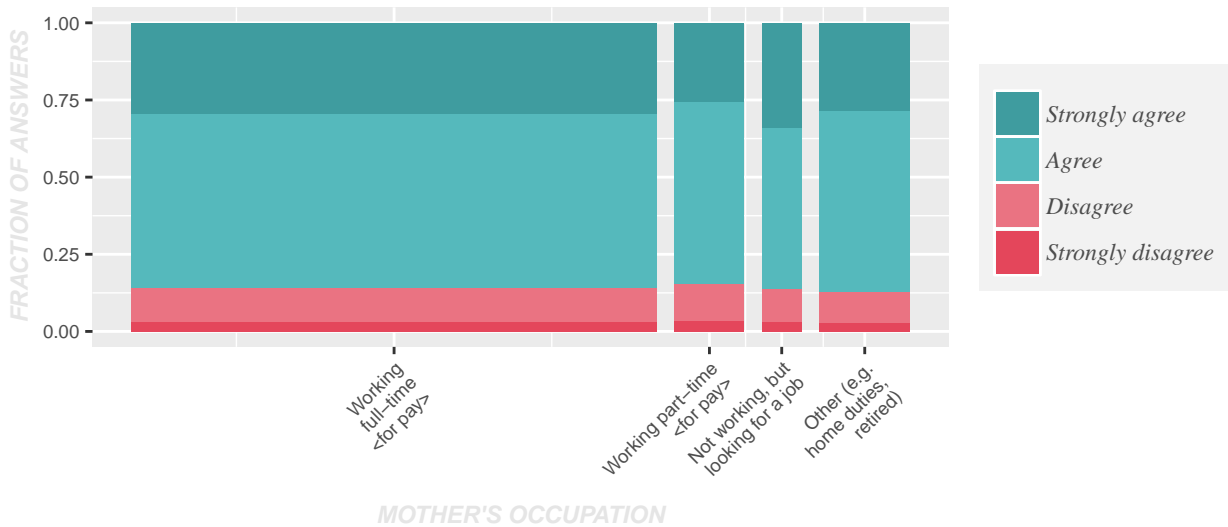
If I wanted to, I could do well in mathematics



Finland

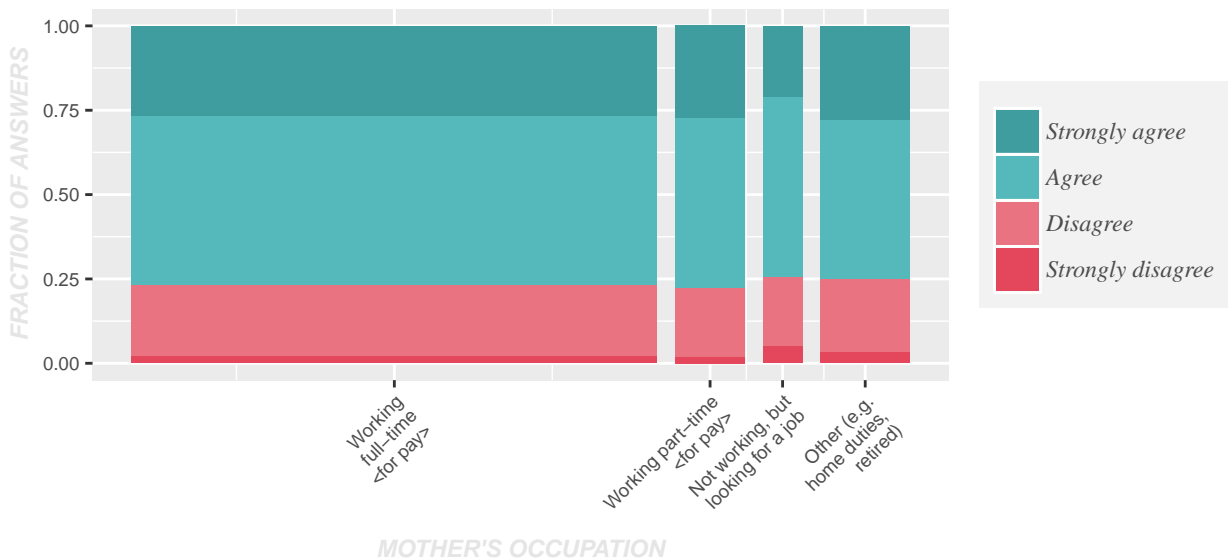
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

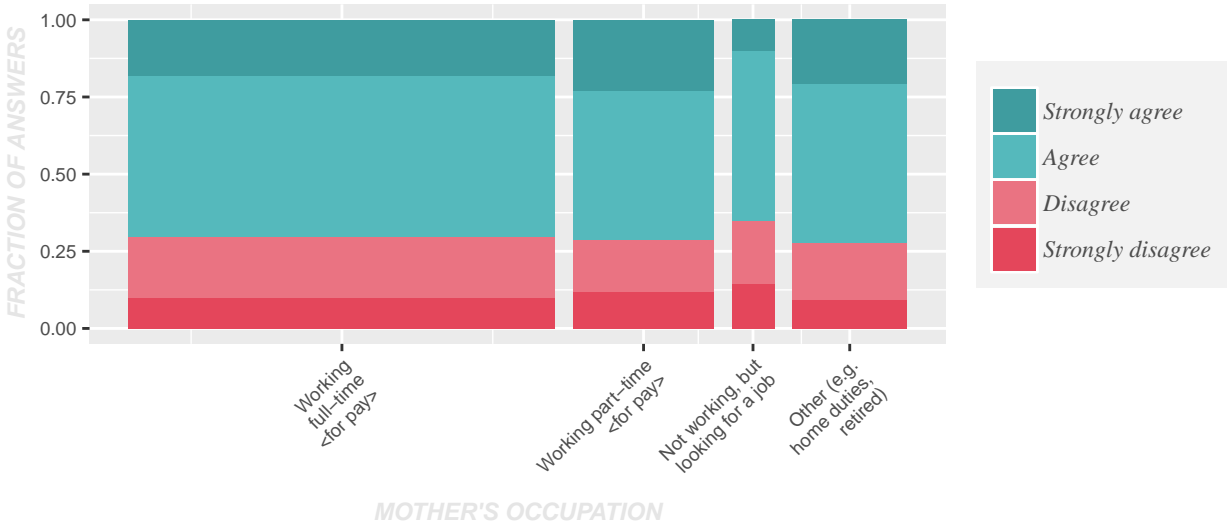
If I wanted to, I could do well in mathematics



France

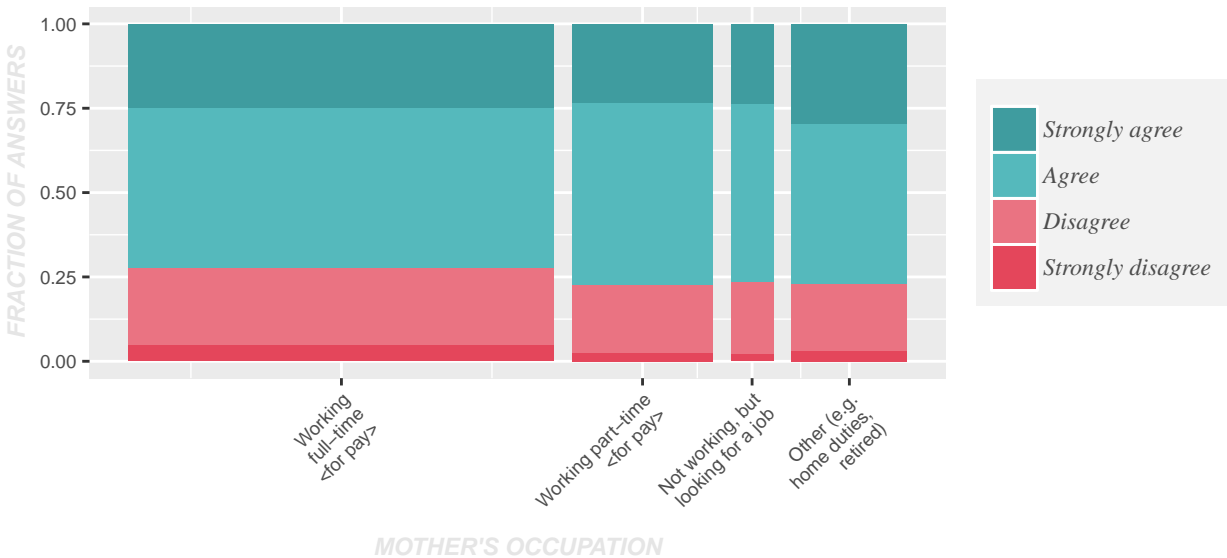
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

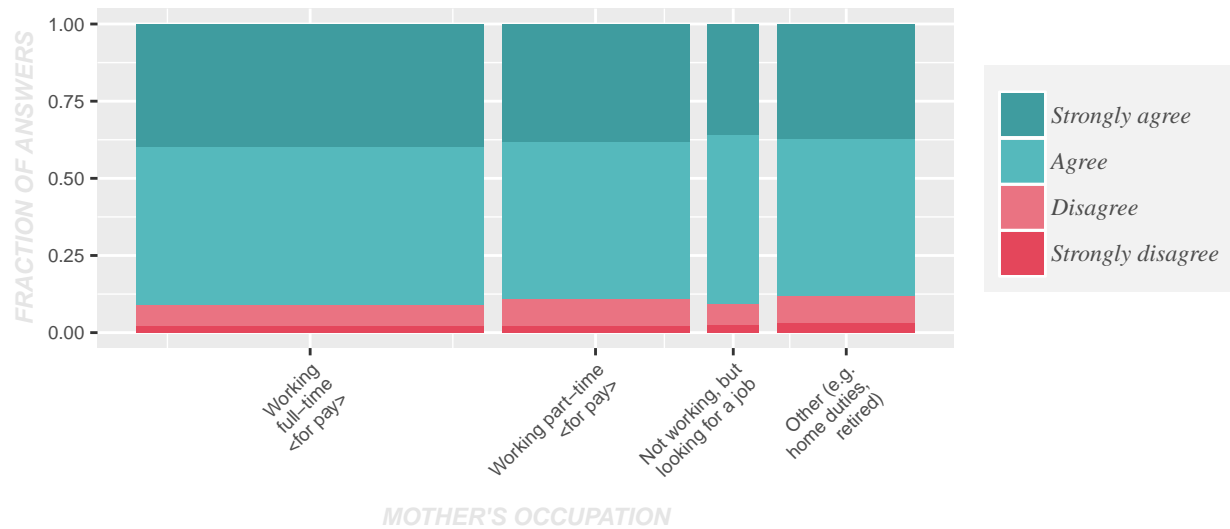
If I wanted to, I could do well in mathematics



United Kingdom

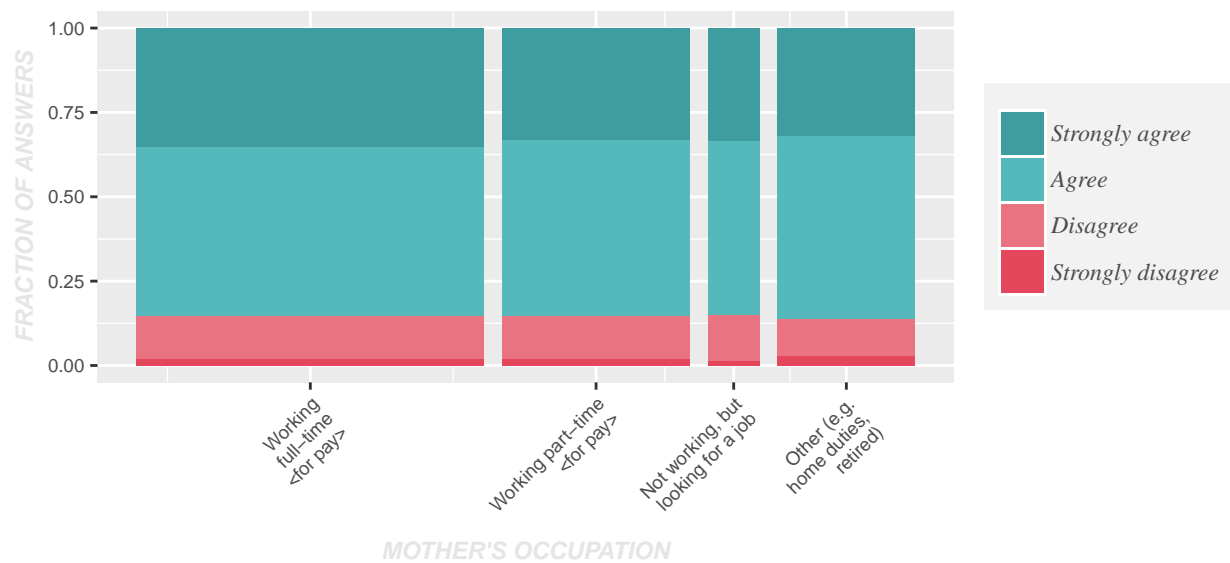
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

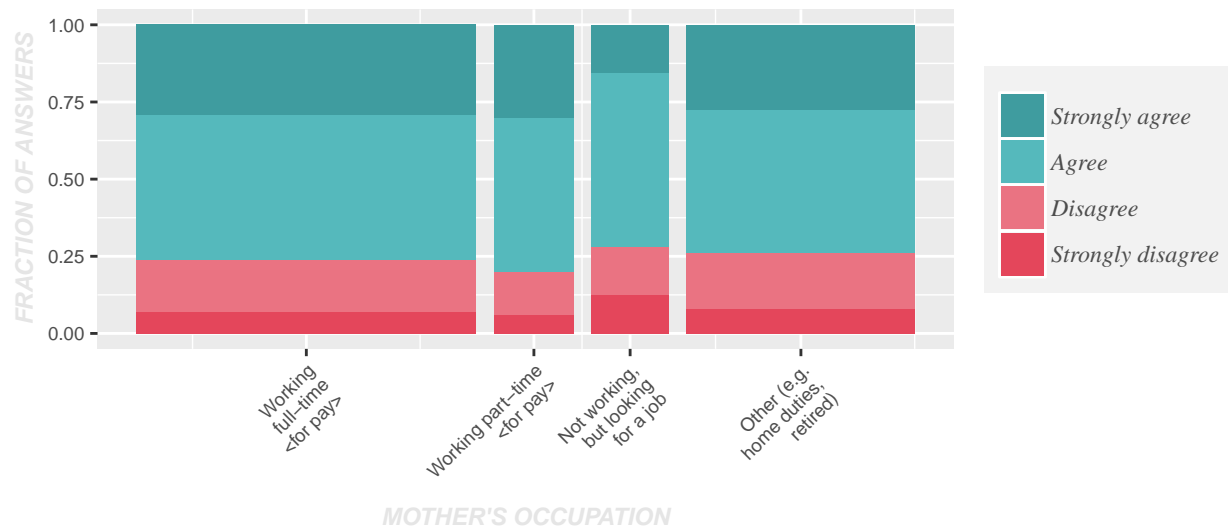
If I wanted to, I could do well in mathematics



Greece

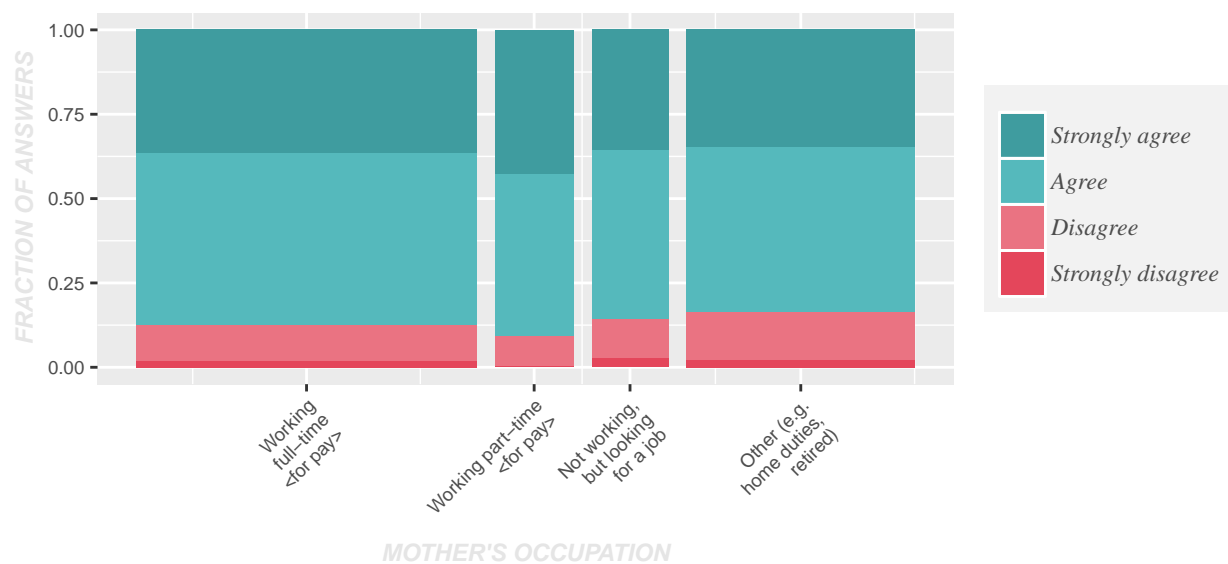
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

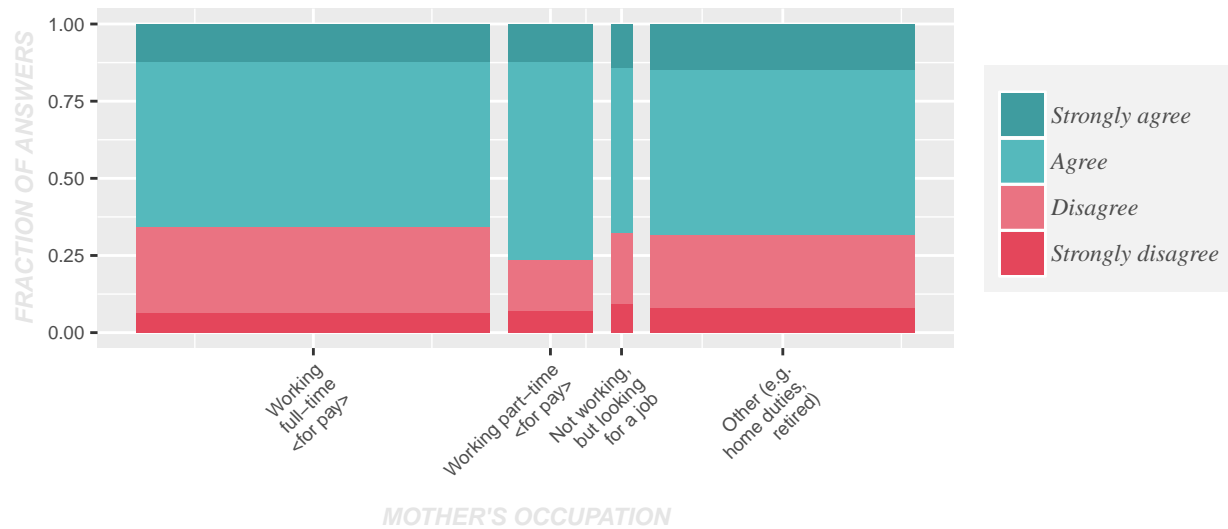
If I wanted to, I could do well in mathematics



Hong Kong-China

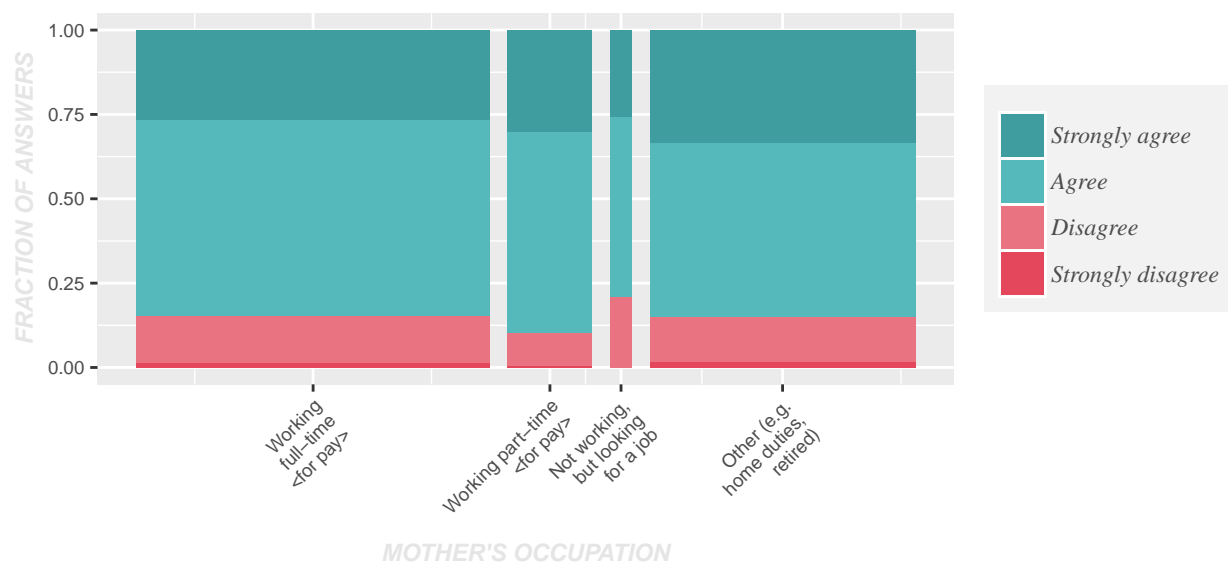
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

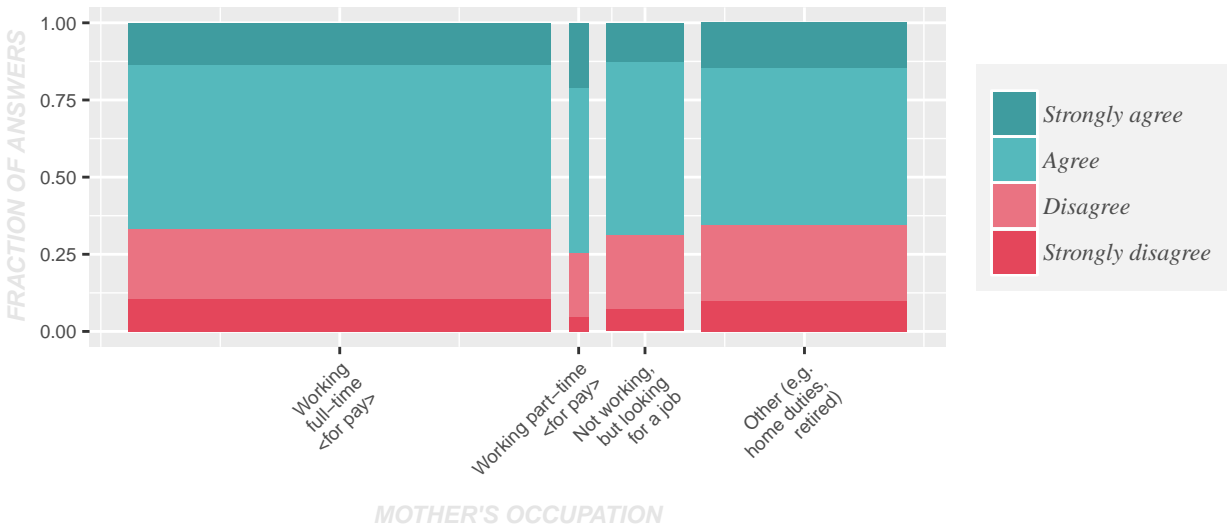
If I wanted to, I could do well in mathematics



Croatia

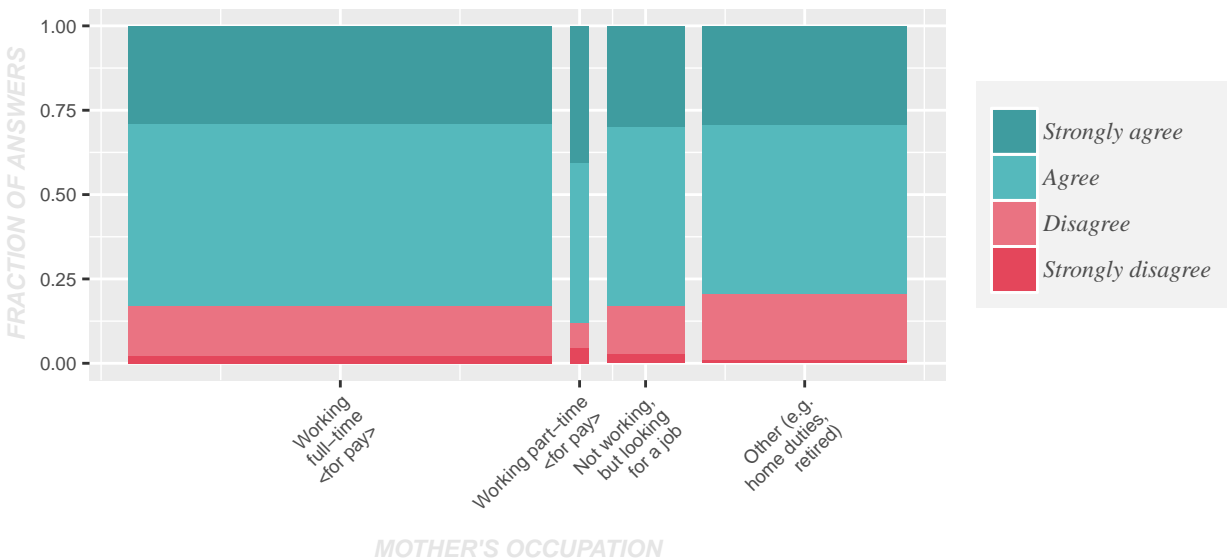
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

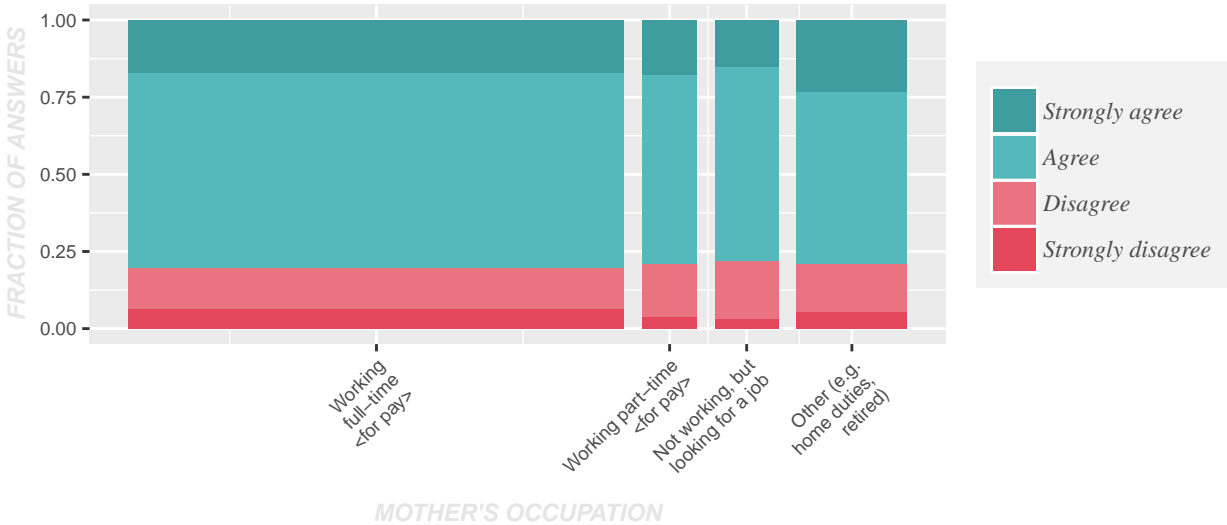
If I wanted to, I could do well in mathematics



Hungary

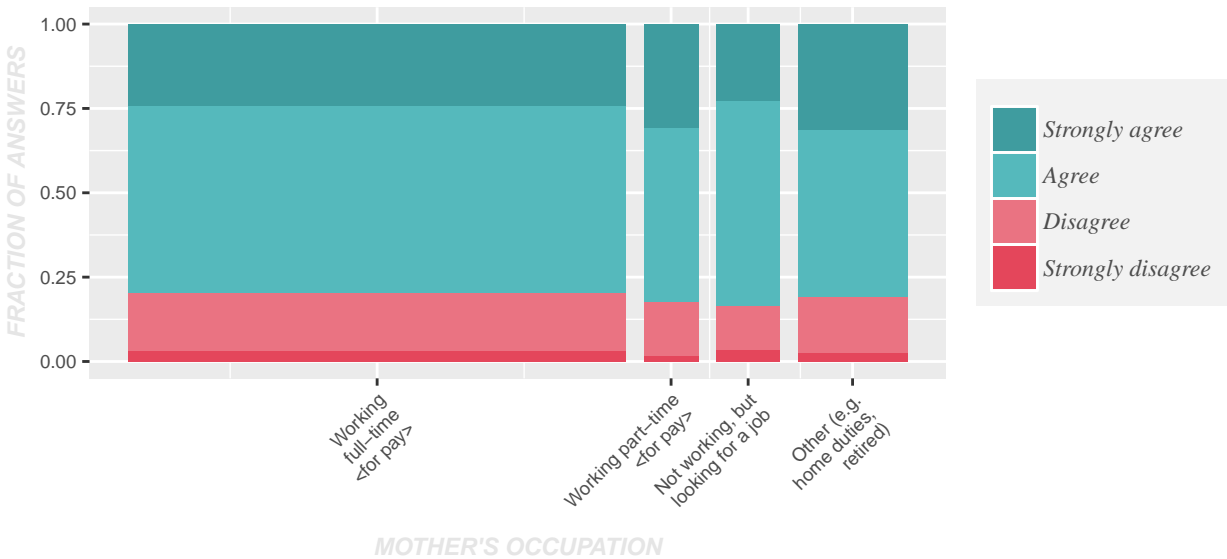
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

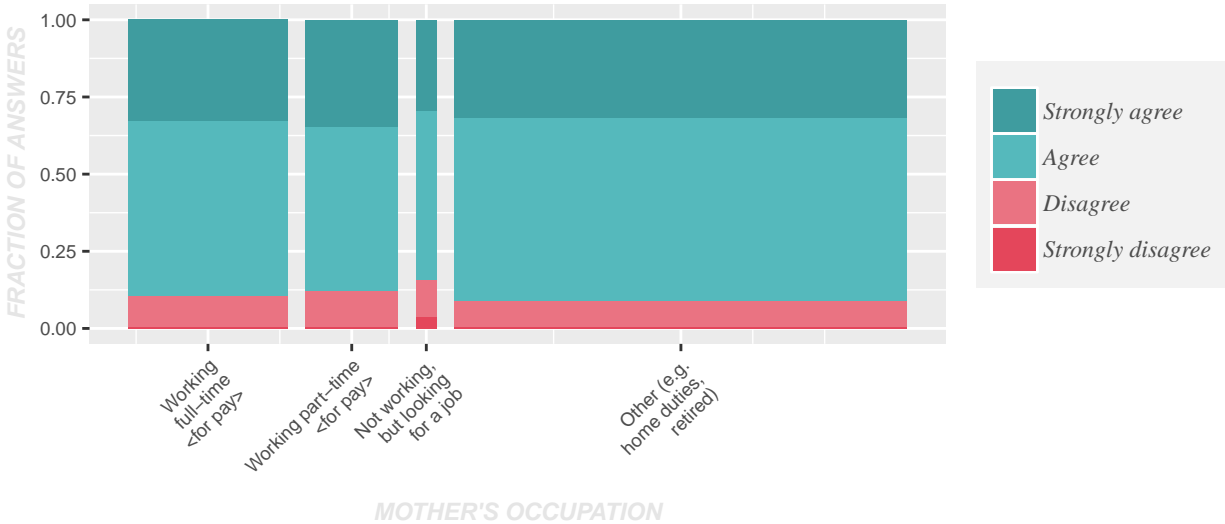
If I wanted to, I could do well in mathematics



Indonesia

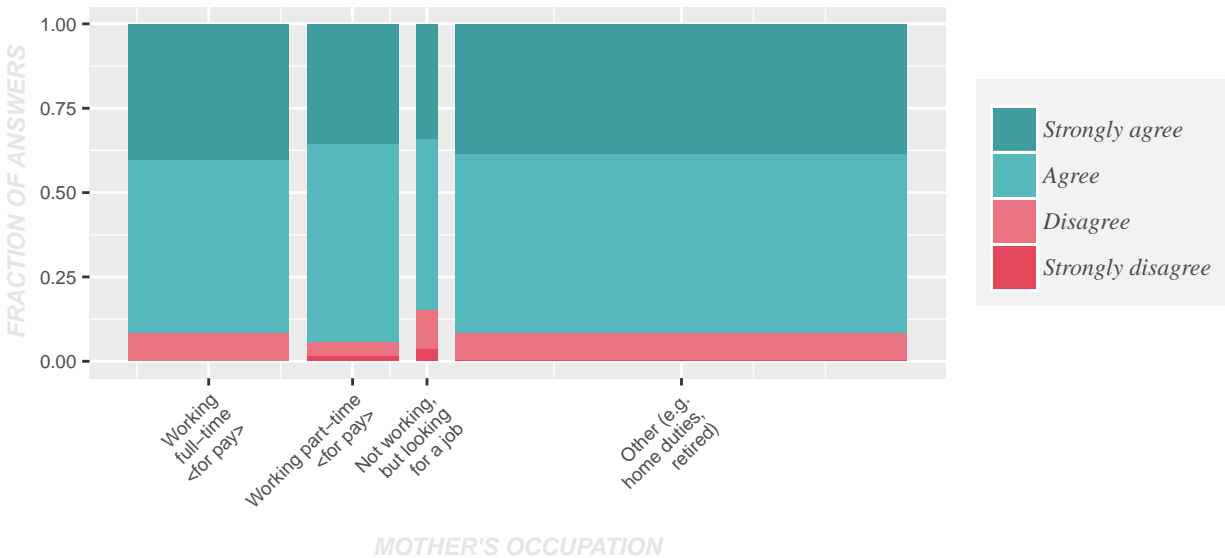
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

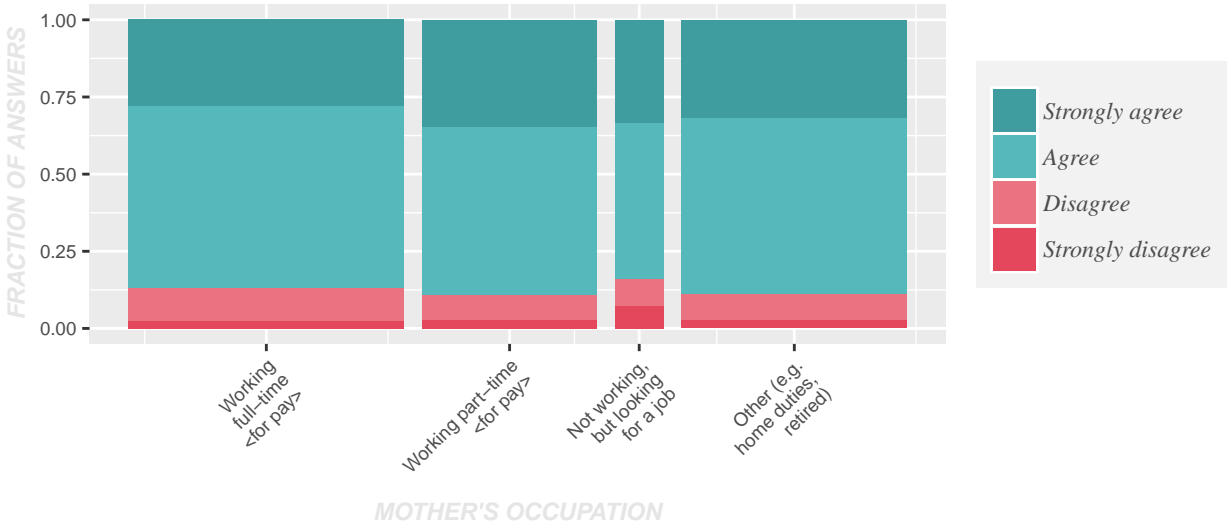
If I wanted to, I could do well in mathematics



Ireland

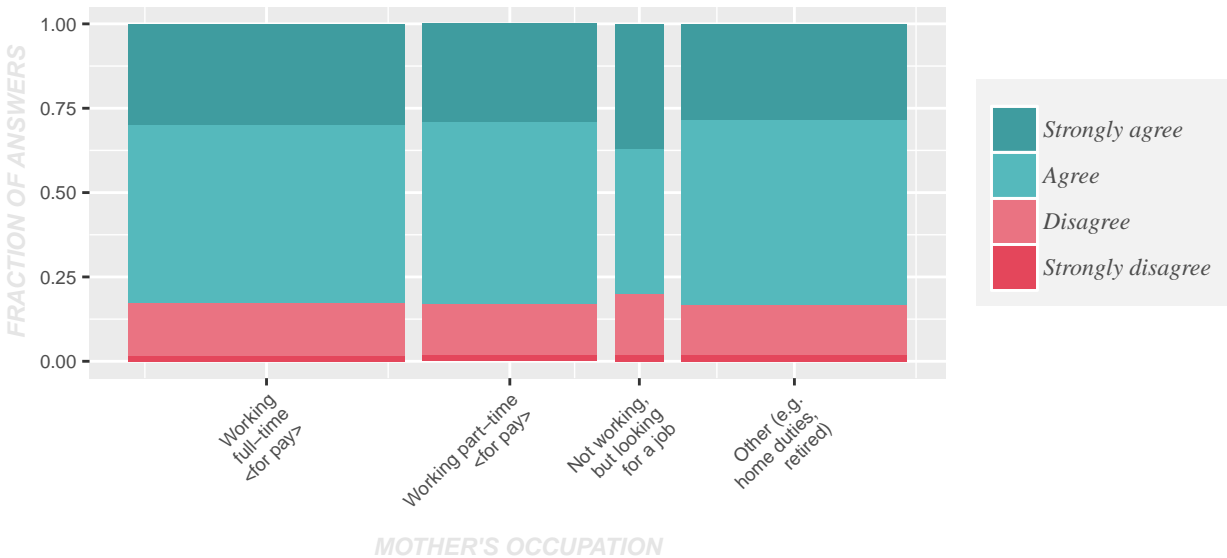
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

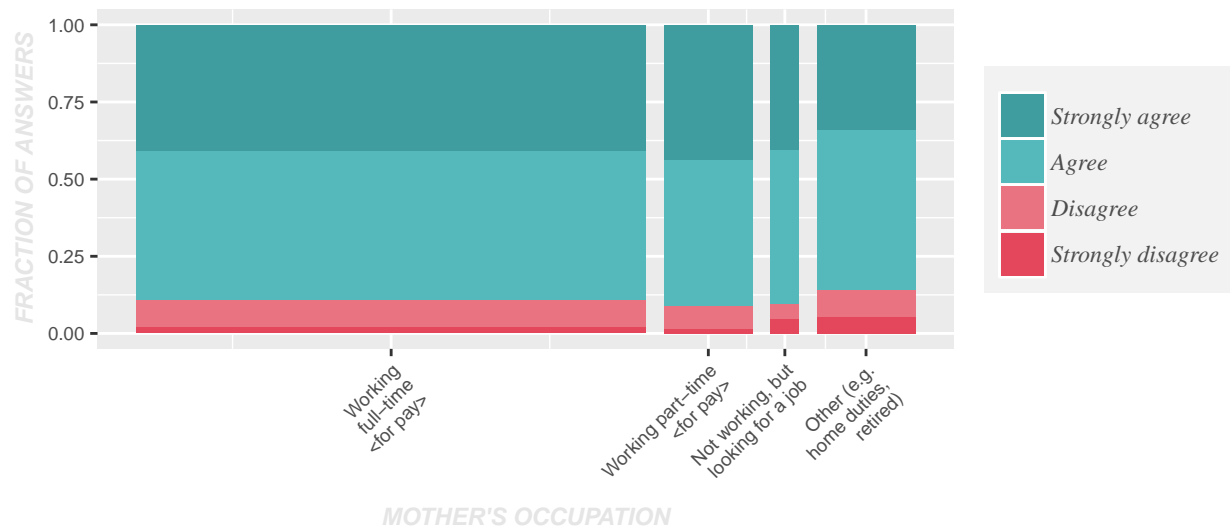
If I wanted to, I could do well in mathematics



Iceland

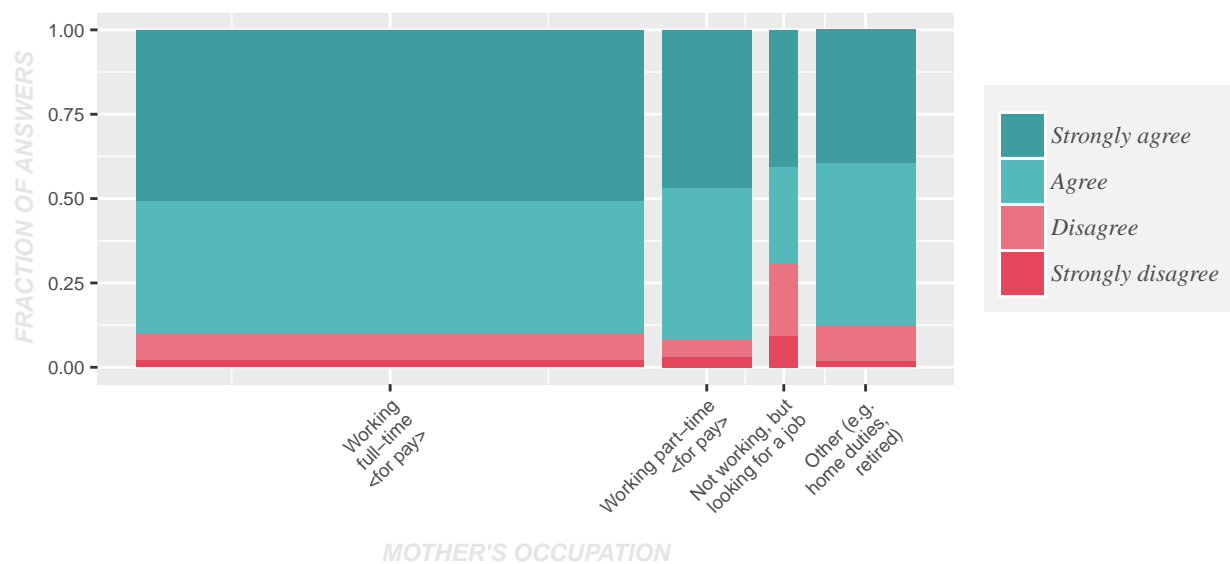
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

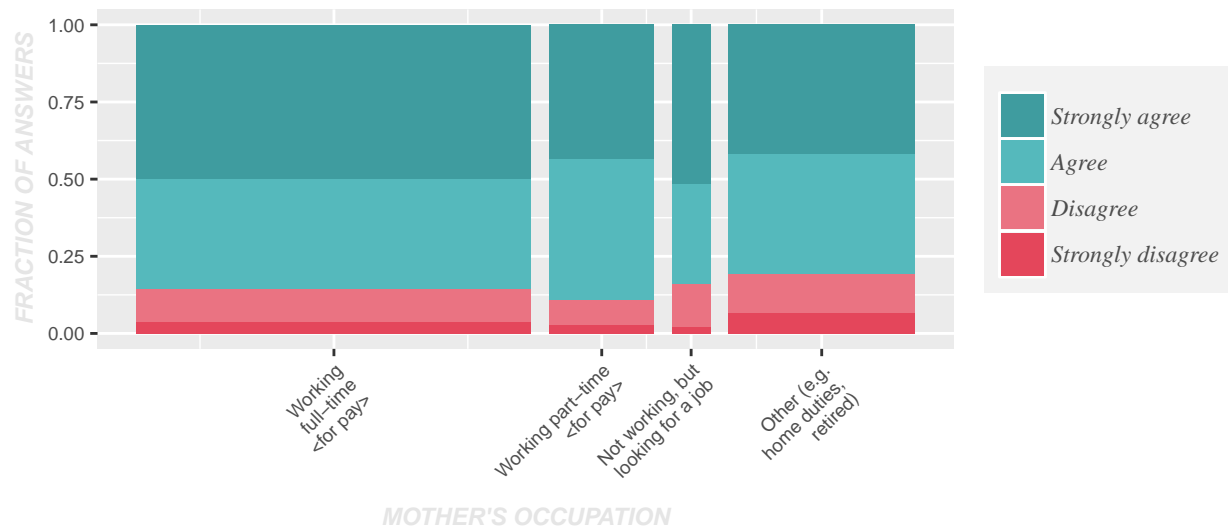
If I wanted to, I could do well in mathematics



Israel

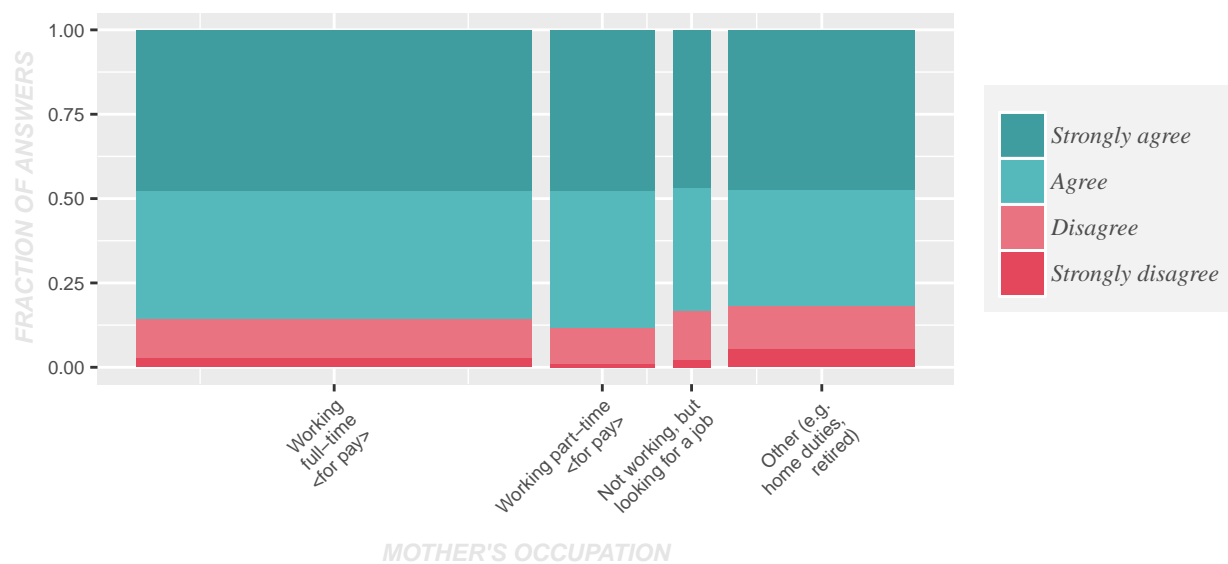
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

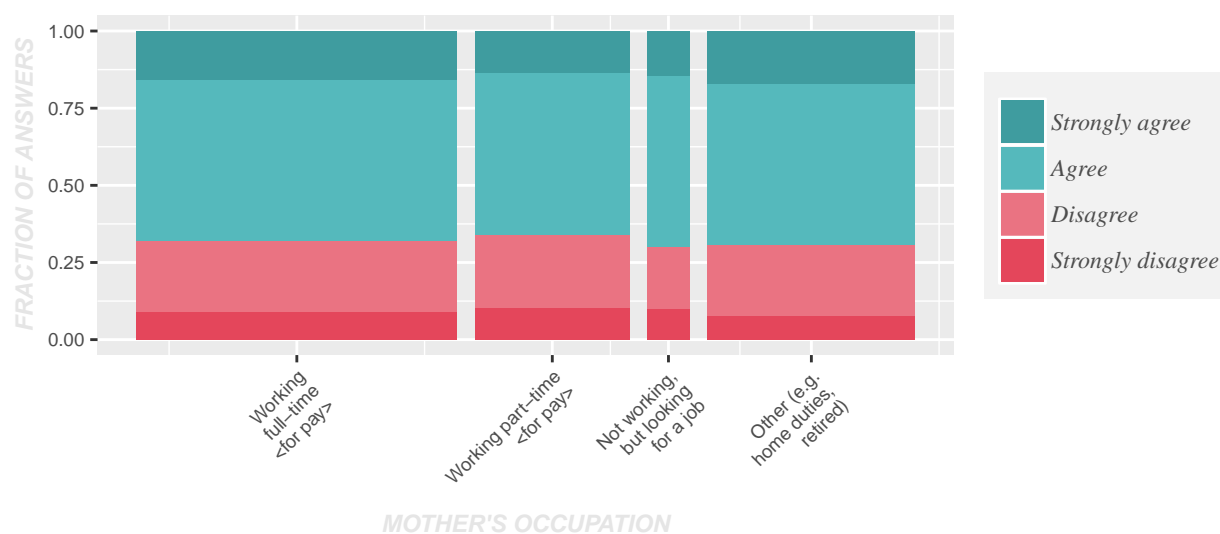
If I wanted to, I could do well in mathematics



Italy

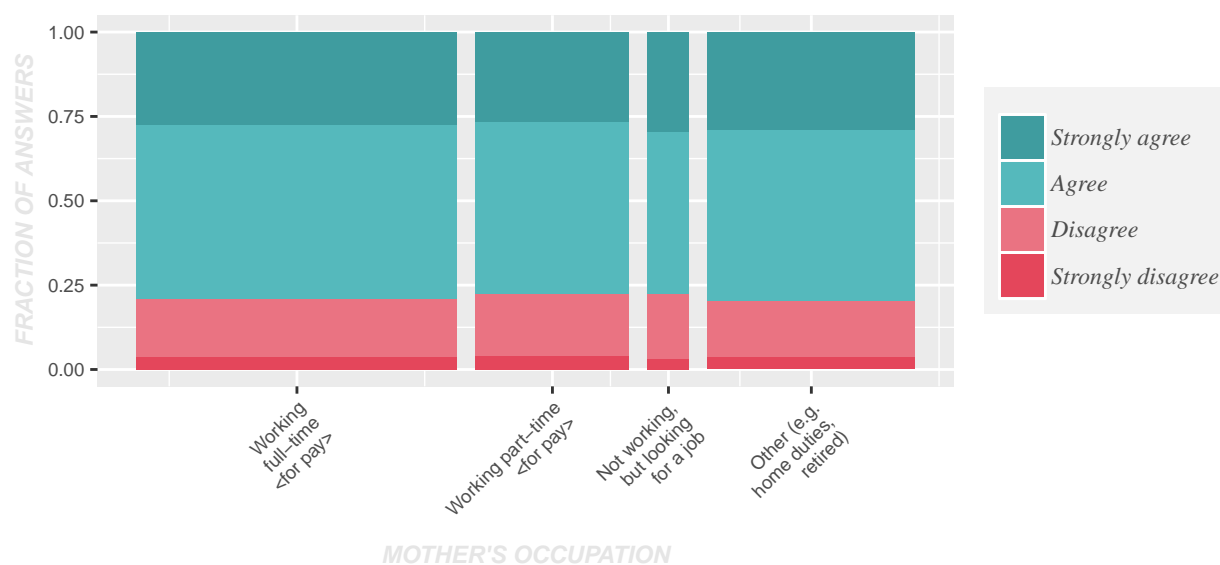
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

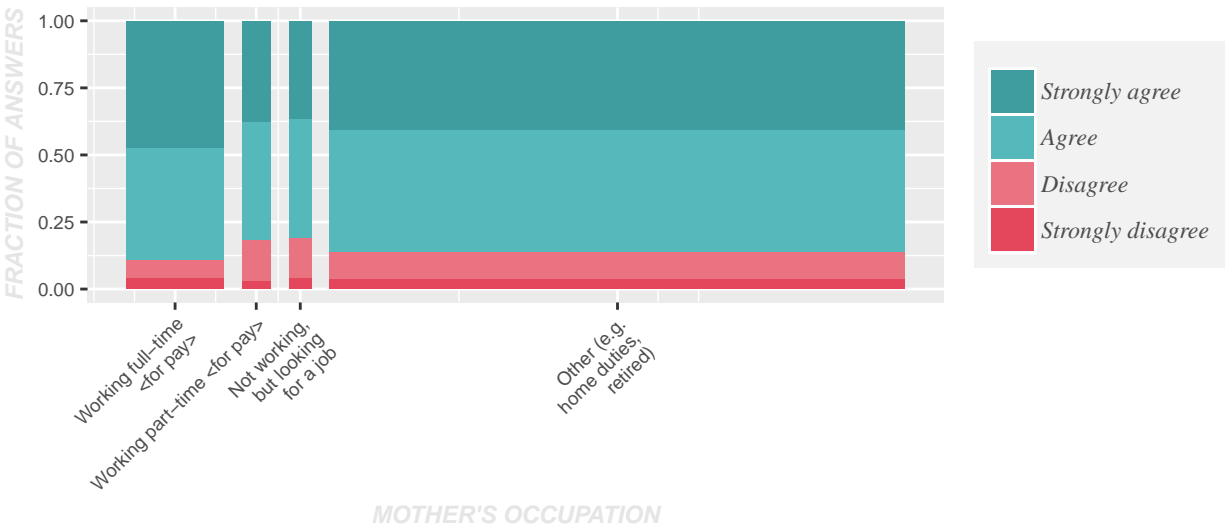
If I wanted to, I could do well in mathematics



Jordan

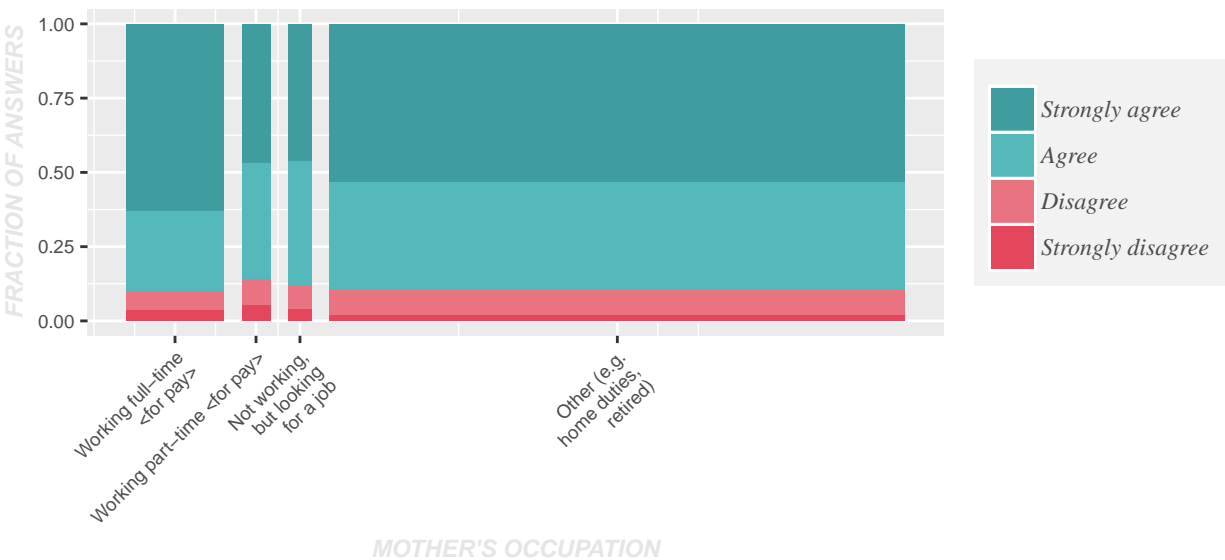
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

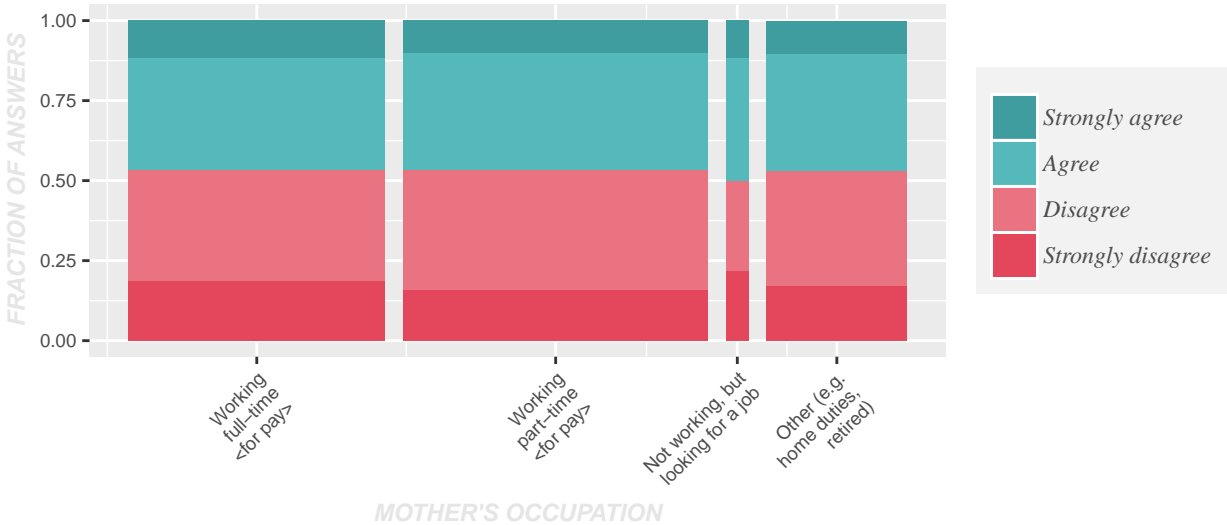
If I wanted to, I could do well in mathematics



Japan

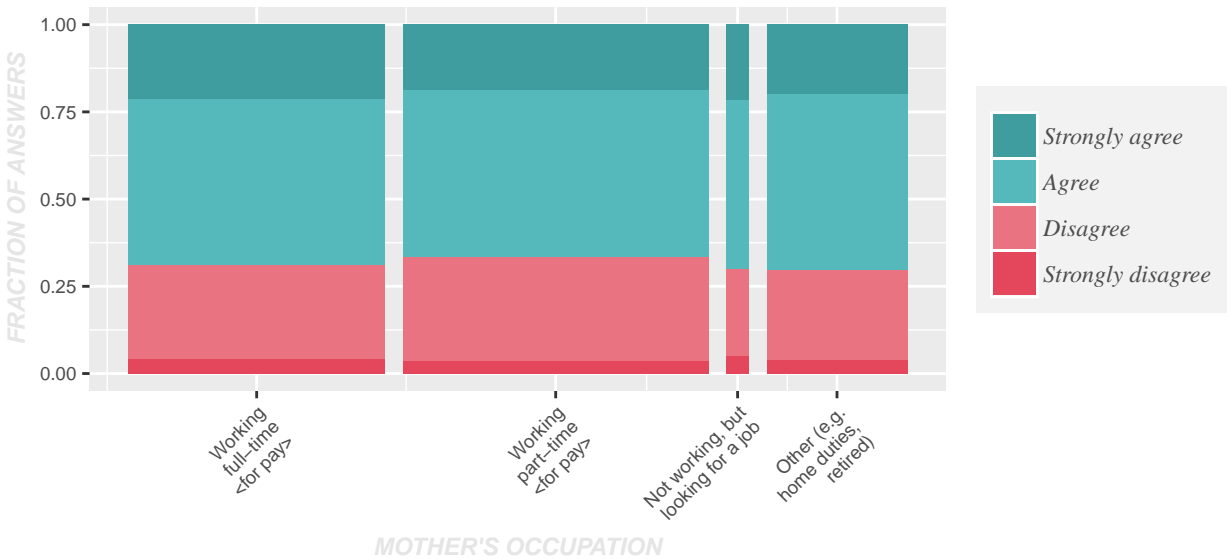
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

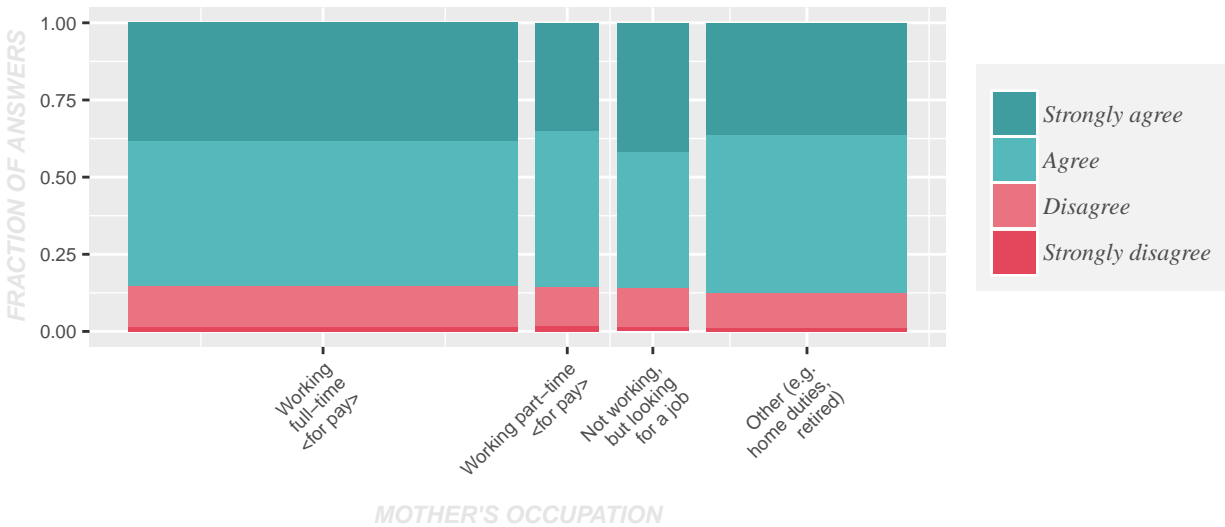
If I wanted to, I could do well in mathematics



Kazakhstan

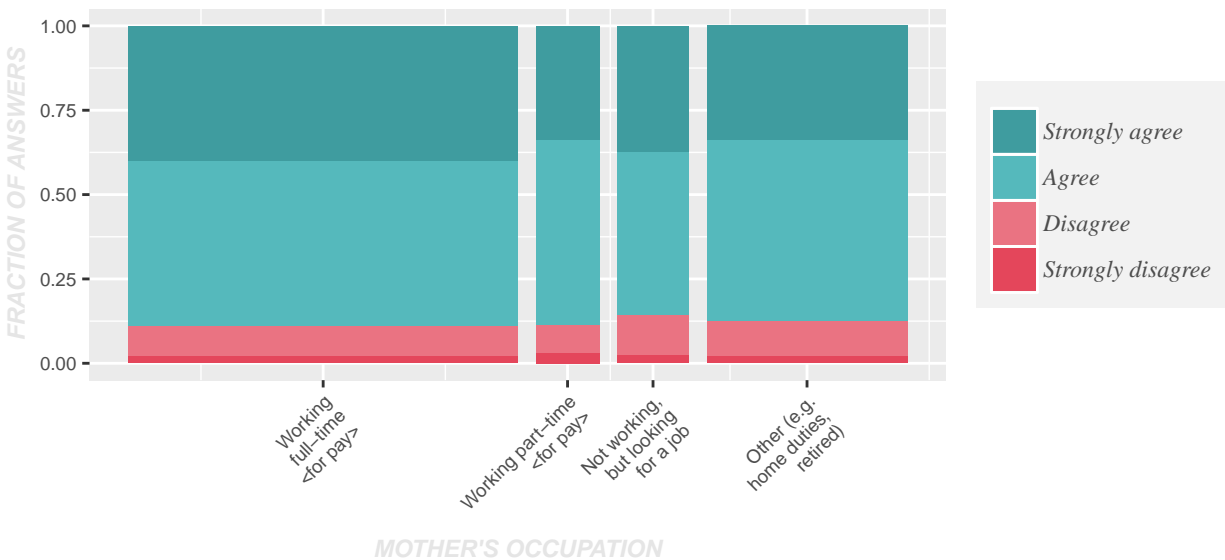
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

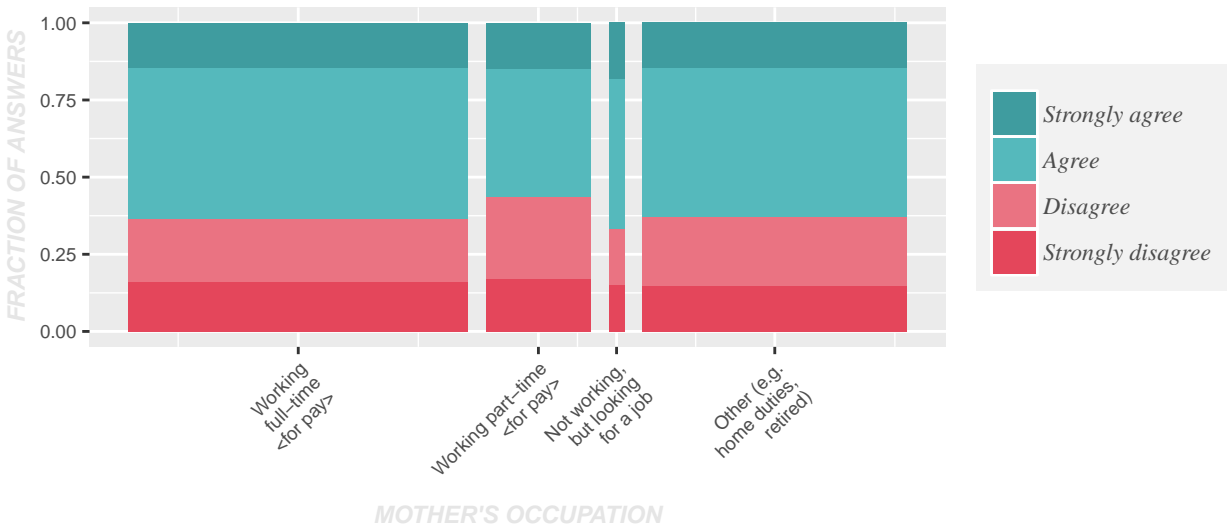
If I wanted to, I could do well in mathematics



Korea

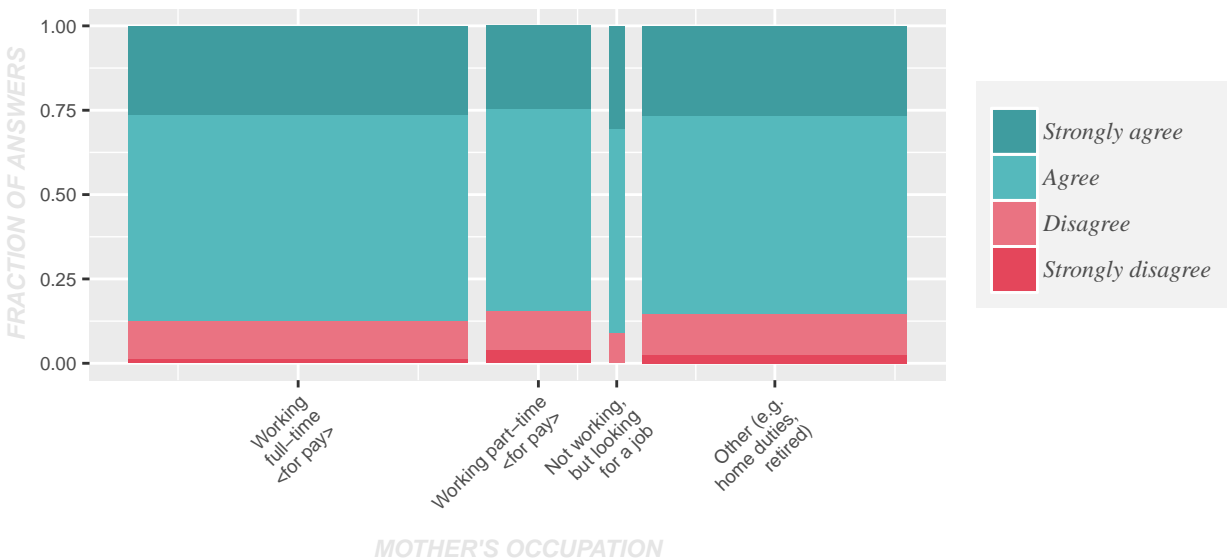
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

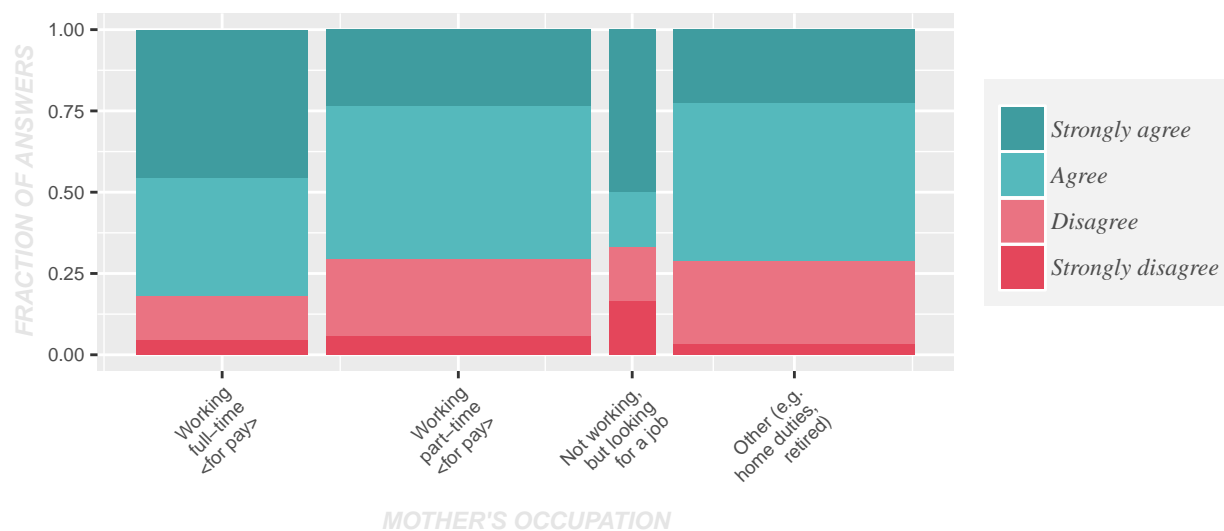
If I wanted to, I could do well in mathematics



Liechtenstein

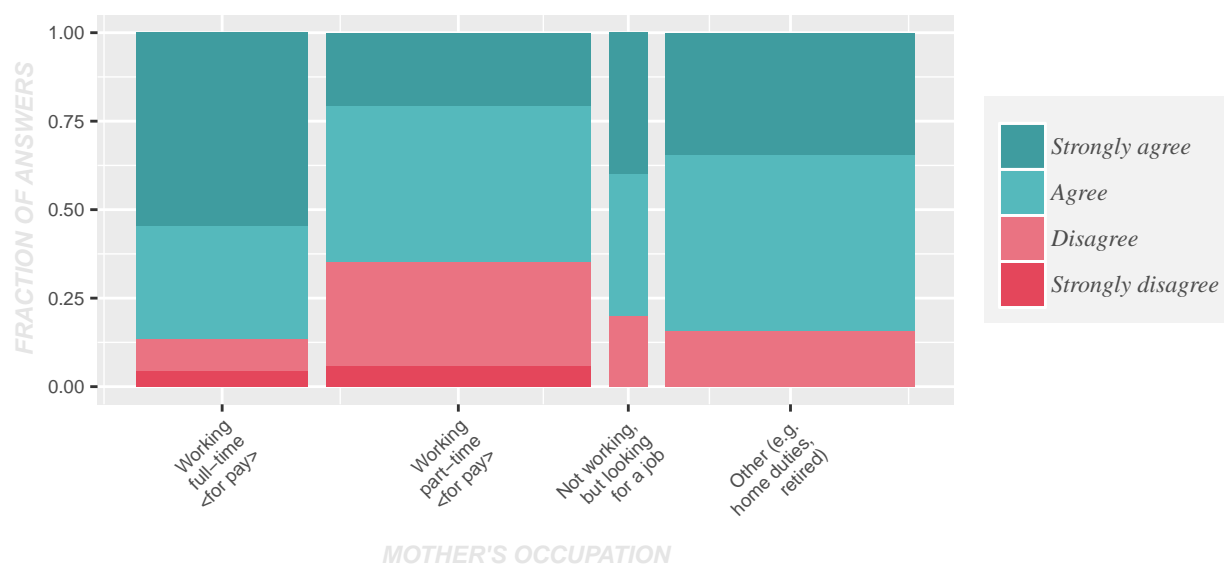
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

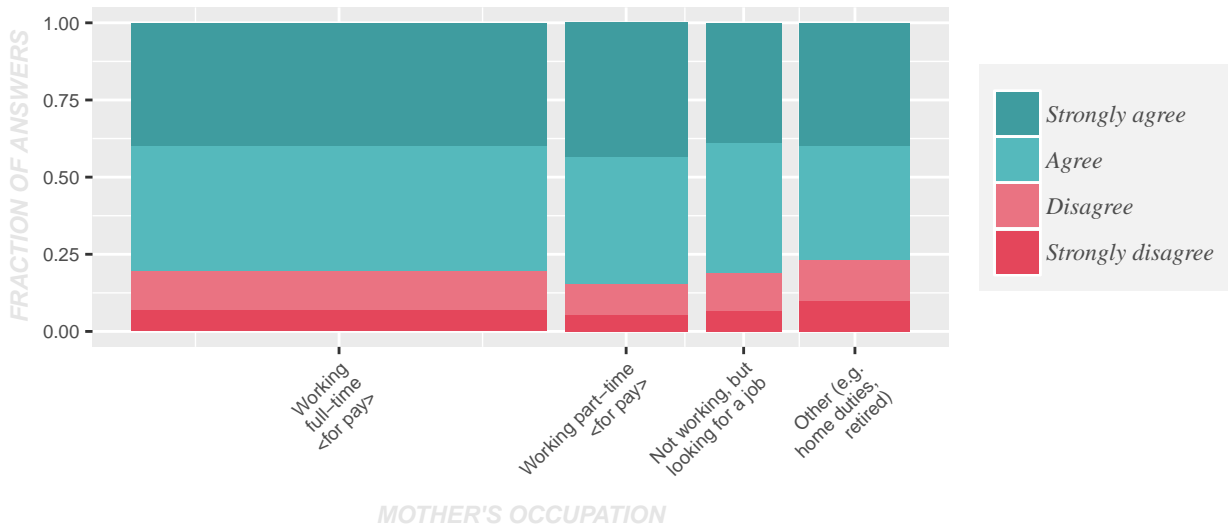
If I wanted to, I could do well in mathematics



Lithuania

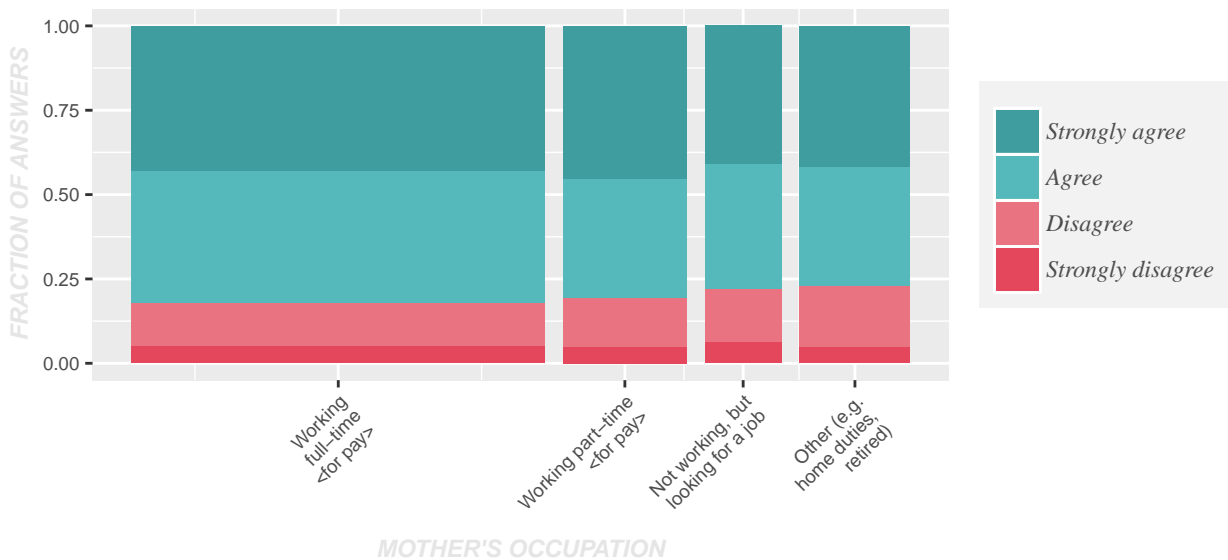
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

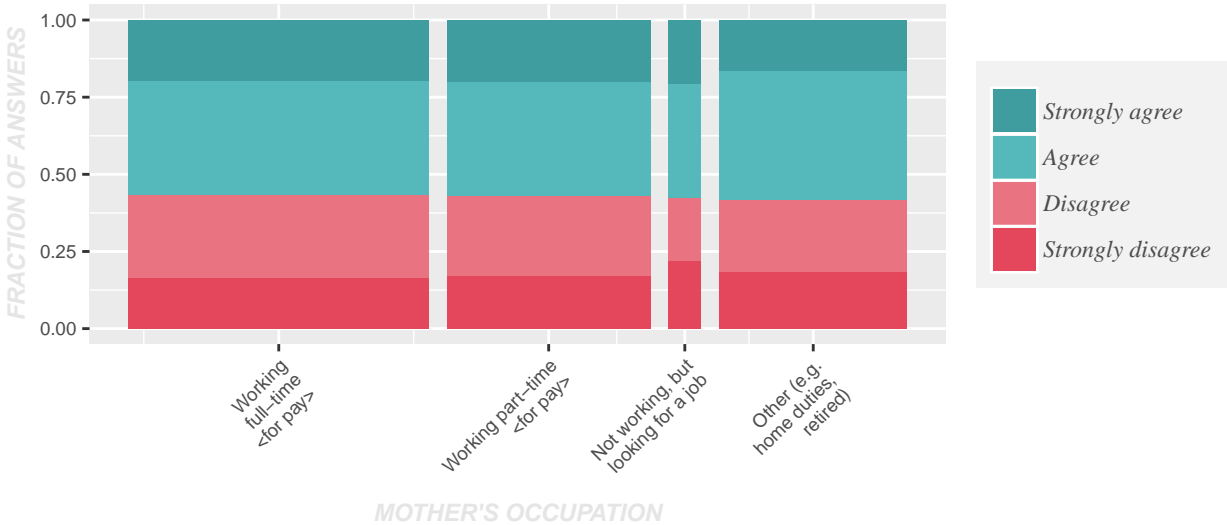
If I wanted to, I could do well in mathematics



Luxembourg

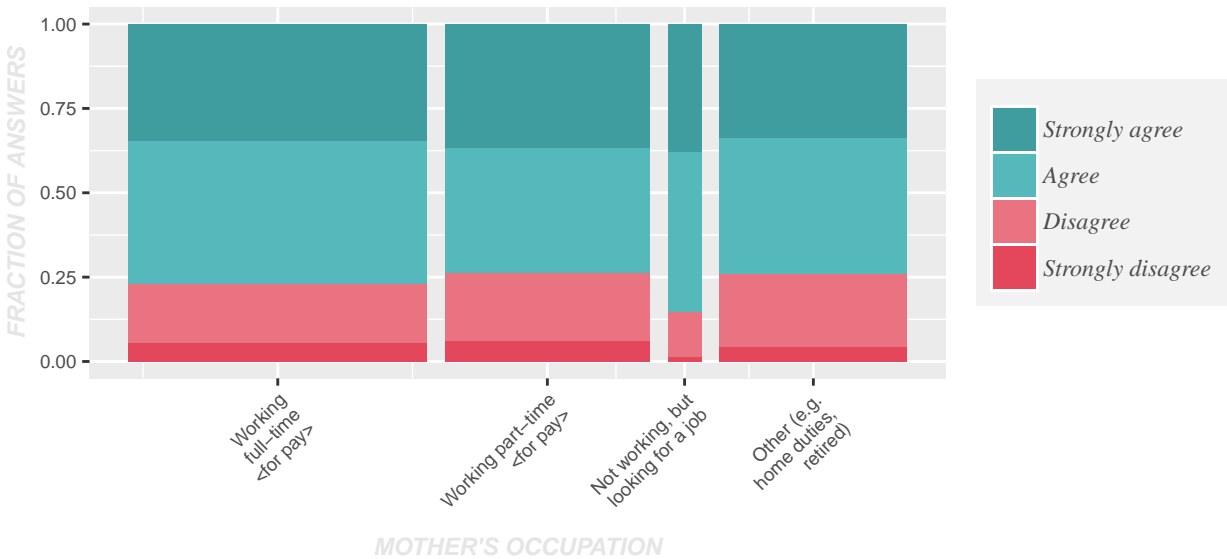
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

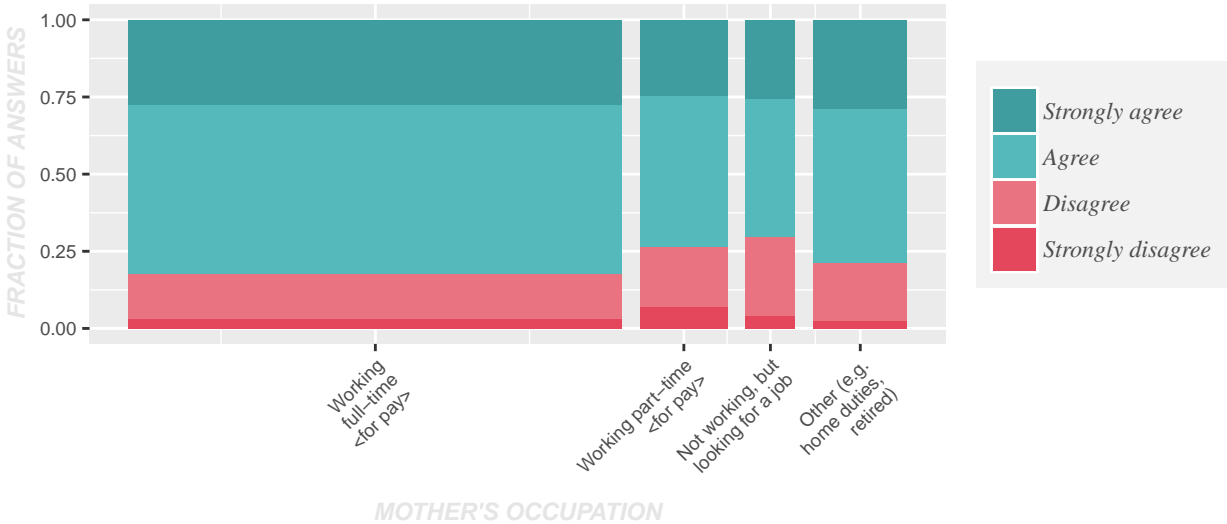
If I wanted to, I could do well in mathematics



Latvia

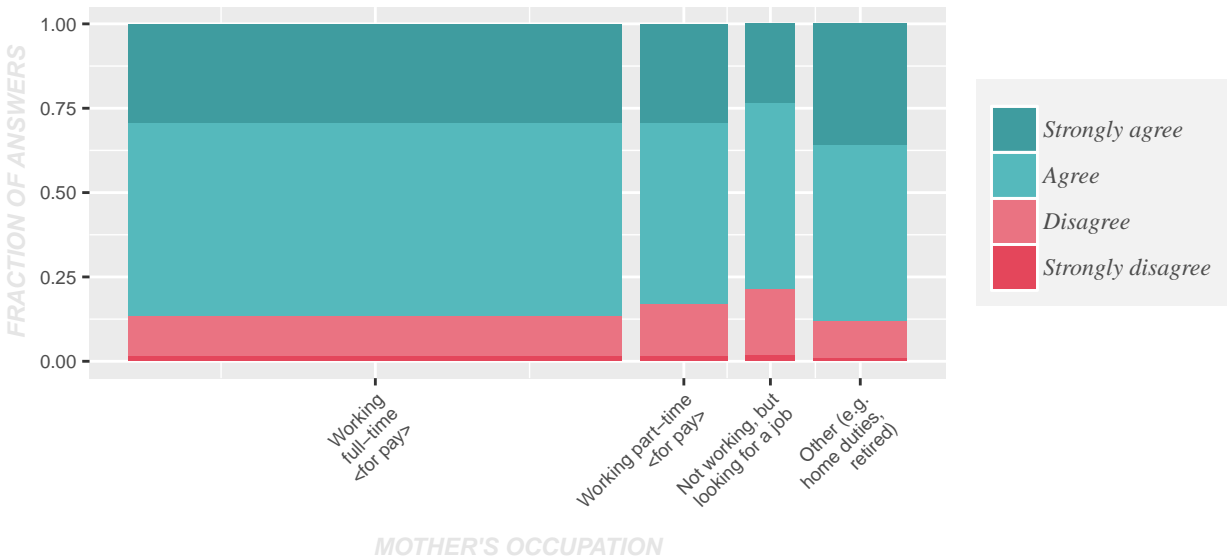
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

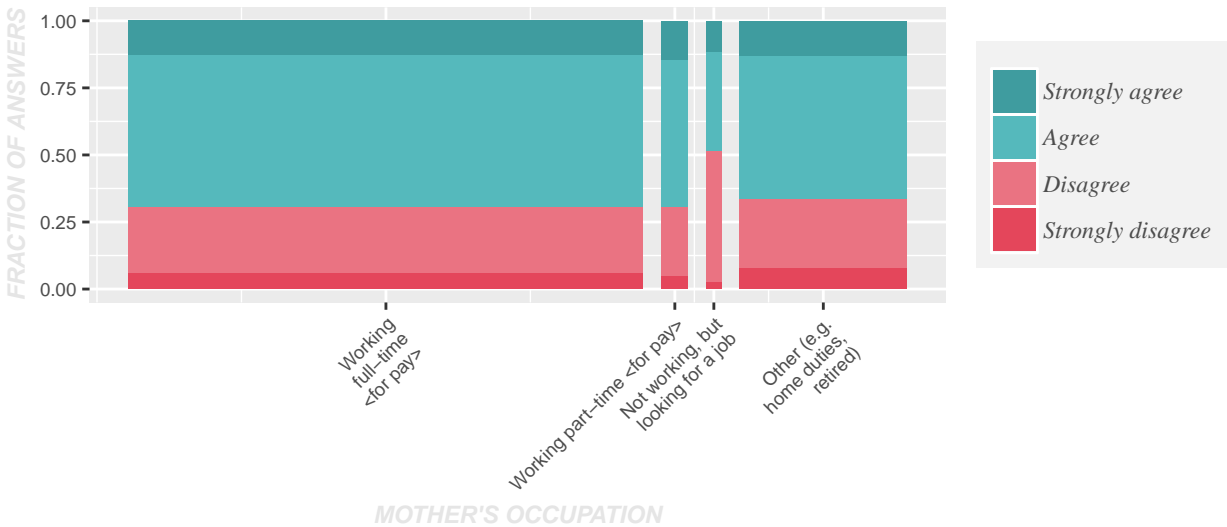
If I wanted to, I could do well in mathematics



Macao-China

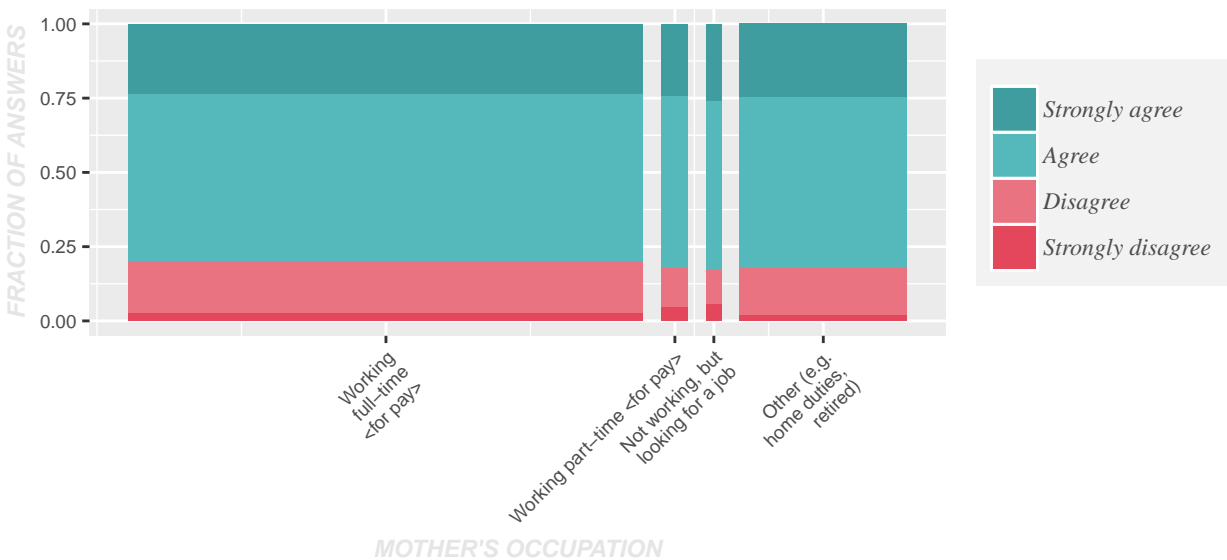
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

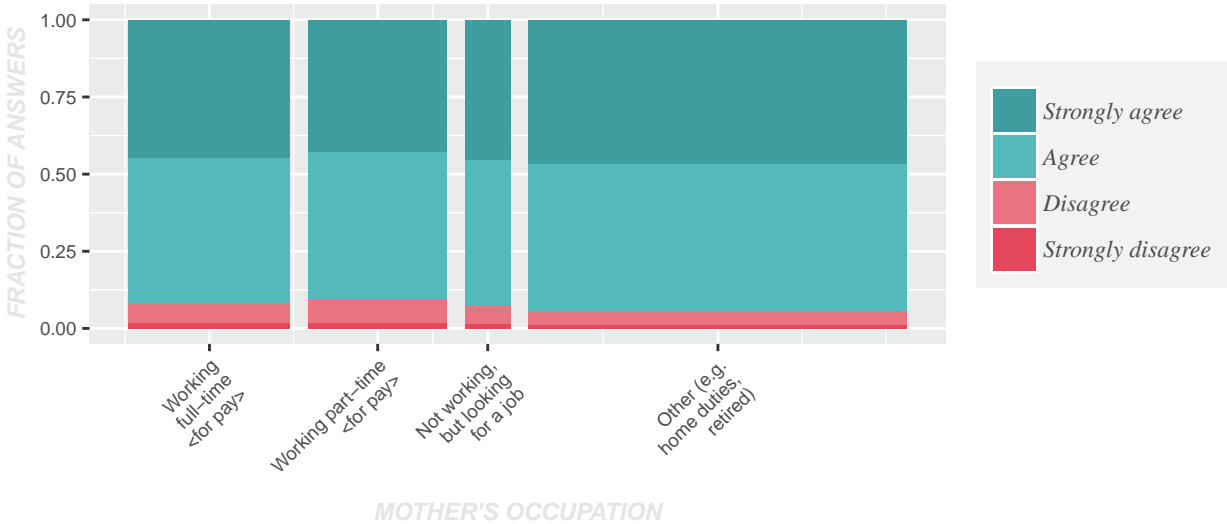
If I wanted to, I could do well in mathematics



Mexico

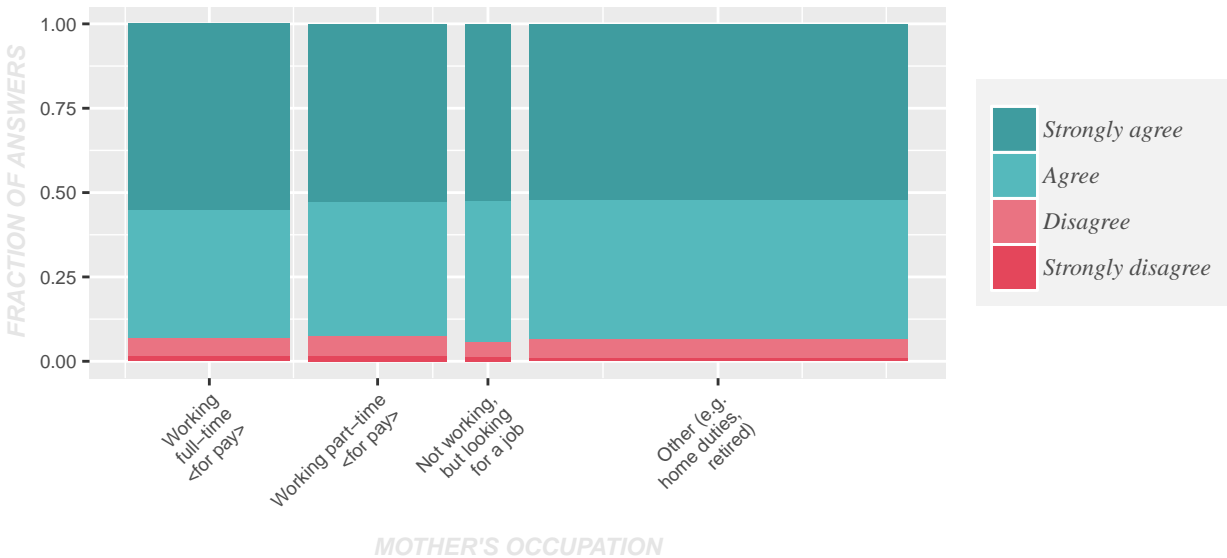
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

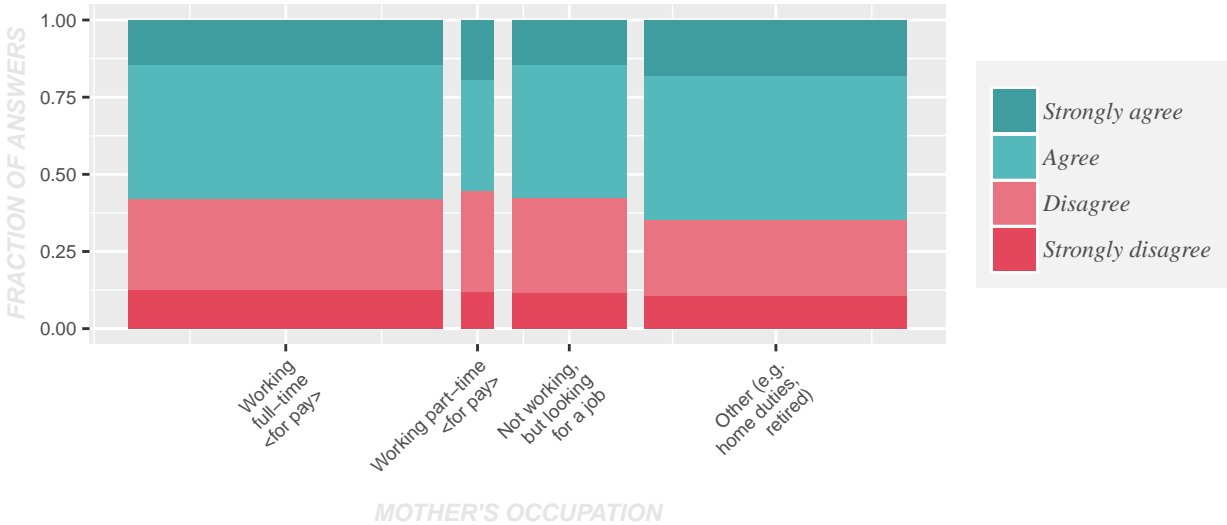
If I wanted to, I could do well in mathematics



Montenegro

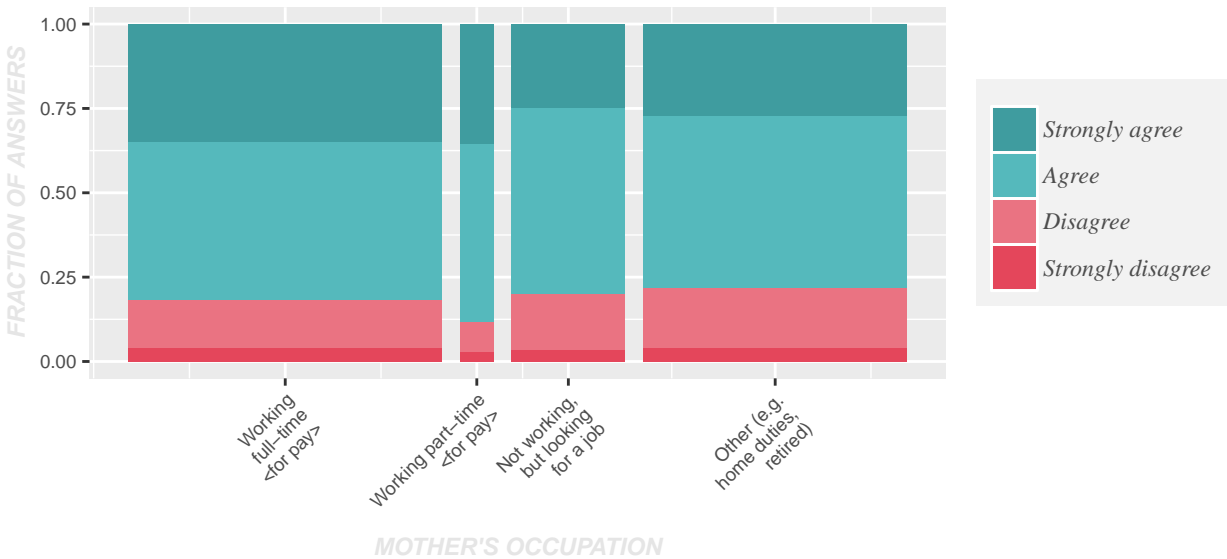
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

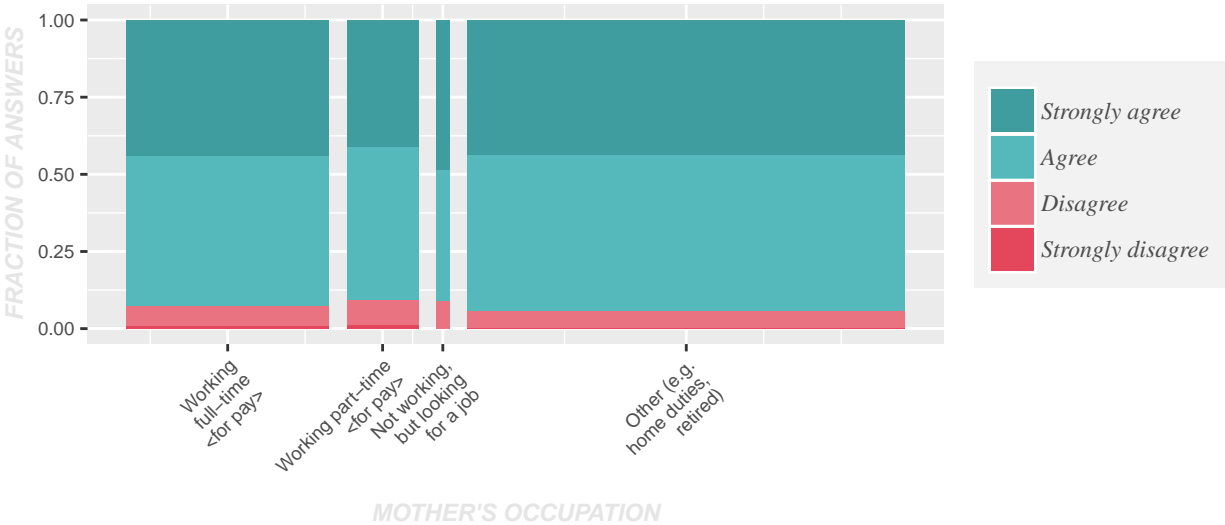
If I wanted to, I could do well in mathematics



Malaysia

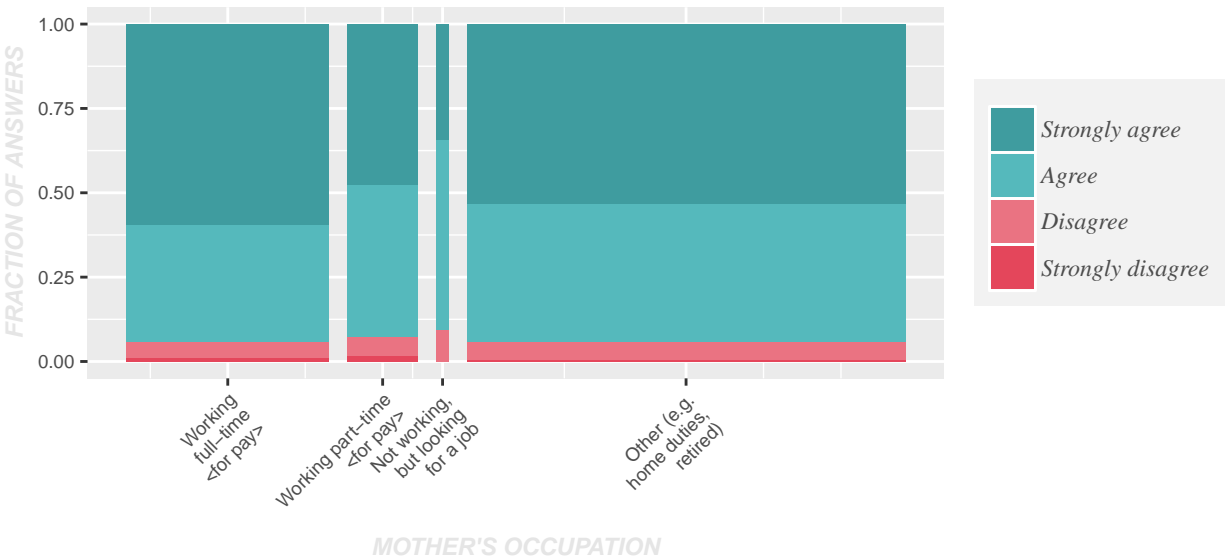
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

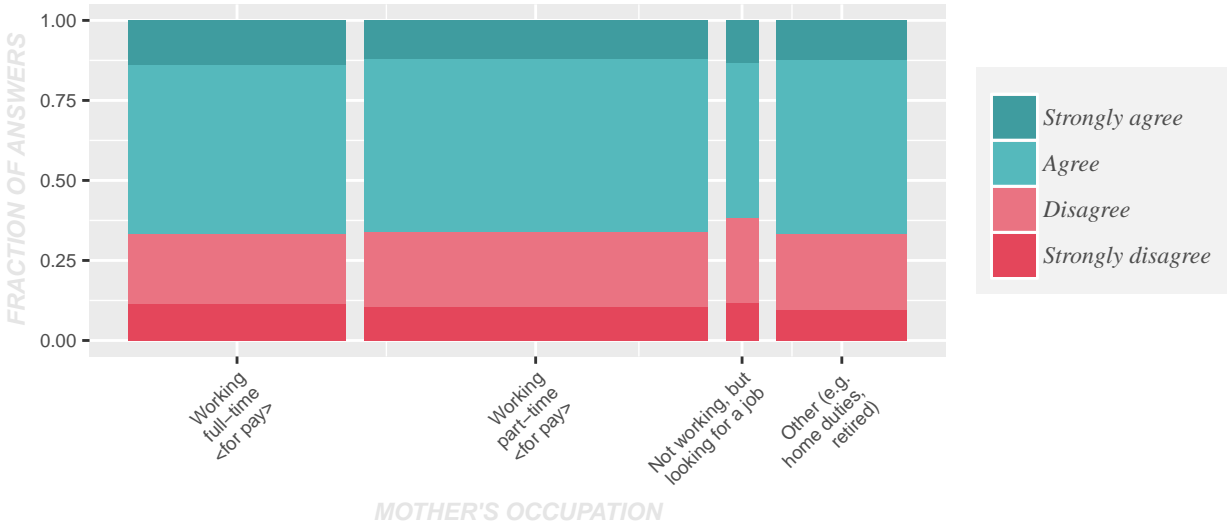
If I wanted to, I could do well in mathematics



Netherlands

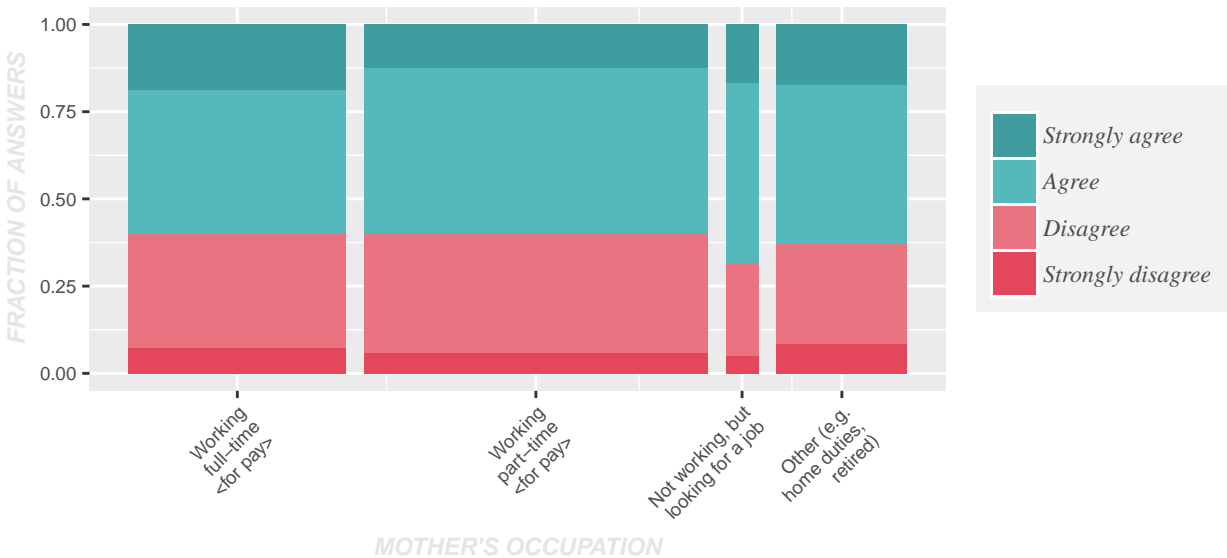
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

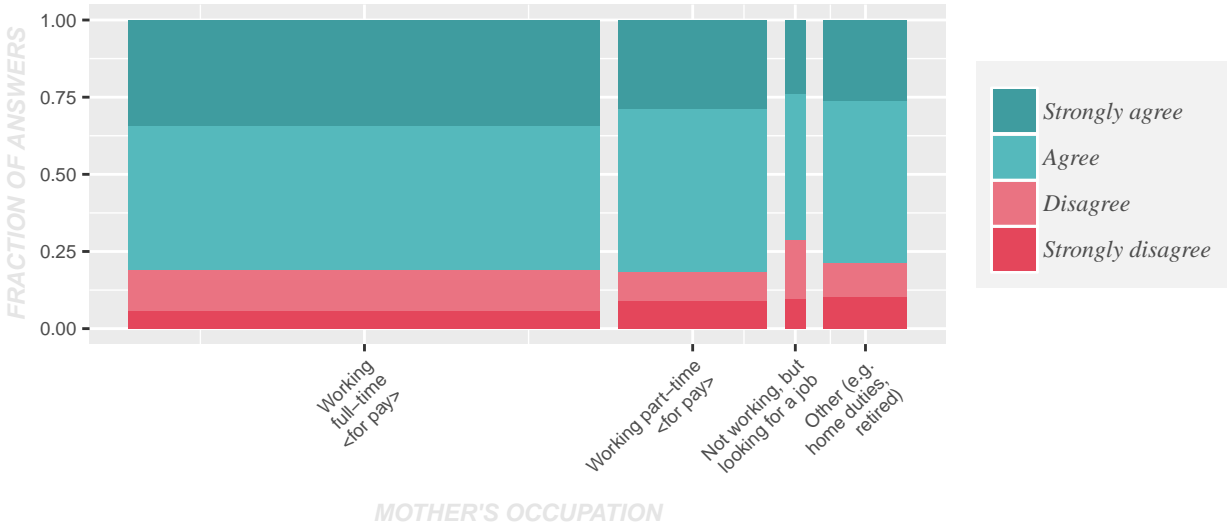
If I wanted to, I could do well in mathematics



Norway

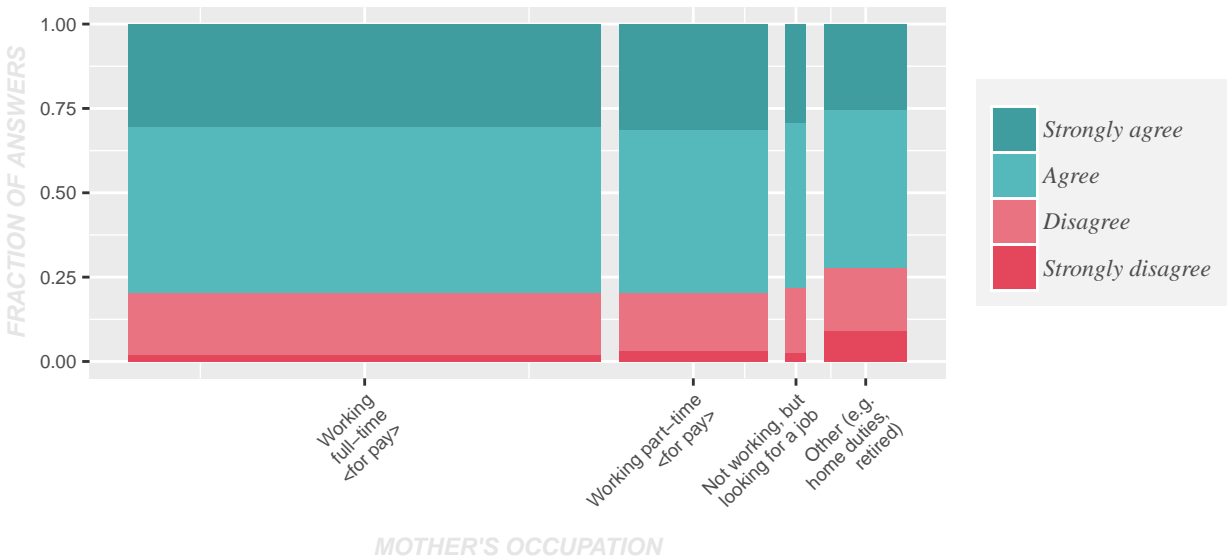
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

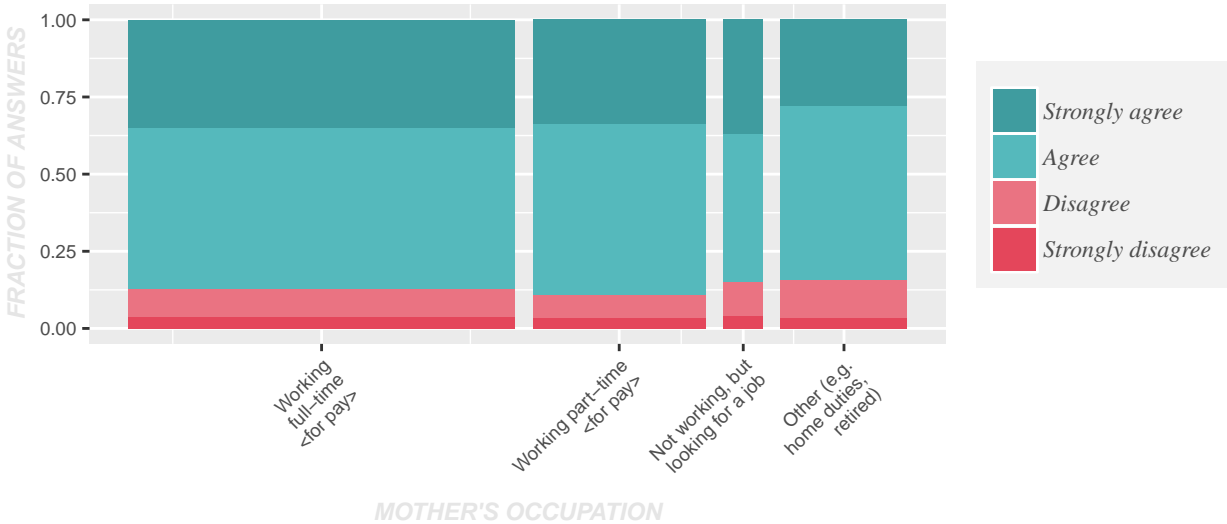
If I wanted to, I could do well in mathematics



New Zealand

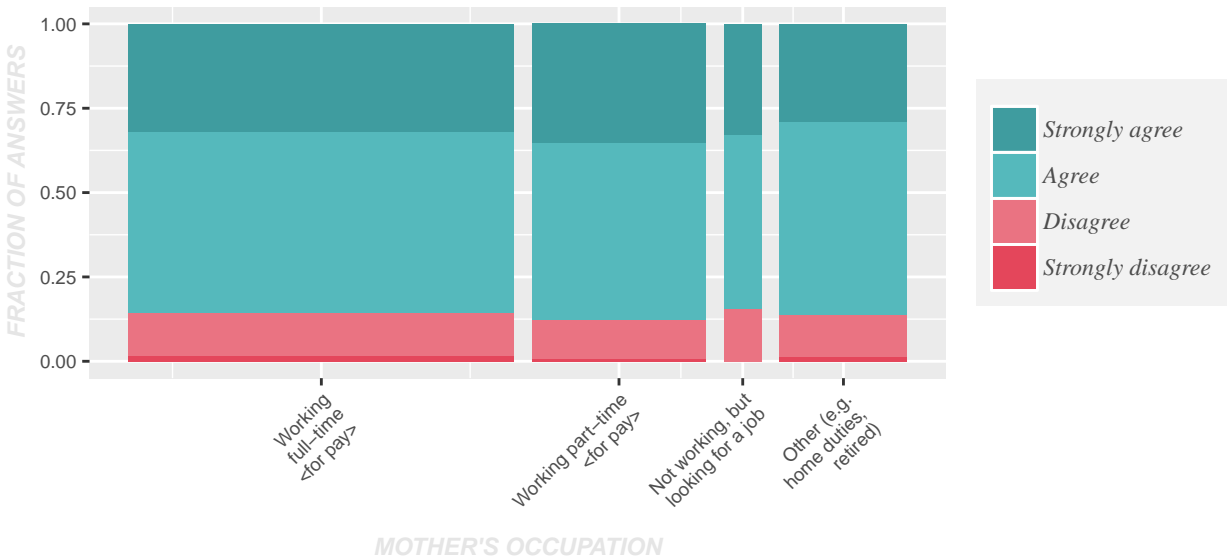
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

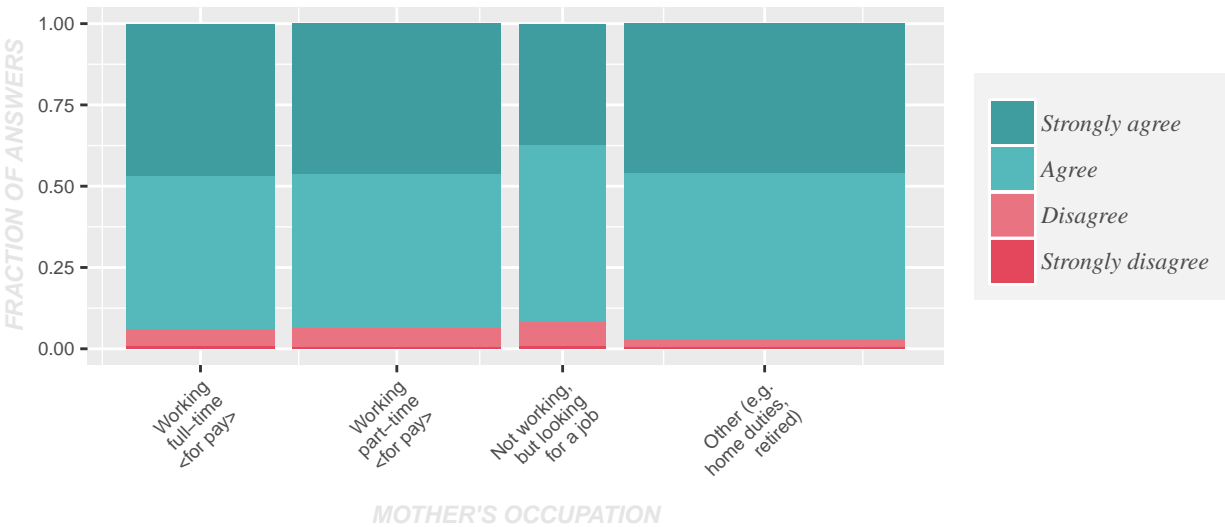
If I wanted to, I could do well in mathematics



Peru

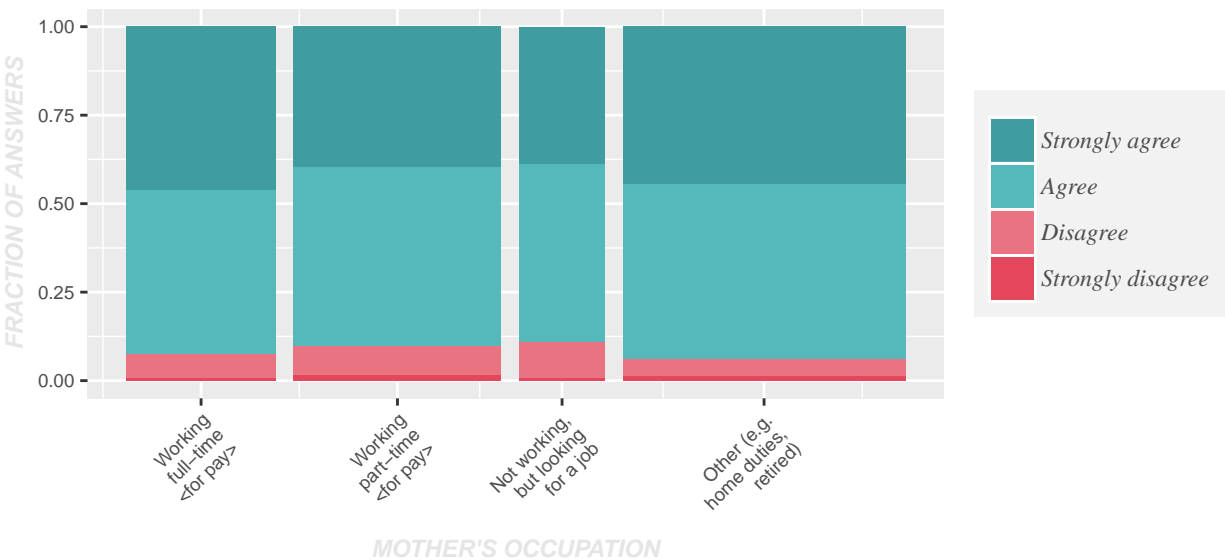
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

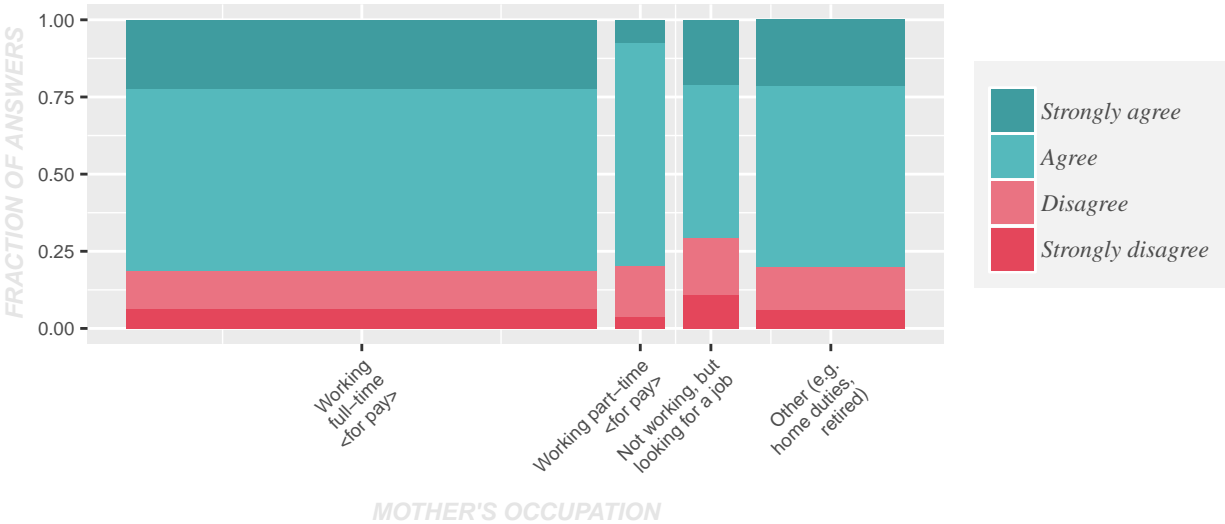
If I wanted to, I could do well in mathematics



Poland

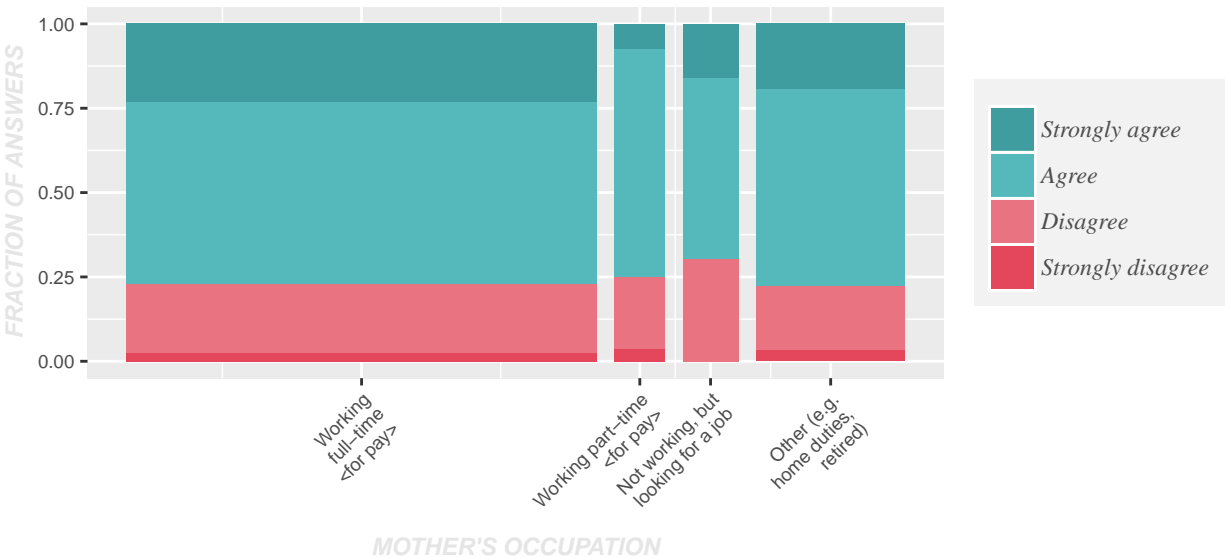
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

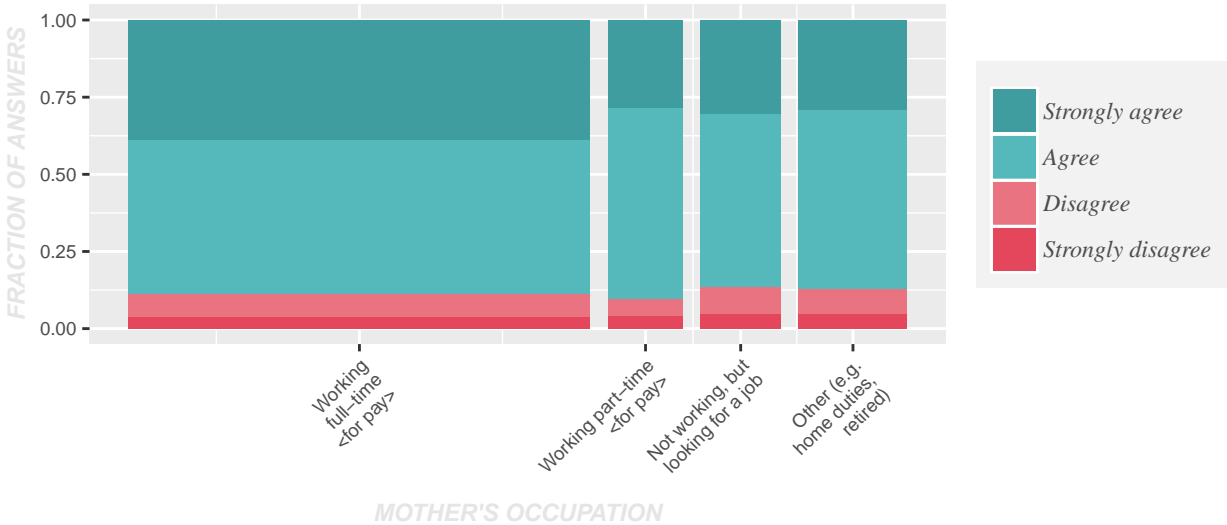
If I wanted to, I could do well in mathematics



Portugal

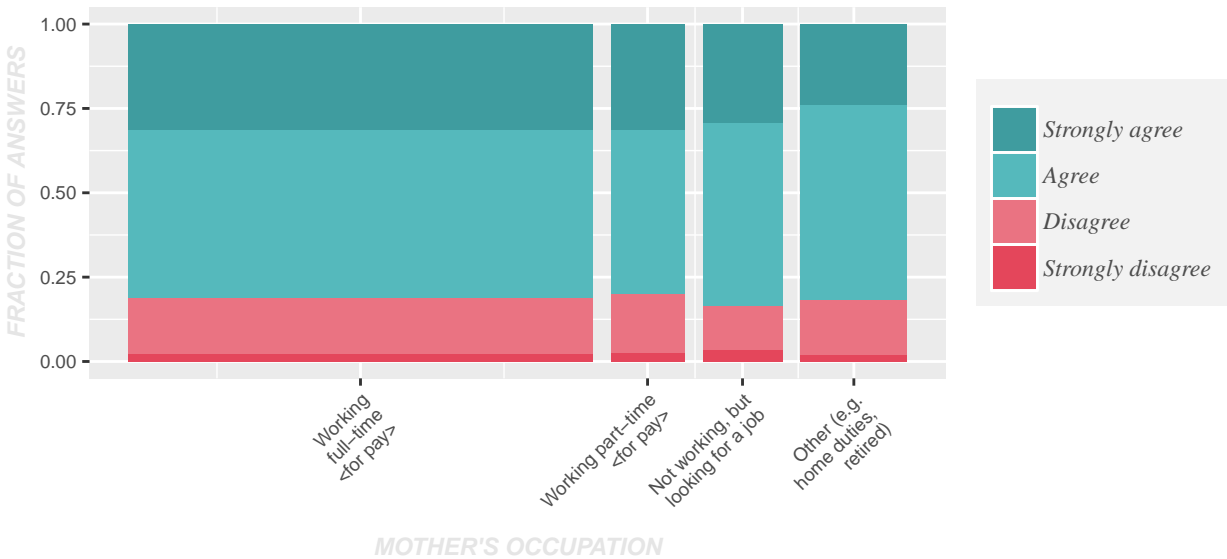
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

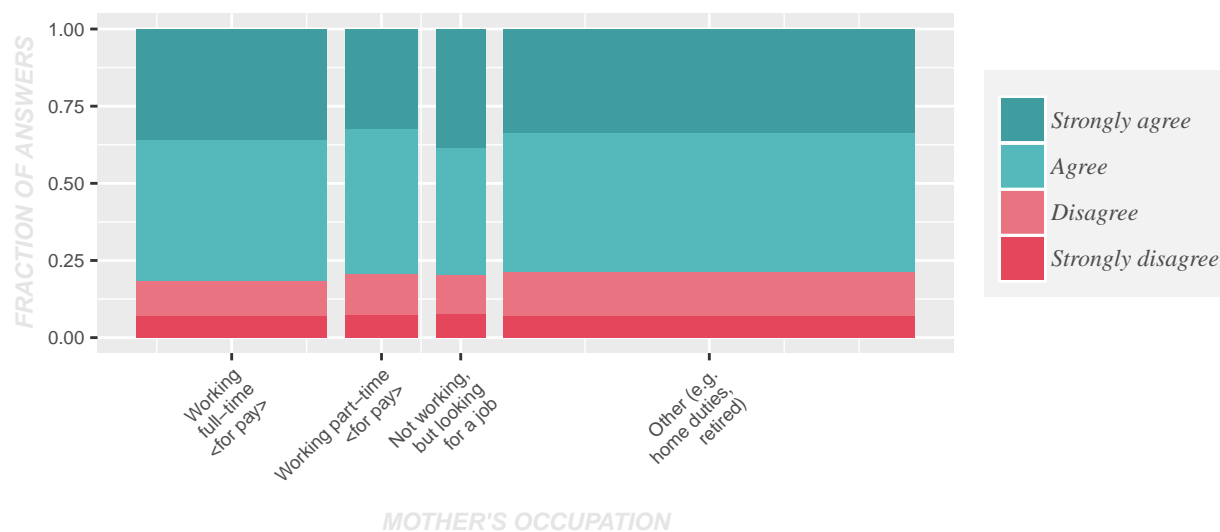
If I wanted to, I could do well in mathematics



Qatar

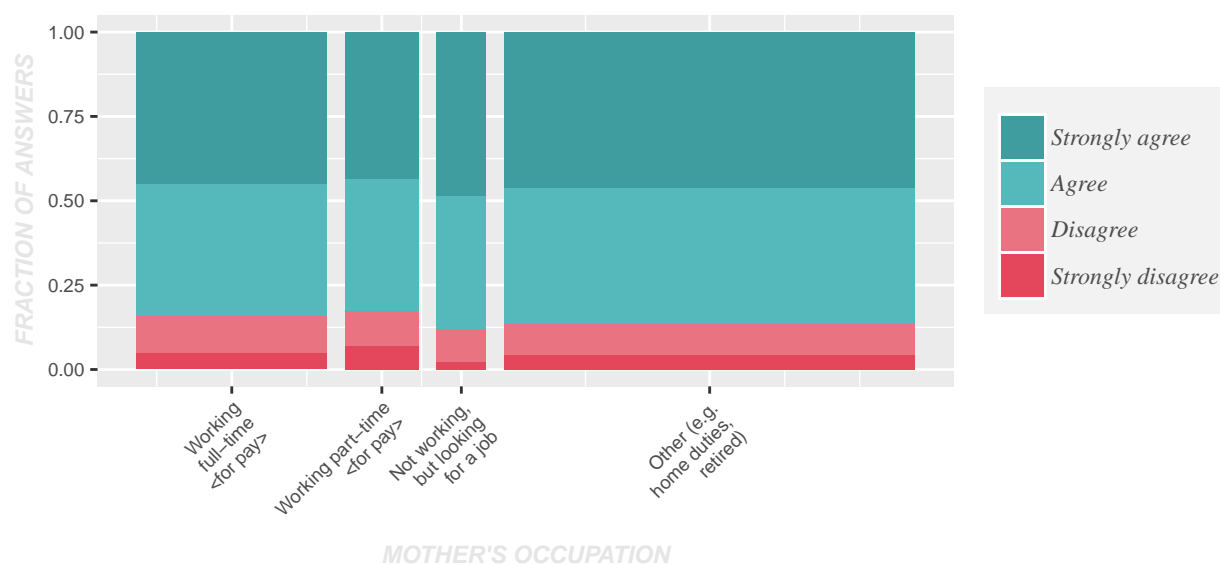
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

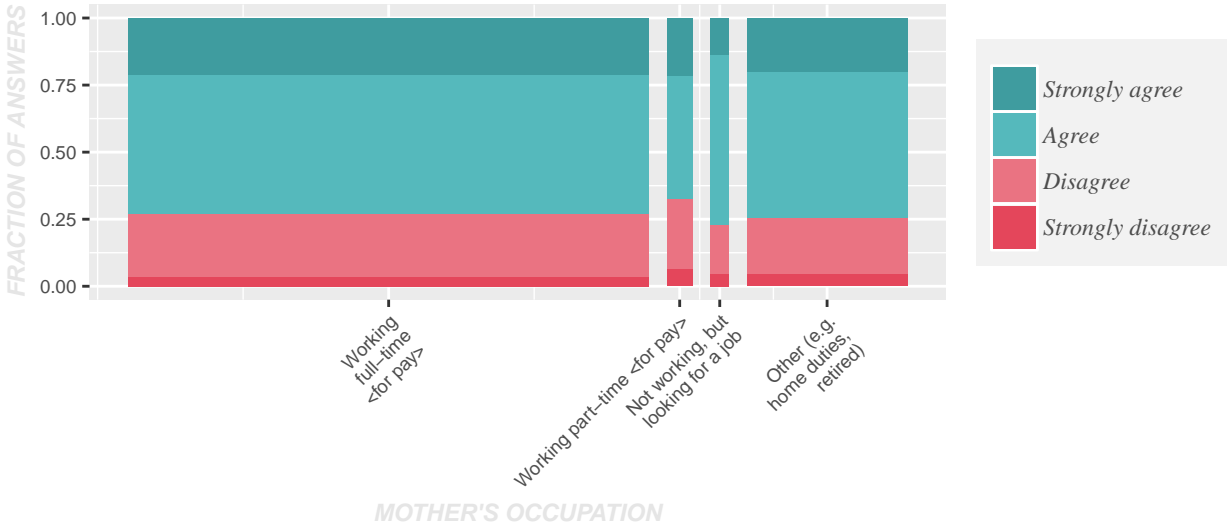
If I wanted to, I could do well in mathematics



China-Shanghai

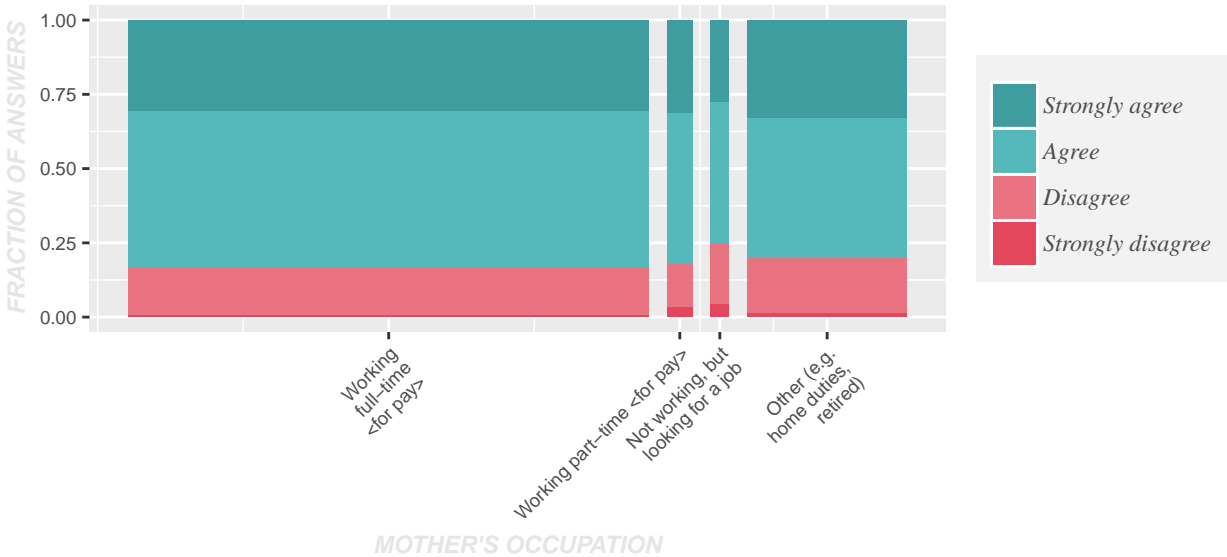
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

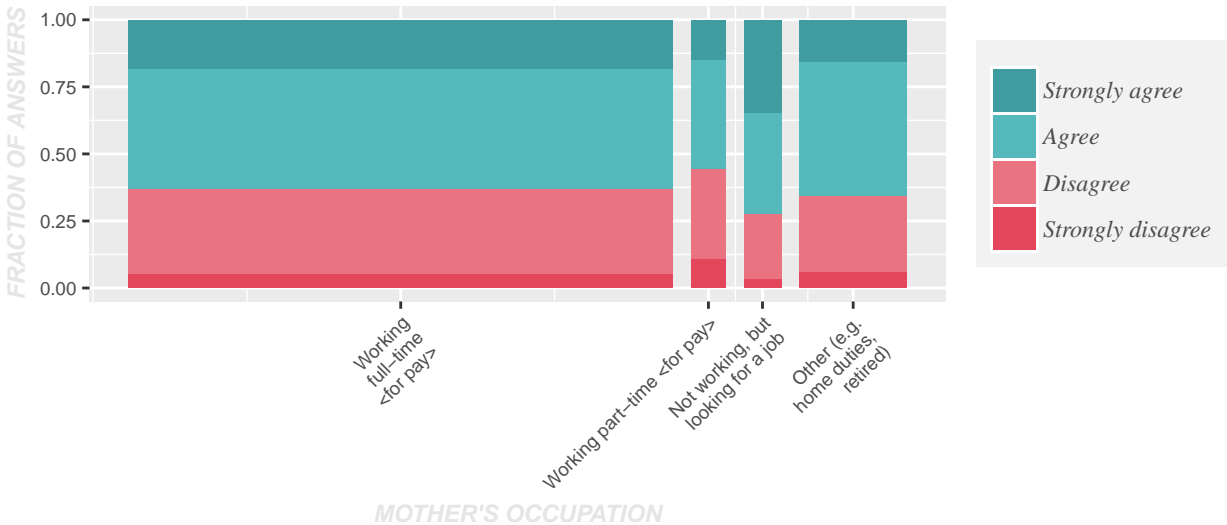
If I wanted to, I could do well in mathematics



Perm(Russian Federation)

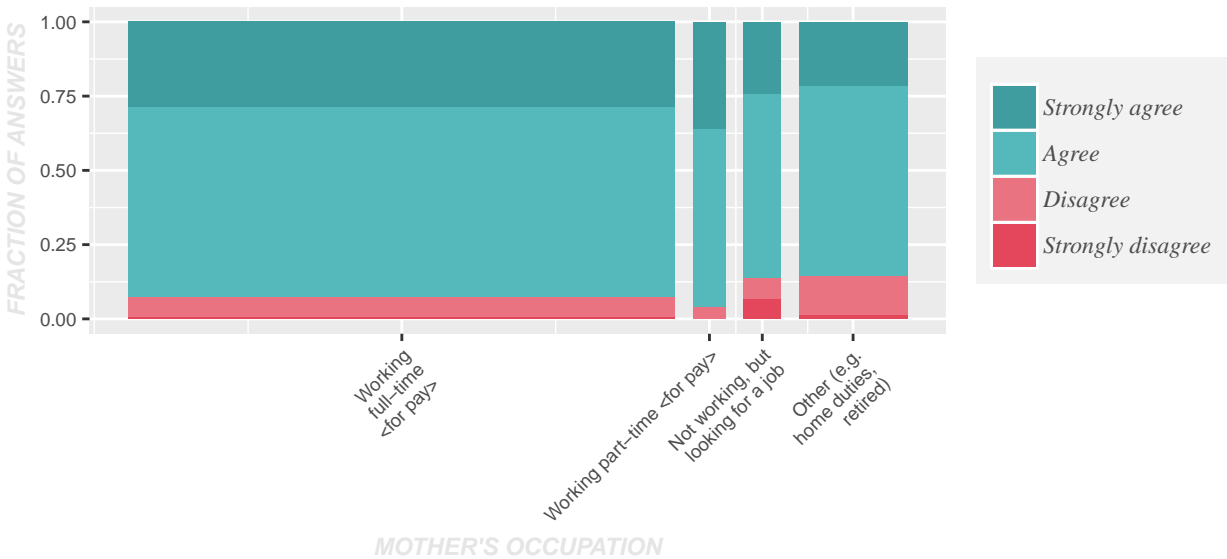
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

If I wanted to, I could do well in mathematics



Romania

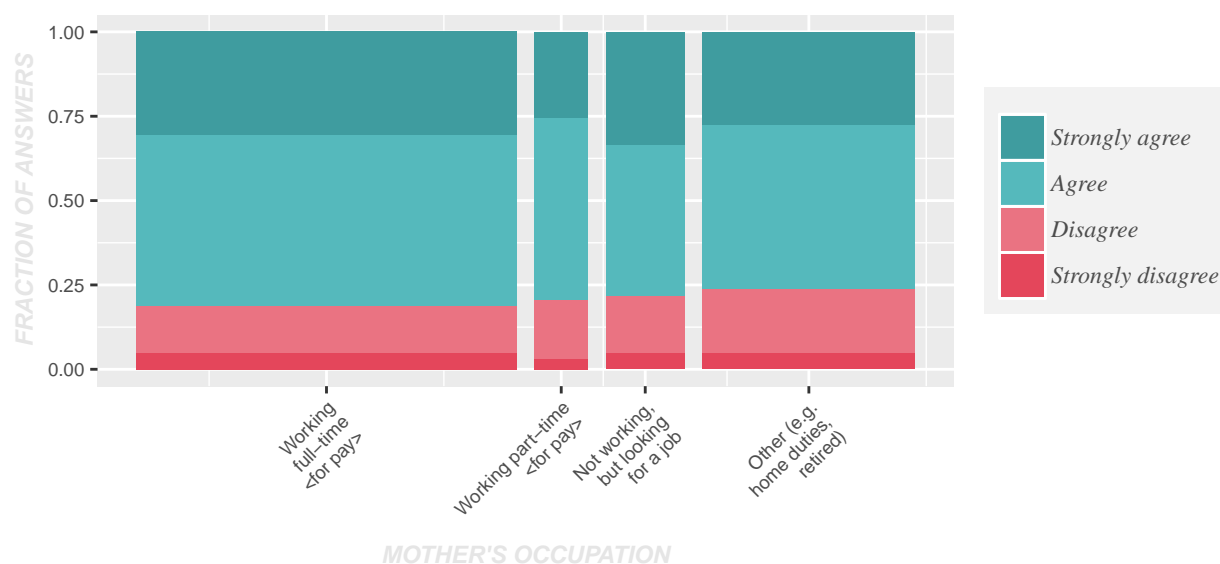
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

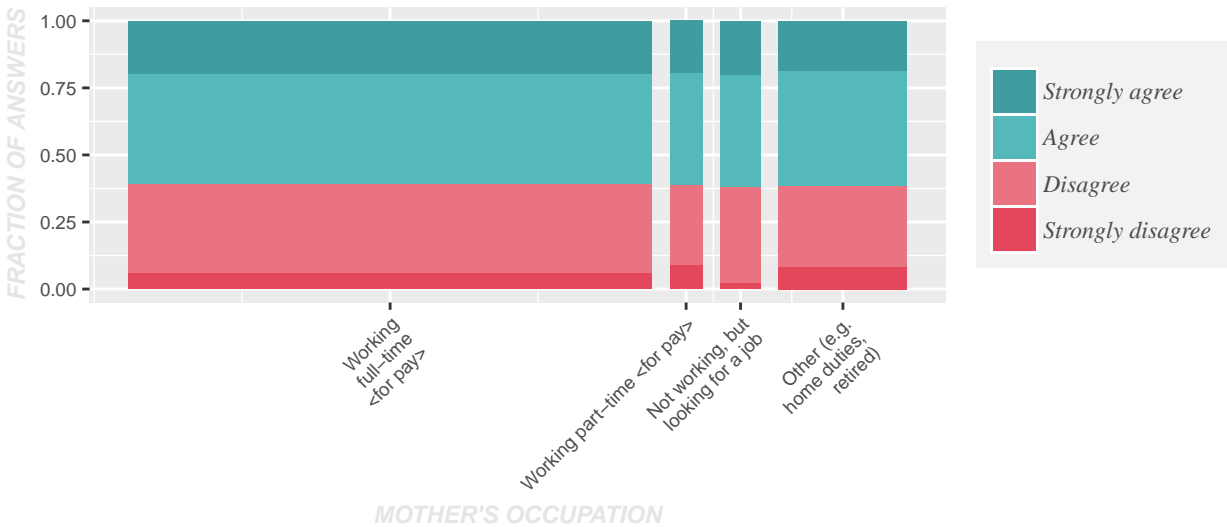
If I wanted to, I could do well in mathematics



Russian Federation

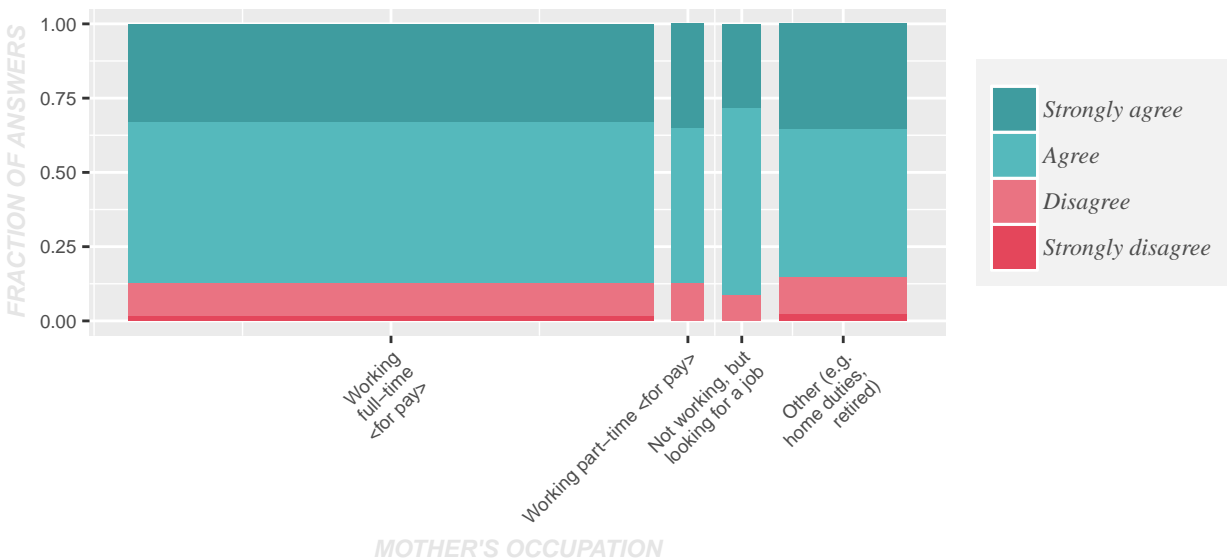
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

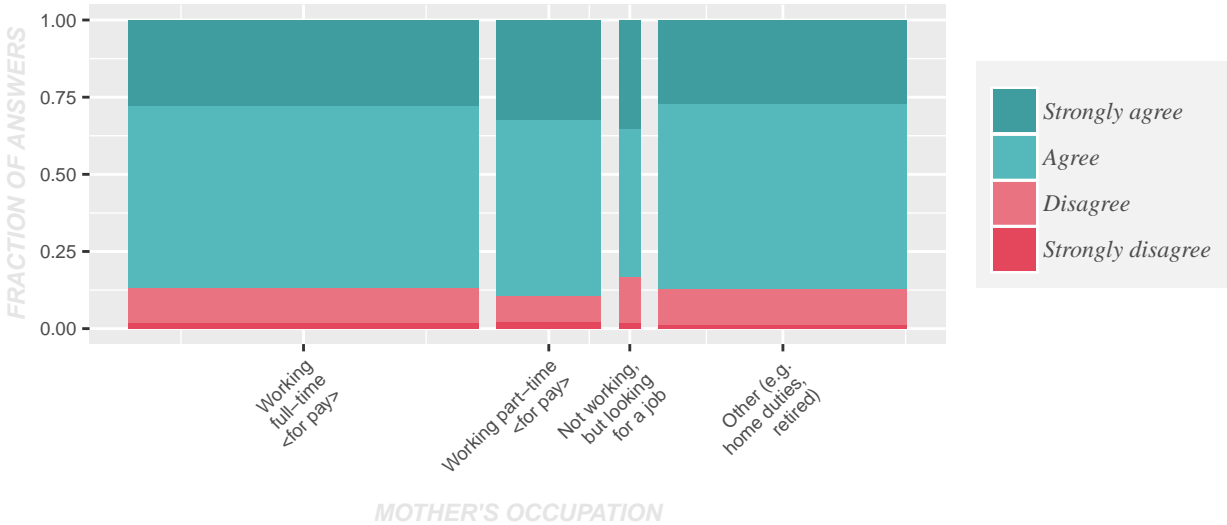
If I wanted to, I could do well in mathematics



Singapore

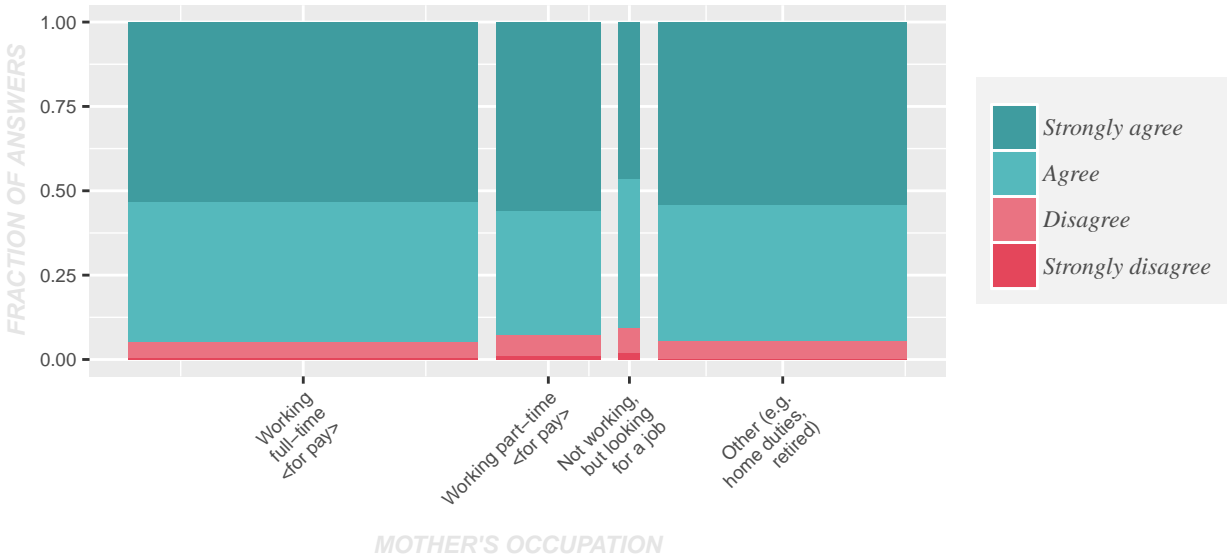
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

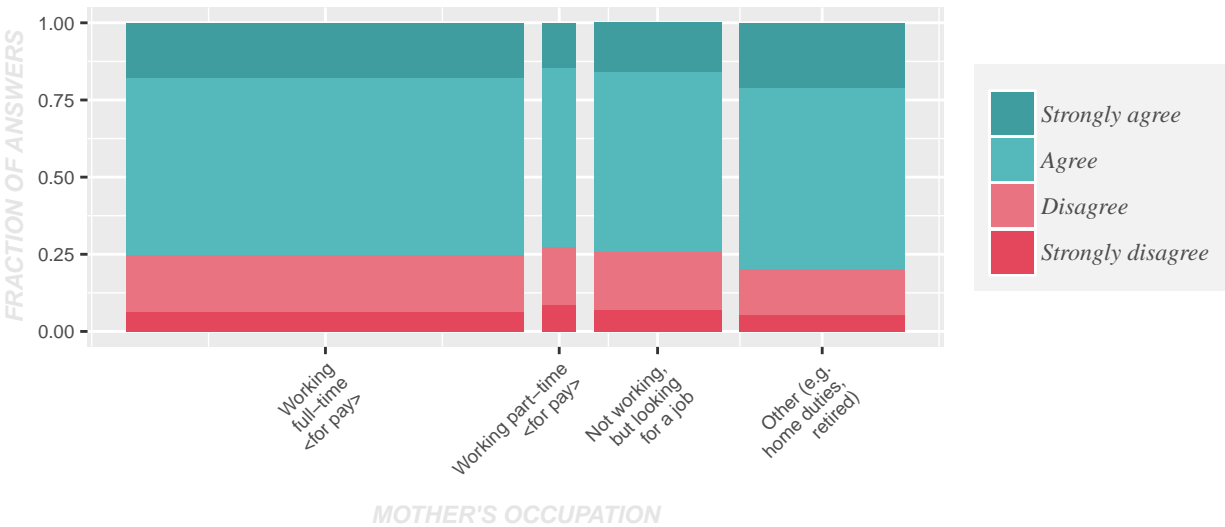
If I wanted to, I could do well in mathematics



Serbia

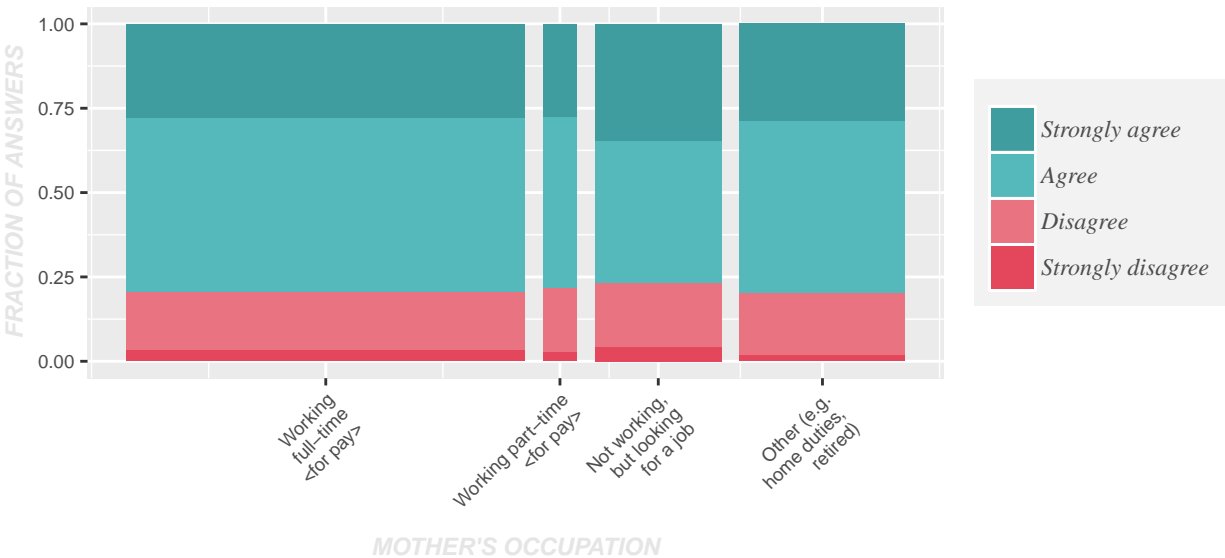
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

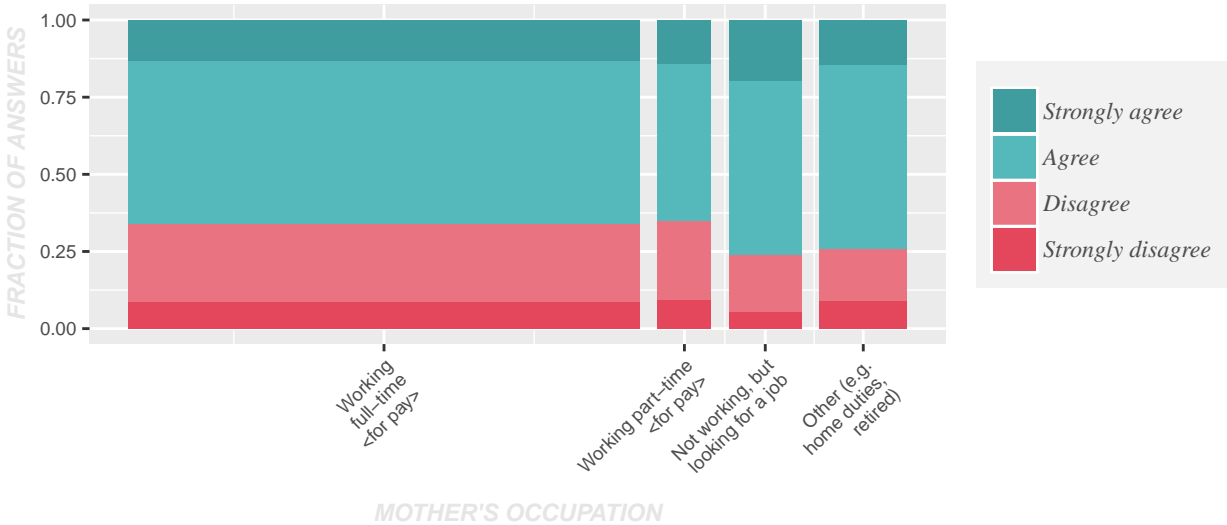
If I wanted to, I could do well in mathematics



Slovak Republic

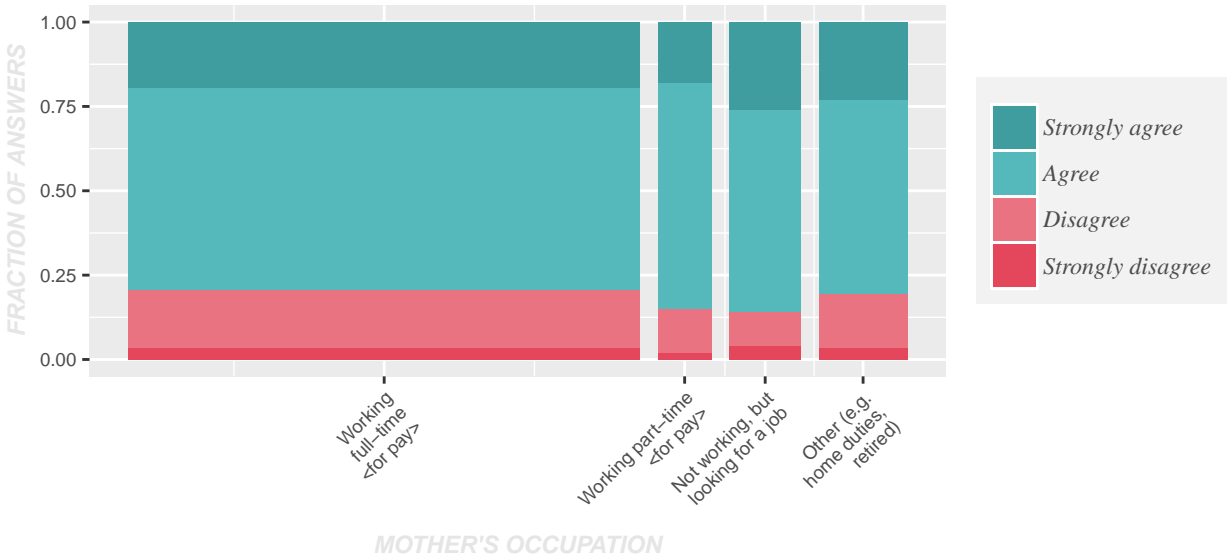
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

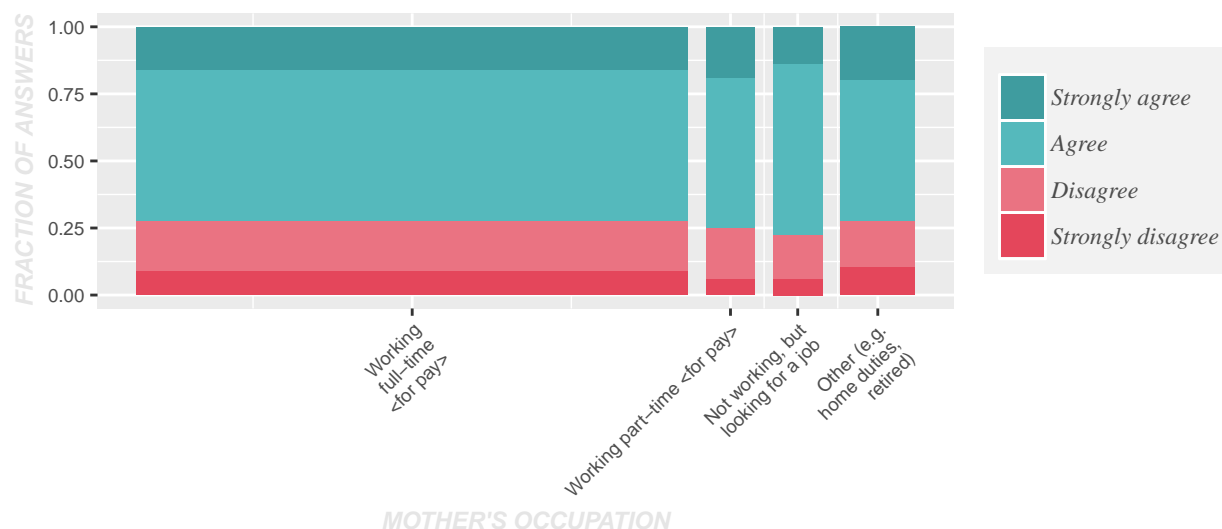
If I wanted to, I could do well in mathematics



Slovenia

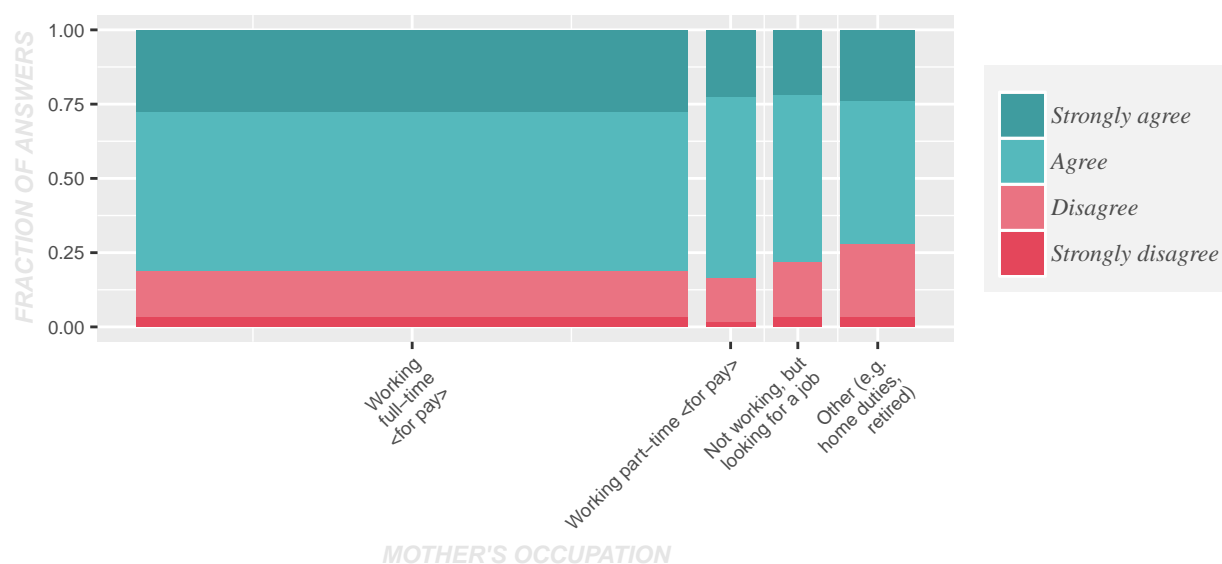
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

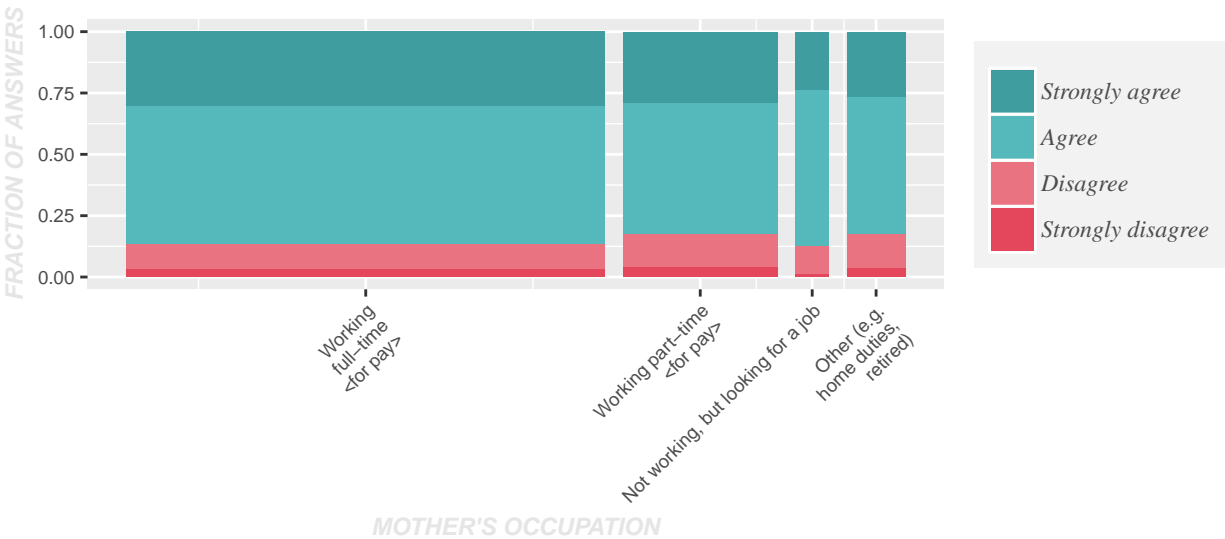
If I wanted to, I could do well in mathematics



Sweden

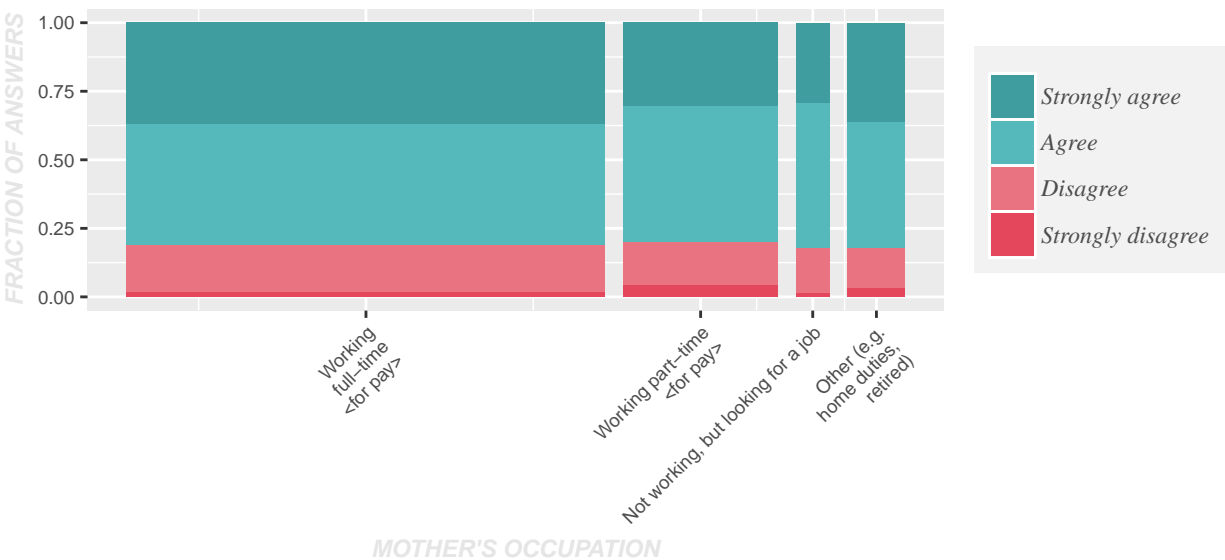
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

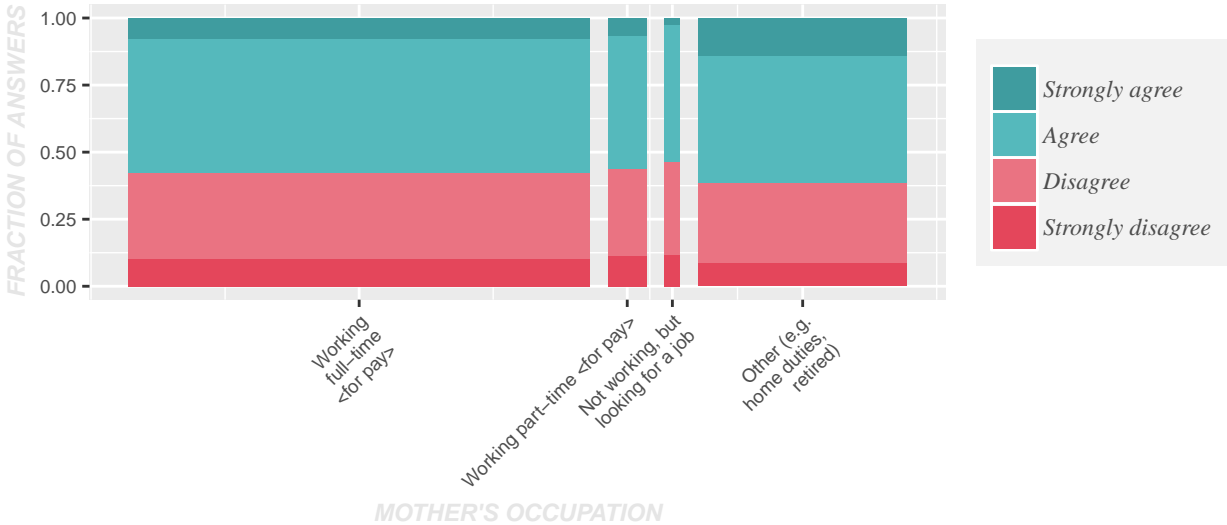
If I wanted to, I could do well in mathematics



Chinese Taipei

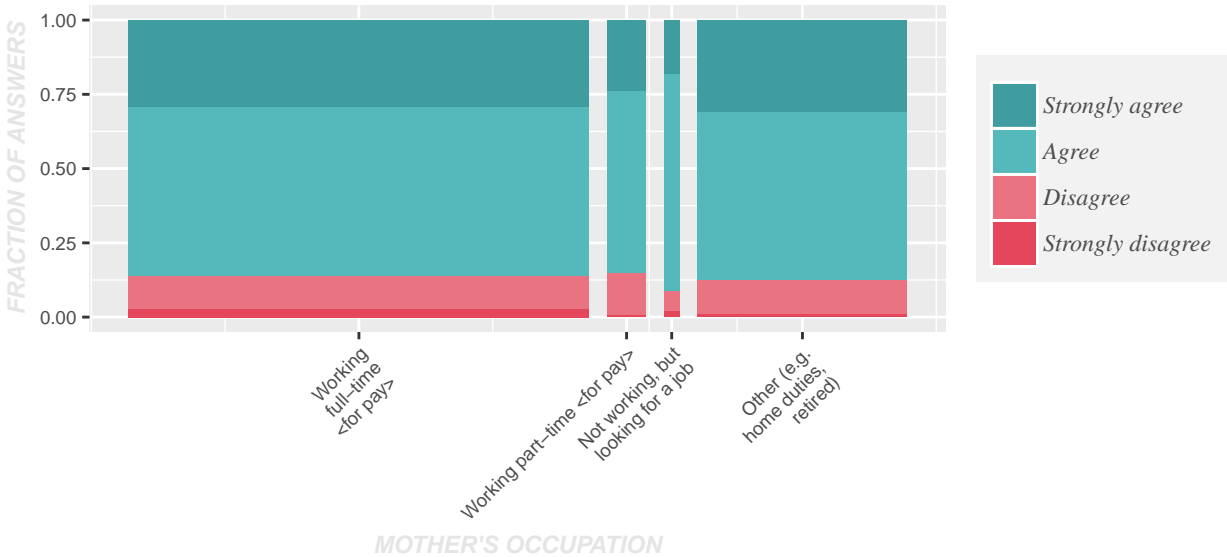
MATH AND CAREER

Learning mathematics is worthwhile for me because it will improve my career



MATH CONFIDENCE

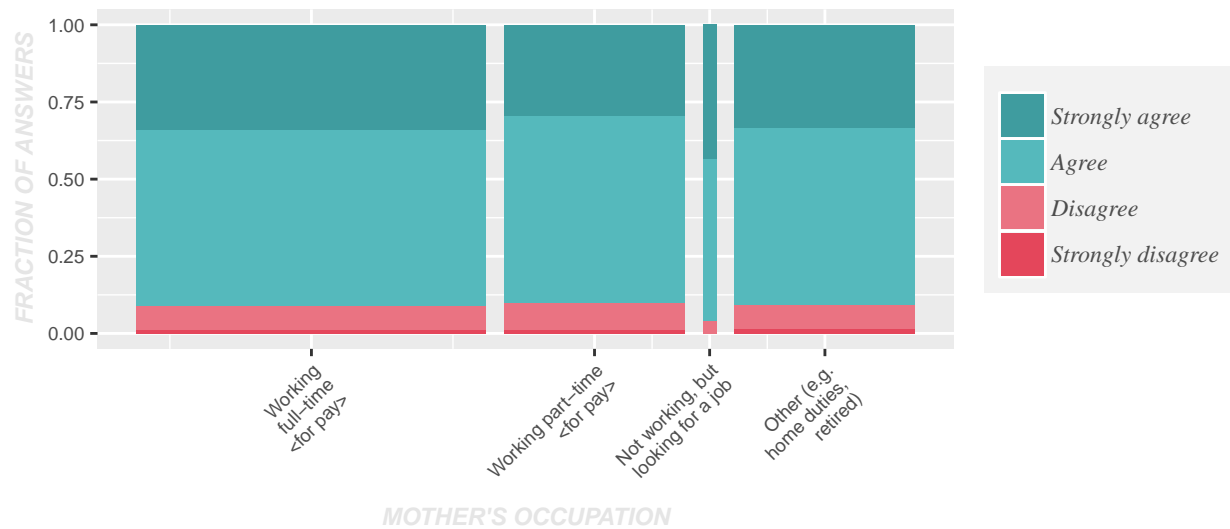
If I wanted to, I could do well in mathematics



Thailand

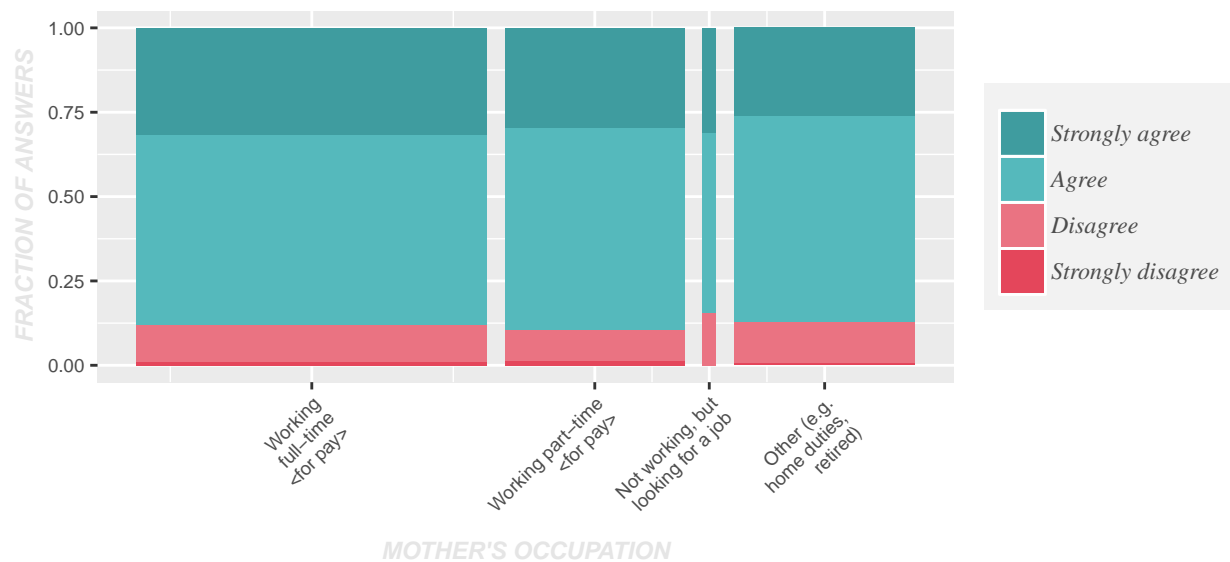
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

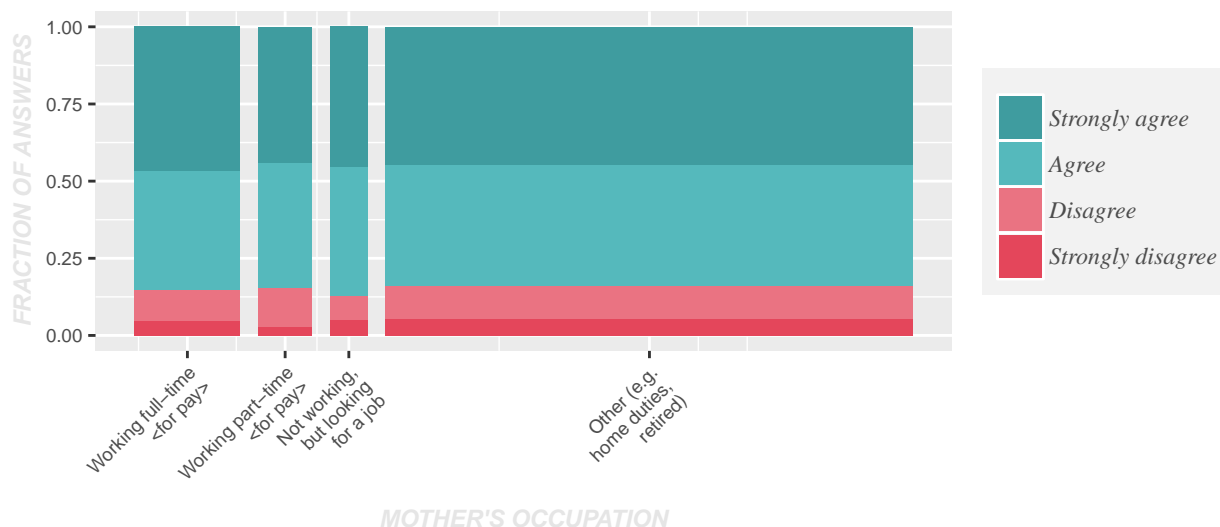
If I wanted to, I could do well in mathematics



Tunisia

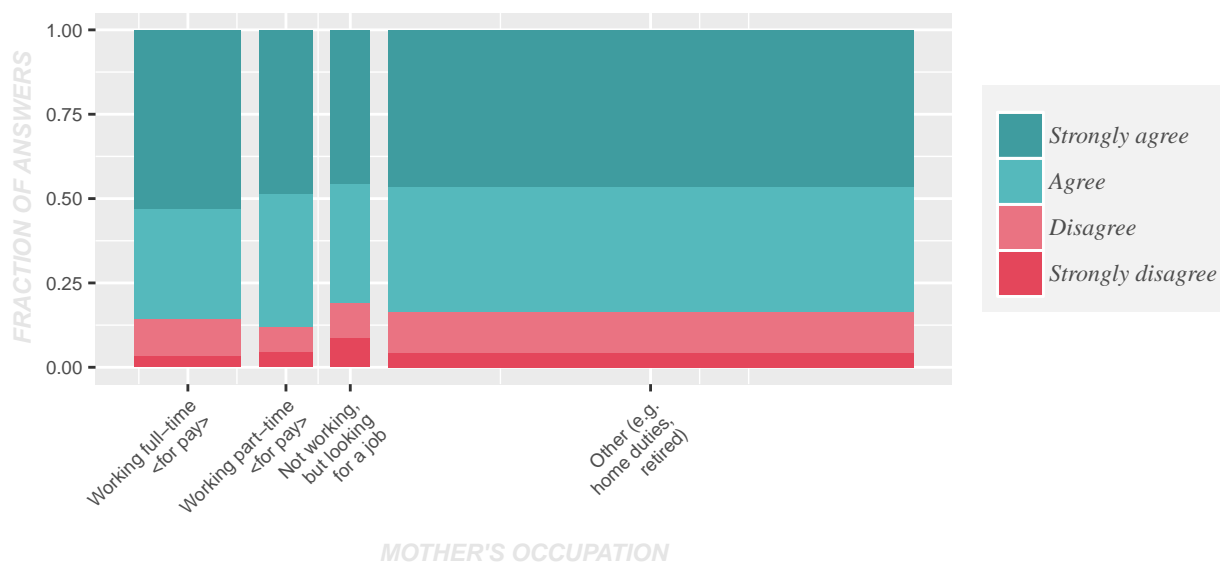
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

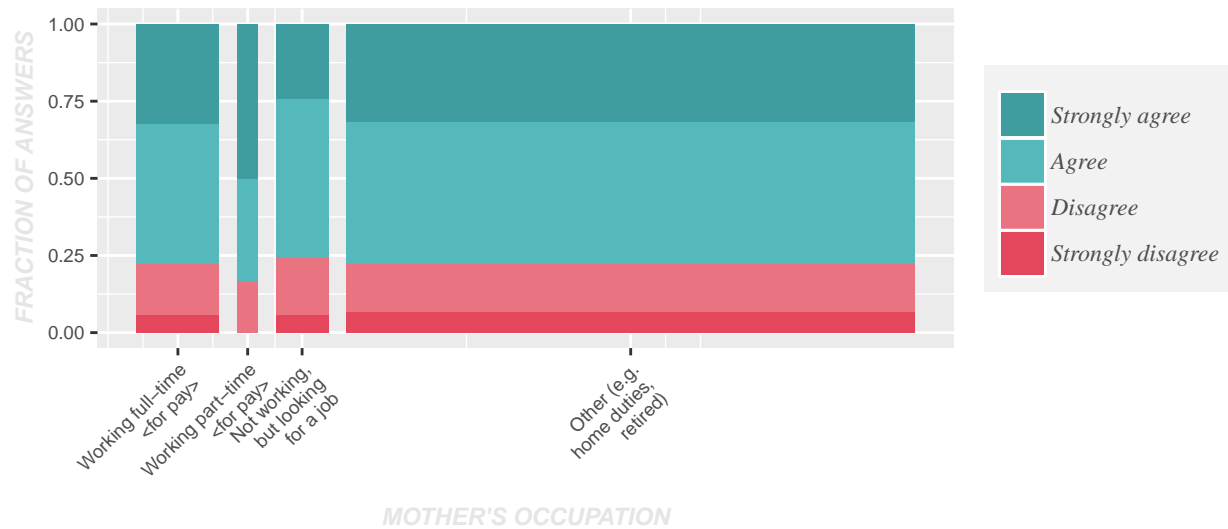
If I wanted to, I could do well in mathematics



Turkey

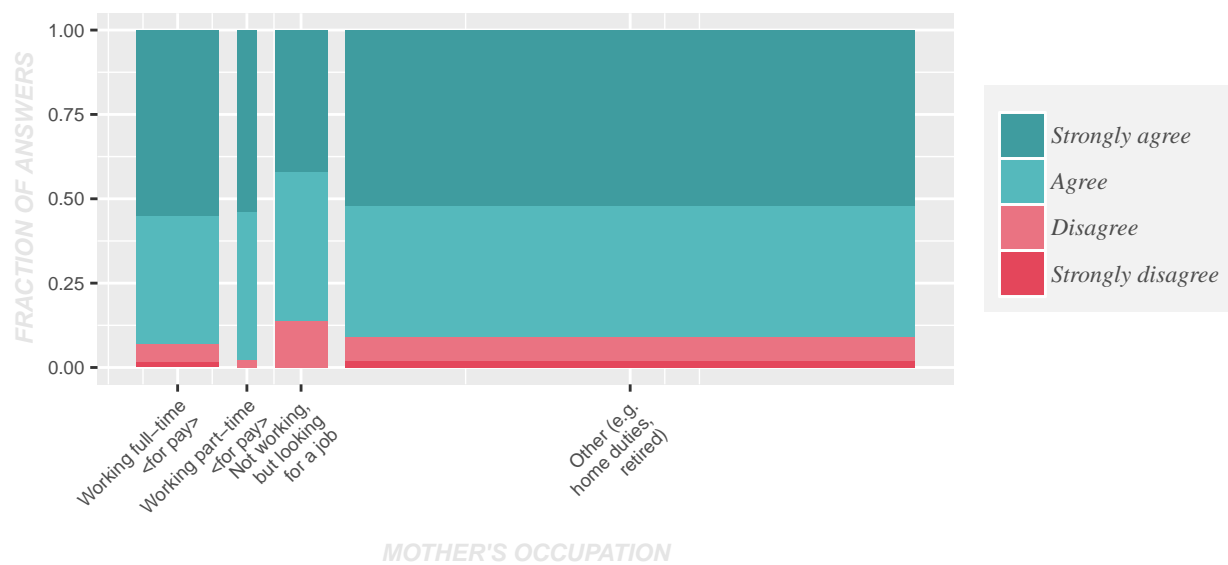
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

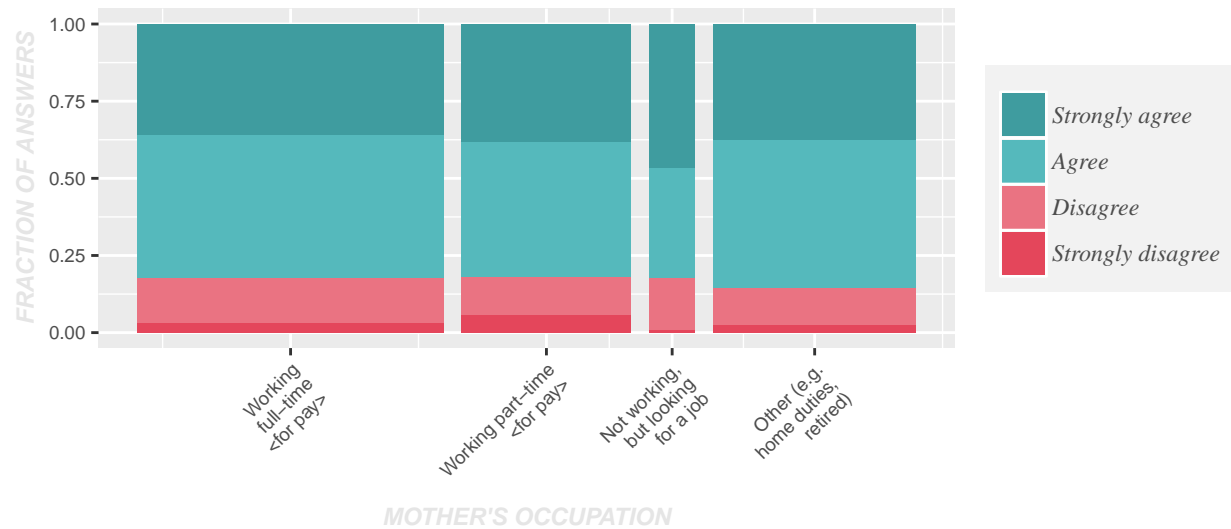
If I wanted to, I could do well in mathematics



Uruguay

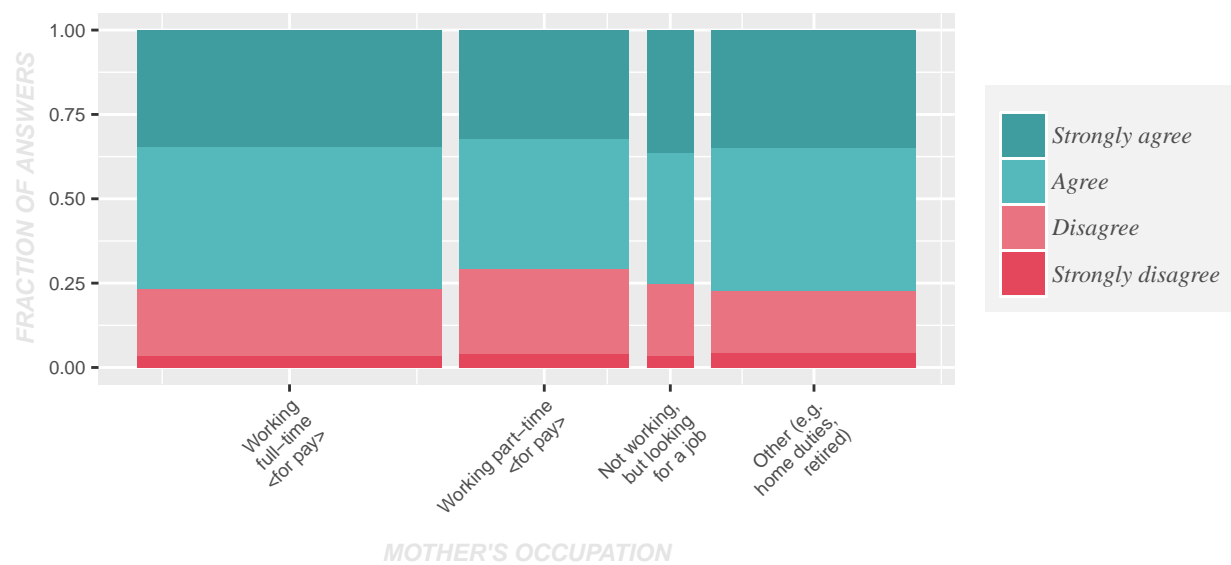
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

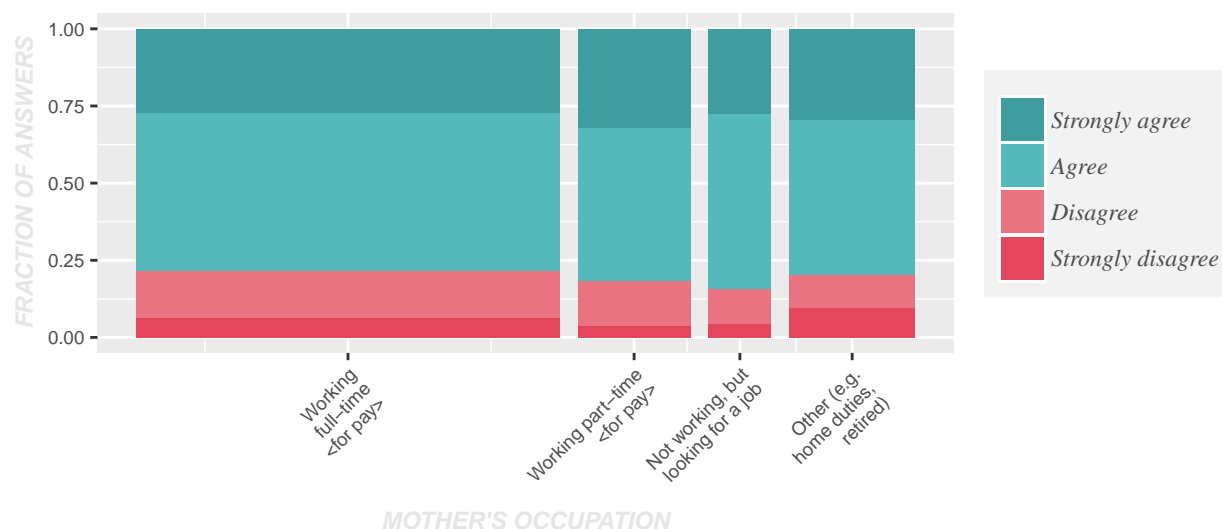
If I wanted to, I could do well in mathematics



United States of America

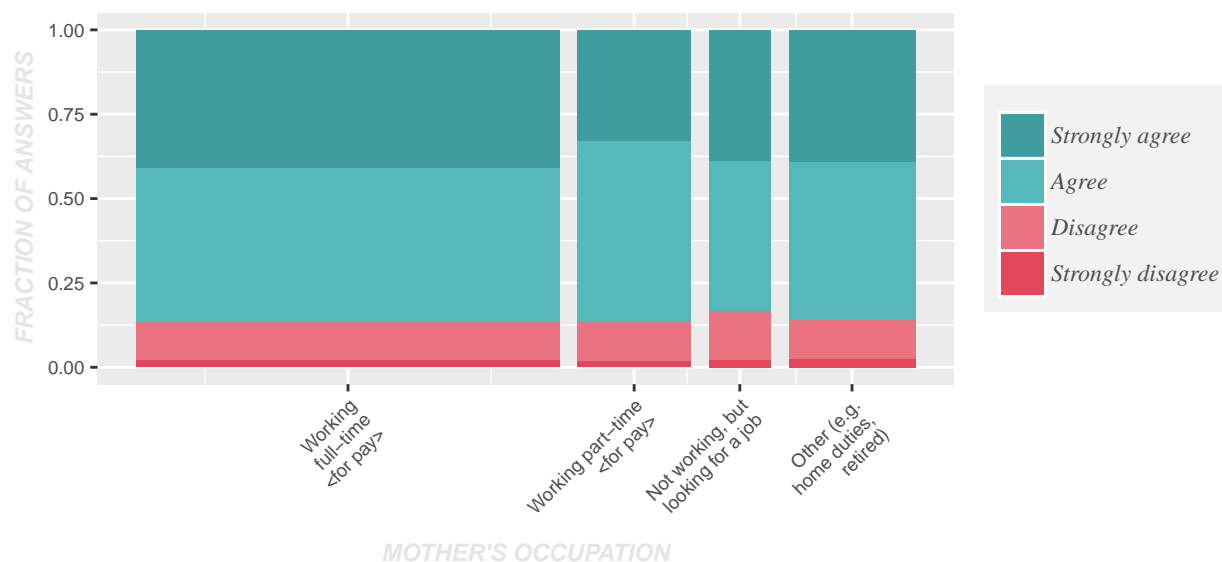
MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

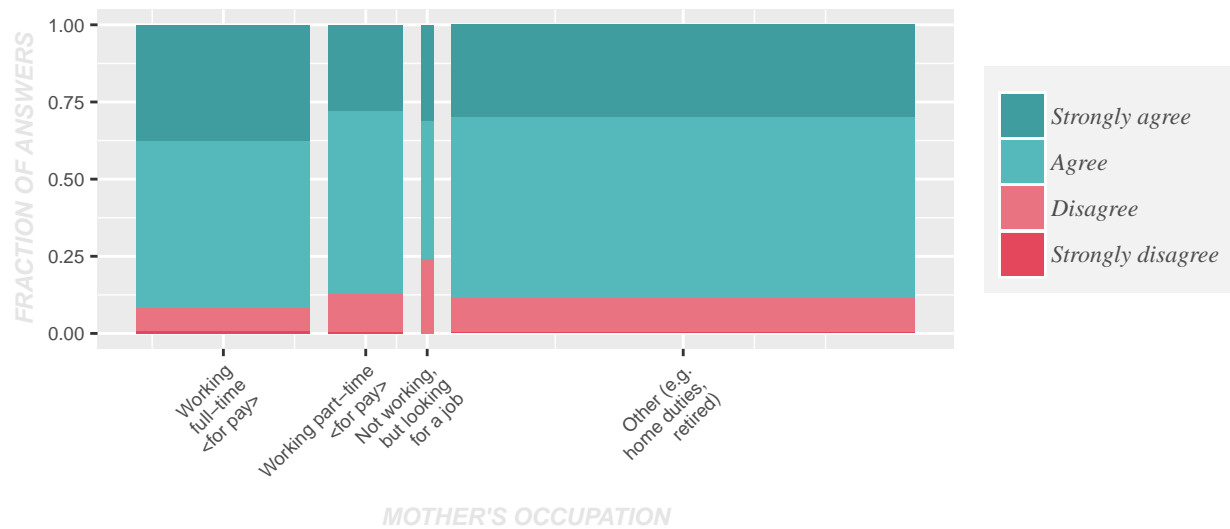
If I wanted to, I could do well in mathematics



Vietnam

MATH AND CAREER

*Learning mathematics is worthwhile for me
because it will improve my career*



MATH CONFIDENCE

If I wanted to, I could do well in mathematics

