Figure 1. Flowchart detailing the selection of studies into the analysis.



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|  | Outcome(s) | **Included studies that decompose gender differences** | "Physical functional limitations were measured by self-reported difficulties or inability to perform at least one of the listed activities involving physical body functions" | Disability: eight health and functioning domains: vision, mobility, self-care, cognition, interpersonal activities, pain and discomfort, sleep and energy, and affect |
|  | SEP indicator(s) | Occupation | Education, income |
| Table 1. General characteristic of the studies included in the systematic review | Number of observations | 7537 | 63638 |
| Age (included in study) | 45-74 | 50 and older |
|  | Cross-sectional | Cross-sectional |
| Study/cohort name | Health and Occupational Trajectories (SIP, French population survey) | World Health Survey (WHS) |
| Survey period | 2006 | 2002-2004 |
| Country/region | France | 57 countries |
| Study | Cambois, Garrouste and Pailhé 2016 | Hosseinpoor et al. 2012 |

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|  | Outcome(s) | **Included studies that contain regression estimates** | Activities of Daily Living (ADL) | SRHS, Activities of Daily Living (ADL)’, Instrumental Activities of Daily Living (IADL) | Activities of Daily Living (ADL), physical performance, functional tasks | Physical performance, mobility, activities of daily living (ADL) |
|  | SEP indicator(s) | Education, childhood SES | Literacy, Education, Years of education, Occupation, Retired, Age of retirement, Home ownership, wealth, income | Education | Education, sufficiency of income |
| Table 1. Continued | Number of observations | 9471 | 2143 | 14125 (HRS), 1051 (SEBAS), 6532 (KLoSA), 8846 (MHAS), 7438 (CHARLS), 4196 (IFLS-4), 449 (THLHP) | 1995 |
| Age (included in study) | 65-84 | 60+ | 55 and over | 65-74 |
| Type of study | Longitudinal | Cross-sectional | Cross-sectional | Cross-sectional |
| Study/cohort name | Health and Retirement Study (HRS) | SABE database | the 2006 wave of the Health and Retirement Study (HRS) in the USA, the 2006 wave of the Social Environment and Biomarkers of Ageing Study (SEBAS) in Taiwan, the 2006 wave of the Korean Longitudinal Study of Aging (KLoSA), the 2001 wave of the Mexican Health and Aging Study (MHAS), the 2011/2012 China Health and Retirement Longitudinal Study (CHARLS), the 2007/2008 wave of the Indonesian Family Life Study (IFLS-4) and the UNM-UCSB Tsimane Health & Life History Project (THLHP) | International Mobility in Aging Study (IMIAS) |
| Survey period | 1998-2010 | 1999-2000 | 2001-2011 | 2012 |
| Country/region | USA | Brazil, Argentina, Chile, Mexico | 7 countries | Canada, Albania, Brazil and Colombia |
| Study | Martin, Zimmer, and Lee 2017 | Trujillo et al. | Wheaton and Crimmins 2016 | Zunzunegui et al. 2015 |

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| Table 2. Associations between sex, disabilities and functional impairments and proportions of the associations attributable to socioeconomic conditions. Studies based on GLM regressions. \* | | | | | | |
|  |  | Crude |  | Adjusted |  | Contribution |
| Outcome | Region/Country | OR | 95% CI | OR | 95% CI | (%) |
|  |  |  |  |  |  |  |
| SPPB<8 | Natal, Brazila | **1.67** | **(1.14 – 2.45)** | **1.70** | **(1.15 – 2.50)** | -3.5 |
|  | Manizales, Colombiaa | **1.97** | **(1.06 – 3.65)** | 1.87 | (0.99 – 3.53) | 7.7 |
|  | Tirana, Albaniaa | **2.38** | **(1.53 – 3.69)** | **2.03** | **(1.31 – 3.16)** | 18.3 |
|  | Saint-Hyacinthe, Canadaa | 1.78 | (0.81 – 3.87) | 1.50 | (0.67 – 3.35) | 29.7 |
|  | Kingston, Canadaa | 1.16 | (0.58 – 2.33) | 1.16 | (0.56 – 2.36 | 0.0 |
|  |  |  |  |  |  |  |
| Impaired mobility | Natal, Brazila | **2.25** | **(1.75 – 2.89)** | **2.16** | **(1.68 – 2.77)** | 5.0 |
|  | Manizales, Colombiaa | **1.51** | **(1.23 – 1.87)** | **1.45** | **(1.18 – 1.79)** | 9.8 |
|  | Tirana, Albaniaa | **1.70** | **(1.39 – 2.08)** | **1.65** | **(1.34 – 2.02)** | 5.6 |
|  | Saint-Hyacinthe, Canadaa | **2.43** | **(1.59 – 3.70)** | **2.12** | **(1.38 – 3.25)** | 15.4 |
|  | Kingston, Canadaa | 1.17 | (0.78 – 1.75) | 1.15 | (0.76 – 1.72) | 11.0 |
|  |  |  |  |  |  |  |
| ADL-limitations | Natal, Brazila | **1.62** | **(1.19 – 2.21)** | **1.62** | **(1.19 – 2.21)** | 0,0 |
|  | Manizales, Colombiaa | 1.38 | (0.99 – 1.93) | 1.39 | (0.99 – 1.95) | -2.2 |
|  | Tirana, Albaniaa | **1.57** | **(1.19 – 2.07)** | **1.40** | **(1.05 – 1.86)** | 25.4 |
|  | Saint-Hyacinthe, Canadaa | **1.70** | **(1.06 – 2.74)** | 1.44 | (0.89 – 2.34) | 31.3 |
|  | Kingston, Canadaa | **1.15** | **(0.79 – 1.66)** | 1.12 | (0.77 – 1.63) | 18.9 |
|  | USAb | **1.60** | **(p<0.001)** | **1.34** | **(p<0.01)** | 38.6 |
|  |  |  |  |  |  |  |
| Squattingc | USA | **1.61** | **(1.48 – 1.75)** | **1.55** | **(1.41 – 1.70)** | 8.0 |
|  | Taiwan | **2.04** | **(1.42 – 2.93)** | **1.89** | **(1.23 – 2.90)** | 10.7 |
|  | Mexico | **1.84** | **(1.55 – 2.20)** | **1.83** | **(1.51 – 2.22)** | 0.9 |
|  | China | **1.22** | **(1.10 – 1.36)** | **1.14** | **(1.01 – 1.29)** | 34.1 |
|  | Indonesia | **1.37** | **(1.05 – 1.79)** | 1.16 | (0.84 – 1.61) | 52.9 |
|  |  |  |  |  |  |  |
| Stairsc | USA | **1.96** | **(1.80 – 2.13)** | **1.87** | **(1.71 – 2.04)** | 7.0 |
|  | Taiwan | **2.63** | **(1.93 – 3.57)** | **2.04** | **(1.51 – 2.76)** | 26.3 |
|  | Mexico | **1.97** | **(1.66 – 2.34)** | **1.92** | **(1.61 – 2.30)** | 3.8 |
|  | China | **1.33** | **(1.17 – 1.50)** | **1.20** | **(1.05 – 1.37)** | 36.1 |
|  |  |  |  |  |  |  |
| Carryingc | USA | **2.66** | **(2.37 – 2.97)** | **2.40** | **(2.13 – 2.71)** | 10.5 |
|  | Taiwan | **5.13** | **(3.09 – 8.54)** | **4.76** | **(2.78 – 8.15)** | 4.6 |
|  | Mexico | **2.62** | **(2.03 – 3.38)** | **2.43** | **(1.82 – 3.26)** | 7.8 |
|  | China | **2.28** | **(1.97 – 2.63)** | **2.15** | **(1.82 – 2.54)** | 7.1 |
|  | Indonesia | **2.66** | **(2.23 – 3.16)** | **2.23** | **(1.83 – 2.72)** | 18.0 |
|  |  |  |  |  |  |  |
| Dressingc | USA | **1.58** | **(1.36 – 1.84)** | **1.41** | **(1.21 – 1.65)** | 24.9 |
|  | Taiwan | **2.16** | **(1.12 – 4.19)** | 1.55 | (0.74 – 3.25) | 43.1 |
|  | Korea | 0.74 | (0.52 – 1.06) | **0.60** | **(0.40 – 0.92)** | -69.7 |
|  | Mexico | **1.43** | **(1.07 – 1.90)** | **1.46** | **(1.09 – 1.95)** | -5.8 |
|  | China | 1.04 | (0.85 – 1.26) | 0.86 | (0.70 – 1.07) | - † |
|  | Indonesia | **2.00** | **(1.58 – 2.53)** | **1.85** | **(1.41 – 2.42)** | 11.2 |
|  |  |  |  |  |  |  |
| Bathingc | USA | **1.33** | **(1.10 – 1.62)** | 1.11 | (0.89 – 1.38) | 63.4 |
|  | Taiwan | **2.15** | **(1.67 – 2.78)** | **1.90** | **(1.15 – 3.12)** | 16.1 |
|  | Korea | 0.96 | (0.68 – 1.37) | 0.80 | (0.53 – 1.20) | - † |
|  | Mexico | 1.29 | (0.88 – 1.90) | **1.20** | **(0.78 – 1.86)** | 28.4 |
|  | China | 1.09 | (0.92 – 1.30) | 0.92 | (0.75 – 1.12) | - † |
|  | Indonesia | **1.96** | **(1.42 – 2.70)** | **1.59** | **(1.05 – 2.41)** | 31.1 |
|  |  |  |  |  |  |  |
| Toilettingc | USA | **2.09** | **(1.64 – 2.66)** | **1.83** | **(1.41 – 2.36)** | 18.0 |
|  | Taiwan | **2.29** | **(1.30 – 4.02)** | 1.94 | (0.95 – 3.98) | 20.0 |
|  | Korea | **0.53** | **(0.31 – 0.92)** | **0.50** | **(0.26 – 0.97)** | -99.2 |
|  | Mexico | 1.50 | (0.98 – 2.30) | 1.33 | (0.84 – 2.13) | 29.7 |
|  | China | **1.22** | **(1.06 – 1.40)** | 1.11 | (0.94 – 1.30) | 47.5 |
|  | Indonesia | 1.26 | (0.74 – 2.16) | 1.02 | (0.54 – 1.95) | 91.4 |
|  |  |  |  |  |  |  |
| \* Statistically significant associations are marked in bold.  a Zunzunegui et al. 2015  b Martin, Zimmer & Lee 2017  c Wheaton & Crimmins 2016  † No contribution is calculated as the unadjusted sex difference is <10% | | | | | | |

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| Table 3. Associations between sex, disabilities and functional impairments and proportions of the associations attributable to socioeconomic conditions. Studies based on OLS regressions with men as the reference category. \*a | | | | |
|  |  | Crude | Adjusted | Contribution |
| Outcome | Region/Country | β | β | (%) |
|  |  |  |  |  |
| IADL | Brazil | **-0.54** | **-0.27** | 51 |
|  | Argentina | **-0.55** | **-0.42** | 24 |
|  | Chile | **-0.65** | **-0.24** | 63 |
|  | Mexico | **-0.59** | **-0.21** | 66 |
|  |  |  |  |  |
| ADL | Brazil | **-1.21** | **-1.00** | 17 |
|  | Argentina | **-0.97** | **-0.97** | 0 |
|  | Chile | **-1.45** | **-0.92** | 36 |
|  | Mexico | **-1.14** | **-0.67** | 41 |
|  |  |  |  |  |
| \* Statistically significant associations are marked in bold.  a Trujillo et al. 2010 | | | | |

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| Table 4. Associations between sex, disabilities and functional impairments and proportions of the associations attributable to socioeconomic conditions. Decomposition-based studies\* | | | | | |
|  |  |  | Difference in | Due to | Contribution |
| Outcome | Region/Country | OR | prevalence | distribution | (%) |
|  |  |  |  |  |  |
| Physical functional | France a | **1.16** | **6.3** | 3.0 | 47.6 |
| limitations |  |  |  |  |  |
|  |  |  |  |  |  |
| Disability | International b | 2.14 † | **16.4** | 6 | 36.6 |
|  | (57 countries) |  |  |  |  |
| \* Statistically significant associations are marked in bold.  a Cambois et al. 2016  b Hosseinpoor et al. 2012  † No odds ratio was given for the sex difference in the paper. This is estimated from the raw prevalence given in Table 1. | | | | | |

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| Table 5. Percentage of sex gap attributable to socioeconomic conditions. In total and stratified by region, outcome, effect size, socioeconomic indicators, and study type. | | | | | |
|  |  | Median | Min | Max | Nr. Associations |
|  |  |  |  |  |  |
| Total |  | 18% | -6% | 91% | 53 |
|  |  |  |  |  |  |
| By regiona | Upper middle-income economies b | 18% | -6% | 91% | 30 |
|  | High income economies | 19% | 0% | 63% | 22 |
|  |  |  |  |  |  |
|  | International | 36.5% | 36.5% | 36.5% | 1 |
|  |  |  |  |  |  |
| By Outcome | SPPB<8 | 8% | -3% | 30% | 5 |
|  | Impaired mobility | 10% | 5% | 15% | 5 |
|  | ADL-limitations | 22% | -2% | 41% | 10 |
|  | IADL-limitations | 57% | 24% | 66% | 4 |
|  | Disability | 45% | 45% | 45% | 1 |
|  | Physical limitations | 48% | 48% | 48% | 1 |
|  | Squatting | 11% | 1% | 53% | 5 |
|  | Stairs | 17% | 4% | 36% | 4 |
|  | Carrying | 8% | 5% | 18% | 5 |
|  | Dressing | 18% | -6% | 43% | 4 |
|  | Bathing | 30% | 16% | 63% | 4 |
|  | Toiletting | 30% | 18% | 91% | 5 |
|  |  |  |  |  |  |
| By effect size c | OR 1.10 – 1.49 | 34% | -6% | 91% | 13 |
|  | OR 1.50 – 1.99 | 9% | -3% | 39% | 16 |
|  | OR ≥ 2.00 | 16% | 5% | 45% | 16 |
|  |  |  |  |  |  |
| By social | Education & childhood SES | 39% | 39% | 39% | 1 |
| variables | Education & marital status | 18% | -6% | 91% | 27 |
|  | Education & income | 10% | -3% | 45% | 15 |
|  | Occupation | 48% | 48% | 48% | 1 |
|  | Vector of SESc | 39% | 0% | 66% | 8 |
|  |  |  |  |  |  |
| Type of study | Regression based (GLM) | 16% | -6% | 91% | 43 |
|  | Regression based (OLS) | 39% | 0% | 66% | 8 |
|  | Decomposition based | 42.1% | 36.6% | 47.6% | 2 |
|  |  |  |  |  |  |
| a Upper middle income:Brazil, Colombia, Albania, Argentina, Mexico, China, Indonesia  High income: France, Canada, USA, Chile, Taiwan  b No contribution is calculated for Korea, as the sex gap was reversed in the Korean study.  c Do not include Trujillo et al. 2010, as no comparable effect sizes can be calculated for that study.  d Level of schooling, illiteracy, age when started to work, current work status, age at retirement,  type of occupation, total income from different sources (pension, family transfers, banking  income, welfare subsidy), home ownership, list of household assets (e.g., refrigerator, washer,  water heater, microwave, television, telephone, VCR, radio player, heating, air conditioning, fan)  Availability of health insurance, includes the following categories: social security, private and  public insurance | | | | | |
|  | | | | | |