

## **Appendix 2. Relationships between socio-demographic factors of gardeners.**

### **METHODS**

To examine potential interactions between socio-demographic variables (e.g., gender, age, region of national origin), motivations for gardening, and gardening experience (e.g., hours spent in the garden) examined in this study, we used chi-square analysis with the CHITEST function in Excel. For each variable, we examined axes of difference for other variables. Age and hours spent gardening were continuous variables, so we first grouped these into categories. For age, we grouped gardeners in three groups each representing close to a third of gardeners: 22-50 years old (n=53), 51-62 years old (n=52), and >63 years old (n=61). For hours spent in the garden, we grouped gardeners in three groups each representing close to a third of gardeners: 0.5-3 hours (n=55), 3.5-6 hours (n=56), 6.5-60 hours (n=55).

### **RESULTS**

There were several differences in other socio-demographic features with gardener gender (Fig. A2.1). Gardener gender was consistent across different age groups ( $P=0.325$ ), but education ( $P<0.001$ ), motivations ( $P=0.004$ ), region of national origin ( $P=0.001$ ), and hours spent in the garden ( $P=0.031$ ) all differed between men and women. Women were more highly educated than men, tended to be more highly motivated by nature connection and less by health, recreation, and social reasons, and spent fewer hours gardening compared with men. In addition, there were more female Asia/Pacific-origin and Europe-origin gardeners compared with males.

Only region of national origin differed depending on gardener age (Fig. A2.2). Gardener age groups were balanced between gender ( $P=0.245$ ), education ( $P=0.261$ ), motivations ( $P=0.430$ ), and hours spent gardening ( $P=0.348$ ), but there were differences in age groups with region of national origin ( $P=0.017$ ). There were more older gardeners from Europe and USA/Canada and more gardeners from younger age groups from Asia/Pacific Islands and Latin America.

Education level differed with all other socio-demographic, motivation, and experience factors (Fig. A2.3). Gardener education level differed with age ( $P<0.001$ ), gender ( $P<0.001$ ), region of national origin ( $P<0.001$ ), motivations ( $P<0.001$ ), and hours spent gardening ( $P<0.001$ ). Older gardeners were more likely to have no formal education or to have graduate degrees and intermediate age gardeners (51-62) were more likely to have less than high school education. Female gardeners were more likely to be more highly educated. Latin America-origin gardeners were the least educated in the survey group and USA/Canada-origin gardeners were more educated. Gardeners with less education were more likely to garden for recreation and gardeners with more education were more likely to garden for nature connection and social reasons.

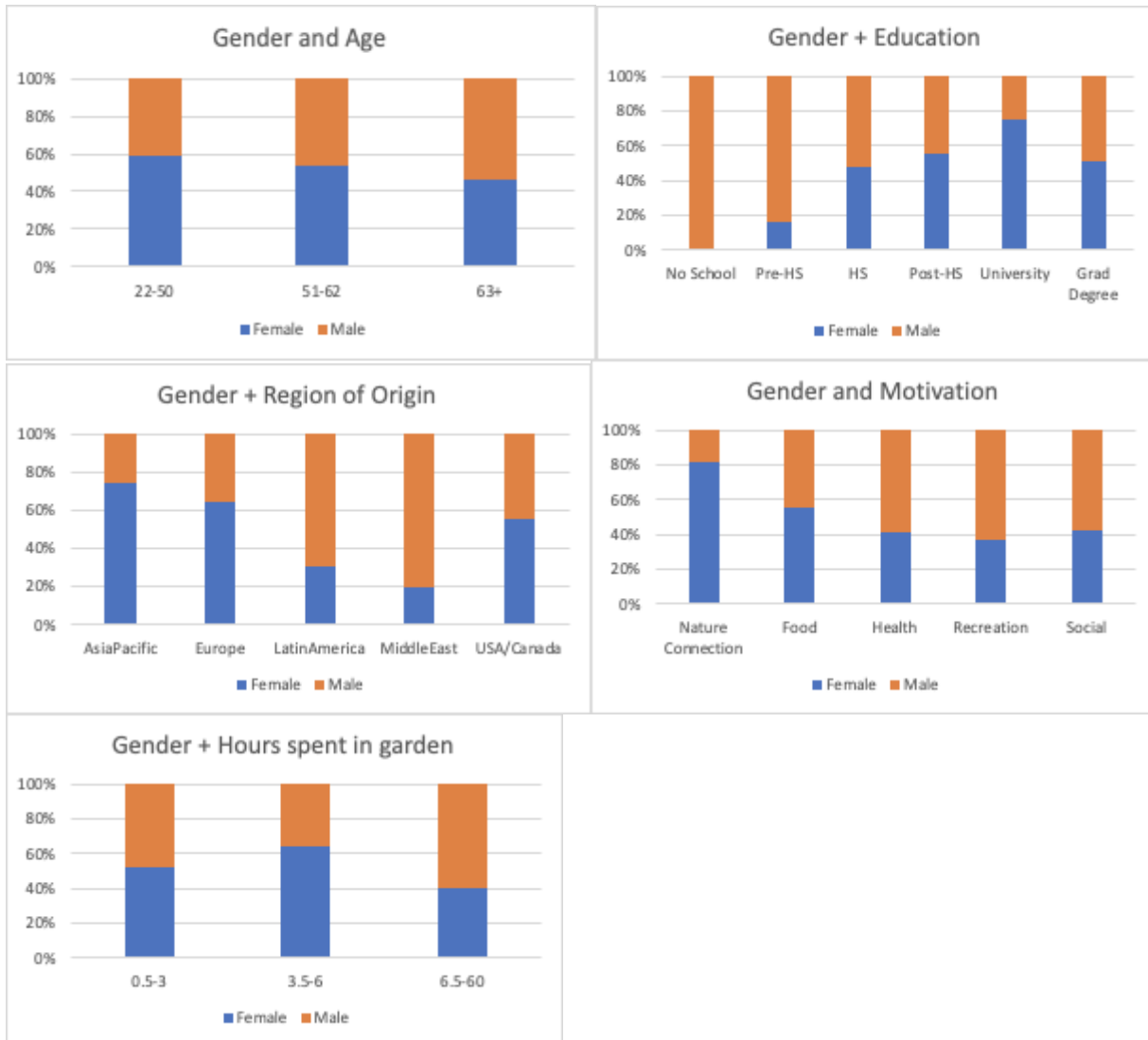
All factors differed with gardener region of origin (Fig. A2.4). Gardeners from Latin America and the Middle East were more often male ( $P<0.001$ ). Asia/Pacific-origin gardeners were less likely from the older age group and Middle East-origin gardeners were either from the younger or older age group, missing the intermediate age group ( $P<0.001$ ). Gardeners from Latin America were less educated than other groups ( $P<0.001$ ). Gardeners from Latin America and the Middle East were more likely motivated by recreation and those from USA/Canada, Asia/Pacific

and Europe were more motivated by nature connection ( $P < 0.001$ ). Middle East-origin gardeners were more likely to spend long hours in the garden ( $P < 0.001$ ).

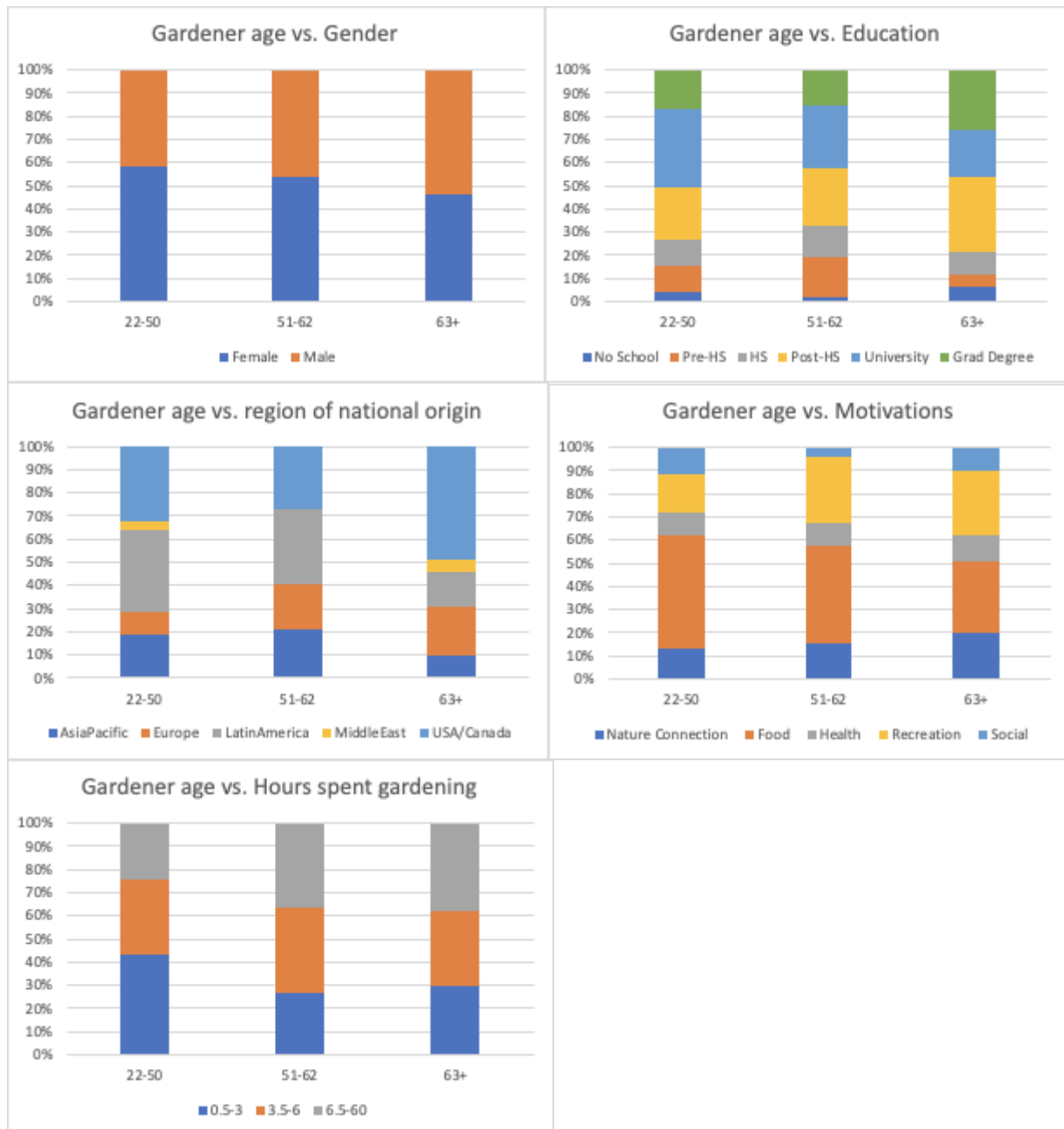
Motivations of gardeners strongly depended on all other demographic factors and experience (Fig. A2.5). Gardener motivations differed with gardener gender ( $P < 0.001$ ), age ( $P < 0.001$ ), education ( $P < 0.001$ ), region of national origin ( $P < 0.001$ ), and hours spent gardening ( $P < 0.001$ ). Older gardeners were more motivated by recreation and nature connection while younger gardeners were more motivated by food. Female gardeners were more motivated by nature connection and male gardeners were more motivated by recreation and health reasons. Latin America-origin and Middle East-origin gardeners were more motivated by recreation and Asia/Pacific-origin, Europe-origin, and USA/Canada-origin gardeners were more motivated by nature connection. Gardeners without any formal education were far more likely to be motivated by recreation and less by food compared to all other groups, and gardeners with higher levels of education were more likely to be motivated by nature connection. Finally, gardeners that spent more time gardening (6.5-60 hours per week) were more motivated by recreation than other groups.

The number of hours spent gardening depended on gender, education, and age but not other variables (Fig. A.2.6). The number of hours spent gardening was similar depending on region of national origin ( $P = 0.522$ ) and motivation ( $P = 0.674$ ). More men spent long hours gardening ( $P = 0.037$ ), gardeners with less education spent more time in the garden ( $P < 0.001$ ), and older gardeners spent more time gardening ( $P < 0.001$ ).

**Figure A2.1.** Relationships between gender and age, education, region of national origin, motivation for gardening, and hours spent in the garden.



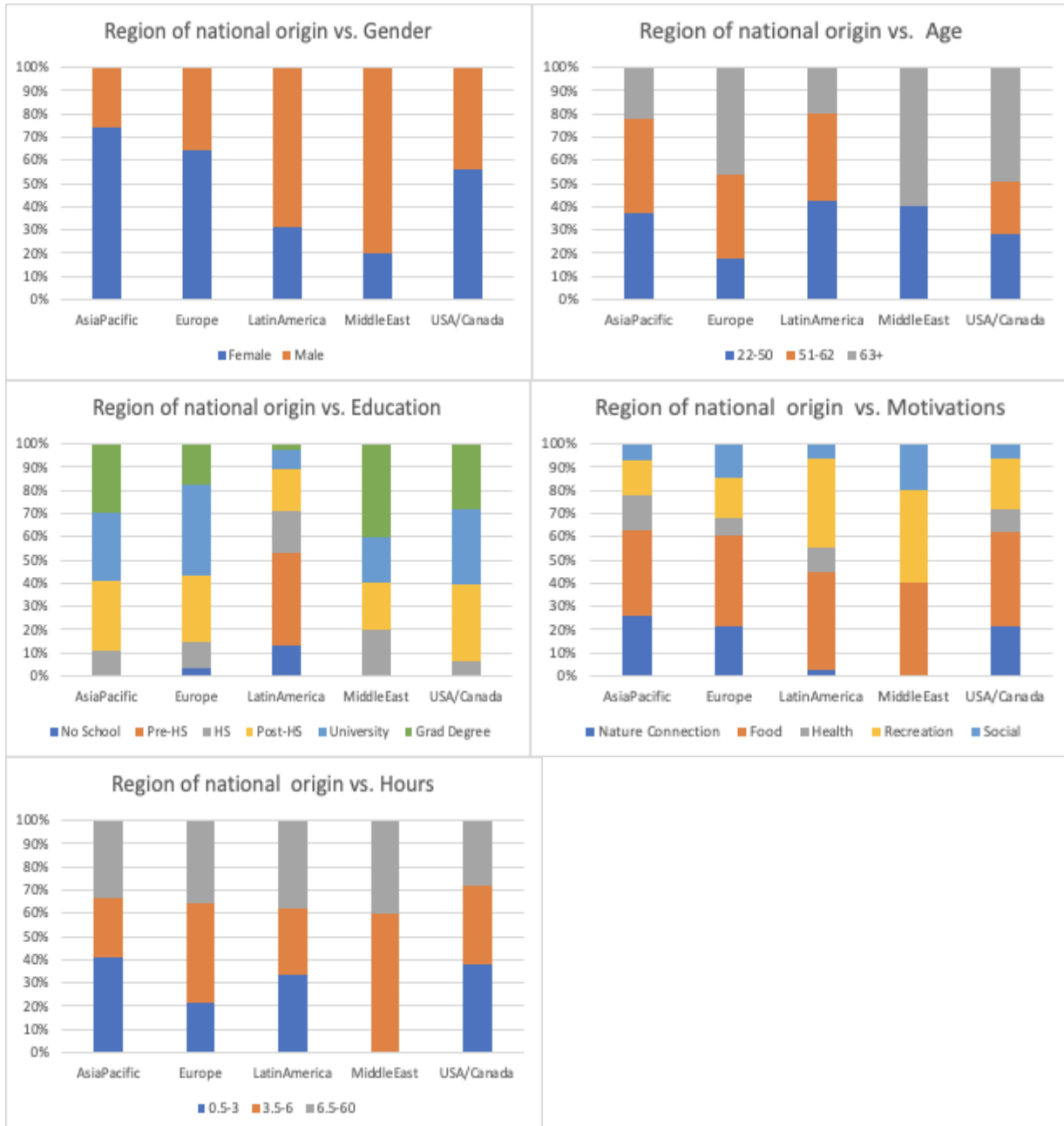
**Figure A2.2.** Relationships between age of gardener and gender, education, region of national origin, motivations, and hours spent gardening.



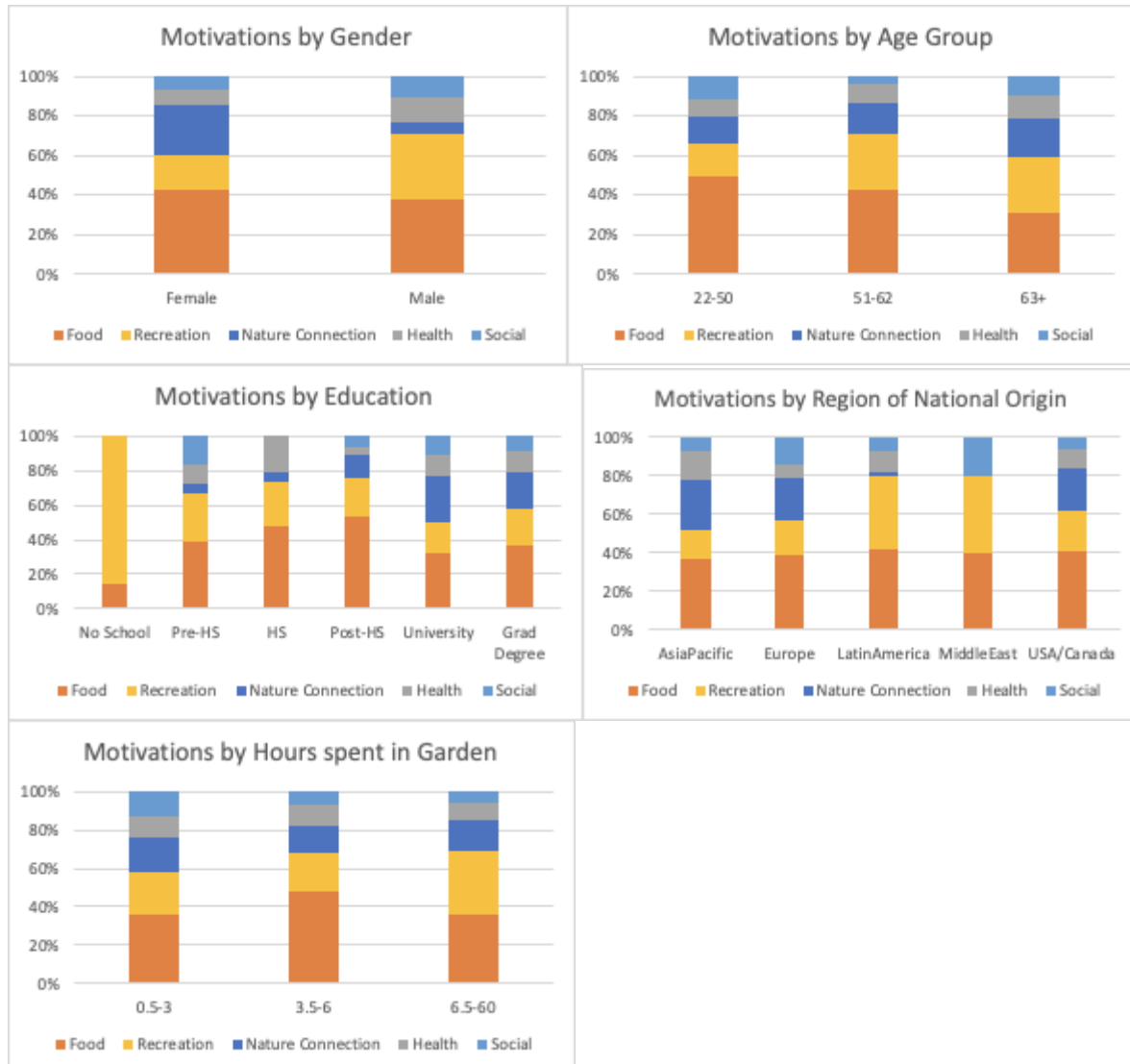
**Figure A2.3.** Relationships between education, age, gender, region of national origin, motivations for gardening, and hours spent gardening.



**Figure A2.4.** Relationships between region of national origin and gender, age, education, motivations for gardening, and hours spent gardening.



**Figure A2.5.** Relationships between motivations for gardening and gender, age, region of national origin, education, and hours spent gardening.



**Figure A2.6.** Relationships between hours spent gardening and gardener age, gender, education, region of national origin, and motivations for gardening.

