

Future Expectations & Long-term Health: The Relationship Between Post-School Expectations & Health/Risk Behaviours in Scottish Adolescents

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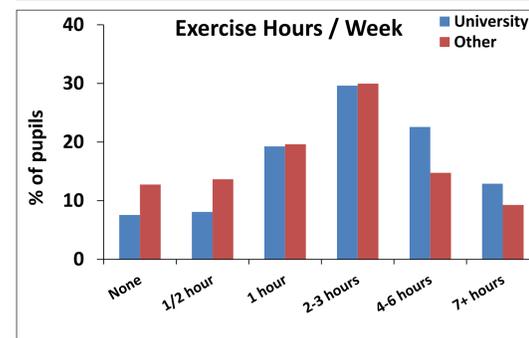
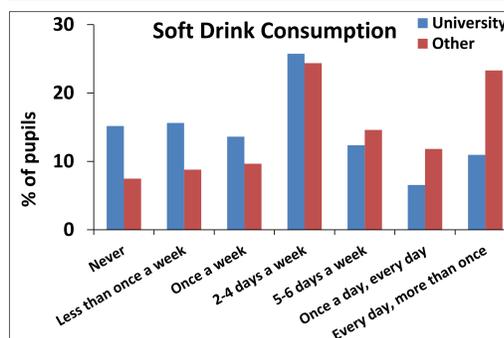
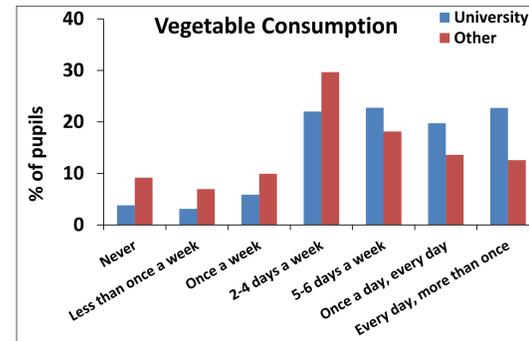
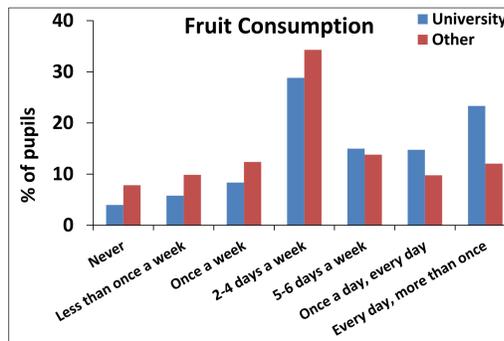
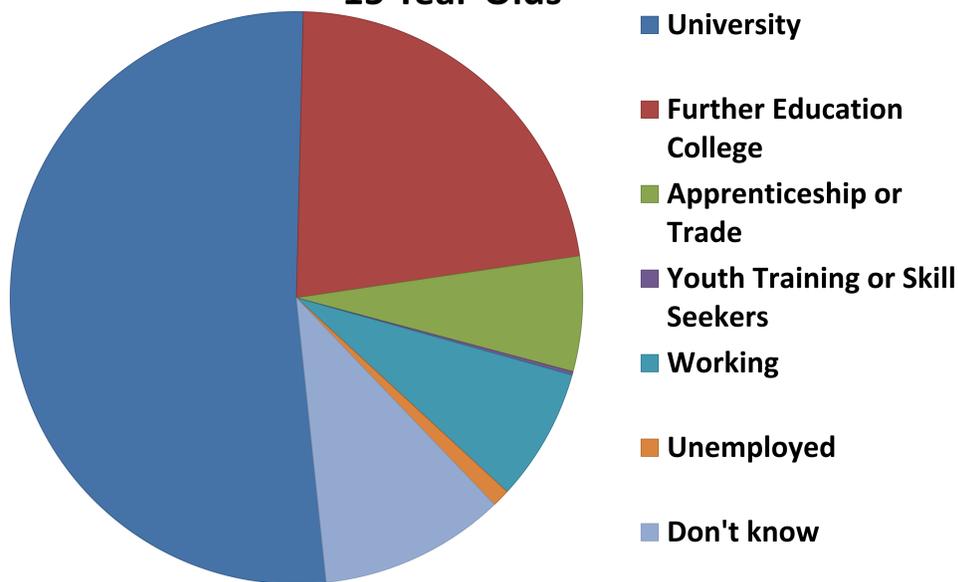
Introduction

Behavioral determinants of chronic disease cluster together within individuals^{1,2} suggesting that there may exist overarching factors which affect the value that individuals place on long-term health.

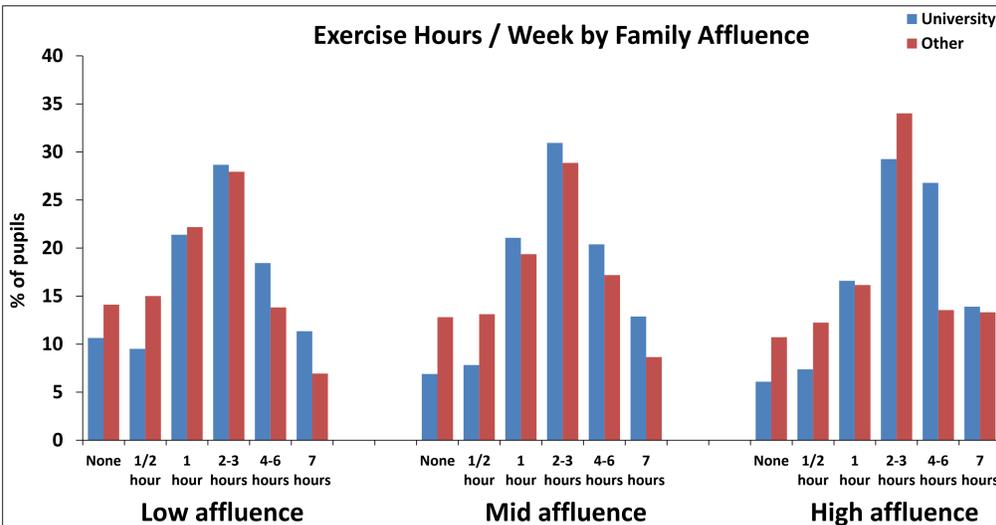
One such factor may implicate the individual's life history strategy³, which could govern how finite biological resources (e.g. telomeres⁴) are expended over the life span.

We hypothesise that individuals expecting a long-term payoff strategy will adopt behaviors which are protective of long term health, relative to those expecting a shorter-term payoff strategy. We test this hypothesis with data from 15 year-olds in the 2010 Scottish HBSC survey.

Expected Post-School Destinations of Scottish 15 Year-Olds



Exercise Hours / Week by Family Affluence



Ordered Logistic Regressions

Effect of post-school expectations, on health/risk behaviours (controlling affluence & gender):
N.B. Similar results are obtained when including Further Education college as a long-term expectation.

Behaviour	Logit (95% CI) (other vs. University)	Sig.
Fruit consumption	-0.652 (-0.800, -0.504)	p<0.001
Vegetable consumption	-0.736 (-0.883, -0.588)	p<0.001
Soft drink consumption	0.738 (0.590, 0.885)	p<0.001
Exercise hours / week	-0.551 (-0.701, -0.401)	p<0.001
Weekday TV watching	0.427 (0.278, 0.577)	p<0.001
Tooth brushing frequency	0.411 (0.220, 0.602)	p<0.001
Weekday breakfast	-0.585 (-0.744, -0.426)	p<0.001
Eating sweets	0.060 (-0.086, 0.206)	p=0.417
Weekday computer games	0.530 (0.377, 0.683)	p<0.001
Tried smoking	0.896 (1.070, 0.772)	p<0.001
Been drunk	0.863 (0.710, 1.016)	p<0.001
Times injured	0.289 (0.130, 0.448)	p<0.001

Discussion

Longer-term educational expectations are associated with increased uptake of health behaviours and avoidance of risk behaviours (independent of gender and family affluence effects), suggesting that the expectation of a longer-term payoff-strategy predisposes individuals to be more protective of their long-term health.

These results are consistent with a life-history approach³ which hypothesizes that natural selection has shaped the way in which individuals expend finite lifetime resources in order to maximize pay-off within a particular environment. Further analysis should investigate contextual determinants of educational expectations, with particular focus on the factors which maintain long-term expectations despite adversity.

Lifestyle interventions which target the formation of long-term aspirations may prove to be an economical means of improving population health.

References

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