

The University of York

Department of Computer Science

**Submitted in part fulfilment for the degree of BEng.**

# **Evolutionary agent-based simulation modelling of human life-history evolution**

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Number of words = 8832, as counted by `wc -w`.  
This includes the body of the report only.



### **Abstract**

This is an abstract. Should be about 500 words long.



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# 1 Introduction

This should be about 1000 words long.

## 2 Literature Review

This should be about 3000 words long.

### 2.1 What is Menopause?

### 2.2 Modelling techniques

Deterministic vs stochastic – computers provide new methods

#### 2.2.1 Deterministic Models

#### 2.2.2 Stochastic Models

### 2.3 Theories to explain evolution of menopause

#### 2.3.1 Mother Hypothesis

#### 2.3.2 Grandmother Hypothesis

#### 2.3.3 Male Preference

#### 2.3.4 Reproductive Conflict

#### Example 1.

Admittedly, this is a very simplistic description of what really happens, but the point is that TeX operates with glue and boxes. Letters are not the only things that can be boxes. [1] One can put virtually everything into a box, including other boxes. Each box will then be handled by LaTeX as if it were a single letter.

### 2.4 Male preference and modelling

### **3 Problem Description/Analysis**

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## **4 Design and Implemenation**

This should be about 2500 words long.

## **5 Results and Evaluation**

This should be about 2500 words long.

## **6 Conclusion**

This should be about 1000 words long.

## Bibliography

- [1] S. D. Tuljapurkar, C. O. Puleston, and M. D. Gurven, "Why men matter: Mating patterns drive evolution of human lifespan," *PLOS ONE*, 2007. [Online]. Available: <http://dx.doi.org/10.1371/journal.pone.0000785>