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## Determining the accuracy of The Sims 2 as a model for life

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### Abstract

In this paper The Sims 2 is reviewed as a life model since it is a game of life. The trimesters of pregnancy are considered, and gestational period is examined. This paper finds that The Sims 2 is characteristically accurate however when looking at gestational period it is not an accurate model for life. The paper explores life through comparing pregnancy. A human is pregnant for less than 1% of their life if they experience only one ideal gestational period. A sim is pregnant for more than 1% of their life. A sims pregnancy time period is proportionally closer to that of 21 months of pregnancy but still slightly longer.

**Keywords:** *Game; Biology; Gestational Period; Baby; Fetus; Sims; The Sims 2*

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### Introduction



*Figure 1 – An image of game play from The Sims 2. The oven has caught on fire, the most likely cause is due to the sims hunger and trying to make food but being distracted by their needs (or the player cancelled the action but left the food in the oven to purposely start a fire) [1].*

The Sims 2 is the second instalment, in a game of life series called The Sims. An individual player can create a family, design their outfits, decide familial relationships, star-signs, characteristics, aspirations and desires etc in The Sims 2. After doing this the player enters a life screen shown in the figure above and their age is displayed [2]. The player can switch between playing as any of the sims in the household as and when they please. When playing as a sim the player can interact with objects in order to carry out tasks to sustain their life. The sim has a bar monitoring hunger, social interaction, bladder, sleep and more [2]. Sims speak their own language called Simlish. The Sims 2 contains many expansion packs which require the base game to be played. Expansion

packs unlock more features and activities for example The University expansion pack unlocks the young adult age range where sims can go to university after being a teen. Sims can also communicate their needs by producing thought bubbles [2]. A key metric to determine whether the sims is an accurate measure of life would be to look at The Sims 2 Gestational period in comparison with lifespan. Gestational period is the time between conception and birth [3]. Pregnancy is usually broken down into 3 trimesters from conception.

### Conception

A sim can become pregnant in the game by 'Trying For, a Baby' after relaxing in bed with another sim. This is a purposeful interaction and different to simply 'Woohoo'-ing. As it is not that type of game, and also marketed to children everything happens, under a blanket and the player sees suggestive lumps. In real life people also typically try to conceive in a bed (and may exclaim 'Woohoo' at some point before, during or after non-baby-making intercourse) so this is an accurate reflection of conception and sex [2].

### Trimester 1

The Sim starts experiencing morning sickness and nausea indicated by running to the toilet and throwing up [4]. Nausea and fatigue are common symptoms experienced by individuals at this stage of pregnancy [5].



Figure 2 – Week 4 of pregnancy [6].

During this trimester body structure and organ systems develop [5]. By the end of this period fingernails form [6]. This trimester is about 13 weeks [5].

### Trimester 2

At this point in the game the bump becomes visible like in real life [4]. The Sim is unable to do some activities like yoga and working out in front of a stereo [4]. The Sim however will be able to work out in front of a TV and go swimming [4]. The womb's proximity to the sounds made by the mother's organs makes it a noisy place [7]. Also the voice is amplified by vibrations so a stereo would induce disturbing noise for the fetus which could result in the damage of the hearing of the baby [7]. It is recommended that environment sound is kept between 50-60 dB [7] and the average speaker has a sound range of 80-90 dB [8] in real life. So, this exemplifies the validity the 2<sup>nd</sup> trimester in *The Sims 2*. This trimester is approximately another 13 weeks [5].

### Trimester 3

The abdomen again increases in size in game and in real life. The Sim will experience mood swings which can affect relationships [4]. Mood swings do occur both in the 1<sup>st</sup> and 3<sup>rd</sup> trimester of pregnancy in real life due to hormone fluctuations [9]. At this stage levels of oestrogen are six times higher [10]. The fetal adrenal provides dehydroisoandrosterone sulfate which is converted to estradiol-17 $\beta$  by trophoblasts [11]. Exchanges of chemicals occur between the fetus and the placenta in which the fetus provides the placenta with a precursor for oestrogen [11]. This high hormone level is to improve vascularisation and support the developing baby [12]. This trimester is until birth [5].

### Birth

The animation for the *Sims 2* birth shows the Sim in pain and the camera pans up to the diamond on the *Sims* head, a small baby diamond pops out of the bigger one and then a baby drops into the arms of the mother [2]. If we take this animation symbolically it is correct. Pain is also typically felt by the mother during

child birth [13]. During childbirth there are 2 types of pain visceral and somatic pain [13].



Figure 3 – All the phases of pregnancy on a sim [4].

### Gestational Period

The *Sims 2* gestational period is 75 hours (which is about 3 days) in the *Sims* [5] universe; in real life it is about 208 to 284 days [14]. This 3-day period may represent each trimester of pregnancy. If we scale this against a life span of 29346 days from 2004, as this was when the game was released [15], then a person is pregnant for between 0.7% to 0.9% of their life assuming they have one child, no miscarriages and ideal conditions. In *The Sims 2* a life span is 92 days to 113 days (with the university expansion pack) [16], this means a Sim is pregnant for 2.6% to 3% of their life (excluding the university expansion pack this percentage range is 3.3% to 4.4%). Sim gestational period is longer than in real life. Theoretically, a sim should be pregnant for about 1 day in sim time for it to reflect the period of 9 months humans experience. Contrarily, scientists have claimed that to be in accordance with our immediate ancestors our gestational period should be 21 months [17]. If this was our gestational period, 2.2% of a person's lifetime would be spent pregnant. Meaning *The Sims 2* would be more accurate. All percentages were calculated by dividing the total days of gestation by the total days of life.

### Conclusion

In terms of symptoms *The Sims 2* is an accurate model for life. In terms of time modelled by gestational period it is not an accurate model as growth of sim baby uses up more lifetime than what is experienced in human life. This paper did not take into consideration a logarithmic timescale for the *sims* game which if considered could reveal a more accurate gestational period. On the other hand the 3 days to reflect 3 separate stages is correct and if we consider how long gestation 'should' be for humans it is a close reflection of life. Suggesting that the game is an accurate model of life, if life went almost perfectly.

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