



Independent research & further reading

Guest: Bill Von Hippel

Disclaimer 1: The literature presented here, directly (or as closely as possible) looks at statements made by the guest. In order to fully understand each topic mentioned, an extensive literature review (beyond the scope of this document) would be required.

Disclaimer 2: The information provided in this podcast and any associated materials is not intended to replace professional medical advice. For any medical concerns, it is essential to consult a qualified health professional.

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Chimpanzees violence within their own group

“So if you look at chimpanzees and how violent they are to other groups of chimpanzees and how violent they are within their own group, they are about 600 times as violent as we are within their own group. So 600 times as likely to hit or bite or otherwise harm members of their own group as well.”

Chimpanzees exhibit non-lethal physical aggression at levels 100 to 1,000 times higher than humans (1).

Living alone

““In 18 51% of Americans lived alone. Now it's a one in 100 now it's one in seven. So you know, here we are, 170 years LA, and 75 years later. And it used to be crazy rare, and now it's one in seven. It's pretty darn common.”

The number of people living alone in the United States has increased significantly, with 28% of households being one-person households in 2019 compared to 13% in 1960. Interestingly, the increase in one-person households has outpaced total population growth since 1960. Long-term historical data from 1850 to 2015 reveal that societal, cultural, economic, and legislative changes have influenced this trend.

References 2-5.

Seeing your neighbours

“about 30% of people saw their neighbors, got together with their neighbors, not visually seeing them, but got together with their neighbors at least a few times a week, and only one in five pretty much never saw their neighbors at all”

Reference 6.

Married couples spending less time together

“married couples are spending less time together”

Reference 7.

Hazda people

"Hadza people over 90% are happy"

Reference 8.

Children deaths 100 years ago

"And you know, even if we look back 100 years, 100 years ago, a quarter of the children died by 150 years ago, a quarter of the children died by the time they turned five"

Reference 9.

Living in cities vs in the country and wealth

"People who live in cities in the United States, for example, are about 25% wealthier than people who live in the country"

People living in urban areas in the United States tend to be wealthier and have better health outcomes, including longer life expectancy and lower mortality rates, compared to those living in rural areas.

References 10-12.

Relationships in rural vs urban areas

"people in rural areas are much more satisfied with their friendships and relationships than those that live in urban areas."

References 13-16.

Economically-challenged people and friendships

"poor people are happier with their friendships"

Poor people may be happier with their friendships due to the importance of deep social connections and non-material aspects of life, although this happiness is influenced by various factors such as economic stability and social exclusion.

References 17-19.

High testosterone and attractiveness

“high testosterone men are more likely to pair up. They take these risks. Women find them attractive at some level, even if they don't personally feel like it's attractive at the moment, but something about that is attractive to them”

High testosterone in men is associated with increased mating success and attraction to women, particularly for short-term relationships, due to enhanced sociosexuality, perceived dominance, and risk-taking behaviours.

References 20-23.

Sexual plasticity

“women have a lot more of what we call sexual plasticity than men”

Women exhibit greater sexual plasticity than men, as their sexual behaviours and attitudes are more influenced by sociocultural, situational, and environmental factors.

References 24, 25.

Genetics of homosexuality

“there's a lot of genes that contribute to homosexuality, and the more of those genes you have, you know, most, most human behaviors are driven by a number of genes, not just one. We call them polygenic. A whole bunch of genes contribute to a particular behavior, and especially a complex behavior like so homosexuality”

“ this paper was published in Science, if I remember right, a few years ago, and laid out the genes. And they don't make sense. Some of them relate to your sense of smell. There. We don't understand these polygenic scores very well yet.”

Studies suggest that male homosexuality may be influenced by genetic factors, with potential contributions from regions on chromosomes Xq28 and 8, and possibly other polygenic influences, but no single gene has a strong influence. While early studies reported this linkage between homosexuality and the Xq28 chromosomal region, subsequent research has not confirmed this finding. Genome-wide scans have identified potential candidate regions on chromosomes 7q36, 8p12, and 10q26. Despite progress, further research is needed to understand the genetic basis of sexual orientation and how sociocultural influences may interact with genetic predispositions.

References 26-32.

Genetic factors predisposing to homosexuality and increased mating success

“men who have more gay genes, but are still straight, have more sexual partners than men who have fewer gay genes and are also straight.”

Reference 33.

Relationship preference and education level

“women are looking for men who are as educated as themselves or more, and men are looking for women who are as educated themselves or less they don't.”

Recent research shows that women with higher education levels are more likely to form relationships with less educated men rather than staying single. Meanwhile, women with moderate education levels are less likely to form relationships with highly educated men. For men, there is no indication that they have a greater tendency to partner with highly educated women.

References 34-36.

Self-control and academic success

“if you look at success in the world, self control is a bigger predictive than IQ”

Self-control is a significant predictor of academic success and long-term life outcomes, often surpassing or complementing the predictive power of intelligence.

References 37-41.

Women's preference for higher-income men

“if women are looking for men that have more resources than them on average, which is what I read in some of the studies that I think it was, roughly 70% of women say they want a man that has equal or more money than they do”

In an online dating experiment, women visited male profiles with higher incomes more frequently, with this effect increasing as women's own incomes rose. However, conflicting evidence suggests that wealth may not be as important to women as previously thought, with one study finding women less interested in wealthier men. Additionally, both men and women tend to seek partners with similar incomes to their own, regardless of local resource pressures.

References 42-44.

Decline of sexual behaviour

“if you look at young, single people, their actual sexual behavior is going down. They're having less sex than they were 20 years ago”

Research shows that contemporary young adults are not reporting more sexual partners or more frequent sex compared to earlier generations. In fact, there's evidence of a decrease in casual sexual encounters among young adults aged 18-23.

References 45, 46.

Pornography

“a percentage of 18 to 25 year olds who had had sex or watched porn within the last year, and about 80% of 18 to 25 year olds had had sex in the last year. And now it's getting down nearer to 65 70%”

A recent study of Australian youth found that 86% of males and 69% of females reported exposure to pornography. In an older study in the United States, 87% of young men and 31% of young women have been reported using pornography. However, a more recent study showed young men were more likely to seek out pornography and view it frequently, with 54% reporting weekly use compared to 14% of women.

References 47, 48.

Fertility rates

“fertility rates are going way down”

Recent studies indicate a global decline in fertility rates, with most developed countries falling below replacement levels.

References 49, 50.

Endocrine disrupters

“There's so many hormone mimics in our environment, in plastics, in various pollutants that change our endocrine system, that reduce sperm counts, we think that's what's going on. And reduce sperm count often is associated with reduced sex drive, et cetera.”

Endocrine-disrupting chemicals can affect the endocrine system by mimicking or blocking hormones, leading to disruptions in development, reproduction, metabolism, and potentially contributing to diseases. Compounds like PCBs and phthalates may negatively impact sperm count

and quality, although there is no consistent evidence of a global decline in sperm counts due to these factors.

References 51-59.

Hormones released by parents

“the parent releases certain hormones in the child by their touch, the oxytocin”

Reference 60.

Marriage and happiness

“percentage of Americans who are very happy or not too happy as a function of marital status, quite clearly shows that if you want to be happy, you should be married, and if you want to be not too happy, you should be separated”

- Happiness itself appears to enhance marriage prospects, suggesting a bidirectional relationship. (61)
- A longitudinal study in Korea showed that a positive effect of marriage on life satisfaction persists for at least six years. (62)
- Marriage temporarily boosts well-being before returning to baseline. It is important to note, however, that while marriage doesn't seem to create lasting changes in life satisfaction, it may offer other benefits. (63)
- Happiness gaps between spouses seem to predict future divorce, with couples more likely to separate when the wife is less happy (64).
- Negative communication and emotional exchanges before and during the early years of marriage are significant predictors of marital distress and eventual divorce (65).

Marital satisfaction before marriage can be influenced by various factors, including personality traits, temperament, communication skills, and individual psychological characteristics.

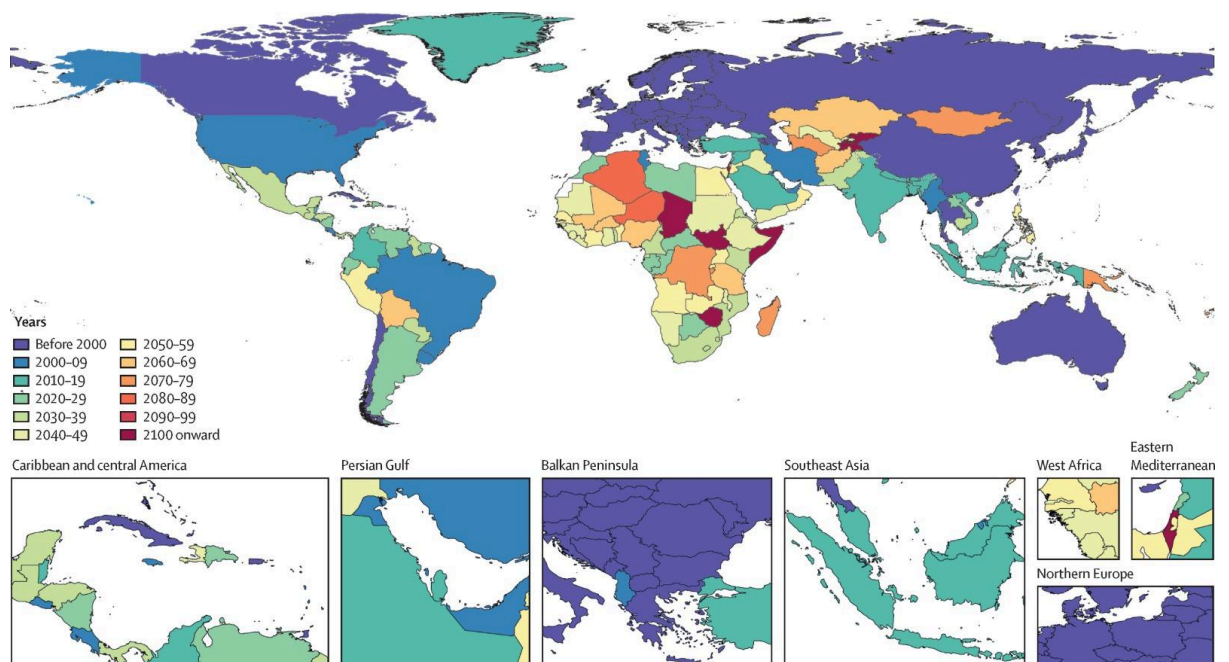
World population and fertility rates

“if you look at the current population the globe, it's meant to peak somewhere between, say, 2070 and 2090 probably around 8 billion and some change, and then it start to go down”

“the consequence is that in every single country that's industrialized and rich, the reproduction the reproductive rate of females is less than 2.1 per female, which is what you need in order to maintain population at the current level. And so every single country on Earth is shrinking it, but for immigration. And so right now, you know, we have all these fights about immigration, people arguing, well, we don't want to let x into my country. It's going to be, I promise you, in 50 years, that arguments can be the exact opposite. How can we convince people of Country X to come into our country? Because we're going to shrink and disappear. There's a lot of countries that are going to be literally half their size by the year 2100 because they're shrinking so fast, really, half of East Asia, half of Western Europe, they're just shrinking crazy fast.”

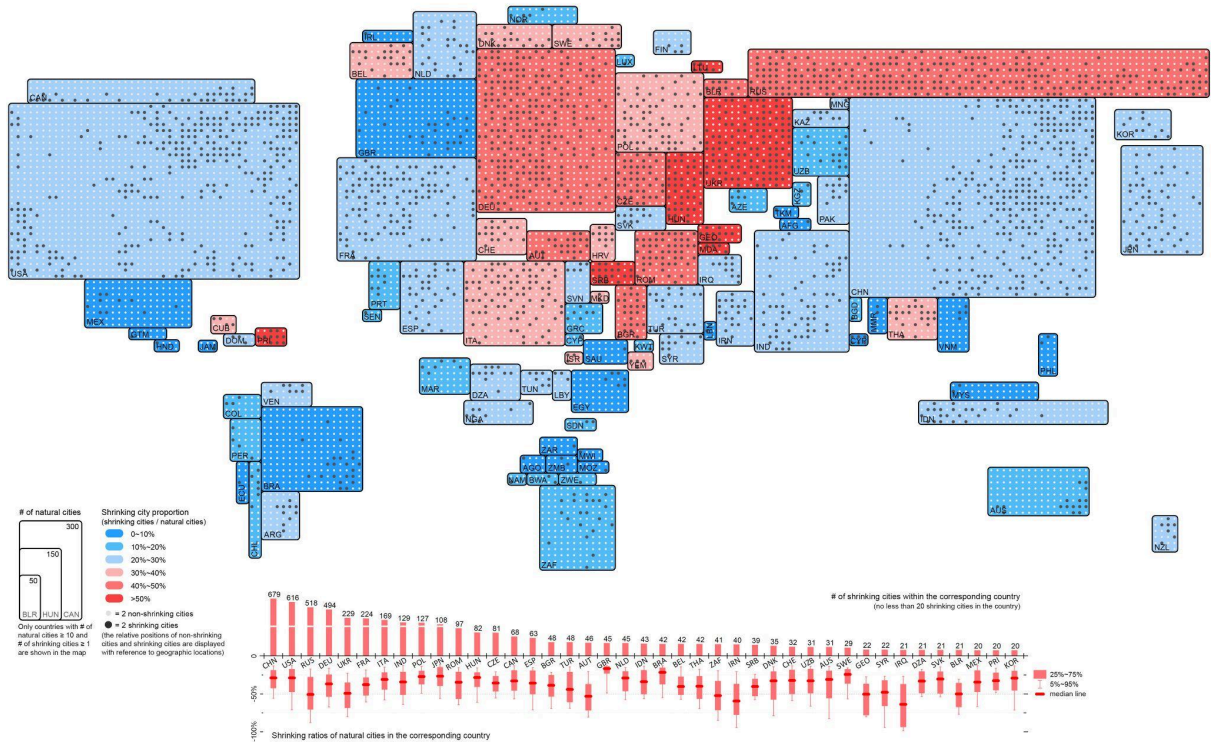
By 2050, projections indicate that 151 countries will have a total fertility rate below the replacement level, with this number rising to 183 by 2100. In this scenario, 23 nations—including Japan, Thailand, and Spain—are expected to experience population declines exceeding 50% between 2017 and 2100.

References 66-71.



“Map of the year that the net reproduction rate falls below the replacement level” from [Vollset et al. \(2020\)](#).

Flat Cartogram: the spatial distribution of shrinking cities on the globe and the shrinking city proportion at the country level 2000–19



“Flat cartogram of 2020–2100 shrinking cities (SCs) on the globe at the country level.” from [Wang and Long \(2023\)](#).

Men vs women friendships

“women form tighter bonds with smaller groups of friends. Men form looser bonds with larger groups of friends.”

Reference 72.

Introversion/extroversion

“evolutionary basis for introversion and extroversion? Is it? Is it a real thing? It is a real thing. It's highly heritable”

While there is evidence supporting a genetic component to introversion and extroversion, environmental factors also significantly influence these traits. The interaction between genetic predispositions and environmental experiences shapes the expression of these personality characteristics.

References 73-76.

Heritability

“behavioral genetics is that, on average, things are 50% heritable”

Reference 77.

Genetics of obesity

“you can see that you're much more likely to be overweight, if your polygenic score, if your genes push you toward obesity. But lots of people with with overweight genes are normal weight. It just means that they have to work harder to get there”

Obesity has a significant genetic component, accounting for over 40% of the variability in body weight, with higher heritability in individuals with obesity. However, not everyone with a genetic predisposition becomes obese, indicating the significant impact of environmental factors.

References 78-81.

High-toxin environments and neurodivergent conditions

“when we look at the epidemiological data, it seems to be associated with high toxin environments”

The etiology of ADHD is complex and multifactorial, involving genetic, environmental, and social factors. Recent research has highlighted the potential role of environmental toxins, namely lead and PCBs in the development and exacerbation of ADHD symptoms.

References 82, 83.

Heritability of ADHD

“Now, ADHD is a different ball of wax. We know it's highly heritable.”

ADHD is a highly heritable disorder, with genetic factors playing a significant role in its development. Research consistently shows that ADHD has a strong genetic component, with heritability estimates ranging from 70% to 80% in children and somewhat lower in adults due to methodological differences in studies.

References 84-86.

Electrodes for treatment-resistant depression

“There's some kinds of depression that just are untreatable. And for some of those people, they literally insert an electrode into their brain and stimulate this particular region. And the people who experience it say it's like my world was in black and white, and suddenly it became in color, like I've got this neural implant, and it's making my life worth living again.”

Deep brain stimulation is an emerging treatment for severe, treatment-resistant depression.

References 87-89.

Anxiety

“If you could get yourself to be mindful in the moment and set aside the future. Your anxiety will disappear because it's all future based”

Being present in the moment, often referred to as mindfulness, can help reduce anxiety, but it may not completely eliminate it.

References 90-93.

Religion and happiness

“people that are associated with religious participation are typically more happy than those who are not”

Research indicates that individuals who participate in religious activities tend to report higher levels of happiness compared to those who do not. This positive association is influenced by various factors, including social support, community involvement, and personal belief systems.

References 94-98.

Marriage benefits: is it gender-specific?

“marriage is more beneficial for men's longevity than it is for women's”

Marriage appears to be more beneficial for men's longevity than for women's. Research shows that married men experience greater health and longevity benefits compared to their unmarried counterparts, while the benefits for women are less pronounced.

References 99-101.

“Men will live an extra two years if they’re married, and women will only live an extra year and a half if they’re married.”

Reference 102.

Hunter gatherers and marriage

“from his life experience with them, that about 20% of them stay married for life, so one in five, which is not high, very low. Now, if you think about it, why is that such a high divorce rate? Well, hunter gatherers don't institutionalize marriage the way that agriculturalists do.”

In hunter-gatherer societies like the G|ui and Gllana, divorce is widely accepted and woven into social norms that encourage remarriage and maintain strong kinship ties. Adults often marry multiple times throughout their lives, making stepfamilies a common part of social life. After a divorce, children typically live with a remarried parent or stepparent, and caregiving is shared among stepparents, relatives, and the broader community. This communal approach to childcare reflects the cooperative nature of these societies, where frequent movement between camps reinforces a culture of resource sharing and mutual support. As families adapt to changing circumstances, flexible marital relationships and strong social bonds help individuals navigate both personal and societal shifts with ease.

References 103-106.

Testicle size of humans vs gorillas

Human testicles are proportionally larger than those of gorillas, suggesting distinct reproductive strategies shaped by evolutionary pressures. This difference likely reflects higher sperm competition in humans compared to gorillas.

References 107-109.

Genetics of religion

“So religion has two components. There's the genetic component. And interestingly, the genetics of religion are religiosity. How religious you are, that's highly heritable”

While specific religious affiliations are primarily influenced by environmental factors, general religious beliefs and practices are moderately heritable, with genetic influences increasing with age.

References 110-112.

Money and happiness

“money does make you as happy as you think it would, but it does help”

“if you have disposable income, it makes you a lot happier when you spend it on things to do, rather than things to have.”

The relationship between money and happiness is complex and multifaceted. While money can contribute to happiness, its impact varies based on how it is earned, spent, and perceived.

References 113-117.

Having a pet: relationship to happiness

“the data show that having a pet actually makes people quite happy,”

While having a pet can enhance happiness and well-being for many individuals, the effects are not uniform and depend on various personal and contextual factors. The relationship between pet ownership and happiness is complex, with both positive and mixed outcomes reported across different studies.

References 118-120.

Collaborative pursuit of goals

“doing lifestyle goals with others actually makes you more like an achievement, especially if they're a new goal for you”

Collaboration with others in pursuing lifestyle goals can significantly enhance goal achievement through increased motivation, effort, and social support.

References 121-123.

Alcohol consumption and heart rate variability and resting heart rate

“we know that alcohol, every every drink, every alcoholic drink that I have, raises my resting heart rate by, I think it's about a beat, beat and a half, if I remember, right, and lowers my HRV by like three points. If I remember right, I could be getting those numbers a little bit off, but it's that kind of magnitude every drink just it's this linear effect up to at least 10 drinks.”

One alcoholic drink does not seem to affect HRV. However, a study found that two glasses of either red wine or ethanol decreased total HRV by 28-33% (124). In a review article, the authors concluded that in nondependent individuals, low alcohol intake is linked to higher HRV, while heavier

consumption is associated with lower HRV compared to both abstainers and moderate drinkers. In dependent individuals, HRV improved with abstinence but remained lower than in nonalcoholic controls (125).

Alcohol consumption and exercise

“So I get exercise in the morning, then I drink, and the impact of the drink is worse because I exercised”

The guest is talking about unpublished data. However, data on drinking after exercise shows it can hinder muscle recovery and performance (126).

Alcohol consumption and cortisol levels

“I don't think alcohol raises your cortisol. Very strong diurnal I don't know. I know nothing about it, so I'm ignorant.”

Alcohol consumption, both acute and chronic, is associated with increased cortisol levels, which can have significant implications for stress response and health. The effects can vary based on gender, drinking patterns, and individual psychological traits.

References 127-129.

Gender differences in sleep duration needs

“men need less sleep than women”

While women often report poorer sleep quality and face more sleep disturbances due to hormonal and life changes, they tend to sleep longer than men. The differences in sleep needs are complex and influenced by biological, psychological, and social factors rather than a simple requirement for less sleep in men.

References 130-132.

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