# The Diversity of Lifestyles: Do They Meet the Sufficient and Necessary Conditions of a Sustainable Lifestyle?

https://doi.org/10.5281/zenodo.15858689

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## Abstract

The need to achieve a state of sustainable lifestyles, both in developed countries and in developing countries, has become a pressing one today due to increasing concerns over actual levels of environmental and social degradation. The general goals of this paper are to use qualitative comparative tools to point out, based on three specific characteristics, all possible lifestyle choices; and to use this framework to show that none of them meets the sufficient and necessary conditions underlying the existence of sustainable lifestyles. Then, some relevant conclusions are provided.

## Introduction

The diversity of lifestyles can be appreciated from several angles. First, lifestyles can be seen from the personal level. We all are different in many aspects, but we have some commonalities such as over-consumption or under consumption. This information can be used to identify and then support lifestyle changes at the personal level aimed at minimizing negative impacts or maximizing positive impacts or to optimize them.

Second, lifestyles can be seen at the community level. All communities are different in many aspects, but also, they may share some similarities such as local environmental problems. Hence, this data can be gathered and analyzed to select, propose, and implement the changes in local lifestyles required to ensure community sustainability.

And third, lifestyles can be seen from a regional or global level. Regions are different, but again they may share some peculiarities or needs such as the need to eradicate widespread poverty within and across regions. Hence, regional or global lifestyles must change in a way that permits sustainable regional or global development goals.

As we move the analysis from personal, to community, and then to regional or global, the level of complexity increases. On the other hand, the need to express complex thoughts in simple, but consistent terms arise. It is accepted today that personal, community, and regional/global lifestyles need to be made sustainable. The need to achieve sustainable consumption is one of the goals mentioned in chapter 4 of Agenda 21(Michaelis 2002). Consumption patterns, how and what we consume, are seen as one of the major impediments to the implementation of Agenda 21(Upton 2002) and currently sustainable consumption is goal # 12 among the 17 development goals (UN 2025) aimed avoiding the consequences of unsustainable consumption behavior. There are several

characteristics whose presence or absence in meaningful ways is usually associated with lifestyle variability, which are described below.

**Lifestyles characteristics**

Lifestyles are usually associated with many social, economic, and environmental characteristics such as consumption, commitment, education, purchasing power, and technology. On the other hand, the sustainable/unsustainable lifestyle discourse is usually focused on an absolute lifestyle dichotomy, the developed(rich) and developing(poor) country dichotomy. For example, western countries are usually associated with having too much consumption, too much education, too much purchasing power, and too much technology, but too little commitment to seek a more balanced lifestyle. Developing countries, on the contrary, are usually portrayed or presented as not having a strong commitment to lifestyle change specially in terms of the preservation of environmental values because they lack appropriate levels of consumption, education, purchasing power, and technology to support a sustainable lifestyle. Hence, the lifestyle problem comes from two sources, developed countries (the rich) and developing countries (the poor). The move of developing countries in Asia to adopt western lifestyles of consumption is emerging as a main cultural problem (Beng-Huat 2000), and consumption per capita and total in the APAC region has increased since (STATISTA 2025) signaling stronger lifestyle pressures from the developing country angle. This situation leads to some important questions such as: Which is the worse lifestyle? Which is the best lifestyle? Is the best lifestyle sustainable? and if not, why not? Below, there is a simple way of providing an answer to the above questions.

**Goals of this paper**

The general goals of this paper are to use qualitative comparative tools to point out, based on three specific characteristics, all possible lifestyle choices; and to use this framework to show that none of them meets the sufficient and necessary conditions underlying the existence of sustainable lifestyles.

**Terminology**

The qualitative comparative terminology used in this paper is summarized in Table 1 below.

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**Table 1**

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|---|---|
| L = desirable lifestyle | l = undesirable lifestyle |
| T = high levels/technology | t = low levels/technology |
| R = high levels/purchasing power | r = low levels/purchasing power |
| E = high levels/education | e = low levels/education |

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**Methodology**

First, a desirable lifestyle model(L) is presented assuming that based on three characteristics, Technology(T), Purchasing Power(R), and Education(E) are the drivers of lifestyle variability. Second, based on the above model(L), all 8 possible types of lifestyles consistent with it are listed. Third, specific lifestyles in the list are identified as the worse, the best, unimodal, and bimodal lifestyles. Fourth, a definition of sustainable lifestyles is provided to introduce the necessary and sufficient conditions for the existence sustainability. Fifth, the characteristics of sustainable lifestyles and that of the 8 types of lifestyles in the list and derived from the lifestyle variability model are compared to determine sustainability gaps. And finally, some relevant conclusions are provided.

**Lifestyle model**

Based on three of the characteristics of lifestyles described above and based on the well accepted traditional economic premise that "more is better"; a desirable lifestyle model can be stated as follows:

**1) L = T + R + E**

The above formula implies that there are different desirable lifestyles(L) depending on whether or not they are characterized by high levels of technology(T) or high levels of purchasing power(R) or high levels of education(E) or any combination of them. In other words, this model allows us to frame and compare different possible types of lifestyles that may be present within countries or between countries. For example, developed countries (rich communities/rich people) would likely score high on these characteristics while developing countries (poor communities/poor people) would likely score low, and then as the level of development(income) changes, the scores of these characteristics may change. Table 2 below shows the possible different types of lifestyles.

**Table 2 Lifestyle variability**

| **Lifestyle** | **Characteristics** |
|---|---|
| L1 = tre | low/technology, low/purchasing power, low/education |
| L2 = Tre | high/technology, low/purchasing power, low/education |
| L3 = tRe | low/technology, high/purchasing power, low/education |
| L4 = trE | low/technology, low/purchasing power, high/education |
| L5 = TRe | high/technology, high/purchasing power, low/education |
| L6 = tRE | low/technology, high/purchasing power, high/education |
| L7 = TrE | high/technology, low/purchasing power, high/education |

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L8 = TRE  high/technology, high/purchasing power, high/education

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***The worse lifestyle***

The worse lifestyle according to the information in Table 2 above is L1 = tre as it is the most undesirable one: It has low levels of technology(t), low levels of purchasing power(r), and low levels of education(e). This type of lifestyle can be found most likely among the poorest individuals, the poorest communities, and the poorest countries.

***The best lifestyle***

According to the Table 2 above and based on the view that "more is better", the best lifestyle is L8 = TRE since it is the most desirable one: It has high levels of technology(T), high levels of purchasing power(R), and high levels of education(E). This type of lifestyle can be found most likely among the richest individuals, the richest communities, and the richest countries.

***Unimodal lifestyles***

These are lifestyles in Table 2 where one of the three characteristics is present in high levels such as technology- based lifestyles(L2); purchasing power-based lifestyles(L3); and education-based lifestyles(L4). These types of lifestyles could be considered as the first step of the development drive to move from the worse lifestyle position to the best lifestyle position by means for example of specialization. As we know, specialization is thought to lead to comparative advantages that can be exploited by specific individuals, communities or countries.

***Bimodal lifestyles***

When two of the three characteristics are present in high level form, then we have the bimodal type of lifestyles such as technology and purchasing power-based lifestyles(L5); purchasing power and education-based lifestyles(L6); and technology and education-based lifestyles(L7). These types of lifestyles listed in Table 2 could be considered the second step of the development drive to reach the best lifestyle position by means of diversification: being good in two areas relevant to lifestyles is thought to be better and less risky than being the best in only one area.

**In summary**, lifestyles can vary from the worse to the best; and unimodal and bimodal lifestyles could be considered intermediate steps toward the apparent ultimate goals of consumers, the aim to reach the best lifestyle possible. Notice that the 8 possible types of lifestyles displayed in Table 2 appear to indicate the existence of a vertical structure of lifestyles where the view that "more is better" appear to favor pressures for upward mobility only.

**Sustainable lifestyles**

A sustainable lifestyle can be defined as a lifestyle that balances out all types of concerns relevant to it. When concerns are balanced out, optimal conditions are created. Hence, a

sustainable lifestyle can be redefined as a lifestyle in an optimal stage: a lifestyle ruled by optimal conditions. Based on formula 1), there are three relevant concerns to lifestyles: technology(T), purchasing power(R), and education(E). If an optimal lifestyle exist, then, it must incorporate all these three concerns in optimal form at the same time, which can be expressed as follows:

* ***

**2) L = TRE, where * = optimization**

The above means that the necessary and sufficient condition for a sustainable lifestyle(L*) to exist is the presence of optimal levels of technology(T*), optimal levels purchasing power(R*), and optimal levels of education(E*) at the same time. In other words, a sustainable lifestyle is a lifestyle that integrates optimal conditions. Notice that we are dealing here with the interaction of optimal conditions, which the author calls internal optimization. Under internal optimization, both too much or too little are not desirable states as both of them would lead to wasteful behavior. For example, environmental degradation is said to be driven by both, those who have too much and those who have too little, which is a dual situation that needs to be balanced out, which leads to expected transition problems as for example moving from a paradigm thinking where more is better to one where less is better (Muñoz 2010).

Formula 2) above can be restated as follows:

* *

**3) L = ( TRE ) ; where * = optimization**

The above expression suggests that the necessary and sufficient condition for a sustainable lifestyle(L*) to take place is the optimization of the interaction of technology(T), purchasing power(R), and education(E). Notice that here we are dealing with the optimization of interactions, which the writer calls external optimization. Under external optimization, levels of technology have to be consistent with levels of purchasing power and with levels of education in such a way as to maintain optimal conditions. For example, inconsistencies in the levels of technology, purchasing power, and education available to individuals, communities, and countries can be seen as important sources of lifestyle unsustainability.

**Sustainability gaps**

By comparing the structure of optimal lifestyles in formula 2[L* = T*R*E*] and in formula 3[L* = (TRE)*] with the 8 possible lifestyles shown in the Table 2 above, we can notice that none of the types of lifestyles in this Table 2 is consistent with optimal structures, and therefore, none of them, neither the most desirable lifestyle (L8 = TRE), is a sustainable one. In other words, the 8 types of lifestyles presented in the Table 2 above, including the best lifestyles, are not sustainable lifestyles because they are not consistent with optimal conditions: They do not posses the necessary and sufficient conditions required for the existent of a sustainable lifestyle.

These inconsistencies with optimality are called here sustainability gaps. Notice that eliminating sustainability gaps is not cost-free or sacrifice-free in all 8 cases in Table 2 because it requires a change in behavior from unsustainable states to sustainable ones. The main issue here is how to induce sustainable lifestyle behavior given that some people may be able to afford the changes, but others may not. For example, those enjoying desirable lifestyles may be able to adjust

to extreme changes in technological, purchasing power, and educational behavior easier than those facing undesirable lifestyles, especially cost-wise.

## Conclusions

Based on the simplified desirable lifestyle model presented here there are 8 possible types of lifestyles, which can be classified in four groups: the worse, the best, unimodal and bimodal lifestyles. Based on this model, the worse lifestyle (L1 = tre) is the one where levels of technology, purchasing power, and education are low at the same time while the best lifestyles (L8 = TRE) are those where the same factors are present at high levels at the same time. Based on the definition of a sustainable lifestyle provided, it was shown that the best lifestyles are not sustainable because they do not optimize the interaction of technology, purchasing power, and education. In fact, based on sustainability gaps, it was shown that none of the possible types of lifestyles listed in Table 2 is a sustainable one because none of them meets the sufficient and necessary conditions for a sustainable lifestyle, which are the presence of optimal technology, optimal purchasing power, and optimal education at the same time. This means that without optimality we may be able to find cases of sustained lifestyles, at the personal, community, or regional level, but not of sustainable ones.

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