

## **Economic Value of Tourism Through Human Capital Gains**

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### **Published**

2022

### **Journal Title**

Journal of Travel Research

### **Version**

Accepted Manuscript (AM)

### **DOI**

<https://doi.org/10.1177/00472875221146782>

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## **Economic value of tourism through human capital gains**

### **Abstract**

Leisure tourism can be analysed as a mechanism to rebuild human capital depleted by work. Human capital is an essential input to human economies, and possesses a corresponding economic value. Therefore, tourism possesses an economic value additional to expenditure and multipliers, which can be seen as investments in increasing human capital as an asset. Calculating the financial value of human capital gains is likely to prove a more powerful political tool for the tourism sector, than current political perceptions as discretionary leisure.

**Keywords:** economics; psychology; mental health; workplace; productivity

### **Introduction**

I propose a general addition to the economic valuation of the tourism sector, via its contributions to the human capital of tourists. Tourists pay for enjoyable experiences and improved wellbeing; wellbeing increases individual human capital; human capital has an economic value; and this confers an additional economic value on tourism. Historical and current economic valuations of the tourism sector are based on expenditure, plus economic impact via supply-chain and employee-spending multipliers. These costs can be seen as investments, to generate a human capital asset. In the same way that businesses account for assets and liabilities as well as income and expenditure, I propose an asset accounting for tourism via human capital gains. Individuals deplete their human capital by investing it in earning money through employment or business, and then rebuild their human capital by reinvesting a proportion of their earnings in leisure activities, including tourism.

### **Theoretical Framework: Human Capital**

Human capital value is the extrinsic economic value of an individual, to other individuals (Dublin & Lotka, 1930). It differs between individuals, and changes over time (Grosse, Krueger, & Pike, 2020). It is entirely distinct from the intrinsic moral value of an individual, which is treated in most philosophies as nominally identical for every individual, or at least unaffected by their material circumstances. Human capital value is a longstanding concept (Becker, 1964; Weisbrod, 1961), thoroughly embedded in the structure of human societies. Commercial examples include salary differentials, athlete transfer fees (Leifheit & Follert, 2021), and payments for client lists or social media followers. Policy examples include public funding for education (Grosse & Zhou, 2021) and healthcare (Rice & Cooper, 1967; Hanly et al., 2022), and visa programs for migrant skills and labour. An individual's human capital value, eg to their employer, family, or national treasury, changes over their life course, typically positive during their working years but negative as a child and in old age.

Human capital may include: technical and professional expertise, knowledge, experience, skills, and qualifications; physical health, strength and fitness; personality aspects such as emotional intelligence and leadership capability; and social capital, connections and status. The education sector, including outdoor education (Ewert & Yoshino, 2011; Zwart & Ewert, 2022) aims to build human capital; employment aims to exploit it. Reflecting this, recent applications in tourism research have approximated human capital value either as years of education (Croes et al., 2021; Divisekera & Nguyen, 2018), or via a scale of employee attributes (Elsharnouby & Elbanna, 2021). Kožić, I. (2019) showed that tourism employment

can reduce higher education uptake, and hence human capital in other industries. All those analyses considered the human capital value of employees rather than tourists. The human capital value of tourists has apparently been considered only once, for international African wildlife tourism. Buckley & Chauvenet (2022a) calculated the economic value of residual mental health benefits acquired by these tourists, and transferred back to their countries of origin. Here I extend that approach, arguing that a human capital framework can be applied across the entire tourism sector, and that we could calculate local or global asset values for human capital gains contributed by tourism.

## **Connecting Tourism to Human Capital**

Tourism can be viewed within a human capital framework, as outlined in Fig. 1. People trade their human capital for money, via work. They then spend some of their earnings on tourism. This rebuilds their human capital, via mental health recovery from workplace stress (Packer, 2021; Sonnentag, Cheng, & Parker, 2022; Syrek et al., 2018). That is important, because an individual needs good mental health in order for an employer, family, or society to reap economic value from their strengths, skills, or knowledge, the basis for human capital value. Traditional tourism research paradigms do not include human capital gains for tourists. They analyse how marketing motivates tourists to purchase products, from enterprises that supply travel, accommodation, food and activities at destinations, generating experiences that create satisfaction, which increases individual wellbeing and mental health. Human capital value adds one more layer outside that system, by recognising mental-health values as components of human capital, an economic asset generated through tourism expenditure (Fig. 1).

The human capital approach recognizes that the wellbeing of an individual tourist can also benefit other people, and hence societies and economies more broadly, via interactions and transactions. Prices that people are prepared to pay for tourism products reflect their own personal valuations of the enjoyment and wellbeing gains they expect to experience. These effects, however, do not vanish immediately once a tourist returns home. They persist, for months or years, as mental health improvements (Gump et al., 2021; Mitas & Kroesen, 2020; Yu, Smale & Xiao, 2021). Those improvements create flow-on benefits for friends, families, employers, health insurers, and national economies (Buckley et al., 2019). Mental health is a component of human capital, carried by individuals and transferable to other beneficiaries. Human capital hence provides economic values for tourism, additional to direct expenditures and local economic multipliers. This human capital value accrues to non-tourism sectors, at tourists' regions of origin, and fades over time.

The traditional analytical paradigm has been linear: people work to earn money, and then spend some of that money to play. The paradigm adopted here, in contrast, is circular: individuals invest their accrued human capital to earn money, through employment or business enterprises; and then reinvest some of those earnings in tourism, recreation and leisure, to rebuild some components of their human capital (Fig. 1). Money is used for day-to-day life expenses and for savings, as well as for holidays; and employers value skills components of human capital as well as mental health components; so there are leakages from the feedback loop shown in Fig.1; but the loop is operational and significant even so.

For individuals to maintain mental health in the long term, holidays and other leisure must rebuild human capital more rapidly than work depletes it. This is reflected in the structure of labour laws and workplace employment agreements that include annual paid vacation time. A few weeks' holiday once a year is presumed sufficient to rebuild human capital for the rest of

the year. Tourism is thus treated as a powerful tool. Annual leave entitlements recognise that most forms of employment use and deplete human mental-health capital, and most forms of leisure tourism replenish it. Some countries (eg, Australia) have government programs encouraging employees to make full use of their workplace leave entitlements, for leisure; and domestic tourism advertising programs aiming to exploit those programs. The explicit economic value of human capital rebuilding via tourism, however, has not been addressed or included in national workplace, labour, or tourism policies. I propose that this is possible, and deserves research attention and policy implementation.

## **Research Priorities**

There would seem to be three main priorities for future research on tourism contributions to human capital: mechanisms; economics; and sectoral and regional patterns. The mechanisms have been addressed within tourism wellbeing research. They include: personalities and life histories, sensory and emotional experiences, and memory duration and wellbeing fade-out (Buckley, 2022a,b; Buckley & Cooper, 2022; Buckley et al., 2022; Chark, King, & Tang, 2022; Chen, Huang, & Petrick, 2016; Chen, Petrick, & Shahvali, 2016; De Bloom, Geurts, & Kompier, 2013; Demeter, MacInnes, & Dolnicar, 2022; Hosany, Martin, & Woodside, 2021; Kroesen & Handy, 2014; Sousa & Gonçalves, 2021; Wang, Hou & Chen, 2021). There was a historical focus on psychological traits such as sensation-seeking personalities, and a new current emphasis on nature connectedness and nature relatedness (Barragan-Jason et al., 2022; Cleary et al., 2020; Dean et al., 2018; Martin et al., 2020). This is a fast-moving and fruitful research field, with new counterparts in the high-tier health sciences (Sudimac, Sale & Kuhn, 2022).

The economics are notionally straightforward, but highly data-dependent. To measure the human capital value of any tourism destination, product, or activity, involves three steps. The first is to measure individual mental health, pre and post visit or tour, and at intervals subsequently to determine fade-out timescale. There are a large number of relevant psychological scales, with different degrees of specialisation; but as yet, few comparisons between these scales within a tourism framework. The second is to control for other mental health factors, such as socioeconomic, demographic, physical health, and psychological characteristics of individual tourists, and experience components such as good or poor weather, by measuring these simultaneously and modelling their interactions (Buckley et al., 2019). The third is to convert mental health effects to economic valuations (Buckley & Chauvenet, 2022b). This is an evolving field, and new economic approaches may arise.

Sectoral and regional geographic patterns are particularly important in practical applications of tourism as a contribution to human capital in other industries. Tourism can contribute to mental health components of human capital, but that component may be more or less important in different industries, enterprises, and staff positions and responsibilities. Mental health stress, and hence the potential for tourism to improve stress recovery, may differ between countries, cities cf rural areas, societies, and individuals (Buckley & Chauvenet, 2022b; Kožić, 2019). These are empirical questions that are yet to be examined within a human capital framework. This will now be possible, as a number of countries implement nature-based therapies, including nature-based tourism, in mainstream mental healthcare (Buckley & Cooper, 2022; Buckley, Zhong & Cooper, 2022).

## Policy & Management Implications

Considering tourism within a human capital framework emphasises its importance to human societies and economies. If tourism is treated solely as discretionary leisure activity, and the tourism sector simply as a means of satisfying individual desires unrelated to fundamental human needs, then it is difficult for governments to justify investment in tourism during times of economic difficulty. We have seen this during the COVID-19 pandemic and its aftermath. Australia, for example, poured billions of dollars of taxpayer funds into paying for continuing staff positions in businesses that were no longer profitable, including accommodation, food and drink, and transport. Those programs, however, focussed only on short-term domestic employment, not long-term tourism infrastructure investment and marketing.

If societies and governments were to see tourism as an essential tool in maintaining human capital across multiple industry sectors, that would indicate a much more fundamental role in national economies, and a much greater importance for national policies and investments. Monetary arguments are politically more powerful than moral claims referring to tourism as a human right. During post-pandemic tourism recovery, therefore, it would be useful to characterise and quantify the economic value of tourism via its role in rebuilding work-depleted human capital assets.

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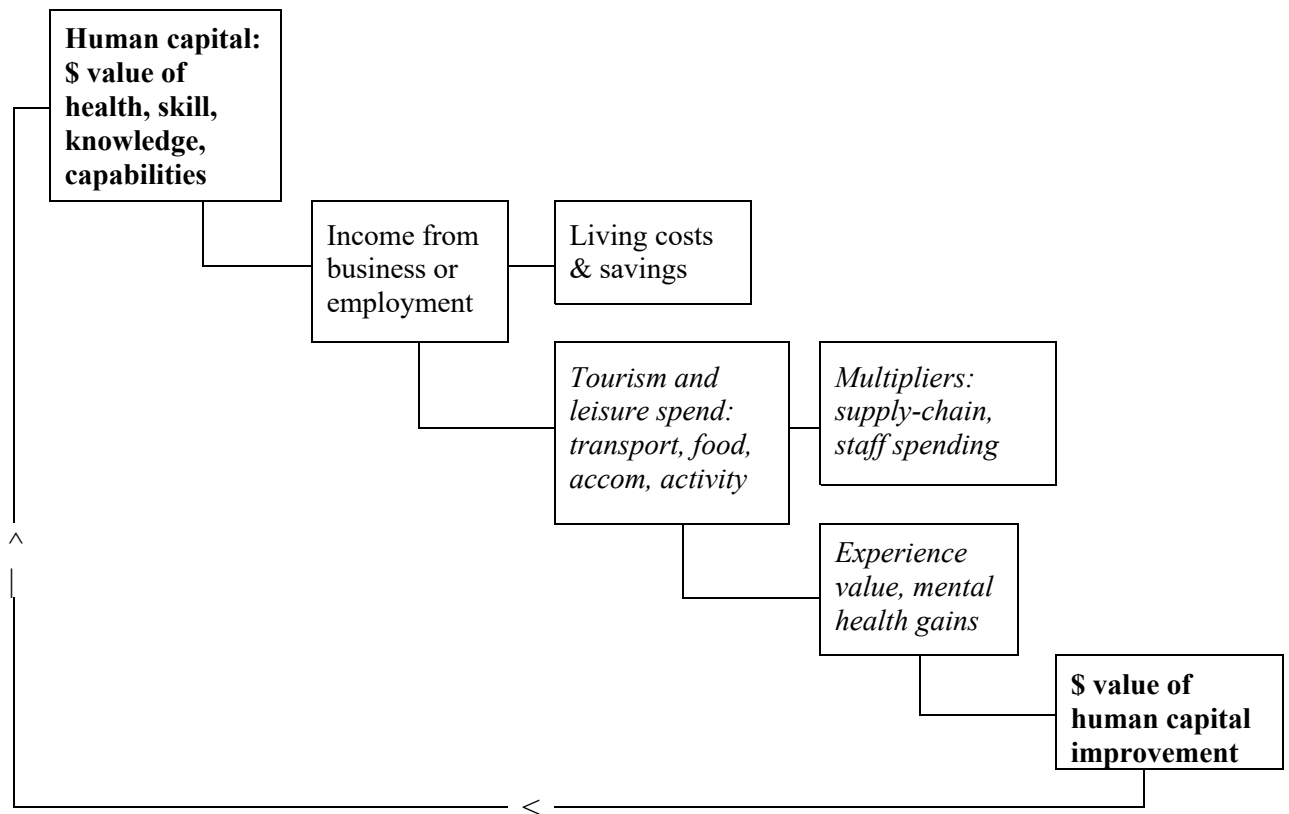
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**Figure 1. Schematic structure of tourism contributions to human capital**



*Italic: Routine components of tourism research.* Roman: Individual economics.  
**Bold: human capital framework.**