**Public Transport Service and Passengers’ Satisfaction in Madrid: An Empirical Investigation**

**Edward Oni Heyedde1**[[1]](#footnote-1), **David Huy Zanella2**, **Unzule Ban Buluç3** and **Xavier Santiago Fuentes4** (the order is First Name, Middle Name, and Family Name)

1 Thuongmai University, 79 Ho Tung Mau, Cau Giay, Hanoi, Vietnam

 <https://orcid.org/0000-0002-7478-3699>

e-mail: eoheyedde@edu.vn

2 “Aleksander Moisiu” University, 23 Currila, Durres, Albania

 <https://orcid.org/0000-0002-6474-7539>

e-mail: [dhzanella@am.edu.ab](mailto:dhzanella@am.edu.ab)

3 Çanakkale Onsekiz Mart University, Mimarlık ve Tasarım Fakültesi Terzioğlu Yerleşkesi 17100, Turkey

 <https://orcid.org/0000-0052-6474-793>1

e-mail: [ubuluc@gmail.com](mailto:ubuluc@gmail.com)

4 University of Valencia, 13. Nivell 3 46010, Valencia, Spain

 <https://orcid.org/0000-0089-6484-7939>

e-mail: [xfuentes@uv.es](mailto:xfuentes@uv.es)

|  |  |
| --- | --- |
| ***Original research paper /***  ***Review paper (Please choose one)***  **Citation**:  Heyedd, E.O., Buluç, U., Fuentes, X. and Zanella, D.H. (2023). Public Transport Service and Passengers’ Satisfaction in Madrid: An Empirical Investigation. *Economic Insights – Trends and Challenges, 13*(1),1-20. https://doi.org/10.51865/EITC.2023.03.03  [Creative Commons License](https://creativecommons.org/licenses/by-nc/4.0/)  Copyright: © 2023 by the authors | **Abstract:** *This study aimed at the effects of Public Transport Service Quality on passengers’ satisfaction in Madrid. The study examined the effect of perceived unreliability of transportation service, service frequency, fare level, comfortability and perceived safety uncertainty on the perceived satisfaction of passengers in Madrid. The sample size of the study was 362. Data were analyzed using descriptive and Binary Logit Regression Model. Findings show that perceived unreliability of transportation service, fare level and comfortability significantly relate with the perceived satisfaction of passengers in Madrid. The study concluded that there are some important variables that the users of Public Transport Service are considering for their satisfaction. The study recommended that drivers/transportation companies should ensure reliability of transportation service, moderate fare level and boost comfortability in order to achieve the satisfaction of passengers in Madrid. A relevant question then is what explains the low satisfaction among public transport users, and what can be done to make public transport commuting more satisfying. Parameters included in the analysis are distance to public transport stations, whether commuters have to transfer modes along the way and waiting time while transferring. The findings in this study are useful for policy makers planning public transport services. Both to make the service more satisfying for the current users, and also in order to make public transport an attractive alternative to car use. This study contributes to the literature by exploring how the different characteristics of public transport journeys influence people's satisfaction with their commutes and with other significant factors. (Between 200 and 250 words)* |
| **JEL Classification:** [***Link***](https://www.aeaweb.org/econlit/jelCodes.php)  *R41; R410; M10 (3-5 codes)* | **Keywords:** *Public Transport Service; Passengers’ Satisfaction; Perceived Unreliability; Perceived Safety Uncertainty (3-5 keywords)* |

**Introduction [Mandatory chapter]**

The extent and depth of poverty in the developing world is very grave (Pinstrup-Anderson & Pandya-Lorch, 2021; AFDB, 2022). E), recently this has been attributed to a lack of inclusive growth in these countries (Edward & Sumner, 2019). However, the growth elasticity of poverty differs enormously across countries with the shape of the growth incidence curve (Elwood et al., 2011; Figley, 2022; O’Halloran & Linton, 2023).

**Literature Review [Chapters Titles]**

Velez et al. (2018) found that a number of measures for poverty reduction. For instance, the Mercantilists laid emphasis on foreign trade which according to them is an important vehicle for the promotion of economic growth and poverty reduction. The Classical economists’ (Adam Smith, David Ricardo, Thomas Malthus, Karl Marx, etc.) views on poverty reduction brought to the fore the social changes which occurred through technological changes resulting from the industrial revolution that took place between 1750-1850. The early development economists of the 1940s and the 1950s advocate the theory of forced-drift industrialization via Big-push, Balanced growth, and Labour transfer (Ijaiya, 2022).

**Theoretical Review [Subchapters Titles]**

In the 1990s, Chenery et al. (1994) advocates the re-distribution of income. To them, poverty can better be reduced if radical redistribution of income or land is allowed to take place because of the interlocking power and self-interest of the rich and the bureaucracy in the handling of the nations’ resources (Table 1).

**Table 1.** KMO and Bartlett's Test

|  |  |  |
| --- | --- | --- |
| **Kaiser-Meyer-Olkin Measure of Sampling Adequacy.** | | .706 |
| **Bartlett's Test of Sphericity** | Approx. Chi-Square | 2233.682 |
| Df | 45 |
| Sig. | .000 |
| **Bartlett's Test** | Approx. Chi-Square | 45633.682 |
| Df | 44 |
| Sig. | .000 |

*Source*: Chenery et al. 1994

Using the basic growth–poverty model suggested by Ravallion (1997; 2008) and Ravallion & Chen (1997); and the adopted empirical works of Agénor (2004, 2005), Islam (2004), and Anyanwu and Erhijakpor (2010, 2012) the relationship estimated was based on Sachs-Solow growth model which is built around the familiar neoclassical aggregate production function and written as:

(1)

*(Please write the equations only with the Microsoft Equation Editor)*

where Y is real output, K is capital, L is the labour input, and At is a measure of exogenously determined “technology.” The aggregate production function is assumed to be “well-behaved,” that is, it satisfies the three “Inada” conditions.

The World Bank (2019a; 2019b) emphasizes the need for stable macroeconomic policies and economic growth. To the World Bank, sound fiscal and monetary policies will create a hospitable climate for private investment and thus promote productivity which in the long run would lead to poverty reduction (Dollar and Kraay 2000; Sandstorm 1994; Edwards 1995). This approach is what is referred to as pro-poor growth approach to poverty reduction (Figure 1).

**Fig. 1.** Employment and ANE in the manufacturing industry, 2000-2015 (thousand persons)

*Source*: Jackson, 2019.

Under this program, the main issues addressed by allocated Community funding are:

* Modest R & D and innovation performance, low demand for business for the results of these activities, and hence the limited transfer of R & D results to businesses;
* Reduced entrepreneurial culture, the limited ability of many SMEs to withstand the market, the modest competitiveness of most enterprises included in this dimensional category;
* The poor condition of infrastructure, low accessibility of many areas;
* Considerable potential for increasing energy efficiency, which, although in improvement, has numerous reserves to be capitalized and which consists in significantly reducing consumption in economic activity, public infrastructure, and population;
* Poor environmental protection, high pollution in large urban areas;
* Under-dimensioning and poor quality of educational, health, and social services infrastructure;
* Existence of many degraded urban areas concerning housing and public utilities.

**Conclusions [Mandatory chapter]**

Based on the finding of this paper, the authors draw the attention of university authorities and policymakers to give several suggestions to improve the job satisfaction level of academic staff: (i) job should be designed in such a way that teachers get a sense of accomplishment as well as challenging and satisfying work; (ii) ensuring such a work environment that teachers can easily establish a smooth, friendly and co-operative relationship with co-workers; (iii) giving emphasize on fair pay, promotion, and quality supervision.

**References [Mandatory chapter] [APA STYLE]** *(Alphabetic order)*(*APA Style is mandatory, please access* [*link*](https://apastyle.apa.org/style-grammar-guidelines/references/examples))

*Journal article with DOI*

1. Brady, J. S., Her, M., Moreno, G., Perez, C., & Yelinek, J. (2019). Emotions in storybooks: A comparison of storybooks that represent ethnic and racial groups in the United States. *Psychology of Popular Media Culture*, *8*(3), 207–217. <https://doi.org/10.1037/ppm0000185>
2. Cerrentrup, A., Mueller, T., Glowalla, U., Herder, M., Henrichs, N., Neubauer, A., & Schaefer, J. R. (2018). Teaching medicine with the help of “Dr. House.” *PLoS ONE*, *13*(3), Article e0193972. <https://doi.org/10.1371/journal.pone.0193972>

*Journal article*

1. Dutler, J. (2017). Where access meets multimodality: The case of ASL music videos*. Journal of Rhetoric, Technology, and Pedagogy*, *21*(1). <http://technorhetoric.net/21.1/topoi/butler/index.html>

*Whole authored book with DOI*

1. Eackson, L. M. (2019). *The psychology of prejudice: From attitudes to social action* (2nd ed.). John Wiley & Sons. <https://doi.org/10.1037/0000168-000>

*Whole edited book*

1. Fygum, E., & Pedersen, P. M. (Eds.). (2010). *Early childhood education: Values and practices in Denmark*. Hans Reitzels Forlag. <https://earlychildhoodeducation.digi.hansreitzel.dk/>
2. Kesharwani, P. (Ed.). (2020). *Circular Economy and its Benefits for Consumers*. Academic Press.

*Chapter in an edited book with DOI*

1. Lron, L., Botella, M., & Lubart, T. (2019). Culinary arts: Talent and their development. In R. F. Subotnik, P. Olszewski-Kubilius, & F. C. Worrell (Eds.), *The psychology of high performance: Developing human potential into domain-specific talent* (pp. 345–359). Springer. <https://doi.org/10.1037/0000120-016>

*Chapter in an edited book*

1. Millard, J. P. (2020). Currents in the study of persuasion. In M. B. Oliver, A. A. Raney, & J. Bryant (Eds.), Media effects: Advances in theory and research (4th ed., pp. 115–129). Routledge. https://doi.org/10.1037/0000120-00016

*Report by an institution*

1. National Cancer Institute. (2019). *Taking time: Support for people with cancer* (NIH Publication No. 18-2059). <https://www.cancer.gov/publications/patient-education/takingtime.pdf>

*Brochure References*

1. Oedars-Sinai. (2015). *Human papillomavirus (HPV) and oropharyngeal cancer* [Brochure]. https://www.cedars-sinai.org/content/dam/cedars-sinai/cancer/sub-clinical-areas/head-neck/documents/hpv-throat-cancer-brochure.pdf

1. Corresponding author [↑](#footnote-ref-1)