



An empirical investigation of attitudes toward waiting on the part of Northern California commuters



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ARTICLE INFO

Article history:

Received 24 July 2014

Received in revised form 28 September 2014

Accepted 29 September 2014

Available online 17 October 2014

Keywords:

Bi-factor analysis

Hierarchical factor analysis

Equipped waiting

Travel behavior

Information and communication technology

(ICT)

ABSTRACT

Using a sample of 2849 commuters in Northern California, this paper offers a first effort to identify latent constructs associated with a *general orientation* toward waiting. The bi-factor analysis of 11 items revealed a single dimension capturing a general like/dislike of waiting, together with two domain-specific factors representing attitudes of “waiting is OK if I expect it” and “I don’t need to be equipped when waiting”. We compared mean factor scores across socio-economic groups based successively on gender, income, presence of children, primary commute mode, and the number of productivity tools carried on the commute. Although sample size contributed to statistical significance, effect sizes in most cases were modest. Nevertheless, women tended to have more favorable attitudes toward waiting than men (including a greater tolerance of expected waiting and a greater inclination to be equipped). Higher-income respondents tended to view waiting less favorably, and were more inclined to be equipped to wait. Those with children at home were less tolerant of expected waiting than others. Users of public transit or active commute modes (walking/biking) tended to view waiting more positively. Respondents who are more tolerant of waiting and have a proclivity to be equipped for a wait event tend to carry more productivity tools during their regular commute, such as books and magazines, tablets, smartphones, and music players.

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1. Introduction

Waiting for a service is a common part of everyday life. A vast literature over the last several decades seeks to understand factors that affect people’s experience with waiting (for example, see Maister (1984)), and the impact of this experience on the overall evaluation of the service for which people waited. People’s experiences with waiting have been measured using objective and cognitive scales – for example how perceived wait duration compares with actual duration; and using affective or psychological responses in the form of stress, irritation, frustration, and boredom (Durrande-Moreau, 1999; Friman, 2010). Waiting is considered as a problem to be avoided; a cost or loss to be minimized (Durrande-Moreau, 1999; Leclerc et al., 1995); or simply an unpleasant experience (example Gasparini, 1995). It is well established in

literature that a negative wait experience adversely influences the overall service satisfaction (Pruyn and Smidts, 1998; Taylor, 1994). In the transportation sector, the disutility associated with a minute of waiting is 2–4 times the disutility of in-vehicle travel time (Abrantes and Wardman, 2011; Wardman, 2004), which goes a long way toward explaining the low penetration of environmentally sustainable public transit systems. In the entertainment and leisure industry, the innovations and investments by Disney Parks (among others) to manage queues highlights the importance of managing customers’ wait experience.

Literature in the operations research domain examines strategies to reduce the objective wait time; whereas papers in the social sciences domain deal with reduction of the perceived or actual wait time or of the emotional and psychological costs associated with waiting, by manipulating consumer expectations or the wait environment in the form of music, color, smell, and provision of distractions like newspapers and television.

A few papers allow for the possibility that waiting may not be a universally negative phenomenon. For example, in the context of waiting for public transit, Friman (2010, p. 203) found study participants were more “...pleased, glad, and calm...” if they were

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pre-occupied while waiting, or if the wait was “in-process” rather than “pre-process” – for example waiting inside a bus and not at the bus stand. Compared to the pre-process wait, the in-process wait may give customers the sense that they are inside the system and the service has started. Similarly, van Hagen (2011, p. 259) found that passengers find the wait in train stations to be “. . . more enjoyable, useful and pleasant. . .” in the presence of music, advertisement, and colored lights.

Customers are likely to be more tolerant of inconveniences (including time expended waiting) to purchase a service with a highly valued outcome (Berry et al., 2002). At the extreme, people are not only willing to bear the economic and psychological costs associated with waiting, but may actively enjoy a wait event. For example, Giebelhausen et al. (2011) explored the possibility that waiting signals a positive quality to consumers, enhancing purchase intentions and actual experienced satisfaction. Similarly, the social atmosphere surrounding people camping out to get the best Black Friday deals or the latest Apple product likely endows the waiting phenomenon with the status of an event that is desirable in its own right.

At a deeper level, there is even recognition that waiting can furnish an opportunity for positive character development (although generally more endured as a discipline than embraced as a pleasure), as embodied in proverbs such as “patience is a virtue” (Kupfer, 2007), “all things come to those who wait” (<http://www.phrases.org.uk/meanings/27000.html>), and “they also serve who only stand and wait” (Milton, 1899), as well as the central role that waiting plays in religious contexts such as the Advent season in Christianity and waiting for the Messiah in Judaism (Gasparini, 1995).

Although numerous studies have examined the influences on single, separately measured attitudes toward waiting in a specific context or toward a specific experience involving waiting, relatively few have attempted to identify latent constructs associated with a *general orientation* toward waiting, relating those constructs to multiple indicators simultaneously. Even fewer studies have systematically investigated the empirical association of a general orientation toward waiting with socioeconomic traits and other variables. Yet, in view of the ubiquity of waiting in everyday life, and the outsize influence of waiting on one’s sense of equanimity, it seems important to learn more about individuals’ overall attitudes in that realm of life: Can a general liking/disliking for waiting be identified? What are the roles played by equippedness (Gasparini, 1995) and expectation in one’s orientation toward waiting? Do attitudes towards waiting differ across various socio-demographic groups – gender, income, age, presence of children in household, and employment status? Addressing these questions is the aim of the present paper. To our knowledge, no other study has undertaken an empirical investigation of this nature. We believe that the outcome is a first step forward into a fruitful area of further investigation, not only increasing our understanding of humans’ views on a key category of time use, but potentially leading to actionable insights for transportation and other service providers.

The remainder of this paper is organized as follows: Section 2 briefly reviews some pertinent literature in the context of the research questions addressed by this paper. Section 3 describes the data available to our analysis. Section 4 presents the methods used, while Section 5 provides the results of the factor analysis. Section 6 analyzes the differences in factor scores with respect to a variety of socio-demographic variables, and Section 7 offers a concluding discussion.

2. Literature review and research questions

Positive or negative views toward waiting may arise from a combination of long-term and permanent characteristics of

personality as well as short-term elements of mood and current time pressure. Dislike toward waiting may arise out of cultural factors. In various Western cultures, for example, time may be considered as an economic (and hence scarce) resource (Becker, 1965). As a result, people will budget and allocate time to various activities so as to maximize their utility. In such a context, waiting may be considered a waste of time and therefore money, and accordingly something to be avoided or eliminated (Nie, 2000). Durrande-Moreau and Usunier (1999) and Usunier and Valette-Florence (2007) developed and applied a scale to measure people’s time style, considered to be a permanent characteristic of personality and measured along five dimensions, and its influence on the experience of a wait event. The three dimensions found to influence the wait experience were economic orientation towards time (i.e. time is money), orientation towards the past, and orientation towards the future.

Nie (2000) also discussed the roles of pace of life and tempos for work, play, and rest in various cultures. Tolerance towards waiting may vary with the pace of the environment. In fast-paced environments (like cities), there may be more demands on one’s time and hence less room for discretionary or wasteful activities, such as waiting. Alternatively (although probably less often), waiting may be considered, at best, a useful pause in a busy schedule and an opportunity to “space out” mentally and physically, or to undertake various discretionary activities. Affective views toward waiting may also be influenced by the (transitory) mood of the individual (Durrande-Moreau and Usunier, 1999). A positive event (whether anticipated or just past) resulting in a good mood before the wait may result in a positive experience of a wait event.

This study aims simply to identify and measure a general dimension of like vs. dislike towards waiting. Similar to the time style, we speculate this to be a permanent characteristic of an individual that influences her waiting experiences. We do not seek to explain the circumstances leading to such an attitude (though we plan to analyze the associations of such an attitude with other fundamental attitudes and personality traits in a subsequent paper). The 11 items created for the survey used in our analysis (see Section 3) were designed to capture a general attitude toward waiting, together with how one’s attitude might differ depending on (a) whether the waiting was expected or not and (b) whether one was “equipped” to gainfully utilize the wait time or not.

Personal expectations about the wait event strongly influence evaluation of the overall wait experience (Durrande-Moreau and Usunier, 1999). Expectations may be formed about the existence of a wait event, its duration, and conditions surrounding the event (pleasant versus unpleasant conditions, equitable versus inequitable wait, etc.). A wait event that meets or betters expectations is more likely to evoke positive, or perhaps less negative, emotions. Expectations may be formed because people have prior experience with the service – for example, the daily commute using a bus or rail service or frequent visits to a favorite restaurant. Deviation from expectation due to (say) a service delay may lead to a negative wait experience. If long queues for certain services are commonplace (such as queuing in the former Soviet Union for essential goods and services), then people are likely to expect and accept waiting (Gasparini, 1995), and such queuing may become part of the social essence. The service provider may also manipulate expectations by announcing likely wait durations (Durrande-Moreau and Usunier, 1999).

If waiting is likely or unavoidable, people may equip themselves to carry out activities during the wait event. This is referred to as equipped waiting (Gasparini, 1995) or self-distraction (Durrande-Moreau and Usunier, 1999) and may include activities such as computing, watching videos, playing video games, reading newspapers, or just daydreaming. The penetration of smartphones, laptops, and video games provides new opportunities to be

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