



## KEY POINT SUMMARY

### OBJECTIVES

To study the effect of objective waiting time and waiting environment on satisfaction with the service.

To study the effect of attractiveness as compared to the effect of explicit distractors, like TVs.

To investigate the mediating role of three subjective variables: perceived waiting time, acceptable waiting time and the appraisal of the wait.

## Effects of Waiting on the Satisfaction With the Service: Beyond Objective Time Measures

Pruyn, A., Smidts, A.

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### Key Concepts/Context

Wait times are a persistent concern in healthcare today. It is a concern that healthcare shares with other service industries. To counter this waiting areas provide numerous distractions- TVs, magazines, vending machines, computer kiosks etc. The efficacy of these distractions is beginning to be studied in greater detail today. This research was conducted in a Dutch polyclinic, where TVs were installed, with paid programming, using the argument that this would provide a distraction for patients and cause them to be less aggravated by any delay. To investigate if this was indeed the case research was undertaken that looked at how waiting time and the waiting environment impact the satisfaction with service. Within the context of waiting environment the attractiveness of the environment and the use of an explicit distractor (TV) were studied. Waiting environments are a key component of healthcare design and this article provides an insight into how the waiting experience can be improved via design.

### Methods

A study was conducted in polyclinics across three Dutch hospitals. In each hospital observations took place in three randomly selected waiting rooms, on six consecutive working days. Waiting rooms differed with respect to layout, atmosphere, decorations and furniture arrangement. The TV set was, however, always located on one of the corners. Each observation day was divided into 4 blocks of 2 hours, and per block it was randomly decided whether the TV set was on or off. Observers were trained graduate students who sat inconspicuously in the waiting room, and observed every tenth person who entered the waiting room. They also made note of the waiting time by noting time of arrival and time that the time that the subject was called into the physician's room. After consultation



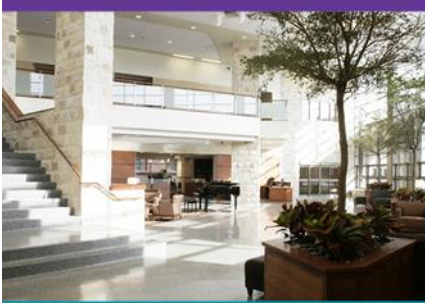
subjects were intercepted and asked to fill out a questionnaire. Response rate of questionnaires was 40.4% (337 of total 479 subjects observed). Questions were asked on perceived time spent in the waiting room (which included time before the appointment time) and perceived waiting time (perception of time spent from the appointment time till the consultation with the doctor), overall satisfaction with service, appraisal of the duration of wait (short to long), and the affective component of the wait (irritation, fairness, annoyance, boredom and stress), and perceived attractiveness of the waiting environment (atmosphere, cleanliness, spaciousness and climate). Additionally subjects were asked to indicate maximum acceptable waiting time. Those in TV conditions were asked about intensity of TV watching. Demographic variables (sex, age, education) were also collected.

## Findings

1. The waiting environment is a stronger determinant of service satisfaction than objective waiting time
2. Objective waiting time affects satisfaction through both a cognitive and an affective route, whereas the most influential variable, the waiting environment, operates through affects only
3. With respect to the cognitive route, it is not so much the perceived number of minutes that a customer has to wait which affects satisfaction as it is the subjective transformation of these minutes into a long/short judgment. Customers use their own frame of reference for these long/short judgments.
4. Affective responses are dependent on the difference between the perceived waiting time and the acceptable waiting time. For example if the perceived waiting time exceeds levels of tolerance (too long) then it is perceived as aggravating.
5. TV as a source of explicit distraction does not lead to shorter perceived waiting times. In fact, viewing TV, especially with short varied items interrupted with commercials, may result in overestimation of waiting time.

## Limitations

This study was not conducted under strictly controlled conditions and the differences between the different sites are not explained in detail by the author, or accounted for. The study also does not account for the experience in the physician's office, which could bias the results of the questionnaire.



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## Design Implications

1. The design of the waiting environment can be a significant factor in improving patient satisfaction- this impact is via the affective route so designs should aim to improve the mood of patients via an attractive environment.
2. Televisions don't help in reducing the perception of wait-time, in fact they may have the opposite effect. If TVs are provided, longer and less varied programs may be more suitable.