

How Plumbing Service Wait-Time Satisfaction is Affected by Age and Income

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BACKGROUND

Plumbing and other home-service companies quote a "service-arrival window length" to customers. Generally, these are either one hour, two hours, three hours, or four hours in length. In previous research, the Zion & Zion research team found that plumbing companies that aren't taking a serious look at the length of the service-arrival windows that they quote to customers are suffering significant hits to initial customer satisfaction. There is near unanimity among marketers that the earliest stages of the customer journey may be the most significant. Research by Demand Metric Research Corporation found that 90% of marketers believe it is somewhat or very important to influence a buyer early in their customer journey.

EXECUTIVE SUMMARY

To better understand how the length of the service-arrival window affects consumer satisfaction, the Zion & Zion research team conducted a nationwide survey of 1,044 adult homeowners (age 25+). We investigated how a consumer's age and income affect their satisfaction with plumbing service-arrival window lengths. We found that older consumers are less satisfied with longer service-arrival windows than younger consumers; that there is a curvilinear relationship between income and satisfaction; and that multiple negative predictors for satisfaction are cumulative. We also present the implications of our findings for the home-service industry.

THE PSYCHOLOGY OF WAITING

There likely aren't many people who enjoy waiting. There is a strong relationship between perceived wait duration and satisfaction. Waiting can cause anxiety, boredom, lack of control and irritation. Together, these elements create perceived neglect that, if left unaddressed, affects satisfaction.

There is a rich body of consumer research literature that has studied how waiting affects satisfaction. As far back as the 1980s, researchers have been investigating how dissatisfaction is fostered, supporting a body of well-accepted truths, including:

- Satisfaction decreases as waiting time increases.
- People tend to overestimate actual waiting time.
- The amount of time a person perceives they wait impacts their satisfaction just as much as the actual time they wait, if not more.
- Unfair waits seem longer than equitable waits.

The Zion & Zion Research Team wondered whether this wait-time psychology is affected by the age or income of the consumer.

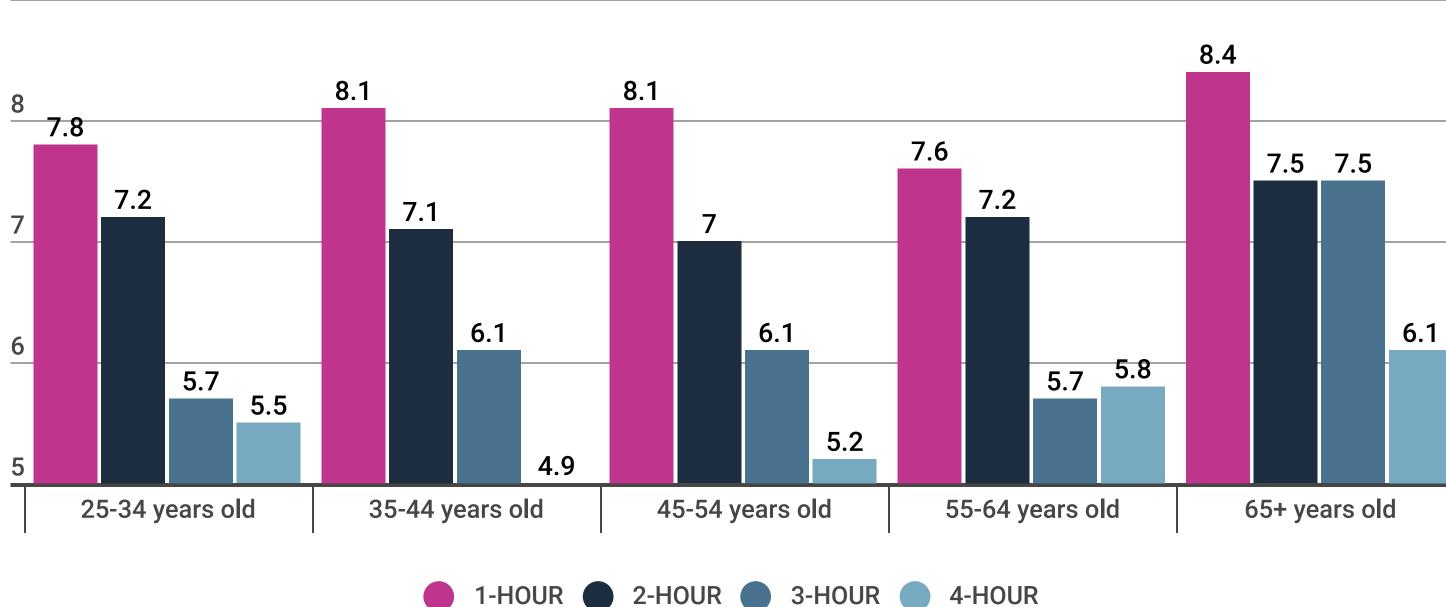
IMPACT OF AGE

Our research shows that, simply put, the older you get, the more satisfied you'll be with longer service-arrival windows. That's not to say that mature adults like long service-arrival windows, only that they're less dissatisfied than younger people. Figure 1 makes this clear.

Figure 1

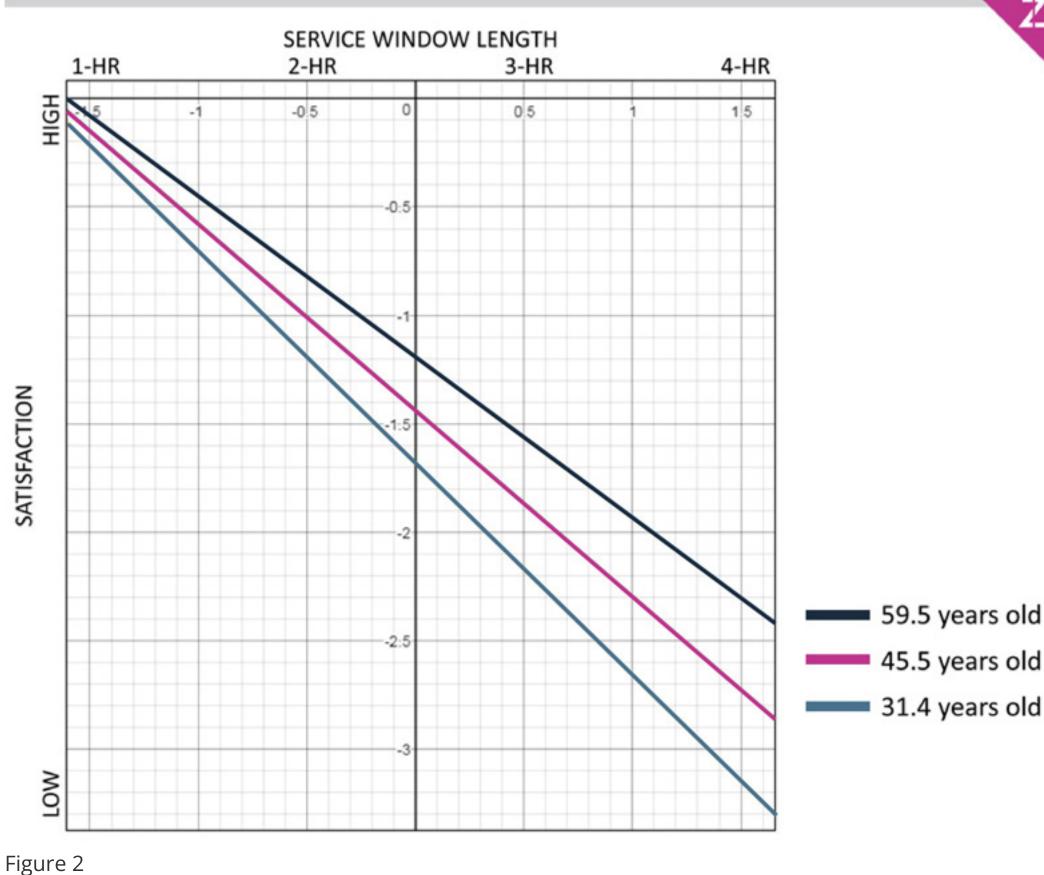
Average Satisfaction By Service Arrival Window Length





as service-arrival window time increases. However, this is an over-simplified way of interpreting the data, which provides age ranges rather than actual ages, and it doesn't control for other variables of the study, such as whether the person lives in a city or rural area. Here, we use regression analysis to clarify the results by examining the effect of age while holding everything else constant (such as income and where people live). This brings greater clarity to the relationship between age and window-length satisfaction (see Figure 2).

It makes sense that each age group is most satisfied at the shortest (1-hour) service-arrival window length. And all age groups become more dissatisfied



All ages are most satisfied with shorter service-arrival windows, and they grow increasingly dissatisfied as the window lengthens. Analyzing the data via

regression makes it clear that the negative impact of increasing the service-arrival window length is greater for younger consumers, who drop in satisfaction by 0.9 more than older consumers when moving from a one-hour window to a four-hour window. The 0.9 value corresponds to 64 minutes of waiting. So, when an older person waits four hours, a younger person will drop to the same satisfaction level in just under three hours. Plumbing companies should care that customers become more dissatisfied as service-arrival windows get longer, but this is especially true for younger consumers. To put it another way, the younger your customers are, the faster their satisfaction falls when presented with longer service-arrival windows. Our research team also explored if whether a person is usually home during the day or not affects satisfaction. 34.6% of respondents in the youngest

the reasons that seniors are satisfied with longer service-arrival windows is because they're home anyway. But the data does not support this; there is no correlation between wait time satisfaction and whether a person is home during the day. We can speculate why older people are less dissatisfied with longer service-arrival window lengths than those younger than them. A 2010 study in the Journal of Service Management concludes that "having something to do during the wait decreased perceived boredom, resulting in a more positive wait

experience." Seniors are often wrongly stereotyped as homebodies who do little more than sleep and watch television. The most recent U.S. Bureau of

age group (25-34) said they were usually home during the day. But that rose to 78.5% of those 65 years or over. That might lead to an assumption that

Labor Statistics' 2016 American Time Use Survey makes it clear that seniors are active and engaged. While seniors do watch more television than the general population, compared to younger populations they spend more time reading, socializing with friends, making home improvements and planning meals. This may result in seniors having their day already planned with "something to do" while they wait, thereby resulting in a more positive wait experience and possibly not minding waiting as much as someone forced to stay home from work at the last minute with little to do than twiddle their thumbs.

Next, we investigated whether income has an influence on the consumers' satisfaction with service-arrival window length. This is another occasion where basic averages don't tell the whole story (see Figure 3).

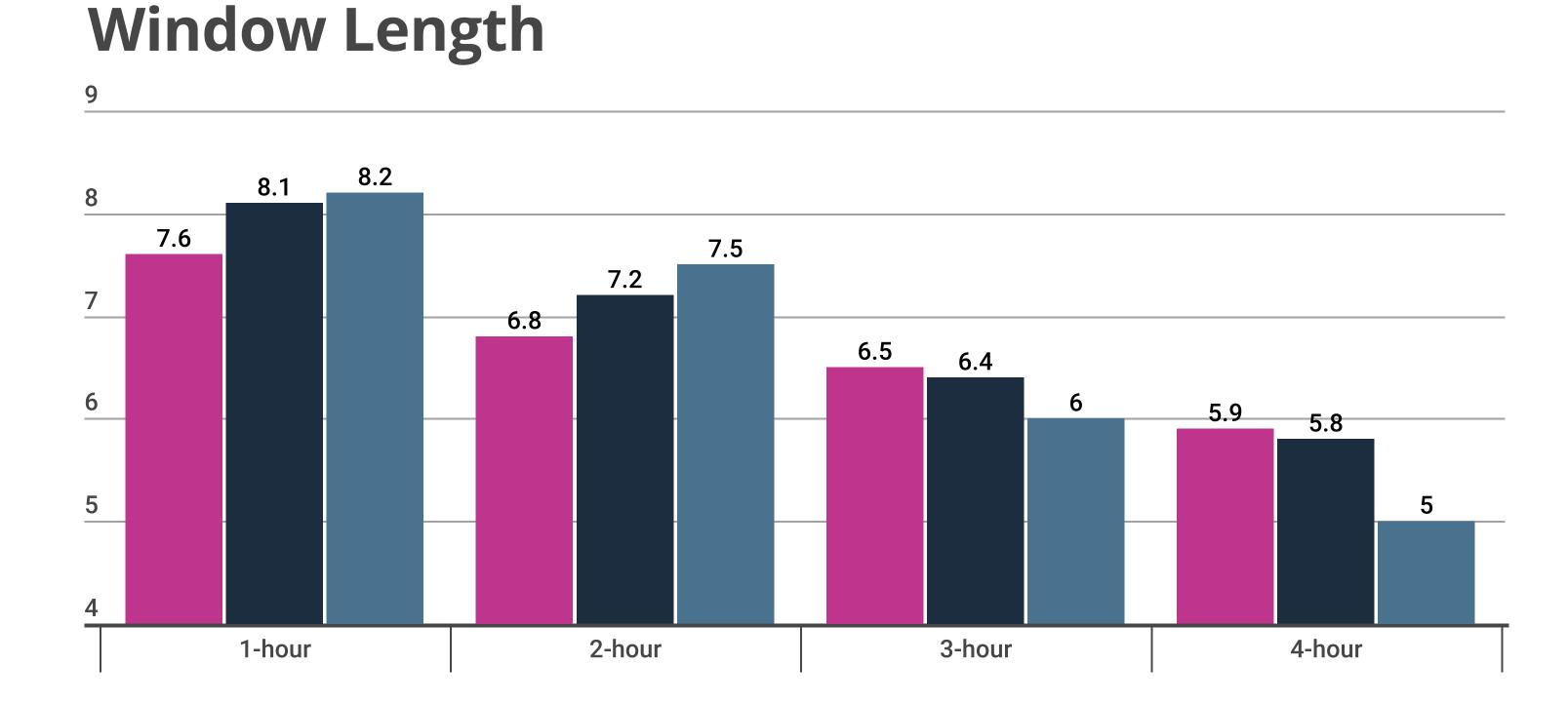
dissect the data in a meaningful way (see Figure 4).

by plumbing companies.

IMPACT OF INCOME

Figure 3

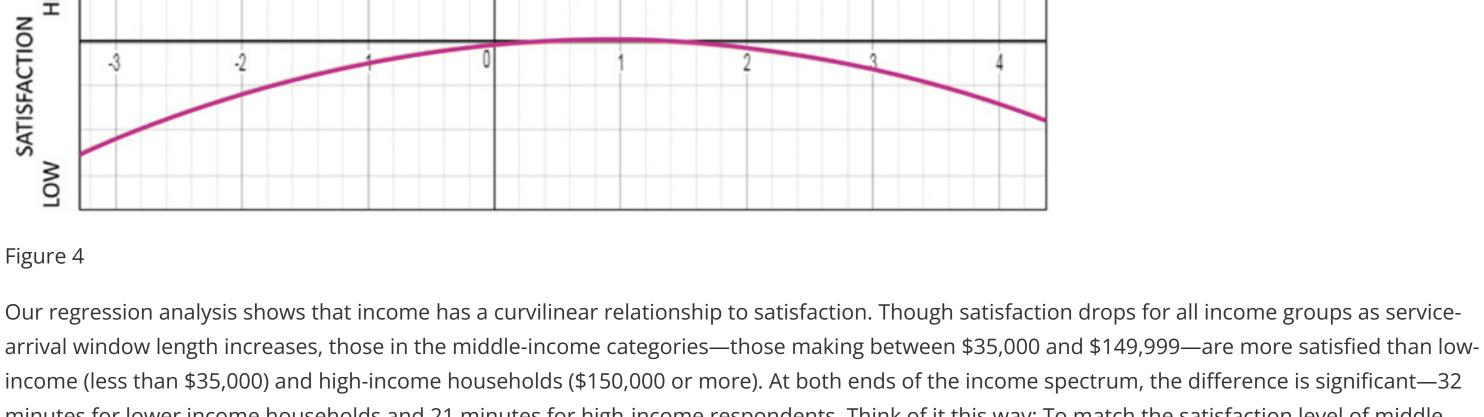
Average Satisfaction By Service Arrival



INCOME LOW HIGH

Less than \$50K \$50K to \$100K \$100K or more

No matter the income bracket, everyone's satisfaction decreases as the service-arrival window grows longer. Again, a regression analysis is necessary to



minutes for lower income households and 21 minutes for high-income respondents. Think of it this way: To match the satisfaction level of middleincome households, plumbing companies need to shave 32 minutes off the service-arrival windows provided to low-income customers and 21 minutes off the windows quoted to those with very high incomes. Plumbing companies covet high-income customers, partially because those customers tend not to be tire kickers. They call when they have a problem and affordability, on average, is less of an issue. Plumbing companies that want to attract and keep this demographic should pay particular attention to service-arrival windows.

PUTTING THE DATA TO WORK

Here's where the rubber hits the road—digesting the data and using it to foster greater customer satisfaction. And for plumbing companies, this is a

treasure trove. Previous research by the Zion & Zion research team found that city dwellers become less satisfied 24 minutes quicker than people who identify

themselves as living in suburban or rural environments. A key take-away of our research is that the effects of age, income, and customer location on wait time satisfaction are cumulative. And this can add up to a perfect storm if not addressed. Here's an illustrative example: A consumer calls to set an appointment and a plumbing company gives them a two-hour service-arrival window. That's a happy customer (although they would have been much happier if the plumbing company gave them a one-hour arrival window). Still, you've made a decent first impression. However, if that person lives in the

city, their satisfaction drops as if you added 24 minutes to their service-arrival window. If they're young, it's as if you added on another 64 minutes. Then add 32 minutes because they are from a low income household. Together, your two-hour window actually winds up getting a satisfaction rating on par with a four hour arrival window. So much for your first impression. Plumbing companies that want to maximize initial satisfaction for this market young low-income city dwellers—should consider the shortest possible service-arrival window. This research can also go the other way. Plumbing companies that service a community of seniors might consider a longer window rather than straining operations trying to service a one-hour promise. This data can be extremely useful at the CSR level, where the findings could be used to create custom scripts for incoming service calls. If caller ID reveals that a consumer is calling from an area populated mostly by seniors, then you might be able to increase the offered service-arrival window. Or if

If you're a plumbing company in Madison County, Idaho, you'd do well to keep windows to a minimum—Madison County has a median age of 23.2. But if

the call arrives from a high-price neighborhood, you might consider decreasing the service-arrival window so as to take a minimal satisfaction hit.

you operate a plumbing business in Sumter County, Florida, where the median age is 66.6, the data suggests that your typical customer may put up with longer service-arrival windows. There's no one-size-fits-all here. Demographics are different for every community, and that uniqueness should also be reflected in service levels offered