

Etiquette of Riders on New York City Subways

An Observational Study Conducted by Students at Hunter College,
The City University of New York
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From the New York Times, 1939:

Hunter College students, who spend an average of 1,650 hours in subway travel during their four years at college, drafted a subway etiquette code last week.

The code does not insist that a man surrender his seat to a woman simply because she is a woman, but it does ask all subterranean commuters to speak softly, refrain from pushing, spreading newspapers over others' laps, taking a seat and a half, leaning against persons, traveling with children in rush hours and, in general, from being pointedly conspicuous.

Introduction

According to figures furnished by transit officials there were 1,763,000,000 subway trips taken in 2015 (Murphy, 2016). This is the largest number of trips taken since 1948 at which time public transit was a more popular means of transportation.

With the ever-increasing number of riders using New York City's subway system, considerably greater attention has been devoted to promoting subway etiquette and discouraging inconsiderate behavior. In 2015, the Metropolitan Transit Authority launched the "Courtesy Counts" campaign. The aim of this campaign is to encourage riders of New York City's subway system to abide by a number of rules of conduct in order to make the ride a more pleasant experience for all. Using placards installed in subway cars and public service announcements, the campaign urges straphangers to follow several guidelines promoting courteous behavior. Riders are reminded to: "Step Aside to Let Others Off First," "Keep Your Stuff to Yourself," "Take Your Pack Off Your Back," "Offer Your Seat to an Elderly, Disabled, or Pregnant Person," "Take Your Litter Off With You," and "Keep the Sound Down." Straphangers are also admonished not to be a "pole hog," not to turn the subway car into a "dining car," not to clip nails or "primp" their hair, or not to spread their legs widely apart when seated (i.e., "manspread").

The explicit rationale for this campaign is to reduce the incidence of inconsiderate behavior. Yet the timing of this campaign suggests that, in addition to discouraging discourteous behavior as a goal unto itself, another aim is to increase the efficiency of the system. It is obvious that if riders block the doors, then travel time increases. But other types of discourteous behavior can also contribute to train delays. If riders carry bulky knapsacks on their backs, spread their legs far apart while sitting, or pole hog, then the space available to other passengers is reduced, exacerbating crowding. This, in turn, creates loading and unloading problems that extend "dwell time" and lead to progressively lengthier delays.

The concern about inconsiderate behaviors reaches beyond train delays. There is also a concern that these behaviors might adversely affect the level of ridership. One prominent analyst of transportation trends, Charles Komanoff, notes that while total ridership peaked in 2015, the *rate of increase* in ridership tapered off

markedly in that year (Komanoff, 2016). He cites a number of factors for why the rate of increase has slackened: the hike in fares, cheaper gasoline prices, and the emergence of Uber and other for-hire vehicles. But he speculates that the most compelling reason for the slower growth rate might be attributable to crowding. He states:

Jammed trains and platforms aren't just making subway travel more uncomfortable. They're forcing passengers into even closer mutual proximity, enabling misogynist and other antisocial behavior and augmenting the sense of disorder that many New Yorkers associate with the subways. And of course crowding slows riders' entrance and egress from cars and platforms, increasing station "dwell time" and creating delays that then cascade down the line, sometimes for hours. All of these issues would tend to dampen ridership gains.

Despite the record-setting number of subway riders and the concerns stemming from this growth, there is a surprising dearth of studies examining the behavior patterns of riders. With the subway serving as an integral part of so many New Yorkers' daily routines, it is critically important to understand the culture of the subways and how subway behavior might impact both the efficiency of the system and the pleasantness of the ride. Subway etiquette can potentially affect how well the system performs overall and, as noted above, even shape the decision to ride or not ride the subway. Moreover, subway etiquette can affect the demographic composition of riders and/or the times and circumstances under which different subgroups of the population ride the subways. Subway etiquette, for example, might have a differential effect on female vs. male riders. Discourteous behavior might lead female riders to be more inclined to travel in certain hours of the day or in "interior cars" or cars with a minimum number of riders than their male counterparts.

The present study has two major objectives. The first is to measure the extent to which riders engage in a number of behaviors targeted by the "Courtesy Counts" campaign. These behaviors include: blocking the doors, eating, pole hogging, and manspreading. The second objective is to gauge gender-based differences in subway usage. Do males and females differ in the time periods they use the subway, in their use of interior vs. exterior cars, in traveling in cars with a minimum population density, or in their propensity to sit or stand? And if there

are gender-based differences, what are the factors which might be contributing to these differences?

Methodology

The study was carried out in two distinct phases. The first phase, conducted during the Fall of 2015, examined a number of specific behaviors targeted by the “Courtesy Counts” campaign. The second phase, conducted in the Spring of 2016, focused on the frequency of standing and sitting by males and females under varying conditions.

The results of the study are based upon observations carried out by Hunter College students. Students who carried out the first phase of the study were enrolled in one of two sections of a Sociology Department course entitled, “Introduction to Research Methods” or an Urban Policy and Planning course entitled, “Quantitative Approaches for Urban Analysis.” Students who conducted the second phase of the study were enrolled in one of three Sociology Department courses (Introduction to Research Methods, Honors Seminar/Research Practicum, Mapping Social Science Data) or in one of two Urban Policy and Planning courses (Quantitative Approaches for Urban Analysis or Urban Data Analysis).

In both phases of the study students were assigned a specific subway line on which to carry out their observations. The subway lines they were assigned were ones they often used during the course of a given week. Students were also assigned a type of day of the week (any of the five weekdays or Saturday/Sunday), and a time interval (6:00 am – 10:00 am, 10:01 am – 4:00 pm, or 4:01 pm – 8:00 pm) during which to conduct their observations.

The assignment of a particular subway line, type of day, and time interval was not based upon a random sampling methodology. Instead, it was based upon a convenience sample. It should be pointed out, though, that the students who participated in this study come from geographically dispersed neighborhoods throughout New York City and take subways during various times of the day and evening. Thus, the lines in this study represent a broad swath of all lines in the City and the time periods included are differing in nature.

Each student was instructed to gather data during different subway trips with each trip comprising a number of “segments.” A segment was defined as a part of a subway trip between two adjacent stops. Altogether, each student had to gather data during 40 separate segments. The segments comprising *each different trip* had to be taken on the same subway line, on any weekday (Monday through Friday) or the weekend (Saturday or Sunday), during the same time period, and on the same type of subway car (either the exterior front/rear cars or the interior cars).¹

In the first phase of the study, observations were carried out during 2,305 segments on 21 different subway lines. Observations in the second phase of the study were carried out during 2,984 segments also on 20 different subway lines.

For both phases of the study, observations were confined to individuals located up to but not including the beginning of the second set of doors from the rear of the subway car. This rule applied whether the subway car had three or four sets of doors on each side. Limiting observations to roughly the rear third of the subway car was necessary because it would have been impossible to correctly gather data covering the entire length of the subway car. Confining data-gathering to the rear third of the car also had the added advantage of creating a uniform area in which to carry out the observations. If students were free to choose the portion of the car in which to collect their data, an additional bias might have intruded into the data-gathering process.

The foci of observations for the first phase of the study included the number of male and female riders separately who were: (1) seated, (2) standing, (3) eating, (4) “manspreading,” and (5) pole-hogging. Observations concerning these behaviors were restricted to individuals estimated to be 13 years of age or older.

Eating was defined as consuming something more than a stick of chewing gum or a lollipop. Also, drinking liquids was not considered as eating.

“Manspreading” was defined as a passenger whose legs were spread so wide apart that it precluded someone else from sitting in the space right next to him/her (i.e., taking up space for more than one person). Students were instructed to be conservative in their judgements. If a rider had his/her legs spread slightly apart – but not apart in a pronounced way – it was not considered

to be a case of manspreading. To illustrate manspreading, students were shown images of riders engaged in this type of behavior.

Pole-hogging was defined as when someone was leaning his/her body against a pole or wrapping a part of his/her body around a pole. Pole-hogging manifested itself by significantly reducing the amount of pole space another rider could use to grasp the pole. Students were told to count only the number of riders who were pole hogging on stand-alone poles – not poles that were attached to seats, etc. Again, students were exposed to images of riders who were pole-hogging so as to possess a firm understanding of this type of behavior.

The first phase of the study also measured whether an “orderly exit” occurred or not. An orderly exit was defined as occurring when, at the end stop of the ride segment, *all* exiting passengers were able to leave the train before *any* entering passengers get on.²

The first phase of the research also included whether posters which are part of the “Courtesy Counts” campaign were visible in the rear third of the car. It should be noted, however, that the posters could contain messages pertaining to any facet of the “Courtesy Counts” campaign. Therefore, no linkage could be established between the content of a specific poster and the display of a particular type of behavior.³

Lastly, the students recorded for each segment whether the car was “very crowded.” The definition accorded “very crowded” was that a student’s vision was so obstructed that he/she could not obtain an accurate count of all the passengers (seated and standing) from the rear third of the car up to the second set of doors. Importantly, though, if the car was “very crowded,” students were instructed to still record the number of passengers seated or standing within their field of vision.

The second phase of the study adhered to the same methodology as adopted in the first phase. The major difference was that students focused solely on the numbers of men and women separately who were seated or standing. In this regard, they also noted whether men or women who were seated or standing were accompanied by children. Furthermore, they recorded whether adult passengers had strollers or large packages which they brought on the train with them and which might affect seating patterns.

For both phases of the study, students were told to note any anomalies in gathering the data which might affect the results. Finally, students were instructed to remain as inconspicuous as possible in carrying out their observations. They were explicitly told not to engage in any verbal interactions with other riders and to only “casually glance around” the car when observing behavior patterns.

Data for the first phase of the study were gathered between October 22 and November 12, 2015, and data for the second phase of the study were gathered between February 15 and March 14, 2016.

Altogether, there were 40,337 passengers (20,080 males and 26,032 females) observed during 2,305 segments in the first phase. In the second phase there were 50,921 passengers (25,815 males and 25,106) females observed during 2,984 segments.

Findings

Crowding

As discussed above, students recorded whether a car was “very crowded” or “not very crowded” based on visibility to count the riders for each trip segment. Slightly less than one-fifth (17.3%) of the segments overall were labeled as “very crowded.” Conforming with expectations, the incidence of cars which were labeled “very crowded” was considerably greater in the weekday morning peak hours (30.5%) and afternoon peak hours (23.5%) than in the weekday off-peak hours (8.8%). In general, weekend trips were not as likely to be termed “very crowded” as weekday peak hours (morning or evening). Saturday evening hours (4 pm to 8 pm), though, also evidenced a high frequency of segments termed “very crowded” (22.2%).⁴

Eating

The incidence of eating on the subways was minuscule. A little more than one-half of one percent of males and six-tenths of one percent of females were observed engaging in this type of behavior.

Manspreading

Overall, manspreading was observed among 8.5 percent of the seated male riders. Noteworthy, though, is that the frequency of manspreading varied

considerably by whether or not the car was very crowded. When the car was not very crowded, the incidence of manspreading was 9.1 percent. When there was less room in the car, the incidence fell dramatically to 2.9 percent of the seated male riders. This finding suggests that manspreading is not a biologically-based phenomenon due to the body dimensions of males as some have argued (Yakas, 2016). Rather its occurrence appears to be situational and depends upon the population density of the riders in the car.

Pole-hogging

Slightly less than 3 percent of all the standing riders were observed to be pole-hogging (2.6%). The figure for pole-hogging was more elevated when the car was not very crowded vs. when the car was very crowded (3.3% vs. 1.1%). Little discernible differences existed between males and females in the incidence of pole-hogging (2.8% vs. 2.5%).

Disorderly Exits

Discounting instances in which no riders entered or exited from cars at a given stop, the overall frequency of “disorderly exits” was 12.2 percent. Not surprisingly, the incidence of disorderly exits decreased during weekday off-peak hours (6.7%). Also, as would be expected, the frequency of disorderly exits was markedly lower when the car was not very crowded vs. when the car was very crowded (10.7% vs. 20.3%).

Gender Differences by Time of Day

The Fall, 2015, and Spring, 2016 data sets yielded no consistent patterns with respect to the relationship between the percent of riders who were female and the time period in which observations were carried out.

Gender Differences in Less Vs. More Crowded Cars

The total number of riders who were observed in the study was evenly distributed between males and females. However, the distribution of female riders seemed to be contingent upon the population density (“load”) of the cars. There was a strong positive relationship between the proportion of riders who were female and total number of riders. As the car load increased, the proportion of riders who were female also steadily increased. The data show that as the load of cars rose from 5 or less passengers to 28 or more passengers, the share of female riders increased from 42.3 percent to 51.2 percent. It appears, therefore, that females were more inclined to ride in cars with a greater density of riders.⁵

Gender Differences in Interior Vs. Exterior Cars

In the first phase of the research female riders were proportionately more represented in the interior than the exterior cars (52.1% vs. 48.4%). In the second phase of the research this gap was barely in evidence (49.7% vs. 48.4%).

Gender Differences in Standing

The data show there was a noticeable gender gap in the proportion of males vs. the proportion of females who were observed standing. Overall, the proportion of males standing exceeded the proportion of females standing by 10.3 points (35.8% vs. 25.5%). This gap persisted across different time periods although it narrowed somewhat during the weekend morning period. Noteworthy, the gap was still evident when the car was either very crowded or not very crowded (13.1 percentage points and 9.4 percentage points, respectively). Moreover, the gap was not affected by whether the male or female riders were accompanied by children.⁶

Courtesy Counts Posters

The presence or absence of posters from the Courtesy Counts campaign had little noticeable effect on certain behaviors such as manspreading, pole-hogging, or eating. It must be remembered, though, that the specific content of the posters was not noted by the observers. Therefore, the messaging in the posters in the section of the car being observed may not have been relevant to the behavior under study.

Postscript

The two most prevalent types of discourteous behavior uncovered in the first phase of this study (October-November, 2015) were disorderly exits and manspreading. To update the findings concerning these two behaviors, a supplemental sample of riders was conducted during the week of April 11-18th, 2016. This supplemental sample was based on 495 segments and restricted to just interior cars and rides occurring on a weekday. Students were given autonomy in selecting the subway lines upon which to carry out their observations.

The results from this supplemental sample show a sharp increase in the incidence of disorderly exits from the October-November, 2015 sample. The percent of all exits which were coded as disorderly was 18.3 percent (excluding no one exiting and/or no one entering) compared to 12.2 percent in the Fall sample. As one

would anticipate, again there was a wide divergence in the incidence of disorderly exits when the car was very crowded vs. not very crowded (30.5% vs. 12.5%). Likewise the percent of seated men who were manspreading was found to be higher in the April sample than in the Fall, 2015 sample (14.4% vs. 8.5%).

Several explanations might be posited to account for the disparity in the incidence of disorderly exits and manspreading between the October-November sample and this supplemental sample. It could be attributable to sampling variability (i.e., that the results of samples differ due to the varying composition of different samples). Alternatively, the disparity in results could be due to actual changes in subway behavior over the course of the last several months. Data gathered by the MTA, while showing a long-term increase in train delays due to overcrowding, “unruly customers,” and sick customers, do not reveal, however, a marked increase in delays due to these three factors in the last half-year (Metropolitan Transportation Agency, 2016). One other explanation which could account for the differing results is that in the first phase of this study students were charged with gathering data simultaneously on multiple facets of the “Courtesy Counts” campaign whereas in the supplemental sample they only had to focus on two specific facets. The greater burden imposed on students in the first phase of the study may have compromised their ability to gather the data as accurately as they might have done under less challenging circumstances.

Conclusions

Several important findings have emerged from this study. The findings concerning the four types of behavioral phenomena covered by this investigation reveal that disorderly exiting is the most commonplace of these phenomena. Two estimates produced in this study (one in the Fall of 2015 and one in a supplemental sample taken in April, 2016) showed that disorderly exits occurred at 12.2 percent and 18.3 percent of the subway stops, respectively. In both samples, the frequency of disorderly exits soared if the car was very crowded. The Fall, 2015 sample yielded a “disorderly exit” rate of 20.3 percent and the supplemental sample of April, 2016 produced a “disorderly exit” rate of 30.5 percent under “very crowded” conditions. If the subways are to run more efficiently and attenuate the frustrations of riders due to delayed trains, then one priority should be to focus on reducing the incidence of disorderly exits.

Both the Fall, 2015 sample and the supplemental sample conducted in April, 2016 also showed a relatively high frequency of “manspreading” (8.5 percent and 14.4 percent, respectively). Yet, the proclivity of many males to spread their legs wide apart and thus deprive other riders of seating space appears to be highly sensitive to the social conditions existing in the car. When the subway is crowded, the incidence of manspreading plummeted to just 2.9 percent in the Fall, 2015 sample and fell to 9.6 percent in the supplemental sample.

Pole-hogging was noted by the observers less than 3 percent of the time and at an even lower rate (1.5%) under crowded conditions. Though these figures are low, it should be remembered that, aggregated over millions of rides each day, pole-hogging does contribute to the scarcity of space and adds to the unpleasantness of the ride.

Finally, consuming food was a statistical rarity and, although it may detract from the aesthetics of the ride for other riders, does not appear to be a major problem.

This study also yielded evidence of a gender divide in subway behavior. First, females appear less disposed to enter a subway car if there are fewer people populating the car. This behavior pattern could owe its existence to not wanting to be socially isolated. Second, female riders are more likely to sit than their male counterparts even in the absence of children. Interestingly, the greater likelihood of females sitting is not diminished when the subway car has available seating. A number of explanations could be offered to account for this last-mentioned finding. It may be that males, in general, take shorter trips than females. Or it may be that the age distribution of females is skewed more toward the older age categories. Or it may even be that the shoes worn by some women make it uncomfortable to stand for prolonged periods of time. A final possibility is that men are consciously or unconsciously engaging in “chivalrous” behavior. Sorting out these competing explanations constitute one basis for continuing research in the area of subway etiquette.

Limitations of the Study

There are several limitations attached to this study. First, while observational data were gathered more than 5,000 segments across both phases of the research, these segments are not independent units. Students gathered data on

sequential segments (i.e., a consecutive series of subway stops). Thus, it is reasonable to assume that some of the behavior patterns exhibited in one segment observed by a given student on a given trip might carry over to the next segment observed by that same student. This lack of independence is mitigated somewhat by the large number of students conducting the research on different subway lines at different times of the day and different days of the week

A second limitation of the study is that the subway lines and times employed to gather the data were not chosen randomly. Therefore, no precise statistical estimates can be drawn from the findings about etiquette to the entire universe of subway riders. It should be kept in mind, though, that the subway lines and time periods used in this study were varying in nature and therefore the findings can be thought of as being broadly representative of the ridership.

A third limitation of this study is that it is cross-sectional. To assess the efficacy of the “Courtesy Counts” campaign, data would need to be gathered at different points in time – preferably both before and after the advent of the campaign. Nevertheless, this study can serve as a baseline measure against which to gauge the changes in behavior patterns going forward.

Notes

1. In the first phase of the study, exterior cars were denoted as either the first two or the last two cars of the train. In the second phase of the study, exterior cars were denoted as either the very first or the very last car of the train.

2. As originally conceived, the coding for an “orderly exit” was dichotomous: either the exit was orderly or disorderly. This coding scheme was amended to include situations in which no passengers entered or exited the rear third of the subway car at a given stop. A few students did not adhere to this amended coding scheme. However, the cases pertaining to this variable for these students were identified and isolated. Thus, the analysis of this variable was not affected by the refinement in the coding scheme.

3. In many cars, one entire side of the cars is devoted to the “Courtesy Counts” posters. Students did not differentiate between these cars and those with at least just one poster within view of the observer.

4. The findings concerning crowding presented above are also based upon the second phase of the study. The findings concerning crowding from the first phase of the study closely mirror the ones discussed here. One notable difference is the frequency of segments labelled “very crowded” in the first phase was less than the frequency of segments labelled “very crowded” in the second phase (11.6% vs. 17.3%).

5. The positive relationship between the load of the car and the percent of riders who were female noted here was found in the second phase of the study. A similar but somewhat attenuated relationship was uncovered in the first phase of the study. When the load was light (5 or under) the proportion of females was 46.2 percent. When the load was heavy (28 or more) the corresponding proportion of females was 50.7 percent.

6. The results reported here concerning gender differences in standing were based upon data from the second phase of the study – 35.8% for males and 25.5% for females. A similar gender gap in the proportion of standees was noted for the data from the first phase of the study (nine percentage points).

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