

4-30-2020

The Women-only Passenger Carriage: Is It Helpful?

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Recommended Citation

Prabowo, Hendro; Rebeca, Andreana; Salve, Henny R.; Fatimah, Firda F.; Chrisnatalia, Maria; Prabawati, Ira N.; and Handayani, Nita S. (2020) "The Women-only Passenger Carriage: Is It Helpful?," *Psychological Research on Urban Society*: Vol. 3: No. 1, Article 10.

DOI: 10.7454/proust.v3i1.45

Available at: <https://scholarhub.ui.ac.id/proust/vol3/iss1/10>

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Psychological Research
on Urban Society
2020, Vol. 3(1) 18-23
© The Author(s) 2020
DOI: [10.7454/proust.v3i1.45](https://doi.org/10.7454/proust.v3i1.45)
proust.ui.ac.id

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Received: January 8th, 2019
Revision Accepted: October 31th, 2019

Abstract

In large metro areas such as Jakarta, Bogor, Tangerang, and Bekasi, the electric train (KRL) is a popular means of transportation because it runs quickly and on time despite being crowded. To help prevent the sexual harassment of female passengers, some KRL carriages are designated specifically for women. This study examines differences in female KRL passengers' anxiety about sexual harassment in mixed carriages and women-only carriages on the Bogor-Jakarta route ($n = 100$) and Bekasi - Jakarta route ($n = 110$), using the Anxiety About Sexual Harassment Scale (Leitenberg & McNeil, 1990; Dacey, 2000). Significant differences in anxiety about sexual harassment were found among women who rode in women-only versus mixed carriages on the Bogor-Jakarta route but not on the Bekasi-Jakarta route. However, in general, participants who rode women-only carriages had higher anxiety than those who rode mixed carriages. This finding was confirmed by interviews with 35 female passengers (7 from the Bogor-Jakarta route, 28 from the Bekasi-Jakarta route). Some women expressed a preference for riding mixed cars because male passengers made room for them to enter or exit the cars and offered them seats. Meanwhile, some participants reported not choosing women-only carriages because the other passengers behaved aggressively.

Keywords

Anxiety about sexual harassment, female passenger, mixed carriage, women-only carriage

Residents of large metro areas such as in Jakarta, Bogor, Tangerang, and Bekasi frequently use public transportation such as the electric train (KRL). KRL is a popular choice because it runs quickly and on time, even though it is often crowded. According to PT Kereta Commuter Indonesia (2018), as of June 2018, the Indonesian Commuter Train (KCI) had 900 KRL units, following the addition of a fleet of 60 trains in 2017. In the first half of 2018, the average number of KRL passengers per day reached 1,001,438 on weekdays, with the highest number of people served in one

day being 1,154,080. The total annual number of train passengers in Jakarta, Bogor, Depok, Tangerang, and Bekasi regions increased from 2006 to 2018, as Table 1 shows.

In 2011, KCI began offering women-only trains (PT Kereta Commuter Indonesia, 2018) with the aim of reducing the sexual harassment of female passengers. Similar policies have been implemented in other countries, such as Brazil, Japan, Mexico, Egypt, India, Thailand, Iran, and the United Kingdom (Purnamasari, 2017).

Seven years into the policy of offering women-only trains, what are the effects on passengers? Many stories have been reported in online media (e.g., Facebook), including female malignancy (Putera, 2017), female passengers being annoyed with pregnant women, who often receive priority seats on the train (Pitoko, 2017), and two women on the KRL hitting each

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other in an argument over a seat as other passengers tried to separate them (Nailufar, 2017).

Table 1. Annual number of passengers in Jakarta, Bogor, Depok, Tangerang, and Bekasi by year

Year	Number of Passengers
2006	104,425
2007	118,095
2008	125,451
2009	130,508
2010	124,308
2011	121,105
2012	134,088
2013	158,483
2014	208,496
2015	257,531
2016	280,589
2017	315,854
2018	250,232

Source: BPS (2018)

Two previous studies have addressed the women-only car policy. Karliana and Prabowo (2014) found recognition of the perpetrators of sexual harassment was related to the harassment they had committed on the Bogor-Jakarta route. The sexual harassment was experienced by female passengers during the crowded passenger hours in the KRL economy class. Moreover, Widyanti and Fakhurrozi (2009) described that harassment during crowded hours resulted in female passengers' anxiety.

Other researchers have studied the women-only car policy. For instance, Wing and Vany (2011) reported that the level of passenger satisfaction in women-only carriages was unsatisfactory. Christin (2018) found that women-only carriages on the front and back of the KRL train series did not necessarily solve the problem of female passengers' safety and even caused new problems such as fights between female passengers in the cars.

Study Purpose

This research consists of two studies. Study I aims to examine the differences in anxiety about sexual harassment in female passengers in women-only carriages versus mixed carriages. Study II aims to shed light on why female passengers prefer either women-only carriages or mixed carriages.

Study I

Methods

Participants

The participants were female passengers on the KRL train on the Bogor-Jakarta and Bekasi-Jakarta routes. Each train consists of eight carriages, two of which are women-only cars. Each carriage has a capacity of 134 passengers.

The research sample was obtained by a purposive sampling technique. Participants were selected who had the following characteristics: a female passenger who had been actively using the KRL for at least six months.

Instrument

We use the Anxiety About Sexual Harassment Scale (Leitenberg & McNeil in Leitenberg, 1990; Dacey, 2000), which includes 46 items (30 favorable items and 16 unfavorable items). The scale consists of three components, namely, cognition, behavior, and physiological responses. Five response choices are given for each item: Strongly agree, Agree, Neutral, Disagree, and Strongly disagree. The reliability with Cronbach's alpha is .918.

Results

The results of Study I study are summarized in Table 2.

Table 2. Mean difference in anxiety about sexual harassment between women-only and mixed carriage passengers

Route	Average Age	N = 210	T	Mean
Bogor-Jakarta	25 years (n = 100)	Women only n = 50	4.317	175.58
		Mixed gender n = 50		156.48
Bekasi-Jakarta	25.5 years (n = 110)	Women only n = 57	1.842	182.47
		Mixed gender n = 53		176.60

Conclusions

On the Bogor-Jakarta route, there were differences in anxiety about sexual harassment among female passengers who rode women-only versus mixed carriages, $t(98) = 4.317, p < .01$. That is, female passengers in women-only carriages felt more anxious than female passengers in mixed carriages. In contrast, on the Bekasi-Jakarta route, there were no differences in anxiety about sexual harassment among female passengers in women-only versus mixed carriages $t(100) = 4.317, p > .05$. This is because of the larger number of passengers on the Bogor-Jakarta route compared to the Bekasi-Jakarta route, or 69.95% compared to 13.48% in 2017 (PT Kereta Commuter Indonesia, 2018).

Study II

Methods

Participants

The Study II participants were 35 female passengers, including 28 passengers from the Bekasi-Jakarta route and seven passengers from the Bogor-Jakarta route. The participants were selected based on their experiences of choosing women-only and mixed carriages. They were students, lecturers, and workers. The average age was 26.5 years.

Instrument

We followed interview guidelines by asking the participants two questions: Why do female

passengers prefer mixed carriages? Why do female passengers reject women-only carriages? After answering both questions, the participants were encouraged to provide further explanations or thoughts. The data collection was carried out directly on campus and at the train station. Some interviews were done through social media.

Results

In response to the first question (“Why do female passengers prefer mixed carriages?”), the participant gave a total of 386 answers with an average of 11 reasons (lowest number of reasons = 1; highest number of reasons = 19). The answers were coded and grouped into 20 similar responses. As Table 3 shows, the participants reported that male passengers on the mixed cards tended to offer them seats or space to stand, enter or exit, etc.

In response to the second question (“Why do female passengers reject women-only carriages?”), the participants gave a total of 522 answers with an average of 15 reasons (lowest number of reasons = 0; highest number of reasons = 24). The answers were coded and grouped into 27 similar responses. Table 4 shows that the participants saw passengers in the women-only cars as having aggressive behavior.

Conclusions

Female passengers may behave more aggressively in women-only carriages compared to mixed carriages. This is due to the fact that there

Table 3. Top 10 reasons for preferring mixed carriages (total of 20 similar responses)

Response	N
Male passengers give in, are tolerant, and offer seats.	30
Male passengers have a higher awareness, more care, and respect for women or other people who need help.	29
Male passengers offer seats or make space for female passengers who stand.	29
Male passengers do not push like passengers in the women-only carriages.	29
Male passengers help women board the mixed carriages.	27
The carriage is calm because the male passengers are silent and don't talk much.	26
Male passengers are more polite to women by keeping a distance and not touching.	27
Male passengers can restrain themselves when impulses occur, so they try to keep their distance and not touch women's bodies.	26
Male passengers make space for others to get out of the carriage.	28
There are more mixed carriages than women-only carriages, so the mixed carriages are more relaxed and quiet, and there are more places to sit.	22

Table 4. Top 10 reasons for rejecting women-only carriages (total of 27 similar responses)

Response	N
Female passengers are more selfish and less willing to help than male passengers.	32
Female passengers often do not want to give up seats for others.	30
Female passengers in women-only carriages have rude behavior or are physically aggressive (e.g., clawing, stepping on someone else's feet, pulling a headscarf/bag, pushing).	29
Since all the other passengers are women, they think it doesn't matter if they are crowded, pushy, and rude.	28
Female passengers push when entering or leaving the carriage.	29
Female passengers often don't want to make room for other passengers to get off.	29
Female passengers in the women-only carriages are rude.	28
Female passengers are forced to enter the carriage even though it is full.	27
Female passengers elbow to get in or out of the carriage.	27
Female passengers lean into others' spaces.	26

are only two women-only carriages among the eight KRL carriages, making the female passengers more crowded.

Discussion

This study supports several other studies that concluded crowding generally increases aggressive behavior (Calhoun, 1962; Mahiques, 2013), though the other works did not address sex. For example, Calhoun's (1962) research on Norwegian rats showed that when a population of laboratory rats was allowed to increase in a confined space, the rats developed acutely abnormal patterns of behavior that could even have led to the extinction of the population. Calhoun coined the terms "behavioral sink" to describe aberrant behaviors in overcrowded population density situations and "beautiful ones" to describe passive individuals who withdrew from all social interaction. Mahiques (2013) added that these animals grew up in confinement for generations without the ability of escape or migrate to a frontier. They developed social pathologies similar to humans in overcrowded cities or settlements. Behavioral disturbances reached the levels of deadly fights, sexual deviation, and cannibalism. In response to invasion and a large number of males, the females became aggressive, and this attitude generalized to their baby rats. Overcrowding produced dramatic results ranging from aggression to many forms of abnormal behavior.

Several other studies support the results of this research (Aiello, 1975; Walden et al., 1981;

Ruback & Carr, 1984; Kaya & Erkip, 2001; Isbell, 1991). Aiello (1975) found that there are differences in the effects of the environment on students living in tripled rather than doubled room arrangements. Tripled students saw themselves as being more crowded and felt less satisfied than doubled students. However, when one considers the effects of crowding on health and the stability of living arrangements, it is crowded women who are most negatively affected. Crowding was also differentially responded to by males and females, with females apparently being less disturbed by the crowded conditions (Walden, et al., 1981).

Ruback and Carr (1984) examined the effects of crowding on 561 female prisoners in prison. The study showed that the average population in the institution was significantly related to the transformed rate of discipline. The study also found that female inmates' perceived control was positively related to liking their room and negatively related to their reported stress and physical symptoms. In addition, the stress inmates experienced was negatively related to liking their room and positively related to physical symptoms. In addition, Kaya and Erkip (2001) found that the perception of room size was significantly related to sex. Although both male and female residents found their room size small, more female residents perceived their rooms as small compared to their male counterparts.

Isbell's (1999) animal research showed that the pattern of most female primates (and many other mammals) living in groups is paradoxical,

given that the presence of others presumably increases competition for food and may, for some, reduce reproductive success. Competition for food resources is generally inferred from female dominance hierarchies within groups, female aggression between groups, and increasing home-range size with increasing group size.

In contrast, several other studies do not support the results of this research (in humans: Freedman et al., 1972; Marshall & Heslin, 1975; Epstein & Karlin, 1975; in animals: Alexander & Roth, 1971; Brown & Grunberg, 1995). Freedman et al. (1972) found that all-male groups were more competitive in small rooms, while all-female groups were less competitive in the same conditions. In addition, all-male groups gave more severe sentences in a small room than in a large room while all-female groups were more lenient in the small room compared to the large one. Mixed-sex groups showed no effect of room size for either the whole group or each sex considered separately. Affective reactions by the same-sex groups were consistent with these measures, with males being generally more positive to each other in the large room, while females were more positive in the small room. In addition, a number of studies have shown that the social orientation of the group mediates reactions to crowding. For example, in situations that require the formation of an achievement-oriented team, males more easily form cooperative groups than do females. Under such circumstances, crowded males become even more cooperative and crowded females less cooperative than their noncrowded counterparts (Marshall & Heslin, 1975). Alternately, in situations requiring a high degree of socioemotional group maintenance, women are more likely to band together cooperatively than are men. Under these circumstances, crowded females become more cooperative and crowded males more competitive than their noncrowded counterparts (Epstein & Karlin, 1975).

Alexander and Roth (1971) studied the effects of short-term acute crowding on aggressive behavior in a troop of Japanese monkeys (*M. fuscata*). Monkeys of both sexes displayed higher frequencies of aggression when crowded. The males, however, produced and received a greater proportion of the total attacks under crowded conditions. Low-ranking adults, sub-adults, and juvenile males showed the greatest

increase in attacks received. In contrast, females were proportionately less aggressive and less frequently attacked when crowded. These differential effects were related to the spatial structure of wild troops. There was no breakdown in the social structure of the troop under crowded conditions. The dominance hierarchy, in fact, was more predictive of aggressive events in pen than in the corral. Brown and Grunberg (1995) also found that male rats had higher corticosterone levels (a sensitive and reliable index of stress) under crowded conditions. In contrast, female rats had higher levels when housed individually.

Conclusion

The study findings indicate that women-only carriages are largely ineffective in reducing anxiety about sexual harassment and female passengers' satisfaction. This is because the women-only carriages are crowded, resulting in passenger aggressiveness.

Recommendations

It is recommended that KRL management add more women-only carriages to reduce the density/crowding that results in passenger aggressiveness. In addition, future research should examine this phenomenon using more specific variables such as aggression, density, and crowding. The research should also consider the perpetrators and victims of aggression, including sex.

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