

When Racial Attitudes Take Flight: Passenger Perceptions of Airline Employees

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ABSTRACT

Research reveals that White individuals exhibit negative attitudes towards Black individuals and those perceived as having lower status. Airline employees have reported experiencing discrimination in the workplace, but there is a research gap regarding airline passengers' attitudes toward airline employees (i.e., flight attendants and pilots). This study delves into racial and status-based attitudes among airline passengers, focusing on perceptions of Black and White male pilots and flight attendants. A total of 175 participants in three airports completed an evaluative priming task to measure implicit attitudes. Subsequently, participants viewed a video of a Black or White male flight attendant or pilot giving a safety speech and rated them on their perceived competence and warmth. Participants indicated more negative implicit attitudes towards Black flight attendants and pilots compared to White counterparts. Further, participants had more favorable implicit attitudes toward Black pilots than Black flight attendants and toward White pilots than White flight attendants. Additionally, White airline employees (especially flight attendants) were rated as higher in warmth than Black airline employees. Limitations and potential future extensions of this study are discussed.

INTRODUCTION

It is estimated that 1,000 to 3,000 pilots are retiring each year. An implication of this is that the commercial airline industry may face a shortage of around 2,000 pilots per year from now until 2026 (Prelis, 2020). One large contributing factor to this shortage may be burnout among pilots, described as exhaustion and disengagement from work, which is related to career turnover intentions (Barthauer et al., 2020). One factor that may contribute to burnout is poor mental health (Cullen et al., 2022). Demerouti et al. (2018) found that over 40% of airline pilots report struggling with high levels of burnout and 12.6% of pilots in this study meet the criteria for having major depressive disorder. Similarly, flight attendants report higher levels of depression and anxiety than the general population (McNeely et al., 2014). Negative attitudes among individuals in society may lead to discrimination (Gran-Ruaz et al., 2022). This poses the question of whether racial attitudes that individuals have in society may be contributing to this burnout and other mental health consequences.

Evans (2012) conducted interviews with Black pilots and flight attendants. This is one of few studies that have looked at the experience of prejudice among Black airline employees. The study concluded that Black employees feel they frequently deal with racism in the airline industry. Evans and Feagin (2012) stated there is a deep rooted history of institutional discrimination in the airline industry. Employment in the airline industry was unobtainable for Black individuals for a long period of time, largely due to Jim Crow laws. Today, there still is an underwhelming number of Black pilots employed in the airline industry. In 2010, there were 71,000 pilots in the commercial airline industry and less than 700 of them were Black. This indicates that less than 1% of airline pilots are Black, which is a major underrepresentation considering that Black individuals make up over 12% of the United States population (Jones, 2020). All of the Black pilots and flight attendants in Evans' (2012) research, except for one, stated that they have had passengers refuse to fly when they learned that their pilot is Black. Discrimination in these instances took more blatant forms, but it can also happen in subtle ways. More subtle forms of discrimination are driven by implicit or automatically-activated attitudes.

Implicit attitudes are measured through various types of implicit attitude tests (e.g., evaluative priming tasks) and aim to capture an individual's true, and perhaps unconscious attitudes without directly asking them (Reis et al., 2014). Implicit attitudes are activated automatically and may lead to behaviors of racial discrimination (Gran-Ruaz et al., 2022) when an individual has low motivation to control prejudice and/or they lack the opportunity (time, mental resources, ability) to do so (Fazio & Olson, 2014). Through a Black-White IAT (BW-IAT), Gran-Ruaz et al. (2022) found that both White and non-White groups tend to hold negative implicit attitudes toward Black individuals and this can lead to subtle discriminatory actions in the workplace such as freezing, antagonizing, or

avoiding the situation all together (Trawalter et al., 2020). Another study concluded that indicators of status can affect implicit attitudes. For example, people perceived as higher in socioeconomic status elicit more positive attitudes on tasks measuring implicit attitudes (Mattan et al., 2019). There have been a plethora of studies on implicit attitudes of White individuals toward Black individuals, but no research on implicit attitudes toward Black airline employees. It is important to note that implicit attitudes are distinct from consciously-held, self-reported explicit attitudes that are also commonly measured as indicators of negative attitudes, such as perceptions of competence and warmth.

The stereotype content model provides a framework to understanding the nature of cultural stereotypes and theorizes that the perception of social groups is explained by the two dimensions of warmth and competence. Fiske et al. (2002) found that these two aspects play an important role in how people tend to evaluate and then act toward others based on their apparent social group memberships in their environment. Warmth is categorized as being sociable and kind. Competence is classified as being intelligent, knowledgeable, and able to problem solve. Fiske et al. (2002) concluded that perceptions of warmth and competence depend on several factors. High status groups tend to be rated as high in competence (and low in warmth if they are seen as a threat) and low status groups tend to be perceived as low in competence (and high in warmth if they are not seen as a threat). Warmth and competence are both important factors in how a member of one race may perceive a member of another race. For instance, when an outgroup is perceived as warm, there is more willingness to participate in interracial interactions (Awale et al., 2018).

When compared to White individuals, Black individuals are viewed as lower in competence and in warmth. This gives reason to hypothesize that Black pilots and flight attendants will be rated lower in competence and warmth than White pilots and flight attendants. Black professionals tend to be described as higher in competence and lower in warmth compared to disadvantaged Black individuals (Baharloo, 2022). Chute and Weiner (1995) stated that the airline pilot profession is typically seen as a male-dominated and skillful job whereas the flight attendant profession is typically seen as female-dominated and a service job. Thus, airline pilots are seen as higher in status than flight attendants. Since pilots are perceived as higher status than flight attendants (Chute & Weiner, 1995), this indicates that pilots will be rated higher in competence, but lower in warmth than flight attendants who are perceived as lower in status.

This research is significant because it is important to know to what extent racial prejudice exists toward Black airline employees as this could negatively impact their well-being. If society is made aware that negative racial attitudes exist in the commercial airline industry, efforts can be made to educate individuals to increase motivation to control prejudice and reduce acts of discrimination that can harm the mental health of Black airline employees.

The current study investigated implicit attitudes toward Black and White flight attendants and pilots using an evaluative priming task. It also investigated how status and race influence more explicit, self-reported competence and warmth ratings. It was hypothesized that (1) participants would hold more negative implicit attitudes toward Black male pilots and flight attendants than toward White male pilots and flight attendants; (2) participants would hold more negative implicit attitudes toward flight attendants compared to pilots of the same race; (3) participants would rate Black male pilots and flight attendants lower in competence and warmth compared to White pilots and flight attendants; and (4) participants would rate flight attendants lower in competence compared to pilots but higher in warmth.

PILOT STUDY

To ensure that there were no differences in attractiveness based on the race and status of images for the evaluative priming task used in the main study to measure implicit attitudes, a pilot study was conducted online where participants rated each of the 20 photographs on attractiveness. These images were found from Google searches. The images included Black and White pilots and flight attendants from the shoulders up. Pilots were wearing captain's hats and flight attendants were not wearing a hat (see Appendix A for images used). After viewing the photographs in a random order, the participants were asked "How attractive is this person?" and responded using a 1-7 scale ranging from *Very Unattractive* to *Very Attractive*.

METHODS

Participants in the pilot study consisted of 54 adults recruited through a social media post ($M_{age} = 41.75$ years, $SD = 19.12$). Participants identified as man (26%), woman (70%), other (2%), and choose not to respond (2%). Most participants identified as White (89%). The remaining participants identified as Hispanic/Latino (6%), Asian American (2%), or choose not to respond (2%). These were different participants from the main study, but the ages and races were similar. No incentives were offered for participation in the pilot study. The pilot study took less than 5 minutes to complete per participant.

RESULTS

To test for potential differences in attractiveness ratings across groups in the pilot study, paired samples t -tests were conducted. The comparison between attractiveness of Black flight attendants ($M = 4.23$, $SD = 0.99$) and White flight attendants ($M = 4.25$, $SD = 0.90$) did not yield a significant difference in attractiveness ratings, $t(53) = 0.24$, $p = .81$. There was also no statistically significant difference in attractiveness ratings between Black pilots ($M = 4.16$, $SD = 0.93$) and White pilots ($M = 4.16$, $SD = 0.94$), $t(53) = -0.08$, $p = .93$. Further, the comparison between Black flight attendants ($M = 4.23$, $SD = 0.99$) and Black pilots ($M = 4.17$, $SD = 0.94$) revealed no significant difference in attractiveness ratings, $t(53) = .61$, $p = .55$. Finally, no statistically significant difference in attractiveness ratings was found between White flight attendants ($M = 4.25$, $SD = 0.90$) and White pilots ($M = 4.16$, $SD = 0.94$), $t(53) = -0.96$, $p = .33$.

MAIN STUDY

Results from the pilot study indicated that there were no significant differences in perceived attractiveness across different racial and job status categories regarding the images presented to participants. These results ensured that the evaluative priming task used in the main study to measure implicit attitudes did not have the confounding variable of differences in attractiveness of images. The main study was conducted to test the primary hypotheses.

METHODS

Participants

For the main study, participants included 175 people ($M_{age} = 47.59$ years, $SD = 17.26$) from three airports in Wisconsin (ranging from small to mid-sized). Over half of the participants identified as women (53%) while the rest identified as men (44%), non-binary (1%), and other (2%). Most participants identified as White (82%). The rest identified as Hispanic/Latino (6%), Asian American (3%), African American (2%), or American Indian or Alaska Native (1%). Three percent of participants chose not to respond. The number of times that participants have flown previously ranged from 0 to 5000 ($M = 200.65$, $SD = 598.09$). The education levels of participants included: Doctoral Degree or Equivalent (7%), Master's Degree or Equivalent (24%), Bachelor's Degree or Equivalent (33%), Associate's Degree (9%), Some College (15%), Graduated High School (10%), Other (7%), Some High School (1%), and No High School (1%). Over half of participants reported their economic status as Better Off Than Most Families (53%), The Same As Most Families (29%), Much Better Off Than Most Families (13%), and Worse Off Than Most Families (6%).

Materials and Procedures

The main study utilized a mixed design. Participants completed this study in airports on university-provided laptops. Prior to beginning the study, participants provided informed consent by signing a form. After filling out the form, participants were trained to differentiate between pilots and flight attendants based on whether they had a hat on (pilots wore hats) for 10 trials (5 flight attendants and 5 pilots).

Next, participants completed the evaluative priming task using the pilot-tested images of White and Black pilots and flight attendants (Fazio et al., 1995) adapted by (Mattan et al., 2019). Twenty color photographs of White and Black males were used (see Appendix A for images used) as primes (10 Black males and 10 White males). All photographs were from the shoulders up with the same background. There were 5 White male pilots, 5 Black male pilots, 5 White male flight attendants, and 5 Black male flight attendants.

For the primary part of the evaluative priming task, participants were instructed to categorize target words as positive or negative as quickly and accurately as possible (Fazio et al., 1995). A face prime (e.g., White flight attendant) appeared immediately prior to each target word. Faster responses for primes preceding positive (vs. negative) words are thought to reflect a positive evaluative bias, whereas faster

responses for primes preceding negative (vs. positive) words are thought to reflect a negative evaluative bias. The positive target words used in this study were: Wonderful, outstanding, charming, delightful, fabulous, likable, nice, and excellent. The negative target words used in this study were: Repulsive, irritating, rotten, disgusting, sickening, awful, disturbing, and horrible.

To start the primary evaluative priming task, participants completed a short training procedure (16 trials) to learn the paradigm. The initial instructions page instructed participants to press the / key for positive words and the Z key for negative words. It also informed participants to respond as quickly and as accurately as possible. Practice trials then began. Positive and negative words were continuously presented at the center of the screen. Target word valence was randomized across all trials, with each target word being presented once. Each trial was terminated after the participant's response. Late (1,000 ms. or longer) or incorrect responses resulted in an error message of "INCORRECT," presented centrally. No feedback for correct responses in the practice trials were given. A pause preceded all subsequent trials.

After completion of the practice trials, participants were told that they will continue to categorize words as positive or negative in the forthcoming trials. They were also told that there would now be faces, but to only respond to the words. However, they were instructed to still pay attention to the faces as they will be quizzed on them later. Similar to the practice block, the main critical blocks had positive and negative words. These words were preceded by a face prime in which race and status differed across trials (e.g., a White flight attendant). After the face prime disappeared, a target word appeared in the middle of the screen. Each trial finished after a participant's response of positive or negative. A brief pause came before all trials. No feedback on errors were given. There were 120-trial critical blocks including 3 sets of 40 trials. In each block, there were 20 flight attendant and pilot stimuli presented as a prime before the negative or positive word.

To determine prejudice scores, response times when viewing a negative word after a prime type (e.g., White flight attendants) were subtracted from response times when viewing a positive word after that prime type (e.g., White flight attendant). Higher scores indicated more negative prejudice toward that group (e.g., White flight attendants). To test Hypothesis 1, prejudice scores toward White flight attendants were subtracted from prejudice scores toward Black flight attendants. Similarly, prejudice scores toward White pilots were subtracted from prejudice scores toward Black pilots. Higher difference scores were indicative of more prejudice toward Black flight attendants and Black pilots, respectively. To test Hypothesis 2, prejudice scores toward Black pilots were subtracted from prejudice scores toward Black flight attendants. Likewise, prejudice scores toward White pilots were subtracted from prejudice scores toward White flight attendants. Higher scores were indicative of more prejudice toward flight attendants than toward pilots of the same race.

Following this, participants rated their internal and external motivation to control prejudice (Plant & Devine, 1998) using a 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) scale (E.g., "I try to act non-prejudiced toward Black people because of pressure from others"). Next, to measure competence and warmth attitudes, participants were randomly assigned to view a one minute safety video of a Black male flight attendant, a Black male pilot, a White male flight attendant, or a White male pilot. The pilots wore ties and stated that they were pilots. The flight attendants stated that they were flight attendants. The same Black man was used as the Black flight attendant and the Black pilot for the videos. A similarly aged White man was the White flight attendant and the White pilot. All four videos followed the same script, were the same length, and were recorded from the same angle (see appendix B for screenshots of the videos and script).

Participants then rated the man in the video they were assigned to on a 10-item questionnaire related to their perceived competence (5 items; $\sigma = .93$) and warmth (5 items; $\sigma = .83$). This questionnaire was adapted from Fiske et al., 2002. Participants responded to questions pertaining to competence (i.e., "This person is capable in their career") and warmth (i.e., "This person is friendly") using a 1 (*Strongly Disagree*) to 6 (*Strongly Agree*) response range. Finally, participants filled out a demographics questionnaire where they answered questions regarding their age, economic standing, education, gender, times flown in their lifetime, and times flown per year. Finally, participants received a debriefing. This experiment took anywhere from 15-30 minutes to complete.

9 participants were removed for having incomplete data. 4 participants were removed for being outliers (z-scores above 3.00 or below -3.00). These participants were outliers throughout all portions of the study, indicating that they may not have been paying attention. Removing these outliers did not impact the significance of the results, but it made the standard deviations smaller.

RESULTS

Hypotheses 1 and 2

To test Hypotheses 1 and 2, paired samples *t*-tests were conducted to see if implicit prejudice difference scores described previously were significantly different from 0, indicating prejudice. Consistent with hypothesis 1, participants exhibited a statistically significant level of prejudice toward Black flight attendants compared to White flight attendants ($M = 119.84$, $SD = 84.02$), $t(162) = 18.21$, $p < .001$. The mean difference was significantly greater than zero, indicating a substantial bias against Black flight attendants compared to White flight attendants. Participants also showed a statistically significant level of prejudice toward Black pilots over White pilots ($M = 29.32$, $SD = 91.37$), $t(163) = 4.11$, $p < .001$. The mean difference was significantly greater than zero, suggesting a bias against Black pilots compared to White pilots (see Table 1).

Consistent with hypothesis 2, one-sample *t*-tests indicated that participants revealed more prejudice toward Black flight attendants compared to Black pilots ($M = 90.36$, $SD = 118.05$), $t(162) = 9.77$, $p < .001$. The mean difference was significantly greater than zero, displaying a bias against Black flight attendants compared to White flight attendants. Similarly, participants displayed a notably higher level of prejudice toward White flight attendants compared to White pilots ($M = 233.49$, $SD = 129.54$), $t(162) = 23.01$, $p < .001$. The mean difference was significantly greater than zero, suggesting a bias in favor of White pilots compared to White Flight attendants (see Figure 1).

Hypotheses 3 and 4

To test hypotheses 3 and 4, two univariate analysis of variance tests (ANOVAs) were conducted, one with competence entered as the dependent variable and one with warmth entered as the dependent variable. The independent variables included race (Black vs. White) and status (flight attendant vs. pilot). The main effects of each of these independent variables and the interactions were assessed using ANOVAs.

The analysis of variance (ANOVA) examining warmth as the dependent variable revealed a significant main effect of Race, $F(1, 170) = 7.30$, $p = .008$, $\eta^2_{\text{partial}} = 0.041$. White airline employees received significantly higher warmth ratings ($M = 4.89$, $SD = 0.57$) compared to Black airline employees ($M = 4.60$), $t(170) = 2.71$, $p = .008$. Notably, White flight attendants ($M = 4.93$, $SD = 0.51$) were rated higher in warmth than Black flight attendants ($M = 4.60$, $SD = 0.88$), $t(81) = 4.45$, $p < .001$. Additionally, White pilots ($M = 4.85$, $SD = 0.62$) were rated higher in warmth than Black pilots ($M = 4.60$, $SD = 0.83$), though this difference did not reach statistical significance, $t(89) = 1.73$, $p = .086$. No significant main effect was found for Status Condition, $F(1, 170) = 0.14$, $p = .714$. Moreover, there was no significant interaction between Race Condition and Status Condition, $F(1, 170) = 0.14$, $p = .711$ (see Figure 1).

Moving to the competence analysis, there were no significant main effects for Race Condition, $F(1, 170) = 0.07$, $p = .799$, Status Condition, $F(1, 170) = 0.17$, $p = .677$, or their interaction, $F(1, 170) = 1.42$, $p = .236$. The overall model did not achieve statistical significance, $F(3, 170) = 0.55$, $p = .650$, with an adjusted R^2 value of .010. In summary, the analysis did not reveal statistically significant effects in composite competence scores based on the race or status conditions.

Figure 1
Mean Ratings of Warmth as a Function of Race and Status

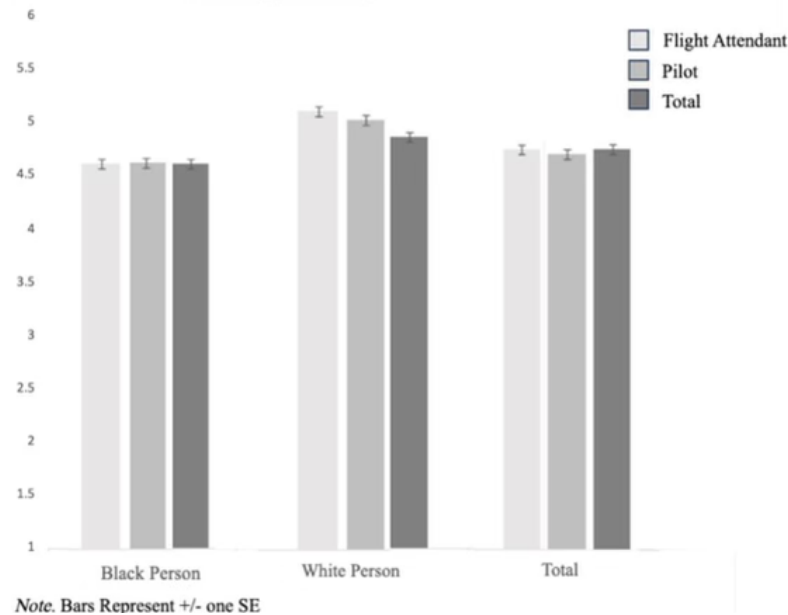


Table 1

Mean Implicit Prejudice Scores Toward Airline Employees by Race and Status

Race/Status	<i>M (SD)</i>	<i>t</i>	<i>df</i>	Significance
Black flight attendants compared to White flight attendants	119.84 (84.02)	18.21	162	<.001
Black pilots compared to White pilots	29.32 (91.37)	4.11	163	<.001
Black flight attendants compared to Black pilots	90.36 (118.05)	9.77	162	<.001
White flight attendants compared to White pilots	233.48 (129.54)	23.01	162	<.001

Note. Results indicate significant differences in implicit prejudice scores among different racial and status groups of airline employees. Implicit prejudice scores were measured in ms, with higher scores indicating higher levels of implicit prejudice toward the group listed first in the race/status column relative to the comparison group.

DISCUSSION

The present study aimed to investigate the implicit racial attitudes of airline passengers toward Black and White airline pilots and flight attendants, as well as to examine the perceived competence and warmth associated with these occupational roles.

One-sample *t*-test results corroborated the hypothesis that participants would hold more negative implicit attitudes toward Black airline employees compared to White airline employees. This finding indicates that regardless of status, people hold more negative bias against Black airline employees than White airline employees based on race.

The one-sample *t*-tests also supported the hypothesis that Black flight attendants elicited more negative implicit attitudes than Black pilots. Similarly, White flight attendants evoked more negative implicit attitudes than White

pilots. Together, these findings suggest that despite the positive bias toward Black pilots when contrasted with Black flight attendants, there remains a significant racial bias against Black pilots compared to their White counterparts.

The findings on perceived competence and warmth only partially supported the corresponding hypotheses. White flight attendants were rated significantly higher in warmth than Black flight attendants. White pilots were rated marginally higher than Black pilots in warmth, indicating that race may play a larger role than status. However, there was no interaction between race and status. There were also no significant findings regarding competence.

These results align with existing literature that people hold negative implicit attitudes toward Black individuals, as indicated by higher prejudice scores toward Black employees on the evaluative priming task (Gran-Ruaz et al., 2022). The influence of occupational status on implicit attitudes is also highlighted. The presence of negative biases toward Black airline employees emphasizes the need for targeted interventions to address biases within the airline industry. The airline industry's historical context, as discussed by Evans (2012) and Chute and Weiner (1995), emphasizes the significance of job roles in shaping perceptions.

Although it was hypothesized that race and status would affect both perceived warmth and competence, the significant results for warmth and race, but not competence or status, could be described by several factors. The concept of "thin slices of behavior" refers to the idea that people can form accurate judgments about others based on very brief observations or interactions (Ambady & Rosenthal, 1992). Ambady and Rosenthal (1992) conducted studies demonstrating that observers could very quickly assess traits like likability, dominance, and warmth from short video clips without sound. This supports the significant findings of warmth being found from a short, sixty second video in this study. Fiske, Cuddy, and Glick (2007) proposed the Stereotype Content Model (SCM), which posits that warmth is judged more quickly than competence.

Warmth judgments are thought to be based on perceived intent and friendliness, which can be quickly inferred from facial expressions, body language, and other non-verbal cues. Further, a study by Willis and Todorov (2006) found that judgments of trustworthiness, which is related to warmth, were formed rapidly and had a significant impact on overall impressions. Competence judgments, on the other hand, were more influenced by longer exposures. Related to this, research on implicit prejudice, as measured by implicit association tests (IATs), has shown that warmth-related biases can be activated more rapidly than competence-related biases (Greenwald & Krieger, 2006).

The idea that warmth is judged more quickly than competence is also supported by neuroscientific study results, including functional magnetic resonance imaging (fMRI) research, with findings that brain regions associated with social cognition and emotion processing may be activated more quickly than those linked to cognitive processing (Haxby et al., 2000). These findings further support that warmth can be judged quickly, but also state that competence is typically judged more slowly. Finally, warmth tends to be easier to judge than competence. Non-verbal cues such as facial expressions, body language, and tone of voice often convey warmth or approachability more readily than cues related to competence (Todorov et al., 2013). In summary, there is a body of research supporting the idea that warmth or social traits can be perceived more rapidly than competence or task-related traits, particularly in situations involving brief interactions or exposure to minimal information. The specific dynamics may vary based on context, cultural factors, and individual differences.

Finally, as stated by Fazio and Olson (2014) and consistent with the MODE Model, people may control their prejudices if they have the opportunity and motivation to do so. Thus, it is possible that participants may have corrected for their implicit prejudices when rating competence and warmth since they had sufficient time (opportunity) to do so. In the future, I will test this possibility by analyzing whether participant motivation to control prejudicial reactions predicts the degree to which implicit prejudices correlate with competence and warmth ratings.

Limitations

The unexpected finding of significance for race, but not status, can also be viewed through several factors. One reason could be that racial status overshadowed career status in this instance. In the evaluative priming task, the airline employees wore hats to help illustrate the difference in status. In the videos, the only indicators of status were the pilots stating that they were pilots and wearing a tie. This may have made race more salient.

Although the findings were largely significant, they cannot be applied to other genders as only males were used in this study. Future studies may benefit from examining the interaction of gender on these variables. Being a male flight attendant goes against expectations of the roles of men and women in the airline industry. This may elicit negative attitudes and cause male flight attendants to be judged more harshly. Being a flight attendant is perceived to be more of a warmth-related job, and being a pilot is more of a competence-based position. This indicates that it may be beneficial for future research to examine these attitudes regarding women stimuli.

Another limitation is that some participants may have caught on to the hypothesis by the time they viewed the video and rated the subject on competence and warmth. However, random assignment to conditions largely rules out the potential impact of demand characteristics.

Advantages

One major advantage of this study is the pilot study that was conducted. This crucial prelude to the main research provided a foundation by pretesting and validating the stimuli used in the evaluative priming task. By assessing attractiveness ratings through paired samples *t*-tests, the pilot study effectively eliminated the potential confounding factor of varying attractiveness between groups to make the stimuli used as equal as possible except for status and race. This aids the construct validity of the evaluative priming task and enhances the credibility of subsequent results regarding implicit prejudice.

Another key advantage is the psychological realism of this study. There is slightly less internal validity than what is typical of an experiment since the current study was conducted in less controlled settings (airports). However, there is more external validity than is typical because measuring peoples' attitudes toward pilots and flight attendants in a context in which those attitudes are more relatable, pertinent, and accessible likely enhances the accuracy of and applicability of the implicit attitudes measured in this study.

Future Research

Future studies could benefit from a stronger manipulation such as finding pilots who have hats to wear in their videos. This could make the distinctions between flight attendants and pilots more salient. It may also be useful to use women stimuli to examine whether implicit attitudes toward Black and White flight attendants and pilots emerge in a related way to the findings in the current study. Examining attitudes toward other races would similarly be beneficial.

Application

Despite these limitations, this study can help provide insight into the attitudes of passengers that exist in the airline industry. This study indicates that people do hold implicit prejudices toward airline employees based on their race and status. To help combat the shortage of airline employees that we see, more resources should be allocated toward these employees to deal with the stigma and discrimination that they experience. Further, it would be beneficial to educate individuals, organizations, and the public on the existence of these attitudes. Education is related to decreased prejudice expressed (Katz, 1991). Indeed, increased education would likely increase motivation to control prejudice, equipping passengers to be less likely to express their implicit prejudices behaviorally.

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Appendices

Appendix A

Pilot Study/ Evaluative Priming Images













Appendix B

Pre-Flight Safety Video

There were four short videos (1-2 minutes long) of a White male pilot, a White male flight attendant, a Black male pilot, and a Black male flight attendant conveying a pre-flight safety message. Possible confounds were held constant (i.e., length of the videos, background of the videos, type of apparel worn by the airline employees, gender of the airline employees, perceived attractiveness of the airline employees, and these employees each used the same script). Each participant was randomly assigned to see one of the four videos.

Script:

"Hello everyone, this is your captain (OR flight attendant) speaking. On behalf of the entire crew, I'd like to welcome you aboard this flight. We're excited to have you with us today and we'll do everything we can to make sure you have a safe and enjoyable flight. Before we take off, I want to remind you to fasten your seatbelts, make sure your tray tables are stowed, and your seats are in the upright position. Should the cabin experience sudden pressure loss, stay calm and listen for instructions from the cabin crew. Oxygen masks will drop down from above your seat. Place the mask over your mouth and nose. Pull the strap to tighten it. If you are traveling with children, make sure that your own mask is on first before helping your children. In the unlikely event of an emergency landing and evacuation, leave your carry-on items behind. Life rafts are located below your seats and emergency lighting will lead you to your closest exit and slide. We'll be taking off shortly, and we'll be cruising at an altitude of 35,000 feet. We'll do our best to keep you updated on our progress throughout the flight, and if there's anything we can do to make your flight more comfortable, please don't hesitate to let us know. Thank you for choosing to fly with us today, and we hope you enjoy your flight."

Screenshots from videos:

