How Big is Your Bubble?:
The Effects of Race and Gender on Personal Space

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Introduction
Non-verbal behavior may impact the way one individual reacts to another. Women tend to remember other individuals’ appearance and nonverbal cues better than men (Knapp, Hall, & Horgan, 2014). People of color also face the negative effects of nonverbal behavior, such as facial expressions and body language (Dovidio, Kawakani, & Gaertner, 2002).

Research Purpose
The present research sought to investigate nonverbal behavior in terms of gender and race.

Hypotheses
1. Individuals would stand closer to those who were moderately similar in gender than those who were completely similar in both gender and race, moderately similar in race, and completely dissimilar.
2. Individuals would stand closer to Caucasian women than Caucasian men, Non-Caucasian men, and Non-Caucasian women.

Participants
Data were collected from 120 participants across two different locations: the Huntington Mall in Barboursville, WV and Starbucks at Marshall University.

Procedure and Materials
In the current project, the researcher assessed the distance between individuals standing in line at public venues. The researcher measured tiles on the floor and used this measurement to estimate distance between individuals. Participant variables were operationally defined by the researcher and included the actor (the person joining the line) and target’s (the individual standing in line) gender and race. Gender was operationally defined as an individual who physically appears masculine or feminine. Race was operationally defined as an individual who appears to be of Caucasian or Non-Caucasian descent. The dependent variable was the distance from which the actor stood from the target.

Results
Data were analyzed using a 2 (participant gender: man or woman) x 2 (participant race: Caucasian or Non-Caucasian) between-subjects analysis of variance. The first hypothesis was not supported; all observed groups stood equal distance from each other $F(3, 116) = 1.65, p = .18$. For additional descriptive statistics, see Table 1. The second hypothesis was also not supported. Actors stood equal distance from all targets, regardless of target gender and race $F(3,116) = 2.13, p = .10$. For additional descriptive statistics, see Table 2.

Limitations and Conclusions
The results trended toward significance, and there is one major limitation that may have led to the lack of significant results. Specifically, data were collected at the food court in the Huntington Mall after a band competition. The actors and targets at this location knew each other and may have maintained closer distances due to familiarity. This limitation could have led to validity issues and measurement error. In the future, researchers should exclude actors and targets who are standing in line together.

References

Table 1
Distancing in Terms of Similarity

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Similar</td>
<td>15.29</td>
<td>8.18</td>
</tr>
<tr>
<td>Similar in Gender</td>
<td>11.90</td>
<td>7.60</td>
</tr>
<tr>
<td>Similar in Race</td>
<td>15.96</td>
<td>6.45</td>
</tr>
<tr>
<td>Completely Dissimilar</td>
<td>13.50</td>
<td>7.79</td>
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</table>

Table 2
Distancing in Terms of Individual Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Caucasian</th>
<th>Non-Caucasian</th>
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</thead>
<tbody>
<tr>
<td>Women Targets</td>
<td>16.23</td>
<td>11.38</td>
</tr>
<tr>
<td>Men Targets</td>
<td>14.33</td>
<td>12.78</td>
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</table>