

Who can afford to be egalitarian?: Social status affects physiological threat during intergroup encounters

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Purpose

Background:

A realistic group conflict model (Sherif *et al.*, 1961) suggests that high social status Whites are not competing with Blacks for “the good life” and may perceive them as less of a threat.

The realistic threat to high status Whites may be from members of their own ingroup, as increased social status requires increased vigilance for possible usurpers (Sapolsky, 2004).

Current Research:

We investigated the relationship between Whites’ social status and their stress reaction to being evaluated by either White or Black evaluators. Our prediction is that increased social status will be associated with less physiological stress during an intergroup encounter and more physiological stress during an ingroup encounter.

Method

Participants:

Participants were 79 White Boston area men and women between the ages of 20 to 55 ($M = 30.1$, $SD = 10.3$). They were well educated (59% having a BA degree or higher), diverse in terms of their annual income (22% below \$30 thousand, 45% between \$30-70 thousand and 30% above \$70 thousand), and evenly distributed in gender (53% female).

Social Status Measure:

Participants were presented with the picture of a ladder with 10 rungs (adapted from Adler *et al.*, 2000). They were asked place an x on the ladder to indicate their relative social standing in the U.S.

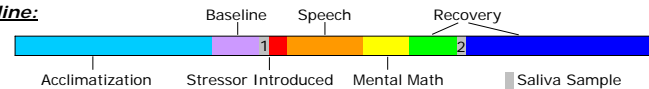


Procedure:

Manipulation: Participants performed a speech and mental math task for a pair of White interviewers or Black interviewers.

Dependent Variables: We measured cardiac and hormonal measures (cortisol and DHEAs) at baseline, during the stressful tasks, and during recovery.

Timeline:



Conclusions

High social status predicted increased heart rate with White interviewers during both components of the stressful task, while the opposite trend was seen with Black interviewers.

This demonstrates that White participants experience more stress in an evaluative situation with ingroup members if they are high in social status.

High social status predicted salutatory hormone balance, driven by decreases in the catabolic hormone cortisol, for those participants with Black interviewers, while the opposite trend was seen with White interviewers.

This demonstrates that White participants experience less physiological threat during an evaluative situation with outgroup members if they are high in social status.

This is initial evidence for a realistic conflict model of physiological threat in which high status is protective in situations with outgroup members and a vulnerability in situations with ingroup members.

Future Directions

Explore whether this pattern of results occurs only in situations of evaluative threat, where the outgroup (or ingroup) members are in a position of power relative to the participant, or whether relative socioeconomic advantage is often protective for Whites interacting with outgroup members.

Investigate whether social status has the same relationships for minority group in an intergroup context.

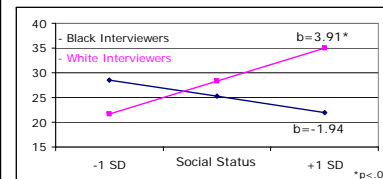
References:

- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology, 19*(6), 586-592.
- Sapolsky, R.M. (2004). Social Status and Health in Humans and Other Animals. *Annual Review of Anthropology, 33*, 393-418.
- Taylor, M.C. (2000). The Significance of Racial Context. In D. O. Sears, J. Sidanius, L. Bobo (Eds.), *Racialized Politics: The Debate About Racism in America*. (pp. 222-246). Chicago, IL: University of Chicago Press.

Heart Rate during Speech

Results showed that with White evaluators, higher social status predicted greater increases in heart rate during the speech.

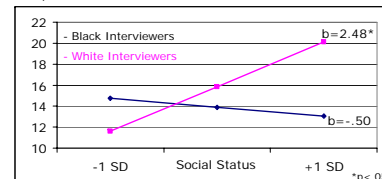
The interaction was significant, $T(1,73) = 2.75$, $p < .01$.



Heart Rate during Math

In the math task as well, there was a relationship between higher social status and heart rate increases for those with White interviewers.

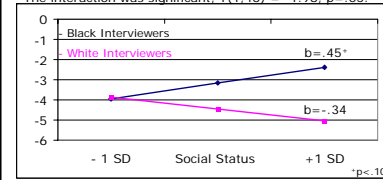
The interaction was significant, $T(1,79) = 2.04$, $p = .04$.



Hormone Balance

We assessed the balance between catabolic (“breaking-down”) and anabolic (“building-up”) hormones after the stressful task. For those with Black evaluators, higher social status predicted a more salutatory hormone balance.

The interaction was significant, $T(1,46) = -1.98$, $p = .05$.



Catabolic Hormones

Hormones were assessed again at the end of the study. For participants with Black evaluators, higher social status predicted decreased cortisol levels in comparison with baseline, indicating a healthy recovery from the stressful task.

The interaction was significant, $T(1,48) = 2.21$, $p = .03$.

