

**FEEDBACK REPORT FOR PARTICIPANTS**

**Implicit Biases, Employees' Perceptions, and Organizational  
Culture**

**SMU REB # 19-022**

**Research Project conducted by:**

**Ivona Đukić, Gregory Anderson, Odelia Wong, Prachi, Eric Damecour, Damian  
Canagasuriam, Michael MacDonald, and Dr. Nicolas Roulin**

Associate Professor

Department of Psychology

Saint Mary's University, 923 Robie Street, Halifax, NS B3H 3C3

Email: [nicolas.roulin@smu.ca](mailto:nicolas.roulin@smu.ca)

## **INTRODUCTION & GOALS OF THE PROJECT**

Multiple studies have shown that appearances matter in professional and education settings (Martin & Dula, 2010; Search, Tolle, McCombs, Gayle & Arndt, 2018). In a study of city employees in the public sector, the type of attire has been shown to be a factor in one's own perception of competency, productiveness, and trustworthiness (Karl, McIntyre Hill & Peluchette, 2013). Specifically, employees felt more competent when wearing formal business or business casual attire, compared to casual dress. Furthermore, this study found that tattoos, amongst other types of body modifications (e.g., piercings, hair color), had a negative impact on customers' perceptions of overall quality of service. These negative perceptions may entice organizations to establish formal policies to dictate what appearances are acceptable in a given work environment.

Given the prominence of tattoos in our societies, and a scarce availability of measurements related to individuals' perceived biases towards visible tattoos, the purpose of the research was to investigate individuals' implicit biases towards employees with visible tattoos (e.g., hands, face, and neck) in an organizational/workplace context. In a workplace setting, individuals with tattoos that are easily identifiable may face different biases and prejudices as a result of their tattoos. As a consequence, biases can drastically skew opinions and attributions of behaviour. Therefore, individuals with tattoos may provoke negative emotions in others, and similarly, they may be viewed as more deviant (with respect to social norms), and less capable in a workplace setting, as a result of preconceived beliefs about tattooed individuals.

In addition, in the context of an organization or workplace, the level of competitiveness versus support that employees perceive or experience may affect things like employees' job attitudes or well-being, and organizational effectiveness outcomes such as efficiency or productivity.

Previous research examining competitiveness has developed scales assessing trait competitiveness (e.g. Smither & Houston, 1992), competitive worldviews (Duckitt, Wagner, Du Plessis, & Birum, 2002), and competitiveness in specific contexts such as those in sales (Brown, William, & Slocum Jr., 1998). To our knowledge, a scale intended to assess, at any organization, employees' perceptions of competitiveness at the level of the organizational culture has not been created.

In the present research, we wanted to assess the validity of our two scales by administering them to employees recruited online alongside additional scales, which will be used as measures of convergent and discriminant validity. We also conducted factor analyses to demonstrate the structure and reliability of our scales. Participants were invited to complete an online survey, approximately 20-30 minutes in length. They were recruited using the Amazon Mechanical Turk platform. The survey was completed online via Qualtrics. Compensation (USD \$3) was given to participants who reach the end of the survey.

## PARTICIPANTS, DATA COLLECTION, & ANALYSES

A total of 500 U.S. participants were recruited from Amazon Mechanical Turk, an online survey platform to participate in one of the five studies conducted. The characteristics of the sample were similar across studies:

- 205 females.
- 35.7 of age on average.
- 369 of participants identified as Caucasian, with 37 Black/African American, 30 Hispanic/Latino American, 47 Asian American, 2 Middle Eastern, 3 Native, and 9 Mixed
- 349 of the sample had post-secondary education.
- 479 of the participants were employed.

The survey included the following measures (all self-report scales):

- Our newly developed 25-item scale of 'implicit biases toward employees with visible tattoos', which included three hypothesized factors: (a) *Affect* (i.e., experience of a feeling or emotion towards employees with tattoos that can be seen within the workplace); (b) *Competency* (i.e., perceived skills and capabilities of employees with visible tattoos, that are needed to accomplish work-related tasks and goals); (c) *Deviance* (i.e., perceived tendency of employees with visible tattoos to engage in behaviors that negatively violate organizational norms).
- Our newly developed 28-item scale of 'perceptions of competitiveness in organizational culture' (*Employee Perceptions of Competition Scale*; EPCS), which included three hypothesized factors: (a) *Employee behaviours* (i.e., self-interested and selfish beliefs and behaviours, relative to prosocial beliefs and behaviours); (b) *Organizational values* (i.e., organization fosters and encourages its employees to adopt self-interested and selfish ideologies and values); (c) *Reward Distribution* (i.e., financial and social benefits, and the conditions that underlie their distribution).
- We included the following established measures to examine convergent/divergent validity:
  1. 10-item 'Openness to Experience' scale, which is one of the Big-5 personality traits from the International Personality Item Pool (IPIP; Goldberg, 1999)
  2. 6-item Distinctive Appearance' scale (Tiggemann & Golder, 2006)
  3. The short (8-item) version of the 'Social Dominance Orientation' scale (Ho et al., 2015)
  4. 4). The short (6-item) version of the 'Right Wing Authoritarianism' scale (Bizumic & Duckitt, 2018)

5. 20-item Competitive Jungle Social World View Scale (Duckitt, Wagner, Du Pleiss, and Birum's, 2002), which assesses the extent to which an individual views the world as being a constant, ruthless struggle for resources and power.
6. 10-item Scale of Cohesion (Carless and DePaola, 2000), which measures task and social factors of cohesion in an employee's work group.

We also included demographic questions (e.g., age, gender, ethnicity, etc.). We note that this data was used to describe the sample and/or as control variables in analyses. However, this data was only used at the aggregated level.

## MAIN FINDINGS

Scales similar to the hypothesized scale for perceived biases towards people with visible tattoos such as biases towards transgender people (see Hill, & Willoughby, 2005) and the need for a distinctive appearance (see Tiggemann, & Golder, 2006) have been developed in the past, the current proposed scale was one of the first to look at tattoos, and additionally, the first to develop a scale for perceptions towards people with visible tattoos in the workplace.

The hypothesized scale initially included affect, competence and deviance; however, an exploratory factor analysis confirmed a different three-factor structure that includes *negative behaviors*, *positive attitudes*, and *negative attitudes*. Statistical analyses revealed that the overall scale, and all three individual factors have high reliability. Despite the unexpected results, the observed three-factor structure does provide important insight into the conceptual understanding regarding biases towards individuals with visible tattoos; mainly that biases towards these individuals includes both negative and lack of positive attitudes, as well as negative perceptions about the behaviors of tattooed individuals in the workplace.

Competition has been demonstrated to be, generally, a negative form of social organization that leads to lower levels of productivity and well-being (Johnson & Johnson, 1989; Ng, 2017).

Our *EPCS*, comprised of 15 items divided across a four-factor structure, helps to assess employee perceptions of competition within organizational cultures, and consequently, fill the gap in research and practice concerning organizational competition assessment. The final version of the *EPCS* factors demonstrated a satisfactory fit with the data. However, future research should aim to build upon these findings with additional items, particularly for some factors. Research examining the relationships between demographic variables (e.g. annual household income) and *EPCS* scores would also be valuable. The further development and validation of this scale would be of value to researchers for the purpose of examining relationships between important performance and well-being elements, and to practitioners for the purpose of assessing competition within their organizations.

If you have any question about this research or our findings, please contact [nicolas.roulin@smu.ca](mailto:nicolas.roulin@smu.ca).