



PERCEPTIONS OF GENDER-BASED AND AGE-BASED DISCRIMINATION IN THE WORKPLACE: A SERIAL MEDIATION MODEL OF THE DIFFERENTIAL ROLES OF PERCEIVED MOBBING AND DEMOTION ON SUBSEQUENT DISCOMFORT

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Abstract

One study tested a serial-mediation model exploring the moderating role of the type of perceived discrimination at work on the causal path linking perceived mobbing (i.e. the perception of being the object of continuous reprimands for errors committed), perceived demotion (i.e. the perception of being assigned to tasks inferior to one's job role), and psychological discomfort related to carrying out daily work. The current work argues that that mobbing will be perceived as the cause of demotion, which will in turn be perceived as a discriminative behaviour actually caused by one's gender and age, which will then increase negative feelings. As expected, findings indicated that the perception of being assigned to tasks inferior to one's job role increased perceived discrimination due to one's sexual gender and age, which in turn exacerbated the psychological discomfort related to carrying out daily work. All of the possible alternative serial-mediation models proved to be statistically non significant.

Keywords

Demotion, Discrimination, Mobbing, Well being

Introduction

Around the modern world, laws have been enacted to prohibit discrimination in the workplace. Despite these laws, discrimination in the workplace continues to exist. With the abundance of research articles referring to the importance of establishing organizational procedures to address discrimination, the question still remains to better understand individual's experiences with perceived discrimination in the workplace. This has lead researchers to take a more comprehensive look at perceived discrimination and its relationship with the following three constructs: mobbing, demotion, and stress related psychological disorders.

Being discriminated against can induce stress and reduce an individual's psychological well-being (Jang, Chiriboga, & Small, 2008). We posit that demotion is perceived as unjust by the employee, and therefore leads to the perception of being discriminated against.

Mobbing is commonly defined as a form of psychological violence, repeated for a given period (Bekker, Van Essen, Josten, Meihuizen, Baars, Grim, & De Voogd-Hamelink, 2004), As a consequence, mobbing victims may manifest early warning signs at the psychosomatic level (cephalea, tachycardia, gastroenteritis, osteoarticular disorders, myalgia, and balance disorders), at the emotional level (anxiety, tension, sleep and mood disorders) or at the behavioural level (anorexia, bulimia, alcohol abuse, and drug addiction). When mobbing is followed by demotion, it should have the above mentioned emotional consequences.

Demotion means the move of an employee to a position with a lower occupational status (More, 1962). Employees have long regarded demotion as a kind of failure, lead to despair and depression (Sprague, 1984).

Despite this, there is very little empirical research on the effects of demotions on employees (Hall and Isabella, 1985). As a consequence, the aim of this study was to assess the effects of demotion on employees' feelings, as a result of perceiving this mobbing related management decision as an act of discrimination. In view of the results of earlier studies as reviewed above, *we expect that mobbing will be perceived as the cause of demotion,*

which will in turn be perceived as a discriminative behaviour, which will then increase negative feelings.

Method

Participants ($N = 118$) belonged to the administrative staff of an Italian enterprise through email. The researcher contacted them through e-mail asking for volunteers to take part in an anonymous on-line survey. Prior to completing the online survey, participants were provided with an informed consent. The informed consent outlined the point of the study, confidentiality and the right to withdraw at any moment. The informed consent also specified that there were no known risks to participating and it guaranteed their anonymity.

The data collection tool used here consisted of a questionnaire that included 79 questions and 6 personal and work-related information on the respondents. Overall, the questionnaire investigated 15 scenario categories belonging to three thematic macro-areas, each composed of a series of sets of questions. The three thematic areas were 1) Organizational Wellbeing (the respondent's perceptions of the degree of physical, psychological and social well-being inherent to their working conditions within the working community to which they belong); 2) the evaluation system (the measure of the respondent's degree of agreement with the work performance evaluation system applied to him); 3) one's hierarchical superior (the respondent's perceptions of the level of correctness of his hierarchical superior in carrying out the managerial functions of improving the work performance of the staff).

All the questions in the questionnaire were formulated in the form of assertions, for each of which the respondent expressed his/her greater or lesser agreement through an always identical increasing scale of values from 1 to 6.

Results

The statistical analysis of the "raw" data was performed in two different phases.

Phase I:

As a precaution, in the first instance a Multivariate Analysis of Variance performed demonstrated that there were no statistically significant differences in the psychological factors subject to the statistical analysis phases illustrated below, based on the gender, age and length of service of the respondents ($F < 2.58$, *ns*). As a further precaution, all the statistical analyses performed (and described below) included a preliminary verification of any effects of alteration of their results, depending on the gender, age and length of service of the respondents, without, however, finding any.

Phase II:

In the next phase of the data analytical plan, since the questionnaire was composed of 85 questions and the number of respondents was too small in relation to them to obtain statistically reliable results, the scores of the answers to the 85 questions of the questionnaire have been aggregated into a conceptually coherent set of synthetic statistical indicators. This "transformation" operation of the original data was aimed at obtaining results of sufficient statistical reliability, without losing at the same time important conceptual information contained in the answers to the 85 original questions.

For this purpose, after an initial a priori exclusion of (groups of) questions that were inherent to clearly identifiable conceptualized themes, and therefore immediately aggregated into the respective synthetic indicators (evaluation of the Manager; perception of Discrimination at work by Gender, Age and Disability; etc.), the answers to the remaining 45 questions were subjected to a type of statistical analysis (Exploratory Factor Analysis) aimed at reducing further the number of questions on whose answers subsequent statistical analyses would be carried out, grouping them into conceptually and statistically homogeneous synthetic indicators, in order to overcome the redundancy of the original questionnaire for the compelling reasons of statistical reliability of the subsequent results explained above. Following this preliminary operation on the original data coming from the 45 questions above, those which, from the examination carried out in this way, the respondents had perceived as conceptually linked to the same topic were statistically identified.

Specifically, an Exploratory Factor Analysis (Factor Extraction: Principal Components; Factor Rotation: Promax) revealed the presence of 11 Factors with Eigenvalues above the threshold level of 1, which explained 75.7% of the statistical variance in the data analysed. This made it possible to statistically aggregate the scores of the response items of each of these thematic areas, after having preliminarily verified the degree of statistical reliability of each indicator with a specific statistical test (Cronbach's Alpha higher than the conventionally accepted threshold level of 0.80), in 4 statistical indicators relating to specific distinct aspects of the Organizational Well-being of the respondents, to which synthetic index calculated on some groups of questions relevant for the purposes of the analysis work presented here, which had previously been excluded from the statistical analysis, has been added above for the reasons specified above (Manager's Evaluation), as well as the scores of the answers

provided to 10 different individual questions, considered indicators of constructs of particular heuristic value for the purposes of the analysis work presented here.

Phase III:

The next phase of the statistical data analysis procedure was aimed at identifying the degree to which each of the aforementioned 15 key psychological factors identified in the previous analytical phase were statistically associated with the respondents' perception of being subjected to discrimination at work due to their Sexual gender and their Age.

For this purpose, the scores of the answers provided to the aforementioned 15 identified key psychological factors and that of the mono-item indicator (single question) of the respondents' perception of being the object of discrimination based on Gender / Age were subjected to two distinct statistical analyses of the same type (Exploratory Factor Analysis). Each of them included one of the aforementioned two types of perceived discrimination each time and was aimed at identifying which, among the aforementioned 15 psychological factors of interest, the statistical examination thus carried out indicated that the respondents had perceived as conceptually linked to a unitary psychological theme associated ("correlated") statistically with the perception of being the object of Discrimination.

Phase IV:

The final phase of the statistical data analysis procedure was aimed at identifying which of the aforementioned psychological correlates identified above were the cause and which were the consequence of the perception of discrimination due to sexual gender and age of the respondents.

For this purpose, maintaining fixed the analytical role of "dependent" variable of perceived Discrimination by Gender / Age, on the basis of the indications obtained from the examination of the composition of the Factors obtained in the previous statistical analysis, we have empirically tested all the different conceptually causal models alternatives that were conceivable in light of the results of theorization and research evidence of Organizational Social Psychology in this thematic area. This was achieved through the systematic variation of the causal order of the 15 possible correlates of perceived Discrimination by Gender / Age identified as above, considered as having the analytical role of "Independent" variable of perceived Discrimination by Gender / Age identified as above, considered as having the analytical role of "Dependent" variable.

Specifically, through a specific type of statistical technique (Causal Path Analysis) which allows one to verify the existence or not of a given causal path with "chain" causal effects between different factors (Serial Multiple Mediation), we tested the indirect effects (Statistical Mediation) of all 15 predictive variables of perceived Discrimination by Gender / Age identified as above. This type of analysis procedure in fact allows one to verify the statistical validity of all the different theoretically possible causes between a series of factors that act as intermediaries (Statistical Mediator) between the effect of a given causal factor (the Independent Variable) and that of a given caused factor (the Dependent Variable). To do this, we used the PROCESS macro (Hayes, 2018) available for the advanced statistical analysis software SPSS, which was developed to be able to perform statistical mediation analysis, so as to be able to calculate an interval of statistical reliability relating to the causal path examined each time, through a specific procedure ("bootstrapping" with 5,000 simulated samples) which calculates the respective numerical interval of statistical significance at 95% (i.e. with a margin of statistical error of 5%). If zero does not appear in this numerical interval, this indicates the presence of the tested statistical mediation effect, to be interpreted at that point on the basis of the specific results of the in-depth statistical multiple regression analyses to be performed later, which describe the causal effects emerged among the factors used in the aforementioned Statistical Mediation analysis.

To summarize, Phase III and Phase IV of the statistical data analysis procedure were repeated, as indicated below, for each of the types of perceived discrimination of interest in this analysis (i.e. by Gender and by Age).

Perceived discrimination based on one's sexual GENDER

Phase III:

An Exploratory Factor Analysis performed on the aforementioned 15 identified key psychological factors and that of the single-item indicator (single question in the questionnaire) concerning the respondents' perception of being the object of discrimination due to their sexual gender (Factor Extraction: Principal Components; Factor Rotation: Oblimin) revealed the presence of 5 Factors with Eigenvalues greater than 1, which explained 65.7% of the statistical Variance in the analysed data.

Phase IV:

Psychological CAUSES of perceived discrimination based on one's GENDER

We therefore conducted a statistical mediation analysis, in which the correlates of perceived gender discrimination comprising the aforementioned 5 factors were included. None of the alternative causal models thus tested were

found to account for the data collected in a statistically significant manner, with the exception of the one that included the perception of being evaluated on the basis of criteria not relevant to one's job as a causal factor (Independent Variable), the perception of being subject to Gender Discrimination as a caused factor (Dependent Variable) and the perception of being assigned to work tasks inferior to those of one's role as a Mediating factor of the causal effect between the two aforementioned causal and caused factors (coefficient of Boot = 0.08, SE = 0.05, 95% CI [-0.19, -0.01]).

As for the specific relationships between the factors making up the aforementioned causal chain of perceived Gender Discrimination, the results of the multiple regression analyses performed subsequently indicated that the perception of being evaluated on the basis of criteria that are not relevant to one's job increases the intensity of that of being assigned to perform tasks inferior to one's job role ($B = 0.27, p < 0.001, 95\% \text{ CI } [-0.46, -0.09]$), increases that of being the subject of Gender Discrimination ($B = 0.31, p < 0.03, 95\% \text{ CI } [0.03, 0.58]$). The result is that, after having inserted the two aforementioned direct and mediating causal factors into the causal chain ("statistically controlled"), the perception of being evaluated on the basis of criteria that are not relevant to one's job no longer appeared to be the cause of the perceived Gender Discrimination ($B = 0.02, ns, 95\% \text{ CI } [-0.25, 0.21]$), which highlighted the empirical validity of the aforementioned Statistical Mediation hypothesis.

As for the specific causal relationships between the factors making up the aforementioned causal chain of perceived Age Discrimination, the results of the multiple regression analyses performed subsequently indicated that the perception of being evaluated on the basis of criteria that are not relevant to one's job increases that of being subjected to continuous reprimands for errors committed ($B = 0.20, p < 0.01, 95\% \text{ CI } [-0.34, -0.06]$), which increases the perception of being assigned to tasks below one's role at work ($B = 0.30, p < 0.001, 95\% \text{ CI } [0.11, 0.49]$), which in turn exacerbates the perception of being the object of discrimination due to one's age ($B = 0.21, p < 0.03, 95\% \text{ CI } [0.04, 0.40]$). The statistical result is that, after having inserted the two aforementioned mediating factors into the causal chain ("statistically controlled"), the perception of being evaluated on the basis of criteria that are not relevant to one's job no longer appeared to be the cause of the perceived Age Discrimination ($B = 0.14, ns, 95\% \text{ CI } [-0.30, 0.01]$), which highlighted the empirical foundation of the aforementioned Serial Statistical Mediation hypothesis.

Psychological CONSEQUENCES of perceived discrimination based on one's GENDER

We therefore conducted a statistical mediation analysis, in which the correlates of perceived gender discrimination comprising the aforementioned 5 factors were included. None of the alternative causal models thus tested were found to account for the data collected in a statistically significant manner, with the exception of the one that included the perception of being evaluated on the basis of criteria not relevant to one's job as a causal factor (Independent Variable), the fact of being affected by psychological ailments linked to carrying out daily work (anxiety; feeling of uselessness; lack of initiative; nervousness; depression; insomnia; headache; stomach ache; muscle or joint pain; breathing difficulties) as a factor caused (Dependent Variable), the perception of being assigned to work tasks inferior to those of one's role as the first mediating factor and the perception of being the object of discrimination perceived for one's gender as the following mediating factor of the causal effect between the two causal factors of the aforementioned (Boot coefficient = 0.02, SE = 0.02, 95% CI [0.1, 0.06]).

As for the specific relationships between the factors making up the aforementioned causal chain of the psychological consequences of perceived gender discrimination, the results of the multiple regression analyses carried out subsequently indicated that the perception of being assigned to perform tasks lower than one's job role ($B = 0.27, p < 0.001, 95\% \text{ CI } [-0.46, -0.09]$), which in turn increases the risk of perceiving discrimination based on one's gender ($B = 0.34, p < 0.02, 95\% \text{ CI } [0.05, 0.62]$), which in turn increases the frequency of psychological illnesses related to carrying out daily work ($B = 0.27, p < 0.01, 95\% \text{ CI } [-0.49, -0.06]$). These statistical results highlighted the empirical foundation of the aforementioned "chain" (Serial) statistical mediation hypothesis.

Perceived discrimination based on one's AGE

Phase III:

An Exploratory Factor Analysis performed on the aforementioned 15 identified key psychological factors and that of the mono-item index (single question of the questionnaire) concerning the respondents' perception of being subjected to discrimination due to their age (Factor Extraction: Principal Components; Rotation Factorial: Oblimin) revealed the presence of 5 Factors with Eigenvalues greater than 1, which explained 65.2% of the statistical Variance in the analysed data.

Phase IV:

Psychological CAUSES of perceived discrimination due to one's age

We therefore performed a Serial Statistical Mediation analysis, in which the correlates of perceived Discrimination by Age comprising the aforementioned 5 Factors were inserted. None of the alternative causal models thus tested was found to explain the data in a statistically significant manner, with the exception of the one that included the perception of being evaluated on the basis of criteria not relevant to one's job as a causal factor (Independent

Variable), the perception of being the object of Discrimination for one's Age as a caused factor (Dependent Variable), the perception of being the object of continuous reprimands for errors committed as the first Mediating factor and the perception of being assigned to job duties lower than those of one's role as a following Mediating factor of the causality effect between the two aforementioned causal and caused factors (Boot coefficient = 0.01, SE = 0.01, 95% CI [0.4, -0.01]).

Psychological CONSEQUENCES of perceived age discrimination

We then performed a Serial Statistical Mediation analysis, in which the correlates of perceived discrimination by age comprising the aforementioned 5 factors were included. None of the alternative causal models thus tested was found to explain the data in a statistically significant manner, with the exception of the one that included the perception of being evaluated on the basis of criteria not relevant to one's job as a causal factor (Independent Variable), the fact to experience psychological discomfort related to carrying out daily work (anxiety; feeling of uselessness; lack of initiative; nervousness; depression; insomnia; headache; stomach ache; muscle or joint pain; breathing difficulties) as a caused factor (Dependent Variable), the perception of being assigned to work tasks inferior to those of one's role as the first mediating factor and the perception of being the object of perceived discrimination due to one's age as the following mediating factor of the causal effect between the two aforementioned causal and caused factors (Boot coefficient = 0.01, 95% CI [0.01, 0.08]).

As for the specific causal relationships between the factors making up the aforementioned causal chain of perceived Age Discrimination, the results of the multiple regression analyses performed subsequently indicated that the perception of being evaluated on the basis of criteria that are not relevant to one's job increases that of being assigned to tasks inferior to one's job role ($B = 0.27, p < 0.001, 95\% \text{ CI } [-0.44, -0.09]$), which in turn increases the perception of discrimination due to one's Age ($B = 0.42, p < 0.001, 95\% \text{ CI } [0.17, 0.67]$), which in turn exacerbates the frequency of psychological discomfort related to carrying out daily work ($B = 0.24, p < 0.05, 95\% \text{ CI } [-0.49, -0.01]$).

Discussion

The analytical work described so far sheds light on the causes and psychological consequences of different types of Discrimination (Gender and Age) perceived by the investigated workers.

Results highlight the presence of psychological experiences attributable to those known in the literature under the definitions of "mobbing" and "psychosomatic syndrome of work stress". This data indicates the fact that a series of behavioural practices have been implemented towards the investigated workers of which there should be no trace in a work place, as some experience them as degrading and offensive to their dignity of workers and, more generally, of human beings. Furthermore, the aforementioned types of behaviour cannot help but inevitably contribute to creating both an increase in latent conflict and a reduced work commitment and, consequently, professional performance. Instead, a management style that respects the personal dignity of the worker should be employed, in which behaviours that are inappropriate for the purposes of work performance must be corrected without resorting, for example, to practices of continuous reprimand and demotion (formal or de facto).

To this end, the empirical conclusions of the analytical work presented here deserve a joint analysis with the governance of the investigated work place, in order to identify possible improvements to the problems they describe. Specific types of targeted interventions could in fact undoubtedly contribute to bringing about an improvement in the problematic experiences highlighted in this study. A strengthening of information systems and information sharing in reference to the evaluation system, for example, appears appropriate for this purpose, through the holding of a series of meetings to explain to workers the functioning of the professional performance evaluation system of the investigated work place. Through the involvement in this type of activity, opportunities for mutual understanding between managers and their respective work communities could be improved. The result of this would be to increase awareness of how, on the one hand, the results of the investigated work place's evaluation can help improve one's professional performance and, on the other, the quality of the results of one's work can contribute to the achievement of objectives of the investigated work place.

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