

# ***Predictors and Impacts of Everyday Discrimination in Chinese Employees: A Focus on Age and PTSD***

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**Abstract:** This study explores the dynamics of everyday discrimination within small and medium-sized enterprises (SMEs) in Southern China. Utilizing the Everyday Discrimination Scale (EDS), examined its impact on employees born before and after 1990, the influence of parental upbringing styles, and the correlation with Post-Traumatic Stress Disorder (PTSD). This research reveal that everyday discrimination is a significant issue among employees in Southern China's SMEs. Notably, there are distinct generational differences in EDS scores, with younger employees reporting higher levels of perceived discrimination. Additionally, the results show a strong correlation between PTSD symptoms and higher EDS scores, suggesting that individuals with PTSD are more susceptible to discrimination. While age emerged as a significant predictor of discrimination, gender and parental upbringing styles did not show a significant predictive relationship with EDS scores. This research adds to the discussion on workplace discrimination by exploring the intricacies of everyday discrimination and its related factors. The aim is to inform strategies that promote inclusive and equitable work environments.

**Keywords:** Everyday Discrimination, Small and Medium-Sized Enterprises (SMEs), Post-Traumatic Stress Disorder (PTSD), Generational Differences

## **1. Introduction**

In contemporary society, everyday discrimination has increasingly drawn attention from academia and the public health field. This form of discrimination encompasses the frequent, subtle discriminatory experiences individuals encounter daily due to factors such as race, gender, and age. Studies have shown that everyday discrimination significantly affects mental health and contributes to various physical health problems [1]. This article reviews the development, application, reliability, validity, and impact of the EDS on mental health.

Numerous studies have shown that everyday discrimination is closely related to mental health issues such as stress, depression, and anxiety [2]. For example, Kessler et al. found that individuals who frequently experience everyday discrimination are more likely to exhibit symptoms of depression [3]. Additionally, everyday discrimination has been linked to physical health problems such as hypertension and cardiovascular disease [4]. In the workplace, everyday discrimination has also been found to negatively impact employee job satisfaction and career development [5].

## **2. Discrimination**

### **2.1. Everyday Discrimination and Mental Health**

One widely used tool is the Everyday Discrimination Scale (EDS) developed by Williams et al. [6]. The EDS comprises nine items intended to evaluate the frequency and subtlety of discriminatory events, individuals encounter in their daily lives. These items encompass a range of discriminatory experiences, from being treated rudely to being treated unfairly. The scale employs a five-point Likert scale, from "never" to "almost every day," to measure the frequency of these experiences.

Numerous studies have confirmed the reliability and validity of the EDS. Research indicates that the internal consistency (Cronbach's  $\alpha$ ) of the EDS in different populations is generally above 0.80, demonstrating high reliability [4]. Furthermore, the structural validity of the EDS has been confirmed in various cultural contexts, like the EDS showed good structural validity among African American, Latino, and Asian American populations.

Everyday discrimination has been revealed in multiple fields, especially in public health. Studies have shown that frequent experiences of everyday discrimination are associated with various negative health outcomes, including mental health issues like depression and anxiety, and physical health problems like hypertension and heart disease [4]. For example, Schulz et al. found that individuals experiencing higher levels of everyday discrimination are more likely to report higher levels of stress and lower levels of mental health [7]. Another study by Williams and Mohammed found that everyday discrimination is also associated with sleep disturbances, lower self-esteem, and reduced life satisfaction [8].

Additionally, everyday discriminatory experiences can negatively affect job satisfaction and career development in workplace.

Although substantial research has explored the application and impact of the EDS, several unresolved issues warrant further investigation. Firstly, future research should examine the applicability and comparability of the EDS across different cultural contexts. Secondly, further studies should investigate the interaction between everyday discrimination and other types of discrimination (such as systemic discrimination) and their combined effects. Additionally, further research is necessary to explore interventions and strategies to mitigate the impact of everyday discrimination on mental health.

### **2.2. Everyday Discrimination and Age**

Existing studies indicate that experiences of everyday discrimination vary across different age groups, as age can influence how individuals perceive and respond to discriminatory events. For instance, research has found that younger individuals are more likely to encounter everyday discrimination in school and workplace settings, whereas older adults may face discrimination in healthcare and public services. Additionally, older adults are more susceptible to mental health issues, such as anxiety and depression, due to age discrimination [9]. However, there remains a need for systematic research specifically exploring the relationship between age and everyday discrimination experiences.

### **2.3. Everyday Discrimination and Post-Traumatic Stress Disorder (PTSD)**

Post-Traumatic Stress Disorder (PTSD) is a severe mental health condition triggered by traumatic events and has been shown to be associated with various forms of discrimination [10]. Everyday discrimination can act as a chronic stressor, exacerbating PTSD symptoms. Studies have found that individuals experiencing everyday discrimination are more likely to report post-traumatic stress reactions. However, research on the relationship between EDS and PTSD is still sparse.

## 2.4. Parenting Styles and Coping with Discrimination

Parenting styles play a crucial role in psychological development and may influence how individuals cope with everyday discrimination. For example, authoritative parenting (both strict and supportive) is associated with higher psychological resilience and lower psychological stress. Conversely, authoritarian or permissive parenting styles may lead to more negative psychological responses when facing everyday discrimination. Despite the known influence of parenting styles on coping mechanisms, research examining how different parenting styles modulate the impact of everyday discrimination is lacking.

While substantial research has examined the impact of the Everyday Discrimination Scale (EDS) on individuals' mental and physical health, studies specifically investigating the relationship between EDS and factors such as age, post-traumatic stress disorder (PTSD), and parenting styles remain relatively limited. This section focuses on the potential impact of these factors and suggests directions for future research.

## 2.5. The Current Study

The current study seeks to address two main research questions:

To what extent does everyday discrimination manifest among employees in SMEs in Southern China, specifically comparing individuals born before 1990 and after 1990?

How does parental upbringing style influence everyday discrimination among employees of different age groups within SMEs? Furthermore, this study aims to examine whether there is a correlation between traumatic experiences during the formative years and age discrimination among employees in SMEs in Southern China.

Based on previous literature, this research developed four hypotheses:

H1: Employees in small-medium enterprise would experience significant everyday discrimination.

H2: There would be difference in EDS between those born before 1990 and those after 1990.

H3: The discrimination they face is related to the parenting style of their parents.

H4: The discrimination people face can make them more susceptible to PTSD related symptoms.

## 3. METHOD

### 3.1. Participants

The number of participants in this survey is 357, of which 259 questionnaires are valid. In the valid questionnaire, two individuals were unwilling to disclose their gender, 144 females and 113 males, all from the southern region of China. They were born between 1980 and 2007, all working in small and medium-sized enterprises.

### 3.2. Measurements

Three scales were used in the study:

#### 3.2.1. Chinese version of the Everyday Discrimination Scale

The Cronbach's  $\alpha$  coefficient for the Chinese version of the EDS Daily Perception Discrimination Questionnaire was 0.908, the Guttman split-half coefficient was 0.874, and the correlation coefficient between the scores of each item and the total score ranged from 0.699 to 0.812. The number of common factors obtained by exploratory factor analysis was consistent with the original scale, extracting one common factor with a cumulative variance explanation rate of 56.341%. Anxiety and depression scores were negatively correlated with discrimination scores ( $p < 0.01$ ). The item content

validity index ranged from 0.83 to 1.00, and the overall content validity index of the scale was 0.92, indicating good reliability and validity. Therefore, the Chinese version of the EDS is considered a reliable and valid measurement tool for assessing daily perceived discrimination in China [11].

The scale's Cronbach's  $\alpha$  coefficient and Guttman's split-half coefficient, at 0.908 and 0.874 respectively, demonstrate strong internal consistency and stability. The correlation coefficients between each item's scores and the total score, ranging from 0.699 to 0.812, indicate a high level of consistency between individual item scores and the overall score. The exploratory factor analysis revealed common factors consistent with the original scale, explaining 56.341% of the cumulative variance, showing effective variance explanation. Thus, the scale exhibits high reliability.

Anxiety and depression scores were negatively correlated with discrimination scores ( $p < 0.01$ ), indicating high content validity, meaning each item effectively measures daily perceived discrimination. "The item content validity index ranged from 0.83 to 1.00, with an overall content validity index of 0.92, further confirming the scale's high validity."

Given the robust reliability and validity results, the Chinese version of the EDS scale emerges as a reliable and valid instrument for assessing daily perceived discrimination among Chinese subjects.

The original questionnaire utilized a Likert 4-point scoring method, where frequent occurrences were scored as 1 point, occasional occurrences as 2 points, rare occurrences as 3 points, and never occurrences as 4 points, resulting in a maximum score of 40 points. A lower score indicates a more severe problem of daily discrimination.

### **3.2.2. Revised Short-form Egna Minnen av Barndoms Uppfostran for Chinese**

The Chinese version of the EMBU (s-EMBU) has demonstrated good cross-cultural validity. In this study, s-EMBU scores show consistent associations with other relevant factors, such as mental health status and family relationship quality. Research indicates that the internal consistency and test-retest reliability of the s-EMBU exhibit stable consistency across different sample groups. The s-EMBU is widely used in studying the impact of family environments on individual development due to its good validity and reliability. Scores for each dimension of the s-EMBU (e.g., strictness, emotional warmth) can be obtained through simple summation to derive a total score [12].

### **3.2.3. The International Trauma Questionnaire**

The ITQ was translated and adapted into Chinese by Ho (2017) to assess symptoms related to the impact of traumatic events, such as PTSD. The ITQ has demonstrated good cross-cultural validity, showing consistent associations with other relevant factors such as mental health status and symptoms related to traumatic events. The internal consistency and test-retest reliability of the ITQ exhibit stable consistency across different sample groups. The ITQ is a relatively new tool for assessing PTSD symptoms, and its good validity and reliability make it popular among researchers. Scores for each dimension of the ITQ can be obtained through simple summation to derive a total score [13].

## **3.3. Analytical Approach**

This research employed statistical analyses to investigate discrimination experiences and their predictors among SME employees in Southern China. A one-sample t-test was utilized to assess discrimination occurrences, while an independent sample t-test was conducted to explore potential age-related differences in these experiences. Gender-based disparities in EDS index values were examined using independent sample t-tests. Additionally, the relationship between EDS and PTSD values was assessed through an independent samples t-test. Finally, a regression analysis was performed to identify predictors of EDS, including age, gender, PTSD presence, and parenting style.

## 4. RESULTS

### 4.1. Everyday Discrimination Scale (EDS)

To examine the discrimination index of participants, a one-sample t-test was conducted and revealed that all participants felt discriminated against. EDS scores were significantly above 0, indicating significant discrimination ( $t(258) = 73.373$ ,  $p < 0.001$ , Cohen's  $d = 6.282$ ). This result indicates that participants experienced a significant amount of discrimination.

To investigate the impact of gender on EDS index differences, independent sample t-tests were conducted on EDS. A significant difference in EDS between males and females was found ( $t(255) = 2.228$ ,  $p = 0.027$ , Cohen's  $d = 6.247$ ).

To examine whether participants born before 1990 and those born after 1990 differ in EDS scores, an independent samples t-test was conducted and revealed a significant difference ( $t(257) = 10.638$ ,  $p < 0.001$ , Cohen's  $d = 5.245$ ). This result indicates that participants born after 1990 face more discrimination than those born before 1990.

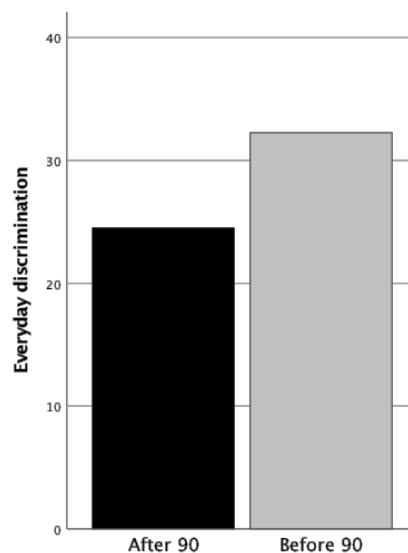


Figure 1: Average EDS scores of participants born before and after 1990 ( Note. A lower score indicates a higher severity of discrimination).

### 4.2. Post-Traumatic Stress Disorder (PTSD)

To examine whether people with or without PTSD showed different levels of EDS, an independent samples t-test was conducted. Results indicate that people with PTSD showed higher levels of EDS than those without PTSD ( $t(257) = 0.039$ ,  $p = 0.969$ , Cohen's  $d = 6.294$ ). However, there was no significant difference observed in EDS scores between individuals with and without PTSD.

### 4.3. Factors influencing EDS

To examine the factors that predict EDS, a regression analysis was conducted with EDS as the dependent variable and participants' age, gender, PTSD status (yes/no), and parenting style (father/mother) as independent variables. The model was significant ( $F(5, 253) = 23.690$ ,  $p < 0.001$ ). Among all the predictors, participants' age was a significant predictor ( $\beta = -0.548$ ,  $t = -10.342$ ,  $p < 0.001$ ). These results indicate that age has a significant impact on EDS scores. All other factors did not significantly predict EDS (all  $|t| < 1.396$ , all  $p > 0.164$ ).

Table 1: Predictors of Everyday Discrimination Scale (EDS) Scores

Model	Unstandardize d B	Coefficients Std. Error	beta	t	p
(Constant)	36.776	2.757		13.338	0.000
AGE	-6.876	0.665	-0.548	-10.342	0.000
Gender	-0.657	0.612	-0.56	-1.073	0.284
PTSD (yes/no)	-0.954	0.684	-0.073	-1.396	0.164
parenting style (father)	-1.295	0.941	-0.073	-1.376	0.170
parenting style(mother)	-0.307	1.034	-0.016	-0.297	0.767

Dependent Variable: EDS

## 5. DISCUSSION

This study delved into the intricate dynamics of everyday discrimination within small and medium-sized enterprises (SMEs) in Southern China. The Everyday Discrimination Scale (EDS) was utilized to examine its impact on employees born before and after 1990, the influence of parental upbringing styles, and the correlation with Post-Traumatic Stress Disorder (PTSD) symptoms.

The investigation revealed that discrimination is a prevalent issue among employees in Southern China's SMEs, with participants reporting significant levels of everyday discrimination. This result is consistent with previous work by Zhang, who found that 33% of Chinese employees had experienced discrimination in job seeking, salary increases, and promotions over the past five years [14]. Zhang's study also highlighted that male employees with higher career efficacy and concerns about unemployment were at a higher risk of facing job discrimination or victimization. Conversely, female employees with tertiary education were less likely to encounter job discrimination.

Interestingly, distinct differences in EDS scores were observed based on age groups, indicating a generational aspect to discrimination perception. In particular, younger employees born after 1990 reported higher levels of perceived discrimination compared to their counterparts born before 1990. This indicates that younger generations might be more sensitive to or more aware of discriminatory practices.

Furthermore, this research show no significant difference in EDS between individuals with and without PTSD. This suggests that individuals with PTSD are not more susceptible to experiencing discrimination in their daily lives. This result contrasts with previous work by Kessler et al., which documented heightened sensitivity of individuals with PTSD to stressors, including discrimination [3]. This discrepancy may be related to cultural differences in the perception of psychological trauma.

Regarding predictors of EDS, age emerged as a significant factor influencing discrimination levels, while gender and parenting styles did not show a significant predictive relationship with EDS scores. This nuanced understanding provides valuable insights into the factors contributing to perceived discrimination in SMEs.

### 5.1. Limitations and Future Research

Although the study significantly contributes to existing work on everyday discrimination in public health and the workplace, several limitations need to be acknowledged.



First, the study's sample size, although adequate for the purposes of analysis, is restricted to a specific region and industry, namely Southern China's SMEs. This limitation may affect the generalizability of findings, making it difficult to apply these results to broader populations or different geographic areas. To improve the applicability of future research, it would be advantageous to incorporate more diverse samples from different regions and industries.

Second, the reliance on self-reported measures, such as the EDS and PTSD symptoms, introduces the potential for bias or subjective interpretation of experiences, affecting the accuracy of data.

Moving forward, future research could expand this study to encompass a broader geographical scope and include a more diverse range of industries. Additionally, exploring interventions and policies to mitigate discrimination and support affected individuals could be a valuable avenue for further investigation.

## 6. Conclusion

This study makes a significant contribution to the ongoing discussion about workplace discrimination, especially within SMEs in Southern China. By delving into the intricacies of everyday discrimination and its related factors, this study aims to provide strategic insights for fostering inclusive and equitable work environments.

In today's economic and social context, workplace discrimination is a highly pertinent issue. Within SMEs, the experiences of employees and interpersonal dynamics play crucial roles in organizational functioning. However, there can be varying understandings and approaches to addressing discrimination, necessitating in-depth research on the topic.

This research focuses on SMEs in Southern China, offering a unique backdrop for study due to the specific challenges these enterprises often face in socioeconomic and cultural realms. By analyzing instances of everyday discrimination within these businesses, a better understanding of these challenges can be gained, allowing for the proposal of targeted solutions.

This study goes beyond mere understanding; it aims to guide practical actions. By deeply exploring the complexity and influencing factors of everyday discrimination, effective strategy recommendations can be offered for business managers and decision-makers. These strategies may involve improving employee training and education, implementing more inclusive and equitable policies, and enhancing organizational cultural development.

This research hopes that the findings will garner attention and inspire further research and practical initiatives in related fields. Continued research and practice can help create a fairer and more inclusive work environment, providing better support and assurance for employee development and long-term organizational growth.

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