Research Article

Work alienation among labor dispatch workers in the financial industry: A Study in Shaanxi Province, China

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ABSTRACT

Work alienation is an important problem faced by labor dispatch workers, as they are alienated and experience injustice in the present work system. The present research aims to identify the impact of work ostracism and organizational injustice on work alienation, as measured through a research conducted among 601 employees of the financial sector in Shaanxi, China, using a structural equation model. The mediating role of relative deprivation and emotional exhaustion, and the moderating role of psychological resilience, are also explored. The research findings suggest that work ostracism, along with the three dimensions of organizational injustice, sequentially predicts work alienation. The mediating role of relative deprivation and emotional exhaustion is also identified, as both factors sequentially mediate work ostracism, organizational injustice, and work alienation. Additionally, psychological resilience is identified as a moderator that buffers the outcomes of relative deprivation-work alienation and emotional exhaustion-work alienation. Theoretical contribution of the present research is identified as an understanding of work alienation through non-standard employment relationships, mediated through the dynamics of resource depletion. Practical contribution of the present research is identified as multi-fold, as it provides a variety of interventions at different levels to address the problems faced by organizations due to work ostracism, organizational injustice, relative deprivation, emotional exhaustion, and low psychological resilience.

Keywords: work alienation; labor dispatch; workplace ostracism; organizational injustice; relative deprivation; emotional exhaustion; psychological resilience

1. Introduction

Work is not only a means of physical sustenance; it is associated with other connotations in modern society. Ideally, work is expected to bring happiness to individuals, assist in their development, and be an important arena for the development of identity, meaning, and a sense of belonging. However, in many instances, a disconnect is seen between what is expected from work and what is actually found, wherein workers experience feelings of meaninglessness, unfreedom, or even antagonism towards their work, a situation that is referred to as work alienation[1]. Labor dispatch is considered to be an exceptional employment relation with extremely fast growth rates in the global economy. Labor dispatch employment relations have become widespread in China since the 1990s. Labor dispatch employment relations have

reached a total workforce of 27 million by 2010, and this number increased to over 60 million by 2023. As financial organizations face increased competition in the global financial market, they are increasingly using labor dispatch employment relations to maintain costs. Labor dispatch workers in financial organizations play a vital role in the daily operations of financial organizations, but they vary from regular employees in terms of wages, career growth, and labor right protection. These inequalities not only influence the motivation to work and the quality of life of dispatch workers but may also lead to alienation from work, which may undermine the sustainability and stability of society. Work alienation is a concept that is based on Marx's theory of alienated labor. Work alienation is a situation where there is a disconnect between the workers and the products of work, the production process, and fellow workers[1]. Recent studies have found that work alienation indeed remains a phenomenon in modern work systems, particularly in precarious work arrangements[2]. Psychological individual factors also contribute to work alienation[3]. Life crafting, where shattered dreams are used as intervention, proves to be effective in reducing work alienation[4]. In the case of dispatch workers in the financial sector, it is apparent that their employment relationship in triangular forms, as well as their peripheral position in organizations, makes them vulnerable to social alienation. Alienation does not only involve alienation from labor objects, but also involves self-estrangement, as well as the disruption of social relations. Workplace ostracism and workplace injustice appear as important antecedents of work-related alienation. Workplace ostracism is a situation where individuals are deliberately ostracized at their workplace[5]. According to the need to belong theory, human beings have basic needs when it comes to belonging, and when they are denied these needs through ostracism, they experience psychological distress and resource depletion[6]. In the context of dispatch workers within the financial sector of Shaanxi province, ostracism takes on a greater significance as these workers perceive a sense of neglect in terms of communication, exclusion from projects, and denial of participation in business processes. Organizational injustice includes distributive, procedural, and interactional injustices[7,8]. Organizational injustice as a predictor of negative attitudes and behaviors is supported by empirical research, and it may also be a mediator between work stressors and CWB[9]. Organizational injustice is a salient issue in the financial industry's labor dispatch employment. Organizational injustice includes compensation, influence, and respect in communication. Relative deprivation and emotional exhaustion are mediating processes between workplace stressors and work alienation. Relative deprivation is an unpleasant emotional state that occurs as a result of an individual's perception of being disadvantaged relative to a reference group[10]. Due to comparisons made with dispatch employees and regular employees who have adequate resources, differences in professional development become apparent, resulting in relative deprivation and, consequently, alienation at work. Emotional exhaustion, one of the key aspects of burnout, is described as the overuse of individuals' emotional resources in response to occupational stress[11]. Emotional exhaustion results from feelings of isolation, neglect, and perceived injustices that result from ostracism in the work setting, which results in psychological strains that lead to emotional exhaustion. In this state, the employee lacks sufficient psychological resources to become involved in work, hence leading to alienation from work. Recent studies on digital labor and non-standard work arrangements have shown how this work results in systematic vulnerabilities to psychological processes[12]. This study argues that psychological resilience, which is individuals' ability to maintain a process of positive adaptation and recovery in response to stress, adversity, and associated challenges, is a critical mediating factor in the experience of work alienation. Employees high in psychological resilience are more likely to endure relative deprivation and emotional exhaustion while having a more positive attitude towards perceived injustice, as opposed to experiencing negative self-denial. While a large body of research has focused on work alienation and its associated variables, research examining labor dispatch workers in relation to these constructs is still limited. Therefore, the current study aims to investigate workplace ostracism, organizational injustice, work alienation, relative deprivation,

emotional exhaustion, and psychological resilience among financial sector labor dispatch workers in Shaanxi, China, using a sample of 601 workers.

2. Literature review

2.1. Work alienation and labor dispatch workers

The concept of work alienation, based on classical theory, describes a state wherein an individual feels less attached to work, has less control over work processes, and has a negative attitude toward work. Modern definitions of work alienation have three components: powerlessness (the inability to control work processes), meaninglessness (the absence of purpose in work), and self-estrangement (the absence of connection to oneself during work). Despite changes in modern economies from past economies, work alienation phenomena continue to appear, especially in precarious work arrangements.

Empirical studies have further enhanced the understanding of work alienation in contemporary organizational settings. The rise of telework has created new dimensions of alienation, and the tension between autonomy and isolation has redefined the conventional understanding of alienation in the workplace[13]. Previous studies on organizational antecedents have identified a complex interplay between work stressors and their joint effect on the level of work-related alienation. Temporary staff workers, who are in a triangular employment relationship with staffing agencies, employing organizations, and themselves, are more susceptible to work-related alienation due to their ambiguous employment relationship, which leads to identity ambiguity, a lack of opportunities for career progression and a sense of meaninglessness, and exclusion from organizational issues, which leads to a sense of powerlessness. For dispatch workers in the Chinese financial industry, the dual employment system has resulted in a dichotomy between regular and temporary workers, giving rise to a sense of marginality, or organizational second-class citizenship, and work-related alienation.

2.2. Workplace ostracism and organizational injustice as antecedents

Ostracism in the workplace is defined as the degree to which an employee feels that he or she is being ignored, overlooked, or avoided by co-workers. Research has shown that workplace ostracism is a predictor of unfavorable work outcomes. Recent studies have shown that ostracism is related to an employee's job performance and turnover intention, and that psychological contract violation is a mediator of this relationship[14]. In addition, workplace ostracism is linked with psychological ownership, which in turn influences negative attitudes among employees, as well as organization-based self-esteem, which in turn leads to employee withdrawal[15]. In addition, emotional exhaustion has been found to be a consequence of ostracism, which in turn leads to knowledge concealment, although this can be managed through psychological capital[16]. Dispositional factors are also of great significance, as they predict ostracism as well as its consequences[17].

Organizational justice theory distinguishes between three aspects of justice: distributive justice, or the fairness of outcome allocations; procedural justice, or the fairness of decision-making processes; and interactional justice, or the quality of interpersonal interactions. Extensive research has established that perceptions of injustice lead to negative attitudes and behaviors. New research has found that interactive injustice, or perceptions of negative interpersonal interactions, predicts workplace isolation, mediated by relative deprivation[18]. A research study focusing on employees in the hospitality industry shows that customer interpersonal injustice can create spillovers from the work domain to non-work time through resource depletion effects on employee well-being and work engagement the following day[19]. Furthermore, individual differences such as narcissistic personality traits can shape individuals' responses to perceived

injustice; therefore, narcissistic individuals experience aggravation from distributive injustice while concurrently seeking self-enhancement strategies[20]. For temporary workers in chronically marginalized roles, ostracism by regular staff might heighten feelings of non-belonging in the workplace and consequently alienation. Organizational injustice can be seen in the financial services industry, particularly in labor dispatch practices: disparities in compensation levels for similar tasks performed, lack of inclusion in policy development processes, and feelings of disrespect emanating from upper levels of management.

2.3. Mediating mechanisms: Relative deprivation and emotional exhaustion

In accordance with the concept of relative deprivation theory, negative emotions derive from unfavorable comparisons with others. The latest developments in the field of relative deprivation research highlight the importance of refining fairness-based approaches that take into account assessments of deprivation and deservedness[21]. These individuals have a higher tendency for social comparison in two-track systems, where dispatchers carry out similar tasks in significantly dissimilar circumstances compared to regular employees. Seeing how better compensated, motivated, and respected regular employees are creates relative deprivation through social comparison. The perception of inequity among employees in an organization may lead to feelings of resentment, frustration, and disengagement from work, which is associated with psychological experiences of alienation at work.

The construct of emotional exhaustion is affective in nature and is associated with the depletion of emotional and physical resources. Recent studies on the construct of emotional exhaustion have highlighted the mediating effect of self-efficacy, and the meta-analytic evidence has demonstrated the moderating effect of self-efficacy between stress and emotional exhaustion[22]. Organizational ostracism and perceived injustice in the workplace are considered stressors that drain emotional resources without being replenished. The strain of coping with exclusion and unfavorable and discriminatory work environments contributes to emotional exhaustion. Employees who are emotionally exhausted are unable to psychologically cope and therefore contribute to work-related alienation. Moreover, relative deprivation may contribute to work-related alienation indirectly by leading to emotional exhaustion. This is due to the negative emotions experienced by employees who perceive relative deprivation, which in turn require emotional regulation and lead to emotional exhaustion.

2.4. Moderating role of psychological resilience

While psychological resilience has been talked about in terms of its link with burnout, little emphasis has been put on burnout from both individual and organizational viewpoints, as resilience is considered a major factor in stress reduction as well as overcoming adverse situations[23]. Employees who are psychologically more resilient show more emotional control, positive attribution styles, and coping resources in managing difficult situations. In the relationship between relative deprivation and alienation in the workplace, employees who are more psychologically resilient show more adaptive coping styles in managing situations of relative deprivation by seeing injustice that enhances their potential rather than one of self-denial. On the contrary, employees with low levels of psychological resilience tend to prolong negative emotional experiences in response to relative deprivation. The role of psychological resilience in the link between emotional exhaustion and work alienation cannot be overstated. This is due to the fact that individuals with high levels of psychological resilience can manage their own emotions, hence overcoming emotional exhaustion in the workplace. The hypothesis for this research will be: psychological resilience will be a considerable moderator for the two basic ways to alienate work: firstly, individuals with a great amount of psychological resilience and relative deprivation will be able to re-interpret experiences more positively;

secondly, individuals with emotional exhaustion and psychological resilience will be able to recover from emotional exhaustion more quickly by using effective coping strategies.

3. Methods

3.1. Research design

A cross-sectional survey research design was used to examine relationships between workplace ostracism, organizational injustice, relative deprivation, emotional exhaustion, psychological resilience, and work alienation among labor dispatch employees in China's finance industry. A quantitative research approach and methodology were adopted, using standardized measures to collect data from labor dispatch employees and analyzing relationships using structural equation modeling (SEM) based on predictions from conservation of resources theory[28].

3.2. Participants and sampling

The target population of labor dispatch workers in financial institutions in Shaanxi Province, China (Xi'an, Xianyang, Baoji, Weinan, and Hanzhong cities), adopted purposive sampling to select financial institutions with labor dispatch workers. Cluster sampling was then conducted in the selected financial institutions. In order to increase the representativeness of the sample in the target population, different categories of organizations (financial institutions) and different categories of roles were considered in the selection process. The eligibility criteria for participation were established as: (1) working through labor dispatch agencies rather than regular employment, (2) a minimum tenure of six months within their current role to gain relevant work experience, and (3) providing informed consent. Data collection took place between March and June 2024, and research assistants administered questionnaires to dispatch employees during non-peak working periods. Out of 628 distributed questionnaires, 601 were used after discarding 27 that were deemed unusable due to non-delivery or format problems, resulting in a response rate of 95.9%. The data consisted of 601 labor dispatch employees from 10 financial institutions across five cities in Shaanxi Province. Demographic characteristics such as age, organizational tenure, education level, and job level were recorded, acting as controls for potential confounding variables.

3.3. Research instruments

All scales used a 5-point Likert type measurement, ranging from 1 (strongly disagree) to 5 (strongly agree). The translation procedure for the English scales was done following standard procedures. Workplace Ostracism was used with a 10-item measure with a high reliability coefficient of .932. Organizational Injustice was used with three dimensions: Distributive Injustice (5 items, $\alpha= .878$), Procedural Injustice (6 items, $\alpha= .898$), and Interactional Injustice (5 items, $\alpha= .878$). Relative Deprivation was used with 5 items ($\alpha= .889$). Emotional Exhaustion was used with 5 items ($\alpha= .882$). Psychological Resilience was used with 6 items ($\alpha= .908$). Work Alienation was used with an 8-item measure with a high reliability coefficient of .909. Control Variables used in the research were age, tenure, educational level, and position level, which were statistically controlled in all research due to their potential correlations with work attitudes/experiences.

3.4. Data gathering procedure

Once approvals were granted by the Institutional Review Board of Xi'an Jiaotong University, permission was sought from the human resource department of financial institutions to oversee the participation of dispatch workers. Research assistants were then sent to private or semi-private environments to administer paper-and-pencil-based questionnaires to dispatch workers during off-peak hours to ensure confidentiality. Each participant was allowed to complete the questionnaire independently, and each session was approximately 15-20 minutes long. Personalized invitations to voluntary participation, anonymity, and

confidentiality, which were not related to employment status and were not revealed to their employer, were also implemented to ensure honest and unbiased results. Participants were then asked to put their completed questionnaires in an envelope, and it was collected by the research assistants to ensure confidentiality.

3.5. Statistical analysis

Data analysis was done using SPSS 26.0 and AMOS 24.0. Descriptive analysis, such as descriptive statistics, Pearson correlation, and reliability tests using Cronbach's alpha, was done on all scales. These analyses were done before carrying out any tests. They helped to assess missing values, outliers, and normality. Second, in assessing the goodness of fit of the measurement model, a Confirmatory Factor Analysis (CFA) was carried out to test validity through various fit indices such as chi-square per df, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Goodness of Fit Index (GFI). Third, in assessing the goodness of fit of the structural model, analyses of direct and indirect effects were carried out while controlling for demographic variables. In assessing mediation, bootstrapping with 5,000 resamples was used to obtain bias-corrected 95% confidence intervals.

4. Results

4.1. Preliminary analyses

The final sample consisted of 601 labor dispatch workers in the financial industry of Shaanxi Province, China. The response rate was 95.9%. In all three studies, demographic factors such as age, tenure, education, and job level were controlled, as previously discussed in the section on methods. The results of this study, as presented in **Table 1**, showed that the range of variable scores on a 5-point Likert scale was from 2.654 to 3.297. For this study, moderate levels of variables were found, which included workplace ostracism (M = 2.683, SD = 0.896), distributive injustice (M = 2.663, SD = 0.938), procedural injustice (M = 2.697, SD = 0.951), interactional injustice (M = 2.654, SD = 0.943), relative deprivation (M = 2.704, SD = 0.990), emotional exhaustion (M = 2.685, SD = 0.949), and work alienation (M = 2.658, SD = 0.883). The mean score of psychological resilience was slightly above average (M = 3.297, SD = 0.970). This means that labor dispatch workers have moderate levels of resilience even in a high-pressure environment. Skewness ranges from -0.042 to 0.091, and kurtosis ranges from -1.130 to -0.915. All these are within acceptable ranges, which indicate a normal distribution.

Table 1. Means, standard deviations, correlations, and reliabilities among study variables (N = 601).

Variable	M	SD	α	1	2	3	4	5	6	7	8
1. Workplace Ostracism	2.683	0.896	.932	(.760)							
2. Distributive Injustice	2.663	0.938	.878	.374***	(.769)						
3. Procedural Injustice	2.697	0.951	.898	.393***	.384***	(.771)					
4. Interactional Injustice	2.654	0.943	.878	.355***	.400***	.405***	(.768)				
5. Relative Deprivation	2.704	0.990	.889	.425***	.402***	.388***	.435***	(.785)			
6. Emotional Exhaustion	2.685	0.949	.882	.412***	.385***	.426***	.378***	.414***	(.776)		
7. Psychological Resilience	3.297	0.970	.908	.123**	.142***	.030	.089*	.133**	-.008	(.789)	

Variable	M	SD	α	1	2	3	4	5	6	7	8
8. Work Alienation	2.658	0.883	.909	.406***	.367***	.420***	.355***	.386***	.425***	.156***	(.746)

Table 1. (*Continued*)

*Note. M = Mean; SD = Standard Deviation; α = Cronbach's alpha. Values in parentheses on the diagonal are square roots of average variance extracted (AVE). *p < .05. **p < .01. ***p < .001.*

As can be seen from **Table 1**, all hypothesized relationships showed significant correlations in the expected directions. Workplace ostracism showed positive correlations with relative deprivation (r=.425, p<.001), emotional exhaustion (r=.412, p < .001), and work alienation (r=.406, p<.001). All three aspects of organizational injustice showed positive correlations with relative deprivation, emotional exhaustion, and work alienation (all p-values<.001). Relative deprivation showed positive correlations with emotional exhaustion (r=.414, p<.001) and work alienation (r=.386, p<.001). Emotional exhaustion also showed a positive correlation with work alienation (r=.425,p<.001). Psychological resilience showed weak positive correlations with a number of variables; however, the correlations between psychological resilience and procedural injustice (r=.030, p=.464) and psychological resilience and emotional exhaustion (r=-.008, p=.849) were non-significant. To assess the common method bias, Harman's single factor test was conducted. The exploratory factor analysis indicated that the first factor explains 28.317% of the variance, which is significantly lower than the 50% threshold. Therefore, common method bias is not a major issue in the current study.

4.2. Measurement model

Before testing the proposed structural model, a confirmatory factor analysis was performed to assess the measurement model of the constructs. The measurement model of eight factors was found to fit the data very well:χ^2= 1351.964, df = 1147, χ^2/df = 1.179, RMSEA = 0.017, RMR = 0.038, CFI = 0.988, NFI = 0.926, IFI = 0.988, TLI = 0.987, GFI = 0.918, AGFI = 0.908. All fit indices were beyond the acceptable threshold, which indicated that the measurement model fit was very good. All standardized values for the loading of factors ranged from .706 to .855, which were above the suggested value of .60. All values were also statistically significant, as all ps were < .001. Values for factor loading of workplace ostracism ranged from .739 to .773, distributive injustice from .744 to .796, procedural injustice from .747 to .803, interactional injustice from .758 to .774, relative deprivation from .764 to .799, emotional exhaustion from .721 to .855, psychological resilience from .778 to .804, and work alienation from .706 to .766.

All constructs had high internal consistency reliability. The Cronbach alpha coefficients for the constructs were between .878 and .932, where workplace ostracism had an alpha coefficient of .932, distributive injustice had .878, procedural injustice had .898, interactional injustice had .878, relative deprivation had .889, emotional exhaustion had .882, psychological resilience had .908, and work alienation had .909. For convergent validity, Average Variance Extracted (AVE) and Composite Reliability (CR) were used as measures. All the AVE results were above 0.50: workplace ostracism (AVE = 0.578, CR = 0.932), distributive injustice (AVE = 0.591, CR = 0.878), procedural injustice (AVE = 0.595, CR = 0.898), interactional injustice (AVE = 0.590, CR = 0.878), relative deprivation (AVE = 0.616, CR = 0.889), emotional exhaustion (AVE = 0.601, CR = 0.882), psychological resilience (AVE = 0.622, CR = 0.908), and work alienation (AVE = 0.556, CR = 0.909). Discriminant validity was ensured through the recognition that the square root of Average Variance Extracted (AVE) of all the constructs is greater than the correlations between the constructs. In other words, the square root of Average Variance Extracted (AVE) of all the constructs is greater than the correlations between the constructs.

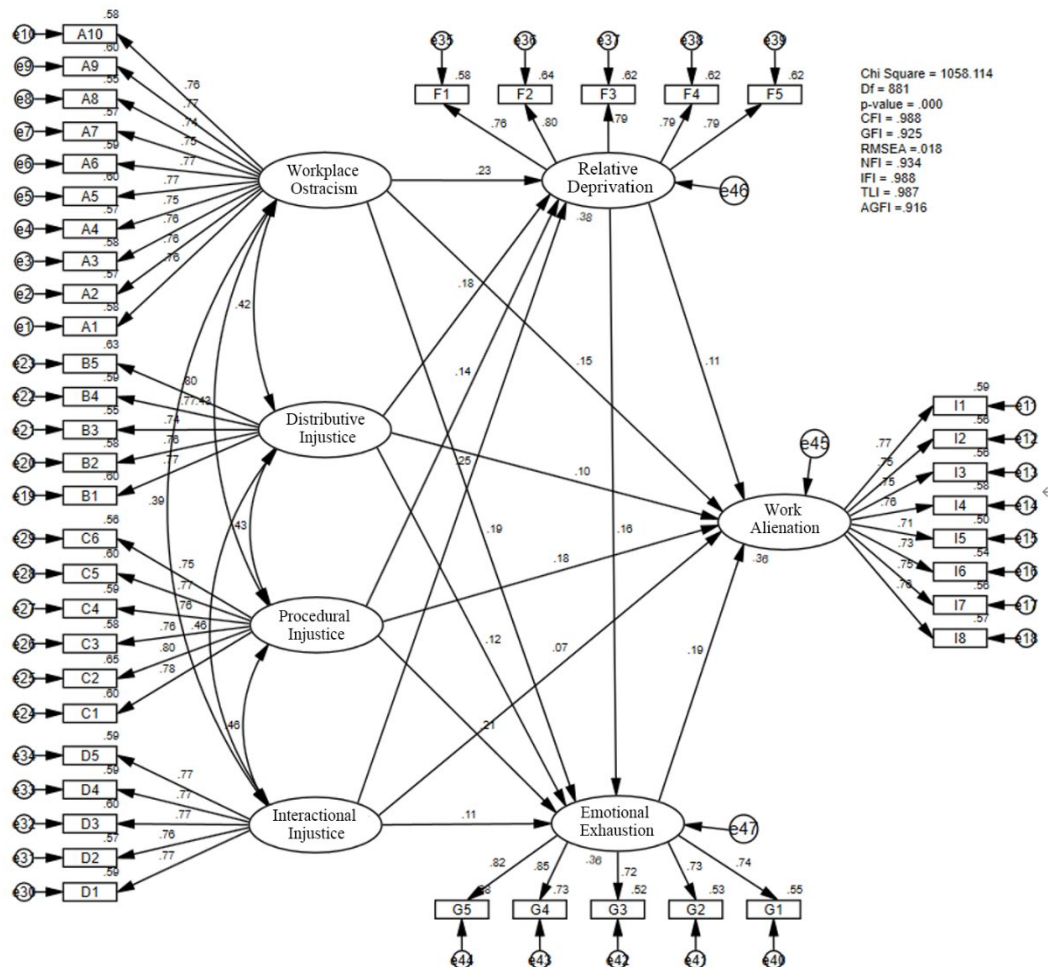## 4.3. Structural model and hypothesis testing

Figure 1. Structural equation model showing standardized path coefficients.

After confirming the measurement properties, the structural model was tested to examine the hypothesized relationships between the variables. The structural model had a very good fit to the data: χ^2= 1058.114, df = 881,χ^2/df = 1.201, RMSEA =.018, RMR=.037, CFI=.988, NFI=.934, IFI=.988, TLI=.987, GFI=.925, AGFI=.916. **Figure 1** shows the standardized path coefficients for the hypothesized direct effects. Ostracism at work significantly predicted relative deprivation (β= .231, p < .001) and emotional exhaustion (β=.194, p<.001). Of the organizational injustices, distributive injustice (β=.183, p<.001), procedural injustice (β=.141, p<.01), and interactional injustice (β=.253, p<.001) collectively and significantly predicted relative deprivation. The three aspects of organizational injustice were found to be good predictors of emotional exhaustion. They were distributive injustice (β=.124, p<.05), procedural injustice (β=.211, p<.001), and interactional injustice (β=.111, p<.05). Moreover, relative deprivation was also found to significantly predict emotional exhaustion (β=.164, p<.001). Besides, relative deprivation (β=.109, p<.05) and emotional exhaustion (β=.192, p<.001) were found to significantly predict work alienation. In addition, workplace ostracism was found to have a significant direct effect on work alienation (β=.154, p<.001). Distributive injustice (β=.105, p<.05) and procedural injustice (β=.182, p<.001) were also found to have a significant direct effect on work alienation. The direct effect of interactional injustice was, however, found to be insignificant (β=.072, p=.148).

4.4. Mediation analysis

A bootstrap analysis consisting of 5,000 resamples was carried out to test whether relative deprivation and emotional exhaustion mediated the relationship. Indirect effects of multiple mediation models were assessed by checking whether zero was contained in the 95% confidence interval. The results of the mediation analysis are presented in **Table 2**. Relative deprivation was found to be a significant mediator of the relationship between workplace ostracism and work alienation (indirect effect = .025, 95% CI [.001, .056]). The direct effect of workplace ostracism on work alienation was also significant (direct effect = .154, 95% CI [.060, .246]). Relative deprivation was used to mediate the links between different aspects of organizational injustice and work alienation. More concretely, relative deprivation partially mediated the relationships between distributive injustice (indirect effect = .020, 95% CI [.002, .049]) and procedural injustice (indirect effect = .015, 95% CI [.000, .041]) and work alienation, while maintaining significant direct effects. However, relative deprivation fully mediated the relationship between interactional injustice and work alienation (indirect effect = .028, 95% CI [.002, .063]), while failing to yield a significant direct effect (direct effect = .072, 95% CI [-.022, .178]).

Table 2. Bootstrap analysis of mediation effects.

Path	Indirect Effect	95% CI Lower	95% CI Upper	Direct Effect	95% CI Lower	95% CI Upper	Mediation Type
WO → RD → WA	.025	.001	.056	.154	.060	.246	Partial
WO → EE → WA	.037	.015	.068	.154	.060	.246	Partial
DI → RD → WA	.020	.002	.049	.105	.001	.201	Partial
DI → EE → WA	.024	.005	.055	.105	.001	.201	Partial
PI → RD → WA	.015	.000	.041	.182	.081	.280	Partial
PI → EE → WA	.041	.016	.076	.182	.081	.280	Partial
II → RD → WA	.028	.002	.063	.072	-.022	.178	Full
II → EE → WA	.021	.004	.048	.072	-.022	.178	Full

Note. WO = Workplace Ostracism; DI = Distributive Injustice; PI = Procedural Injustice; II = Interactional Injustice; RD = Relative Deprivation; EE = Emotional Exhaustion; WA = Work Alienation. Bootstrap sample size = 5,000. CI = Confidence Interval.

Emotional exhaustion was also a significant mediator of the relationships between workplace ostracism and work alienation (indirect effect = .037, 95% CI [.015, .068]), with a significant direct effect also being obtained. In addition, emotional exhaustion mediated the relationships between the dimensions of organizational injustice and work alienation. More specifically, emotional exhaustion partially mediated the effect of distributive injustice (indirect effect = .024, 95% CI [.005, .055]) and procedural injustice (indirect effect = .041, 95% CI [.016, .076]) on work alienation. However, emotional exhaustion fully mediated the relationship between interactional injustice and work alienation (indirect effect = .021, 95% CI [.004, .048]). The sequential mediation model of relative deprivation to emotional exhaustion to work alienation was also supported by a significant path from relative deprivation to emotional exhaustion (β = .164, $p < .001$) and from emotional exhaustion to work alienation (β = .192, $p < .001$).

4.5. Moderation analysis

To investigate the moderating effect of psychological resilience, hierarchical regression analysis was performed. All the continuous variables were centered around their means before creating the interaction terms to avoid multicollinearity. **Table 3** presents the hierarchical regression analysis results for the moderating effect of psychological resilience on the relative deprivation-work alienation relationship. After controlling for demographic variables (Model 1), relative deprivation was found to be a significant predictor of work alienation (β= .382, p < .001, Model 2), explaining an additional 14.5% variance (ΔR^2= .145). The introduction of psychological resilience (Model 3) also added significantly to the model (ΔR^2= .012, β= .111, p < .01). More important, the interaction effect of relative deprivation and psychological resilience was also significant (β=−.080, p < .05, Model 4), explaining an additional 0.6% variance (ΔR^2= .006). The final model explained 17.7% variance in work alienation (Adjusted R^2= .167, F = 18.232, p < .001).

Table 3. Hierarchical regression analysis testing the moderating role of psychological resilience.

Part A: Relative Deprivation × Psychological Resilience → Work Alienation

Variable	Model 1	Model 2	Model 3	Model 4
Control Variables				
Age	-.045	-.031	-.028	-.026
Work Tenure	.067	.042	.039	.041
Education Level	.023	.015	.012	.013
Position Level	-.089*	-.065	-.062	-.059
Independent Variable				
Relative Deprivation (RD)		.382***	.379***	.381***
Moderator				
Psychological Resilience (PR)			.111**	.115**
Interaction				
RD × PR				-.080*
Model Statistics				
R²	.014	.159	.171	.177
Adjusted R²	.008	.152	.162	.167
ΔR²		.145***	.012**	.006*
F	2.113	22.511***	20.516***	18.232***
VIF (max)	1.108	1.245	1.356	7.476
Durbin-Watson				1.576

Part B: Emotional Exhaustion × Psychological Resilience → Work Alienation

Variable	Model 1	Model 2	Model 3	Model 4
Control Variables				
Age	-.045	-.024	-.020	-.017
Work Tenure	.067	.036	.031	.034
Education Level	.023	.012	.008	.009
Position Level	-.089*	-.058	-.054	-.050
Independent Variable				
Emotional Exhaustion (EE)		.419***	.415***	.418***

Variable	Model 1	Model 2	Model 3	Model 4
Moderator				
Psychological Resilience (PR)			.163***	.168***
Interaction				
EE × PR				-.107**
Model Statistics				
R²	.014	.188	.214	.226
Adjusted R²	.008	.182	.207	.217
ΔR²		.174***	.026***	.012**
F	2.113	27.641***	27.023***	24.689***
VIF (max)	1.108	1.268	1.402	7.254
Durbin-Watson				1.659

Table 3. (*Continued*)

Note. *Standardized regression coefficients (β) are reported. RD = Relative Deprivation; EE = Emotional Exhaustion; PR = Psychological Resilience. VIF = Variance Inflation Factor. *p < .05. **p < .01. ***p < .001.*
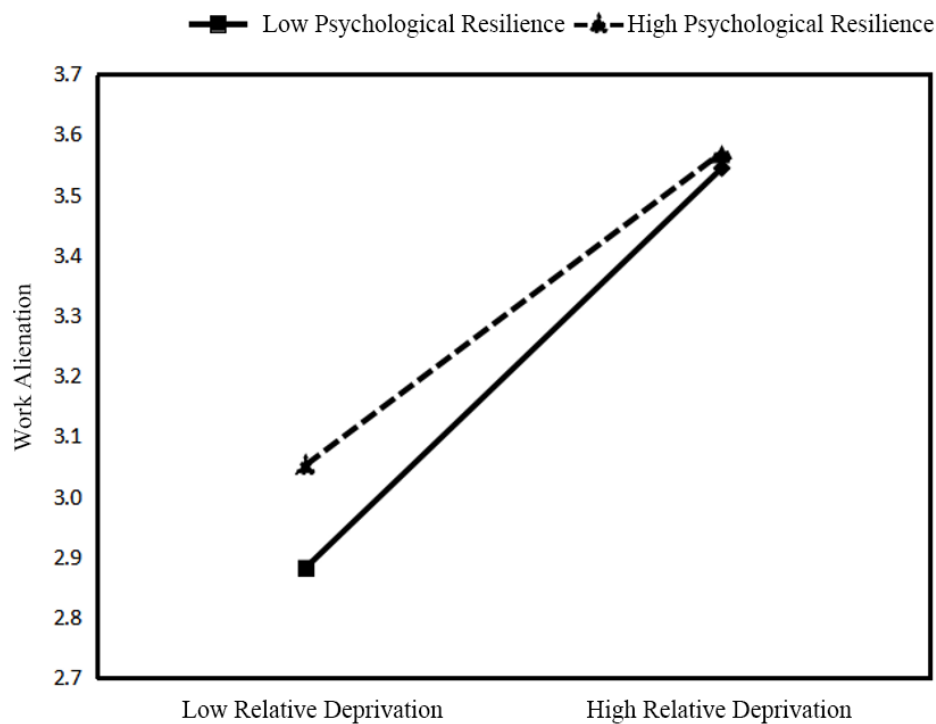

Figure 2. Moderating effect of psychological resilience on the relationship between relative deprivation and work alienation.

Simple slope analysis revealed that the positive relationship between relative deprivation and work alienation was more pronounced among workers with low levels of psychological resilience (.401, $p < .001$) than among those with high levels of psychological resilience (.261, $p < .001$). **Figure 2** depicts this interaction effect, which shows that psychological resilience acts as a buffer against the effect of relative deprivation on work alienation. Psychological resilience also moderated the relationship between emotional exhaustion and work alienation. Emotional exhaustion was found to be a significant predictor of work alienation when demographic variables were controlled ($β = .419$, $p < .001$, Model 2), explaining an additional

17.4% of the variance (ΔR^2= .174). The introduction of psychological resilience into the model (Model 3) added significantly to the equation (ΔR^2= .026, β= .163, p < .001). The interaction effect was also significant (β= −.107, p < .01, Model 4), explaining an additional 1.2% of the variance (ΔR^2=.012). The final model explained 22.6% of the variance in work alienation (Adjusted R^2= .217, F = 24.689, p <.001).
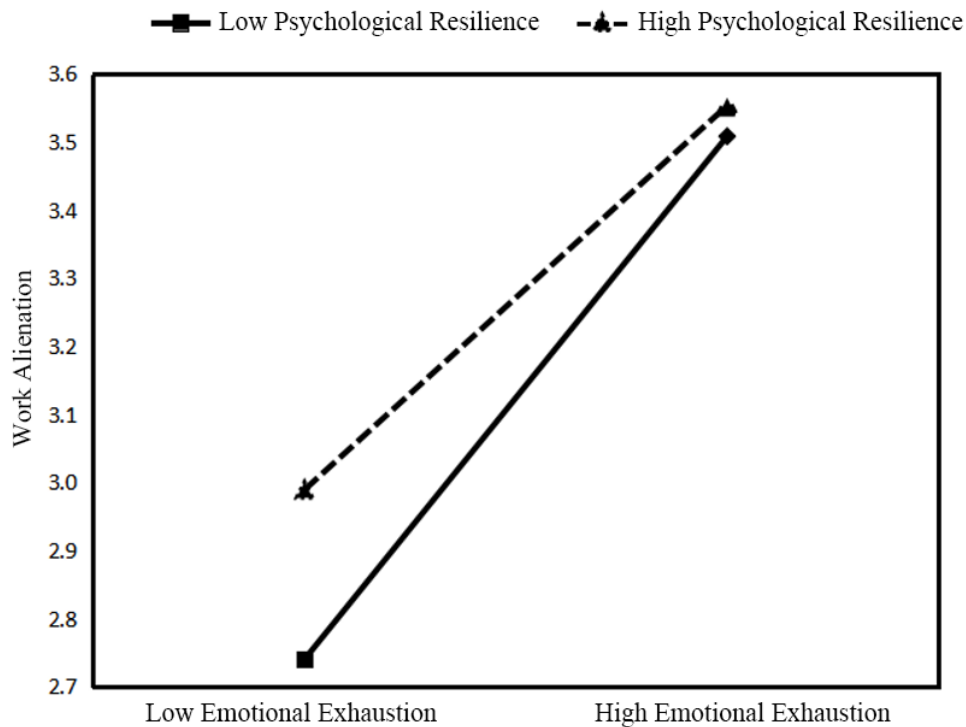

Figure 3. Moderating effect of psychological resilience on the relationship between emotional exhaustion and work alienation.

Analysis of simple slopes showed that the relationship between emotional exhaustion and work alienation was stronger for employees with low psychological resilience (β= .482, p< .001) than for those with high psychological resilience (β= .285, p< .001). **Figure 3** shows the interrelation between the variables, proving that psychological resilience acts as a buffer for the effects of unfavorable emotional exhaustion on work-related alienation. It should be noted that for the models used, all variance inflation factor (VIF) values are less than 10 (varying from 1.004 to 7.476), showing no major multicollinearity between the variables used. Similarly, the range for the Durbin-Watson statistic varies from 1.056 to 1.659.

5. Discussion

The present research aims to explore in a systematic way how processes of exclusion in the workplace and perceptions of injustice in an organization lead to labor alienation in the context of labor dispatch work in China's finance industry. The research is informed by a combination of Conservation of Resources theory and labor alienation theory, including a process of relative deprivation, emotional exhaustion, as well as a moderating role for psychological resilience. The research has implications for theory as well as practice.

From a theoretical perspective, this research contributes to the literature on work alienation by examining its antecedents and mechanisms among labor dispatch workers, who are a growing but understudied at-risk group. To properly grasp the nature of burnout, one must first grasp the depletion of psychological resources within an organization, as indicated by research that found alienation as a final outcome of this process[24]. While previous models indicated factors that contributed to the estrangement of

workers from their work, current research reveals a very different picture in terms of triangular employment relationships. Additionally, emotion regulation processes have been shown to be important antecedents in the alienation process, as a deficiency in emotion regulation skills is linked to increased alienation[25]. From our research, it is evident that within the triangular labor dispatch employment relationship, workers are simultaneously embedded and peripheral, carrying out crucial tasks without being properly acknowledged, a situation that leads to work alienation.

Emphasis on psychological resilience as a major moderator helps to explain individual differences in vulnerability and adaptation. While workplace ostracism and organizational injustice create negative contexts, dispatched workers do not react uniformly. Those high in resilience have a heightened ability to exhibit work engagement and meaningfulness even in the face of relative deprivation and emotional exhaustion. Previous research on the resilience paradox has shown that being exposed to untoward events may actually increase resilience if environmental conditions are favorable[26]. This means that, despite unfavorable conditions in the workplace, resilience may be developed as long as favorable resources are available. The neurobiological bases of resilience include emotion regulation circuits[27], which means that resiliency is carried out at both psychological and biological levels. The dynamic process perspective on resilience focuses on the constant change in individual adaptiveness to a particular stress profile, suggesting that interventions to enhance resilience should be culturally targeted to particular groups[28]. Cross-cultural studies have found differences in strategies to enhance resilience between Eastern and Western cultures. Specifically, it was found that in collectivistic cultures, such as those in East Asia, social support was more important in enhancing resilience, while in individualistic cultures, perceived control was more important. The results of these analyses also suggest that resilience operates as a buffer at different stages of the alienation process, which reinforces the idea that it plays a vital part in ensuring that even vulnerable workers remain psychologically involved with work.

Our research makes a contribution to the justice and ostracism literature by showing that these two constructs affect alienation through two distinct yet related routes. Distributive injustice strongly moderated the effect of relative deprivation due to the comparison process among the dispatchers who compared themselves to other employees. The procedural injustices affected the employees' sense of voice and influence, which led to the perception of being deprived of their rights in decision-making. The interactional injustices exacerbated the feeling of emotional exhaustion, and the immediate psychological effects of feeling disrespected led to alienation from work. The mechanisms demonstrate the intricate nature involved in the intervention strategies for alleviating work alienation. The equitable distribution of outcomes, decision processes, and the cordial treatment of groups in interpersonal relationships are key aspects that need to be considered by organizations. The chain mediation implication suggests that the design should focus on the triggers and emotional exhaustion that are integral to alienation.

These results have important implications for financial institutions and other organizations seeking ways to improve the well-being of dispatchers and reduce alienation at work. Organizations may consider several reforms that have been supported by evidence, such as reducing ostracism at work through positive and inclusive practices, such as planning team-building activities that promote interaction between regular employees and dispatchers, as well as training employees on how to reduce ostracizing behavior that is associated with exclusionary actions. Additionally, addressing issues of multi-dimensional injustice through equal pay policies, encouraging participation in decision-making processes, and training supervisors on how to treat employees with respect is important. Finally, relative deprivation and emotional exhaustion can be addressed through buddy programs and mental health interventions. Policy makers may think about a more effective system of regulation for labor dispatch work that safeguards the psychological well-being of

workers by ensuring their equal participation and making it obligatory to report any case of discrimination. Human resource management may think about implementing measures to build resilience in the context of labor dispatch work by introducing stress management sessions for workers, autonomy in roles for workers, and access to psychology services. The rapid rise of non-standard employment arrangements worldwide, as evidenced in the recent analysis of platform workers and flexible labor arrangements globally[30], underscores the need to examine the alienating effects experienced by non-standard workers. If the factors that lead to alienation are not addressed, millions of precariously positioned workers worldwide are not only at risk of experiencing job dissatisfaction but also existential alienation from work, which has the potential to provide meaning, dignity, and livelihood.

6. Conclusion

This research contributes to the understanding of work alienation experienced by dispatched workers, a population that continues to grow and face disadvantage in modern economies. By utilizing a sample of dispatched workers in the financial industry of Shaanxi Province, China, and a research model that focuses on the impact of ostracism and work-related injustice (distributive, procedural, and interactional injustice) on work alienation through the mediating effects of relative deprivation and emotional exhaustion, the research reveals the ways by which ostracism and work-related injustice impact work alienation through relative deprivation and emotional exhaustion and also points to the buffering effect of psychological resilience on the negative impact of relative deprivation and emotional exhaustion on work alienation.

The research has a number of theoretical implications. The theory of labor alienation is further developed by explaining triangular labor relations and how it leads to worker marginalization in the workplace. The originality of the research is found in extending previous research in organizational justice and contributing to the conservation of resources theory, as well as applying the concept of resilience in a work context. From an applied perspective, the implications of the findings are as follows: First, organizations should deal with workplace ostracism and issues of injustice from a holistic perspective. Second, the government should enhance the rights of dispatch workers. Third, the field of HR should strive to develop programs that help build resilience. Significance of these intervention strategies cannot be overemphasized, especially because millions of workers globally are in precarious positions similar to the dispatchers in the study. Failure to apply these strategies to address the mechanisms of alienation leads to a situation beyond job dissatisfaction; it leads to a general absence of existential connection to a job that should provide meaning, dignity, and sustenance. The information and interpretation of the analysis suggest that the experience of work alienation for dispatchers is neither predetermined nor necessarily a function of individual pathology; instead, it is a systemic process that can be influenced by organizations and policymakers. As economies continue to shift to a more flexible model of work arrangements, it is critical to understand and reduce the experiences of work alienation for non-standard workers.

Conflict of interest

The authors declare no conflicts of interest.

References

1. Marx K. Economic and Philosophic Manuscripts of 1844. Milligan M, translator. New York: International Publishers; 1964. (Original work published 1844)
2. Adams JS. Inequity in social exchange. In: Berkowitz L, editor. Advances in Experimental Social Psychology, Vol 2. New York: Academic Press; 1965. p. 267-299.
3. Crosby F. A model of egoistical relative deprivation. Psychological Review. 1976;83(2):85-113.

4. Maslach C, Jackson SE. The measurement of experienced burnout. Journal of Organizational Behavior. 1981;2(2):99-113.
5. Bies RJ, Moag JF. Interactional justice: Communication criteria of fairness. In: Lewicki RJ, Sheppard BH, Bazerman MH, editors. Research on Negotiations in Organizations, Vol 1. Greenwich: JAI Press; 1986. p. 43-55.
6. Hobfoll SE. Conservation of resources: A new attempt at conceptualizing stress. American Psychologist. 1989;44(3):513-524.
7. Baumeister RF, Leary MR. The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin. 1995;117(3):497-529.
8. Colquitt JA. On the dimensionality of organizational justice: A construct validation of a measure. Journal of Applied Psychology. 2001;86(3):386-400.
9. Vinokurov LV, Kozhina AA. The contribution of individual psychological features to the determination of the phenomenon of work alienation. Behavioral Sciences. 2020;10(3):64.
10. De Jong EM, Ziegler N, Schippers MC. From shattered goals to meaning in life: Life crafting as an intervention to counteract alienation. Frontiers in Psychology. 2022; 13:840312.
11. Lee J. Remote work and the new alienation: Autonomy versus isolation. Work, Employment and Society. 2023;37(2):345-363.
12. Dajani M, Mohamad M. Perceived organizational injustice and counterproductive behavior: The mediating role of work alienation. International Journal of Business and Management. 2017;12(2):170-187.
13. Erkutlu H, Chafra A. The impact of workplace ostracism on employees' job performance and turnover intention: The mediating role of psychological contract breach. European Journal of Management and Business Economics. 2020;29(3):270-289.
14. Endratno H, Adawiyah WR, Purnomo R. Workplace ostracism and employee outcomes: The roles of psychological ownership and organization-based self-esteem. International Journal of Business Studies. 2023;7(1):39-52.
15. Choi JN, Park JY. Workplace ostracism and knowledge hiding: The mediating role of emotional exhaustion and moderating role of psychological capital. Sustainability. 2019;11(18):5114.
16. Wu L, Wei L, Hui C. Dispositional antecedents and consequences of workplace ostracism: An empirical examination. Frontiers of Business Research in China. 2016;5(1):23-44.
17. Zhang Q, Li W, Zhao H. Interactive injustice and workplace isolation: The mediating role of relative deprivation. Frontiers in Psychology. 2021; 12:689234.
18. Huang X, Li Y, Zhang Y. Beyond the workday: The effect of daily customer interpersonal injustice on hotel employee experiences after work and the next day. Tourism Management. 2022; 96:104709.
19. Chou CC, Ramser J. The effects of narcissism on negative unfairness perceptions, self-enhancement motivation, and organizational citizenship behavior: A self-regulation perspective. Journal of Business Ethics. 2022;180(3):823-841.
20. Cropanzano R, Anthony EL, Daniels SR, Hall AT. Social exchange theory: A critical review with theoretical remedies. Academy of Management Annals. 2017;11(1):479-516.
21. Smith HJ, Pettigrew TF. Advances in relative deprivation theory and research. Social Justice Research. 2015;28(1):1-6.
22. Feather NT. Analyzing relative deprivation in relation to deservingness: A fairness-based approach. In: Oleson JC, editor. Moral Psychology: Historical and Contemporary Readings. Chichester: Wiley-Blackwell; 2015. p. 387-408.
23. Li Y, Wang Y, Zhang L. Self-efficacy as a moderator between job stress and emotional exhaustion: A meta-analytic review. Journal of Vocational Behavior. 2020;119:103309.
24. Maslach C, Leiter MP. Understanding the burnout experience: Recent research and its implications for psychiatry. World Psychiatry. 2016;15(2):103-111.
25. Gross JJ. Emotion regulation: Current status and future prospects. Psychological Inquiry. 2022;33(1):1-26.
26. Bonanno GA. The resilience paradox. European Journal of Psychotraumatology. 2021;12(1):1942642.
27. Davidson RJ, McEwen BS. Neurobiological bases of resilience. Nature Neuroscience. 2023;26(4):512-524.
28. Infurna FJ. Resilience as a dynamic concept. Development and Psychopathology. 2023;35(1):44-58.
29. Chen X, Li M, Wang H. Cultural pathways to resilience: A comparative study of Eastern and Western adolescents. Cross-Cultural Research. 2023;57(2):123-145.
30. Eurofound. Digital platform work: Minimising the risks to seize the opportunities. Luxembourg: Publications Office of the European Union; 2023.