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<b>Article:</b>	<b>Sociological Analysis of Distributive Justice Affecting Job Satisfaction among University Teachers</b>
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## ABSTRACT

The aim of this article was to investigate the effects of Distributive Justice on Teaching Faculty Job Satisfaction in higher educational institutions in Khyber Pakhtunkhwa, Pakistan, specifically Bacha Khan University, University of Malakand, and University of Swat. The study was quantitative in nature, and a questionnaire was employed as a data collection tool to gather primary information from a sample size of 217 respondents selected using a proportional allocation approach. The study found a significant ( $P \leq 0.05$ ) relationship between teacher satisfaction and assumptions such as unjust award distribution, teachers not receiving rewards based on performance, and their behaviors being dependent on administrative fairness. Furthermore, unfair reward distribution increases the likelihood of turnover among university teachers. In light of the study's findings, the Government and administration should take proactive measures to provide better working conditions for employees in order to regain their trust. Such measures should include increasing collaboration with teachers, investigating benefits for teachers, fostering stronger relationships in the workplace, and encouraging effective discussion which can enhance and promote an exchange of ideas between administration and faculty.

**Keywords:** Effects of Distributive Justice, Teaching Faculty, Job Satisfaction, Higher educational institutions, Fostering stronger relationships

## **Introduction**

Distributive justice is fairness of distribution of rewards and resources within an organization. It is an award given to an employee by an organization on the premise of equity and employee's impression of the fairness of the outcomes received (Lambert et al., 2020; Addae and Boso, 2020). However, perceptions of fairness about processes considered within allocation choices are measured in the scope of procedural justice (Ali et al., 2020). Organizational fairness refers to the distribution of opportunities and resources, such as wages. Distributive justice exists when one's expectations match the outcomes received. People in the workplace often apply the equity principle, which states that they appraise outcomes based on their inputs such as effort, experience, and aptitude (Nuzula and Nurmaya, 2020). Organizations can only generate distributive justice if the allocation of benefits and remuneration matches different levels of employee input.

In this instance, justice creates perceived fairness methods, outcomes, or bonuses that individuals receive in exchange for interpersonal relationships within an organisation (Lee, 2021). By determining whether the results satisfy their expectations, are in proportion to the effort they put in, or are comparable to those of their peers, employees can determine whether there is justice in the situation (Colquitt, Scott, and Judge, 2006). If an employee receives fewer financial benefits than someone who works just as hard as they do, they may view a bonus or pay increase as unfair. Everyone may not be able to acquire what they want if something is scarce, and employees may feel injustice if they are unable to prevent a bad situation from occurring. People judge how well a system works by comparing the results to a set of rules or standards and/or to the rewards given by a referent, such as a colleague or a past experience (Hubbel and Chory-assad, 2005).

Distributive justice is the oldest form of justice whose conceptualization is based on Adam's equity theory. It is defined as the perceived fairness and evaluation of decisional outcomes like pay, recognition, performance appraisal, and rewards (Byrne and Cropanzano, 2001). Distributive justice is promoted only if the outcomes are consistent with implicit norms for the allocation, such as equality and equity. Injustice resulting from unfair distribution of workload and pay raises constitutes harm or loss (Jayus, 2021). Hence, to the degree distributive injustices may cause harm, losses, and victims to doubt their ability to deal with them adequately, they will consider distributive injustices as "stressors" and, in turn, psychological distress will arise among them.

The promotion and sovereignty of ethical and fair implementations and proceedings within an organization constitutes organizational justice (Iskan and Naktiyok, 2004). Employees within an organization expect an equal application of regulations to all teachers, payment of an equivalent amount to equal inputs, and equal outcomes from social possibilities and fees. However, employees not only place outcomes and their comparison but also the rules within the organization. These rules and the interaction among individuals are also considered part of the focus of justice perception (Bakoti and Bulog, 2021).

Distributive justice can be observed as the honest share of outcomes within an organization (Lambert et al., 2007). It is related to the fidelity and honesty shown during the distribution of organizational assets. It focuses on performance evaluation, wage increases, punishments, and promotions (Tutar, 2007). Generally, it compares outcomes given by an organization to employees with their responsibilities, contributions and efforts related to work, and employee level of expertise (Moorman, 1991). Employees might perceive outcomes as fair or unfair (bonus, income, promotion, etc.). They draw a comparison between what others gave and what they received. An unfair distribution of work rewards will create tension among the employees because satisfaction is a function of outcomes and rewards. Accordingly, they will perceive the injustice done to them. This may affect their behaviors and attitudes towards administration and organization. In conclusion, distributive justice is employees' belief with regard to the fairness of shared organizational resources (Ozdevecioglu, 2003; Barsky and Kaplan, 2007).

### **Theoretical framework**

The most important and relevant theory relating to the topic is that of George Homans. According to the theory, people compare their outcomes with those associated with their contributions. People will try to do more work and exertion if they were rewarded for it in the past. It means that sanctions for something in the past motivate or de-motivate people (Ritzer, 2010). The core principle of this theory is that the relationship between social entities is the degree to which each of these two social entities agrees to exchange implicit norms and respect social rules. Examples of these attributes define the quality of relationships such as loyalty, trust, and commitment. These attributes depend upon factors such as status, goods, love, money, and services that are invested by employees in social relationships. This theory claims that people are generally connected by networks made of ties whose strength influences their intention to leave or keep their jobs. Therefore, in the perspective of this theory, turnover intention is the result of the disrespect of implicitly or explicitly agreed rules by colleagues or by administration. It means that if there might be a breach of prior agreements, employees may voluntarily quit the organization (Pauline and Ngo-Henha, 2017).

### **Objectives of the study**

1. To explore faculty's level satisfaction from their jobs
2. To measure the association between distributive justice system and faculty's job satisfaction.
3. To suggest policy recommendations.

### **Methods and procedures**

The present study was carried out in higher educational institutions of Khyber Pakhtunkhwa, Pakistan i.e. Bacha Khan University, University of Malakand and University of Swat. The nature of the study was quantitative and questionnaire was used as a tool of data collection for collecting information from the sample size of 217 respondents selected through proportional allocation method. A conceptual framework consists of independent variable i.e. distributive aspect of justice and a dependent variable i.e. job satisfaction was cross tabulated

through the application of Chi Square test statistics to ascertain association between the dependent and independent variables.

## Results and Discussion

**Table-1 Association of Distributive Aspect Justice and Job Satisfaction**

Assessing distributive justice	Responses	Job satisfaction			Total	Statistics
		Yes	No	Uncertain		
Distributive justice is associated with employees commitment to organization	Yes	72	0	0	72	$\chi^2 = 299.941$ $P = .000$
	No	49	88	0	137	
	Uncertain	0	0	8	8	
Care about economic outcomes	Yes	110	0	0	110	$\chi^2 = 366.104$ $P = .000$
	No	11	87	0	98	
	Uncertain	0	1	8	9	
Outcomes reflect the efforts of teachers	Yes	121	56	0	177	$\chi^2 = 270.944$ $P = .000$
	No	0	32	0	32	
	Uncertain	0	0	8	8	
Satisfaction with the outcomes	Yes	121	21	0	142	$\chi^2 = 272.814$
	No	0	67	3	70	

	Uncertain	0	0	5	5	P= .000
Enough rewards as they deserve	Yes	12	0	0	121	$\chi^2 = 376.133$ P= .000
	No	0	88	2	90	
	Uncertain	0	0	6	6	
Rewards as per their performance	Yes	35	0	0	35	$\chi^2 = 174.096$ P=.000
	No	86	84	0	170	
	Uncertain	0	4	8	12	
Fair distribution of rewards	Yes	65	0	0	65	$\chi^2 = 175.330$ P= .000
	No	56	80	0	136	
	Uncertain	0	8	8	16	
Fair responsibilities	Yes	121	43	0	164	$\chi^2 = 242.208$ P= .000
	No	0	45	2	47	
	Uncertain	0	0	6	6	
Chance of promotion	Yes	121	15	0	0	$\chi^2 = 350.854$ P= .000
	No	0	72	0	72	

	Uncertain	0	1	8	9	
Teachers' behaviour dependent upon administrators' fairness	Yes	32	0	0	32	$\chi^2 = 100.512$ $P = .000$
	No	89	52	0	141	
	Uncertain	0	36	8	44	
Equal distribution of rewards as a source of motivation	Yes	121	16	0	137	$\chi^2 = 282.761$ $P = .000$
	No	0	67	0	67	
	Uncertain	0	5	8	13	
Unequal distribution of rewards leads towards turnover intention	Yes	32	0	0	32	$\chi^2 = 245.532$ $P = .000$
	No	89	88	0	177	
	Uncertain	0	0	8	8	

### Association between distributive justice and job satisfaction of Respondents

The above table reveals an association between two variables, i.e., the dependent variable "job satisfaction" and the independent variable "distributive aspect of justice". The results show that a highly significant association ( $P = .000$ ) has been found between teachers' commitment to organization and teaching faculty job satisfaction. These results indicated a highly significant association between the statement and job satisfaction. It might be the reason that economic outcomes can determine teachers' social status and class in society. It could also be the reason that the more they get economic outcomes, the more they get life facilities. Distributive justice is an individual judgment of fairly distributed outcomes (Leventhal, 1980).

In this regard, Clay (2005) stated that this perception of fairness was closely associated with teachers' attitudes, such as their commitment to the organization and pay satisfaction.

Furthermore, a significant relationship ( $P = .000$ ) has been found between concern for economic outcomes and job satisfaction. These results revealed a highly significant association between the statement and job satisfaction. In fact, money can make life easier and more comfortable, and it might be the reason that teachers always care about their economic outcomes. It could also be the reason that teachers have only one source of income, which is their salary, and that is the reason they care about their economic outcomes. For example, money can buy health care, educational opportunities, social status, and a comfortable retirement. The same conclusion was made by Colon (1993) that it makes good sense that teachers care about economic outcomes. Employees were found to be extremely concerned about their economic outcomes when considering their future benefits.

In addition, a significant relationship ( $P = .000$ ) was found between teacher effort outcomes and job satisfaction. These results indicated a highly significant association between the statement and job satisfaction. When an employee works hard and honestly, he/she expects to receive the same rewards that reflect the input he/she put into the work. It might be the reason that there are clear and unbiased policies to determine the economic outcomes of teachers according to the effort they are putting into the work. In this regard, Adams (1960), in his equity theory, stated that employees always try to maintain a balance between their input and what they receive from that organization. These outcomes may be job security, salary, and employee benefits.

Moreover, a significant association ( $P = .001$ ) has been found between satisfaction with the outcomes and the teaching faculty's job satisfaction. These results indicated a highly significant association between the statement and job satisfaction. If the employees were satisfied with the outcome of the work they had completed, their job satisfaction would increase. It might be the reason that teachers are getting paid according to the scale and pay policy of the higher education commission. In the same way, Nabtchi (2007) stated that employees want to get rewards and benefits according to their contribution and want a balance between their inputs and outputs. They will be satisfied with their jobs, and job satisfaction will increase if they are satisfied with the outcomes.

Similarly, a significant association ( $P = .000$ ) has been found between whether teachers get enough rewards as they deserve and the teaching faculty's job satisfaction. These results revealed a highly significant association between the statement and job satisfaction. It means that teachers are getting the rewards they deserve, and it might be the reason they are satisfied with the outcomes. It could also be the reason that enough economic outcomes are distributed among teachers. Similarly, Luthans (2005) stated that distributive justice is a perception of fairness that one should get enough reward as he/she deserves. These outcomes include promotion, salary, incentives, and salary raises (Robbins, 2005).



Furthermore, a significant association ( $P = .000$ ) has been observed between rewards as per performance and teaching faculty's job satisfaction. These results indicated a highly significant association between the statement and job satisfaction. Some employees work hard and honestly as compared to others, and that's the reason they expect and deserve more honor and rewards. It might be the reason that there is no policy to determine rewards according to the performance of teachers. It could also be the reason that rewards are distributed among teachers according to their BPS and not per their performance. From the study, it can be deduced that no rewards are awarded to teachers according to their performance. In this regard, Peter (1992) concluded that good performance should be rewarded and bad performance should not be tolerated. He further explained that then we could get higher productivity.

Likewise, a highly significant ( $P = .000$ ) relationship has been discovered between the equitable distribution of rewards among faculty members and job satisfaction. These results revealed a highly significant association between the statement and job satisfaction. It might be the reason that rewards are distributed according to government rules fairly among teachers, or it could also be the reason that administrators are quite honest in the distribution of rewards fairly among faculty members. Generally, people follow the equity principle in the workplace, and they gauge whether rewards are proportional to their contribution or whether they meet the expectations (Colquitt, Scott, and Judge, 2006). Hubbel and Chory (2005) explain that employees will consider a bonus or pay raise as unfair and job dissatisfaction will increase if they get fewer economic outcomes than another employee who worked the same as him/her.

In addition, a highly significant ( $P = .000$ ) relationship has been discovered between fair job responsibilities and job satisfaction. These results indicated a highly significant association between the statement and job satisfaction. Employees' job responsibilities should be fair; otherwise, they will fail to fulfill their responsibilities and will be discouraged and embarrassed among their coworkers. It might be the reason that teachers need some time for rest during classes, and that is why their work schedule has been set fairly by the administrators. It could also be the reason that they merely teach and they are not given extra responsibilities. In this regard, Moorman (1991) stated that employees were found caring about their job responsibilities, efforts, level of expertise, and other roles related to work within an organization. Employees who were given extra job responsibilities almost failed to fulfill them.

Similarly, a highly significant ( $P .000$ ) relationship has been discovered between job satisfaction and job satisfaction with chances of promotion. These results revealed a highly significant association between the statement and job satisfaction. When employees join an organization, their next goal is to get a promotion. The chances of promotion are closely associated with job satisfaction. It might be the reason that universities have specific rules for teachers' promotion according to their overall job experience and qualifications. For example, a highly qualified person can easily get a promotion as compared to those who have not completed a doctorate degree yet. In the same way, Konovsky and Cropanzano (1991) stated that when employees observe that their chances of promotion are not based on performance rating or on justice practices but on biased and political motives, their job satisfaction decreases and they become de-motivated.

Furthermore, a significant association ( $P = .000$ ) has been observed between teachers' behavior towards duties and students dependent upon the administrator's fairness and the teaching faculty's job satisfaction. These results revealed a highly significant association between the statement and job satisfaction. The behavior of a teacher is the result of fairness in the workplace, and it might be the reason that if an administrator is honest and fair to their subordinates, teachers will have positive attitudes and behavior towards their students and duties. It could also be the reason that a teacher's behavior towards duties and students is a response to the administrator's fairness. In this regard, Roch and Shanock (2006) stated that organizational justice is concerned with how employees react to fairness in the workplace. Organizational behaviors and attitudes can be directly linked with an employee's perception of fairness.

Likewise, a significant relationship ( $P = .000$ ) was found between the equal distribution of rewards as a source of motivation and the teaching faculty's job satisfaction. These results revealed a highly significant association between the statement and job satisfaction. When an employee is rewarded for a good performance, he/she will definitely be motivated to work harder. It might be the reason that equal distribution of rewards can increase job satisfaction. It could also be the reason that teachers who are rewarded equally will try to perform their duties more honestly next time. In this regard, Nadler and Lawler (2007) concluded that equal distribution of rewards is observed as a source of motivation for employees when they observe the outcomes to be linked with their level of effort.

Moreover, a highly significant association ( $P = .000$ ) was observed between unequal distribution of rewards and the teaching faculty's job satisfaction. These results revealed a highly significant association between the statement and job satisfaction. Employees will definitely think about quitting the organization, and turnover intention will increase if they observe the unequal distribution of rewards. It might be the reason that, in an unequal distribution of rewards, teachers might not be able to fulfill their daily life necessities. It could also be the reason that teachers may feel shame and embracement when their colleagues of the same scale and performing the same duties get more rewards as compared to them. In the same way, Cropanzano and Greenberg (1997) concluded that unjust processes and unequal distribution of rewards lead toward turnover intention among employees within an organization. High turnover intentions were observed among employees when they found that the organization distributed rewards unfairly and unequally among them.

## **Conclusion and Recommendations**

The present study concluded that teachers' commitment to the organization was based on the fairness of equal distribution of rewards. Most teachers care about their economic outcomes. Further, the outcomes reflect the efforts they have put into work as they demand enough rewards as per their performance. In addition, a teacher's behavior towards duties and students is dependent upon the administrator's fairness. Likewise, they perceive equal distribution of rewards as a source of motivation and unequal distribution of rewards leads to turnover intention among university teachers. The government and administration should

establish their trust by expanding cooperation towards employees, strengthening employee relationships with each other, and should encourage open communication forums that stimulate exchanges between employees, were some of the recommendations that were presented in light of the study.

## References

- Addae, H. M., & Boso, N. (2020). Job satisfaction, distributive justice, perceived absence legitimacy and the role of turnover intentions: an exploratory study in Ghana. *International Journal of Organizational Analysis*.
- Ali, L., Jameel, A. S., & Rahman, A. (2020). The effect of organizational justice on job satisfaction among secondary school teachers. *International Journal of Psychosocial Rehabilitation*, 24(3), 1302-1310.
- Bakotić, D., & Bulog, I. (2021). Organizational Justice and Leadership Behavior Orientation as Predictors of Employees Job Satisfaction: Evidence from Croatia. *Sustainability*, 13(19), 10569.
- Barling, J. and Phillips, M. (1993). Interactional, Formal, and Distributive Justice in the Workplace: An Exploratory Study. *The Journal of Psychology*, 127(6), 649-656.
- Byrne, Z.S., and Cropanzano, R. (2001). The History of Organizational Justice: The founders speak. In Cropanzano R (Ed.), *Justice in the Workplace: From Theory to Practice*, 2, 3-26. Lawrence Erlbaum Associates. Mahwah, New Jersey.
- Clay-Warner, J., Reynolds, J., & Roman, P. (2005). Organizational justice and job satisfaction: A test of three competing models. *Social Justice Research*, 18(4), 391-409.
- Colquitt, J. A., Scott, B. A., Judge, T. A., Shaw, J. C. (2006). Justice and personality: Using integrative theories to derive moderators of justice effects. *Organizational Behavior and Human Decision Process*. 100(1), 110-127. ISSN 0749-5978.
- Cropanzano, R., and Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. *International Review of Industrial and Organizational Psychology* 12, pp317-372.
- Folger, R., and Konovsky, M. A.(1989). Effects of Procedural and Distributive Justice on Reactions to Pay Raise Decisions. *Academy of Management Journal*. Vol. 32, Iss. 1, pp. 115-130. ISSN 0001-4273.
- Greenberg, J. (1990). Organizational Justice: Yesterday, Today, and Tomorrow. *Journal of Management*, 16, 399-432.
- Hubbel, A. P., Chory-assad, R. M.(2005). Motivating Factors: Perceptions of Justice and Their Relationship with Managerial and Organizational Trust. *Communication Studies*., Vol. 56, Iss. 1, pp. 47-70. ISSN 1051-0974.
- Hubbel, A. P., Chory-assad, R. M.(2005). Motivating Factors: Perceptions of Justice and Their Relationship with Managerial and Organizational Trust. *Communication Studies*., Vol. 56, Iss. 1, pp. 47-70. ISSN 1051-0974.
- İscan, Ö.F., and Naktiyok A. (2004). Çalışanların Örgütsel Bağdaşımalarının Belirleyicileri

- Jayus, J. A. (2021). The Effect of Distributive Justice, Procedural Justice and Interactional Justice on Teacher Engagement and Teachers Performance. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(7), 131-139.
- Konovsky, M.A., and Cropanzano, R. (1991), "Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance". *Journal of Applied Psychology*, 76, 698-707.
- Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2007). The impact of distributive and procedural justice on correctional staff job stress, job satisfaction, and organizational commitment. *Journal of Criminal Justice*, 35, 644-656.
- Lambert, E. G., Keena, L. D., Leone, M., May, D., & Haynes, S. H. (2020). The effects of distributive and procedural justice on job satisfaction and organizational commitment of correctional staff. *The Social Science Journal*, 57(4), 405-416.
- Lazarus, R.S., and Launier, R. (1978). Stress-Related Transactions between Person and Environment. In: Pervin, L.A. and Lewis, M., Eds., *Perspectives in Interactional Psychology*, Plenum, New York, 287-327.
- Lee, B. R. (2021). The effect of the distributive justice on the job satisfaction of social workers in rehabilitation facilities: the mediating effect of empowerment. *Journal of Digital Convergence*, 19(9), 343-348.
- Leventhal, G.S. (1980). What Should Be Done with Equity Theory? In: Gergen, K.J., Greenberg, M.S. and Willis, R.H., Eds., *Social Exchanges: Advances in Theory and Research*, Plenum, New York, 27-55.
- Luthans F. (2005). Cognitive Process of Organizational Behaviour. *Organizational Behaviour*. Singapore: McGraw-Hill.
- Moorman, R.H. (1991). Relationship between Organizational Justice and Organizational Citizenship Behaviors: Do Fairness Perceptions Influence Employee Citizenship? *Journal of Applied Psychology*, 76, 845-855.
- Nabtchi, T., Bingham, L. B, Good, D. H. (2007). Organizational justice and workplace mediation: a six-factor model. *International Journal of Conflict Management*. Vol. 18, Iss. 2, pp. 148-174. ISSN 1044-4068.
- Nadler, D.A., and Lawler, E.E. (2007). "Motivation: a diagnostic approach", in Osland, J.S., Turner, M.E., Kolb, D.A. and Rubin, I.M. (Eds), *The Organizational Behavior Reader*, 8th ed., Pearson Prentice Hall, Upper Saddle River, NJ, pp. 171-80.
- Nuzula, I. F., & Nurmaya, E. (2020). The influence of distributive justice, job satisfaction and affective commitment to organizational citizenship behavior. *Revista Produção e Desenvolvimento*, 6.
- Özdevecioğlu, M. (2003). Algılanan Örgütsel Adaletin Bireylerarası Saldırgan Davranışlar Robbins S. (2005). What is Organizational Behaviour. In Michael Albassmeir, Jeff Shelstad, Mellisa Yu (Eds.) *Organizational Behaviour*. San Diego: Pearson Prentice Hall.

- Roch, S.G., and Shanock, L.R. (2006). Organizational justice in an exchange framework: Clarifying organizational justice distinctions. *Journal of Management* 32(2), pp299-322.
- Scandura, T.A. (1999). Rethinking Leader-Member Exchange: An Organizational Justice Perspective. *Leadership Quarterly*, 10(1), 25-40.
- Tutar, H. (2007). Erzurum’da Devlet ve Özel Hastanelerde Çalışan Sağlık Personelinin İşlem Üzerindeki Etkilerinin Belirlenmesine Yönelik Bir Araştırma. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 21, 77-96.