ENVY AND COUNTERPRODUCTIVE WORK BEHAVIORS: IS MORE FAIRNESS ALWAYS PREFERRED?

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Abstract

The authors examined how the interaction between perceived justice facets (distributive & procedural justice) and envy predicts two forms of counterproductive work behaviors (abuse against others & withdrawal behavior). The objective of the study was threefold (a) to use one of the discrete emotions (envy), instead of general negative affect, as predictor of counterproductive work behaviors, (b) to see moderating effect of justice dimensions on relationship between envy and counterproductive work behaviors, and (c) to test the attribution model of fairness in the context of envy. The study was conducted on employees of different telecommunication companies in Pakistan. Envy, organizational justice perceptions and counterproductive work behaviors were measured through self-reports after 15 days, the individuals (N=145) received their annual salary raise. The predictions were made on the basis of attribution model of fairness. The results showed that envy was a significant predictor of counterproductive work behaviors (abuse against others & withdrawal behavior). The relationship between envy and abusive behavior against other was more pronounced when perceptions of distributive justice were high. Similarly, the relationship between envy and withdrawal behavior was strong in case of high levels of procedural justice perceptions.

Keywords: envy, distributive justice, procedural justice, counterproductive work behaviors, attribution model of fairness.

Introduction

In recent years, there has been a growing interest in the study of counterproductive work behaviors. These behaviors are a set of distinct acts which share two common characteristics (a) they are volitional and (b) purpose of these acts is to harm or intend to harm organizations and/or organization stakeholders, such as clients, coworkers, customers, and supervisors (Spector & Fox, 2005). Since the last decade, various researchers studied the antecedents of counterproductive work behaviors and acknowledged that perceived injustice and emotions play a pivotal role in the occurrence of these behaviors (Barclay, Skarlicki, & Pugh, 2005; Folger & Skarlicki, 1997; Krehbiel & Cropanzano, 2000). Although these studies have examined emotions like anger, guilt, shame, happiness, and pride, the role of episodic envy (termed as envy here) in the context of counterproductive work behavior have been largely underresearched.

Our goal in the present study was to contribute to the body of knowledge on counterproductive work behaviors, envy, and organizational justice in at least three ways by addressing few of the missing pieces.

First, although previous studies have examined the effect of negative emotions on counterproductive work behavior (CDC, 1993; National Victim Center, 1994; O'Boyle, 1992; Fox, Spector & Miles, 2001; Hinduja, 2007), most of these studies have operationalized negative emotions as a general negative affect and only few focused on discrete emotions. It has already been suggested (Lazarus & Cohen-Charash, 2001) that instead of focusing on general affect, the role of discrete emotions should be examined due to their unique relational themes, antecedents, and outcomes. Likewise, Weiss, Suckow and Cropanzano (1999) have cautioned that ignoring discrete emotions in favor of general positive and negative affect can limit our ability to predict specific behaviors. Similarly, Lee and Allen (2002) have emphasized on the importance of study of negative discrete emotions by proposing ".... further investigation of negative discrete emotions may turn out to be more fruitful than investigation of positive discrete emotions." Following the recommendations discussed above, we stepped out of the concept of general affect and used one of the discrete emotions, envy, as an antecedent of counterproductive work behavior.

Second, there has been a dearth of research examining the moderating effect of perceived justice facets on relationship between discrete emotions and counterproductive work behavior. The studies have shown perceived justice either as a predictor of affect or affect as a predictor of justice perceptions (For review see Cohen-Charash & Byrne, 2008). Although recent research by Cohen-Charash and Mueller (2008) did examine the interaction effect of justice perceptions on relationship between envy and interpersonal counterproductive work behavior, we extended the work of Cohen-Charash and Mueller (2008) by examining the interaction effects among two facets of organizational justice and envy on two dimensions of counterproductive work behavior i.e. Abuse against others and withdrawal behavior

Third, previous studies, examining organizational justice and envy, have not differentiated among various organizational justice dimensions; instead the main focus had been on global justice construct (Cohen-Charash & Mueller, 2007, Smith, Parrott, Ozer & Moniz, 1994). The justice literature suggested that each of the organizational justice facets predicted specific outcomes like procedural justice predicted system–referenced outcomes (e.g. organizational commitment), distributive justice predicted personal level evaluations (e.g., pay satisfaction), interpersonal justice predicted agent-referenced outcomes, and informational justice was the strongest predictor of both agent referenced and system-referenced evaluation of authority (Colquitt, 2001; Colquitt et al., 2001; Sweeney & McFarlin, 1993). As each of the justice dimensions explained differential effects, it would be injustice with organizational justice to

include global justice construct in research studies. We, therefore, included two justice dimensions for the current study.

The choice of studying two facets of organizational justice (procedural & distributive) is based on high power distance and status centered cultural norms of Pakistan. According to Beugré (2007), in status centered cultures, the relationships between employees and managers may take paternalistic form and deference to authority may be considered as a normal way of dealing with supervisors. Previous research on impact of power distance has also provided evidence that people belonging to such cultures tend to tolerate injustices emanating from authority figures. Morris and Leung (2000) stated that "...in high power distance cultures, people's acceptance of unequal social prerogatives promotes the tolerance of unfair treatment whereas in low power distance societies, rejection of inequality makes people less tolerant of unfair treatment" (p.117). To further probe the arguments of Beugré (2007) in field setting of Pakistani telecommunication organizations, we conducted 10 interviews with managers and employees and assessed their concerns regarding distributive, procedural and interactional justice. Based on the analysis of these interviews, we concluded that a typical Pakistani employee was more concerned with distributive and procedural justice aspects while interactional justice was not considered important. We, therefore, included procedural and distributive justice dimensions in our analysis.

Envy and counterproductive work behaviors

Many negative discrete emotional states like envy, anger, sadness, guilt, and fear, which may influence our attitudes and behaviors at work. We chose envy, as predictor of counterproductive work behavior, due to two reasons. First, given the inherent competitiveness of great deal of organizational life, the experience of envy and jealousy by employees prevail as one of the most common emotional experiences. In a confidential survey of the frequency of the experience of employee jealousy and envy, Miner (1990) found that 77% of a sample of 278 employees had observed an instance of envy/jealousy during the prior month. Second, we have built our theoretical framework on attribution model of fairness. In view of our research objectives, we chose one of the self threatening interpersonal emotions that is related to attributions (Tangney & Salovey, 1999) and counterproductive work behaviors. Guilt, shame, and envy were explicitly mentioned in literature as self threatening interpersonal emotions. Although guilt and shame are considered to be related to attributions (Barclay et al., 2005), they are unrelated to counterproductive work behaviors (Wallington, 1973). Whereas envy, being related to both attributions and counterproductive work behavior (Cohen-Charash & Mueller, 2007), is best suited for current study.

Envy occurs "when a person lacks another's superior quality, achievement or possession and either desires it or wishes that the other lacked it" (Parrot & Smith, 1993, p. 906). Envy is experienced as a result of negative social comparison between X and Y, and social comparison occurs when a person X notices that a similar other person Y has something (S) superior than X has, and X also desires to have S which is in the domain of X's self-concept. According to self-evaluation maintenance model (Tesser, Millar, & Moore, 1988), persons behave in a manner that maintains or enhances their self evaluation which considerably depends on one's relationship with others. Self-evaluation maintenance model is composed of two processes: reflection and comparison. Both of these processes are further affected by closeness of other, quality, and relevance of other's performance. If closeness of other, along

with quality and relevance of performance are high, one can gain in self evaluation through the reflection processes. Comparison processes, on the other hand, adversely effect the self evaluation by looking bad one's own performance. Enhancements to self-evaluations result in positive affect or mood where as threats to self-evaluations result in negative affect or mood (Tesser, 1991). Hence, comparison process leads to envy which plays a causal role in unfolding of subsequent behavior.

Tesser's (1988) self-evaluation maintenance model can also be used to explain the link between envy and counterproductive work behavior. According to this model, a change in external circumstances triggers self-evaluation maintenance model processes which result in arousal. This increased arousal leads to a cognitive search (Berscheid, 1983; Mandler, 1975) which subsequently results in behavior intended to eliminate or reduce the potential pain of comparison.

The stressor-emotion model of counterproductive work behavior (Spector & Fox, 2005), which is based on integrating human aggression and occupational stress, suggests that counterproductive work behavior is a response to emotion-arousing situations in organizations. Studies have shown that counterproductive work behavior was related to general measures of negative affect (Fox, Spector & Miles, 2001; Miles, Borman, Spector & Fox, 2002). The stressor-emotion model also stated that it is not only the anger that is associated with counterproductive work behavior but many forms of negative emotions played a causal role in unfolding of these behaviors.

Spector, Fox, Penney, Brurrsema, Goh and Kessler (2006) proposed five dimensions of counterproductive work behaviors (a) *abuse against others* include behaviors directed towards coworkers and others with a motive to harm them physically and psychologically through threats, nasty comments, making fun, and undermining one's performance, (b) *production deviance* is the purposeful failure to perform job tasks, the way they are required to be performed, (c) *sabotage* is the purposeful damage to or defacing the company property or equipment (d) *theft* is the stealing from organization or others. It includes acts like taking something home belonging to employer or employees etc without permission, and (e) *withdrawal behavior* consists of acts like coming late on job, absenteeism, leaving early from job, taking longer breaks than authorized etc. Spector et al. (2006) further categorized these five dimensions on basis of behaviors directed toward people (Abuse against others) and behaviors directed toward organizations (Production deviance, sabotage, theft and withdrawal). Current study focused on two dimensions of counterproductive work behaviors i.e., abuse against others and withdrawal behavior. The importance of these two dimensions in the context of envy is articulated in coming lines.

Engaging in counterproductive work behaviors can be seen as an emotion regulation technique (Penney & Spector, 2008). Emotion regulation focuses on how behavior can be directed towards altering one's emotional experiences. Employees distract themselves from negative emotional feelings of envy by indulging in some other tasks where they feel pleasure. Withdrawal is often a coping strategy for dealing with envy (Duffy & Shaw, 2000). For example, in order to reduce the inferior emotional feelings, an envious employee may decide to concentrate on less emotion provoking stimuli by indulging in some forms of withdrawal acts like smoking in office during working hours, taking alcohol, taking longer breaks than required etc. Alternatively, an envious employee may opt for some other acts falling under the purview of "abuse against others" dimension of counterproductive work behaviors, like verbally abusing envious other, making indecent gestures towards envious other etc. Also, according to Vecchio's (1995) work adapted model, the potential reactions to envy and jealousy may include sabotaging the rival's work, back-stabbing a competitor,

harassment or ostracism of the rival. In the same way, an envious person may reduce the envy-provoking advantage by harming the envied person, thereby helping to equate the lots of the person experiencing envy and the envied person (Heider, 1958; Silver & Sabini, 1978). Hence on the basis of aforementioned theoretical arguments and some empirical supports, we can hypothesize:

H1: There is a positive relationship between envy and "Abuse against other" behavior.

H2: There is a positive relationship between envy and withdrawal behavior.

Perceived organizational justice and envy

Research has identified four dimensions of organizational justice (Colquitt, 2001) namely distributive justice (perceived fairness in allocation of outcomes), procedural justice (perceived fairness of processes which lead to outcomes), interpersonal justice (perceived fairness of interpersonal treatment), and informational justice (provision of adequate information and justifications regarding procedures and decisions). Several studies have included the four dimensional justice typology (Ambrose, Hess, & Ganesan, 2007; Cheung & Law, 2008; Judge & Colquitt, 2004; Kernan, & Hanges, 2002) and found consistent support for four factor model.

Although, previous studies have examined the relationship between envy and objective injustice beliefs (Cohen-Charash & Mueller, 2007, Smith et al., 1994), they did not differentiate between different justice dimensions. However, some studies did examine the relationship between envy and outcomes like promotion (Schaubroeck & Lam, 2004) or grades (Lieblich, 1971). Similarly, theoretical works on envy have not taken into consideration multi-foci model of organizational justice. Rather, envy theories are based on relative deprivation (Ben-Ze'ev, 1992) and inferior position in social comparisons (Ben-Ze'ev, 1992; Smith et al., 1884). Some argued that injustice is not necessary for the elicitation of envy (Ben-Ze'ev, 1992; Feather & Sherman, 2002) rather it is one's inferior position as compared to someone else which leads to envious feelings.

In organizational life, it is easy to imagine frequent events which give rise to social comparisons subsequently leading to envy. Salary increments, bonuses, promotions, allocation of scarce organizational resources and rewards etc. are all potential candidates for social comparisons among colleagues. In all these events, perceptions of organizational justice sometimes become envy-provoking disadvantage experienced by a person. For example, if a person X gets very good salary increment which indeed he deserves and decision is also made on fair procedures, then it is obvious for a person Y (with no salary increment) to feel envy, when he/she compares him/herself with X, although things have been decided fairly. So fairness can act as a stimulus for envy-provoking disadvantage. This reasoning is in line with the Cinderella myth which suggests that a person who is simply striving to meet personal standards may arouse the resentment of others merely for the fact alone (Ulanov & Ulanov, 1983).

Moderating role of perceived distributive and procedural justice dimensions

A number of scholars (Greenberg, 1990; Skarlicki & Folger, 1997) have argued that if organizational decisions and actions are deemed unfair, the employees experience feelings of outrage and resentment. Greenberg (1993) has shown employee theft as a reaction to underpaid equity. Some of the other negative reactions to perceived unfairness include

retaliation (Skarlicki & Folger, 1997), revenge (Bies & Trip, 2001), counterproductive work behaviors (Fox et al., 2001) and sabotage (Ambrose, Seabright & Schminke, 2002). Likewise, a quite large number of studies have seen the interplay between perceived (in)justice and different types of emotions like anger, guilt, shame, sadness and envy etc. (For review see Cohen-Charash & Byrne, 2008). Envy like guilt and shame is considered to be a self threatening interpersonal emotion (Tangney & Salovey, 1999), and theoretically these types of emotions are related to attributions (Barclay et al., 2005). Relationship between envy, counterproductive work behavior and organizational justice can be explained on the basis of attribution model of fairness.

According to attribution research, individuals make use of information in social environment to attribute causal explanations for events. Generally people tend to make self serving attributions. When another person has erred, we will often use internal attribution, saying it is due to internal personality factors or due to negligence on the part of that person. When we have erred, we will more likely to use external attribution, attributing causes to situational factors rather than blaming ourselves and vice versa. We will attribute our successes internally i.e. to our own efforts or abilities. And the success of our rivals is attributed to external 'luck'. Research has also shown that successful events are internalized; thus undue credit is taken, whereas unsuccessful events are externalized; thus responsibility for failure is not accepted (Bradley, 1978; Miller & Rose, 1975; Snyder, Stephan, & Rosenfield, 1978). The basic motive behind self serving attributions is to enhance one's self evaluation and self-esteem (Snyder et al., 1978).

Applying attribution theory to the context of envy suggests that envious person feels discontented when he thinks about the desired advantage or superiority enjoyed by the other. He (envious person) has to cope with an inferiority complex, lowered self-worth and lowered self esteem (Salovey, 1991). These inferior feelings can initiate the search for attributions for one's less advantageous position. The facets of organizational justice (distributive, interactional and procedural) can carry the attribution information, which can be used in the cognitive appraisal process (Barclay et al., 2005, De Cremer, 2002). Low perceptions of procedural and distributive justice allow individuals to externalize blame for their inferior position; hence perceiving that the envied person's advantage is unfair and situation would have been different if fair justice norms could be implemented. These arguments are also consistent with fairness theory (Folger & Cropanzano, 1998, 2001) which holds that regardless of the type of violation that occurs individuals try to make sense of it and they are likely to imagine that how the situation would, could, or should have been different. This shift of responsibility for one's inferior position from person's own abilities/performance to facets of justice prevents damage to a person's sense of self (Brockner, 2002; Brockner at al., 2003) and enables one to maintain his positive self-evaluation and self-esteem.

On the other side, high levels of perceived procedural and distributive justice can reduce the ability of envious person for attributing the blame to external sources like justice conditions. The reduced ability of envious person for externalizing the blame results in internalization of blame where one considers his/her performance responsible for the desired advantage or superiority enjoyed by the envied other. One may argue here that justice may not be the only cause for externalizing the blame of inferior feelings but this can be explained in line with Kelley's (1972) discounting principle which suggests that role of a factor can not be discounted if other plausible factors are unable to explain the outcome. Thus, it would be difficult for one to deny his/her responsibilities/abilities for inferior feelings experienced as a result of envy, when perceptions of justice about envied other's advantage are high. Hence, experiencing envy in response to a situation where envy-provoking advantage/event is fair may pose a greater threat to self-evaluations and self-esteem (Cohen-Charash & Mueller,

2007). Such threats to self evaluations and self esteem may provoke negative reactions such as behaving aggressively, withdrawal behavior, abusing others etc. (Heatherton & Vohs, 2000; Esposito, Kobak, & Little, 2005). Thus, in this case the envious person will engage actively in counterproductive work behaviors in order to restore his threatened self esteem (Fein & Spencer, 1997). Recent findings by Barclay et al. (2005) also support the attribution model of fairness showing that individuals retaliate against others when there are higher levels of procedural justice. Empirical findings (De Cremer, 2002) and theoretical arguments made elsewhere (see Cropanzano & Ambrose, 2001) have proved that perceptions of distributive justice also served as carrier of attributions.

On the basis of above mentioned theoretical arguments and empirical findings of past studies, we hypothesize the following:

- H3: The relationship between envy and "abuse against others" is more pronounced when procedural justice is high than it is low
- H4: The relationship between envy and "withdrawal behavior" is more pronounced when procedural justice is high than it is low
- H5: The relationship between envy and "abuse against others" is more pronounced when distributive justice is high than it is low
- H6: The relationship between envy and "withdrawal behavior" is more pronounced when distributive justice is high than it is low

Method

Sample

Study participants were employees from five telecommunication sector organizations of Pakistan. These are large sized mobile phone service providers having more than 4000 employees. They show resemblance regarding core business operations, compensation plans, fringe benefits, career growth etc. The questionnaires were sent to respondents just after 15 days of the announcement of their annual salary increment. Out of 250 questionnaires, 145 completed questionnaires were received, depicting a response rate of 58%. Due to sensitive nature of questionnaire, we followed the recommendations of Spector et al. (2006) and did not collect any demographic data like age, gender, experience etc.

Procedure

All the measures were adapted in Pakistani context by conducting a focus group study (Three Pakistani PhD candidates and two human resource (HR) managers participated). All items were checked for proper wording and some words and statements were rephrased. The questionnaire was translated from English to Urdu language and then two experts did backward translation. All items were measured on 5 point likert scale. In each organization, the HR department was contacted for taking permission regarding administering of the questionnaires. The questionnaires were distributed to the respondents under joint cover letter from the HR manager and authors. After completion, the respondents deposited the questionnaires to the designated person in the HR department.

Measures

Episodic Envy

To elicit episodic envy, we followed particular instructions based on previous studies (Cohen-Charash & Mueller, 2007; Heider, 1958; Salovey, 1991). We presented participants with the following instructions:

Choose a person (X) in your organization with whom you work frequently and to whom you constantly compare yourself. This person should be perceived by you as more successful than yourself at gaining things (Like recent salary increment) that you strive for and that are very important to your self-worth.

We adapted 9-item scale (Cohen-Charash & Mueller, 2007) in Pakistani context. Two items ("I feel gall" and "I feel rancor") were excluded from the measure on the basis of recommendations of focus group. Remaining items included "I lack some of the things X has", "I feel bitter", "I feel envious", "I want to have what X has", "I feel irritated/annoyed", "I feel some hatred towards X", and "X has things going for him/her better as compared to me". The rating scale ranged from 1 (strongly disagree) to 5(strongly agree).

Counterproductive work behavior

We used a 15 items checklist for "abuse against others". Others include coworkers, superiors and subordinates. We narrowed down the scope of "others" to "envied other" and represented it by "X" in our questionnaire. For "withdrawal" behaviors, we used a 4 items checklist. In view of the study objectives, these checklists were adapted from the scale developed by Spector et al. (2006) for five dimensional model of counterproductive work behaviors. Items for "abuse against others" included "told people outside the job that you work for a miserable place", " started or continued a harmful rumor at work", "Insulted X about his performance", "made fun of X's personal life", "purposely ignored X at work", "blamed X for your own error/mistake", "started a useless argument with X at work", "verbally abused X at work", "made an indecent gesture to X at work", "threatened X at work with violence", "insulted or made fun of X at work", "played/told a mean joke to embarrass X at work", "looked at private mail/property of X without permission", "hit or pushed X at work", and "verbally threatened X at work, but not physically". The items of withdrawal scale were comprised of "came to work late without permission", "left work earlier before the closing hours", "taken a longer break during work than you were allowed to take", and 'stayed home from work and told lie that you were sick". The rating scales ranged from 1 (never) to 5(every day).

Perceived distributive and Procedural justice

We used the most recent comprehensive indirect Colquitt's (2001) measure published in the justice literature. Our choice was due to following noteworthy characteristics of this measure (Colquitt & Shaw, 2005): first, items were generated on close examination of literature and all items were based on semantic works. Second, it provides the convertibility, meaning that the measure can be tailored to fit any particular event context. Our objective was to measure the distributive and procedural justice perceptions of employees regarding annual salary increment. We adapted the measure according to our research context and used the four items for distributive justice including "your salary increment reflect the efforts you have put into your work", "your salary increment is appropriate for the work you have completed", "your salary increment reflects what you have contributed to the organization", and "your salary increment is justified as compared to your performance". A separate study, conducted by first author, validated this measure in Pakistani context where three of the procedural justice items

were deleted due to low factor loadings. Hence, we used four items for procedural justice comprising of "Those procedures have been applied consistently", "Those procedures have been free of bias", "Those procedures have been based on accurate information", and "Those procedures are ethically and morally acceptable". The rating scales ranged from 1 (strongly disagree) to 5 (strongly agree).

Results

Exploratory Factor Analysis

An exploratory factor analysis (EFA) was performed on multi items scales. Through an analysis of the principal components using varimax rotation, the aim was to identify the number of components. Items having low factor loadings or high cross loadings on more than one factors were excluded from the analysis. A five-factor model emerged from the data accounting for approximately 64.54% of the variance. The first factor incorporated eight of the fifteen items measuring behavior of abuse against others (a = .91). It accounted for 26.69% of the variance, with an eigen value of 6.41. The second factor was comprised of four items measuring distributive justice (a = .89) and constituted 18% of the total variance, its eigen value was 4.32. The third factor was comprised of five of the seven items measuring envy (a = .81) and accounted for 9.25% of the variance with eigen value of 2.22. Fourth factor was comprised of four items measuring procedural justice (a = .74), it accounted for 5.51% of total variance with eigen value of 1.32. The fifth and final factor brought together three items from the scale measuring withdrawal behavior (a = .54). It explained 5.08% of the variance, and its eigen value was 1.22. In the present study, Cronbach's alpha values for all the scales, except withdrawal behavior, were well above the recommended level of .70 (Nunnaly & Bernstein, 1994). The low alpha value can be explained on the fact that behavioral checklists are best considered causal indicator scales (Edwards & Bagozzi, 2000) in which items are not interchangeable indicators of a single underlying construct. This often results in low internal consistencies because the items define the construct rather than the reflection of the construct (Spector et al., 2006). Appendix 1 shows the results of EFA.

Descriptive Statistics

Table 1 shows the means, standard deviations, and correlations among the variables in this study. The zero-order correlation between envy and withdrawal behavior was .20 (p < .05); between envy and abuse against others was .45 (p < .01); between procedural justice and distributive justice, it was .59 (p < .01). Our measures of envy and abuse against other behavior have a fairly low means i.e. 1.98 and 1.29 respectively. These means, however, are not surprising and are consistent with prior studies. For example, Barclay et al. (2005) reported a mean of 1.52 on 5-point scale for inward-focused emotions; Cohen-Charash and Mueller (2007) reported a mean of 1.39 for interpersonal counterproductive work behavior.

TABLE 1

Mean, Standard Deviations, and Correlations among Variables^a

Variables	Mean	s.d.	1	2	3	4	5
1. Withdrawal Behavior	2.07	0.74	(.54)				
2. Abuse against others	1.29	0.57	.45**	(.91)			
3. Procedural Justice	3.15	0.78	02	.01	(.74)		
4. Distributive justice	2.95	0.99	07	.02	.59**	(.89)	
5. Envy	1.98	0.77	.20*	.45**	01	.01	(.81)

^a n = 145. Cronbach alpha coefficients for multi-item scales are listed on the diagonal in parentheses.

Hierarchical Regression Analyses

We centered the variables forming the interactions between envy and perceived organizational justice (procedural & Distributive) to minimize multicollinearity among the interactions and their individual components (Aiken &West, 1991). The six hypotheses were tested via multiple regression analysis. We tested hypothesis 1 and 2, concerning the main effect of envy, by regressing employee counterproductive work behaviors (abuse against others, & withdrawal behavior) on envy (See model 1 in table 2 & table 3). Hypotheses 3 and 4, concerning the individual moderating effects of procedural justice and hypotheses 5 and 6 concerning individual moderating effects of distributive justice, respectively, were tested by two separate moderated regression models (model 2 for procedural justice and model 3 for distributive justice). Additionally, we compared the relative moderating effects of procedural justice and distributive justice, by including both interaction terms in the same regression model (model 4). Table 2 shows results for outcome variable (Abuse against others), and table 3 displays results for outcome variable (withdrawal behavior).

Main effects of envy on counterproductive work behaviors (abuse against others and withdrawal behavior (Hypotheses 1 & 2) Envy had a significant, positive effect on both of our counterproductive work behaviors: abuse against others $(\beta = .33, p < .01)$, withdrawal behavior $(\beta = .19, p < .05)$. Hypotheses 1 and 2 thus received significant support (See model 1 in table 2 and table 3).

^{*} p < .05 , ** p < .01

TABLE 2

Results of Hierarchical Regression Analyses: Effects of Envy and Perceptions of Justice (Distributive & Procedural) on Abuse against others (N= 145)

Variables	Model 1	Model 2	Model 3	Model 4
Main effects				
Envy	.333**	.326**	.324**	.325**
Procedural justice		.01		.01
Distributive justice			.02	.02
Interactions				
Envy x Procedural justice		.09		01
Envy x Distributive justice			.11*	.11
R^2	.199	.210	.224	.224
? R ²		.011	.025*	.025

 $^{^{\}scriptscriptstyle +}$ p < .10 , $^{\scriptscriptstyle *}$ p < .05 , ** p < .01

Moderating effects of procedural justice (*Hypotheses 3 & 4*) As hypotheses 3 and 4 state that procedural justice has moderating effects on relationships between envy and counterproductive work behaviors (abuse against others & withdrawal behavior). Table 2 (model 2) shows that procedural justice did not moderate the relationship between envy and abuse against others. However, procedural justice did moderate the relationship between envy and withdrawal behavior (see model 2 Table 3). The beta coefficient for the interaction term (procedural justice by Envy) was statistically significant ($\beta = .23$, p < .05). The positive sign before the beta weight of the interaction term is consistent with hypothesis 4, which states that relationship between envy and withdrawal behavior is stronger for individuals high rather than low in procedural justice perceptions.

TABLE 3

Results of Hierarchical Regression Analyses: Effects of Envy and Perceptions of Justice (Distributive & Procedural) on Withdrawal Behavior (N= 145)

Variables	Model 1	Model 2	Model 3	Model 4
Main effects				
Envy	.187*	.170*	.181*	.172*
Procedural justice		02		.01
Distributive justice			04	05
Interactions				
Envy x Procedural justice		.23*		.27*
Envy x Distributive justice			.09	01
R^2	.037	.075	.052	.079
? R ²		.038*	.01	.037+

⁺ p < .10 , * p < .05 , ** p < .01

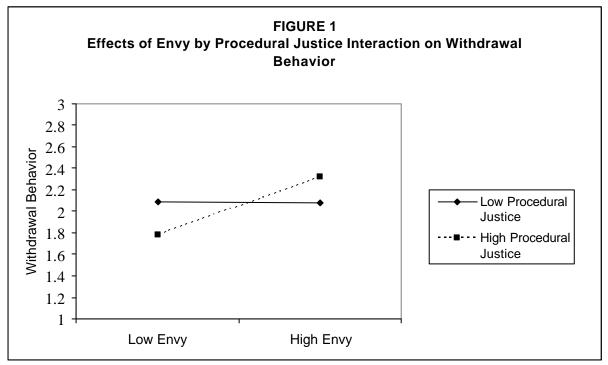
To further clarify the interaction effects of procedural justice, we examined separate simple slopes depicting the relationship between envy and withdrawal behavior. Separate plots were drawn for individuals whose scores on the moderator were one standard deviation below the mean, and one standard deviation above the mean (Aiken & West, 1991). The slope was positive and significant for high procedural justice group, and negative and non significant for the low procedural justice group. Table 4 shows the result of simple slope test, and figure 1 presents this significant interaction effect for procedural justice. Thus, results provided support for hypothesis 4 but hypothesis 3 was not supported.

TABLE 4

Results of Standard Error and t Tests for Simple Slopes of Twoway Interactions including Envy and Procedural Justice

Procedural	Wit	ior	
Justice	Simple Slope	SE	t
High	0.35	0.1	3.37**
Low	-0.01	0.11	0.07

^{*} p < .05, ** p < .01



Moderating effects of distributive justice (Hypotheses 5 & 6) As hypotheses 5 and 6 state that distributive justice has moderating effects on relationships between envy and counterproductive work behaviors (abuse against others & withdrawal behavior). Table 3 (model 3) shows that distributive justice did not moderate the relationship between envy and withdrawal behavior. However, distributive justice did moderate the relationship between envy and abuse against others (see model 3 table 2). The beta coefficient for the interaction term (distributive justice by envy) was statistically significant ($\beta = .11$, p < .05). The positive

sign before the beta weight of the interaction term is consistent with hypothesis 5, which states that relationship between envy and abuse against others is stronger for individuals high rather than low in distributive justice perceptions.

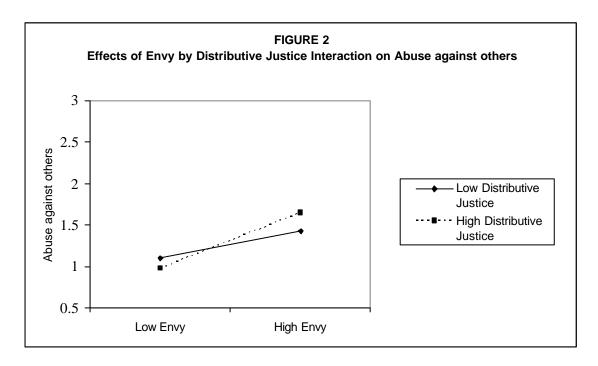
To clarify the interaction effects of distributive justice, separate simple slopes depicting the relationship between envy and withdrawal behavior were examined. The slopes were positive and significant for both high and low distributive justice groups. As shown in table 5, the betas were larger for high distributive justice group and smaller for low distributive justice group. Similar fact is represented in figure 2. Thus results provided support for hypothesis 5 but hypothesis 6 was not supported.

TABLE 5

Results of Standard Error and t Tests for Simple Slopes of Two-way Interactions including Envy and Distributive Justice

Distributive	Abı	ers	
Justice	Simple Slope	SE	t
High	0.44	0.07	5.91**
Low	0.21	0.08	2.67**

^{*} p < .05 , ** p < .01



Comparing the moderating effects of procedural justice and distributive justice We further examined the unique moderating effect of each variable while controlling the other by including both interaction terms in the same regression equation. As shown in model 4 (table 2, table 3), when procedural and distributive justice interaction terms were entered into the equations simultaneously, both were not significant for abuse against others, while only procedural justice (model 4,table 3) was found to be significant for withdrawal behavior ($\beta = .27$, p < .05). This result indicated that procedural justice was a stronger moderator than distributive justice for withdrawal behavior.

Discussion

The objective of our study was threefold (a) instead of general negative affect, to use one of discrete emotions (envy) as predictor of counterproductive work behaviors, (b) to see moderating effect of two justice dimensions on relationship between envy and counterproductive work behaviors and (c) to test the attribution model of justice in context of envy.

We found significant support for four of our hypotheses while two hypotheses were not supported. We found that envy is significantly related to two dimensions of counterproductive work behaviors i.e. abuse against others and withdrawal behaviors. We also found that envy interacts with procedural justice to predict withdrawal behavior whereas it interacts with distributive justice to predict abusive behavior against others. Stated otherwise, the relationship between envy and withdrawal behavior is more pronounced when procedural justice perceptions are high than they are low; similarly, the relationship between envy and abusive behavior against others is more pronounced when distributive justice perceptions are high than they are low. These results can be explained on basis of findings from organizational justice and counterproductive work behavior literatures. Procedural justice is shown to be a better predictor of organization level outcomes (for review see Colquitt, 2001; Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Yee Ng, K., 2001) and behaviors directed at organizations like citizenship behavior directed at organization (OCB-O), workplace sabotage etc. Applying these findings to our context suggest that relationship between envy and withdrawal (being a negative behavior directed at organizations) is moderated by procedural justice perceptions. Distributive justice predicts behaviors directed at organizations, for example Spector et al., (2006) found a significant correlation between distributive justice and harmful behaviors directed at organizations. Hence it moderates the relationship between envy and abuse against others.

Our results support the attribution model of fairness and are consistent with previous researches (Barclay et al., 2005; Brockner et al., 2003). The study contributes in two ways to the research on attribution model of fairness: (a) we examined the attribution model in the context of envy and counterproductive work behavior, and in a different culture, (b) Our findings support that like procedural justice and interactional justice (Barclay et al., 2005), distributive justice also serves as a carrier of attribution information and these findings are related to the argument of Cropanzano and Ambrose (2001) that distribution rules could be seen as procedures.

The study also contributes to the fairness, envy and counterproductive work behavior literatures in several ways by addressing some of the lacunas. First, most of the existing literature on organizational justice and emotions has examined how justice perceptions effect emotions, how emotions effect perceived justice, whether emotions mediates the relationship between perceived justice and counterproductive work behaviors (For review see Cohen-Charash & Byrne, 2008). Our study is among the first few to address the interaction between discrete emotions (envy) and justice facets to predict counterproductive work behaviors. Second, to date, studies on envy and organizational justice have focused on overall fairness (Cohen-Charash & Mueller, 2007; Smith et al., 1994). According to our knowledge, none of the studies have so far examined the interaction between envy and different justice facets on different dimensions of counterproductive work behaviors. Our study is the first to see the moderating effect of two justice facets (distributive and procedural) on relationship between envy and counterproductive work behaviors. Third, in line with the recommendations of Spector et al. (2006) we used two dimensions of counterproductive work behavior as separate constructs and examined the effect of one of the discrete emotions (envy) and justice

dimensions. We found different results for these two dimensions, hence supporting the arguments of Spector et al. (2006) against combining diverse behaviors into one or two indices of counterproductive work behaviors.

Our results, showing support for attribution model of fairness, contradict other research (Cohen-Charash & Mueller, 2007) which supports the social exchange perspective of fairness as explaining the relationship between envy, unfairness and harming behaviors. There may be several reasons for these differences in results. First, Cohen-Charash and Mueller (2005) examined the effect of overall fairness on relationship between envy and harming behavior whereas we used distributive and procedural justice facets. Our findings suggest that different facets of justice do indeed matter when examining the relationship between envy and harming behaviors.

A second possible explanation for the difference between Cohen-Charash and Mueller's (2007) findings and ours might relate to the upholding of social exchange norms in different cultures. Although, reciprocity norm is a universally accepted principle but the degree to which people comply with it varies across cultures (Cropanzano & Mitchell, 2005). Here, we can assume that social exchange assumptions may apply less well to Pakistani culture as compared to western cultures.

Limitations and future research directions

The contributions and findings of our study should be considered in view of certain limitations. We used self report measures which may result in common method bias. However, the use of self reports is justified by the nature of the variables examined (Spector, 1994).

First, Envy, an inward focused emotion, can only be best measured from the person experiencing it and any other measure not originating from the person experiencing it might prove invalid (Cohen-Charash, Mueller, 2007). Also, the self reports are the best way to measure the emotional experiences (Diener, 2000). We used retrospective self reports to measure individuals' reactions of envy to annual salary raise. Although, in some cases, the retrospective reports can be problematic (Golden, 1992; Robinson & Clore, 2002), we measured the reactions to salary raise just after 15 days of its announcement. So we believe that in our case the memory bias will not have any significant effects due to two reasons (a) the time span between recalling the event and actual event is very less i.e., 15 days, and (b) prior research has demonstrated that individuals are better able to accurately recall more salient events than less salient events (e.g., Fabiani & Donchin, 1995) and memories associated with some affect or emotional arousal are better remembered than those that are affectively neutral (Kihlstrom, Eich, Sandbrand, & Tobias, 2000). We believe that annual salary raise is a salient event which occurs once in a year and people do remember their emotional and behavioral experiences associated with it.

Second, counterproductive work behaviors were also measured using self-reports. Another possible option was to obtain the peer ratings but we used self reports due to two reasons (a) some forms of counterproductive work behaviors assessed in this study are private and covert like staying at home from work and telling lie, looked at someone's private property without permission etc, hence these can be best reported by the person performing them rather than the coworkers, and (b) previous studies have shown that self reports and peer reports significantly converged on most of the study variables (Penney & Spector, 2005; De Jonge & Peeters, 2009).

Third, we have seen the moderating effects of perceptions of different facets of organizational justice and perceptions can be best measured by self reports. We also

checked whether common method bias is indeed a problem in our study by conducting Harman's single factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We conducted exploratory factor analysis on all of our measures and five factors structure emerged explaining 64% of the variance, showing that common method bias is not a problem in our case.

Another potential limitation of our study is the cross sectional design which does not allow us to infer causality. Future studies should focus on laboratory experiments examining the relationship between envy, organizational justice and counterproductive work behaviors. As our sample consisted of employees from telecommunication sector of Pakistan, we believe that our findings may be generalizable to other countries having similar culture as that of Pakistan like India, Bangladesh, and Nepal etc. For the generalizability of these results to western context, this study needs to be replicated in other sectors and cultures. Future research should also examine the role of other dimensions of organizational justice (i.e. interpersonal and informational) in the context of envy and other forms of counterproductive work behaviors like sabotage, theft and production deviance.

Managerial Implications

Our results suggest that it is not always beneficial for the organizations that their employees have high levels of perceptions of procedural and distributive justice. The findings of our study show that "more fairness is not always preferred"; because when employees experience self threatening emotions like envy, the higher levels of perceptions of distributive and procedural justice reduce their ability to externalize the blame for their less advantageous position. This, in return, inclined the employees to engage in counterproductive acts due to threatened self-esteem. Brockner (2000) suggested that managers might respond to this dilemma by supporting the self-esteem of the employees and encouraging them to engage in activities which are self-restorative and self-affirming.

Overall, the results suggest that organizations should focus on reducing the levels of envy so that employees may not engage in counterproductive work behaviors. Organizations should maintain the secrecy about reward allocations (Leventhal, 1976), so that individuals may not indulge themselves in unnecessary social comparisons which lead to envy. Although it is not possible to maintain secrecy in every aspect of organizational life, it can be done in certain cases. Like, in current study the source of envy was salary raise, organizations can maintain the secrecy in announcements of salary raises, bonuses, pay checks etc in order to avoid the feeling of envy among employees.

Also, according to our results, high levels of procedural justice and distributive justice exacerbate counterproductive work behavior related to envy. Usually, high self esteemed individuals engage in counterproductive work behaviors when they feel that their self evaluation is threatened and they are unable to externalize the blame for their less advantageous position in organization. As high self esteemed people are generally good performers (Judge & Bono, 2001), organizations have to make a trade-off between expected performance and probability of occurrence of counterproductive work behaviors while hiring these high self esteemed individuals.

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Appendix – 1

Factor Loadings of the five factor Model (N=145)	Abuse Against	Distributive		Procedural	Withdrawal
	others	Justice	Envy	Justice	Behavior
Verbally abuse X at work	.812	.077	038	122	.138
Hit or pushed X at work	.791	.137	.182	006	.131
Insulted or made fun of X at work	.782	028	.306	.086	.170
Made an indecent gesture to X at work	.773	.036	.065	141	.309
Threatened X at work with violence	.769	020	.152	.234	047
Looked at X's private mail/property without permission	.738	041	.244	074	.241
Verbally threatened X at work. but not physically	.700	181	.213	.309	044
Insulted X about his job performance	.670	.049	.211	223	.146
Your salary increment reflects what you have contributed to the	057	.888	.064	.183	.022
organization					
Your salary increment reflects the efforts you have put into your work.	041	.845	.062	.212	.022
Your salary increment is appropriate for the work you have completed	.163	.777	106	.360	040
Your salary increment is justified as compared to your performance	.045	.712	016	.376	195
I feel irritated/annoyed	.150	077	.803	.001	.082
l feel bitter	.192	.001	.793	007	207
l feel envious	.256	.064	.761	.088	053
I feel some hatred towards X	.340	017	.731	045	.077
X has things going for him/her better as compared to me	007	.058	.598	054	.279
Those procedures have been free of bias	.012	.308	.071	.687	009
Those procedures are ethically and morally acceptable	.030	.340	049	.671	.118
Those procedures have been based on accurate information	.093	.354	016	.646	.216
Those procedures have been applied consistently	185	.155	038	.629	224
Left work earlier before the closing hours	.172	.190	.027	181	.742
Taken a longer break during work than you were allowed to take	.287	136	.011	.082	.590
Come to work late without permission	.257	256	.112	.237	.543