

# Moderators of the Relationship Between Person-Job Fit and Subjective Well-Being Among Asian Employees

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*The moderating effects of core self-evaluation and person-organization (P-O) fit on the relationship between person-job (P-J) fit and subjective well-being were examined using cross-sectional surveys. Most of the participants of the studies were Asian employees in the United States. In Study 1 (N = 90), the interaction between core self-evaluation and needs-supplies (N-S) fit significantly predicted happiness but not depression. Workers with high levels of core self-evaluation were less affected by N-S fit, whereas employees who had low core self-evaluation displayed a reduced level of happiness when there was a lack of N-S fit. In Study 2 (N = 90), P-O fit moderated the relationship between P-J fit and happiness. Employees with high P-O fit displayed more dramatic increases in happiness than employees with low P-O fit as P-J fit increased. These studies suggest that core self-evaluation and P-O fit may moderate the relationship between P-J fit and psychological well-being. In addition, facets of P-J fit showed differential relationships with mental health in a pattern consistent with previous research. Implications for research and occupational health interventions were discussed.*

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*Keywords:* person-job fit, person-organization fit, core self-evaluation, subjective well-being

Identifying potential moderators of the relationship between stressors and health is important for understanding personal or environmental charac-

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teristics that may alleviate or exacerbate the effects of stressful experiences. This knowledge can be used in developing interventions addressing workplace stress. Two potential moderators of the relationship between person-job (P-J) fit and subjective well-being were considered in the present research. Core self-evaluation was examined in Study 1, and person-organization (P-O) fit was assessed in Study 2.

## PERSON-JOB FIT IN OCCUPATIONAL HEALTH

Stress literature suggests that appraisal of a situation (Lazarus, 1991) is an important determinant of the stress response. Primary appraisal, which is a prerequisite of the stress process, includes evaluation of the self and the environment (Edwards, Caplan, & Harrison, 1998). A situation can be thought of as stressful when there is a mismatch between workplace characteristics and either personal skill-set or preferences.

Person-environment fit (P-E fit) reflects this type of interaction. P-E fit is thought to predict strain better than either its corresponding environment or person factor alone (Caplan, Cobb, French, Harrison, & Pinneau, 1980). Strain is referred to as a psychological, behavioral, or physiological outcome from a stressor, which is often negative (Griffin & Clarke, 2010). Subjective perceptions of P-E fit influenced by expectations and evaluations may be responsible for strains (Edwards et al., 1998).

One aspect of the P-E fit theory of stress emphasizes P-J fit (e.g., Caplan et al., 1980; Edwards, 1996). The concept of P-J misfit as a job stressor has been further delineated as being composed of two subfacets; needs-supplies (N-S) fit and demands-abilities (D-A) fit (Edwards et al., 1998). N-S fit is defined as the congruence between employees' needs and the rewards received for their work. D-A fit is referred to as the congruence between a job's demands and the skills possessed by the employee (Cable & DeRue, 2002). Previous research suggests that individuals differentiate N-S fit and D-A fit (Cable & DeRue, 2002), but a misfit from either facet can cause strains (Edwards et al., 1998).

However, poor subjective P-J fit may not necessarily produce strain in all individuals. Through the secondary appraisal process (Lazarus, 1991), other factors can affect the relationship between P-J fit and strains. Secondary appraisal involves the evaluation of the available resources used for dealing with a negative event (Lazarus, 1991). Thus, other factors may moderate the relationship between subjective fit and well-being. In particular, personal or environmental resources may help to prevent stress from developing due to a misfit (Hobfoll, 1989; Lazarus, 1991). Personal resources include personality (Hobfoll, Johnson, Ennis, & Jackson, 2003). An individual's personality

or affectivity is likely to influence the perception of stress (Beehr, 1998; Eaton & Bradley, 2008). Environmental resources include external conditions that can be helpful (Hobfoll, 1989), such as organizational values.

### **SUBJECTIVE WELL-BEING**

Subjective well-being is conceptualized as an individual's evaluation of his or her own life, which includes one's affect or mood (Diener & Lucas, 1999). Subjective well-being includes the absence of strain, but it also emphasizes positive experiences over negative ones (Diener, 1984). Understandably, it can be used as an indicator of mental health.

Subjective well-being consists of multiple indicators, depending on the valence of one's mood and the degree of arousal (Warr, 2006). Happiness (vs. unhappiness) involves a purely evaluative type of well-being (i.e., positive affect) without reflection on arousal (i.e., neutral arousal). On the other hand, depression (vs. enthusiasm) consists of negative valence and low arousal. These constructs are generally related but display differential relations with other factors (Warr, 2006). The measurements of happiness and depression are intended to represent a range of different aspects of subjective well-being that may have distinct relationships with stressors such as P-J fit incongruence.

The purpose of the current study was to investigate possible moderators of the relationship between P-J fit and subjective well-being. These moderators include core self-evaluation and P-O fit. Core self-evaluation is a higher-order construct that combines four established lower-order traits: self-esteem, generalized self-efficacy, emotional stability (low neuroticism), and internal locus of control. Core self-evaluation was tested as a moderator in Study 1. In the second study, direct effects of P-O fit on individual outcomes were examined, as well as the moderating effect of P-O fit on the relationship between P-J fit and individual outcomes. Although some have questioned the role of P-O fit as a stressor (Edwards et al., 1998), others have demonstrated the potential for P-O fit to act as a stressor (Kristof-Brown, Zimmerman, & Johnson, 2005). The criteria included depression and happiness.

### **STUDY 1**

Previous research has resulted in mixed support for the relationship between P-J fit and depression (Caplan et al., 1980; Shaw & Gupta, 2004). Despite this inconsistency, the logic for P-J misfit as a stressor is strong

(Edwards et al., 1998). As such, it may still be worthwhile to assess the direct effect of P-J fit on subjective well-being. Moreover, P-J fit has not been investigated as a predictor of happiness, an important aspect of subjective well-being.

The relationship between P-J fit and subjective well-being may depend on the specific facet of P-J fit. It was suggested that N-S fit would be more relevant to occupational health than D-A fit (Edwards, 1996). In accordance with Lazarus's (1991) appraisal theory, D-A fit is argued to result in strain only when N-S fit is poor. Namely, even if the task itself does not match with personal ability and thus is perceived as stressful, it may not develop strain when the individual can find other values from the job. D-A fit is still important in a person's work life because it is directly related to job performance. Poor job performance can lead to other negative outcomes. Nevertheless, N-S fit may be more related with mental health than D-A fit.

*Hypothesis 1:* N-S fit is more related with indicators of subjective well-being (negatively to depression and positively to happiness) than D-A fit.

It has been argued that personal characteristics can exacerbate or alleviate strain responses (Beehr, 1998). The likelihood of a stimulus producing a strain response may be dependent on individual personality, through secondary appraisal (Lazarus, 1991). While some individuals may be more prone to perceive an event as producing strain, others may experience less strain when met with the same stimuli, and the difference can be attributed to personality. Hence, personality can be considered a moderator in the stressor-strain relationship.

Core self-evaluation has received increasing attention in occupational psychology (e.g., Judge, Erez, Bono, & Thoresen, 2002; Johnson, Rosen, & Levy, 2008). Core self-evaluation refers to global assessments that people make about their own self worth and competence (Judge, Locke, & Durham, 1997). They suggest that people's appraisals of the external world are affected not only by the attributes of objects and desires of people but also by the subconscious assumptions people hold about themselves, others, and the world.

Although core self-evaluation is a personality characteristic and therefore cannot be a stressor itself, the four subtraits (i.e., self-esteem, generalized self-efficacy, emotional stability, and internal locus of control) have shown relationships with happiness (Judge et al., 2002; Piccolo, Judge, Takahashi, Watanabe, & Locke, 2005) and depression (e.g., Meier, Semmer, Elfering, & Jacobshagen, 2008). One study (Brunborg, 2008) demonstrated a significant effect of the global construct of core self-evaluation on job stress. Although

this study (Brunborg, 2008) used a work-specific well-being criterion, it is likely to be valid for general well-being.

*Hypothesis 2:* Core self-evaluation is related to subjective well-being (negatively to depression and positively to happiness).

The main purpose of Study 1 was to investigate the moderating effect of core self-evaluation on the relationship between P-J fit and subjective well-being. Core self-evaluation may play a role as a personal resource that buffers the negative relationship between P-J misfit and mental health. Possessing high core self-evaluation may help to alleviate the impact of P-J misfit and produce more positive outcomes than low core self-evaluation.

Numerous empirical studies have emphasized the importance of its subfacets in influencing relationships of stressors and individual outcomes (e.g., Jex & Elacqua, 1999; Makikangas & Kinnunen, 2003 for self-esteem, Siu, Lu, & Spector, 2007; Siu, Spector, Cooper, & Lu, 2005 for general self-efficacy, Meier et al., 2008 for locus of control, and Kinnunen, Vermulst, Gerris, & Makikangas, 2003; Tai & Liu, 2007 for emotional stability), although the results depended on characteristics of the samples such as gender (Makikangas & Kinnunen, 2003), types of predictors (Tai & Liu, 2007), locations (Siu et al., 2005), or criteria (Siu et al., 2007; Tai & Liu, 2007). When the global measure of core self-evaluation was examined, however, the moderating effect was equivocal. The global construct failed to moderate the relationship between job stressor and burnout (Boyd, Ensari, Hoffman, & Newman, 2007). This result implies that summing the facets to create a core-self evaluation measure may show different results than the use of a global measure. Core self-evaluation measured by a sum of its facets may moderate the relationship between P-J fit and subjective well-being. A high level of core self-evaluation is hypothesized to alleviate the dysfunctional effect of P-J misfit on subjective well-being.

*Hypothesis 3:* Core self-evaluation moderates the relationship between P-J fit (N-S fit and D-A fit) and subjective well-being (depression and happiness), alleviating the dysfunctional effect of low P-J fit.

## **METHOD**

### **Participants and Procedure**

The participants of Study 1 were 90 employees in a bank originally based in Asia that has its American headquarters in New York City. The survey was

initially distributed to 235 employees (response rate = 38.30%). After approval from the Institutional Review Board, an internal human resources representative distributed and collected the questionnaires. Among the 90 employees, the proportion of males was 26.70% and that of females was 61.10%. The remaining 12.20% did not respond. The majority of participants (93.30%) were Asian or Pacific Islander, and one person was American Indian or Alaskan Native. Five people did not answer for their race. The average age was 34.70 years with a standard deviation of 7.35 years. The average organizational tenure was 2.71 years ( $SD = 3.79$ ), and the average job experience in the current job was 4.08 years ( $SD = 5.68$ ).

## Measures

### *Person-Job Fit*

P-J fit was measured using six items developed or modified by Cable and DeRue (2002) on a seven-point agreement scale (1 = “strongly disagree” to 7 = “strongly agree”), three items for N-S fit ( $\alpha = .88$ ), and the other three for D-A fit ( $\alpha = .80$ ). A sample item for N-S fit is, “The attributes that I look for in a job are fulfilled very well by my present job.” A sample item for D-A fit is “My abilities and training are a good fit with the requirements of my job.”

### *Core Self-Evaluation*

An aggregate of four separate measures was used to assess core self-evaluation ( $\alpha = .89$ ). Self-esteem was rated on a four-point response scale using the 10 items from Rosenberg (1979). Sample item includes “On the whole, I am satisfied with myself.” General self-efficacy was measured using the New General Self-Efficacy Scale developed by Chen, Gully, and Eden (2001). The scale consists of eight items with a 5-point agreement scale. One example item is “Even when things are tough, I can perform quite well.” Emotional stability was rated by 10 items from the International Personality Item Pool (<http://ipip.ori.org/>). The scale consists of five positively worded items (emotional stability) and five negatively worded items (neuroticism). Sample item includes “I rarely get irritated.” They were rated on a 5-point agreement scale. Finally, internal locus of control was rated using eight items from the Internality, Powerful Others, and Chance Scales (I, P, and C scales) developed by Levenson (1981) on a 6-point scale. Sample item includes “I can pretty much determine what will happen in my life.” These scales were

used in many other studies including core self-evaluation studies (e.g., Judge et al., 2002; Piccolo et al., 2005).

### *Subjective Well-Being*

Subjective well-being was measured using depression and happiness. Depression was measured by the Center for Epidemiologic Studies Depression (CES-D) Scale, developed by Radloff (1977). This self-rated scale purports to measure depression in the general population. Instructions ask respondents to rate their feelings during the past week. Examples of the 20 items include "I felt depressed," and "I enjoyed life (reversed scored)." The items were rated on a 4-point scale (0 = "less than 1 day" to 3 = "5 to 7 days,"  $\alpha = .89$ ).

The Happiness Measure (HM) developed by Fordyce (1988) was used for measuring happiness. This scale is composed of two broad questions. One question asks the degree of happiness rated on a scale from 0 to 10. The other question asks the percentage of time of happiness, unhappiness, and neutral feeling. These three percentages total to 100%. The combination score is computed by  $[\text{scale score} \times 10 + \text{happy \%}]/2$ . The scale is reported to be valid along with other happiness measures (Diener, 1984; Fordyce, 1988). Because of the uniqueness of the scoring, the internal consistency cannot be computed for this scale.

### **Data Analyses**

Data were analyzed after replacing missing data using the expectation-maximization method (EM). There were 141 missing data among total 7,830 data points (90 employees  $\times$  87 items), yielding 1.80% missing data. Because the amount of missing data was very small, and we did not find any specific pattern, we considered the missing data to be random. The EM algorithm was reported as a better approach to yield more accurate reliability estimates, cross-sample estimates, and confidence intervals (Enders, 2004). Two cases in depression could not be replaced because all questions were left unanswered. However, the cases were included because the other scales were answered. None of the missing data in the happiness scale could be replaced due to the scale format.

Bivariate correlations were used to test hypothesized direct relationships between the variables. Hierarchical multiple regressions were used to test the hypothesized moderating effects. Variables were centered by subtracting the mean from each score to allow a more meaningful interpretation and com-

parison of regression coefficients, while reducing multicollinearity (Aiken & West, 1991). Following Aiken and West (1991)'s recommendation, the moderating effects were explored using regression equations for: one standard deviation above the mean on the moderator ("high") and one standard deviation below the mean ("low") on the moderator. After equations of two cases were obtained for the relationship between P-J fit and subjective well-being, subjective well-being scores were plotted by the level of P-J fit (Aiken & West, 1991).

Demographics were considered as control variables, because previous literature showed that certain demographic variables such as gender (i.e., Makikangas & Kinnunen, 2003) affected the results. However, demographic variables were not significantly related with either criterion and thus were not entered into the equations, following Becker's recommendation (2005).

## RESULTS

### Main Effects

Table 1 presents correlations between all measures. N-S fit was not significantly related to depression ( $r = -.09, p = .213$ ), but D-A fit was ( $r = -.26, p = .007$ ). On the other hand, N-S fit displayed a significant positive relationship with happiness ( $r = .39, p = .000$ ), whereas D-A fit did not ( $r = .13, p = .132$ ), offering partial support for Hypothesis 1. Core self-evaluation had a strong negative correlation with depression ( $r = -.62, p = .000$ ) and a strong positive relationship with happiness ( $r = .52, p = .000$ ), supporting Hypothesis 2.

**Table 1.** Correlation Matrix of Variables in Study 1 and Study 2

	1	2	3	4	5
1. Moderator	.89	.40***	.42***	-.62***	.52***
2. Needs-Supplies Fit	.92	.88	.60***	-.09	.39***
3. Demands-Abilities Fit	.72***	.94	.80	-.26*	.13
4. Depression	.60***	.78***	.91	.89	-.41***
5. Happiness	-.15	-.16	-.23***	.90	N/A
	.33***	.30**	.22**	-.21*	.96

*Note.*  $N = 90$ , but  $N = 88$  for depression and  $N = 79$  for happiness in Study 1 and  $N = 89$  for happiness in Study 2. Above the diagonal indicates Study 1 variables and below the diagonal indicates Study 2 variables. Diagonal contains reliabilities (Study 1 above and Study 2 below); Study 1 used core self-evaluation and Study 2 used P-O fit as the moderator.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

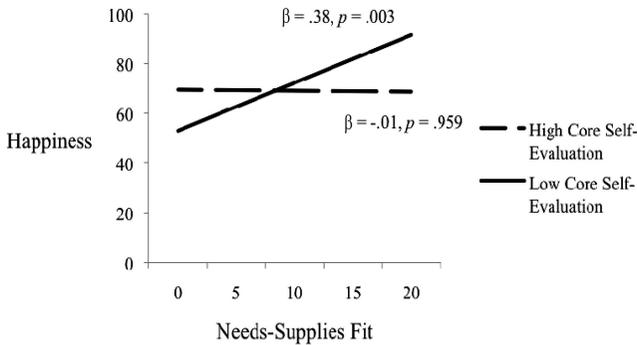
Moderating Effects

Table 2 represents the hierarchical multiple regression results for the interaction effects of core self-evaluation on the relationships between the facets of P-J fit and subjective well-being. While 40% of the variance in depression was accounted for by the main effects of core self-evaluation and N-S fit ( $R^2 = .40, p = .000$ ), the interaction of core self-evaluation and N-S fit did not account for any additional variance beyond the main effects ( $\Delta R^2 = .00, \Delta F(1, 84) = .02, p = .882$ ). When depression was used as the criterion, the interaction between D-A fit and core self-evaluation was also not significant ( $\beta = .00, p = .986$ ). Nevertheless, Hypothesis 3 was partially supported, because a significant interaction between core self-evaluation and N-S fit on happiness was showed in that high core self-evaluation attenuated the negative effect of low P-J fit on happiness ( $\beta = -.20, p = .036$ ). The interaction between core self-evaluation and N-S fit accounted for an additional 4% of variance ( $\Delta R^2 = 0.04, \Delta F(1, 75) = 4.57, p = .036$ ) beyond the main effects. As shown in Figure 1, for employees with high levels of core

**Table 2.** Interaction Between P-J Fit and Core Self-Evaluation on Subjective Well-Being in Study 1

Criterion	Step	Independent variables	$R^2$	$\Delta R^2$	$\beta$	$r_p$	$r_{sp}$
Depression <i>N</i> = 88	1	Main effects Core Self Evaluation N-S Fit	.40***				
	2	Moderating effects N-S Fit × Core Self Evaluation	.40***	.00	-.66*** .14	-.62*** .17	-.62*** .13
Depression <i>N</i> = 88	1	Main effects Core Self Evaluation D-A Fit	.38***				
	2	Moderating effects D-A Fit × Core Self Evaluation	.38***	.00	-.60*** -.04	-.58*** -.04	-.56*** -.04
Happiness <i>N</i> = 79	1	Main effects Core Self Evaluation N-S Fit	.32***				
	2	Moderating effects N-S Fit × Core Self Evaluation	.35***	.04*	.42*** .18	.43*** .20	.39*** .17
Happiness <i>N</i> = 79	1	Main effects Core Self Evaluation D-A Fit	.28***				
	2	Moderating effects D-A Fit × Core Self Evaluation	.29***	.01	-.20* -.10	-.24* -.12	-.20* -.10

Note.  $\beta$  = Standardized regression coefficient in the full model;  $r_p$  = Partial correlation coefficient in the full model;  $r_{sp}$  = Semi-partial correlation coefficient in the full model.  
\*  $p < .05$ . \*\*\*  $p < .001$ .



**Figure 1.** Interaction between needs-supplies fit and core self-evaluation on happiness in Study 1.

self-evaluation, there was a weak relationship between N-S fit and happiness ( $\beta = -.01, p = .959$ ), while employees with low levels of core self-evaluation displayed a strong positive relationship between N-S fit and happiness ( $\beta = .38, p = .003$ ). Core self-evaluation did not affect the relationships between D-A fit and happiness ( $\beta = -.10, \Delta R^2 = .01, p = .311$ ).

## DISCUSSION

The first study examined the moderating effect of core self-evaluation on the relationship between P-J fit and subjective well-being. Core self-evaluation significantly buffered the relationship between N-S fit and happiness as expected. Specifically, employees with high core self-evaluation were less affected by their perceptions of N-S fit relative to employees with low core self-evaluation. This implies that employees with high levels of core self-evaluation may not perceive the incongruence between their personal characteristics (i.e., need) and the job attributions (i.e., supplies) as a detrimental stressor. On the other hand, to employees who had low levels of core self-evaluation, or self-concepts, happiness increased as N-S fit increased.

Facets of P-J fit displayed differential relationships with indicators of subjective well-being. N-S fit was more related with happiness than depression, whereas D-A fit was more related with depression than happiness. This is consistent with a previous study (Edwards, 1996) wherein N-S fit explained more variance in job dissatisfaction than in tension. On the other hand, D-A fit explained more variance in tension than in job dissatisfaction (Edwards, 1996). This suggests that facets of P-J fit may capture different aspects of subjective mental health.

It has been suggested that a large sample size is generally necessary for an interaction term to reach significance (Aiken & West, 1991). Thus, the insignificant results in the current study may be due to the small sample size. However, one interaction term did reach significance in spite of limited power due to sample size. This result suggests that core self-evaluation may be a powerful moderator of the relationship between N-S fit and happiness.

The current study suggests the potential of personality as the moderator in the relationship between P-J fit and subjective well-being. French, Caplan, and Harrison (1982) examined the moderating effect of Type A tendency on the relationship between P-J fit and strain using job complexity and quantitative workload as the fit dimensions and found no significant relationship. However, the current study found that happiness was predicted by a significant interaction between core self-evaluation and N-S fit. This suggests that the specific type of personality or fit dimensions may determine the relationship between P-J fit and health.

The results also underscore the potential influence of measurement regarding core self-evaluation. Unlike Boyd et al.'s (2007) study that found no significant interaction between core self-evaluation, as assessed by a global measure, and job stressor on burnout, the current study found a significant effect. Core self-evaluation, measured by the sum of its facets, significantly moderated the relationship between N-S fit and happiness. However, it is still unclear that the difference is due to the measurement or the other variables such as the predictors or the criteria. Also, it should be noted that a summed scale score has been criticized due to the inherent multidimensionality of core self-evaluation (Johnson et al., 2008). Different measures of core self-evaluation should be investigated.

## **STUDY 2**

In Study 2, P-O fit was examined as an influence on the relationship between P-J fit and subjective well-being. Based on the results of Study 1, the first hypothesis was modified. While both N-S fit and D-A fit are related to strain, the aspects of strain that each facet is primarily related to may differ (e.g., Edwards, 1996). The resources an individual wants to obtain from a job may be broader and more important than the abilities an individual can exercise in a job. If one's needs are fulfilled, he or she may experience positive affect. On the other hand, if one's abilities are appropriately used, it can help to prevent a strain from developing. Therefore, the match between individual preferences and job characteristics may promote positive outcomes, whereas the match between individual ability and job demands may prevent negative outcomes.

*Hypothesis 1:* N-S fit will be more strongly related to happiness than depression whereas D-A fit will be more strongly related to depression than happiness.

P-O fit considers the match between person and environment. Value congruence in P-O fit refers to an individual's perception of one's value and the organization's value, as well as of comparisons between individuals in the organization (Cable & DeRue, 2002). Other types of P-O fit measure interpersonal aspects such as match with other employees in the organization (Cable & Judge, 1997). Congruence with other employees not only reflects interpersonal aspects of fit, but also takes into account organizational climate, or culture, which can affect working conditions. For instance, an employee with a preference for solitary work may experience poor P-O fit in an organization that utilizes team-based work.

In summary, incongruence between the person and organization based on either type of match can also lead to strain. Overall, P-O fit is matched when at least one entity (i.e., the organization or the individual) meets what the other needs, they share fundamental similarities, or both (Kristof, 1996), and as a result, may be related to subjective well-being. Meta-analytic research has shown that P-O fit is moderately related to strain (Kristof-Brown et al., 2005).

*Hypothesis 2:* P-O fit is related to subjective well-being (negatively to depression and positively to happiness).

We argue that in addition to direct effects of P-J and P-O fit on well-being, there is an interplay of these variables that results in an interactive effect. We contend that P-O fit moderates the relationship between P-J fit and subjective well-being. One study found significant interactions between N-S and P-O fit (Resick, Baltes, & Shantz, 2007) in predicting satisfaction. However, D-A fit did not moderate (Resick et al., 2007).

We expect a similar effect in the current study with subjective well-being as the criterion. If levels of both P-J fit and P-O fit are high, an individual is likely to experience better subjective well-being than an individual with the same level of P-J fit but lower P-O fit. Similarly, if levels of both P-J fit and P-O fit are low, an individual is likely to experience a lower level of subjective well-being than an individual with the same level of P-J fit but higher P-O fit. In short, P-O fit may function as a resource in dealing with low P-J fit.

*Hypothesis 3:* P-O fit moderates the relationship between P-J fit (N-S fit and D-A fit) and subjective well-being (depression and happiness), synergizing the effect of P-J fit.

## METHOD

### Participants and Procedure

The participants of Study 2 were 90 employees with an average age of 31.27 ( $SD = 8.06$ ) from two separate companies run by Asian Americans. Fifty-seven employees were from a bank located in Los Angeles (the response rate was 76%) and 33 were from a fashion manufacturing company in Santa Fe Springs, California (the response rate was 66%). A total of 47 (52.20%) participants were male and 39 (43.3%) were female with four individuals not reporting their gender. The majority of the participants were Asian American (88.90%), followed by Hispanic (3.3%), Other (2.2%), Black (1.1%) and Mixed or Unspecified (1.1%). The average organizational tenure was 1.34 years ( $SD = 1.83$ ), and the average job experience in the current job was 5.06 years ( $SD = 6.06$ ).

### Measures

#### *Person-Job Fit*

P-J fit was measured by the same six items used in Study 1. In Study 2, internal consistency estimates were .94, and .91 for N-S fit and D-A fit, respectively.

#### *Person-Organization Fit*

P-O fit was measured by seven items on a 7-point Likert scale (1 = “strongly disagree” to 7 = “strongly agree”). Three items of value congruence came from the research of Cable and DeRue (2002). Example item is “The things that I value in life are very similar to the things that my organization values.” Two items were modified from Cable and Judge (1997). The example item includes “I match or fit with the current employees in my organization.” The final two items were from Oh, Darnold, Kristof-Brown, and Zimmerman (2007). The example item is “Overall, I think I fit well with my organization.” The internal consistency of these seven items in the current sample was .92.

#### *Subjective Well-Being*

The CES-D was also used in Study 2 ( $\alpha = .90$ ). However, a different measure of happiness from Study 1, the Steen Happiness Index (SHI or

Authentic Happiness Index [AHI]; Seligman, Steen, Park, & Peterson, 2005) was used in Study 2. The SHI was developed to measure three forms of happiness; positive emotion, engagement, and meaning (Seligman et al., 2005). The scale consisted of 20 items, in each of which the respondents selected one best description of their state during the past week among five options (1 to 5). Example descriptions include “I am joyless (1),” “I am neither joyful nor joyless (2),” “I am more joyful than joyless (3),” “I am much more joyful than joyless (4),” and “Almost everything about my life fills me with joy (5).” A very high internal consistency, .96, was shown for the SHI in this sample.

### **Data Analyses**

Missing data were replaced using the EM method. There were seven missing data points (.07%) among possible 9,810 data points (90 employees  $\times$  109 items) in total. One case in the SHI could not be replaced because all of the questions were not answered. However, the cases were included because the other scales were answered.

Correlations and hierarchical multiple regressions were used to assess the hypothesized relationships. Significant moderating effects were visually inspected using line graphs. Regression equations for line graphs were obtained using the method recommended by Aiken and West (1991). Demographic variables were not controlled because no demographic variables showed a significant relationship with the criteria (Becker, 2005).

## **RESULTS**

### **Main Effects**

N-S fit was significantly related to happiness ( $r = .30, p = .002$ ), but not to depression ( $r = -.16, p = .067$ ). D-A fit was significantly related to both depression ( $r = -.23, p = .013$ ) and happiness ( $r = .22, p = .019$ ). Therefore, Hypothesis 1 was partially supported. Hypothesis 2 also received partial support; P-O fit was significantly related to happiness ( $r = .33, p = .001$ ), but not to depression ( $r = -.15, p = .085$ ).

### **Moderating Effects**

The moderating effects of P-O fit on the relationships between facets of P-J fit and subjective well-being were tested via hierarchical regression

analyses (see Table 3). The interaction between N-S fit and P-O fit was not significant in explaining depression ( $\beta = -.16, p = .170$ ). D-A fit had a more substantial interaction than N-S fit, but failed to reach significance ( $\beta = -.19, p = .069$ ).

However, P-O fit significantly moderated the relationship between N-S fit and happiness ( $\beta = .28, \Delta R^2 = .07, p < .009$ ). As represented in Figure 2, employees with high P-O fit experienced higher levels of perceived happiness ( $\beta = .30, p = .056$ ) than employees with low P-O fit ( $\beta = -.10, p = .530$ ), as N-S fit increased. P-O fit also moderated the relationship between D-A fit and happiness, ( $\beta = .34, \Delta R^2 = .11, p = .001$ ). When employees perceived low levels of P-O fit, the perceived level of happiness decreased as D-A fit increased ( $\beta = -.24, p = .094$ ). On the other hand, when employees perceived high levels of P-O fit, the perceived level of happiness increased as D-A fit increased ( $\beta = .37, p = .018$ ; Figure 2).

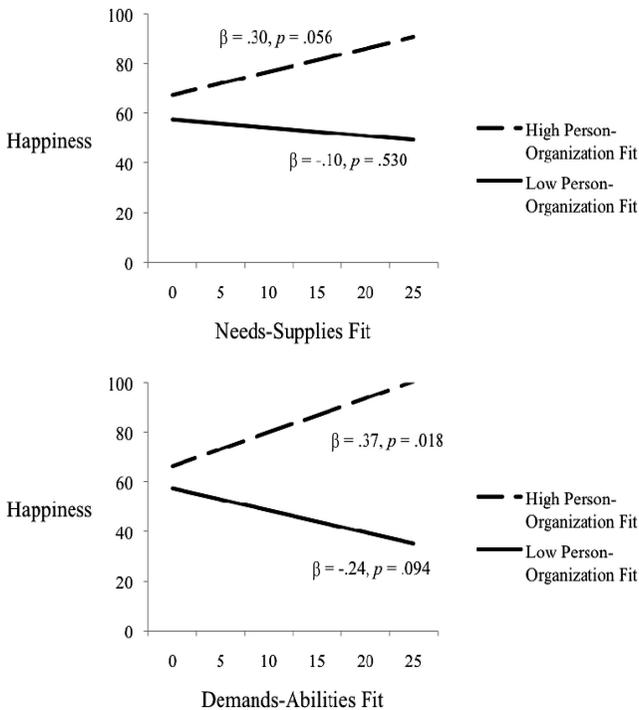
### DISCUSSION

D-A fit was significantly related to depression, but N-S fit was not. Both facets of P-J fit were related to happiness, but the magnitude was stronger for N-S fit than for D-A fit. The interactions between the facets of P-J fit and P-O

**Table 3.** Interaction Between P-J Fit and P-O Fit on Subjective Well-Being in Study 2

Criterion	Step	Independent variables	$R^2$	$\Delta R^2$	$\beta$	$r_p$	$r_{sp}$
Depression $N = 90$	1	Main effects	.03				
		P-O Fit			-.14	-.09	-.09
	2	N-S Fit			-.09	-.07	-.07
Moderating effects N-S Fit $\times$ P-O Fit		.05	.02				
Depression $N = 90$	1	Main effects	.06				
		P-O Fit			-.02	-.17	-.17
		D-A Fit			-.25	-.20	-.20
	2	Moderating effects D-A Fit $\times$ P-O Fit	.09*	.04			
Happiness $N = 89$	1	Main effects	.12**				
		P-O Fit			.37*	.26**	.24**
		N-S Fit			.10	.07	.07
	2	Main effects	.19***	.07**			
N-S Fit $\times$ P-O Fit				.28**	.28**	.26**	
Happiness $N = 89$	1	Main effects	.11**				
		P-O Fit			.33**	.29**	.27**
		D-A Fit			.07	.06	.05
	2	Moderating effects D-A Fit $\times$ P-O Fit	.22***	.11**			
					.34**	.35**	.33**

Note.  $\beta$  = Standardized regression coefficient in the full model;  $r_p$  = Partial correlation coefficient in the full model;  $r_{sp}$  = Semi-partial correlation coefficient in the full model.  
\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



**Figure 2.** Interaction between person-job fit and person-organization fit on happiness in Study 2.

fit explained significant incremental variance in happiness, but not depression. P-O fit influenced the relationship between P-J fit and happiness, such that employees with high P-O fit displayed an increase in perceived happiness as P-J fit increased, whereas employees with low P-O fit displayed a decrease in perceived happiness as P-J fit increased.

These results imply the possibility of P-O fit as a moderator of the relationship between P-J fit and subjective well-being, consistent with previous research (Resick et al., 2007). We build on previous evidence (Resick et al., 2007) by using a sample of regular full-time employees (rather than interns). Regular employees' lengthier tenure and subsequent organizational experience may increase the accuracy of both P-O and P-J fit, ultimately improving the generalizability of the results. Additionally, P-O fit has been relatively less examined in the field of occupational health, and the interaction between P-J fit and P-O fit is not actively examined. Most of the studies have focused on incremental effects of either type of fit (e.g., Lauver & Kristof-Brown, 2001). Therefore, more studies should examine P-O fit in this area.

## GENERAL DISCUSSION

Two studies were conducted to examine if the relationships between P-J fit and indicators of subjective well-being are moderated by other variables. Study 1 found that core self-evaluation moderated the relationship between N-S fit and happiness. Employees with low core self-evaluation displayed a higher degree of happiness when they experienced higher N-S fit. Employees with high core self-evaluation, on the other hand, were hardly affected by N-S fit. In Study 2, P-O fit moderated the relationship between facets of P-J fit and happiness. When P-O fit was high, the relationship between P-J fit and happiness was positive; however, when P-O fit was low, the relationship between P-J fit and happiness was negative.

The facets of P-J fit differed in the direction and magnitude of relationships with indicators of subjective well-being. N-S fit was significantly related only with happiness but not with depression in both Study 1 and Study 2. D-A fit was significantly related with depression only in Study 1, but in Study 2, it was significantly related with both indicators of subjective well-being. This provides further evidence on discriminant validity of facets of P-J fit, consistent with previous research (Cable & DeRue, 2002; Edwards, 1996).

### Implications

In the current studies, the relationship between P-J fit and happiness is moderated by employee disposition (core self evaluation), as well as environmental conditions (P-O fit) perceived by the employee. Edwards, Cable, Williamson, Lambert, and Shipp (2006) compared different measures of fit and found that the different measures were not interchangeable. A fit measure focusing on similarity, which the current study used, was suggested to overlap more with affective state than other types of measures such as a fit focusing on discrepancy (Edwards et al., 2006). The current study implies that this may be dependent on other conditions. Depending on employees' personal characteristics (Study 1) or other situational characteristics (Study 2), the fit measure focusing on similarity may be less impacted by affect.

Investigating a positive aspect of mental health is another asset of this study. Happiness has not received as much empirical investigation as the other occupational health outcomes (Warr, 2006) with a few exceptions (e.g., Schaufeli, Bakker, van der Heijden, & Prins, 2009). The present study showed that the absence of a stressor produced a positive outcome, happiness. As the model of subjective well-being suggests, this result implies that happiness is not just the opposite of depression.

This study also provides information on the Asian workforce in the United States. The U.S. Bureau of Labor Statistics (2008, 2009) showed an overall increase in the number of Asians employed in the workforce, which was the only case among four racial or ethnic groups. Given the growing trend of Asian employees, it is important to investigate this racial group. The relatively homogeneous samples of the study consisted mainly of Asian employees, and the results may generalize to other Asian-based companies.

The results of the current studies have practical implications for occupational health interventions at the individual and organizational level. The results from Study 1 imply that individually targeted interventions can be used to promote employee well-being. Locus of control, self-efficacy, and self-esteem, which are the elements of core self-evaluation, have been used as resources in individually targeted interventions (Cartwright & Cooper, 2005). For example, cognitive-behavioral therapy (CBT) provides users with techniques that enhance cognitive evaluations of self and situational circumstances that in turn lead to improved mood (Cartwright & Cooper, 2005). While most interventions are targeted at the individual level, Study 2 suggests the importance of focusing on the organizational level. Organizations should provide information about their culture and values so that applicants can self-select based on congruence of personal and organizational characteristics. Applicants can then actively collect information from websites, informational interviews, career fairs, social networks, and employment agencies (Cable & Yu, 2007). Designing recruitment and selection systems that enhance the P-O fit of new employees may serve as a preventative intervention.

### **Limitations and Future Directions**

There are several methodological limitations of this study. First, the sample sizes were somewhat small for the examination of moderation. As noted earlier, sample size is important for testing the interaction (Aiken & West, 1991). One reason for nonsignificant results in terms of depression might be the lack of power caused by the current sample sizes. The second limitation is due to the cross-sectional design of the study. Because this study did not include a longitudinal time frame, the causal relationships could not be investigated. Therefore, a longitudinal study is recommended for future research.

Despite these limitations, the current research contributed to the field of P-J fit theory of stress in several ways. First, we have identified moderators such as personality and P-O fit. Second, it confirmed the previous findings that facets of P-J fit are differentially related with criteria. Finally, it sug-

gested that positive affect, such as happiness, should be studied along with negative affect, typical of strain.

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