



Jackson and Schuler (1985) Revisited: A Meta-Analysis of the Relationships Between Role Ambiguity, Role Conflict, and Job Performance¹

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We conducted a meta-analysis of correlations between role ambiguity and job performance and role conflict and job performance. Previous meta-analyses of these role constructs and performance relationships (e.g., Jackson & Schuler, 1985) were limited by small sample sizes and sparse reporting of reliability estimates in primary studies. The present study used a comprehensive database with a larger sample size and a distribution of interrater reliabilities to extend the previous findings. We also tested moderator hypotheses proposed but not conducted by Jackson and Schuler. Results revealed a negative relationship ($\rho = -.21$) between role ambiguity and job performance with moderating influences due to job type and rating source. A negligible relationship ($\rho = -.07$) was observed for role conflict and job performance, a finding consistent across job types and rating sources. Conclusions were that role ambiguity ought not to be dismissed as an unimportant variable in the job performance domain. © 2000 Elsevier Science Inc. All rights reserved.

Since the theory of organizational role dynamics was first introduced (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), extensive research has examined the relationships between role ambiguity, role conflict, and a variety of their correlates, including organizational commitment, job satisfaction, and job performance. A role is defined as a pattern of behaviors; role ambiguity refers to the expectations surrounding a role, and role conflict involves the incompatibility of demands facing an individual (Ilgen & Hollenbeck, 1991). Research involving these constructs has culminated in three meta-analytic reviews (Abramis, 1994;

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Fisher & Gitelson, 1983; Jackson & Schuler, 1985). The general conclusion of these reviews has been that role ambiguity and role conflict tend to be associated with negatively valued states such as tension and low job satisfaction (Jackson & Schuler, 1985). The reviews also suggested a weak and negative relationship between both role ambiguity and job performance (Abramis, 1994) and role conflict and job performance (Jackson & Schuler, 1985).

The previous reviews, however, were limited by small sample sizes and inadequate information on criterion reliability. They may, therefore, have been prone to second-order sampling error and bias arising from inadequate corrections for statistical artifacts. For instance, in two of the previous reviews (e.g., Abramis, 1994; Jackson & Schuler, 1985), job performance ratings were corrected for unreliability using coefficient alpha estimates of internal consistency because the primary studies did not report the more appropriate interrater reliabilities (Hunter & Schmidt, 1990). In another review (Fisher & Gitelson, 1983), no correction at all was made for criterion unreliability. In addition, the relatively small sample sizes in the previous reviews made it difficult to conduct moderator analyses. In reviews that did conduct moderator analyses, the subgroup sample sizes were small, increasing the likelihood of second-order sampling error. For all of these reasons, the questions that prompted earlier reviews, as well as those that have arisen since those reviews, may yet remain unanswered.

We, therefore, reexamine the relationships between role ambiguity and job performance and role conflict and job performance using a much larger and more comprehensive database that allows for meaningful tests of theoretically specified moderator variables. In addition, we use a recently reported distribution of interrater reliabilities (Viswesvaran, Ones, & Schmidt, 1996) to more accurately correct for unreliability in performance ratings.

Past Research on Links Between Role Constructs and Job Performance

Researchers have studied organizational roles and role stress for at least fifty years (e.g., Gross, Mason, & McEachern, 1958; Merton, 1949; Parsons, 1951). An extensive body of research on the relationships between role ambiguity, role conflict and a variety of correlates (e.g., job satisfaction, absenteeism, job performance) has cumulated since the development of the most widely used scales to measure organizational role stress (Rizzo, House, & Lirtzman, 1970; RHL). Conceptually, a role is a pattern of behaviors perceived by an employee as behaviors that are expected (Ilgen & Hollenbeck, 1991; Naylor, Pritchard, & Ilgen, 1980). Although role expectations may seem to refer to various job tasks, the literature distinguishes between job tasks and roles with the latter being the set of expected behaviors engaged in while performing the job tasks (Ilgen & Hollenbeck, 1991). Role behaviors, therefore, can include expectations not necessarily defined in terms of specific job tasks. Role ambiguity occurs when the set of behaviors expected for a role is unclear, and role conflict occurs when there is incompatibility between the expected set of behaviors perceived by the focal person and those perceived by role senders (Katz & Kahn, 1978).

It seems important to understand how these two role constructs are related to job performance because organizations are systems of roles and work behavior is guided by social interactions that occur throughout the role-system (Katz & Kahn, 1978). Specifically, system members communicate explicitly and implicitly their expectations and standards of behaviors for others. To the extent that this communication is either nonexistent or inefficient, role ambiguity is likely. Similarly, communications, or a lack of communication, can result in contradictory information that contributes to role conflict. Work roles provide constancy and stability to organizations; people may come and go but organizations remain intact because of roles that guide expected behavior (Katz & Kahn, 1978). In today's complex work environments, boundaries between occupations, departments, and organizations are often unidentifiable and blurred roles are especially likely to occur in jobs where the responsibility and performance of job tasks is distributed among teams and team members. Since organizations are role-systems (Katz & Kahn, 1978) that depend on the interaction of system members, both role ambiguity and role conflict could be expected to have negative consequences on organizational outcomes.

As noted by Jackson and Schuler (1985), negative relationships between role ambiguity, role conflict and job performance can be explained by research that focuses on cognitive and motivational processes. For example, role ambiguity can be conceptualized as a lack of knowledge of the most effective job behaviors, and role conflict occurs when, due to conflicting information, the individual is unable to do everything that is expected (Jackson & Schuler, 1985). Thus, from a cognitive perspective, both role ambiguity and role conflict should result in lower levels of performance since they represent a lack of information and information overload, respectively. From a motivational view, performance should be negatively related to both role ambiguity and role conflict since they tend to weaken effort-to-performance and performance-to-reward expectancies (Jackson & Schuler, 1985).

However, as also noted by Jackson and Schuler (1985), the literature examining these relationships does not consistently support these contentions. Primary studies in the 1970s and 1980s (e.g., Bedeian, Armenakis, & Curran, 1981; Sieber, 1974; Stumpf & Rabinowitz, 1981) often failed to find significant correlations between role ambiguity and job performance or role conflict and job performance. However, in other studies (e.g., Bagozzi, 1978; Michaels, Day, & Joachimsthaler, 1987; Szilagyi, 1977), the results indicated that both role ambiguity and role conflict were significantly and negatively related to job performance. This inconsistency in the findings of primary studies has been addressed in three previous meta-analytic reviews (Abramis, 1994; Fisher & Gitelson, 1983; Jackson & Schuler, 1985). Of the three, the study conducted by Jackson and Schuler (1985) was the most comprehensive. Their results indicated that role ambiguity was weakly and negatively related to job performance for both objective performance ratings and performance ratings provided by supervisors or peers, and more strongly related to performance for self-ratings. Similar findings were reported by Fisher and Gitelson (1983) and Abramis (1994). For the role conflict variable,

Jackson & Schuler noted negligible correlations for objective and self-ratings, and a somewhat stronger but still weak negative relationship for supervisor or peer ratings. However, those authors also noted that substantial variation remained in their estimates even after correcting for artifactual variance.

Given the limited number of studies and correlations ($K = 37$) available for their meta-analyses, Jackson and Schuler could not conduct meaningful moderator tests. They therefore recommended that future research examine the influence of moderators, especially job type. Although Fisher and Gitelson (1983) conducted moderator analyses of job type and rating source, the moderator subgroups contained as few as two correlations. Therefore, those results were inconclusive.

In addition to the problems of small sample sizes in the previous reviews, many primary studies failed to report reliability estimates. In fact, Jackson and Schuler (1985) had available only eight estimates of the reliability of supervisor and peer ratings and only one estimate for the reliability of self-ratings. In the present study, therefore, we sought to replicate and extend the findings presented in Jackson and Schuler's (1985) review by addressing some of the problems that they encountered. The use of a larger and more comprehensive database (one that extends over ten years beyond that of the previous review) would allow for more meaningful tests of theoretically specified moderator variables. In addition, the unreliability in performance ratings can now be more accurately corrected for using a recently reported distribution of interrater reliabilities (Viswesvaran, Ones, & Schmidt, 1996).

Theoretical Rationale for Tests of Specified Moderator Variables

Job Type

Jackson and Schuler (1985) hypothesized that employees whose job performance depends largely upon interactions with others may be more likely to experience role ambiguity than employees working in jobs where performance is largely a function of completing specific job tasks. According to theories of organizational behavior (Naylor, Pritchard, & Ilgen, 1980), the contingencies between job performance and evaluations may be less clear for more complex jobs, and the lack of formalization of work activities found in some jobs (e.g., managerial jobs) may lead to increased levels of role ambiguity (e.g., Organ & Greene, 1981; Rousseau, 1978; Sorenson & Sorenson, 1974). For example, many managers face unique role demands due to varying demographic compositions and varying strategic requirements (e.g., Arvey & Anderson, 1997); in these environments of uncertainty, the clarity of ones' role may also be ambiguous. In addition, if it is assumed that complex jobs exist at higher levels in a department or an organization (e.g., Hamner & Tosi, 1974; Ilgen & Hollenbeck, 1991), then the individuals in those positions are likely the role-makers. That is, although their own multifaceted roles may be relatively more ambiguous than for jobs more clearly specified, their roles are clear: they involve decision making and policy formation in an uncertain environment. Less conflicting, therefore, are the expect-

tations of the role. As job complexity increases along with decision-making authority, greater role ambiguity than role conflict could be expected.

However, in less complex jobs where roles are more clearly defined, conflict may be greater. Incompatibility can arise from any number of sources, including conflict with supervisors, coworkers, customers, and others as to how the role should be performed (Ilgen & Hollenbeck, 1991); and the employee may not have either the authority or the ability to resolve conflicting demands (Fisher & Gitelson, 1983; Jackson & Schuler, 1985). In those less complex jobs, the roles are more clearly defined by policies, procedures, rule, and regulations set forth by the role maker—the manager. Role ambiguity in those positions, therefore, should not be as great (as in more complex jobs). Based on these propositions together with Jackson and Schuler's (1985) hypothesis that job type may be a moderator, we examine job type as a moderator of the role constructs and performance relationships. We, therefore, coded studies according to the following job types defined in the Dictionary of Occupational Titles (DOT; U.S. Department of Labor, 1991): (a) service; (b) clerical and sales; and (c) professional, technical, and managerial. We also included a non-classifiable category for studies that either did not report enough information to determine the job type or because the study sample included employees in a number of different job types.

Rating Type

Consistent with research (e.g., Harris & Schaubroeck, 1988) indicating that ratings from different sources can differ substantially, Abramis (1994), Fisher and Gitelson (1983), and Jackson and Schuler (1985) all grouped correlations according to one or more of the following performance ratings: objective (e.g., sales volume), self-ratings, and/or supervisor or peer ratings. Their findings indicated stronger correlations between role ambiguity and performance with self-ratings. Since role ambiguity was also self-rated, these results suggest the possibility of correlated measurement errors. That is, incumbents are giving both sets of ratings. Thus, their perceived performance may differ as a function of their self-reported perceptions of role ambiguity although their actual performance does not reflect this perception. For role conflict, however, Jackson and Schuler (1985) found that the correlations were higher for supervisor and peer ratings. To examine the extent that the patterns observed in the present meta-analysis compare with previous reviews, we followed the same classification scheme (i.e., objective, self, and supervisor/peer ratings).

In summary, our research sought answers to the following specific questions:

What are the relationships between role ambiguity and job performance, and role conflict and job performance?

Do differences in job type moderate the relationships between role ambiguity and job performance, and role conflict and job performance?

Does type of performance rating (i.e., objective, self, supervisory/peer) moderate the relationships between role ambiguity and job performance, and role conflict and job performance?

Method

Literature Search and Inclusion Criteria

We conducted literature searches using computer-based (e.g., PsycInfo, Sociofile) and hardcopy (e.g., reference sections of previous reviews) retrieval sources. Studies were included in the analysis if they provided at least one correlation (or statistics that could be used to compute a correlation) between role ambiguity and job performance or role conflict and job performance. Studies failing to report sample sizes were not included in the meta-analysis. In cases where correlations from the same data were reported in more than one article, we used the correlation from the earliest reported article. Overall, our search produced 128 correlations and a total sample size of 21,608. For role ambiguity and job performance, there were 74 independent correlations and a sample size of 11,698. For role conflict and job performance, the search produced 54 independent correlations and a sample size of 9,910. The primary studies used in this meta-analysis are listed in the Appendix.

Analysis Strategy

We used the Schmidt-Hunter Interactive Meta-analysis Program (Hunter & Schmidt, 1990; Law, Schmidt, & Hunter, 1994a, 1994b; Schmidt, Law, Hunter, Rothstein, Pearlman, & McDaniel, 1993) to estimate the true score correlations and standard deviations for the role construct-job performance relationships. Statistical artifacts in primary studies, including sampling error, unreliability in the predictor and criterion, and range restriction, can attenuate observed correlations. The present meta-analysis corrected for all four artifacts. The Schmidt-Hunter meta-analysis procedure tests for situational specificity: the extent to which the magnitude of correlations is similar across the studies in the meta-analysis. If the correlations in the meta-analysis are strongly dependent on the situation (i.e., moderators are present), the artifact corrections will not account for a substantial amount of variation in the observed correlations. We used the 90% credibility interval to address the hypotheses concerning whether moderators were operating. The credibility interval is generated using the corrected standard deviation (as opposed to the standard error that is used to generate confidence intervals) around the mean corrected correlation (Hunter, Schmidt, & Jackson, 1982; see also Whitener, 1990 for a review of this distinction). An interval that is large or includes zero suggests that moderators are operating (Kemery, Mossholder, & Dunlap, 1989; Pearlman, Schmidt, & Hunter, 1980). Specifically, the remaining variance could be attributed to other uncorrected artifacts, methodological differences between studies, truly situationally specific correlations, or to the operation of moderator variables. Other indications of moderator effects are when (a) there are differences in the subgroup correlations, and (b) when more variance is accounted for in the subgroup moderator analyses than in the overall meta-analysis for those groups combined.

*Distributions Used in the Meta-Analysis*¹

The meta-analysis was conducted using the following distributions: (a) primary study correlations and their associated sample sizes; (b) observed reliabilities for measures of role ambiguity and role conflict as reported in the primary studies; (c) a meta-analytically derived distribution of interrater reliabilities (Viswesvaran, Ones, & Schmidt, 1996); (d) a distribution of coefficient alpha estimates of internal consistency for self-ratings of performance; and (e) a range restriction distribution of u values computed using as the population reference standard deviation the mean of the distribution of standard deviations for the primary studies (for a detailed review of u computations and the range restriction formula, see Hunter & Schmidt, 1990: 125–132).

Consistent with Jackson and Schuler (1985) we used an estimate of 1.0 for the reliability of objective measures of performance. Interrater (as opposed to coefficient alpha) reliabilities are the appropriate estimates for corrections of correlations based on supervisory and peer ratings, and parallel forms or test-retest reliabilities are most appropriate for self-reported ratings (Hunter & Schmidt, 1990: 123–125). The distribution of interrater reliabilities, consisting of 39 estimates, was used to correct for unreliability in supervisor and peer ratings of job performance. These corrections for criterion unreliability adjust the estimated correlation and its variance. For self-ratings, however, the primary studies reported only estimates of internal consistency. We, therefore, used the distribution of internal consistency estimates based on those studies to correct for unreliability in the self-ratings, even though this procedure is likely to underestimate the actual correlation between the constructs of interest (Hunter & Schmidt, 1990: 124). Finally, we corrected for restriction of range in all of the meta-analyses, to correct for the variance of the estimated correlations.

Results

The results are presented in Table 1 (role ambiguity) and Table 2 (role conflict). For each role construct, the statistics for the overall meta-analysis are presented first, followed by the results of the moderator analyses that correspond to our research questions. Wherever appropriate, we compare our findings to those from the previous meta-analytic reviews. For purposes of comparison, Tables 3 and 4 present a subset of the findings from Jackson and Schuler's (1985) review.

Role Ambiguity and Job Performance

Overall Meta-Analysis

The meta-analysis of role ambiguity and job performance was conducted using a total of 74 independent correlations with a total sample size of 11,698. The overall meta-analysis included correlations between measures of role ambiguity and an aggregation of three types of job performance measures: objective, self-ratings, and supervisor/peer (combined) ratings. The true score correlation and its standard deviation were $\rho = -.21$ and $SD_{\rho} = .16$. The 90% credibility interval is wide and contains zero ($-.47$ to $.05$) suggesting that moderators are

Table 1. Summary of Meta-Analysis Results for Role Ambiguity

<i>Correlate</i>	<i>K</i>	<i>N</i>	\bar{r}	SD_r	ρ	SD_ρ	<i>90% Credibility Interval</i>	<i>% Variance Explained</i>
Overall	74	11698	-.15	.15	-.21	.16	-.47 to .05	40.85
<i>Job Type</i>								
Service	12	1519	-.04	.11	-.06	.09	-.21 to .09	67.37
Clerical/Sales	24	3074	-.15	.17	-.22	.19	-.53 to .09	35.80
Prof/Tech/Mgr	31	5323	-.19	.14	-.26	.14	-.49 to -.03	50.18
Not Classifiable	7	1782	-.13	.09	-.18	.08	-.31 to -.05	60.96
<i>Rating</i>								
Objective	12	1898	-.04	.12	-.04	.11	-.22 to .14	43.43
Self	28	4423	-.21	.14	-.28	.12	-.48 to -.08	54.24
Supervisor/Peer	34	5376	-.14	.13	-.20	.14	-.43 to .03	46.54

Note: K = number of correlations; N = number of subjects; \bar{r} = sample size weighted mean observed correlation; SD_r = sample size weighted observed standard deviation; ρ = true score correlation; SD_ρ = standard deviation of the true correlation; 90% credibility Interval = $\rho \pm 1.645*SD_\rho$; % Variance Explained = percent of variance accounted for by sampling error and artifacts.

operating. Further indication of moderators is the relatively moderate percent variance (40.85) accounted for after corrections. Thus, the best estimate of the relationship between role ambiguity and job performance is $-.21$. However, this relationship appears to vary across studies. Therefore, we followed up this overall analysis with a series of tests for moderator variables based on theoretical rationale from the extant literature on role ambiguity.

Moderator Analyses

Job Type. The true score correlation ($\rho = -.26$, $SD_\rho = .14$) for the category of professional, technical, and managerial jobs was greater than for

Table 2. Summary of Meta-Analysis Results for Role Conflict

<i>Correlate</i>	<i>K</i>	<i>N</i>	\bar{r}	SD_r	ρ	SD_ρ	<i>90% Credibility Interval</i>	<i>% Variance Explained</i>
Overall	54	9910	-.06	.01	-.07	.11	-.25 to .11	46.33
<i>Job Type</i>								
Service	10	1166	-.03	.01	-.04	.06	-.14 to .06	79.72
Clerical/Sales	16	2399	-.05	.01	-.07	.01	-.23 to .09	54.38
Prof/Tech/Mgr	22	4641	-.07	.01	-.09	.14	-.32 to .14	31.46
Not Classifiable	6	1704	-.04	.02	-.05	.00	-.05 to -.05	100.00
<i>Rating</i>								
Objective	7	1406	.02	.00	.03	.00	.03 to .03	100.00
Self	19	3820	-.05	.09	-.06	.06	-.16 to .04	68.38
Supervisor/Peer	28	4684	-.09	.02	-.12	.13	.33 to .09	39.95

Note: K = number of correlations; N = number of subjects; \bar{r} = sample size weighted mean observed correlation; SD_r = sample size weighted observed standard deviation; ρ = true score correlation; SD_ρ = standard deviation of the true correlation; 90% Credibility Interval = $\rho \pm 1.645*SD_\rho$; % Variance Explained = percent of variance accounted for by sampling error and artifacts.

Table 3. Role Ambiguity Data for Jackson and Schuler (1985)

<i>Correlate</i>	<i>K</i>	<i>N</i>	ρ	<i>% Variance Explained</i>
Objective	9	1330	-.10	30
Self	11	1312	-.37	52
Other	17	3320	-.12	50

Note: *K* = number of correlations; *N* = number of subjects; ρ = true score correlation; % Variance Explained = percent of variance accounted for by sampling error and artifacts.

clerical and sales ($\rho = -.22, SD_{\rho} = .19$) and service jobs ($\rho = -.06, SD_{\rho} = .09$). The true score correlation for the studies which could not be classified was $\rho = -.18 (SD_{\rho} = .08)$. The differences in subgroup correlations (especially between service jobs and the other job types) and the relatively larger amount of variance explained within groups (as compared to the overall analysis) suggests that job type does moderate the relationship between role ambiguity and job performance. However, the width of the 90% credibility intervals for the subgroup correlations suggests that other moderators are operating as well.

Rating Type. The true score correlations for self-ratings ($\rho = -.28, SD_{\rho} = .12$) and supervisor/peer ratings ($\rho = -.20, SD_{\rho} = .14$) were considerably larger than that for objective ratings ($\rho = -.04, SD_{\rho} = .11$). As indicated in Table 3, the pattern is somewhat similar to that reported by Jackson and Schuler (1985) but there are differences across studies in the magnitudes of true score correlations. In the present study, we interpret the amount of variance remaining to be explained together with the subgroup differences in correlations as suggesting that rating source is a moderator. Self and supervisor/peer ratings share in common credibility intervals, but these intervals are wide suggesting the possibility of other moderators (in addition to rating type).

Role Conflict and Job Performance

Overall Meta-Analysis

The meta-analysis of role conflict and job performance was conducted using 54 independent correlations and a total sample size of 9,910. The overall meta-analysis included correlations between measures of role conflict and an aggrega-

Table 4. Role Conflict Data for Jackson and Schuler (1985)

<i>Correlate</i>	<i>K</i>	<i>N</i>	ρ	<i>% Variance Explained</i>
Objective	3	769	.02	100
Self	7	1037	-.03	46
Other	14	3119	-.11	67

Note: *K* = number of correlations; *N* = number of subjects; ρ = true score correlation; % Variance Explained = percent of variance accounted for by sampling error and artifacts.

tion of three types of job performance measures: objective, self-ratings, and supervisor/peer (combined) ratings. The true score correlation and its standard deviation were $\rho = -.07$ and $SD_{\rho} = .11$. The 90% credibility interval is wide and contains zero ($-.25$ to $.11$), suggesting the presence of moderators. Further, the percent variance explained (46.33) suggests the presence of moderators. Thus, the best estimate of the relationship between role ambiguity and job performance is $-.07$. However, because this relationship varies across studies, we conducted tests of moderators based on the above-mentioned theoretical literature.

Moderator Analyses

Job Type. The results (Table 2) indicate that role conflict and job performance are somewhat more related for professional, technical, and managerial jobs ($\rho = -.09$, $SD_{\rho} = .14$) than for the other job types. However, the differences in the correlations across subgroups are rather small in magnitude and all of the correlations indicate a weak relationship between role conflict and job performance.

Rating Type. The true score correlation for supervisor and peer ratings ($\rho = -.12$, $SD_{\rho} = .13$) was larger than that for self ratings ($\rho = -.06$, $SD_{\rho} = .06$) or objective ratings ($\rho = .03$, $SD_{\rho} = .00$). As Table 4 shows, these results are quite similar to those obtained by Jackson and Schuler (1985). In addition, however, the subgroup differences in our data and the increases in variance explained within subgroups (relative to the overall analysis) suggest that type of performance is a moderator. However, the wide credibility intervals for each subgroup suggest that other factors may moderate this relationship. In addition, consistent with the overall analysis, all of the subgroup correlations indicate a weak relationship between role conflict and job performance.

Discussion

We compared the results of this more comprehensive meta-analysis with those of a review published more than ten years ago (Jackson & Schuler, 1985). In their paper, Jackson and Schuler (1985) voiced an interest in what research on role relationships would reveal in the following ten years. Consistent with their findings, we conclude that role ambiguity is negatively related to performance. These empirical findings are congruent with cognitive and motivational theories of performance which suggest that role ambiguity should be negatively related to performance, since role ambiguity represents a lack of information about what behaviors are appropriate, and role ambiguity weakens the links between effort-to-performance and performance-to-reward contingencies (Jackson & Schuler, 1985; Naylor, Pritchard, & Ilgen, 1980).

However, the present findings also indicate that the relationship between role ambiguity and performance is variable, depending on the condition—and these effects are not trivial. The true score correlation between role ambiguity and job performance for professional, technical, and managerial jobs is $-.26$. The magnitude of this correlation can be compared with some personality correlations (e.g., $\rho = .26$, conscientiousness) considered important in the job performance

domain (Barrick & Mount, 1991). This correlation in the present study suggests that efforts to reduce role ambiguity could have a meaningful impact on job performance. As mentioned earlier, more complex jobs are expected to experience more detrimental effects of role ambiguity, since ambiguity is to some extent an inherent component of those types of jobs (Hamner & Tosi, 1974; Schuler, 1975). However, we also observed that substantial variance in role ambiguity-job performance relationships exists even after correcting for artifactual variance and that the correlation between role ambiguity and performance is somewhat higher with self-ratings. These results may be due in part to correlated measurement errors. That is, this correlation represents the relationship between perceived ambiguity and perceived performance. Thus, perceptions of ambiguity may be likely to influence perceptions of performance even when actual performance is unaffected, and incumbents who perceive high levels of role ambiguity may think they are performing worse than they actually are.

Regarding role conflict, our results replicated Jackson and Schuler (1985): role conflict does not appear to be meaningfully related to job performance. Although there is variance remaining to be explained in effect sizes even after correcting for artifactual variance, all of the true score correlations were negligible. Previous research (e.g., Hamner & Tosi, 1974; Schuler, 1975) suggested that role conflict would be more detrimental for workers in less ambiguous lower level jobs (i.e., service or clerical vs. professional, technical, managerial). However, our results disagree with this hypothesis, at least for the jobs in the present study. The small true score correlation between role conflict and job performance combined with the large amount of variance explained by artifacts suggests that for these job types there are no differences in the relationship between role conflict and job performance.

In addition to the above results, another contribution of this meta-analysis is the use of the artifact distribution of interrater reliabilities for corrections of criterion unreliability for supervisor and peer ratings. Jackson and Schuler (1985) noted that one limitation of their research was the lack of available performance reliability estimates to include in the meta-analysis. Because of the larger database and the more appropriate criterion reliability corrections, the present meta-analytic results would be expected to be more representative than those of the previous reviews.

Limitations

The present study has several limitations that could be addressed in primary study research. First, as noted by Jackson and Schuler (1985), there is an inherent difficulty in interpreting observed relationships between role perceptions and job performance. Since role ambiguity and role conflict are self-report measures, they may be influenced by prior knowledge about levels of performance. As one reviewer noted, an incumbent who has received a poor performance evaluation (or who perceives that his or her performance is poor) may ascribe the poor performance to ambiguity in the job. Thus, the causal nature of the relationship is difficult to determine and may be reciprocal, a consideration that could be given in designing future research. Second, the job type classifications used in the

present study may not have been fully representative of the complexity or level distinctions that are made in the theories specifying differential role construct-job performance relationships for different job types. It could be argued that, within any of the present study categories (e.g., clerical and sales), various jobs would differ in complexity. In the present study, rather than arbitrarily creating categories, we used classifications from the DOT (U.S. Department of Labor, 1991) in an effort to make our results more interpretable.

Finally, we assumed perfect reliability for objective ratings. This decision was influenced by our interest in conducting our analyses in a manner that would facilitate the most direct comparisons between our results and those of Jackson and Schuler (1985) who also used a value of 1.0 as the estimate for criterion reliability for objective measures. Furthermore, however, there is neither theory nor data to suggest any other correction for objective measures of performance (Hunter & Schmidt, 1990).

Conclusions and Recommendations

Results of this meta-analysis indicated a nontrivial correlation between role ambiguity and job performance and showed that a substantial amount of variance in the corrected correlation remains to be explained. Future research that identifies the variables that moderate these relationships could greatly improve our understanding of how these role constructs impact performance. Since Jackson and Schuler, a concern has been that the construct labelled role ambiguity is too global, and role ambiguity has therefore been redefined as job ambiguity (e.g., Breugh & Colihan, 1994). We argue that job ambiguity may be conceptually more specific than role ambiguity, and that, although job ambiguity may be a new construct of theoretical and pragmatic utility in the job performance domain, role ambiguity ought not to be lightly dismissed as unimportant. Indeed, the present results show a correlation that could substantially and negatively impact job performance.

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Note

1. These distributions can be obtained from Judith Collins.

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