This study presents an exhaustive model in order to study the impact of socialization practices on the role adjustment of professionals. Previously studied role adjustment variables - role orientation, role ambiguity, and organizational commitment - are examined in detail, and relationships between these variables are explored using a path analytic model. The study confirms that socialization practices are positively related to role orientation, role ambiguity, and the commitment of new employees. In a departure from previous results, the study found that role adjustment variables are not independent and that role ambiguity has a strong negative impact on commitment. The study also examines the mediating role of two other variables - self-efficacy and group affinity. While the study confirmed several previously examined relationships between socialization practices and role adjustment, the study found two previously unexplored results - (1) high group affinity has a negative impact on self-efficacy and (2) organizational commitment is negatively affected by self-efficacy.

I. INTRODUCTION

The study of socialization and its processes has only recently been applied to organizations to investigate the manner in which new employees adjust to corporate culture. Specific studies in this area have considered the manner in which organizational socialization practices help in the adjustment of the employee to the new task, the work group, and the organization. The rationale of these studies is that, upon entering a new organization, newcomers experience surprise or role shock. In order to ease the transition of new members, an organization typically employs socialization tactics to help them learn those values, norms, and behavior patterns that, from the organization's point of view, are necessary for them to know.

The most recent comprehensive work in this area is that of Van Maanen and Schein [144], who described socialization as the process by which people learn what is important and expected in an organization. The process and effectiveness of socialization in turn determines employee loyalty [50], commitment [61], productivity [76], and turnover [7]. Van Maanen and Schein [144] identified six major socialization tactics that have an impact on individual adjustment to new work roles and proposed that, through the use of different methods (tactics) of socialization, newcomers will respond to their roles differently (role orientation).
Newcomers can be encouraged either to accept existing role definitions or to significantly modify them. The conceptual model proposed by Van Maanen and Schein [144] was empirically tested by two later studies - those by Jones [61] and Allen and Meyer [2]. Both studies found only partial support for the Van Maanen and Schein model.

There have since been several extensions to their socialization theory and the factors that affect organizational commitment. This subsequent work suggests several substantive and methodological issues that make a re-examination of the Van Maanen and Schein framework appropriate.

First, the literature suggests that the treatment of role adjustment variables is more complex than has been proposed by Jones [61]. Jones examined the direct impact of socialization tactics on role adjustment variables (role orientation, role ambiguity, and commitment). However, the literature suggests a relationship between these variables as well. Specifically, as discussed below, commitment has been shown to be a function not only of the manner in which the socialization of new employees occurs but also of role orientation and role ambiguity. An examination of these relationships will help clarify how socialization affects employee adjustment.

Second, other researchers have proposed that socialization is greatly facilitated by demographic similarity, which refers to commonalities in demographic features such as age, race, sex, or, as Pfeffer [103] notes, time of entry into the organization. These studies propose that a similarity in demographic variables results in cohort formation, increased communication among group members, and an increased feeling of belonging in group members. The time of entry dimension is particularly important since new entrants are likely to interact more with other new employees and form cohorts. We refer to this cohort formation among newcomers as group affinity and test its intervening properties.

Finally, most previous studies have been based on correlational and/or regression analysis. However, we suggest that specific causal relationships and the effect of mediator variables can be best examined using a path analytic model since this type of analysis can test a priori causal hypotheses against a set of observed correlations [16].

The current study is therefore motivated by the need to extend the existing socialization theory. Specifically, its objectives are

1. Through a comprehensive literature review, examine the antecedents of role adjustment and develop and validate a framework for the effect of socialization practices on it;
2. Incorporate group affinity as a significant component of the socialization framework and examine its mediating effects;
3. Specify a path analytic model to understand causal relationships between socialization practices, role adjustment variables, self-efficacy, and group affinity.

The next section summarizes the organizational socialization literature. This is followed by a review of the literature pertaining to role adjustment variables and to the impact of self-efficacy and group affinity on role adjustment. The
research model and data collection strategies are then presented, followed by data analysis and study conclusions.

II. LITERATURE REVIEW

This section undertakes a review of organizational socialization and its associated outcome variables. The objective is to examine its nature and the manner in which socialization practices have been used to influence employees. Similarly, when reviewing studies on outcome variables - role orientation, role ambiguity, and commitment - the focus is on examining variables that have been shown to be antecedents of role adjustment. Studies pertaining to the intervening effects of group affinity and self-efficacy are also reviewed.

Organizational Socialization

The study of socialization and its processes has been greatly influenced by works such as Charles Cooley's *Human Nature and the Social Order* [26], George Mead's *Mind, Self and Society* [81], Jean Piaget's *The Moral Judgement of the Child* [105], and Erving Goffman's *The Presentation of Self in Everyday Life* [49]. Although a wide variety of definitions have been used to describe socialization, one representative statement is that by Elkin: "We may define socialization as the process by which someone learns the ways of a given society or social group so that he can function within it" [38] and more recently by Wentworth: "[socialization is the] activity that confronts and lends structure to the entry of non-members into an already existing world or a sector of that world." [146]

These general definitions of socialization were applied to an organizational setting by Van Maanen and Schein [144], who defined organizational socialization as "the fashion in which an individual is taught and learns what behaviors and perspectives are customary and desirable within the work setting as well as what ones are not" (p. 211). Socialization practices are the mechanism by which an organization ensures that such learning occurs. Socialization practices may be formal (consciously designed by the organization) or informal.

Thus, socialization involves the process of learning what is expected in an organization. Its effectiveness determines employee loyalty [50], commitment [61], productivity [76], and turnover [7]. Organizational scholars have recently empirically examined the effect of socialization practices on variables such as employee role orientation and commitment [5, 61, 90, 128, 150]. The general premise of these studies is that newcomers experience reality shock [28, 58, 96] or surprise [75] when entering an organization and try to reduce this uncertainty response by seeking information [75, 83]. Organizations, by withholding or furnishing certain information, can therefore affect the newcomer's behavior outcome.

In what can be called the structural theory of socialization, Van Maanen and Schein [144] propose that different methods of socialization result in different role responses. This role response to task requirements is called role orientation, of which there are two extreme cases: custodial and innovative. Innovative role orientation requires new employees to significantly change role requirements.
Custodial role orientation, on the other hand, entails little significant change; new employees simply accept assigned roles. Van Maanen and Schein also identified six major socialization tactics (Table 1) that may affect role orientation: collective vs. individual, formal vs. informal, sequential vs. random, fixed vs. variable, serial vs. disjunctive, and investiture vs. divestiture.

The first two tactics (collective vs. individual and formal vs. informal) are concerned with the context within which information is provided to new employees. Under collective tactics, new employees undergo common learning experiences designed to convey specific information so that homogeneous responses to situations are produced. In contrast, individual socialization tactics provide each newcomer with a unique set of learning experiences through designated socialization agents. Formal tactics involve segregating newcomers from regular organizational members while they learn the responsibilities of their roles. Under informal tactics, the organization makes fewer efforts to segregate newcomers from experienced staff members and puts them in their work groups so that learning takes place on the job. Sequential vs. random and fixed vs. variable tactics relate to the content of information furnished to newcomers. Sequential tactics refer to a transitional process symbolized by a series of distinct stages through which an individual must pass in the organization. On the other hand, random tactics occur when the sequence of activities leading to the expected role behavior is unclear. Fixed and variable socialization tactics deal with the temporal nature of events. Fixed tactics provide new employees with a precise timetable for completing each stage in their orientation, but variable tactics provide no consistent time frames. The final two types of tactics (serial vs. disjunctive and investiture vs. divestiture) relate to the social aspects of socialization. Serial tactics involve senior organization members acting as role models or mentors for newcomers. In the disjunctive socialization process, new staff members are left alone to "learn the ropes." Newcomers must develop their own definitions of situations, and no prior role models or incumbents are available. The last category of socialization tactics specifies how knowledge and personal characteristics brought with the newcomers are regarded by more senior organization members. Investiture processes ratify the viability of the characteristics that the newcomers possess. Under divestiture tactics, the organization provides negative feedback to newcomers relative to their existing knowledge.

Jones [61] regrouped the six socialization tactics proposed by Van Maanen and Schein [144] by categorizing one extreme (collective, formal, fixed, sequential, serial, and investiture tactics) as institutionalized socialization tactics and the other extreme (individual, informal, variable, random, disjunctive, and divestiture tactics) as individualized socialization tactics. He used two questionnaires (n=102) to determine that institutionalized tactics lead to custodial role orientation, and individualized tactics to innovative role orientation. The study also found that self-efficacy moderates this learning process - specifically, that socialization tactics produce a stronger custodial role orientation when newcomers possess low levels of self-efficacy. In addition, the study used canonical analysis to determine that investiture, serial, sequential, and fixed tactics are related to high job satisfaction and commitment and low role conflict and ambiguity. Further, individual, random, variable, and disjunctive socialization tactics are related to innovative role
orientation. Thus, Jones concluded that institutionalized and individualized socialization tactics have different effects on role orientation and personal adjustment. A subgroup analysis using Fisher's r to z transformation further confirmed the moderating influence of self-efficacy on role orientation.

Table 1
A Classification of Socialization Tactics and their Relationship to Role Orientation

Allen and Meyer [2] replicated Jones' findings. They also used a longitudinal study (n=132) and determined that only the serial-disjunctive dimension contributed toward the prediction of role orientation after a year of employment. In addition, both the fixed-variable and investiture-divestiture dimensions were shown to contribute to predictions of commitment after six months, but only the investiture-divestiture was significant at the end of twelve months.

Baker and Feldman [7] also explored the relationships among the different tactics and the impact of these strategies on newcomer adjustment. Their study found two overall patterns of socialization: "unit" and "batch" processing. The "batch" process (similar to Jones' institutionalized tactics - formal, collective, fixed, sequential, and serial) tends to be associated with more positive attitudinal responses than a "unit" strategy (equivalent to Jones' individualized tactics).
Black [17] further examined socialization practices in the international context and studied the impact of socialization practices on the role innovation of American expatriate managers. He found that collective, serial, and fixed tactics have a significant relationship with role innovation. In addition, organizational tenure moderates the relationship between collective and serial tactics and role innovation.

**Role Adjustment Variables**

The literature has suggested that three major role adjustment variables are linked to the socialization process. These variables - role orientation, role ambiguity and organizational commitment - are discussed below.

As discussed in the previous section, studies such as those by Schein [120], Van Maanen [143], and Van Maanen and Schein [144] have suggested that socialization tactics can enhance or retard innovative roles. In addition, other studies have shown links between socialization and role innovation. For example, West, Nicholson and Rees [147] determined that socialization practices for newly created jobs tend to be individual, informal, random, and disjunctive and that these tactics encourage role innovation. In general, as West [147] writes, "the introduction of significant new behaviors into pre-existing roles" occurs in work roles perceived as having high job discretion or freedom. Structured organizational experiences - formal training, feedback, and orientation sessions - have been referred to as organizational scripts [83], which newcomers learn on entry into organizations and which allow them to deduce appropriate behavior. Further, as noted by Miller and Jablin [83], since newcomers are especially receptive to learning in order to deal with surprise and role shock, scripts (institutional socialization practices) are effective in promoting desired behavior. In the absence of such practices, individuals typically fall back on their prior socialization experiences, leading to the infusion of new roles and actions.

A second role adjustment variable affected by socialization practices is role ambiguity. Role ambiguity is defined as a lack of knowledge of the outcomes of behavior. It also refers to a lack of inputs and norms from the organizational environment to serve as guides to behavior [111]. Therefore role ambiguity, as operationalized by Rizzo et al. [111], reflects uncertainty about duties, authority, and clarity of direction. This definition of role ambiguity is based on role theory [62], which argues that ambiguity is likely to result when information concerning role expectations is insufficient or inconsistent. According to Jones [61], since socialization practices provide information that reduces the uncertainty surrounding entry, institutionalized socialization tactics reduce role ambiguity.

In addition, several other factors have been shown to reduce role ambiguity. Jackson and Schuler [59], in their meta-analysis, found that feedback from others is associated with low role ambiguity. They also determined that formalization and the existence of written rules and procedures governing work activities reduce role ambiguity. Sawyer [119] and Olk [98] made similar observations. Finally, Ashforth and Fried [6] argue that organizational socialization involves newcomers' learning scripts which buffer them from role conflict by institutionalizing procedures and providing them with a basis for evaluating
behavior. Thus, organizational socialization provides a program and a means of "adopting the system" and therefore relieves role ambiguity by symbolic cueing [133].

Table 2 presents a review of studies describing the antecedents of role orientation and role ambiguity.

Table 2
Review of Past Studies on Role Orientation and Role Ambiguity

The third adjustment variable related to socialization is organizational commitment. Although Jones [61] argued that institutionalized tactics lead to increased organizational commitment, the literature suggests a more complex relationship linking organizational commitment, role orientation, and role ambiguity. Table 3 reviews several past studies, which have discussed the antecedents of organizational commitment.

The review clearly shows that organizational commitment is a function not only of the manner in which the socialization of new employees occurs but also of role orientation and role ambiguity. New entrants, as noted by Buchanan [20], are primarily concerned with security and getting established within and accepted by the organization. They are anxious to prove themselves by showing that they can
learn and adjust to the demands of the new environment [12, 148]. Therefore, the

### Table 3
Review of Past Studies on Organizational Commitment

<table>
<thead>
<tr>
<th>Study</th>
<th>Antecedents of Organizational Commitment</th>
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<tr>
<td>Buchanan [20]</td>
<td>Confirmation of pre-entry expectations and job scope</td>
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<tr>
<td>Steers [134]</td>
<td>Confirmation of pre-entry expectations and challenges</td>
</tr>
<tr>
<td>Jamal [60]</td>
<td>Role clarity, freedom from conflict</td>
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<tr>
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<td>Morris and Sheman [87]</td>
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<td>Role ambiguity</td>
</tr>
<tr>
<td>Cherniss [23]</td>
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<td>Lower degree of adjustment and social difference</td>
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<td>Fewer unmet job expectations</td>
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<td></td>
<td>Lower job stress</td>
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<tr>
<td>Munroe [89]</td>
<td>Organizational socialization</td>
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<td>Nota [93]</td>
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<td>London [72]</td>
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<tr>
<td>Soeters [132]</td>
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<td>Task changes</td>
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<td>Sager and Johnston [115]</td>
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<td>Caldwell, Chatman and O’Reilly [21]</td>
<td>Socialization practices</td>
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<tr>
<td>Luthans, Baack and Taylor [77]</td>
<td>Structuring of situation by leader</td>
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<td>Dubinsky et al. [33]</td>
<td>Work realism</td>
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<td>Role definition</td>
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most influential experiences for new recruits are those that help them to understand what is expected of them [14]. Thus, clear role expectations are likely to help ease the anxiety that newcomers feel and increase their commitment to the organization. This is confirmed by Glisson and Durick [48], who found that role ambiguity is a significant factor contributing to negative organizational commitment.

Table 3 also notes the influence of factors such as job autonomy, self-expression, and job involvement as predictors of commitment. For example, DeCotiis and Summers [30], using a path analytic model, determined that autonomy with respect to work definition is an antecedent of commitment. Role innovation has also been shown to be positively related to work satisfaction [147], which, in turn, has been noted to be related to organizational commitment [107].

**Self-Efficacy and Group Affinity**

Self-efficacy is based on Bandura's social cognitive theory [8, 10, 11] and is defined as the "conviction that one can successfully execute the behavior required to produce the [desired] outcome" [8]. Self-efficacy has been increasingly studied in organizational literature because of its impact on individual performance. Bandura's theory proposes that efficacy judgments determine, in part, an individual's choice of activities. As shown by Earley and Lituchy [34], highly efficacious individuals proactively engage their task environment by taking on increasingly challenging tasks. In general, people develop expectations concerning their ability to perform a task. These expectations, in turn, influence goal levels and goal commitments through a choice of activities [125], roles [91], persistence [15], and coping effects [47].

Self-efficacy has also been shown to have positive impacts in diverse areas of psychosocial functioning, such as anxiety and phobias [9], depressive effects [29], health behaviors [94], athletic attainment [39], assertiveness [66, 65], interpersonal skills [46], death competency [112], and school achievement [124, 123]. In general, these research studies suggest that individuals with high self-efficacy tend to perform better than individuals with low self-efficacy.

Self-efficacy arises, as Gist and Mitchell [47] indicate, through a complex mechanism involving a judgment of the skills required to do a task and a comparison of these skills with those an individual believes he or she possesses. A positive assessment leads to increased self-efficacy. Judgment of task requirements and skills is influenced by external cues such as information about the task and its complexity and internal cues such as task familiarity. Therefore, providing information about required tasks and appropriate training is likely to increase self-efficacy. This relationship has also been summarized by Earley and Lituchy [34] through a review of three models - those of Locke and Latham [71], Garland [42], and Eden [35] - of the impact of goals and ability on self-efficacy and performance. These models indicate that tactics which provide a sense of purpose, direction, and clarity increase self-efficacy.

Self-efficacy has been treated as both a mediator and a moderator variable. Mediational analysis lends support to the causal contribution of self-efficacy as
described by Bandura's theory [8]. On the other hand, the moderator effect has been studied by Jones [61]. In this model, self-efficacy is shown to affect the direction of and/or strength between the predictor variables and criteria. Support for self-efficacy as a mediator can also be seen in studies by Schunk and Gunn [125], Lent, Brown and Larkin [69], Mitchell, Brodwin and Benoit [84], Biglan [15], and Tannenbaum, Mathieu, Salas and Cannon-Bowers [135] and as a moderator in studies by Lee and Graham [67], Dipboye, Zultowski, Dewhirst and Arvey [32], Maddux and Stanley [78], Eden and Kinnar [36], Dilorio [31], Weaver et al. [145], and Trice [141].

Group affinity is proposed here to indicate the cohesion that may develop between newcomers due to common learning experiences during the socialization process. Group affinity reflects social integration; that is, the degree to which an individual is psychologically linked to others in his/her group (in this case, new employees). A study by O'Reilly, Caldwell, and Barnett [95] has previously shown social integration to be a function of the degree to which members coordinate their effort and of the general morale of the group. Group affinity represents this social integration and therefore an individual's satisfaction with other group members and his/her motivation to sustain the relationship.

Group affinity is related to the construct "demographic similarity" proposed by Pfeffer [103]. Pfeffer [103] notes that similarity in demographic characteristics (for example, time in the organization, age, and sex) helps to increase communication frequency and the development of cohorts. The consensus among studies on demographic similarity is that it increases group cohesion and leads to higher interpersonal communications [95]. These effects among employees have also been seen to reduce turnover in studies such as those by Lorence [74], Pfeffer and O'Reilly [104], and Templer and Schwartz [136]. Social integration has also been related to executive succession [101], innovation [95], individual performance [142], communication [151], and power coalitions [37].

Group affinity, therefore, captures one proposed outcome of demographic similarity - cohort formation. Thus, while the demography theory focuses on similarities that can influence interpersonal dynamics within a group, group affinity measures the extent to which such dynamics exist.

Group affinity is especially relevant in the case of new employees who interact with other newcomers in order to understand their environment. While socialization practices are the formal processes by which information is imparted to new employees, we also need to examine the informal processes inherent in group affinity by which newcomers acquire the conventions of the organization. For example, Comer [25] and Sherman, Smith and Mansfield [126] note that the best way to supplement organizational socialization is to use other employees to help newcomers adapt to organizational culture.

III. RESEARCH FRAMEWORK AND STRATEGY

Based on the above discussion, the hypothesized research model is shown in Figure 1.

Although this model is based partially on the study by Jones [61], it also incorporates the later studies related to socialization practices reviewed in the
previous section. Jones proposed that socialization tactics directly affect three role adjustment variables - role orientation, role ambiguity, and commitment. However, as shown by a review of the literature, clear work expectations and innovative work lead to satisfaction and organizational commitment [107]. Therefore, the model also depicts role orientation and ambiguity as antecedents of organizational commitment.

Figure 1
Research Model Linking Socialization Tactics and Role Adjustment Variables

Further, this study proposes that, as suggested by Schiaffino [121] and Longo [73], self-efficacy and group affinity act as mediators in the relationship between socialization practices and role adjustment. The mediational role of self-efficacy argues that appropriate socialization practices can facilitate the transfer of relevant skills to new employees and therefore increase their self-efficacy. Thus, self-efficacy can be an important outcome of organizational socialization, which in turn affects role adjustment.

Group affinity also has mediational effects in the model. Since socialization can be designed to increase communication among new employees, it can enable group formation, which in turn affects role adjustment. Institutionalized socialization practices provide a more relevant context for newcomers in that they provide opportunities for network formation and should lead to higher group affinity. Thus, this model argues that self-efficacy and group affinity mediate the relationship between socialization tactics and role ambiguity, role orientation, and organizational commitment.
A direct effect of group affinity on self-efficacy is also shown in the model. Although there have been few studies relating group dynamics and self-efficacy, Kerr [63] has noted that an increasing group size can result in a diminished sense of self-efficacy. He also pointed out that, as shown by Bandura [9], group size and cooperative behavior in a group can interact to cause a complex pattern of relationships with self-efficacy. Similarly, Craft and Hogan [27], in outlining strategies for enhancing efficacy, note that "successes achieved with external aid carry less efficacy value because they are likely to be credited to external factors." These studies suggest that high group cooperation may work to induce a feeling of lower personal achievement and efficacy. We test this proposition by proposing a direct effect from group affinity to self-efficacy.

Respondents and Data Collection

The study involved 70 high-technology firms located in a major midwestern metropolitan area. A directory from the local high-technology council was used as a basis for selection of the firms. The highest-ranking managers in several functional areas - marketing, accounting, production, and research and development - were contacted, and each was given a questionnaire to distribute to his/her recently hired professionals. Managers were asked to select all professionals in their departments hired within the last two years. Professionals are defined as those skilled personnel who have undergone extensive training prior to joining the company and who are performing work that requires creativity and non-routine skills. For confirmation purposes, sixteen firms were randomly selected, and telephone interviews were conducted to determine the nature of socialization practices in these firms. Among these sixteen high-technology firms, ten had institutionalized socialization practices for their newly-hired professionals while the remaining six firms trained employees informally or on an individual basis.

Respondents

Of the 70 firms included in the sample, 51 firms agreed to participate in the study. Study questionnaires were distributed to the managers in these firms with a cover letter that stated that the intent of the study was to understand the processes that occur when an employee is first hired. The respondents were instructed to return the questionnaires directly to the authors in the provided postage-paid envelopes. The cover letter assured all respondents of anonymity and confidentiality. A total of 216 questionnaires were received from these 51 firms (an average of 4.2 professionals per firm). Fifty-six questionnaires were received from these 51 firms (an average of 4.2 professionals per firm). Fifty-six questionnaires were later found to be unusable because the respondent's tenure was over 25 months; this was considered too long a period after initial entry to study role adjustment. Thus, 160 usable questionnaires were included in the data analysis.

To determine whether the characteristics of the participating firms differed from those of the solicited firms, the solicited firms' annual sales, age, number of employees and industry segments were compared to those of the participating firms; the proportions were found to be similar. This mix provided some assurance as to the representativeness of the final 51 firms.
Among the 160 professionals, 41 were in the finance/accounting area, 45 in marketing, 38 in production engineering, and 36 in research and development. This provided for a rather even distribution among the four functional areas. The average age of the employees was 27.4 years, average tenure in the organization was 14.7 months, and average tenure in the work group was 13.34 months. These demographical data suggest that these newly hired professionals were in an early stage of their careers and in the job position for which they were originally recruited.

Measures

The following section discusses the measurement and operationalization of the socialization tactics, self-efficacy, group affinity, and outcome variables.

Socialization Tactics

Socialization tactics were measured using the scales developed by Jones [61]. For example, collective vs. individual was measured using four items from the Jones study that were summed to form an index of collective tactics (Cronbach's alpha=0.75). All the remaining tactics were measured on four-item 1-5 Likert-type scales except the formal vs. informal dimension in which six items were used. Cronbach's alpha values for the scales ranged from 0.71 to 0.77. These results are shown in Table 4.

Table 4
Descriptive Studies and Intercorrelations Among Variables^{a,b,c}
Role Orientation

Role orientation was measured on a four-item Likert-type scale using a 1-5 response format ranging from "strongly disagree" to "strongly agree" [61]. A high score on role orientation indicated an innovative role orientation; a low score indicated a passive, custodial role (Cronbach's alpha = 0.86).

Personal Outcomes

Role ambiguity and job commitment were used as measures of personal outcomes. Role ambiguity was measured using the five-item scale developed by Rizzo, House, and Lirtzman [111] and commitment by the techniques of Porter, Steers, Mowday, and Boulian [107]. Inter-item reliability values for these scales were 0.88 and 0.89.

Self-Efficacy and Group Affinity.

Self-efficacy was measured using five items developed by Jones [61]. These items judge an individual's expectations that he/she can successfully execute the behavior required to produce a desired outcome. These items were scored on a five-point Likert-type scale ranging from "strongly agree" to "strongly disagree" ($\alpha = 0.76$).

The measure for group affinity was based on Pfeffer [103]. Three items were used to judge the degree of interaction among new employees. Respondents were asked to indicate on a five-point scale, ranging from "strongly agree" to "strongly disagree," their responses to three statements: (1) When I joined the organization, there was a group who joined at the same time; (2) As far as learning how things really are in this organization, I owe the most to the new members who joined with me; and (3) I have developed a continuing relationship with the group of new members who joined this organization at the same time as I. Alpha for the three items was 0.81.

IV. RESULTS

The analysis performed in this study involves self-report data from a single source. To explore the possibility of common method variance, a single factor test was performed as suggested by Harman [53] and Podsakoff and Organ [106]. In this test, the six socialization tactics, self-efficacy, role ambiguity, role orientation, and group affinity were simultaneously factor-analyzed. Common method variance can be a problem if the unrotated factor solution reveals a single factor or a predominant general factor that accounts for substantial variance. From the analysis, three factors emerged. The first had an eigenvalue of 3.06 and accounted for 28 percent of the variance. The other two factors accounted for a combined additional 18 percent and had eigenvalues of 1.87 and 1.08. Varimax and oblique rotations produced similar results. Thus, since there is no single dominant factor, the single factor test does not raise any concerns about the impact of method variance.
Table 4 presents inter-item reliability (Cronbach's alpha), means, standard deviations and correlations among the study variables. Examining the intercorrelations reveals that socialization tactics under similar dimensions demonstrate high correlations; this result is consistent with Jones' [61] findings. For example, serial tactics correlate most highly with investiture tactics as they both deal with the social aspects of socialization. Similarly, sequential tactics correlate mostly with fixed tactics. In all cases, inter-item reliability estimates (Cronbach's alpha) are of greater magnitude than inter-scale Pearson correlations [20]. This suggests a comfortable level of discriminant validity between socialization tactics.

The relationships shown in Figure 1 were examined in a path analysis conducted using Lisrel VII. The path analysis strategy was based on Tetrick and LaRocco [138], who proposed the use of the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), and, when maximum likelihood or generalized least squares estimation procedures are employed, the relative change in $\chi^2$ to degrees of freedom to compare models. This last procedure, based on Bentler and Bonett [13], involves estimating the fit of a series of sequential nested models in which each model is progressively more restricted (has one fewer parameter to be estimated). The difference in $\chi^2$ between two sequential models is analogous to the change in $R^2$ in moderated hierarchical regression. The analysis begins with a full model and then reestimates the model with the parameter for one term fixed to zero. If the $\chi^2$ difference obtained from subtracting the $\chi^2$ values for the former model from the $\chi^2$ values for the more restricted model is statistically significant, the effect is supported. The sequence of testing nested models continues until all relationships have been tested.

Table 5 summarizes the tests of sequential nested models with each model being more restricted than the previous one. The coefficients of determination for each of the endogenous variables and the total system of equations are shown. The $\chi^2$, GFI, and AGFI values are also shown for each more restricted model.

In Table 5, the full model shown in Figure 1 is estimated first. The estimated parameters are $\chi^2 = 1.07$ for d.f. = 1 with GFI = 0.999, AGFI = 0.920 and a coefficient of determination of 0.729. Next, to examine if there is a significant impact of divestiture tactics on self-efficacy, the corresponding path is set to zero and the model is reestimated. $\chi^2$ for this reestimated model is 0.280 with d.f. = 2. Thus, for one d.f. increase, $\chi^2$ has increased by only 1.73 from 1.07 to 2.80; this result is not significant at $p = 0.05$. Therefore, this path is deleted from the model.

As can be seen from Table 5, socialization tactics have no effect on self-efficacy. After six parameters are deleted, $\chi^2$ increases by only 4.53 from 1.07 to 5.62. However, significant $\chi^2$ differences can be seen when restricting the effects of divestiture, serial, and sequential tactics on role ambiguity. These paths are therefore retained. Similar comparisons are conducted for each path in the model. The final model has a $\chi^2$ value of 21.54 with 28 degrees of freedom. This model and its significant paths ($p = 0.05$) are shown in Figure 2. The figure shows that in the current model, sequential tactics are the most important in obtaining custodial roles and, together with serial and investiture tactics, lead to reduced role ambiguity.
Commitment is increased by collective, serial, and investiture practices but is negatively affected by high self-efficacy.

Table 5
Summary of Tests of Sequential Nested Models - Mediator Effects
The sequence of models represents progressively more restricted models (i.e., there are fewer parameters free to be tested). Significant increases in $\chi^2$ relative to the changes in d.f. indicate that the parameters that have been fixed should be left in the model rather than being set to zero.
To summarize, the main results of the analysis support the following model assertions:

1. Role orientation is affected primarily by sequential tactics, which result in custodial roles (path = -0.340, p = 0.0001).
2. Formal (path = 3.388, p = 0.0004) and fixed (path = 2.539, p = 0.005) tactics result in stronger group affinity.
3. Role ambiguity is reduced by sequential (path = -2.614, p = 0.03), serial (path = -4.846, p = 0.0001), and investiture (path = -5.498, p = 0.0001) tactics.
4. Commitment is increased by collective (path = 2.018, p = 0.02), serial (path = 3.667, p = 0.0001), and investiture (path = 7.708, p = 0.0001) tactics and reduced by role ambiguity and self-efficacy.
5. Group affinity leads to lower self-efficacy (path = -1.877, p = 0.03).

These results are discussed in detail in the next section.

V. DISCUSSION AND CONCLUSION

This study has used a path analytic model to re-examine the relationship between organizational socialization tactics and the role adjustment of professionals. Several results of this study confirm previous findings while others present new research perspectives. The discussion of these results is divided into three sections: (1) the
The Direct Impact of Socialization Tactics on Role Adjustment

In this study, only the sequential tactics were found to affect role orientation. Van Maanen and Schein [144] have argued that socialization tactics, either individually or in combination, most influence role orientation. In the study by Jones [61], the canonical set relating to individual tactics, most importantly collective and sequential tactics, affected role orientation. When newcomers confront an organization, they have strong incentives to adopt its culture. Socialization assists in this process and also helps in learning organizational legitimacy [40], suggesting to newcomers certain behaviors as the only ones acceptable in the organization. Restrictions imposed by this learning can mask the need for greater innovation in newcomers, a need which may become more important in later career stages. Also, it is possible that some common factors such as task characteristics may affect role orientation. Some tasks are more amenable to innovation than others, and this may limit the degree of role innovation possible.

Strong support was found for the proposition that institutionalized tactics reduce role ambiguity. Sequential, serial, and investiture tactics are most important in this regard. As noted by Jones [61], serial and investiture tactics reflect the social (interpersonal) aspects of the socialization process. Therefore, he argued that the social tactics (serial tactics) will have a stronger effect on newcomers' transitions into organizations. Further, these tactics are likely to be important in situations in which information is ambiguous or role learning is complex because they provide the social cues and facilitation needed during the learning process.

In the current model, the greatest impact of investiture tactics is on organizational commitment. As Van Maanen and Schein [144] note, "an investiture process says to the newcomer, 'We like you just as you are'" (p. 250) and tries to build upon the skills, values, and attitudes the recruit is thought to possess. This theme lies at the heart of the notion of exchange [57, 80]. Individuals come to organizations with certain needs, desires, skills, and experiences and expect to find a work environment in which they can utilize their abilities. When the organization provides such a vehicle, the likelihood of increasing commitment is enhanced. Further studies such as those by Buchanan [20], Hall and Schneider [52], and Hrebiniak and Alutto [57] have shown that prior work experiences are related to commitment. It is therefore not surprising that the more an organization tries to capture and build on an employee's experiences, the more the employee's commitment is increased.

Again, the social context of socialization is important. In the current model, both serial and investiture tactics are shown to have a strong impact on commitment. Jones [61] also found that institutional tactics, most importantly investiture and serial tactics, have a strong impact on newcomer adjustment. Studies by Allen and Meyer [2] and Baker and Feldman [7] provided similar results.
Interrelationships Among Role Adjustment Variables

Based on the literature, this study had hypothesized that role orientation and role clarity would enhance organizational commitment. Only one of these results was supported - role ambiguity is an antecedent of organizational commitment.

The impact of role ambiguity on commitment is important especially since previous studies have not empirically shown any direct relationships. Although Jackson and Scheiter [59] note that perhaps this relationship is indirect - role ambiguity may affect satisfaction and tension which impact on organizational commitment - their meta-analysis did find a strong connection between role ambiguity and commitment.

The effect of role ambiguity on commitment is especially important for new employees. Organizational entry is a particularly critical time for an individual, and, as Lee, Ashford, Walsh, and Mowday [68] note, experiences during this period are likely to shape a newcomer's adjustment to the organization. New employees experience a high level of role-related and career uncertainty. The ease and quickness with which newcomers learn their roles therefore affects their relationship with the firm.

However, it must be noted that there has been some discussion in the literature [54, 131] regarding method variance and confounding due to item wordings in the measurement of role ambiguity as proposed by Rizzo, House and Lirtzman [111]. This has resulted in the development of new measures of role ambiguity (e.g., Breaugh and Collins [19]; Sawyer [119]). Sawyer's measure, for example, was designed specifically to eliminate wording effects by using neutral items. However, replication studies and validation are needed before these measures can be adopted. The examination of these new measures and their facets may lead to stronger relationships with organizational commitment.

The absence of an impact of role orientation on commitment is surprising. Perhaps the nature of the task and the employee's previous exposure to similar tasks may affect actual role innovation. Further, as suggested by Lee, Ashford, Walsh, and Mowday [68], initial commitment propensity might mask the actual impact on organizational commitment.

Impact of Self-Efficacy and Group Affinity

One of the main results found in this study was the negative impact of self-efficacy on commitment. This is contrary to suggestions made in the literature and necessitates a reexamination of the self-efficacy construct itself. Self-efficacy as a broader concept is reflected in such philosophical concerns as the determinism and indeterminism of human action, voluntarism, intentionality, free will, and causality. As defined in a delimited space, it refers to people's assessment of their effectiveness, competence, and causal agency. Self-efficacy is therefore increased by gradual accomplishments and exposure to needed task performance. Organizational commitment implies an employee's desire to remain in an organization while high self-efficacy suggests that the employee has self-perceived competence. Analyzing this from a person-job interaction perspective [130], the two can be at odds if personal competence as implied by self-efficacy is not congruent
with the job. For example, as noted by Gist [45], "... if all other factors are held constant, an employee with high self-efficacy might choose to apply for an advertised vacancy that offers more challenge and pay, while an employee with low self-efficacy might choose to remain in a dead-end position" (p. 474).

Considered together with the fact that in the current model, role ambiguity is shown to reduce commitment, the results discussed above point to the usefulness of viewing the job context as a learning environment and the role incumbent as a learner within a person-job interaction framework. As Terborg [137] suggests, "[Since] situations vary in cues, rewards, and opportunities and people vary in cognition, abilities, and motivation, accurate measurement of individual differences and accurate measurement of situational differences both become necessary" (p. 570). Studies such as those by Sims [130] have shown that matched individuals report higher job satisfaction and performance. It is likely that such a match would also cause an employee to work to remain in an organization.

The impact of self-efficacy on commitment also raises concern about the differentiation of commitment to the organization from commitment to the profession. The subjects for this study were all professionals working at tasks characterized by creativity and individual work. Studies such as those by Raelin [110] have shown that one of the most important issues in the management of professionals is the conflict between cultures: the corporate culture, which describes the manager, and the professional culture, which socializes professionals. It is possible for professionals to have dual loyalties - toward the profession and toward the organization - and it is possible that the two are not congruent.

Young professionals join an organization based on knowledge and learning that are highly transferable and that can be carried across organizations. Specialization among professionals also makes them highly interdependent, building bonds among people in the same tasks. This interdependency may sometimes exclude organizational considerations. Thus, employees may profess greater loyalty and commitment to their profession than to their organization. If self-efficacy is a measure of skills or a belief in them, then it may also predict commitment to the profession and not to the organization.

It must, however, be stated that research on self-efficacy has noted that high self-efficacy is good to have. It leads to favorable consequences for the individual, the organization, and society. Gecas [43] writes, "Even the illusion of efficacy and control seems to be beneficial" (p. 311). He further cautions that research has not yet determined the parameters of self-efficacy's beneficial consequences; that is, under what conditions might high self-efficacy and personal control be dysfunctional? Clearly, the results of the current study point to the need for greater conceptual clarity and control-specific observations of self-efficacy.

A second result of this study that appears to contradict past studies is the negative impact of group affinity on self-efficacy. In the few empirical studies regarding group affinity, the main conceptual arguments are based on the attraction-selection-attrition model. Studies, such as those by Schneider [122] and Pfieffer [102], have argued consistently that an organization composed of dissimilar people will experience high levels of conflict and turnover and that individuals in such organizations will have less positive attitudes.
Directly supporting the argument that high group affinity should not only increase morale but also assist in the transfer of skills is the group learning theory proposed by Ryle [114]. This theory suggests that groups assist their members in developing skills through direct instruction and feedback and by providing models for correct behavior. Although the idea that group feedback can facilitate the learning of skill and role behaviors [8] is intrinsically appealing, it must be applied with caution to new employees.

High group affinity implies that newcomers have formed an interdependent relationship in order to learn about the organization. In this environment, there may be social pressures or even a mutually agreed upon decision to cooperate. Although this cooperative environment may facilitate the transfer of general organizational information, it may preclude the learning of specialized skills. In fact, group formation may reduce the perception of skills. In what has been termed collective efficacy, Kerr [63] expresses the idea that group confidence is reflected in the belief that a group may together be good at problem solution. This, however, differs from self-efficacy, which focuses on the individual level and is in fact sensitive to group size. Kerr [63] further argues that the perception of self-efficacy drops as group size increases and that individuals feel more self-efficacious individually or in smaller groups.

**Study Extensions**

This study indicates that further research is needed to understand the processes by which newcomers adjust to the organizational environment. Consistency of several results with those of past studies increases confidence in the validity of the impact of socialization tactics on role adjustment. However, future studies are needed to examine the observations that have been found to vary. There are several extensions to socialization theory that could help in further understanding the manner in which newcomers adjust to the organization. Socialization tactics as suggested by the Van Maanen and Schein model [144] represent one aspect of employee socialization. However, studies such as those by Fogarty [40] have suggested that other forces such as coercion and mimetic and normative pressures may describe a fuller range of socialization practices. Thus, he argues that employees learn roles from established reward structures (economic coercion), role modeling, mentoring, and diffusion of past experiences (mimetic forces), and the norms of their profession. Including these processes may provide a better description of employee adjustment. In addition, prior socialization experiences of the new employee should be considered as potential influences on current responses.

This study has focused on direct effects in the socialization framework only; i.e., the impact of socialization practices on role adjustment. It is possible that other organizational and personal variables may act as moderators in these relationships. For example, Jones [61] examined self-efficacy as one possible moderator. Self-efficacy has also been used as a moderator variable by Saks [117], who found that initial self-efficacy moderated the relationship between training and adjustment of professionals. In addition, the inclusion of moderator effects such as newcomer expectations [79] and demographic variables such as age, education, and organizational experience [140] will greatly enhance the socialization framework.
The study of socialization practices typically examines an organization's efforts to influence new employees. This approach completely overlooks an employee's self-monitoring and information-seeking behavior. Miller and Jablin [83] present one framework that can be used to describe information seeking on the part of the employee. How information-seeking behavior correlates with socialization tactics and their joint impact on role adjustment are important issues. These additional studies, it is hoped, will help clarify the impact of socialization tactics on an employee's role orientation and commitment.

Conclusion

The results of this study underscore the importance of assessing the nature of socialization and role adjustment in new employees. Based on the Van Maanen and Schein [144] model, this study has validated a modified framework of organizational socialization. The results suggest a complex pattern of role adjustment, more so than has been discussed in previous literature. The explicit influences of self-efficacy and group affinity have been investigated. In a departure from previous studies, it was found that high self-efficacy is not necessarily an antecedent to organizational commitment and that a high level of group affinity may reduce self-efficacy. These results necessitate a reexamination of the self-efficacy and group affinity constructs and their relationship with specific socialization tactics.

NOTE

1. We would like to thank an anonymous referee for this observation.

REFERENCES


