

# **Development and Early Testing of the Role Enactment Questionnaire**

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Le questionnaire sur l'établissement des rôles a été élaboré afin de mesurer comment les parents de jeunes enfants vivent l'intensité et l'inégalité de leurs rôles respectifs. Ces deux facteurs ont été décrits comme antécédents aux tensions par rapport au rôle. L'instrument subsume trois échelles de Likert de cinq points qui représentent deux dimensions et quatre rôles. L'élaboration de l'échelle comprenait la validation du contenu et l'essai psychométrique initial avec quatre-vingt-douze parents afin de permettre l'analyse de la fiabilité. La version finale du questionnaire sur l'établissement des rôles comportait 126 points. Les facteurs de pondération alpha de Cronbach étaient de 0,90 pour la dimension «inégalité» et de 0,89 pour la dimension «intensité». La fidélité de stabilité sur la base des réponses données par soixante-dix-huit parents était de 0,73 pour l'inégalité dans le rôle et de 0,80 pour l'intensité du rôle.

The Role Enactment Questionnaire was developed to measure role intensity and role disparity experienced by the parents of young children. These two factors have been described as antecedents to role strain. The instrument subsumes three 5-point Likert scales that represent two dimensions and four roles. Scale development included: content validation and initial psychometric testing with 92 parents to conduct a reliability analysis. The final version of the Role Enactment Questionnaire consisted of 126 items. Cronbach's alphas were 0.90 for the disparity dimension and 0.89 for the intensity dimension. Test-retest reliabilities ( $r$ ) based on the responses obtained from 78 of the parents were 0.73 and 0.80 for role disparity and role intensity, respectively.

The number of Canadian women engaged in paid employment outside the home is increasing. Specifically, the percentage of Canadian women in the labour force who have children 3 years or younger, increased from 31.7% in 1976 to 61.5% in 1991, while the participation of those with children 3-5 years old rose from 40.9% to 68.2% (Dumas, 1992). Despite these trends, there is a lack of consensus about the psychological and physical costs and benefits to parents who also simultaneously fill the roles of worker and spouse.

## **Literature Review**

Two theories in the literature have reflected differing conceptualizations of the effects of multiple roles. The scarcity theory was developed first, and relates role strain to competing or overwhelming role demands and obligations in the context of energy limitations (Coser, 1974; Goode, 1960; Slater, 1963). According to this theory, role strain occurs when the individual experiences difficulty in fulfilling role obligations (Goode, 1960). The signs include fatigue, depression, tension, anger, hostility, guilt, dissatisfaction, physiological stress, and discomfort (Ward, 1986). The expansion theory focuses atten-

tion on the benefits and gratification of multiple roles, which are viewed as outweighing the strains and resulting in a net gain in well-being (Marks, 1977; Sieber, 1974; Thoits, 1983). Marks (1977) acknowledged that role strain can occur, but argued that it was not inevitable. Although empirical evidence has been more supportive of the expansion theory, recent research has provided evidence in support of the scarcity theory (Campbell & Moen, 1992; Hall, 1975; Hemmelgarn & Laing, 1991; Walker & Best, 1991). Results have provided evidence that both role strain and gratification occur and suggestions have been made for conditions that facilitate one or the other. Thus, role strain has not been conceptualized as an inevitable outcome of multiple role occupancy.

Study results have been inconsistent in part, because researchers have traditionally focused on the number of roles an individual occupies (quantity) and have only recently considered role types and characteristics (quality). Role characteristics must be considered because they vary in role demands and according to gender and individual expectations (Froberg, Gjerdingen, & Preston, 1986). Froberg and colleagues (1986) have suggested that role strain may be more related to the type and quality than to the number of roles.

Several qualitative studies have indicated that there is a relationship between the type and quality of roles and role demands (Hall, 1987, 1991; Maclean, 1991; Meleis, Norbeck, Laffrey, Solomon, & Miller, 1989). Findings have also indicated that control for women with young children (Hall, 1987) and attitudes about acceptable role characteristics for women and men with young children (Hall, 1987, 1991) are important. Little attention has been given, in quantitative research, to the interaction between role demands and the individual's control over them (Piechowski, 1992). Other investigators have indicated that differences in parent's attitudes (Hoffman, 1989; Scarr, Phillips, & McCartney, 1989) and the degree of control they perceive (Froberg et al., 1986), should be included in instrumentation. The next logical step in developing dual-earner family research is to define the composition and structure of demands and control (Piechowski, 1992).

### ***Purpose***

A number of authors have described antecedents or sources of role strain, such as role conflict, role accumulation, role intensity, role ambiguity, role incompetence, and role disparity (Burr, 1972; Sarbin & Allen, 1968; Ward, 1986). The literature has not identified tools that address antecedents of role strain in relation to the work/family interface, family role characteristics, and variables such as responsibility, control, and acceptability of role characteristics. Specific instruments must be developed for both genders so that possible sources of role strain can be understood in the family context. Thus, the purpose of the present study was to develop a reliable and valid instrument to

measure role intensity and role disparity in study subjects as paid workers, spouses, parents, and individuals. These were the four major roles identified by Hall's (1987, 1991) studies of dual-earner parents.

### Method

First, a conceptual framework was designed to serve as a basis for instrument development (Anastasi, 1988; Nunnally, 1978). Using findings from two qualitative studies by Hall (1987, 1991), other descriptive studies (Bird, 1979; Hood, 1983; Mackey, 1985; Rapoport & Rapoport, 1971; Rapoport & Rapoport, 1976; Russell, 1982; Shaevitz, 1984; Smith & Reid, 1986) and various sources in the literature (Burr, Leigh, Day, & Constantine, 1979; Sarbin & Allen, 1968; Ward, 1986), two dimensions of role enactment were identified and described in relation to the four specific roles of paid worker, spouse, parent, and individual:

*Role intensity.* Role intensity was defined as the amount of time (preemptiveness) and effort (organismic involvement) devoted to specific role components (Burr et al., 1979; Sarbin & Allen, 1968). This dimension consisted of personal perceptions of the amount of time, effort, and responsibility that were associated with the four roles. Women and men described feeling overwhelmed by the planning, thinking about, and execution of activities that accounted for every moment of their days (Hall, 1987; Hall 1991).

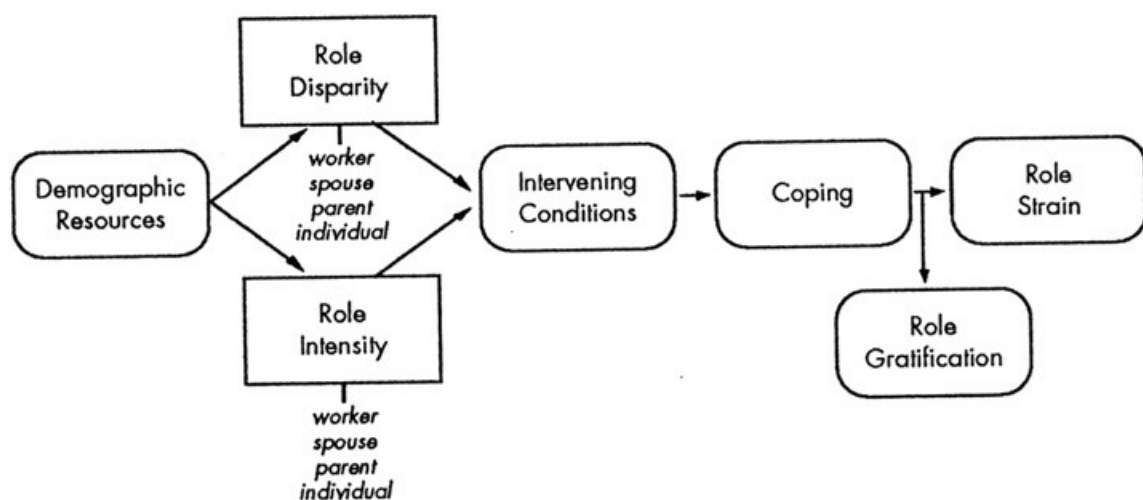
*Role disparity.* Role disparity was defined as discrepancy between expectations, existing attitudes, and actual behaviours (Burr et al., 1979; Sarbin & Allen, 1968). It captured the individuals' perceptions of their abilities to control their role intensities as paid worker, individual, and spouse and their attitudes about the level of intensity they experienced in the four roles of paid worker, individual, parent and spouse. For example, men talked about their expectations in relation to nurturing their children and how their attitudes changed as they were confronted with reality. Attitudes could make carrying out their roles more difficult if activities became uncontrollable or unacceptable (Hall, 1991) (Figure 1).

### *Development of the Item Pool*

The item pool that was developed consisted of behaviours or components associated with each role. Parents' descriptions that had been generated from qualitative data (Hall, 1987; Hall, 1991) were used to increase the validity of the items. These descriptions were augmented by findings from other studies of dual-earner couples (Bird, 1979; Hood, 1983; Mackey, 1985; Rapoport & Rapoport, 1971; Rapoport & Rapoport, 1976; Russell, 1982; Shaevitz, 1984; Smith & Reid, 1986). A total of 138 items were generated in the first pool for use with a 5-point Likert scale. Because the questionnaire asked participants

**Figure 1**

**A theoretical framework for antecedents of role strain:  
Role disparity and role intensity**



to indicate the level of role intensity and role disparity they experienced, negatively worded items could not be included to prevent response bias. In addition, low values on the Likert scale in relation to control and acceptability had to be transposed during data entry into high levels of role disparity.

Objectives that represented each domain were developed from the author's qualitative work and other descriptive findings. An exhaustive set of items was designed to measure each objective. All objectives were not measured by the same number of items. Parents with preschool-aged children emphasized parenting and spousal roles to a greater extent than work and individual roles. In addition, work was viewed as important largely in the context of the extent to which it intruded on home life.

### **Validity**

Next, the author requested four experts in family nursing or work and family research to rate each item out of 100, by subscale, for inclusion or removal. The experts rated the items in relation to the objectives and the definitions of terms. They also assessed whether the items satisfactorily represented the behaviours in the specified domains and identified any areas that had been neglected or omitted.

All of the experts agreed that relationship and household management should be included in the spousal role. Inclusion of those components fitted with Nye's (1974) view that a therapeutic role is an aspect of the spousal role and Mederer's (1993) insistence that housework includes caring for home, household members, and other transactional matters.

The responses were reviewed and 12 items that had been rated below 70 by two or more of the experts were removed. The demographic data collection page was revised to include a consideration of blended families, and the availability of flex-time of paid or unpaid support persons. At this point the instrument consisted of 126 items representing activities, responsibilities undertaken by parents in relation to their four roles, attitudes toward those activities/responsibilities, and the amount of control associated with some of the activities. Three items were developed for each activity or role component. In the first item participants were asked to quantify the amount they performed a particular role component, in the second, how acceptable their level of performance was to them; and in the third, how much they controlled their performance or how much responsibility they took for planning or performing the role component. Likert response formats ranged from none (1) to a great deal (5). For example:

	None		A great deal		
The amount you dress your children	1	2	3	4	5
a) How acceptable is this to you?	1	2	3	4	5
b) How much responsibility do you take for this?	1	2	3	4	5

### *Pilot Testing*

Pilot testing of the instrument was carried out by 10 dual-earner couples with at least one child less than 6 years of age. These volunteers were asked to answer all the questions, but to indicate if they did not understand any items, or felt they were irrelevant or unacceptable. They were also asked to comment on the overall format and the clarity of the instructions and to indicate their total time for completion of the questionnaire. After pilot testing, revisions were made to correct any items considered ambiguous, irrelevant or unacceptable. The overall format of the questionnaire was revised and the instructions were revised to increase clarity. The 126-item questionnaire was printed in final format for testing on a larger sample.

A convenience sample of dual-earner couples was used for evaluating the final instrument. All were from a large urban area, and were recruited through advertisements and flyers at day care-centres. Questionnaires were mailed to respondents. Completion of the questionnaire was considered to indicate consent to participate in the study. All questionnaires were coded and only the researcher had access to names and addresses of the subjects.

### **Results**

Of the 55 couples who were recruited, 46 returned the first questionnaire and only 39 of these returned the second one so that test-retest reliability could be calculated. The second questionnaire was mailed out 2 weeks after

the return of the first one. However, since there was often a delay of about one month before the second questionnaire was returned, it may have been completed from 3 to 6 weeks after the first one.

Study participants had the following demographic characteristics: they ranged in age from 25 to 52 years old (mean 33.2 years); they had from 1 to 3 children (mean 1.43) and their ages ranged from 2 months to 7 years (mean 23.28 months); the parents' hours of work per week ranged from 4 to 90 (mean 35.3); their education ranged from some high school to completed doctoral studies; 58 persons indicated that flex-time was not available, 7 had some form of flex-time, and 27 indicated flex-time was available; individual incomes ranged from \$7,000 to over \$50,000 per year (mean \$36,609 in Canadian funds). Eighty-three percent of couples indicated that they received some assistance from nannies, cleaning personnel, baby-sitters and/or gardeners.

### ***Reliability Analysis***

Data from questionnaires were entered on a computer, cleaned by hand, and analyzed using the SPSS-X program. Internal consistency using Cronbach's alpha was calculated on the dimensions of the instrument. The internal consistency was high, with an alpha coefficient of 0.90 on the disparity dimension and 0.89 on the intensity dimension. Alpha coefficients ranged from 0.39 to 0.93 for each of the roles on each dimension. Some of the subscales with fewer items, i.e., role as paid worker (7 items) and role as individual (6 items), demonstrated alphas that were somewhat lower. Because alpha is dependent on the total test variance and the length of the test, it is not unusual to have lower alphas with a short test and a small sample size (Waltz, Strickland & Lenz, 1991). Test-retest reliability was calculated. The Pearson  $r$  was 0.73 for the disparity dimension, 0.80 for the intensity dimension, and ranged from 0.62 to 0.87 for each of the roles on each dimension.

### **Discussion**

As previously stated, one of the methodological limitations of dual-earner family research has been the absence of a reliable and valid questionnaire that addresses antecedents of role strain in relation to work-family interface, family role characteristics, and variables such as responsibility, control, and acceptability. For example, although questionnaires developed by Baruch and Barnett (1986) and Marshall and Barnett (1993) measure role quality in family and work roles, they focus on rewards and concerns or role conflict. In addition, although reliability has been reported, validity testing has not.

The Role Enactment Questionnaire was developed primarily from previously reported qualitative findings (Hall, 1987, 1991). Items were generated to fit categories that had been identified in the life experiences of Canadian dual-

earner families. This questionnaire provides an example of linking the contributions of qualitative and quantitative methods. Content validity was supported by our findings. It is possible to produce a relevant, acceptable questionnaire with high levels of statistical reliability and validity using qualitative findings.

The Role Enactment Questionnaire was tested on a small sample, but the reliability estimates suggest that it is useful for making both group and individual assessments. With further testing, the questionnaire could serve as a reliable and valid instrument for identifying areas of difficulty in families in specific areas of role enactment.

The construct validity of the Role Enactment Questionnaire needs to be examined and, this could be achieved through a number of mechanisms. Confirmatory principal factor analysis using the constructs of role intensity and disparity would be important to support the two dimensions of the questionnaire. Hypothesis testing could be proposed which would specify differences among groups using demographic predictors. Group comparisons could be made using one-way ANOVAs. Criterion-related discriminant validity could also be assessed by using the Work-Family Strains scale and the Work-Parenting Strains Scale to measure role conflict (Marshall & Barnett, 1993). A low positive correlation would be expected between the Role Enactment Questionnaire and the two scales. Finally, further testing of the questionnaire must occur with a larger sample size using Ward's (1986) conceptualization of role strain and role gratification to determine the instrument's utility for measuring antecedents of role strain.

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