PARTICIPATION DECISIONS BY LOCAL UNION MEMBERS:
THE THEORY OF PLANNED BEHAVIOR AND PERSONALITY

By
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Abstract

The theory of planned behavior (TPB) was the theoretical framework applied to examine participation decisions by local labor union members. This study had several objectives: determine the dimensionality of union participation as a dependent variable; extend the TPB to include variables used in union participation research; test personality measures; and test the predictive ability of the TPB over the theory of reasoned action (TRA).

A factor analysis revealed that union participation is multidimensional, with three factors emerging. When personality and demographic variables were included, the amount of variance accounted for in union participation increased by 1 percent. A comparison of the TPB with the TRA also demonstrates support for the TPB.

A relationship was found between perceived behavioral control (PBC) and gender, and for children under 12. The gender effect indicated that males have more PBC than do females, and when there are children under 12, there are issues with volitional control. No relationship was found to exist between PBC and race, or with disabilities. However, non-White members were found to have higher instrumental beliefs towards participation, as did persons with disabilities. A unique finding in this study was the relationship between subjective norms (SN) and participation, and between SN and intentions. A relationship was also found between beliefs and extraversion.

These findings represent important policy consideration for unions. Unions need to be more creative in finding ways to make it easier for females and families to participate. Paid allowances may be necessary to cover expenses, holding meetings
earlier in the evening to make it easier to attend, or locations that provide easy access. Leadership training may address some issues for members less extraverted. Unions must also ensure that socialization of members, using retired union members or working with referent others is encouraged, as it appears to be an important construct.
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CHAPTER 1

Introduction

Statement of the Problem

Over the past two decades, union leaders have witnessed a declining rate of unionization, a lack of interest or indifference in union activities by their members, and dissatisfaction of members with their unions (Barling, Fullagar and Kelloway, 1992; Chacko, 1985; Kolchin and Hyclak, 1984; Paquet and Bergeron, 1996). Given the decline in labor union membership in most advanced industrial societies (Western, 1997), there is a growing need for increased member participation throughout all unions in order to maintain their status and to recruit new members. In Canada, union density, the portion of the workforce in unions, has remained fairly stable for the past thirty years at about 30 percent. During this same period, union density has drastically declined from 30 percent, to just under 14 percent, in the United States (Rose and Chaisson, 2001). Canada has been described as a “middle-density country” when compared to eighteen other OECD countries (Western, 1997). If Canada is to increase its position amongst these OECD countries, it must “attempt to expand beyond their state of relative stability.....If Canadian unions are to grow and prosper, major initiatives are required” (Rose and Chaisson, 2001, p. 39). Some of these major initiatives include increasing density rates by organizing harder-to-organize groups that have not been traditionally unionized (Yates 2000a, 2000b), as well as regaining members lost due to restructuring
and downsizing (Rose and Chaison, 2001). Such initiatives require a significant amount of financial resources and dedicated members who will participate in their union's interests, both at the national and local levels of the union.

Union participation at a very basic level refers to the involvement and commitment of members in their union's local affairs (Davis, 1981). Labor organizations depend upon their membership to actively participate and to carry out day-to-day administrative tasks, such as grievance handling and safety committee work, which are necessary for effective representation (Kuruvilla and Fiorito, 1994). According to Fullagar, Gallagher, Gordon and Clark (1995, p. 148), "union participation has an impact on union democracy because it increases members' involvement in, and influences on, decision making, implementation of policies and selection of leadership". Poor participation levels are therefore detrimental to the democratic nature of unionism (Paquet and Bergeron, 1995).

Unfortunately, there exists a widespread lack of member participation in union activities, which continues to be a prominent source of concern for labor unions (Huszczo, 1983; Kuruvilla and Fiorito, 1994; Kuruvilla, Gallagher and Wetzel, 1993; Miller, Zeller and Miller, 1965; Sherman, 1986; Spinrad, 1960). In much earlier studies, it was determined that over 90 percent of union members did not attend meetings or participate in union affairs (Olson, 1971). While recent studies have not specified precise

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1 The Toronto Star, Monday, September 3, 2001, A1/A6. Union leaders concede that "union activists are aging; young people appear to have little interest" (in the labor movement).
levels of participation, it is clear, based on numerous statements made by union activists, that a problem with participation persists for unions.\footnote{Focus groups were held with both activists and non-activists at the local union level in another study. Activists continually discussed the fact that a vast majority of their brothers and sisters did not participate..."you just have to come to a union meeting and you’ll see that it is always just a few of the same members who come out month after month".}

While securing active member participation at the local union is a problem, the question that remains is about understanding why some members actively participate and others do not. Since the 1950's, numerous studies have been conducted in order to gain a better understanding of this problem (Anderson, 1979; Kelloway and Barling, 1993; Kolchin and Hyclak, 1984; Perline and Lorenz, 1970; Spinrad, 1960; Sayles and Strauss, 1952). Understanding why certain members actively participate and others do not is an important question that needs to be addressed so that the goals of the union can be achieved.

A review of the literature brings to light a number of key variables that, if utilized in a model of union participation, could possibly add to our understanding of the behavior in question. Kelloway and Barling (1993, p. 263) have duly noted that “research on union participation has proceeded piecemeal with little or no attempt to integrate findings across studies or to examine the relative impact of different variables on members’ participation in the union”. This study will attempt to address the concerns of Kelloway and Barling (1993) by integrating key findings of previous research in a predictive model of union participation, including variables not yet tested in participation research, to arrive at a more comprehensive model of union participation at the local level.
An emerging theoretical framework, the theory of planned behavior (Ajzen, 1985; Ajzen and Madden, 1986), provides a method for explaining some of the differences in a union member’s propensity to participate in local union activities. This theoretical framework will be discussed in detail in Chapter 2. Although this framework is used extensively in the social psychological research, it has not been used, to the best of my knowledge, in union participation research. The theory of reasoned action, from which the theory of planned behavior is derived, has been used to varying degrees in studies concerning union participation and union commitment.

Recent studies are clearly more focused on understanding participation as a behavioral outcome. As such, participation, as a dependent variable, has been studied with a goal of determining its dimensionality. There have been many arguments suggesting that participation is unidimensional, while other studies have provided convincing evidence for its multidimensionality (McLean Parks, Gallagher and Fullagar, 1995; McShane, 1986a, 1986).

Certain constructs, if measured, could potentially enhance our understanding of the research question, but they have not been tested in union participation research. One such construct is personality. Differences in personality traits have not been thoroughly tested but, with newer forms of measurement, we may be able to advance our understanding of an individual’s decision to participate and determine differences that may exist across individuals.

Including demographic variables that represent particular groups such as gender, ethnicity, race, eldercare responsibility, presence of children under 12, and disabilities, is
important because these groups represent a significant portion of the population from which the union must draw upon to actively participate in day-to-day union activities. Unfortunately, a number of barriers to union participation may exist, so the inclusion of these groups, in a study of union participation, is essential. For example, a 1999 Conference Board of Canada survey found that 15 percent of the employees surveyed had responsibility for both children and elderly family members, compared to 9.5 per cent a decade earlier. According to Statistics Canada, 2.3 million Canadians aged 15 to 64 reported some level of disability in the 1991 Health and Activity Limitation Survey. Almost one in ten employed Canadians (more than one million) are persons with disabilities. Persons with disabilities face personal, social and economic disadvantages, and barriers that prevent access to the same opportunities as other Canadians. Persons with disabilities are more likely, for example, to have lower levels of education, to be socially isolated, and to be discriminated against in the workplace. They often face economic hardship in their daily lives and many live below the poverty line. Women and Aboriginal persons with disabilities, in particular, experience greater disadvantages, reporting higher incidences of unemployment and poverty.  

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The pool from which unions have to draw upon for union participation is very diverse. The population in Canada can be described as multicultural.\footnote{Multiculturalism is an official government policy enacted by Parliament in 1988 when a Multiculturalism Act was passed unanimously by all the political parties.} For example, from 1991 to 1996, 78 percent of new entrants into Canada were from Asia, Central/South America, the Caribbean, and Africa. At present women and non-Whites make up 70 to 80 percent of new entrants into the Canadian labour force (Cantano, Cronshaw, Wiesner, Hackett and Methot, 2001).

The discussion that ensues will explain these issues in more detail, arguing for the importance of using demographic variables in a model predicting union member participation at the local level.

Objectives of the Study

The overall objective of this dissertation is to ultimately gain an understanding of factors that might impact on a member’s decision to participate or not in their local union’s activities, as well as to gain an understanding of the type of union activity a member might perform.

To achieve these intended objectives, the theory of planned behavior will be used as the theoretical framework for this study. The theory of planned behavior has not been used in the union participation literature,\footnote{The theory of planned behavior is an extension of the theory of reasoned action, which takes into consideration the fact that individuals may not have full volitional control over their actions. The theory of reasoned action has been used more frequently in union participation research than any other theoretical framework as of late. However, it is not entirely appropriate as will be discussed in Chapter 2.} but has been used extensively and successfully in the social psychological research to predict various types of behavior. The theory of
planned behavior uses a set of variables, referred to as internal variables, that include perceived behavioral control, intention to participate, attitudes, beliefs, and subjective norms. In this study a set of external variables will be included to determine if they add predictive value to the model. These external variables include personality, self-efficacy, gender, ethnicity, race, eldercare responsibility, presence of children under 12, education, age, occupation, marital status, and disabilities.

The theory of planned behavior is an extension of the theory of reasoned action. Therefore, the theory of planned behavior will be compared to the theory of reasoned action to determine if it increases the amount of variance accounted for in union participation over the theory of reasoned action.

There has been a persistent problem in determining an appropriate factor structure for participation. Specifically, a question remains regarding the dimensionality of participation. If union participation is a multidimensional construct, then what are the various union activities comprising union participation?

Personality has not been extensively reviewed or tested in union participation research. To address this shortcoming, personality will be measured using the five-factor model that has been used extensively in the selection research. Although there are five personality factors, this study will focus on only two factors: extraversion and conscientiousness.
Significance of the Study

Union participation is central to union democracy (Pateman, 1970) and cannot be effectively achieved without the continued involvement of union members at the local level. The survival and efficiency of any organization relies on how well its members fulfill these roles (Katz and Kahn, 1978). Although there have been a number of studies that have focused on union participation, it has not received the attention it deserves (Barling et al., 1992). Therefore, a study of union participation that attempts to define a theoretical framework, and that further defines the dimensionality of the participation construct, is expected to contribute to the issues associated with union democracy.

Incorporating a theoretical framework, such as the theory of planned behavior, establishes a nomological network that helps to extend our understanding of the behavior in question. This has become a very important issue in the industrial relations field for reasons previously stated. This study also builds on previous research using similar theoretical models such as the theory of reasoned action, which should assist in advancing research in union participation.

The dimensionality of participation remains largely in dispute. Researchers must continue to explore the dimensionality so that an understanding of union participation can be extended. More recent research has determined that participation is a multidimensional construct, but questions still remain. This study should enhance our understanding and extend research in union participation.

Personality measures, in particular the five-factor model, have not been used in union participation research, as unions have been skeptical of what researchers might do
with the information (Zickar, 2001). This construct has been discussed for many years, and most assertions were made qualitatively, rather than quantitatively. What research is available has not been extensively tested, and is fragmented at best. The use of personality measures in this study could advance our understanding of the relationship between personality and a member’s propensity to participate, as well as any differences that may exist amongst union members.

Demographic variables such as gender, ethnicity, race, eldercare responsibility, presence of children under 12, and disabilities, are important in this study. The multicultural composition of our workforce, the demands placed on families, most particularly on females, for childcare and eldercare responsibilities, and the barriers that might exist for persons with disabilities, could impact on union participation. Inclusion of these variables may further account for some of the variance in a model of participation, and help to develop the theoretical framework necessary to appropriately study union participation.

Lastly, this dissertation combines research findings from social psychology and industrial relations. Social psychology explores forces within the person (such as traits, attitudes, and goals) as well as forces within the situation (such as social norms and incentives). The goal within the social psychological domain is to unravel the mysteries of individual and social life in areas as wide-ranging as prejudice, romantic attraction, persuasion, friendship, helping, aggression, conformity, and group interaction. Industrial relations theory, on the other hand starts "from an assumption that an enduring conflict of interest exists between workers and employers in employment relationships. Much of
the work in this field has revolved around the role, structure, and effect of unions and other forms of collective representation and action" (Kochan, 1998). It has also been described as "a broad, interdisciplinary field of study and practice that encompasses all aspects of the employment relationship" (Kochan, 1980). Since the purpose of this dissertation is to study union participation behavior, social psychology will provide the necessary theoretical framework from which to address this question. The combination of the two disciplines will undoubtedly enhance the quality of the study.

The Research Framework

This study represents basic or fundamental research. The main purpose of such research is to generate more knowledge and understanding of the phenomena that occur and to build theories based on the results (Sekaran, 1992). The theory of planned behavior provides a viable framework to explain the phenomena of participation. If some of the variance in a study of union participation can be explained by adding variables such as personality and particular demographics characteristics, then it may enhance and contribute to the use of the theory in future studies.

A survey design methodology will be employed in this study. This particular design is useful because both attitudes and behaviors will be tested, using samples drawn randomly from two different unions, representing both blue-collar and white-collar workers (Fowler, 1988). This study is cross-sectional since the surveys are sent out at one point in time. Survey designs are the methods used most often in industrial relations research. This may be because the application of quantitative methods adds rigor to
research. It allows hypotheses to be tested, orders of magnitudes of the relations between key factors to be established, and patterns to be uncovered (Kochan, 1998). This study is also largely exploratory since the theory of planned behavior has not yet been used in the study of union participation.

Organization of the Dissertation

This dissertation will consist of five chapters. The remainder of the chapters will be organized in the following manner. The theoretical framework, literature review, and hypotheses will be explained in Chapter 2. The research design and methodology will be presented in Chapter 3, introducing the quantitative methods employed in the study. Chapter 4 will discuss the results and analysis as they relate to the theoretical framework and hypotheses. Finally, Chapter 5 will discuss the findings, the implications, and the limitations of the research, and then will conclude with final comments regarding the study, as well as recommendations for future research.

There will be repeated acronyms used throughout the dissertation. To help the reader, the repeated acronyms are as follows:

TRA - *Theory of Reasoned Action*
TPB - *Theory of Planned Behavior*
PBC - *Perceived Behavioral Control*
S-E - *Self-Efficacy*
FFM - *Five-Factor Model*
CHAPTER 2

Theoretical Framework

Theory is defined to be a set of interrelated constructs, definitions and propositions that presents a systematic view of phenomena, by specifying relations among variables, for the purpose of explaining natural phenomena (Kerlinger, 1979). Understanding the phenomena of union participation decisions is important for organized labor as they strive to increase their membership, and ensure the longevity of their organization. This understanding can be achieved through a theoretical framework. A theoretical framework offers an advantage of providing a unifying structure, integrating various explanatory factors. Identifying a set of explanatory variables without a theoretical linkage does little to increase our understanding of phenomena such as union participation (Barling et al., 1992; Gallagher and Strauss, 1991).

The use of grounded theory in industrial relations research has been controversial. Most of what has been referred to as industrial relations research has focused on union-management relations and its impact (Strauss and Whitfield, 1998). Recent work by industrial relations scholars has made important contributions by incorporating social psychological theories to explain certain behaviors, such as union participation. Much of this success can be attributed to the exposure of other disciplines such as organizational behavior and economics (Gallagher and Strauss, 1991), and industrial organizational psychology. Predicting behavior has been the major objective of psychological theories,
and some have proven to be very beneficial (Chang, 1998).

**Union Participation and Theory**

Traditionally, the literature on individual participation in unions has failed to incorporate the use of specific theoretical frameworks (Barling et al., 1992). One of the more commonly used theoretical frameworks concerning individual decision-making and union participation, was reported by Klandermans (1984a, 1984b, 1986a, 1986b). He developed a theory of willingness to participate, which focused on the importance of cognitive processes, and which emphasized situational aspects of participation (Kryl, 1990). This theory was based on the resource mobilization theory, which deals with participation in social movements. The theory of willingness to participate and the resource mobilization theory are both based on the notion that members participate in union activities when they know about opportunities to participate, they are capable of participating, and they are willing to participate. It is on this last concept that Klandermans focused in applying an expectancy-value theory. In general, expectancy-value theories consider the individual’s action to be related to the person’s expectations and subjective value for the consequences that are perceived to follow the actions (Feather, 1982). By adapting an expectancy-value theory to unions, cognitive factors gain more importance.

Klandermans (1984b, 1986b) argued that a rationale decision process is necessary for union participation. Other studies, however, have emphasized that the affective component of participation behavior, feelings of satisfaction and dissatisfaction with the
job, were assumed to initiate participation in union affairs (Chacko, 1985; Hanmer and Smith, 1977; Spinrad, 1960). Therefore, a shortcoming in Klandermans's work is that he focused exclusively on the cognitive aspect of union participation by investigating the perceived instrumentality of union activity through three types of perceived cost-benefit analysis. Additionally, and perhaps more importantly, Klandermans (1984a, 1984b, 1986a) did not extend his research beyond behavioral intentions and so a prediction of the actual behavior was never tested.

An appropriate theoretical framework that looks at the relationship between intentions and actual behavior is probably more encompassing than that espoused by Klandermans. Research that tests the relationship between attitudes and willingness to participate suggests that the intention to perform a behavior could predict union participation (Ajzen, 1987; Ajzen and Fishbein, 1977; Mobley, 1977; Premack and Hunter, 1988). Attitudes are viewed as important in building favorable or unfavorable feelings about participation. Ajzen and Fishbein (1977) also stressed the importance of looking at specific behaviors, because general measures such as job satisfaction tend to have difficulties in predicting specific work-related behaviors.

One such theory that is now used more extensively in the industrial relations literature is the theory of reasoned action (hereafter referred to as “TRA”) (Kuruvilla and Sverke, 1993; Montgomery, 1989; Paquet and Bergeron, 1996). The theory is also derived from an expectancy-value model. The ultimate goal of the theory is to predict and understand what causes people to behave in particular ways. The TRA actually incorporates a number of features found important to Klandermans, with the main
difference being the measure of the actual behavior. Like Klandermans's, the TRA is based on the assumption that human beings are usually rationale and make systematic use of information available to them (Ajzen and Fishbein, 1980). By rationale, it means that people will consider the implications of their actions before they decide to engage or not engage in a given behavior, as opposed to behavior that may be controlled by unconscious motives or overpowering desires. The theory applies only to behaviors in which no external or internal barriers exist to prevent performance of a behavior, once an intention to do so is established (Leone, Perugini and Ercolani, 1999). In other words, the behavior in question is under total volitional control. An individual’s behavioral intention is the single best predictor of whether or not they will engage in a behavior ("I intend to participate in that activity, therefore my participation in that activity will probably happen"). Behavioral intention is in turn, determined by a person’s attitudes toward the behavior, specifically his or her positive or negative evaluation of the consequences of performing the behavior ("I think participating in local union activities would be very useful"). An individual’s attitudes toward a behavior are composed of two components: behavioral beliefs about the outcomes a behavior is believed to yield, and an evaluation of these outcomes (favorable or unfavorable). Favorable consequences for highly likely outcomes of a behavior increase a person’s intention to engage in the behavior ("I believe that by participating I can better my working conditions"). In contrast to attitudes, subjective norms are a function of normative beliefs about the social expectations of significant others such as spouse, parents, co-workers, or even close friends, and an individual’s motivation to comply with those significant others ("my
spouse thinks I should participate in local union activities"). In other words, subjective norms are the perceived social pressure an individual faces when deciding whether to behave in a certain way. Many studies report that a person’s attitudes toward a behavior and subjective norms are sufficient determinants of their behavioral intentions (Bowman and Fishbein, 1978; Goldenhar and Connell, 1993; Jaccard and Davidson, 1972; Jones 1990; Vinokur-Kaplan, 1978).

A review of the participation literature indicates that several researchers have found the TRA useful in their research (Brief and Rude, 1981; Friedman and Harvey, 1986; Kelloway and Barling, 1993; Kuruvilla et al., 1993; Montgomery, 1989; Sverke and Kuruvilla, 1995). Moreover, the development and testing of the theory were predicated on the assumption that the behaviors being studied were under full volitional control of the individual (Madden, Ellen and Ajzen, 1992). At first glance, one might believe that this theory is appropriate, but situations may arise that may hamper the volitional control an individual may have over any given situation. For example, there are potential barriers that may exist for persons with disabilities. Some individuals may face mobility issues where it is not easy for them to get to meetings, or they may feel very fatigued at the end of a long day at work and are unable to attend meetings because of their disability (Hoyle, 1999). While someone may want to participate, there is still a question of how that can be achieved when there are so many obstacles barring a member from participating. Therefore, a more appropriate theory, which builds on the TRA, is the theory of planned behavior (hereafter referred to as “TPB”) (Ajzen, 1985, 1988, 1991; Ajzen and Madden, 1986). There is also some evidence that the TPB predicts
behavior better than the TRA (Chang, 1998). Under the TRA, the assumption of total volitional control is difficult to apply to most everyday acts, and is probably too restrictive (Ajzen, 1988). The TPB explicitly recognizes *perceived behavioral control (hereafter referred to as "PBC")* as an antecedent to behavioral intentions (Ajzen, 1985; Madden et al., 1992). This is an important consideration, since union members may form a positive attitude in which they are motivated to engage in the behavior, but are unable to do so because they do not have full volitional control over the situation. PBC is the individual's perception of the extent to which performance of the behavior is easy or difficult (Ajzen, 1991). For example, a female union member may wish to attend union meetings, but is unable to because it is too difficult for her either to arrange daycare, or to juggle her children's evening activities. PBC is hypothesized as directly influencing both intention and behavior in such a way that the greater the PBC, the more positive the behavioral intention and the more likely the performance of the behavior. The direct path from perceived control to behavior is not necessary in all cases. In fact, this direct path is assumed to exist only if PBC is a good proxy of actual control; this cannot be the case when the behavior is new to the subjects (Ajzen and Madden, 1986). A new union member who has never been subjected to a union and its purpose or mechanisms may not participate until he or she has learned more about it. However, another component is the motivational impact of PBC. Ajzen (1991) argues that if one holds strength of intention constant, the amount of effort that a person will engage in to execute the intended behavior will be a function of PBC. The argument is that when barriers and obstacles impeding performance of the behavior are encountered, individuals with high PBC will
be more inclined to persist in carrying out the behavior. For example, a female member
who really wants to attend a union meeting but has a conflict because of her children’s
activities, may make other arrangements to have someone else take care of the needs of
the children, so that she can engage in the behavior she desires. Those who see
themselves as having a relatively high degree of control over the behavior should be
better able to overcome obstacles. Such persistence may be attributed to an individual’s
conscientious nature. Therefore, the assumption is that PBC will be a positive predictor
of behavior.

Fishbein and Ajzen’s TRA (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980)
and Ajzen’s TPB (Ajzen, 1985; Ajzen and Madden, 1986), are the most widely applied
models of attitude-behavior relationships with the expectancy-value approach (Chaiken
and Stangor, 1987; Eagly and Chaiken, 1993; Olson and Zanna, 1993; Tesser and
Shaffer, 1990). The theories are simple, parsimonious, easy to operationalize, and
applicable to a wide range of behavioral domains. The TPB has been successfully applied
to various situations in predicting the performance of behavior and intentions, such as
class attendance and academic achievement (Ajzen and Madden, 1986), dishonest
behavior (Beck and Ajzen, 1991), and a host of others. Research on union participation
has not yet utilized the TPB as a theoretical framework, yet a review of the literature
demonstrates that it would be appropriate to study participation behavior. Meta-analysis
of studies using the TRA and the TPB have reported that these models explain on average
between 40 and 50 percent of the variance in intention, and between 19 to 38 percent of
the variance in behavior (Sutton, 1998). The TPB would therefore be a useful theoretical framework in a study of union participation.

The sufficiency of the TPB to predict intentions and behavior has been aptly challenged. One concern is that further constructs are required in order to improve the prediction of intentions or behaviors. Part of this concern arises out of the parsimonious nature of the model, whereby a relatively small number of constructs are deemed to have predictive power. Conner and Armitage (1998) have suggested that there are possibly six extensions to the TPB: belief salience, past behavior/habit, perceived behavioral control versus self-efficacy, moral norms, self-identify, and affective beliefs. Within the framework of this dissertation, I would argue that there are possibly two other constructs that might add to the predictive ability of intentions and behavior: personality and demographic factors.

Fishbein and Ajzen (1975) have argued that external variables cannot explain much of the variance beyond that of the existing theoretical model. However, there is an intuitive appeal as well as empirical reasons for justifying inclusion of extra variables. Perhaps how they are measured and what they are measuring may in fact impact and increase the variance. Obviously, based on findings that no more than 38 percent of the variance was explained for behavior indicates that the model is not yet complete.

Differences based on gender, race, ethnicity, persons with disabilities, education, age, occupation, seniority, eldercare responsibility, presence of children under 12, and personality, represent examples of other factors that may impact on the decision to participate. Some of these variables have already been tested in the union participation
literature, while others have not. Specifically, ethnicity, race, eldercare, disabilities, and personality, are factors that should be explored further in union participation research.

Literature Review

Internal Variables within the Theory of Planned Behavior

According to the theoretical framework, Ajzen and Fishbein (1980) postulate that only a small number of components explain the TPB, and they can be used to predict, explain, and influence human behavior, in applied settings. It is this simple nature of the theory, and the parsimonious structure, that makes this theory attractive, as well as its predictive ability in a number of settings, measuring different behaviors.

I begin the literature review by working my way through the theoretical model, explaining first the dependent variable, and then the independent variables. Various aspects of the model represent numerous opportunities for major research studies as well. However, the purpose of this study is not to necessarily challenge each of the variables in detail, but rather to test the prediction of the model as theorized by Ajzen and Fishbein (1980) and Ajzen (1985) against an extension of the model including personality and certain demographic variables. Therefore, particular emphasis will focus on these proposed external variables, as well as on participation, as the behavioral variable in question. Further details of the theory of reasoned action are found in Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980) and of the theory of planned behavior in Ajzen (1985) and Ajzen and Madden (1986).
The Dependent Variable - Participation

Given the state of unions today, where union density must be increased in order to meet the goals of union growth and survival, research in this domain is critical. During what was referred to as America’s “Golden Age” of union governance research between 1948 and 1953 (Spinrad, 1960; Strauss 1977), member participation in union activities received considerable attention. Although participation research was revived briefly in the late seventies (Anderson, 1978, 1979; Glick, Mirvis and Harder, 1977), there has been a marked resurgence in union participation research in the nineties. Increased methodological rigor using multivariate analysis, structural equation modeling techniques (Kelloway, 1996, 1998), as well as new perspectives on participation, have each contributed to this renewed interest in participation research (Kelloway, 1998; Kuruvilla, Gallagher, Fiorito, and Wakabayashi, 1990).

Social scientists have recommended that greater attention should be directed towards behavioral outcomes which are associated with specific union attitudes such as participation, since they explain much more about union members than had been previously thought (Fullagar and Barling, 1987, 1989). Significant research has focused on the dimensionality of union participation, trying to determine if it is a unidimensional or a multidimensional construct, and categorizing member types, in relation to the extent and type of participation. The extent and type of participation must be considered simultaneously for a full understanding of union participation (Barling et al., 1992). For example, during contract negotiation members may fully participate in formulating demands, not be involved in the negotiations, but be in a position to vote for or against
ratification of the contract. However, additional research is required (Barling et al., 1992) to fully understand the relationship amongst these variables.

A concerted effort has been made during the past twenty-five years to determine the construct validity of participation measures. Establishing the construct validity of union participation measures is important and cannot be properly achieved without a precise definition of participation. As noted by Kelloway and Barling (1993), little attention has been paid to the definition of union participation. A precise definition of participation will provide a means of more accurately operationalizing the construct and potentially advancing our understanding of differences in members' decisions to actively participate in their local unions, and the type of activities they may or may not pursue. Others have argued that there has been too much reliance on defining participation since it tends to be driven by instrumentation and operationalization (Kryl, 1990), rather than by a clear conceptualization and precise definition of the construct of interest. The argument is that each of the activities listed under participation represents very different types of behavior, requiring different explanation and motivations (McLean Parks et al., 1995). However, in order to understand what types of behaviors are representative of participation behavior means that first an understanding of what activities are relevant is needed, and this should be derived from a definition of participation.

Defining Participation: Determining a precise definition of participation has proven to be difficult. It has different meanings for many researchers, as well as for union members, with no real clear delineation of what "participation" actually represents. Union participation has been accepted by many as a behavioral construct, requiring the
expenditure of time on union affairs (Sayles and Strauss, 1952). Tannenbaum and Katz (1958, p. 50) defined union participation as “the extent to which members involve themselves in and devote energy to the operation of their union”. A more recent definition of participation provided by Paquet and Bergeron (1996, p. 108) states that “union participation occurs when a worker takes part in activities organized or offered by the union or performs union duties”.

The similarity amongst these definitions concerns the involvement of a member in performing union duties. What seems to be lacking is a distinction amongst different types of members, as well as the extent and types of participation. Barling et al. (1992, p. 97) have included “types” and “extent” of participation in their definition. Their definition proposes that participation is “the extent of the individual’s active involvement in, and influence over both formal and informal union activities”. This also captures aspects of Anderson’s (1978, 1979) definition by including the notion of “influence”, as it relates to the types of decisions a member might make in their local.

Barling et al. (1992) have also argued that the definition of participation should extend beyond behavior and include beliefs or values. Arguably, beliefs or values may impact on the behavior, but may be very distinct from the construct. However, until a more articulated definition of participation is determined, and then tested, the possibility remains for a more far-reaching definition than just behavioral aspects of participation. Research should build on previous studies, and at this point, there have not been enough studies establishing the construct validity of the union participation measures, which would help to arrive at a more precise definition of participation.
The search for an understanding of the extent of participation continues. The definition of participation has been extended to include a wider variety of union activities (Anderson, 1979; Barling et al., 1992; Fullagar and Barling, 1989; McLean Parks et al., 1995; McShane, 1986a; Nicholson, Ursell and Blyton, 1981). These activities can also range from minimal to full union participation (Fosh, 1981; Hagburg and Blaine, 1967; Huszczko, 1983; McLean Parks et al., 1995; Strauss, 1977). A minimal level of participation may occur when a member reads the collective agreement, but full participation may include participating in all activities, as well as sitting on a union committee, or serving as an elected union official such as a local president.

Union participation can also be conceptualized as either being "formal" or "informal". Formal participation is composed of such activities as meeting attendance, voting in union elections or other union votes, serving on committees, holding union office, and using the grievance procedure (Kahn and Tannenbaum, 1954; Spinrad, 1960). These are the behaviors that are necessary for the union to operate effectively and democratically (Fullagar and Barling, 1989). Informal participation includes activities such as reading union literature (Anderson, 1979; Sayles and Strauss, 1952), and talking to shop stewards, or to other members about union or work issues (Nicholson et al., 1981; Huscezo, 1985; Miller and Young, 1955). These types of activities reflect support for the union, but are not necessary for its survival, and are representative of the majority of union members (Barling et al., 1992). The concepts of formal and informal participation are appealing because of their simplicity, but they still do not tell us what activities are formal and informal, and what, if any possibilities exist between the two. Another
similar concept is based on either permission participation or discretion participation (Mellor, 1995). The opportunity to participate in local activities may be restricted to some members and open to others. Members may never run for office or serve on a committee, not because they lack confidence or a desire to participate, but rather because they have never been nominated or asked to serve by other members or officers. A member, on the other hand, can read the newsletter, speak at a meeting, or initiate a grievance, without being prevented from doing so. Therefore, this conception may also be too limiting in terms of understanding who will or will not participate.

A number of studies have also segmented membership into categories based on the type and extent of participation. One example is stalwart, troublemaker, cardholder, and alienated member categories (Tagliacozzo and Seidman, 1956; Child, Loveridge, and Warner, 1973; Johnston, 1974). Nicholson et al. (1981) classified members into five membership categories: reluctant members, card carriers/passive dues payers, selective activists, apolitical stalwarts, and ideological activists. These classifications were replicated in a study conducted by Flood, Turner and Willman (1996, 2000). Five questions were asked in order to segment members into their specific categories and measured against only seven union-related activities. Klandermans (1986a) classified the forms of union participation into four categories: membership (joining the union, commitment to the union, and resignation); holding a position in the union and participation in union decision making; participation in union activities; and participation in industrial action such as striking. Cohen (1993) argues that participation in union activities is a form of active participation (participation in decision making, union
activities, and serving in elected office) versus what he refers to as passive forms of union participation (union commitment, attitudinal militancy, and propensity to strike).

It is apparent that the construct of union participation is much more complex than its typical treatment in the literature (Gallagher and Strauss, 1991; Klandermans, 1986; McShane, 1986; Tetrick, 1995; McLean Parks et al., 1995), and is much more than a check-off list of members' activities. Determining a particular member type seems inappropriate without first understanding the extent of activities that should be covered under each type. In order to achieve this goal, the dimensionality of participation must be resolved so that appropriate types or forms of participation can be properly identified.

Is Participation Unidimensional or Multidimensional? The question of whether participation is a unidimensional (single factor) or a multidimensional (several factors) construct has been posed for more than twenty-five years. Several studies have found support for participation as a unidimensional construct (Chacko, 1985; Kelloway and Barling, 1993; Kuruvilla et al., 1990). There is also compelling evidence that participation is actually multidimensional (Cohen, 1993; Gallagher et al., 1987; Klandermans, 1986; McLean Parks et al., 1995; McShane, 1986a, 1986b; Nicholson et al., 1981; Portwood, Pierson and Schmidt, 1981). According to McShane (1986b, p. 177), "there is growing evidence that union participation is actually a multidimensional rather than a unidimensional construct. That is, there are different types of union activity which can be categorized loosely as union participation, but which have sufficiently distinct factorial and causal structures to require separate study". McShane's (1986a, 1986b)
research was amongst one of the first to provide the most direct evidence for a multidimensional construct. McShane (1986b) conducted a factor analysis and found support for three factors, representing conceptually distinct dimensions, each with high internal consistency. The factors were: (1) participation in the administration of the union, such as running for elected office, holding a union position, and serving on a committee; (2) involvement in union voting (strike, decertification, contract ratification, or union election); and (3) attendance and involvement in union meetings. The three forms of participation were also differentially associated with predictors such as education, seniority, employment status, salary, union attitudes, extrinsic job satisfaction, and job involvement. For example, salary was related to union meeting attendance, but not to administrative participation. Attitudes to unions were associated with active participation in union administration, but not with voting participation. It stands to reason that a particular predictor might be theoretically and empirically associated with one type of union activity, but not with another (McShane, 1986a). Each activity represents different kinds of behaviors and may require different explanations and motivations. Family obligations may prevent some members from attending monthly union meetings held in the evening, but it does not preclude them from helping another member to interpret the collective agreement, or to even participate in a special union vote, which might be held immediately after regular working hours (McShane, 1986b). These results suggest that union participation is multidimensional, and that different types of union activity are independent of each other (Barling et al., 1992).
Subsequent research by Kuruvilla et al. (1990) failed to replicate McShane’s findings. A closer look at McShane’s participation dimensions found that two of the three factors identified had only two items loading on them. According to Harman (1967) (in Barling et al., 1992), such factors are usually unreliable and “must be interpreted with caution or ignored, because one never knows whether they are “real” or “artifactual”. These findings raised some doubts about McShane’s (1986a, 1986b) multidimensional findings.

More recently though, Gallagher et al. (1987) and McLean Parks et al. (1995) also found support for a three-factor solution identified as: administrative, supportive and intermittent participation. McLean Parks et al. (1995) conducted an exploratory factor analysis (sample of full and part time unionized retail workers), and then followed up with a confirmatory factor analysis (sample of unionized nurses) in their study of participation. The results provided support for the multidimensionality of participation, and a distinction among the three dimensions, loading on no fewer than three items on any one factor, thus extending the work of McShane (1986a, 1986b). Administrative participation includes activities such as running for or holding union office, working on union committees, and serving as a union steward. Supportive participation is defined as an activity which is generally supportive of the union through interactions with other members, such as helping others learn about the union, or showing others how the union could help them. Intermittent participation is related to scheduled union activities, such as voting in the union elections, voting on contract issues, and attending meetings. Non-participants are deemed to be union members who take no interest in their union in day-
to-day activities, and expend little to no time at all on union issues. They are the intermittent members and supportive members. Supportive members may play an important role, but their efforts are also intermittent in that they only help out from time-to-time. Intermittent and supportive members would probably become more active in times of unrest such as before, during, or after a strike, or if other issues such as potential plant closings were to surface. However, these are self-serving interests that would cause most of the rank-and-file to become more actively involved for the moment. In order to advance an understanding of the dimensionality of participation, it is essential that adequate construct validation be achieved.

Even though each of these studies (McShane 1986a, 1986b; Gallagher et al., 1987; McLean Parks et al., 1995) produced three-factor structures, they are not equivalent. Each study utilized different activities to differentiate the factors of union participation. The number of union activities defined for each factor in these particular studies ranged from between eight to eighteen items. So while the question of dimensionality may be resolved, it is still unclear as to the precise factor structure of participation. Perhaps with more emphasis on construct validation and an integration of previous research, investigations on union participation will become more focused.

Despite the discrepancies in the union participation factor structure, it would appear that participation is most commonly found to be multidimensional with a three-factor structure. The factor structure provided by McLean Parks et al. (1995) appears to provide a reasonable approximation of a typical union participation structure. There are however, additional items that should be considered if a study on union participation is to
be complete. For example, under *administrative participation*, previous research has failed to acknowledge that union officers may be *appointed* rather than *elected* to their positions. With an increasing amount of indifference by members towards their unions, appointments may be required when there is a lack of interest. Another item that should be included is "*marching in a rally in support of the union*". There are times when unions need to take part in political action, and marching in a rally may be the way that a union can get its message across to the public at large. Marching in a rally may be considered supportive, but only the most active members would probably perform it. Another activity that should be included under administrative participation is "*involved in decision-making process in union*", since members performing activities at this level are normally in positions of leadership, and can effect change more easily than can be achieved at either supportive or intermittent levels.

Therefore, as will be discussed below, union participation will be a multidimensional construct identified as administrative, supportive and intermittent forms of participation.

**Independent Variables**

The linkage between the theory of planned behavior (*TPB*) and union participation literature is very closely tied to union commitment. The TPB utilizes similar variables found in the union participation literature. These variables are associated with beliefs, attitudes, and ultimately commitment. The differences in the variables lie mostly in how they are measured (general versus specific), and how they are utilized
within the theoretical framework. There are numerous studies that have considered the relationship between commitment and participation. The reader is encouraged to review Fullagar and Barling (1989), Gordon, Philpot, Burt, Thompson and Spiller (1980), Johnson, Tetrick and Johnson (1992) and Kelloway and Barling (1993) for a more detailed discussion of union commitment. A brief discussion is necessary to explain the relationship between the constructs used in union commitment and the TPB.

**Union Commitment and Participation.** Gordon et al.'s (1980) conceptualization of union commitment was based on Porter and Smith's (1970) attitudinal definition of organizational commitment. Porter and Smith's conceptualization was based on three factors: strong desire to remain a member of a particular organization; willingness to exert high levels of effort on behalf of the organization; and a belief in and acceptance of the values and goals of the organization. Gordon et al. (1980) proposed that union commitment consisted of four dimensions: loyalty, responsibility to the union, willingness to work for the union, and belief in unionism.

Willingness to work for the union has been identified as a distinct dimension of union commitment (Gordon et al, 1980). Friedman and Harvey (1986) indicated that two dimensions, "union commitment attitudes and opinions", and "pro union behavioral intentions", underlie union commitment. Most importantly, Klandermans (1989) also suggested two dimensions, "loyalty and beliefs" and "willingness to work". The underlying logic of the two-factor solution is that union commitment is composed of one attitudinal dimension and one behavioral or intentional dimension (Sverke and Kuruvilla, 1995). Klandermans's (1989) confirmatory factor analysis provides the underlying
evidence of connectivity between commitment and the theory of reasoned action (TRA), as his findings are consistent with the TRA (Fishbein and Ajzen, 1975). The link provides the basis for studying union participation utilizing an established theoretical framework, which, as mentioned earlier, has been missing in the union participation research.

The relationship between the research on commitment and the TPB is further strengthened by Gordon et al.'s (1980) findings that union loyalty and belief in unionism were more related to socialization experiences than were responsibility to the union, or willingness to work for the union. There is empirical support for the proposition that union loyalty and belief in unionism are different constructs (Gordon, 1980). Responsibility to the union and willingness to work for the union appear to be related more closely to behavioral constructs than are belief in unionism or union loyalty. This is consistent with Fishbein and Ajzen's (1975) TRA. Gordon et al. (1980) found that these two dimensions were more strongly related to union participation than were union loyalty and belief in unionism. Responsibility to the union was more strongly related to dissatisfaction with management and attitudes towards unions in general, than was willingness to work for the union. However, willingness to work for the union was positively related to attitudes toward the local while responsibility was not. This pattern suggests that responsibility to the union and willingness to work for the union are distinct constructs as well (Tetrick, 1995). Thus, further evidence for the link between the TPB and the union commitment literature are supported.

One of the main differences between Gordon et al.'s (1980) conceptualization of commitment as an attitude and of the TPB is the measurement of the variables. Gordon
et al.'s (1980) measures are designed to ask questions of a general nature, whereas the TPB focuses on more specific measures of involvement at the local level. For example, Gordon et al.'s (1980) commitment scale asks about willingness to work for the union. An example of a general question is: "if asked, I would serve on a committee for the union." Whereas, a question in the TPB concerning intention to participate asks the following: "I intend to hold an elected/appointed position and/or sit on a committee in my local". As previously noted, general measures tend to have greater difficulties in predicting specific work-related behaviors than do specific behaviors (Ajzen and Fishbein, 1977).

Accordingly, the union literature on commitment provides support for the use of variables such as intentions, beliefs, and attitudes. Since union commitment is identified as an attitude, the TPB appears to be an appropriate theoretical framework on which to test the prediction and actual behavior of union participation.

**Intention to Participate**

There is extensive evidence in the social psychological literature (see Ajzen, 1991 for review; Ajzen & Madden, 1986) supporting the role of intention as a predictor of behavior across a wide variety of domains. Based on a meta-analysis of eighty-seven studies, Sheppard, Hartwick and Warshaw (1988) found an average intention-behavior correlation ($r = .50$).

According to Ajzen and Fishbein (1980), intention is the immediate determinant of behavior, and when an appropriate measure of intention is obtained, and is measured at
the same level of specificity as the behavior, it will provide the most accurate prediction of behavior.

**Intention and Union Participation Literature.** Referring again to the commitment literature, willingness to work for the union is the most commonly used measure. It is conceptually the same as intention to participate, with the main difference being the specificity of the measure. A number of studies have found that union behavioral intentions are the best predictor of actual participation. This hypothesis has been tested in the prediction of union commitment (Fullagar, McCoy and Shull, 1992), and in union voting intentions (Fullagar and Howland, 1990; Montgomery, 1989).

In the participation literature, Kuruvilla and Sverke (1993) demonstrated that willingness to participate is a strong determinant of actual participation. McShane (1986) also found that the willingness to participate in union administration is the most important determinant of actual participation. Klandermans (1986) found that behavioral intentions were the best predictor of participation in union activities. Kelloway and Barling (1993) contended that conceptually, willingness to work for the union is most appropriately viewed as a behavioral intention to become involved in union activities, rather than a measure of actual participation.

The TRA was found to be useful in various union studies. Fullagar et al. (1992) incorporated elements of the TRA in their study of union commitment. Montgomery (1989) applied an adaptation of the TRA to the study of voting intentions in union representation elections, and found evidence for the role of both attitudes and subjective norms in predicting voting intentions. Intentions to vote for union representation were
predicted by union attitudes, beliefs, and normative pressures, and were in turn predictive of actual voting behavior. Thus, based on the support for this construct in the participation literature it is hypothesized that,

**H1a** *Intention to participate will have a positive and direct relationship with all three measures of union participation (administrative, supportive and intermittent).*

Although a significant relationship is expected to exist between intention to participate and each of the measures of participation, the relationships will probably be different. Members performing activities that require more time and effort such as “acting as a union official” would most likely have very strong intentions, whereas someone performing an intermittent activity such as “reading parts of the union contract” would not. Therefore it is hypothesized that:

**H1b** *Intention to participate will be more positively related to administrative participation, than it will to supportive or intermittent participation.*

**Attitude Towards Participation**

Attitude toward a behavior “refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991, p. 188). An individual’s attitude toward a behavior is determined by beliefs about the consequences of the behavior and the individual’s evaluation of the consequences. Once an attitude is formed about an object, action, or event, the attitude leads to the formation of behavioral intentions with respect to that object, action or event. Attitude is the degree
of belief that a consequence will occur multiplied by an evaluation of that consequence (Ajzen and Fishbein, 1980; Dawes, 1972; Henderson, Morris, Fitz-Gibbon, 1987; Summers, 1970). Attitudes are described as abstract psychological constructs and there exists disagreement among social scientists as to their definition and the relationship among perceptions, attitudes, values, and beliefs (Luzar and Cosse, 1998).

There is a substantial amount of research questioning the direction of the causal relationship between attitudes and behavior (Bentler and Speckart, 1981). Kahle and Berman (1979) found evidence of four different types of attitude-behavior relationships: attitudes cause behaviors (McGuire, 1976); behaviors cause attitudes (Bem, 1972); attitudes and behaviors have mutual causal impact (Kelman, 1974); and attitudes and behaviors are slightly, if at all, related (Wicker, 1969). Although there is a lack of theoretical agreement, progress has been made on identifying factors that influence the attitude-behavior relationship (Alwin, 1973, 1976; Ajzen and Fishbein, 1977; Davidson and Jaccard, 1979; Fazio and Zanna, 1978). What has been determined from studies concerning differences in the attitude-behavior relationship is the necessity to use valid measures and on correct design. Another perspective is that attitude may affect behavior indirectly through a control variable, intention (Fishbein and Ajzen, 1975), thus supporting the use of the TPB.

**Attitudes and the Union Participation Literature.** The literature on attitudes towards union participation is somewhat limited, and what is there is confusing. Hence, there are a number of difficulties that limit the ability to study union attitude formation.
Most notable is the fact that the literature is characterized by inconsistent definitions of the variables, by numerous variations in items used to measure union attitudes, and in the labels used to identify them. Each researcher tends to use customized attitudinal measures (Strauss and Gargano, 1987). As well, theoretical frameworks supporting the selection of variables that relate to union attitudes generally are not used, and consequently, model building has been fragmented (Kuruvilla and Sverke 1993). Therefore, conceptual and empirically clear constructs are necessary if research on members' attitudes toward unions is to advance. The TPB offers an opportunity to remedy the issue of fragmentation by incorporating appropriate variables into a nomological network.

Several attempts have been made to arrive at general measures of union attitudes, but the results have been difficult to compare because of numerous inconsistencies found in the different measures. McShane (1986) completed a construct validation of general union attitudes (see McShane, 1986 for a list of the general union attitude scales developed). Deshpande and Fiorito (1989, p. 885) drew a distinction between general and specific union attitudes, noting that the former term refers to “beliefs about the effects of all unions at all workplaces” while the latter refers to “beliefs about union effects at the respondents’ own workplaces”. Specific union attitudes provide a better prediction of union-relevant criteria than do general attitudes (Barling et al., 1992; Deshpande and Fiorito, 1989). This observation is consistent with the more general finding that attitudes toward specific behaviors offer stronger predictions than do more
diffused attitudes (Ajzen and Fishbein, 1980). Yet, such specific studies have not been conducted in union participation, opting instead for general measures of unionism.

The majority of attitudinal research on union members has focused on the extent to which the union attitudes of unorganized workers or union members influenced union-related behavior such as voting in a certification or a decertification election and union participation (Kuruvilla et al., 1993). As a measure of attitude, union commitment has been used primarily because it represents positive feelings towards the union (Newton and Shore, 1992). There is sufficient documentation in the commitment literature showing that identification with the union will increase the likelihood of participating in union activity (Barling et al., 1992). Several studies (Huszczo, 1983; Sayles and Strauss, 1953) have shown that attitude toward unionism is one of the best predictors of union participation and the willingness to participate (Glick et al., 1977; Gordon et al., 1980). Therefore, if general measures of attitude have shown a positive relationship between attitude and willingness to participate, then the same should hold for more specific measures between attitude and intention to participate. Therefore, it is hypothesized that,

H2 Positive attitudes towards participating in local union activities will have a positive and direct relationship with intention to participate.

Mediating Effects of Intentions to Participate on Attitudes and Participation

The theoretical model determines that attitudes will be directly related to intentions to participate. The ability of attitudes to predict the behavior will depend on the strength of the intention-behavior relationship. No direct effects are expected to exist
between the attitudinal and actual behavior. The effects of attitudes on behaviours are therefore mediated by the behavioral intention. Therefore, it is hypothesized that,

H3  Intention to participate will mediate the effects of attitudes on all measures of union participation (administrative, supportive and intermittent).

Beliefs

Whereas attitude refers to a person’s favorable or unfavorable evaluation of an object, beliefs represent the information he or she has about the object. In other words, attitudes are a function of beliefs. A belief links an object to some attribute. For example, in this study the object would be participation and the attribute would be better working conditions. A belief is a person’s “subjective probability judgement concerning a relation between the object of the belief and some other object, value, concept, or attribute” (Fishbein and Ajzen, 1975, p. 131). A more thorough review of beliefs in the context of the TPB can be found in Ajzen and Madden (1985).

According to Fishbein and Ajzen (1975), there are three different ways beliefs can be formed: descriptive beliefs, inferential beliefs, and beliefs formed on the basis of information from outside sources. Descriptive beliefs are formed on the basis of a person’s own observations whereas an inferential belief results from logical connections that people make in their minds between certain thoughts. These two types of beliefs are very closely related. For example, a member might observe that a particular union steward representing their local is very argumentative with management. From that the member might infer that the individual is a hothead, and that the union is therefore made
up of individuals with bad tempers. Beliefs formed on the basis of direct observation may lead to the formation of new beliefs. A third source of beliefs consists of other people or outside information sources such as newspapers. Once they are accepted, beliefs originating from external sources are similar to beliefs formed through personal observation (Fishbein and Ajzen, 1975). The influence that outside sources can have in the structuring of beliefs (Salancik and Pfeffer, 1978) is very important. This phenomenon is particularly powerful for newcomers to work settings, who must learn new jobs, become acquainted with other union members, and assimilate a great number of details about the aspects of that work setting (Van Maanen, 1977; Wanous, 1980).

Beliefs and Union Participation Literature. Including beliefs in a study for the purpose of predicting a certain behavior is deeply rooted in union research. For example, beliefs have been tested in matters concerning union voting (DeCotiis and DeLouran, 1981; Montgomery, 1989; Youngblood, DeNisi, Molleston and Mobley, 1984), engagement in union activities (Nicholson et al., 1980), and in union participation (Kelloway and Barling, 1989; Paquet and Bergeron, 1996; Sverke and Sjöberg, 1997).

The beliefs construct is similar to the union instrumentality construct that has been widely employed in the studies just identified. The perception of union instrumentality has been found to increase the likelihood of participating (Fullagar and Barling, 1987, 1989). A measure of "perceived instrumentality" was developed in another study and was found to be useful in predicting participation (Paquet and Bergeron, 1996). Klandermans (1984, p. 591) concludes, "the willingness to participate in collective action appears to be strengthened by the belief that others will participate".
Spinrad (1960) noted that a belief in the functionality of union activities is a necessary precondition for union participation. For example, a member may perceive that his or her participation will lead to “better pay” (functionality), may view the situation favorably, and therefore become involved. However, if, on the other hand, the member does not believe that participating will lead to “better pay”, then he or she may view the situation unfavorably and will likely not participate.

The relationship between beliefs and attitudes can be found in the union participation literature, particularly when the TRA was used. Fullagar and Barling (1989) found a significant relationship between perceived instrumentality (beliefs) and union loyalty (attitude) in a study of union participation. Intentions to vote for union representation were predicted by union attitudes, beliefs and normative pressures, and were in turn predictive of actual voting behavior (Montgomery, 1989). Based on the evidence in the literature supporting the importance of beliefs, and their relationship to attitudes, it is hypothesized that:

**H4a**  There will be a positive and direct relationship between beliefs and attitudes.

The relationship between beliefs and attitudes seems incomplete, however, particularly when the issue of volitional control may exist. Despite the favorable or unfavorable attitudes a union member may form about intention to participate, there may be barriers that impact on the member’s ability to participate. Therefore, a relationship between beliefs and perceived behavioral control (PBC) would seem logical when issues regarding volitional control exist. Therefore, it is hypothesized that,
**H4b**  *There will be a positive and direct relationship between beliefs and PBC.*

**Subjective Norms**

Subjective norms are a function of normative beliefs and motivations to comply with others. An individual’s subjective sense of his or her normative environment has been shown to jointly predict intention in conjunction with attitude formation (Fishbein and Ajzen, 1975). A subjective norm “refers to the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991, p. 188).

In the context of union participation, the key factor underlying subjective norms are “important others”. Although participation is voluntary, the normative pressure from co-workers, local union representatives, and family is expected to have some impact on individual intent. The direct link between subjective norms and intention can be described as “compliance,” because an individual accepts influence in order to gain a favorable reaction from another person or group (Kelman, 1958; Venkatesh and Davis, 2000; Warshaw, 1980). This is understandable. If coworkers think very highly of a member’s ability to represent them, this might encourage the member to participate. Family members can also have an impact, because if a person wants to participate and has family obligations, the family must be supportive of the action or else it will be difficult for the member to proceed.

**Subjective Norms and Union Participation Literature.** Most of the literature on union socialization focuses on the initial socialization of newcomers. However, one could conceptualize socialization as a process that actually begins prior to joining an
organization and continues throughout one's tenure in an organization. There is some evidence, although limited, that early family experiences may be related to one's belief in unionism (Barling et al., 1992; Gordon et al., 1980). In union organizing campaigns, socialization tactics could be expected to influence an individuals' belief in unions (Tetrick, 1995). Gordon et al. (1980) tested the hypothesis that the nature of the socialization process in a union should be closely related to a member's level of commitment. Members with the highest levels of commitment, in terms of the four factors proposed by Gordon et al. (1980), also reported positive socialization experiences in their first year of union membership (e.g. being introduced to their union steward, or personally being asked to attend a union meeting).

Spinrad (1960) suggested that any factor that increased the identification of the individual with his or her work group would also increase participation in union activities. Presumably, socialization practices foster greater attachment to the union, and in turn, active participation in union activities. Therefore, it is expected that,

H5a Subjective norms favoring union participation will positively predict intention to participate.

According to Fishbein and Ajzen (1980), the balance between subjective norms and attitudes will vary from situation to situation and from person to person. Behavior such as "reading the collective agreement" is an activity of such low involvement that little normative pressure is likely to occur. An activity such as "serving on a union committee" may require more normative pressure, particularly when there are significant
consequences for the union member performing the activity, and for people who may depend on him or her (Rutter and Bunce, 1989). Therefore, because many of the participation activities in this study are considered to be high involvement, subjective norms may influence the intention to participate much more than will attitudes in a union participation study. It is further hypothesized that,

**H5b**  *Subjective norms will be more strongly related to intention to participate than will attitudes.*

Recent findings indicate that a significant relationship also exists between subjective norms and attitudes (Chang, 1998; Fullagher et al., 1992; Shepherd and O’Keefe, 1984; Shimp and Kavas; 1984; Vallerand et al., 1982; Wetzel et al., 1991). Since most information that shapes individuals’ attitudes is obtained from their peers, family, unions, coworkers and their own experiences, such a relationship appears to be reasonable. How much the individual may be influenced by the opinion of referent others depends on how much they value the advice given (Clark, 2000). Therefore, if the information secured from referent others is also used to form an individual’s attitudes, then it makes sense that there would be a direct relationship between attitudes and subjective norms. It is hypothesized that,

**H5c**  *Subjective norms favoring union participation will positively predict attitudes.*
Perceived Behavioral Control

PBC is defined as the extent to which the person believes that he or she has control over personal or external factors that may facilitate or constrain behavior (Ajzen, 1991). If the behavior is not under complete volitional control, the participants need to have the necessary resources and opportunities in order to perform the behavior. The more resources and opportunities individuals' think they possess, the greater should be their PBC over the behavior (Madden et al., 1992).

PBC has both a direct effect on behavior and an indirect effect on behavior through intentions. An indirect effect is based on the assumption that PBC has motivational implications for the behavioral intention of participation. When people believe they have little control over performing the behavior because of a lack of requisite resources, then their intentions to perform the behavior may be low even if they have a favorable attitude, or subjective norms concerning the behavior. For example, a female union member may very well appreciate the efforts of the union, and others in her local may want her to be active in the union because she is viewed as someone who would help the members. She may see the value of helping and want to participate, but if she is faced with a “quadruple burden” (household duties, daycare and eldercare, in addition to her job), she may not feel in control of the situation and have no intention of participating in local union activities.

The direct path from PBC to behavior is assumed to reflect the actual control an individual has over performing the behavior (Madden et al., 1992). This direct effect of PBC on actual behavior should be significant when the behavior in question is likely to
have some aspect of it not under volitional control and when perceptions of control over the behavior are accurate (Madden et al., 1992). For example, consider the example above. Perhaps if the female had a very supportive spouse who helped out a great deal at home, and other members in her immediate family who could help with eldercare, then her burden would be greatly reduced and she may be able to perform duties on behalf of the union. She still does not have volitional control, however, because she has total reliance on a family support system. However, at any given time that support could be diminished, and she would then again have to take on greater burden, perhaps impacting on her ability to participate in the local union's activities. Those who see themselves as having a relatively high degree of control over the behavior should be able to overcome any obstacles to participate. Incorporating the PBC in a model of union participation is a way of considering the realistic constraints that may prevent intentions from being translated into actual behavior (Ajzen, 1988, 1991; Ajzen and Madden 1986). When people have complete control over the behavior, intentions alone should be sufficient to predict the behavior, and perceived behavioral control will make no significant contribution. In contrast, when a behavior is not under complete volitional control, perceived behavioral control (to the extent that it is accurate) provides important information that should add to the ability of the model to predict the behavior (Madden et al., 1992)
H6a  *PBC will be directly related to all measures of union participation (administrative, supportive and intermittent) when participation is not under complete volitional control.*

H6b  *PBC will be positively and directly related to intention to participate when union participation is under complete volitional control.*

**The Relationship Between PBC and Self-Efficacy.** There are a number of studies which suggest that PBC is strongly linked to Bandura’s (1977, 1982, 1997) concept of self-efficacy (Sparks, Guthrie and Shepherd, 1997; Terry, 1993; Terry and O’Leary, 1995; White, Terry and Hogg, 1994). Self-efficacy (*hereafter referred to as “S-E”*) is defined as “people’s beliefs about their capabilities to produce performance that influences events affecting their lives” (Bandura, 1995, p. 434). People with a strong sense of S-E approach difficult tasks as challenges to be mastered, rather than as personal threats to be avoided. The greater one’s S-E, the more likely it is that he or she will actually carry out an intended behavior (Manstead and van Eekelen, 1998).

There is clearly some degree of overlap between PBC and S-E. Both constructs are concerned with control: the perceived ease or difficulty of performing a behavior (PBC), and the belief that one is capable of performing a behavior (S-E). Numerous studies have been conducted, and arguments remain concerning the relative predictive power of each construct. PBC measures have been found by some researchers to be predictive of behavior, whereas S-E measures were not (Conner and Armitage, 1998; McCaul, Sandgren, O’Neill and Hinsz, 1993; Manstead and van Eekelen, 1998).
Distinguishing between the two constructs is important. As the theory stands, PBC is thought to be concerned about external and internal control in determining an individual’s ability to carry out a behavior. Numerous studies support the notion that internal and external factors might be differentially related to self-efficacy (Terry, 1993; Terry and O’Leary, 1995; White et al., 1994). Internal control is based on factors that come from within the individual (e.g. ability and motivation). This, they feel, is associated with S-E. External control is based on factors outside the individual (e.g. task difficulty, cooperation of others, and access to necessary resources).

It would be expected that those who have low S-E tend not to participate since they would probably lack confidence. Additionally, if S-E is high, then the individual would be able to form an intention to either participate or not. It is hypothesized that,

H6c Low S-E will be negatively and directly related to all measures of union participation (administrative, supportive and intermittent).

H6d High S-E will be positively and directly related to intention to participate

The Partial Mediating Effects of Intention to Participate on PBC and Participation

As previously discussed, when a union member perceives that there is a lack of volitional control, then there is expected to be a direct relationship between PBC and participation. Possibilities exist amongst the three different measures of participation for a union member to determine an instance when volitional control may not exist, and they would not be able to easily perform the union activity. For example, “walking on a picket line” or “sitting on a union committee” are some examples where a member could
have trouble participating. There are times though, when a member will have volitional control over their participation decisions, and a direct relationship would then be expected to exist between PBC and intention. However, a member could have strong intentions to participate, but still have issues with volitional control. It would be expected that intention to participate could partially mediate the relationship between PBC and participation, particularly when an intention exists, but with issues regarding volitional control. Therefore, it is expected that,

H7  *Intention to participate will partially mediate the relationship between PBC and union participation.*

**External Variables**

Generally, Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980) do not incorporate external variables into their studies. They believe that external variables may sometimes be related to behavior, but only if the variables are related to one or more of the variables such as attitudes or subjective norms. Ajzen (1991) has suggested that if further important proximal determinants can be identified, then the model should be extended:

The theory of planned behavior is, in principle, open to the inclusion of additional predictors if it can be shown that they capture a significant proportion of the variance in intention or behavior after the theory's current variables have been taken into account. (p. 199).

Therefore, if external variables, such as personality and demographics, do improve predictions of intentions or behaviors, then the theoretical framework may have to be modified for further research.
Explaining Participation through Personality Traits

Within the context of the TPB, very few studies have incorporated measures of personality. One recent study of exercise behavior, which measured personality within the framework of the TPB, was found to improve prediction (Courneya, Bobick, and Schinke, 1999a). However, the improvements in the prediction of intentions or behavior were relatively minor, and generalizability to other behavioral domains has yet to be demonstrated (Ajzen, 2001). Therefore, an investigation of personality is warranted.

The question of whether personality influences union participation has been discussed in the union literature for the past sixty years (Barling et al., 1992). Intuitively, personality should explain a member’s decision to participate in various activities, or to explain a member’s behavior in any given situation.

Personality as defined by the “Big Five” personality typology (more commonly referred to as the five-factor model, FFM) includes neuroticism (emotional stability), extraversion, openness to experience, agreeableness, and conscientiousness (Barrick and Mount, 1991; Costa and McCrae, 1988, 1995a, 1995b; Digman 1990, Goldberg, 1990, 1993: McCrae and Costa, 1996). **Neuroticism** concerns the degree to which the individual is insecure, anxious, depressed, and emotional versus calm, self-confident, and cool. **Extraversion** concerns the extent to which individuals are gregarious, assertive, and social versus reserved, timid, and quiet. **Openness to experience** defines individuals who are creative, curious, and cultured versus practical, with narrow interests. **Agreeableness** concerns the degree to which individuals are cooperative, warm, and agreeable versus cold, disagreeable, and antagonistic. **Conscientiousness** measures the extent to which
individuals are hardworking, organized, dependable, and persevering versus lazy, disorganized, and unreliable. This grouping of personality traits allows for consistency amongst research efforts and presents a direct way of synthesizing results.

A body of research has accumulated over the past decade that provides compelling evidence for the robustness of the FFM; across different theoretical frameworks (Goldberg, 1981) using different instruments (Conley, 1985; Costa and McCrae, 1988; McCrae, 1989; McCrae and Costa, 1985, 1987, 1989); in different cultures (Bond, Nakazato and Shiraishi, 1975; Noller, Law and Comrey, 1987); using ratings from different sources (Digman and Inouye, 1986; Digman and Takemoto-Chock, 1981; Fiske, 1949, McCrae and Costa, 1987; Norman, 1963; Norman and Goldberg, 1966; Watson 1989) and with a variety of examples (Digman, 1990). Results have also been found to generalize across cultures and there is evidence that the big five are stable over time (Costa and McCrae, 1992). The FFM has recently received support in the personnel selection literature as a potentially predictive device for selecting job incumbents and team members (Barrick and Mount, 1991; Hogan, Hogan, and Roberts, 1996; Kichuk, 1997; Taggar, 1997; Tett, Jackson and Rothstein, 994). The FFM has also been used to determine an individual’s level of integrity (Dunn, Mount, Barrick and Ones, 1995; Eysenck, 1991; Hogan and Hogan, 1989; Hough, Eaton, Dunnette, Kamp and McCloy, 1990; Ones, Viswesvaran and Schmidt, 1993), effectiveness in customer service (McDaniel and Frei, 1994), and managerial potential (Costa and McCrae, 1995b). In other words, research has sought to “profile” an individual’s personality in various
professions and situations.  

Personality in the Union Literature. The discussion of the development and amount of research on the FFM is testament to the growing importance of these measures. The literature on union participation reveals that very few studies have included direct measures of personality (Glick et al., 1977; Hoyman and Stallworth, 1987; Huszczo, 1983; Iverson and Kuruvilla, 1995; Paquette and Roy, 1998; Perline and Lorenz, 1970; Perry and Angle 1981; Spinrad, 1960; Tannenbaum and Kahn, 1958). In earlier studies researchers did not directly test personality, but made observations and deductions from their findings on the personality of a typical union activist or "union man". For example, Tannenbaum and Kahn (1958) stated:

We have found that the active unionist has a relatively high level of energy which he diffuses into the union organization, extending his efforts in many directions within the local....He appears to be a different kind of person, perhaps a different personality type, from the inactive - more ascendant, outgoing and social. He seems to derive satisfaction from social interaction, from doing things with people. (p. 50).

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7 It is at this juncture that a cautionary note must be made. Evaluating the differences in personality of union members, and their decision to participate in union activities carries with it a "dark side" that is often times perceived negatively by unions. There are some very skeptical and cynical union members who abhor this type of research. History is rich in the misuse of personality measures that occurred during the earlier parts of the 20th century, and were reported as late as the 1980's. Job applicants were given personality tests to determine their propensity to become union activists and ultimately turned away if there was any notion that the individual would be an activist. Because of the potential for managerial abuse of the findings that might identify a "union type", many researchers avoided such labels and recommended that this type of research be avoided (Gordon and Miller, 1984; Barling et. al., 1992). Unfortunately, some union representatives have been trained to believe that any research associated with personality measures should be avoided, obviously for some very valid reasons. The fear is that management will use personality measures to harm union members. In the early 1980's a large organization contacted Robert Hogan, the author of the Hogan Personality Inventory (HPI), to conduct a union avoidance study. He found that the best predictor of union activity was a scale that measured ambition. The reasoning: "ambitious blue-collar workers, eager to advance in SOME way, denied opportunities for moving into management, found ways to achieve and advance by getting into union activities". Weeding out members high in union activity would most likely have led to a decrease in organizational effectiveness. Hogan did not publish these data because of the political implications of the work (Zickar, 2001).
Sayles and Strauss (1953) found that union leaders possessed certain broad characteristics:

They have a high activity level, an urge to get things done, never seem to tire, have a surplus of nervous energy, are idealistic, anxious to change things and build a better world, and critical of their employer, fellow union officers and even their own union jobs, but see the union as the best means to change a world that seems to offer insufficient opportunity for them and "their kind". (p. 123).

Those that did test for relationships between personality and participation used different measures, and tested for different traits. There were no two studies that tested for the same traits, and I could find no published research that utilized the FFM in union participation or other related union research. For example, in a recent study on union participation, Paquet and Roy (1998) measured three personality traits related to a person's psychological needs using the revised Jackson Personality Inventory. The traits measured in their study were need of achievement, need of dominance, and social confidence. The results indicated some support for social confidence and dominance, but not for need of achievement. Therefore, research efforts relating personality to participation in local unions is fragmented, and nothing has been done to extend the opportunities provided with the FFM.

The qualitative descriptions provided by researchers such as Tannenbaum and Kahn (1958) and Sayles and Strauss (1953) provide a strong link to support the use of the five-factor model in this research. For example, terminology such as "outgoing and social", are related to "extraversion". The same type of association is made for the conscientiousness trait with descriptions such as "high energy and hardworking". The role of an activist at the local level would require someone who is willing to speak up at
meetings with either fellow union members or in committee meetings. They might be required to be aggressive at times in order to support the wishes of the union and its members. These individuals would also have to be hardworking since they are either taking on double, triple, or quadruple duty work, in order to perform the duties of a union-activist. A member with family responsibilities that may include not only childcare, but also eldercare, would have many demands that would require them to be very organized and hardworking, in order to meet all of the different tasks facing them. As such, the instrumental beliefs that members form about participating in their local union are based to some extent on certain personality traits. If a member is able to speak to large groups, he or she may feel that they are able to participate in activities that involve this type of activity. High in conscientiousness means the member may put in the extra hours required to participate in union activities. These two personality traits, extraversion and conscientiousness, both appear to be important considerations for participation research. Therefore, it is hypothesized that:

**H8a**  *Conscientiousness will be positively and directly associated with favorable beliefs concerning union participation.*

**H8b**  *Extraversion will be positively and directly associated with favorable beliefs concerning union participation.*

**Demographics and Participation**

Anderson (1979) proposed that demographic factors are relatively unimportant correlates of involvement in union participation. He argued that role-type characteristics, attitudes, and social variables, can better explain the variance in the participation
measure. Huszczo (1983) and Chacko (1985) came to the same conclusions that
demographic variables were not very useful in predicting union participation. In other
studies the opposite was found. Personal characteristics such as age, tenure, education,
gender, and race, have all been found to be related to commitment and satisfaction
(Kuruvilla and Sverke, 1993). Most demographic factors will not explain the decision to
participate and some will be more important to the research question than others. The
personal characteristics of most interest in the participation literature, and to the unions,
are race and gender.

Race, Ethnicity and Disability. The labor force in Canada includes 11.6 percent
visible minorities, and this number is expected to double in the next fifteen years (Kelly,
1995). The importance of race and ethnicity relates to the diverse ethnic groups that are
not expected to assimilate into one set of “Canadian” practices. Instead, under a policy of
multiculturalism, visible minorities are encouraged to maintain their unique cultural
backgrounds, while sharing the Canadian experience (Esses and Gardner, 1996; Jain,
1988). This ultimately poses significant issues regarding union policy and the concept of
“collectivism” within the union. In the context of ethnicity, there may be a discrepancy,
as one set of policies may no longer meet the needs of the union’s constituents. This of
course, is a topic for research at a later date. Those needs could ultimately affect a
member’s inclination to participate in local union activities. Visible minorities have been

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8 Multiculturalism has become more than a federal government policy. It was enshrined in the 1982 Constitution Act as part of the Canadian Charter of Rights and Freedoms. The federal government also brought in the Employment Act and the federal Contractors Program in 1986 to provide improved access to employment opportunities for four target groups: women, visible minorities, persons with disabilities and aboriginal peoples (Jain, 1988).
targets of discrimination and prejudice (Berry and Kalin, 1995; Jain, 1988; Moreau, 1991). Their access to the labor market has been affected because of discrimination, thereby limiting the number of non-White participants in unions (Henry and Ginzberg, 1985; Jain, Singh and Agocs, 2000; Ornstein, 2000).9 Also, differences in cultural backgrounds could contribute to a lack of participation, as some cultures may not be accustomed to union activity.

A review of the union participation literature indicates that there have been only a few studies that directly relate race with participation, and they have compared Black and White members (Fullagar and Barling, 1989; Hoyman and Stallworth, 1987) or White and Hispanic workers (Mellor, Barnes-Farrell and Stanton, 1999). Hoyman and Stallworth (1987) found little difference in the extent of participation by Black and White participants. This contradicts the findings of previous studies (Gould, 1977; Gross, 1962; Hull, 1977). The scant literature on Black participation in unions, and the more general research on democratic practices in unions, states that, Black members participate less than White members. Union leaders recognize that racial minorities may be the answer in terms of organizing labor and fulfilling the roles required for participation.10

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9 The Royal Commission on Equality in Employment (Abella Commission), chaired by then Ontario Judge Rosalie Silberman Abella, reviewed employment practices of federal crown and government-owned corporations. Its report, tabled in 1984 made recommendations on how four traditionally disadvantaged groups - women, aboriginal peoples, visible minorities and people with disabilities - could be brought into the mainstream of Canada's labor force. To reach employees not covered by federal jurisdiction, a contract compliance program was included for organizations that did business with the federal government. The federal government introduced the Employment Equity Act in 1986, in response to the findings of the Abella Commission.

10 The Toronto Star, Monday, September 3, 2001, A1/A6. This news article reported the difficulties that union leaders are facing in organizing, bargaining, labor laws, etc. Comments were made about where labor leaders would have to turn to seek help, and racial minorities were defined as the likely candidates.
comparison of different backgrounds, beyond just Black or White members, would contribute to a better understanding of the relationship between race, ethnicity and participation.\textsuperscript{11}

What appears to be most relevant for racial minorities, are policies that deal with fairness, discrimination, and equal employment opportunities. The human rights of union members are protected through nondiscrimination clauses found in collective agreements (Giles and Starkman, 2001; Jain, Sloane and Horwitz, in press). These clauses are meant to protect employees from certain types of actions by management, by other employees, or even sometimes by their own union (Scott, 1996). These policies, if not fairly applied to all union members, could impact negatively on a member’s instrumental beliefs about participating in a union. Studies show that visible minorities in Canada face systemic barriers in employment despite the fact that discrimination based on race or ethnicity is illegal (Andiappan, Crestohl and Singh, 1989; Denton and Zeytinoğlu, 1993; Jain, 1989). However, if non-White members believe their unions are able to improve this situation, such as their working conditions and less discrimination in the workplace, amongst others, then they may form more positive instrumental beliefs about what participation can do for them. It is therefore hypothesized that,

\textbf{H9a} \hspace{1em} \textit{Race will be directly related to beliefs regarding union participation.}

\textsuperscript{11} In 1996, the Canadian visible minority definition included 1.5 million non-Whites, of which the largest groups are Chinese, South Asians and Blacks, in that order. Statistics Canada 1996 Census figures, Catalogue No. 93F0020XCB96004.
Even though a member may see the instrumental value of participating in the union, it does not necessarily mean that they will participate, as there may be an issue concerning volitional control surrounding the activity. What is known at this time is that formal participation of ethnic minorities is lower compared to others (Mellor, Barnes-Farrel and Stanton, 1999). As previously discussed, issues surrounding discrimination may impact on a members' ability to participate. It is therefore hypothesized that,

H9b  Race will be directly related to PBC regarding union participation.

A review of the literature concerning disabilities and union participation failed to uncover any studies. In 1996, 6.7 percent of the population was classified as disabled, and disabilities have implications for employment opportunities. Persons with disabilities may have problems with mobility, sight, or hearing, and participation may be more difficult without appropriate accommodation. White (1993), in a discussion of persons with disabilities and employment, also affirms that there is no information on the unionization of disabled persons, but points out that,

...clearly the voice of disabled persons within the labor movement is not a loud one. ...As well, union members with disabilities may be severely marginalized in the labor movement no less than in the workplace if they cannot obtain transportation to meetings, if they cannot get into the building or the room where the meetings are held, and if they cannot hear the debates or see the reports (p. 214).

If persons with disabilities are not able to participate easily in formal or administrative activities of the union, then this experience could discourage others with similar disabilities from participating. However, a person with a disability would have much to gain by participating in the union, particularly if they could be instrumental in
making policy changes to help their situation. One would expect there to be issues concerning volitional control, particularly when the disabilities are limiting. It is therefore hypothesized that,

**H9c**  *There will be a direct relationship between disabilities and beliefs, and between disabilities and PBC, with respect to union participation.*

**Gender and Participation:**

Bulger and Mellor (1997) investigated the relationship between both self-efficacy and barriers to women’s union participation. Their study was based on the notion that men and women differ in their perceptions of barriers, with women reporting that barriers play a more determining role in their participation than do men (Gray, 1993; Roby, 1993). They found four distinct barriers to union participation for women: community demands, family barriers, union barriers, and work barriers. The most notable impact was based on perceived union barriers. As the magnitude of perceived union barriers increased, self-efficacy magnitude scores declined, and so did participation. One problem with this study concerned a determination of the correct mediation effects. It was suggested that in further research confirmatory (causal) analyses could be used to assess whether union self-efficacy is a mediator or moderator before suggesting that associations in the model represent a causal chain.

Another problem faced by unions is the under-representation of women in union activities (Bulger and Mellor, 1997; Kirton and Healy, 1999). Women do not actively participate as much as men because of the various barriers they face: family commitment
and lack of spousal support, volunteer activities, union barriers where the old-boys
network discourages involvement, and work barriers that may influence their ability to
participate (Badden, 1986; Bulger and Mellor, 1997; Chaisson and Andiappan, 1989;
Elkiss, 1994; Fiorito and Green, 1986; Roby and Uttal, 1993). Studies have also found
that women participate less than men (Baxter and Lansing, 1980; Sapiro, 1984; Klein,
1984). Roby and Uttal (1988) found that triple duty work affected women’s desire to
participate in activities requiring time outside normal working hours. And now the
generation of baby boomers is facing quadruple duty with the addition of eldercare
responsibilities.

Studies focusing on gender have investigated who was most likely to participate.
A less researched topic concerns differences in union-related attitudes and behaviors of
female members compared to male members (Wetzel, Gallagher and Soloshy, 1991).
There are numerous studies that have focused on women and participation, but they are
mostly at national levels of the union. The most difficult situation arises if an individual
is a minority and is a woman (White, 1993), which is a fairly disheartening scenario, that
calls for further research into understanding beliefs, attitudes, and situational factors
affecting participation. Minority women appear to be under-represented in leadership
positions more than are White women (Melcher, Eichstedt, Eriksen and Clawson, 1992).
Wetzel et al. (1991) found no gender differences with regards to union loyalty and
responsibility to the union, but a small, but significantly, lower levels of “willingness to
work for the union”, was expressed by female union members. This makes sense since
women may not actually participate because of various barriers, but still intend to
participate once they are able to engage in union activities. In studies concerning participation-intention, women were more likely than men to sustain and follow up on expressed intents (Lu, 1999, Van Roosmalen and McDaniel, 1992). Empirical results indicate that women are more committed to unions than men when an overall measure of commitment is employed. Women are viewed as having more positive affective orientation toward unions than do men, but when behaviorally oriented measures of commitment, such as the willingness to work for the union or responsibility to the union, were employed, men exhibited more commitment. The discrepancy between attitude and the behavior could be attributed to a lack of opportunity for women to participate due to gender-specific childcare responsibilities or discrimination (Viswesvaran and Deshpande, 1993). One in four employees reported that they or others in their household provided care or support to an elderly family member or friend, up from one in five in a similar 1989 survey. According to 1996 Statistics Canada data, 1.3 million women provided care to an elderly person with a long-term health problem; two-thirds of these women were also in the paid workforce.\(^\text{12}\) Therefore it is hypothesized that,

**H10a** Presence of children under 12, eldercare responsibility, and marital status, will be directly related to PBC, regarding union participation.

**H10b** Gender will be directly related with both beliefs and PBC, regarding union participation.

Education, Seniority, Age and Occupation

Nicholson et al. (1981) found that educational attainment was the only biographical item significantly related to both needs for involvement in union affairs and overall union participation. Others have also found that higher levels of formal education have led to greater involvement in union administration (Hoyman and Stallworth, 1987; Kochan, 1978; McShane, 1986a; Strauss, 1977). Higher levels of seniority also increased the likelihood of being involved in union administration (Nicholson et al., 1981). Both of these findings seem to be reasonable. Those with higher levels of seniority would have more opportunity to become active in their locals because they would have earned the right over others to get involved (Cole, 1970; Kuruvilla et al., 1990). Members with higher levels of education might more easily handle administrative duties requiring the need to interpret the collective agreement, the ability to research, and other similar attributes needed to perform administrative duties. Additionally, members with higher levels of education, possessing more knowledge, may also tend to question more, which could also lead to higher levels of involvement in the union. Finally, the research also indicates that active union members are more likely to be married, older, and blue-collar (Peline and Lorenz, 1970).

Instrumental beliefs about participating in the union would therefore be expected to be strongly associated with these demographic variables because they ultimately describe the type of individual who has actively participated in the union. This would lead to the hypothesis that,
H11 Seniority, education, occupation, and age, will be directly related to beliefs, with respect to union participation.

Testing the Model

The theoretical framework for this study combines two theories, the theory of planned behavior (TPB) and the theory of reasoned action (TRA). A review of the literature comparing both theories suggests that when the behavior in question is out of the volitional control of the individual, the TPB will explain more variance than will the TRA. Participating in union activities can be difficult for a number of reasons and would, in most cases, might be out of the individual's control. Lack of control could be due to family commitments, lack of support to be elected into a union role, or not understanding about the union, just to name a few. Since PBC is the variable that accounts for this control, it is also fitting that external variables be included as they may explain the particular reasons for an individual's degree of control over union participation. Therefore it is further hypothesized that,

H12a Inclusion of the external variables will increase the amount of variance accounted for in the TPB.

Another important inquiry in this study was to test the ability of the TPB to better predict union participation compared to the TRA. To test the predictive ability of one model over the other, only the internal variables (intention to participate, attitude, belief, subjective norms and PBC) would be used in this analysis. The inclusion of the PBC has been hypothesized to contribute to the theory's predictive capability (Ajzen, 1991; Levin,
1999), and therefore the external variables are excluded in this comparison. The exclusion of the external variables also allows for a comparison with previous studies. Therefore,

**H12b** *The TPB will explain more of the variance in union participation than will TRA.*

Table 1 presents a summary of the hypotheses to be tested in this study and is then followed by a depiction of the hypothesized model in Figure 1.

Table 1

Summary of Hypotheses

---

**Intention to Participate**

**H1a** *Intention to participate will have a positive and direct relationship with all three measures of union participation (administrative, supportive and intermittent).*

**H1b** *Intention to participate will be more positively related to administrative participation, than it will to supportive or intermittent participation.*

**Attitude towards Participation**

**H2** *Positive attitudes towards participating in local union activities will have a positive and direct relationship with intention to participate.*

**Mediating Effects of Intention to Participate on Attitudes and Participation**

**H3** *Intention to participate will mediate the effects of attitudes on all measures of union participation (administrative, supportive and intermittent).*

**Beliefs**

**H4a** *There will be a positive and direct relationship between beliefs and attitudes.*

**H4b** *There will be a positive and direct relationship between beliefs and PBC.*
Table 1 (Continued)
Summary of Hypotheses

Subjective Norms

H5a Subjective norms favoring union participation will positively predict intention to participate.

H5b Subjective norms will be more strongly related to intention to participate than will attitudes.

H5c Subjective norms favoring union participation will positively predict attitudes.

Perceived Behavioral Control

H6a PBC will have be directly related to all measures of union participation (administrative, supportive and intermittent) when participation is not under complete volitional control.

H6b PBC will have a positive and direct effect on intention to participate when union participation is under complete volitional control.

H6c Low S-E will be negatively and directly related to all measures of union participation (administrative, supportive and intermittent).

H6d High S-E will be positively and directly related to intention to participate.

Mediating Effects of Intention to Participate and PBC and Participation

H7 Intention to participate will partially mediate the relationship between PBC and union participation.

Personality

H8a Conscientiousness will be positively and directly associated with favorable beliefs concerning union participation.

H8b Extraversion will be positively and directly associated with favorable beliefs concerning union participation.
Table 1 (Continued)

Summary of Hypotheses

Race, Ethnicity* and Disability

H9a Race will be directly related to beliefs regarding union participation.

H9b Race will be directly related to PBC regarding union participation.

H9c There will be a direct relationship between disabilities and beliefs, and between disabilities and PBC, with respect to union participation.

Gender

H10a Presence of children under 12, eldercare responsibility, and marital status, will be directly related to PBC, regarding union participation.

H10b Gender will be directly related to both beliefs and PBC, regarding union participation.

Education, Seniority, Age and Occupation

H11 Seniority, education, occupation, and age, will be directly related to beliefs, with respect to union participation.

Compare TPB against TRA

H12a Inclusion of the external variables will increase the amount of variance accounted for in the TPB

H12b The TPB will explain more variance in union participation than will the TRA

*Ethnicity was not utilized in this study as previously discussed.
Figure 1. Hypothesized Model
CHAPTER 3
Methodology

Research Design

This study is a field study, conducted in a noncontrived setting, with no interference with the normal flow of events. The purpose is to determine why certain union members become actively involved in their unions, and why others do not. Therefore, the unit of analysis is at the individual level. A field study is most appropriate in this setting since the research question concerns individual union members and the decisions they make within their environment.

The research design employed in this study is a survey design whereby union members were randomly selected from two unions to complete surveys that were mailed to members' homes, e-mailed to their work, or completed at meetings. The survey questions were mostly comprised of Likert scales, semantic differential scales, as well as dichotomous and nominal items specific to demographic variables. The analysis was based on quantitative methods for the purpose of testing the theoretical model proposed in Chapter 2.

The Population and Sample

The population of this study was non-participating and participating union members in local unions in Ontario and the Atlantic Provinces. Participating members (also referred to as active members) are defined as those individuals who have been
elected or appointed to their local unions into positions such as union steward, committees representatives such as bargaining or health and safety, or local union executive positions. In terms of this study, they are classified as those involved with the administrative duties of their local union. Non-participating members (also referred to as non-active members) are those members who chose not to become involved with day-to-day activities, and are defined as intermittent and supportive members of their local unions.

The random samples were drawn from District 6, representing both Ontario and the Atlantic Provinces for the United Steelworkers of America (USWA), and from Local 4400 representing the Greater Toronto Region for the Canadian Union of Public Employees (CUPE). The unions were selected because of the potential diversity of the members in terms of race and ethnicity, as well as gender, and the occupational mix of blue and white-collar workers.

Surveys were sent to 639 USWA active and non-active members in the fall of 2001, and to 500 active and non-active CUPE members in the winter of 2002. Ninety-three active members of CUPE were contacted via e-mail, and forty active and non-active members were contacted directly at training meetings conducted by the USWA. Lists were posted in various work places and the union members self-selected themselves to participate in the training. The intent was to send out all surveys to both unions in the fall of 2001, but unfortunately this was not possible due to scheduling issues with CUPE. Each participant was also asked to identify their union and local, as well as city where
they were employed, so that I could differentiate the responses from the two participating unions.

**Characteristics of the Unions**

Union composition is more diffused compared to 20 years ago. While USWA is strong in manufacturing, they have secured membership in other sectors (public) and groups (guards). CUPE represents workers under municipal, health care, school boards, university, and social services. This presents an opportunity to examine a cross-section of workers, and thus contribute to the generalizability of this stream of research. Therefore, this study consists of both blue-collar and white-collar workers. The blue-collar workers are predominantly from the USWA, and the white-collar workers are from CUPE. In terms of size of union, both unions have a fairly substantial membership. USWA has approximately 82000 members, in District 6 (Ontario and Atlantic provinces), with 85 percent male and 15 percent female. CUPE has approximately 7000 members in Local 4400 (Greater Toronto region), with 70 percent female, and 30 percent males. Table 2 highlights specific demographic variables for each of the union's, including their status as either an active or inactive member, gender, marital status, age, seniority, education, occupation, ethnicity, race, presence of children under 12, eldercare, and disability.

**Data Collection Procedures**

As with any study, there is always a concern about obtaining enough information. Both of the unions involved in the study expressed concern that participants would not
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13 The categories used for ethnicity were based on Census Canada 2001, Report 92-125-GIE. However, issues arose over the category “Canadian”. In light of 9/11, there was a concern that many ethnic groups would identify themselves as being Canadian though they might be coming from a visible minority ethnic background. To avoid this discrepancy, Canadian was dropped from the form, with those wishing to classify themselves as Canadian to do so under “other” category. Some respondents were questioned (after they had completed the questionnaire) about their choice, considering that Canadian was missing. It appears that they (Canadians) self-reported themselves as English when they could not find Canadian, leaving caution as to how to interpret these results. Others refused to complete the questionnaire because they were offended that the Canadian category had been omitted. Issues surrounding the self-report of ethnicity are well documented in the census reporting with many identifying with Canadian rather than their ethnicity and arguments remain as to whether ethnicity should even be included. Ethnicity was dropped from the study given the difficulty in interpreting the results.
complete the surveys because of either literacy issues or a lack of interest, particularly with their non-active members. Previous comments about the length of the questionnaire was also concerning, and so the development of the survey instrument had to be designed without compromising the integrity of the research.

The survey instrument was pilot tested and subsequently resulted in some minor revisions (see Appendix A). It took participants approximately twenty minutes to complete the survey. The revised questionnaire was sent to USWA and CUPE union members in Ontario and Atlantic Provinces. Survey participants were randomly selected from the membership lists of the participating unions. The return rate for union surveys is reported to be from 15 to 25 percent (Gallagher & Strauss, 1991) and so a sufficient number of surveys had to be sent out in order to obtain meaningful data. Both USWA and CUPE had experienced return rates of approximately 8 percent and 5 percent respectively on similar surveys. In total, 1139 surveys were mailed to union members' homes. The USWA mailing went out in November and early December 2001. In the November mailing, 300 surveys were mailed to active members, and 339 surveys were mailed to a combination of active and non-active members in December 2001. The CUPE mailing went out in February 2002 to 500 active and non-active members. In both cases, the stuffing of envelopes and subsequent mailing was completed in each of

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14 Sections E and F of Appendix A were not used in this study.
15 The lists maintained by each of these unions for the general population does not indicate whether the member is active or not in their local. USWA maintains a list of those serving on local executives.
the respective union offices, as a means to maintain the integrity of their member lists. A letter endorsing the study from the Director for District 6, USWA, and the local president, from local 4400, CUPE, was enclosed with the survey material (see Appendix B), which included a self-addressed, prepaid envelope. Five days after the mailings went out, a reminder card was sent in an effort to increase the response rate (see Appendix C). An administrative issue ensued with CUPE and reminder cards were not mailed out after the five-day interval.

In an effort to ensure that a sufficient response rate was achieved, an enticement was offered and a draw form was included with the survey material (see Appendix D). The first place winner would be awarded a $300 gift certificate for a DVD Player, and the second place winner would receive a $50 gift certificate from a local department store. In both cases, the winners accepted cash in lieu of their gift certificates. To be eligible for the draw, questionnaires had to be completed in full. Those who did not complete their questionnaires were contacted for the missing information. Confidentiality was again promised and maintained. All members contacted were happy to cooperate when asked about missing data.

Missing data on one or more independent variables are fairly common in survey research. Usually the problem is addressed using pairwise and listwise deletion of missing values. However, both of these techniques have been severely criticized because

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16 The first place winner was a member from the USWA, and the second place winner was a member from CUPE. The prize was sent to each of the winners by registered mail. Once the union members were notified, each of the respective unions was advised that winners had been selected. The names of the winners were not disclosed so that confidentiality could be maintained.
they make the assumption that the data are missing randomly (Cohen and Cohen, 1983; Tabachnick and Fidell, 1983). Listwise deletion often results in omitting a substantial amount of usable data that can reduce statistical power considerably (Cohen and Cohen, 1983).

While there are a number of techniques available for coping with the problem of missing data, estimating missing values by substituting means appears to be a simple solution (Cohen and Cohen, 1983). As with other approaches, only missing data for independent variables are estimated, and those subjects missing data on the dependent variable are dropped from the analyses. One potential disadvantage to this method is that when a large number of values are missing, the variance of the variables may be significantly reduced. This is turn could result in overly stringent tests because the magnitude of the relationships among variables would be decreased (Tabachnick and Fidell, 1983). However, in this study this does not appear to be the problem. The maximum percentage of subjects for whom data were missing for any independent variables in this study was less than 3 percent. The majority of the missing data were from age and tenure, and not the central variables of interest. Using the mean approach results in a conservative approach to dealing with the problem of missing data.

Further efforts were used to secure information from non-active participants. First a snowball sample was employed with CUPE. An e-mail was sent to ninety-three active members who were asked to participate in the survey, and to then pass it on to a non-active member as a means to increase participation. This method is typically used where subjects are difficult to find. Although participants could be reached by mail
surveys and through meetings, it was anticipated that it would be difficult to get non-
active participants to show any interest in the study, and so a snowball sample was tried,
although on a limited basis.

The response rate for non-active members from USWA was very low. In an
attempt to increase the numbers, I attended training sessions held on Saturdays, in various
locations in Southern Ontario. Non-active and active members (if present) were asked if
they would like to participate in the survey, offering them the enticement. These training
sessions were extended to all union members as a means to try and reach the
disconnected members. It was entitled “You and Your Union”. These members signed a
list to attend the meetings and were subsequently paid $100 by their union locals to
attend the sessions. The meetings were comprised of both active and non-active
members, with about twenty members per session for a total of forty members. The time
to complete the survey ranged from twenty to thirty-five minutes, with the exception of a
few members who had difficulty reading, and it took them approximately forty-five
minutes to complete the survey. Six members declined, not wanting to complete the
surveys.

As outlined in Table 3, the final rate of return was 22.9 percent. This return rate
was based on the mail survey, the meetings, and the snow-ball effect. Out of the 1272
surveys sent out, 287 were returned. Five of those were unusable due to excessive
missing data, and forty surveys from the USWA were returned, citing incorrect
addresses. Unfortunately, we were unable to determine if any surveys were rerouted back
to CUPE because of administration issues. Therefore, I anticipate that the final return
Table 3
Survey Distribution Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Sent CUPE</th>
<th>Return</th>
<th>%</th>
<th>Sent USWA</th>
<th>Return</th>
<th>%</th>
<th>Total Sent</th>
<th>Total Return</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail</td>
<td>500</td>
<td>74</td>
<td>14.8</td>
<td>639</td>
<td>155</td>
<td>24.2</td>
<td>1139</td>
<td>229</td>
<td>20.1</td>
</tr>
<tr>
<td>Meetings</td>
<td>-</td>
<td>-</td>
<td></td>
<td>40</td>
<td>34</td>
<td>85.0</td>
<td>40</td>
<td>34</td>
<td>85.0</td>
</tr>
<tr>
<td>Snowball</td>
<td>93</td>
<td>24</td>
<td>25.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>93</td>
<td>24</td>
<td>25.5</td>
</tr>
<tr>
<td>Total</td>
<td>593</td>
<td>98</td>
<td>14.8</td>
<td>679</td>
<td>189</td>
<td>27.8</td>
<td>1272</td>
<td>287</td>
<td>22.6</td>
</tr>
<tr>
<td>Adjustments</td>
<td>-40*</td>
<td>-5**</td>
<td></td>
<td></td>
<td>40</td>
<td>-5**</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Total</td>
<td>593</td>
<td>98</td>
<td>14.8</td>
<td>639</td>
<td>184</td>
<td>28.5</td>
<td>1232</td>
<td>282***</td>
<td>22.9</td>
</tr>
</tbody>
</table>

*These were the forty returned surveys with incorrect addresses.
**These were the five unusable surveys which had too much missing data.
***An additional twenty-eight surveys were dropped from the study because there were issues with outliers. Therefore, the final sample used in this study was 254.

rate is probably higher than that reported, although it would most likely not be a significant difference.

The last concern with this study involved the length of the survey, and so serious consideration was given as to how the items would be measured. The following explains the development of the survey instrument.

Measurement of the Theoretical Framework (TPB)

Before explaining what measurement scales were used for each of the variables in the model, it is important to first present aspects of the theoretical model as specified by Ajzen and Fishbein (1975, 1980), and to explain some of the shortcomings of their
approach, and possible remedies for this study. The elements of the TPB deemed important to the theoretical model by Ajzen and Fishbein (1980) are found in Figure 2.

![Diagram](image)

**Figure 2. Basic Measurement Elements in the Determination of the Theory of Planned Behavior**

The measurement issue associated with this model concerns the "outcome evaluation" and the "motivation to comply". The evaluation of the consequences of one's belief is a component of the attitude. The outcome evaluations are multiplied by its complementary "outcome evaluation" question to form an attitude. The subjective norms are formed by multiplying normative beliefs by the respondents' "motivation to comply".
The motivation to comply refers to how likely the respondent is to behave in a manner consistent with the opinion of others. Each of these questions is complemented by a normative belief question. As previously noted, one of the major concerns voiced by the unions was that their members would not be willing to complete a lengthy survey. Therefore, the measures employed had to yield the highest alphas, with the least amount of items. If outcomes and motivation to comply were included in the questionnaire, this would have increased the number of items. If, for example, beliefs had ten items, then outcome evaluation would also have to consist of ten items. If normative beliefs consisted of ten items, then so to would motivation to comply. The end result would be an additional twenty items. This would obviously increase the length of the instrument and the amount of time it would take for union members to complete the survey. However, there needed to be a justified rationale for eliminating these items without compromising the integrity of the theoretical model.

A review of the literature indicates that several researchers have questioned the value of the expectancy-value approach and have used structural equation modeling to assess the independent, non-multiplicative role, of each of the variables, to determine their usefulness in the theory (Vallerand, Deshaies, Cuerrier, Pelletier and Mongeau, 1992). In the Vallerand et al. (1992) study, outcome evaluation and normative beliefs were found to be significant predictors of attitudes and subjective norms, but motivation to comply and behavioral beliefs were not necessary elements of the model. However, behavioral beliefs were measured with a single item, thus leaving this finding less credible. In another study it was also determined that motivation to comply may not be a
necessary determinant of subjective norms, and that normative beliefs alone were a better predictor of subjective norms than the multiplicative term of normative beliefs and motivation to comply. However, they did not use structural equation modeling, which if used, may have provided more conclusive results (Miniard & Cohen, 1981).

Further, Gagne and Godin (2000) found that summing behavioral beliefs provided as good a correlation coefficient with the attitude towards the behavior, as did the composite score of behavioral beliefs multiplied by outcome evaluations. It was also determined that motivation to comply did not add to the predictive power of normative beliefs, thus providing further support to eliminate the evaluative components suggested in previous studies (Budd, North and Spencer, 1984; Hom and Hulin, 1981). These findings tend to coincide with suggestions by Ajzen (1991) that the expectancy-value model may not be the best method to describe the relationship between direct and indirect measures of constructs of the TPB (Gagne and Godin, 2000).

In light of the research, modifications were made, excluding motivation to comply and outcome evaluations in the theoretical model, thus achieving the goal to reduce some of the items in the survey instrument, and still have a predictive model of union participation. Beliefs have been shown to be an important construct in industrial relations research, particularly with respect to research on intentions to participate in various union activities, and therefore, this measure will be included in the study as it has some theoretical justification. Normative beliefs, however, are somewhat different. Most of the research conducted in either the social psychological or the industrial relations domain have used measures of subjective norms and have reported alphas based on this
measure. Since subjective norms have been measured successfully in the industrial relations research, there would be no advantage to include normative beliefs in the model, as the type of questions asked of each is basically the same. Therefore, normative beliefs will also be excluded from this model.

Ajzen and Fishbein (1975) have suggested that the use of bipolar adjective scales, such as harmful/beneficial, good/bad, or awful/nice, should be used to measure the various constructs found in the TRA or in the TPB. However, bipolar adjective scales might not be so easily interpreted by the respondents in this study. A study of literacy indicates that depending on the type of literacy being measured, 34 to 40 percent of clerks and 40 to 46 percent of sales and service workers are marginally literate, although a clear majority function at Level 2. More than half the craft workers and machine operators, and assemblers in Canada, function at a low-level of literacy, and the proportion testing at only Level 1 are very high (Crompton, 1995).\textsuperscript{17} I therefore chose to use a variety of Likert scales and semantic differential scales that were used in previous studies utilizing the TPB. The various scales ranged from absolutely no control (1) to complete control (4); very unlikely (1) to very likely (5); never (1) to always (5); and strongly disagree or definitely false (1) to strongly agree or definitely true (5) points, and semantic differential

\textsuperscript{17} Workers with only Level 1 or 2 literacy skills - workers "at risk" have quite limited capabilities. In practical terms, their general reading abilities (prose literacy) are restricted to such tasks as identifying dosage instructions on a medicine bottle (Level 1) or answering a simple question about plants based on a brief article about gardening (Level 2). However, they have difficulty summarizing instructions on making sure a bicycle seat is in the proper position for the rider; or reading four movie reviews and identifying which movie was considered the worst, in the absence of a ratings device such as points or stars. These are Level 3 prose tasks.
scales, with evaluative statements such as extremely difficult, difficult, easy, and extremely easy. I wanted to ensure that respondents would find it easy to make their selections. Previous studies have used Likert scales in their investigations with no adverse effects (Bentler and Speckart, 1979).

A number of studies have indicated that survey participants who fill out questionnaires may be influenced by the order of questions and by the information contained in the preceding questions (Gagne and Godin, 2000; Schwarz, Strack and Mai, 1991; Tourangeau, Rasinsky, Bradburn and D’Andrade, 1989a, 1986b). Therefore, the questions were reordered to eliminate any bias.

Measurement of Dependent Variables

An increasing concern pertains to “how” participation should be measured. Participation has been operationalized with either single-item measures (Chacko, 1985; Glick et al., 1977; Kolchin and Hyclak, 1984), or with single composite indexes (Fullagar and Barling, 1989; Huszczo, 1983). Single item measures (which may measure different behaviors), and unidimensional additive indexes (which may aggregate very different behaviors), may in part explain the contradictitory and inconclusive findings of much of the research union participation. Kelloway and Barling (1993) considered a cumulative approach to measuring participation. If participation is a multidimensional construct, as the literature seems to suggest, then the use of an unidimensional additive index is inappropriate. Even though there are different degrees of union involvement (McShane, 1986b; Nicholson, 1978; Sayles and Strauss, 1953; Tannenbaum and Kahn, 1958, Van de Vall, 1970), composite indexes have not been representative of these differences, making
interpretation difficult (Schmidt and Kaplan, 1971). Some studies have scored the items
dichotomously using yes or no responses (Kolchin and Hyclak, 1984; McShane, 1986b),
and have or have not responses (McLean Parks et al., 1995). Others have used Likert
scales (Paquet and Bergeron, 1996). A misleading interpretation of the results associated
with unidimensional studies has been attributed to dichotomously scoring participation.
It is difficult, if not impossible, to express dichotomous variables using factor analytic
models (Aryee and Debrah, 1997; Comrey, 1978; Kim and Mueller, 1978). However, the
most recent study by McLean Parks et al. (1995) used a combination of both scales, so
that construct validity could be established. Tetrachoric correlations were used to better
quantify the relationships between the variables compared to a Pearson correlation
coefficient. If we are to understand the differences in members and the type and extent of
activity they engage in, then we need to utilize scales that will better measure the
differences between activities. A Likert scale may be more appropriate than a
dichotomous scale if construct validity is to be demonstrated. It may be rather difficult
though, to arrive at a range of responses using a Likert scale (using responses such as
from never to always), for all possible union participation activities. For example, you are
either the local president, or you are not. The response in this case will ultimately result
in a completely divergent or dichotomous response. Perhaps, this measurement issue
might be resolved by ensuring that specific questions are asked, such that an individual
can answer beyond just a yes or a no, and that a range of activity is pursued. The issue
might not be so much about the type of scale utilized, but rather, about how the questions
are posed.
Another issue related to participation has been "what" items to measure. Measurement of participation, for the most part, has been limited to administrative factors. In most cases, attendance at meetings and voting in elections has been chosen as the primary measures of participation (Anderson, 1979; Montgomery, 1989; Brief and Rude, 1981). As Strauss (1977, p. 219) suggests, "behavioral participation is much broader than meeting attendance". The focus on administrative factors has been considered to be most critical, because that is where active members performed the bulk of the work deemed important to the union movement (McShane, 1986b). Low levels of administrative participation can be concerning, since union strength depends heavily on having a strong core of activist volunteers (Gallagher and Strauss, 1991). As noted by Anderson (1979), participation is not just about holding office, but it is also about involvement in day-to-day operations and decision-making. Many acts of participation make small contributions. Although a number of these tasks may be mundane, and not particularly noticeable, aggregated together, they promote the effective functioning of the union (McLean Parks et al., 1995; Organ, 1990). For example, reading the collective agreement may not be a noticeable task, and may seem inconsequential to the membership as a whole. If several non-active members did this, and then provided guidance (supportive as suggested by McLean Parks et al., 1995) to those in their local union who required assistance in a company-union related matter, then there would be more education within the local about members' rights. Stewards, as one example, would be free to pursue other activities, such as committee work in health and safety, which affects the local as a whole. As discussed, different studies have incorporated varying
degrees of possible participation activities, but most have been limiting. Gallagher et al. (1987) and McLean Parks et al. (1995) have incorporated eighteen union activities, marking a more comprehensive range of activities beyond just administrative participation. This provides a basis on which to build a participation scale.

The appropriate time period over which union participation should be measured remains unresolved. In the McLean Parks et al. (1995) study, participants were asked to provide a dichotomous response (have or have not) to their participation in the current and previous time periods (throughout their working life). This differed from previous studies which only asked about participation in the previous twelve months (Anderson, 1979; Flood et al., 1996, 2000; McShane, 1986b, Nicholson et al., 1986), or the last two years (Chacko, 1986). The time period is important because there are situations when an individual will be busier with union activities than at others. McLean Parks’ et al. (1995) study allows for an individual to provide a response for something that may have taken place over the course of their working life. If an individual filed a grievance for example, twenty-five years ago, but records the response now, it is misleading as to how active the individual might actually be in general. Education, age, gender, family, and other factors might have influenced the members’ actions at that time, but twenty-five years later these same factors might have a different type of influence on the person. Participation activities may or may not be stable over time (Klandermans, 1984a, 1986) and opportunities to engage in some form of participation simply may not become available during shorter time periods, making the search for predictor variables, based on previous limited time periods, elusive (McLean Parks, et al. 1995). The question of availability of
activities may be resolved by asking a member to think back over the past three years since it could potentially capture all the necessary participation activities for all members. Union contracts are usually ratified for three-year periods so it seems logical to measure participation over the most recent period. Measurement over a three-year time span would allow for occurrences such as strikes, wildcat strikes, or ratification of a collective agreement, that a 12-month period would not. There exists a possibility that the individual may not have been involved in a strike or a wildcat strike in the previous three-year period, but the same possibility exists for the twenty-five year time period, where such strike occurrences may not have taken place.

Therefore, the measure for participation will be based on twenty-one items derived from the literature, using a Likert scale from never (1) to always (5), asking for information over the past three years to capture the average term of a contract (See Appendix A, Section D). In previous studies of this nature, Cronbach's alphas were reported in the range of α = .77 to .92 for one sample of retail workers, and α = .63 to .79 in a nursing sample, for the three categories of participation (McLean Parks et al., 1995).

In order to determine if the factor structure of the participation scale was actually representative of what has been presented in the literature, an exploratory factor analysis, with oblique rotation was used. Only 20 items were used in the final analysis, with Q.19 being deleted. The alphas reported in this study were administrative α = .97 (15-items), supportive α = .69 (2-items), and intermittent α = .76 (3-items). The factor analysis will be discussed in the results section.
Measurement of Independent Variables

As indicated, there was concern expressed by the unions about the length of time it might take members to complete the survey. Therefore, scales were sought that used the least amount of items, for the highest alpha possible. As such, the variables used in this study were based on methods proposed by Fishbein and Ajzen (1975). These methods have been employed in previous research with better than average results.

Measurement of these variables should also be specific, rather than being too general. This is particularly important in measures of “attitudes” and “beliefs”, as they apply to this theoretical model. As will be discussed, many of the measures found in previous studies have been general, and unfortunately inappropriate for this study.

Intention to Participate

Previous studies in the social psychological literature indicate that usually only two or three items have been used to measure intentions, with alphas ranging from $\alpha = .72$ to .92. This measure is similar to “willingness to participate” found in the industrial relations research. Youngblood et al. (1984) found an $\alpha = .89$, in a study of union voting intentions. In a study concerning intention to participate, an $\alpha > .75$ was obtained (Fullagar et al., 1995). For this study, intention to participate was measured using a 6-item, 5-point semantic differential scale (see Appendix A, Section C (b)) derived from the literature. Q.4 and Q.6 were deleted from the scale. An item analysis produced a 4-item scale, with an $\alpha = .96$. 
Attitude

As previously noted, research on attitudes is fragmented because each researcher tends to use tailor-made measures. Schwab (1980) suggested that more time should be spent on validating attitude scales. The General Union Attitude scale (McShane, 1986) and the Union Attitude Index (Getman, Goldberg and Herman, 1976) have been used in union research with much success, but, unfortunately, they are too general for this study. To participate or not participate is not necessarily a good proxy of an individual’s attitude toward their union, as participation may be the result of either a negative or a positive inclination toward the local union, or towards the organization, or based on individual needs.

In the social psychological literature, various types of scales measuring attitudes related to smoking and exercise have reported $\alpha = .87$ (van der Pligt and DeVries, 1998). A 4-item, 5-point semantic differential scale was used in this study. The questions asked members to identify what their attitude was towards participating in the union or committee (See Appendix A, Section C (f)). The survey instrument was modeled after Ajzen and Fishbein (1980) and Madden et al. (1992). Q1 was omitted. The item analysis resulted in a 3-item scale with an $\alpha = .80$.

Behavioral Beliefs

Even though there is unanimity on the importance of beliefs about unions, the measurement of beliefs is inconsistent (Deshpande and Fiorito, 1989). In a study conducted by Deshpande and Fiorito (1989), both general and specific beliefs were found
to affect intentions to vote for unionization. When general beliefs were controlled, specific beliefs appeared to be the more salient determinant of voting intentions.

Unfortunately, there is no consensus as to what scale should be used to measure beliefs. No two studies asked the same types of questions when predicting union participation (Kuruvilla and Fiorito, 1994). In a study of voting intentions, Kochan (1979) and Rosse, Keaveny and Fossum (1987) found that beliefs measured at an individual's workplace carry significantly greater weight than did general beliefs.

The belief scale used in this study was based primarily on similar scales reported in the industrial relations literature, as well as from information secured from focus groups in another union study. According to Ajzen and Fishbein (1980), comparable levels of specificity are most appropriate when predicting attitudes towards an object such as beliefs about a specific union, and should be most predictive of attitudes toward the union.

In a study of union voting intentions, measures of instrumentality beliefs using a 20-item, 5-point Likert scale reported an interitem reliability, \( \alpha = .93 \) (Youngblood, et al., 1984). An \( \alpha = .90 \), using an 8-item, 5-point Likert type scale was reported in a study on willingness to work for the union (Kuruvilla and Fiorito, 1994). For this study, beliefs were measured using a 10-item, 5-point Likert scale (see Appendix A, Section C (d)).\(^\text{18}\) Q.7 was omitted. The item analysis resulted in a 9-item scale with an \( \alpha = .95 \).

\(^{18}\) Researchers in the social psychological literature have recommended that only five to nine belief statements should be included in a measure of beliefs at any given time because larger amounts exceed the information processing capacities of human beings (van der Pligt and Eiser 1984).
Subjective Norms

Subjective norms were partially operationalized according to Fishbein and Ajzen’s (1975) definition, as indicated at the beginning of this section. Correlations reported in the social psychological research have been found to be very low, suggesting that subjective norms, is a weaker predictor of intention in both the TRA and the TPB (Godin and Kok, 1996; Sheppard et al., 1988; Van den Putte, 1991). The rationale provided for these results, stems from measurement problems, and the failure to tap appropriate components of normative influence. The same problem arose in a study conducted by Sparks et al. (1997), where subjective norms were reported to be $\alpha = .38$, using a 5-point semantic differential scale. When two items were removed, interitem reliability increased to $\alpha = .63$. In a study of union voting intentions (Youngblood, et al., 1984), $\alpha = .37$ was reported using a 3-item scale. Kuruvilla and Fiorito (1994) reported an $\alpha = .59$ on a study concerning member’s willingness to participate, using a 4-item, 5-point Likert-type scale. There is very little consistency reported amongst these studies.

In this study, respondents were asked to rate the extent to which they believed people who were important to them (e.g. referent others) thought they should hold an elected/appointed position, and/or sit on a committee in their local. These referent others included father, mother, spouse/partner, close friends outside work, people at work, local union representatives, and management. A 7-item, 5-point Likert scale ranging from strongly disagree or definitely false (1) to strongly agree or definitely true (5) was used (see Appendix A, Section C (e)). Q.7 was omitted. An $\alpha = .91$ emerged from a 6-item scale. The alphas reported for this scale are unusually high compared to previous
research. The strength of the scale might be explained by the items listed under the scale, which indicate that the referent others listed on the questionnaire were in fact all likely candidates to impact on an individual's participation decisions.

Perceived Behavioral Control (PBC)

Based on the literature, both PBC and S-E (self-efficacy) were measured, following the guidelines established by Ajzen and Fishbein (1980). There remains some skepticism about treating PBC and S-E as separate measures. While some studies show support for differences in measures of PBC and S-E, others do not (Sparks et al., 1997). How to measure PBC and S-E remains a topic for further investigation since each has been measured differently with no consistency.

Ajzen and Madden (1986) reported interitem reliabilities for PBC ranging from $\alpha = .74$ to $.79$, in two separate studies. Another study reported $\alpha = .93$ (Sparks et al., 1997). When S-E measures were used, in conjunction with the PBC, interitem reliabilities were reported to be $\alpha = .90$ (Sparks et al., 1997; Terry 1993; Terry & O’Leary, 1995). For this study, a 2-item, 4-point semantic differential scale was used to measure both PBC and S-E. The PBC questions considered a member’s control over their situation, while the S-E questions considered how easy or difficult it would be for a member to participate (see Appendix A, Section C (a)).

Since it was hypothesized that there could be two different scales, a factor analysis was conducted. Using a principal components analysis, only one factor emerged with three items. This was unexpected. Therefore, the original hypothesis that PBC
would result in two factors was not supported, and the view that PBC is a unidimensional scale holds in this case. However, because only a limited number of items were incorporated into the survey, there remains some skepticism regarding the dimensionality of the PBC scale, and further research on this issue should be conducted. Self-efficacy therefore could not be adequately measured in this study, and was not utilized. Q.4 was deleted. An item analysis was conducted on the 3-item scale, with an α = .77. The removal of the third item would have increased the α = .84, with a 2-item scale. However, a 3-item scale was retained for PBC with an α = .77.

**Personality Assessment.**

Personality dimensions were assessed using two personality measures, extraversion and conscientiousness, of the self-report (Form S) version of the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992). The NEO-PI-R is derived from a structural and factor analytic approach to personality assessment. It consists of 240 behavioral statements divided into five, 48-item dimension scales, each comprised of six, 8-item facet subscales. The reduced form consists of sixty items, divided into five, 12-item scales. Respondents indicated the extent to which statements characterized their behavior using a five-point Likert format with endpoints strongly disagree (1) and strongly agree (5). Internal consistency values have ranged from .74 to .89 in previous studies. All negative items were reverse-coded. For this study, conscientiousness resulted in α = .82 with an 11-item scale. Q.6 was omitted. Extraversion resulted in α = .74 with a 9-item scale. Q.5, 11 and 23 omitted. Some of
the items that were deleted may have been difficult to interpret. For example, words such as "light-hearted" or "methodical" may have been difficult to understand.

Demographics

There are a number of standard variables measured in this study. These include seniority (in years), age (in years), employment status (full-time 1, part-time 2), participation level (active 0, inactive 1), gender (male 0, female 1), marital status (married 0, single 1), presence of children < 12 (yes 0, no 1), race (white 0, non-white 1), education (grade levels) and occupation (blue-collar 0, white-collar 1). I have also included some non-standard items including eldercare (yes 0, no 1) and disability (yes 0, no 1) that are not commonly measured in union participation research.

Method of Analysis

The major statistical procedure used in this study is multivariate path analysis, using multiple linear regression analysis. Unstandardized regression coefficients are reported due to the inclusion of dummy coded variables. According to Fox (1997),

An unstandardized coefficient for a dummy regressor is interpretable as the expected dependent-variable difference between a particular category and the baseline category for the dummy-regressor set. Because a 0/1 dummy regressor cannot be increased by one standard deviation, the usual interpretation of a standardized regression coefficient does not apply. (p. 153)

Hierarchical regression analysis was used to determine the incremental variance added with the inclusion of personality and demographic variables to the TPB model, to determine the incremental value that the TPB has over the TRA, and to determine some mediation effects that were hypothesized.
CHAPTER 4

Results and Analysis

In Chapter 1, the main purposes for this dissertation were established. Essentially, there were three important research issues to be examined. First, I wanted to further investigate the notion that participation is a multidimensional construct. Second, I wanted to determine if the theory of planned behavior (TPB) accounted for more variance in union participation than did the theory of reasoned action (TRA). Third, I also wanted to ascertain if the inclusion of external variables (personality and demographic) to the established theoretical framework of the TPB, would add incremental value to the TPB. Multivariate path analysis was conducted using linear regression analysis. Unstandardized regression coefficients ($b$) are reported.

Exploratory Factor Analysis

To determine the multidimensionality of participation, exploratory factor analysis was conducted using a principal components analysis, with oblique rotation. Based on previous research, twenty-one items were initially determined to be appropriate measures (see Appendix A, Section D). Oblique rotation was chosen over varimax to overcome the assumption of orthogonality (Kim and Mueller, 1978), as a number of factors were expected to be correlated. Participation at the administrative and supportive levels would be expected to have overlapping variables that would be correlated. Delta was set to .60 to allow for additional factor correlation. As discussed in Barling et al. (1992, p.
97), one would expect the three factors to be related with each other. For example, "It is 
not realistic to expect administrative participation to be unrelated to attendance and 
involvement in union meetings. On the contrary, being a union officer is probably an 
excellent predictor of meeting attendance".

An initial solution extracted three factors. Eigenvalues, amount of variance 
accounted for in each factor, scree plot, and the pattern matrix, were all reviewed. 
Eigenvalues greater than one were retained. There are varying opinions as to whether the 
pattern or the structure matrix should be reviewed after oblique rotation (Tabachnick and 
Fidell, 1996). The structure matrix is very easily read, and so one might be enticed to use 
this matrix. But the problem lies in the correlations between variables and factors, which 
may be inflated by any overlap between factors. The pattern matrix contains values 
representing the unique contribution of each factor to the variance in the variables. 
Shared variance is omitted, but the set of variables that composes a factor is usually 
easier to see. Therefore, the pattern matrix was used. Loadings had to be greater than 
.40, and there had to be a minimum of two items, otherwise the factor would not be 
considered robust (Harris, 1967). A review of the factor loadings indicated a problem 
with one item (Q. 19). When this item was checked for normality, kurtosis was very 
high. A transformation did not yield much better results so it was removed, leaving 
twenty items to be factor analyzed.\(^\text{19}\) Three factors were extracted from the analysis.

\(^\text{19}\) An initial analysis was conducted leaving question 19 with the second factor. However, when 
reliabilities were calculated, question 19 had to be removed from the analysis, since alpha = .60.
Total variance explained in the three factors was 73 percent, with the first factor accounting for 59 percent, the second accounting for 8 percent, and the last accounting for 6 percent. The pattern matrix, as well as the component correlation matrix, can be reviewed in Tables 4 and 5. The bar charts displaying the distribution of each factor can be found in Appendix E.

Reliabilities for each of the participation scales, administrative, supportive and intermittent, were calculated, with twenty items being retained. Alphas were reported as .97, .69, and .76, respectively. According to McShane (1986a), if a composite participation instrument composed of all union activities were employed, one would expect the reliability coefficient to be below acceptable levels. In his study, the composite amounted to .54, which is comparable to earlier published studies. When I ran such a comparison, my composite participation instrument for administrative participation amounted to .95. After deleting a number of items, the same composite scale emerged with a reliability coefficient of .97. The inclusion of many more union activities in this study (twenty-one versus nine), likely increased the reliability scores. The results of the factor analysis indicate support for a multidimensional participation scale.

Scale Validation

There are two issues that must be addressed regarding scale validation. The first is the reliability or internal consistency of the scales, and the second is the validity of the scales. As reported above, reliability for the scales ranged from .69 to .97, for supportive,
intermittent and administrative participation, respectively. With the exception of supportive participation reporting \( \alpha = .69 \), all reliabilities exceeded the criterion of .70 for exploratory research (Nunnally, 1978). However, .69 is sufficiently close to .70 and should not be discounted.

Table 4
Factor Structure of the Participation Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Served as an elected union official</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Served on a local union committee</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Served as a union steward</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Run for an elected union office</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Been appointed as a union official</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Been a delegate to a union convention or seminar</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Helped a union member prepare a grievance</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Read parts of the collective agreement</td>
<td></td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>9. Helped a new member learn about the union</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Filed grievance(s)</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Spoke up at a union meeting(s)</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Shown another member how the union could</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Him or her with a problem</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Helped another member campaign for a union office</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Encouraged other members to support union position on an issue</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Attended general membership meetings of union local</td>
<td>.58</td>
<td>.74</td>
<td>.90</td>
</tr>
<tr>
<td>17. Voted in elections for local officers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Voted in contract ratification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Walked the picket line during a strike</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Marched in a rally in support of my union</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Involved in decision-making processes within the union</td>
<td>.87</td>
<td>.69</td>
<td>.76</td>
</tr>
<tr>
<td>Alpha</td>
<td>.97</td>
<td>.69</td>
<td>.76</td>
</tr>
</tbody>
</table>
Table 5

Component Correlation Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000</td>
<td>0.703</td>
<td>0.829</td>
</tr>
<tr>
<td>2</td>
<td>0.703</td>
<td>1.000</td>
<td>0.757</td>
</tr>
<tr>
<td>3</td>
<td>0.829</td>
<td>0.757</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

The second issue, the validity of the scales, can be assessed from the perspective of construct validity. Evidence of construct validity includes face, factorial and convergent and discriminant validity (Cook and Campbell, 1979). Face validity is perhaps the easiest to determine, since one merely has to peruse the items and can readily see that they pertain to union activities. Five raters\textsuperscript{20} were asked to assess face validity of the union participation measurement scales. They were instructed on the definition of each of the union participation scales, and then asked to assess whether they were in agreement as to how the items were categorized (administrative, supportive or intermittent). A 5-point Likert scale was used, rating the items from strongly disagree (1) strongly agree (5). Interrater reliability resulted in \( .94 \) agreement, providing support for face validity. As well, understanding how items cluster into each of the factors is another indication of face validity. Administrative duties, as previously discussed, would include items related to elected or appointed roles such as serving on committees, union steward, or higher levels within the local union. In addition to these duties, it could be argued that there would be an overlap with items relating to helping members, or what could be

\textsuperscript{20} The raters consisted of five university graduates, two who were in a union, and three who were not.
described as supportive duties, as it would be within their defined duties to assist members with various issues. In this study, supportive participation consists of activities with elements associated with political action such as picketing, and participating in union rallies. The intermittent scale includes union activities carried out only occasionally by union members. For example, attending general membership meetings, or voting in elections, would occur no more than once a year. Each of these factors describes different types of involvement, all unique, but all leading to support within the union. Therefore, face validity can be considered to be satisfactory.

The validity of the factors was assessed through factor analysis and an examination of the factor loadings. The first factor was particularly pronounced (59 percent), while the other two were subtle (8 and 6 percent). The pattern matrix also clearly demonstrated support for three factors. With the exception of one item (Q. 15), each item loaded on only one factor. The double loading pertained to the question asking union members about “attending general membership meetings” (Q. 15). The final decision was to accept this item on the first factor (.58), since it appeared to be a better fit with the union activities in that factor. The majority of the factor loadings were in excess of .7, with only four items loading on between .4 and .6.

An examination of the scree plot (Appendix F) seems to suggest that participation may only be a one-factor solution. However, based on the evidence discussed above where there was support for a three-factor solution based on high interrater agreement, the differentiation among the factor loadings, the pattern matrix, and previous literature
supporting a multidimensional scale for participation, a three-factor solution was used for this analysis.

Is the Dimensionality of Participation Finally Resolved?

Even though there is support for a multidimensional scale, the factor structure for union participation is still not clearly defined. For example, previous studies have included between five and seven union activities for administrative participation (Kelloway et al., 1993, McLean Parks et al., 1995; McShane, 1986a). In this study, I replicated many of the items used by McLean Parks et al. (1995), but added four additional items to the list of union activities (Q. 5, 18, 20, and 21), in an attempt to further identify the appropriate union activities needed to define union participation. The impetus for this research was pioneered by McShane (1986a), and a number of the items found in the scales developed in this, and in previous studies, are based on his initial work. Through each successive stage of research on this construct, further advancements have been achieved. For example, in this study there are fifteen items loading on administrative participation, compared to only seven for McLean Parks et al. (1995), and five for McShane (1986a), with an increased alpha from .76 for McLean Parks et al. (1995), compared with this study at .97. Even though the union activities included under administrative participation scale are increasing, there are particular union activities that are consistently used across studies (See Table 6).

A comparison with McLean Parks' et al. (1995) findings, on which I had based the majority of my questions, indicated a number of differences in the items that loaded
on each of the three factors. For example, it was expected that items such as "helped a new member learn about the union" (Q. 9), or "shown another member how the union could help him or her with a problem" (Q. 12), would load on the supportive factor. However, these items loaded on administrative. A different type of category appears to have emerged with two items, "walked the picket line during a strike" (Q. 18), and "marched in a rally in support of my union" (Q. 20). These are supportive in nature, but also have an element of political action attached to them. Intermittent participation loaded fairly close to what was expected, with items such as "voted in elections for local officers" (Q. 16), and "voted for contract in contract ratification" (Q. 17). However, it was anticipated that "walking the picket line during a strike" (Q. 18) would have also been an intermittent action, since I had reasoned that members would become more active when it served their own purposes. More specifically, certain union members would only picket in order to receive their strike pay. This item could load on supportive because of the nature of the activity, whereby the member is supporting their local, their fellow co-workers, and their union. While strike pay may be important to some members, it may not be a problem for a majority of union members, because their household brings in two incomes. Alternatively, if a member does not even care about their union, the small amount strike pay provides, may not be worth the effort.

The administrative factor seems to be mixed with administrative and supportive union activities. A member who fulfills a role, such as a union steward, at the administrative level, would also be supportive, as they try to encourage membership
involvement. It might not be possible to distinguish very easily between these two constructs.

While the multidimensionality of the participation measure might be conceptually accurate to some extent, what items do load on particular factors is still somewhat dubious. A comparison of McLean Parks et al. (1995) (confirmatory), McShane (1986a) (exploratory), and the current study (exploratory), demonstrates this difference in factor loadings (See Table 6).

Why the Discrepancies?

There are a number of possible explanations that might lead to the discrepant results. As discussed in another study on the dimensionality of participation (Kelloway and Barling, 1993), there could be potential methodological issues arising out of the use of dichotomous scales (Comrey, 1978). Further, the interpretation of factors loading on only two items, doublets (Nunnally, 1978), may present another problem. Finally, the population from which the results were drawn (Kuruvilla et al., 1990) may also impact on the outcomes.

In the study conducted by McShane (1986a) and McLean Parks et al. (1995), dichotomous scales were used to measure the various union activities. As noted in Comrey (1978), dichotomous scales should not be used in factor analytic studies because the factors may reflect the distribution of response in each category, when data are strongly skewed. Likert scales were used in this study to avoid the possible difficulty with skewed data and dichotomous scales. To further strengthen the measure, I had
Table 6: Comparison of Zinni, McLean Parks et al. (1995) and McShane (1986a) Participation Scales

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Zinni (Exploratory)</th>
<th>McLean Parks (Confirmatory)</th>
<th>McShane (Exploratory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Served as an elected union official</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Served on a local union committee</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Served as a union steward</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Run for an elected union office</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Been appointed as a union official</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Been a delegate to a union convention or seminar</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Helped a union member prepare a grievance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Read parts of the collective agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Helped a new member learn about the union</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Filed grievance(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Spoke up at a union meeting(s)</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Shown another member how the union could help him or her with a problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Helped another member campaign for a union office</td>
<td>.75</td>
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<td></td>
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<td>14. Encouraged other members to support union position on an issue</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>15. Attended general membership meetings of union local</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>16. Voted in elections for local officers</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>17. Voted in contract in contract ratification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Walked the picket line during a strike</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Marched in a rally in support of my union</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Involved in decision-making processes within the union</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Voted in latest strike vote**

Questions 8 and 10 for McLean Parks et al. (1995) were originally included in their study, but reliability was low and subsequently dropped from their study.

Question 16 for McShane was dropped from his study due to some concerns.

Questions 5, 18, 20 and 21 were additional items added to my study.

**Voted in latest strike vote was not included in this study (simply an omission and should have been considered) nor in McLean Parks et al. (1995)**
asked respondents to consider the time spent on each of the union activities measured, within the past three years. The three-year element was meant to consider an entire contract period, as opposed to the twelve-month time frame most often used in these studies. The possibility still exists for a dichotomous response in this study even though Likert scales are used. For example, an individual is either a union steward, or they are not, or may even sit on a union committee, or not. Even though the individual is a union steward, they may never really get involved in day-to-day union issues. The questions are structured such that a respondent would indicate to what extent they would participate in these activities. Allowing a wider range of scores may contribute to fewer problems. It is evident that, in order to measure union participation, a determination of the appropriate scaling requires further analysis. A study that aims at measuring the same construct, in different ways, could further our understanding of the most appropriate way to measure union participation.

There are varying opinions as to the robustness associated with a factor loading made up of only two items. Some authors believe that having at least two items on a factor is considered acceptable (Harris, 1967), while others believe that such factors are unreliable and must be interpreted with caution or ignored, because the results could be either “real” or “artifactual” (Harman, 1967). Supportive participation loaded on only two items. Both of these items, as previously discussed, are associated with each other in a somewhat political nature. Since this study is exploratory, and the items were closely associated, I decided to keep this “doublet”. Further studies should consider other types
of supportive "political action" that might add to, and increase, the reliability of the measure.

Much of course, might depend on the union population surveyed. In this study, the sample was comprised of blue-collar workers, as well as educational assistants, librarians, and support workers. The McLean Parks et al. (1995) study consisted of nurses and retail workers, and the McShane (1986a) study consisted of municipal workers. Perhaps there are differences in how blue-collar and white-collar members view participation. For example, what might be deemed supportive for a blue-collar member may be very different for a white-collar member. To a blue-collar member, walking the picket line may be viewed as supporting the union, but to a white-collar member, picketing might be viewed as negative because there is no strong feeling that picketing will resolve any issues. Future studies need to consider the type of union that is sampled, perhaps their propensity towards strikes or other types of involvement, such as marching in a rally, or their particular union policies. These types of measures may contribute to a better understanding of the type of union participation that members may engage.

It is conceivable that a multidimensional participation scale, with a unique factor structure, may not actually exist. In other words, it may not be a "one size fits all" approach, and that each study, with a particular union population, requires unique participation items. This may follow the rationale associated with the theory of planned behavior (TPB), whereby the measures are specific to the situation. There seems to be general agreement as to what constitutes the administrative construct, but the real concern
appears to be in determining the factor structure for supportive and intermittent participation. Further investigations are required to resolve the issues associated with dimensionality.

Path Analysis

The means, standard deviations, and intercorrelations are presented in Table 7. Path analysis, reporting unstandardized path regression coefficients \((b)\), was used in this study. Path analysis allows the opportunity to determine the amount of influence any of the independent variables have on the dependent variables. As discussed, the model to be tested has multiple dependent variables: administrative, supportive and intermittent participation. Each dependent variable was regressed on all others that preceded it in the hypothesized model shown in Figure 3.\(^ {21} \) This assumes a general model, in which all variables that precede a particular variable in the causal sequence will have direct causal effects on it. There are also indirect causal effects in the participation model, as well as mediation effects, which further explain union participation at the local level.

Table 8 shows the estimates of the path regression coefficients for the hypothesized model, as well as the standard errors. As indicated in the tables, there are many paths with path regression coefficients reaching statistically significant levels. Demographic variables such as *eldercare responsibility*, *occupational status*, *marital status*, *age*, and one personality measure, *conscientiousness*, did not reach statistical significance within the theoretical framework. Demographic variables, in general, do not

\(^{21}\) This model was presented in Chapter 2, and is being presented again to remind the reader.
Table 7

Descriptive Statistics and Pearson Correlations for Dependent and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>Means</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Supportive</td>
<td>27.61</td>
<td>10.41</td>
<td>1</td>
<td>85***</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intermittent</td>
<td>7.62</td>
<td>2.79</td>
<td>.60**</td>
<td>.69***</td>
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<td></td>
</tr>
<tr>
<td>Intent</td>
<td>12.38</td>
<td>5.83</td>
<td>.85***</td>
<td>.73***</td>
<td>.54***</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>18.97</td>
<td>6.19</td>
<td>.68***</td>
<td>.66***</td>
<td>.44***</td>
<td>.73***</td>
<td>1</td>
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<td></td>
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</tr>
<tr>
<td>Attitude</td>
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<td>.55***</td>
<td>.57***</td>
<td>.39***</td>
<td>.64***</td>
<td>.62***</td>
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<tr>
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<td>10.01</td>
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<td>.54***</td>
<td>.32***</td>
<td>.62***</td>
<td>.62***</td>
<td>.58***</td>
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<tr>
<td>PBC</td>
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<td>.65***</td>
<td>.48***</td>
<td>.78***</td>
<td>.56***</td>
<td>.52***</td>
<td>.48***</td>
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<td>Extroversion</td>
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<td>.11</td>
<td>.09</td>
<td>.06</td>
<td>.11</td>
<td>.16**</td>
<td>.06</td>
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<td>-.08</td>
<td>-.12</td>
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<td>-.03</td>
<td>-.05</td>
<td>-.43**</td>
<td>1</td>
</tr>
<tr>
<td>Seniority</td>
<td>3.29</td>
<td>1.45</td>
<td>.31**</td>
<td>.29**</td>
<td>.34***</td>
<td>.17***</td>
<td>.14*</td>
<td>.08</td>
<td>.07</td>
<td>.22***</td>
<td>-.03</td>
<td>-.09</td>
</tr>
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<td>Education</td>
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<td>-.04</td>
<td>-.04</td>
<td>-.07</td>
<td>.00</td>
<td>.02</td>
<td>-.12</td>
<td>-.18**</td>
<td>.03</td>
<td>-.11</td>
<td>-.12</td>
</tr>
<tr>
<td>Gender</td>
<td>.55</td>
<td>.50</td>
<td>-.44***</td>
<td>-.42***</td>
<td>-.40***</td>
<td>-.42***</td>
<td>-.39***</td>
<td>-.28***</td>
<td>-.40***</td>
<td>-.40***</td>
<td>-.08</td>
<td>-.14*</td>
</tr>
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<td>Race</td>
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<td>.08</td>
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<td>-.01</td>
<td>.14*</td>
<td>.17**</td>
<td>.17**</td>
<td>.14*</td>
<td>.06</td>
<td>.08</td>
<td>-.00</td>
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<td>Martial Status</td>
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<td>-.07</td>
<td>-.07</td>
<td>-.10</td>
<td>-.02</td>
<td>-.05</td>
<td>.03</td>
<td>.04</td>
<td>-.01</td>
<td>-.08</td>
<td>-.03</td>
</tr>
<tr>
<td>Eldercare Resp</td>
<td>.75</td>
<td>.43</td>
<td>.08</td>
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***p < .001 level, **p < 0.01, *p < 0.05 (2-tailed)
Table 7 (Continued)

Descriptive Statistics and Pearson Correlations for Dependent and Independent Variables

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***p < .001 level, **p < 0.01, *p < 0.05 (2-tailed)
show statistical significance in a variety of union research initiatives, and so this finding is not entirely surprising. Variables such as gender, age, tenure, number of dependents, occupational level, and income, have been found to be weakly associated with measures of unionization (Bignoness, 1978; Fullagar and Barling, 1987; Kochan, 1978; Uphoff and Dunnette, 1956). However, even though weak associations with measures of unionization have emerged in previous studies, the inclusion of these variables in a study of union participation was important. Since the theoretical framework has not been tested previously in union participation, these variables might possibly have explained union
Table 8

Multiple Regression Results for All Variables
(N = 254)
Hypothesized Model

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Administrative Participation</th>
<th>Supportive Participation</th>
<th>Intermittent Participation</th>
<th>Intent</th>
<th>Attitudes</th>
<th>Beliefs</th>
<th>PBC</th>
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</thead>
<tbody>
<tr>
<td>Child Under 12</td>
<td>0.46 (0.99)</td>
<td>-0.59 (1.01)</td>
<td>0.17 (0.34)</td>
<td>0.13 (0.44)</td>
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<td>-0.45 (1.32)</td>
<td>0.74* (0.30)</td>
</tr>
<tr>
<td>Eldercare</td>
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<td>-0.62 (1.02)</td>
<td>-0.16 (0.34)</td>
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<td>0.30 (0.42)</td>
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<td>0.41 (0.29)</td>
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<td>-0.19 (0.13)</td>
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<td>0.17 (0.09)</td>
</tr>
<tr>
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<td>1.09** (0.36)</td>
<td>0.30** (0.12)</td>
<td>0.14 (0.16)</td>
<td>-0.04 (0.09)</td>
<td>0.02 (0.95)</td>
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<td>0.57 (0.50)</td>
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<td>1.61 (1.53)</td>
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<td>0.07 (0.02)</td>
<td>-0.16 (0.12)</td>
<td>-0.03 (0.03)</td>
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<td>0.03 (0.04)</td>
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<td>0.15***(0.02)</td>
<td>0.06 (0.04)</td>
<td>0.06 (0.04)</td>
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<td>0.07 (0.02)</td>
<td>0.55*** (0.15)</td>
<td>0.06 (0.04)</td>
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<tr>
<td>PBC</td>
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<td>0.76* (0.29)</td>
<td>0.09 (0.10)</td>
<td>1.17*** (0.10)</td>
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<td>0.88</td>
<td>0.68</td>
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<td>0.47</td>
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<tr>
<td>R² adjusted</td>
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<td>0.60</td>
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<td>0.76</td>
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<td>0.28</td>
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*p < .05, ** p < .01, ***p < .001.

Results are reported as unstandardized regression coefficients (b). Standard Errors are reported in parentheses.
participation in this study. Some interesting findings emerged with regards to some of the other variables in this study. First, several paths emerged that had not been hypothesized. For example, statistically significant relationships were found between seniority and measures of administrative, supportive, and intermittent participation, as were subjective norms on administrative and supportive participation, but not on intermittent participation. Another finding was that PBC did not have a direct effect on intermittent participation, but there was a direct effect with administrative and supportive participation. With respect to the other independent variables, the results also indicate statistical significance between intent and beliefs \((p<.05)\). Gender was also found to have a direct relationship with intermittent participation. What this means is that the hypothesized model was under-identified.

The overall variance accounted for in each of the measures of participation ranges from .78 for administrative, .62 for supportive, and .40 for intermittent. Even though the variance accounted for is only .40 for intermittent, this is still quite significant. A revised model, excluding the paths that did not demonstrate any statistical significance, and adding the new paths that emerged in the hypothesized model, was devised and is discussed in the following section.

Revised Models

The same methodology was employed in the second set of regressions whereby each dependent variable was regressed on all others that preceded it in the model. Table 9 displays the new regression coefficients \((b)\), and standard errors, derived from the
second set of regressions for the revised model, followed by the model in Figure 4. The difference between the general model and the revised model are not that substantial. The variance accounted for changes only marginally with the exclusion of the nonsignificant paths. Unstandardized regression coefficients are reported in the diagrammed path analysis, found in Figure 4. An analysis of the results will be discussed in the following section.

Analysis of Results

In this section, the hypotheses are reviewed and analyzed. Additionally, new paths that emerged will be discussed with possible explanations for the results. A number of hypotheses were supported with statistically significant levels. There were a number of paths that emerged that were somewhat surprising on the one hand, and others that made sense in hindsight. Since there are few studies using multidimensional scales for union participation, a comparison of the results proved to be challenging. However, with this study, some of the results are supportive of past research, and offer new items to be considered for future research. A summary of the results, that is, whether the hypotheses were supported or not, can be found at the end of this section.

Dependent Variable: Participation

Administrative, supportive, and intermittent participation were all regressed against twelve predictors previously discussed (See Table 9), using unstandardized regression coefficients. A review of the revised model indicates that there are different sets of causal relations with each of the three dependent variables, but the differences are
Table 9

Multiple Regression Results for All Variables  
(N = 254)  
Revised Model

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<tr>
<th>Independent Variables</th>
<th>Administrative Participation</th>
<th>Supportive Participation</th>
<th>Intermittent Participation</th>
<th>Intent</th>
<th>Attitudes</th>
<th>Beliefs</th>
<th>PBC</th>
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<td>-7.73*** (1.12)</td>
<td>-1.20*** (0.28)</td>
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<td>Seniority</td>
<td>1.44*** (0.16)</td>
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<td>Beliefs</td>
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<td>0.08** (0.02)</td>
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<td>-2.02* (0.91)</td>
<td>0.09*** (0.01)</td>
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</tr>
<tr>
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<td></td>
<td></td>
<td>0.35** (0.12)</td>
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</tr>
<tr>
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<td>0.47*** (0.10)</td>
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<td>0.28*** (0.04)</td>
<td>0.14*** (0.02)</td>
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</tr>
<tr>
<td>Intention</td>
<td>1.37*** (0.14)</td>
<td>0.64*** (0.14)</td>
<td>0.21*** (0.03)</td>
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<tr>
<td>PBC</td>
<td>0.84** (0.27)</td>
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<td></td>
<td>1.18*** (0.09)</td>
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</tr>
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<td>R</td>
<td>0.88</td>
<td>0.78</td>
<td>0.61</td>
<td>0.87</td>
<td>0.67</td>
<td>0.50</td>
<td>0.55</td>
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<tr>
<td>R²</td>
<td>0.77</td>
<td>0.60</td>
<td>0.37</td>
<td>0.76</td>
<td>0.44</td>
<td>0.25</td>
<td>0.30</td>
</tr>
<tr>
<td>R² adjusted</td>
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<td>0.60</td>
<td>0.36</td>
<td>0.76</td>
<td>0.43</td>
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<td>F-ratio</td>
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<td>94.89***</td>
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<td>200.67***</td>
<td>100.04***</td>
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<td>35.21***</td>
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</table>

*p < .05, **p < .01, ***p < .001.
Results are reported as unstandardized regression coefficients (b). Standard Errors are reported in parentheses.
Figure 4: Revised Path Analysis for Administrative, Supportive and Intermittent Participation

**Note: Paths are reported as unstandardized regression coefficients**
not large compared to previous research using a multidimensional approach, with separate participation models. For example, in McShane (1986a), there were significant differences in the paths associated with each of the dependent variables. In his study, correlates for each specific dependent variable were established as separate models. In McLean Parks et al. (1995), most of the constructs used in their study loaded identically on each of the measures of participation, were not that unique from one another, and reported similar effect size. In this study, correlates specific to the theory of planned behavior were expected to load on the same constructs for each of the measures of participation. Only a difference in the amount of variance accounted for in each of the measures of participation was expected. It would have been expected that administrative participation would account for the most variance, while intermittent participation would account for the least due to the nature of the union activities reported in this study. As suspected, there are substantial differences in effect sizes across the three types of union participation measures in this study. As noted in Table 9, the overall variance accounted for, in each of the measures of participation, ranges from 77 percent for administrative, 60 percent for supportive, and 36 percent for intermittent participation, at a significance level of \( p < .001 \). A comparison of the TPB models, cited in the social psychological literature, indicates that the amount of variance accounted for ranges, on average, from between 48 to 64 percent (Giles and Rea, 1999; Morris and Venkatesh, 2000; Sparks et al., 1997). It was difficult to find studies that had tested all elements of the TPB model, as many had opted to use intentions as the dependent variable, in many of the published
studies. The effect size for this study is encouraging given that the amount of variance accounted for is very high, and is differentiated against each measure of participation.

One other possible explanation for the increased effect size could be related to certain external variables that were introduced into the model. Although not hypothesized, some of the external variables introduced in this model resulted in direct and indirect effects that were statistically significant, on each of the measures of participation. There was a significant relationship between gender and intermittent participation \((p < .01)\), but not with administrative or supportive participation. *Seniority* was also found to be statistically significant with administrative, supportive, and intermittent participation \((p < .001)\). Most surprising was the direct, and significant relationship, between *subjective norms* and administrative participation \((p < .01)\), and between *subjective norms* and supportive participation \((p < .001)\). The additional variance explained by each of these variables would undoubtedly contribute to the increased effect size in participation. Therefore, the addition of the external variables to the model may be warranted, given the incremental variance explained in this study, over and above many of the published studies that I reviewed. A hierarchical regression analysis will further corroborate this assumption in hypothesis 12a.

**Independent Variables**

**Hypotheses 1a-b:** Hypothesis 1a predicted that intention to participate would have a positive and direct relationship with all three measures of participation. The results indicate that intention to participate was found to be statistically significant with all three
measures of participation ($p<.001$). Therefore, based on these findings, hypothesis 1a is supported.

Hypothesis 1b predicted that intention to participate would be more positively related to administrative participation than it would be with supportive and intermittent participation. To test this hypothesis, hierarchical regression was used. Intention to participate was treated as the dependent variable, so that the strength of one dependent over the other could be adequately measured. Two analyses were conducted. In the first analysis, administrative participation was entered at Step 1. Supportive and intermittent participation were entered at Step 2. Step 2 results revealed the $\Delta R^2 = .001$, but it was not statistically significant ($\Delta F = .57, p>.05$). In the second analysis, supportive and intermittent participation were entered at Step 1. Administrative participation was entered at Step 2. This analysis revealed the $\Delta R^2 = .19$, and it was statistically significant ($\Delta F = 173.92, p<.001$). These analyses support the hypothesis that the relationship between intentions and administrative participation is greater than the relationship between either, intentions and supportive or intermittent participation. This is important since the goal is to translate intentions into actual participation and the ultimate desire of the union is to have their members participate at the administrative level. Table 10 shows the results of the analyses.

Hypotheses 2: Hypothesis 2 predicted that positive attitudes towards participating in the union would lead to a positive and direct relationship with intention to participate. The relationship between attitudes and intention to participate was statistically significant ($p<.01$). This result is consistent with previous findings, demonstrating positive and
direct relationships with intention to participate. Therefore, hypothesis 2 is fully supported.

Table 10
Hierarchical Regression for Intention to Participate and Participation

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R</th>
<th>R²</th>
<th>Adj. R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>b</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Administrative</td>
<td>.85</td>
<td>.72</td>
<td>.72</td>
<td>.72</td>
<td>655.23*</td>
<td>.38*</td>
<td>.02</td>
</tr>
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<td>2</td>
<td>Supportive</td>
<td>.85</td>
<td>.72</td>
<td>.72</td>
<td>.00</td>
<td>.57</td>
<td>-.07</td>
<td>.04</td>
</tr>
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<td>Intermittent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.10</td>
<td>.10</td>
</tr>
</tbody>
</table>

Analysis 2

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R</th>
<th>R²</th>
<th>Adj. R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>b</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.53</td>
<td>.53</td>
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<td>.03</td>
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<td>Intermittent</td>
<td></td>
<td></td>
<td></td>
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<td>.16</td>
<td>.12</td>
</tr>
<tr>
<td>2</td>
<td>Administrative</td>
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<td>.72</td>
<td>.72</td>
<td>.19</td>
<td>173.92*</td>
<td>.37*</td>
<td>.03</td>
</tr>
</tbody>
</table>

*p<.001

Hypothesis 3: It was hypothesized that intention to participate would mediate the effects of attitudes on all measures of union participation (administrative, supportive and intermittent). A mediator is present when the effects of the independent variable on the dependent variable are diminished in the presence of a significant mediator variable (Baron and Kenny, 1986). The mediating effects of attitude on the relationship between intention to participate, and the three measures of participation, were tested using the regression method established by Baron and Kenny (1986). First, scores from intention to participate were regressed on attitude. Second, the scores from participation (each of the
three measures) were regressed on attitude. Finally scores on participation were regressed on both attitudes and intention to participate.

The results indicate that for administrative participation, attitudes are fully mediated by intentions on participation. The unstandardized regression coefficient for attitudes (independent variable) is statistically significant for both intentions (the mediator) and administrative participation (dependent variable) \( p<.001 \). When administrative participation is regressed on attitudes and intent, attitude is no longer statistically significant. As well, the unstandardized regression coefficients decreased between attitudes and administrative participation \( (b = 3.42, p<.001, \text{ to } b = .03, p>.05) \), when the mediator was imposed. This hypothesis is supported for administrative participation.

The same procedure that was applied to administrative participation was also applied to both supportive and intermittent participation. For supportive participation, the hypothesis was only partially supported, as intentions only partially mediated the relationship between attitudes and supportive behavior. Attitudes were statistically significant but decreased when the mediator was introduced \( (b = 2.85, p<.001, \text{ to } b = .92, p<.01) \).

Intermittent participation was not statistically significant, and so this hypothesis was supported as well. Before mediation, the relationship between attitudes and intermittent participation were statistically significant \( (b = .52, p<.001 \text{ to } b = .10, p>.05) \). When the mediator was added, attitudes were no longer statistically significant. Therefore, only administrative and intermittent participation mediated the effects between
attitudes, intention to participate, and participation. There was no support for supportive participation. Table 11 shows the subsequent significance levels, and the unstandardized regression coefficients.

### Table 11

Regression Analysis of the Mediating Effect of Intentions to Participate on Attitudes and Union Participation

<table>
<thead>
<tr>
<th>Administrative Model</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>( b )</th>
<th>s.e.</th>
<th>( t )</th>
<th>( R^2 )</th>
<th>( F )</th>
<th>( df )</th>
</tr>
</thead>
<tbody>
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<td>Attitude</td>
<td>1.78</td>
<td>.14</td>
<td>13.23*</td>
<td>.41</td>
<td>175.08*</td>
<td>1,252</td>
<td></td>
</tr>
<tr>
<td>Administrative Step 2</td>
<td>Attitude</td>
<td>3.42</td>
<td>.33</td>
<td>10.38*</td>
<td>.30</td>
<td>107.64*</td>
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<td></td>
</tr>
<tr>
<td>Administrative Step 3</td>
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<td>.27</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intention</td>
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<td>19.55*</td>
<td>.72</td>
<td>326.34*</td>
<td>2,251</td>
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<table>
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<th>Supportive Model</th>
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<th>Independent Variable</th>
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<th>s.e.</th>
<th>( t )</th>
<th>( R^2 )</th>
<th>( F )</th>
<th>( df )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to participate Step 1</td>
<td>Attitude</td>
<td>1.78</td>
<td>.14</td>
<td>13.23*</td>
<td>.41</td>
<td>175.08*</td>
<td>1,252</td>
<td></td>
</tr>
<tr>
<td>Supportive Step 2</td>
<td>Attitude</td>
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<td>.26</td>
<td>11.12*</td>
<td>.33</td>
<td>123.69*</td>
<td>1,252</td>
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</tr>
<tr>
<td>Supportive Step 3</td>
<td>Attitude</td>
<td>.92</td>
<td>.27</td>
<td>3.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intention</td>
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<td>.10</td>
<td>19.55*</td>
<td>.55</td>
<td>152.12*</td>
<td>2,251</td>
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</table>

<table>
<thead>
<tr>
<th>Intermittent</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>( b )</th>
<th>s.e.</th>
<th>( t )</th>
<th>( R^2 )</th>
<th>( F )</th>
<th>( df )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to participate Step 1</td>
<td>Attitude</td>
<td>1.78</td>
<td>.14</td>
<td>13.23*</td>
<td>.41</td>
<td>175.08*</td>
<td>1,252</td>
<td></td>
</tr>
<tr>
<td>Intermittent Step 2</td>
<td>Attitude</td>
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<td>.08</td>
<td>6.73*</td>
<td>.15</td>
<td>45.28*</td>
<td>1,252</td>
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</tr>
<tr>
<td>Intermittent Step 3</td>
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<td>1.09</td>
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</tr>
<tr>
<td></td>
<td>Intention</td>
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<td>.03</td>
<td>7.14*</td>
<td>.30</td>
<td>52.65*</td>
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</tbody>
</table>

*p < .001, **p < .01, one-tailed test

Previous studies in social psychology have suggested that when a direct path from attitude to behavior emerges, it may arise out of three conditions: there is insufficient power in the study, the intention measures are unreliable, or the intention measures do not
correspond (Bagozzi, Baumgartner and Yi, 1989). None of these conditions seems to explain the reason for the direct path emerging. What may be a more plausible explanation regarding a direct path between attitudes and supportive participation, is that a union member acts more on spontaneity than they do on planning the activity (intention to participate). The member hears about the activity, and if they form a positive attitude about the activity, they will participate. So the attitude in this case would be directly related to the behavior, rather than stopping to plan the activity. Perhaps the type of behavior being studied will yield different results for attitudes and intentions to participate.

**Hypotheses 4a-b**: Hypothesis 4a predicted that a positive and direct relationship would exist between beliefs and attitudes. The relationship that emerged was significant ($p<.001$). This result was expected, as previous studies have continued to show a strong relationship between beliefs and attitudes. Therefore, this hypothesis was supported.

Hypothesis 4b predicted that there would be a positive and direct relationship between beliefs and PBC. This hypothesis was supported with a significant relationship existing between beliefs and PBC ($p<.001$). As noted previously, this hypothesis is rather unique to the theory of planned behavior, and is not often found in these studies. An individual may possess beliefs that the union can provide them with better working conditions, have better pay and benefits, or experience more fairness and justice in the workplace. However, if the individual feels that he or she has no volitional control over the situation because of external work factors (issues at home), or internal work factors (discrimination at work), then a relationship with PBC would be expected. At the same
time, the individual could still form an attitude, be it positive or negative about participating, but be unable to engage in the activity because they do not have volitional control. This notion is justified, since the relationship between beliefs and PBC is much stronger than the relationship between beliefs and attitude.

Beliefs were also found to be statistically significant with intent \((p<.01)\). This finding was puzzling. A review of the literature did not find another study reporting the same, or similar results. In most studies, attitudes are usually the most important predictor of intention to participate. In this study, attitudes are only marginally predicting intentions, compared to other variables in the study, and only partially mediating the effects of beliefs on intentions. Perhaps, in studies of local union participation, beliefs are the most important predictors of intention to participate, and not attitudes, as previous results seem to suggest. This is further discussed in hypothesis 5.

**Hypotheses 5a-c:** Hypothesis 5a predicted that subjective norms would positively predict intention to participate. This finding was statistically significant \((p<.001)\), and is consistent with previous studies in the industrial relations and the social psychological research (Kelloway and Barling, 1993; Kuruvilla and Fiorito, 1994; Youngblood et al., 1984). Therefore, this hypothesis was supported.

Hypothesis 5b predicted that subjective norms would be more strongly related with intention to participate, than it would with attitudes. There have been many studies that have examined the differences between subjective norms and attitudes and the findings generally state that attitudes provide a stronger link with willingness/intentions, than do subjective norms. However, based on the nature of the activities involved, it was
hypothesized that the views of referent others would be instrumental in procuring local members to become involved in union participation. This hypothesis was supported.

A possible explanation for the relationship between subjective norms and intention to participate over attitudes may be the nature of the study. Previous research in union socialization has demonstrated strong support for this construct leading to increased union participation, particularly when socialization has been conducted at the early stages of employment (Fullagar et al., 1995; Kelloway and Barling, 1993). Subjective norms, or social pressures, are the opinions of referent others (e.g. friends, family, union, and coworkers) in both formulating attitudes, and in transforming these attitudes into behavioral intentions and actual behavior (Gallagher and Strauss, 1991). There is a close relationship between subjective norms and union socialization. Perhaps in this study, the opinions of referent others has played an important role in increasing the relationship between subjective norms and intentions to participate, over the relationship between attitudes and intention to participate. If a union member is not really sure what union participation really means, they may rely more heavily on those around them, who can best tell them what participation in the local union means, and what would actually be required of them.

Hypothesis 5c predicted that subjective norms would positively predict attitudes. This finding was also significant ($p<.001$). In the original TPB framework developed by Ajzen (1985), a relationship between subjective norms and attitudes had not been hypothesized. However, a number of studies have consistently found a significant relationship between these two variables. For example, Fullagar et al. (1992) and
Wetzel et al. (1991) found such a relationship in the industrial relations literature, as did a number of researchers in the social psychological literature (Chang, 1998; Shepherd and O’Keefe, 1984; Shimp and Kavas; 1984; Vallerand et al., 1982). One plausible explanation for this finding relates to how individuals form beliefs about intentions and behaviors. For example, subjective norms reflect the opinions of referent others about participating in a given behavior. Most information that shapes an individual’s attitude is obtained from his or her peers, family, unions, coworkers, and his or her own experiences. How much the individual may be influenced by the opinion of referent others depends on how much he or she values the advice given (Clark, 2000). Therefore, if the information secured from referent others is also used to form an individual’s attitudes, then a direct relationship between attitudes and subjective norms would be expected. Therefore, this hypothesis was fully supported.

Additional paths that had not been hypothesized were found between subjective norms and administrative, and between subjective norms and supportive participation. The paths were significant for both administrative and supportive participation ($p<.001$). Only one other study reported this same relationship between subjective norms and participation (Millstein, 1996). A possible explanation for this finding in my study is that the local union members possessed stronger intentions to participate in their local’s union activities, and were more likely able to translate those intentions into behavior. Since this sample consisted of both activists and non-activists, many of the respondents in this study were already engaged in the activity, and those intentions were translated directly into action. Although intermittent participation did not have a direct relationship with
subjective norms, the type of activities performed within this model do not require referent others to convince them to perform those duties, because there is no issue of volitional control in this case.

**Hypotheses 6a-b:** Hypotheses 6a and 6b pertain to aspects of perceived behavioral control (PBC). Self-efficacy measures were also to be tested, but as discussed, could not be adequately measured in this study. Therefore, only PBC measures were used in this analysis. Hypothesis 6a predicted that PBC would have a positive and direct effect on all measures of union participation, when participation was not under full volitional control. A vast majority of studies incorporating PBC have consistently shown a relationship between PBC and behavior. Statistical significance was found for both administrative participation \((p<.01)\) and for supportive participation \((p<.05)\), with PBC. There was no statistical significance between PBC and intermittent participation. Therefore, this hypothesis was only partially supported.

In hindsight this finding makes sense. The fact that there was no direct influence on intermittent participation suggests that members may have perceived that they had high volitional control to participate in activities classified as intermittent. For example, activities such as "reading the collective agreement", or "voting in elections or contract ratification", are perceived to be within a member's control, whereas an activity such as "involved in decision-making processes within the union" may not be that easily achieved.

Hypothesis 6b predicted that PBC would have a positive and direct effect on intentions to participate, when participation was under full volitional control. As
expected, and consistent with the literature, there was a statistically significant relationship between PBC and intention to participate \( (p<.001) \). Therefore, hypothesis 6b was fully supported.

However, a finding that is not consistent with the social psychological literature is that PBC had more influence over intention to participate, than did attitude. As previously discussed, attitudes generally have a stronger relationship with intentions to participate. The reason for this finding may be dependent on the behavior studied. According to Ajzen (1988, p. 262), \"when perceptions of control correspond to realistic opportunities and constraints that may exist for performing a particular behavior and the behavior is not volitional, perceived behavioral control emerges as an influence on intentions as well as on behavior\". The ability to participate in a local union brings with it inherent constraints such as having available time to perform the duties, or only having limited positions available at the administrative level of participation. Therefore, the perceptions of control from the workers, in this study, were most likely similar to the real constraints that would affect their ability to participate in union activities. Therefore, the increased effect of PBC over attitude appears to be warranted in this situation.

**Hypothesis 7:** It was hypothesized that intention to participate would partially mediate the relationship between PBC and the three measures of participation. First, scores from intention to participate were regressed on PBC. Second, the scores from the three measures of participation were regressed on PBC. Finally, scores on participation were regressed on both PBC and intention to participate.
The results indicate that for administrative participation, PBC is partially mediated by intentions on participation. The relationship between PBC (independent variable) is statistically significant \( (p<.001) \) for both intention to participate (the mediator), and administrative participation (dependent variable). When administrative participation is regressed on PBC and intention to participate, PBC is still statistically significant \( (p<.01) \). The unstandardized regression coefficients decreased between PBC and administrative participate \( (b = 4.01, p<.001, \text{to } b = 1.00, p<.01) \), when the mediator was imposed. This hypothesis is supported for the administrative model.

For the supportive model, the hypothesis was also supported, as intentions to participate did partially mediate the relationship between PBC and supportive participation. PBC was statistically significant, but decreased when the mediator was included \( (b = .279, p<.001, \text{to } b = .87, p<.01) \).

The hypothesis was not supported for intermittent participation since there were no mediation effects, once the mediator was imposed \( (b = .56, p<.001 \text{ to } b = .18, p>.05) \), and there was no statistical significance for PBC and administrative participation \( (p>.07) \). Therefore, intermittent participation is fully mediated by intention to participate. Since there was no direct relationship between PBC and intermittent participation, this finding would be expected. Only the hypotheses for administrative and supportive participation were fully supported. Table 12 shows the subsequent significance levels and the regression coefficients.
Table 12
Regression Analysis of the Mediating Effect of Intentions to Participate on PBC and Union Participation

<table>
<thead>
<tr>
<th>Administrative Model</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>$b$</th>
<th>s.e.</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$F$</th>
<th>$df$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention of participate</td>
<td>Step 1</td>
<td>PBC</td>
<td>1.89</td>
<td>.09</td>
<td>19.96*</td>
<td>.61</td>
<td>398.45*</td>
<td>1, 252</td>
</tr>
<tr>
<td>Administrative</td>
<td>Step 2</td>
<td>PBC</td>
<td>4.01</td>
<td>.23</td>
<td>17.27*</td>
<td>.54</td>
<td>298.22*</td>
<td>1, 252</td>
</tr>
<tr>
<td>Administrative</td>
<td>Step 3</td>
<td>PBC</td>
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<td>3.52**</td>
<td>.74</td>
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</table>

<table>
<thead>
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<th>Supportive Model</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>$b$</th>
<th>s.e.</th>
<th>$t$</th>
<th>$R^2$</th>
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<tbody>
<tr>
<td>Intention of participate</td>
<td>Step 1</td>
<td>PBC</td>
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<td>.12</td>
<td>8.29*</td>
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<td>149.65*</td>
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<th>Intermittent</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>$b$</th>
<th>s.e.</th>
<th>$t$</th>
<th>$R^2$</th>
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<tr>
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<td>Step 1</td>
<td>PBC</td>
<td>1.89</td>
<td>.09</td>
<td>19.96*</td>
<td>.61</td>
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<td>1, 252</td>
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<td>PBC</td>
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<td>.06</td>
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<td>.30</td>
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</table>

$p < .001$, one-tailed test, **$p<.01$, one-tailed test

Hypotheses 8a - b: In these hypotheses, the first of the external variables is being tested. Both conscientiousness (8a) and extraversion (8b) were predicted to be positively and directly associated with behavioral beliefs. Although personality measures are rarely used in union participation studies, they are used more frequently in the social psychological literature, and have reported relationships between extraversion and beliefs (Conner and Abraham, 2001).
For hypothesis 8a, conscientiousness was expected to be positively and directly associated with beliefs, but unfortunately no relationship emerged. However, conscientiousness was found to be weakly, and negatively associated with intention ($p<.075$). The presence of a weak relationship confirms that this construct may be an important variable in the study of local union member’s intention to participate, and would require further consideration in future investigations. As noted though, the direction of the coefficient is negative. An interpretation of this result would indicate that workers who are high in conscientiousness did not have strong instrumental beliefs about union participation. Previous studies have found conscientiousness to be directly related to intentions and to the behavior (Booth-Kewley and Vickers, 1994; Conner and Abraham, 2001; Kenny, Kashy and Bolger, 1998). Even though this hypothesis was not supported, this construct should be explored in future studies.

The same relationship was hypothesized to exist between extraversion and beliefs, in hypothesis 8b. A significant statistical relationship ($p<.01$) was found between extraversion and behavioral beliefs, thus supporting the hypothesis. An interpretation of the finding is that those who had high levels of extraversion held high instrumental beliefs about participating in the union. As previously discussed, members who are extraverted are likely to more easily engage in the social aspects of the union, such as speaking to large groups, or even just speaking to the members about issues that may affect them. This is an important finding as it suggests the importance of including personality measures, which has been sorely lacking in union participation research.
Hypotheses 9a-c: Race, ethnicity, and disability were hypothesized to be directly related to both behavioral beliefs and PBC. As previously discussed, there were some methodological problems with ethnicity, and so it not included in the analysis.

Hypothesis 9a indicated that race would be directly related to beliefs, regarding union participation. This hypothesis was supported with a modest, but a statistically significant finding, between non-White participants and behavioral beliefs ($p<.05$). An interpretation of the results indicates that union members who are non-White hold more positive instrumental beliefs about participating in the union, than do White participants.

In hypothesis 9b, race was expected to have a direct relationship with PBC. This hypothesis was not supported since no relationship was found to exist between race and PBC. In this study, 56 percent of the non-White participants were classified as activists (23 out of 41 participants were activists; 15 males and 8 females). Therefore, PBC would most likely not be have been an issue, because over half of the non-White respondents were already participating in union activities and any barriers to participation were not as a result of PBC.

An adequate discussion on race, as it pertains to union participation, is somewhat constrained by the lack of studies on the topic, and by the ability to reach participants who represent the cultural make-up of our society, in any given study. As noted by Barling et al. (1993), any differences in union participation between White and Black

---

22 Race operationalized (0 = Whites, 1 = non-Whites, and Disabilities (0 = disabilities; 1 = no disabilities).
members are not due to race, but rather, to expectations that individuals can exert an influence on union decision making. This requires further investigation.

Hypothesis 9c indicated that there would be a direct relationship between disability and beliefs, and between disability and PBC, with respect to union participation. The results indicate a statistically significant relationship between disabilities and beliefs \((p < .01)\). This means that persons with disabilities have stronger instrumental beliefs about participating in the union, than do persons with no disabilities. Unfortunately, this hypothesis is only partially supported, as no relationship was found to exist between disability and PBC. Within this study, 11.4 percent of the sample were disabled, which is representative of the labor force in Canada (11.6 percent). The literature on union participation and persons with disabilities is virtually non-existent, and so it is difficult to discuss the results. A review of what were classed as disabilities in this study indicates that three were reported to be legally blind and one deaf. All others were classed as medical disabilities such as bad backs that might not greatly affect their ability to participate in union activities. A much larger pool of disabilities would be needed to effectively analyze the relationship between disability and union participation.

Hypotheses 10a – b: Many of the items that would be related to family issues were predicted to be positively and directly associated with PBC. These items included, presence of children under 12, eldercare responsibility, and marital status. Marital status and eldercare responsibility did not reach statistically significant levels, and were not analyzed. Presence of children under 12 was found to be related with PBC \((p < .05)\). Therefore, this hypothesis was only partially supported.
The relationship between presence of children under 12 with PBC indicates that higher perceived behavioral control exists when there are no children under 12 present. Just over a quarter of the respondents indicated the presence of children under 12. Members with responsibility for children may not have full volitional control to actually participate in union activities, because they may have other responsibilities. This finding would be expected.

Although eldercare did not emerge as a statistically significant variable, this result is somewhat surprising. Since almost one quarter of the respondents indicated responsibility for eldercare, this extra responsibility was thought to have had some effect on their ability to participate. For example, the majority of respondents in this sample fell between the ages of 41-50 (41.7 percent), with the second highest age level between 51-60 (27.6 percent). Because a large percentage of the sample were older than 41, it would be expected that eldercare responsibility would be more prominent. Considering that the population is aging rapidly with the median age of the Canadian population at 37.6 years of age, eldercare is likely to become a predominant issue that could potentially present a barrier to union participation. Eldercare and presence of children under 12 are two variables that would be expected to behave in a similar manner. If the presence of children under 12 is statistically significant, then there might be some reason to believe that eldercare should also be statistically significant. But this did not materialize.

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23 Recent reports in the Toronto Star newspaper reported that the population is aging, with the oldest baby boomers expected to be 65 by 2011. "Aging Workforce Poses 'Real Challenge', A6-8, B1, B5, Wednesday, July 17, 2002."
in this study. Even though respondents have responsibility for eldercare, it may not be enough to impact on decisions they may make with regards to union participation, as the parent may be somewhat more self-sufficient than younger children. One other explanation could be that eldercare might be shared amongst siblings, thus reducing the burden on any one person.

Hypothesis 10b predicted that gender would be directly related to both beliefs and PBC. The relationship between gender and beliefs was found to be negative, but statistically significant ($p<.001$). The results indicate that males have stronger instrumental beliefs about participating in the union, than do females. This contradicts the findings by Kuruvilla and Iverson (1993) who found that women had more positive beliefs about what the union could do for them, although their participation levels were lower than they were for men (Gordon et al., 1980). This is also consistent with the findings by Gallagher and Clark (1989).

The relationship between gender and PBC was also found to be negative, but statistically significant ($p<.001$). An interpretation of these results indicates that males have stronger PBC compared to females, when it comes to participating in the union. In other words, females will have more issues with respect to making participation decisions because of the perceived barriers and constraints that exist for them. Given the large number of females in this sample claiming to be non-activists, this finding is to be expected. Females would most likely have more of an issue of volitional control than would males, because of the extra duties with which they are often faced. As discussed in Chapter 2, Chaison and Andiappan (1989) identified several barriers associated with
gender differences, in local union participation. Females are often faced with conflicts related to their home, job, or other work, as well as childcare responsibilities, which prevent them from participating. Therefore, this hypothesis was fully supported.

An additional path, not previously hypothesized, with a negative coefficient, was found between gender and intermittent participation. The path was also found to be statistically significant ($p<.01$). This finding suggests that males are more likely to engage in intermittent participation, than are females. Logically one might think that it would be easier for females to participate at intermittent levels of participation because of the nature of the activity such as "voting in elections for officers" or "voting in contract ratification". However, even though these activities require little time from members to perform them, the activities may be held at times and locations, that are not convenient for females.

**Hypothesis 11:** *Seniority, education, occupation, and age, were each hypothesized to be directly related to beliefs, with respect to union participation. Age and occupation did not reach statistically significant levels, and seniority was not found to be associated with behavioral beliefs. However, education was found to be negatively related with behavioral beliefs ($p<.05$).*

The implications for the finding on education with beliefs indicates that union members with lower levels of education held stronger instrumental beliefs about participating in the union, than did members who had higher levels of education. There have been a number of studies where education has been found to be negatively and significantly associated with various dimensions of union commitment (Deery, Erwin and
Iverson, 1992; Kuruvilla and Iverson, 1993; McShane, 1986a). However, other studies have shown a trend towards union activists being better educated (Barling et al., 1992; McShane, 1982a; Nicholson et al., 1981). This sample was very highly educated with almost half of the survey respondents holding a college or university degree.

Seniority was found to be significantly related with all three measures of participation ($p<.001$), as opposed to the hypothesized relationship with beliefs. The results indicate that members with higher levels of seniority will be more likely to participate, than will members with lower levels of seniority. Previous research has found seniority to be directly related with administrative participation (Aryee and Debrah, 1997; McShane, 1986a; Youngblood et al., 1984). Seniority obviously has a direct relationship with participation, since many of the activities performed will be dependent on seniority levels. For example, it would be rare that a new member joining the union local would immediately perform administrative duties, but they might perform intermittent duties, such as "reading the collective agreement".

**Hypothesis 12a:** This hypothesis stated that the inclusion of the external variables would significantly increase the amount of variance accounted for in the TPB model. To test this hypothesis, hierarchical regression was used. Hierarchical regression allows the researcher to enter the variables sequentially so that the theoretical model proposed can be tested. At Step 1, the internal variables were entered in a separate analysis for each of the measures of participation. These variables are based on the premise proposed by Ajzen and Fishbein (1980) and Ajzen and Madden (1992). The external variables were then added at Step 2. For administrative participation, Step 2 results revealed the change
in $R^2 = .027$ was statistically significant ($\Delta F = 4.06, p < .001$), and indicated that the addition of the external variables to the TPB uniquely contributed 3 percent of the variance in the model. The results are found in Table 13.

Table 13
Hierarchical Regression of the TPB for Administrative Participation
External Variables vs. Internal Variables

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R</th>
<th>$R^2$</th>
<th>Adj. R$^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$b$</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
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<td>.74</td>
<td>.75</td>
<td>145.68***</td>
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<tr>
<td></td>
<td>Subjective Norm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.30</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.31</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>Beliefs</td>
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<td></td>
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<td></td>
<td>.05</td>
<td>.06</td>
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<tr>
<td></td>
<td>PBC</td>
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<td>1.05</td>
<td>.28</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
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<td>.77</td>
<td>.76</td>
<td>.03</td>
<td>4.06***</td>
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<td>.98</td>
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<td>1.33</td>
</tr>
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<td>.10</td>
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<td>Education</td>
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<td>.71</td>
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<td>Seniority</td>
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<td>1.35</td>
<td>.31</td>
</tr>
<tr>
<td></td>
<td>Child &lt; 12</td>
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<td></td>
<td></td>
<td></td>
<td>.32</td>
<td>.96</td>
</tr>
</tbody>
</table>

** $p < .01$, *** $p < .001$

Supportive participation shared similar results as administrative participation. At Step 2, the results also revealed a change in $R^2 = .03$ that was statistically significant ($\Delta F = 2.77, p < .001$), indicating that the addition of the external variables uniquely contributed 3 percent of the variance in the model. See Table 14 for the results.
## Table 14

Hierarchical Regression of the TPB for Supportive Participation  
**External Variables vs. Internal Variables**

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$b$</th>
<th>s.e.</th>
</tr>
</thead>
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<td>.59</td>
<td>71.34***</td>
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<td>.53***</td>
<td>.15</td>
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<td>.11</td>
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<td>.06</td>
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<td></td>
<td>PBC</td>
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<td>.90**</td>
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<td>Gender</td>
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<td>.60</td>
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<td>2.77**</td>
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<td>Extraversion</td>
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<td>1.36</td>
</tr>
<tr>
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<td></td>
<td>1.19***</td>
<td>.32</td>
</tr>
</tbody>
</table>

** $p < .01$, *** $p < .001$  

Intermittent participation behaved very differently than did administrative and supportive participation. The change in $R^2 = .088$ was statistically significant ($\Delta F = 5.05$, $p < .001$). Again, the addition of the external variables in this case uniquely contributed 9 percent of the variance in the model, far exceeding the other two models. The results of this analysis are found in Table 15.

The findings for hypothesis 12a indicate that the addition of the external variables increased the amount of variance accounted for in each of the measures of participation.
Table 15
Hierarchical Regression of the TPB for Intermittent Participation
External Variables vs. Internal Variables

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R</th>
<th>R²</th>
<th>Adj. R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>b</th>
<th>s.e.</th>
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<td>.31</td>
<td>22.19***</td>
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<td>.04</td>
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<td>.37</td>
<td>.09</td>
<td>5.05***</td>
<td>.96**</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
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<td>.40</td>
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<td>.73</td>
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<td>.04</td>
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<td>.37**</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Seniority</td>
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<td></td>
<td>.19</td>
<td>.33</td>
</tr>
</tbody>
</table>

** p<.01, *** p<.001

This provides support for the inclusion of the external variables to the theoretical framework for the theory of planned behavior. Future studies would have to be conducted to determine if these results could be replicated.

**Hypothesis 12b:** The last hypothesis of this dissertation was to determine the predictive value of the TPB over that of the TRA, to explain union participation at the local level. For this analysis, the external variables were excluded so that the basic theoretical framework could be evaluated. Hierarchical regression was used for this hypothesis as well, so the same procedures were applied as that in hypothesis 12a. All
exogenous and endogenous variables were input at Step 1, except for PBC, which was input at Step 2.

For administrative participation, Step 2 results revealed that the change in $R^2 = .01$ was statistically significant ($\Delta F = 13.93, p < .001$). This indicated that the addition of the PBC uniquely contributed 1 percent of the variance in the model, providing support for the increased predictive ability of the TPB over that of the TRA. Although 1 percent is small, it is still statistically significant. Table 16 shows the results for administrative participation.

### Table 16

Hierarchical Regressions of the TRA vs. the TPB for Administrative Participation

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$b$</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>.86</td>
<td>.73</td>
<td>.73</td>
<td>169.80***</td>
<td>1.71***</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>Intent</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subjective Norm</td>
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<td>.28*</td>
<td>.11</td>
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<tr>
<td></td>
<td>Attitudes</td>
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<td>-.25</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Beliefs</td>
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<td>.05</td>
<td>.06</td>
</tr>
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<td>2</td>
<td>PBC</td>
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<td>.75</td>
<td>.74</td>
<td>13.93***</td>
<td>1.05***</td>
<td>.28</td>
</tr>
</tbody>
</table>

* $p < .05$, ***$p < .001$

Supportive participation revealed a small change in $R^2 = .02$ that was statistically significant ($\Delta F = 10.16, p < .01$). This result is similar to administrative participation, as shown in Table 17.
Table 17
Hierarchical Regressions of the TRA vs. the TPB for Supportive Participation

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R</th>
<th>R²</th>
<th>Adj. R²</th>
<th>ΔR²</th>
<th>ΔF**</th>
<th>b</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
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<td>.57</td>
<td>.57</td>
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<td>.12</td>
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<td></td>
<td>Subjective Norm</td>
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<td>.06</td>
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<td>.59</td>
<td>.58</td>
<td>.02</td>
<td>10.16**</td>
<td>.90***</td>
<td>.28</td>
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</table>

** p < .01, ***p < .001

Intermittent participation was not statistically significant with $R^2 = .01$, ($\Delta F = 3.18, p> .05$). Therefore, the hypotheses held for administrative and supportive participation, but not for intermittent participation. Table 18 shows the results for intermittent participation.

Table 18
Hierarchical Regressions of the TRA vs. the TPB for Intermittent Participation

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R</th>
<th>R²</th>
<th>Adj. R²</th>
<th>ΔR²</th>
<th>ΔF**</th>
<th>b</th>
<th>s.e.</th>
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<tr>
<td>1</td>
<td>Intent</td>
<td>.55</td>
<td>.30</td>
<td>.29</td>
<td>.30</td>
<td>26.71***</td>
<td>.23***</td>
<td>.04</td>
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<td></td>
<td>Subjective Norm</td>
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<td>Attitudes</td>
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<td>Beliefs</td>
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<td>-.02</td>
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<tr>
<td>2</td>
<td>PBC</td>
<td>.56</td>
<td>.31</td>
<td>.30</td>
<td>.01</td>
<td>3.18</td>
<td>.18</td>
<td>.10</td>
</tr>
</tbody>
</table>

** p < .01, ***p < .001
An increase in variance accounted for in the TPB over the TRA of only 1 or 2 percent is considered to be small (Cohen, 1969, p. 23). In a meta-analysis conducted by Conner and Armitage (1998), that directly compared the TRA and the TPB, PBC added, on average, 5 percent to the variance explained in intention, over and above attitude and subjective norms, and 1 percent to the variance explained in behavior, over and above intentions. The results in this study are therefore consistent with findings in previous studies.

Table 19 presents a summary of the hypotheses indicating whether they were fully, partially or not supported. The next chapter will present a discussion on this analysis, as well as the possible limitations inherent in most studies of this nature.

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24 Cohen does acknowledge the danger of using terms like ‘small’, ‘medium’ and ‘large’ out of context. Glass et al. (1981, p. 104) are particularly critical of this approach, arguing that the effectiveness of a particular intervention can only be interpreted in relation to other interventions that seek to produce the same effect. They also point out that the practical importance of an effect depends entirely on its relative costs and benefits.
### Table 19

#### Summarized Results of Hypotheses

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**Intention to Participate**

**H1a** Intention to participate will have a positive and direct relationship with all three measures of participation – **Fully Supported**

**H1b** Intention to participate will be more positively related to administrative participation, than it will with supportive or intermittent participation – **Fully Supported**

**Attitude towards Participation**

**H2** Positive attitudes towards participating in local union activities will have a positive and direct relationship with intention to participate – **Fully Supported**

**Mediating Effects of Intention to Participate on Attitudes and Participation**

**H3** Intention to participate will mediate the effects of attitudes on all measures of union participation – **Partially Supported**

**Beliefs**

**H4a** There will be a positive and direct relationship between beliefs and attitudes – **Fully Supported**

**H4b** There will be a positive and direct relationship between beliefs and PBC – **Fully Supported**

**Subjective Norms**

**H5a** Subjective norms favoring union participation will positively predict intention to participate – **Fully Supported**

**H5b** Subjective norms will be more strongly related to intention to participate than will attitudes – **Fully Supported**

**H5c** Subjective norms favoring union participation will positively predict attitudes – **Fully Supported**
Table 19 (Continued)
Results of Hypotheses

**Perceived Behavioral Control**

**H6a** PBC will be directly related with all measures of union participation when participation is not under complete volitional control – **Partially Supported**

**H6b** PBC will have a positive and direct effect on intention to participate when participation is under complete volitional control – **Fully Supported**

**H6c** Low S-E will be positively and directly related to all measures of union participation – **N/A**

**H6d** High S-E will be positively and directly related to intention to participate – **N/A**

**Mediating Effects of Intention to Participate and PBC and Participation**

**H7** Intention to participate will partially mediate the relationship between PBC and union participation – **Fully Supported**

**Personality**

**H8a** Conscientiousness will be positively and directly associated with favorable beliefs concerning union participation – **Not Supported**

**H8b** Extraversion will be positively and directly associated with favorable beliefs concerning union participation – **Fully Supported**

**Race, Ethnicity and Disabilities**

**H9a** Race will be directly related to beliefs regarding union participation – **Fully Supported**

**H9b** Race will be directly related to PBC regarding union participation - **Not Supported**

**H9c** There will be a direct relationship between disabilities and beliefs, and between disabilities and PBC, with respect to union participation – **Partially Supported**
Table 19 (Continued)
Results of Hypotheses

Gender

H10a Presence of children under 12, eldercare responsibility, and marital status, will be directly related to PBC regarding union participation – Partially Supported

H10b Gender will be directly related to both beliefs and PBC, regarding union participation – Fully Supported

Education, Seniority, Age, and Occupation

H11 Seniority, education, occupation, and age, will be directly related to beliefs, with respect to union participation – Partially Supported

Compare TPB against TRA

H12a Inclusion of the external variables will significantly increase the amount of variance accounted for in TPB – Fully Supported

H12b TPB will explain more variance in union participation than will TRA – Fully Supported
CHAPTER 5

Discussions and Conclusions

Introduction

In this final chapter I will generalize the findings reported in Chapter 4, in the context of the research objectives stated at the outset of this manuscript. In addition, several implications of the research for practitioners (union leaders) and for researchers are discussed, as are the limitations.

Discussion

The primary purpose of this dissertation was to determine whether the theory of planned behavior (TPB) would be useful in predicting local union participation. Since the theory of reasoned action (TRA) has been partially tested in studies concerning union commitment and participation, I wanted to ascertain whether the TPB was a better model of prediction for union participation, over the TRA. In order to achieve that goal, the multiple dependent variable, union participation, needed to be better understood. As previously discussed, the dimensionality of the participation construct has not yet been adequately determined. Additionally, it was hypothesized that certain variables, primarily personality and demographic, would also add to the predictive ability of the theoretical framework, thereby building on the TPB. I begin by discussing the findings, and their subsequent implications, for union participation.
**Multidimensionality of Union Participation.** McLean Parks et al. (1995) and McShane (1986a) have both made important contributions towards resolving the dimensionality of participation. Based on their work, a multidimensional structure was also hypothesized in this study. The findings confirm that union participation is a multidimensional construct. The question of dimensionality remains important for two reasons. The first concerns the determination of the specific union activities that comprise each participation dimension, and the second concerns the different behaviors that impact on each of those identified dimensions.

A multidimensional structure intuitively makes sense, given the different types of union activities that must be performed. There are certain activities that are central to the operation of the local union. These activities are considered to be very active forms of involvement, such as **serving on a committee**. There are also more passive forms of involvement, such as **reading the collective agreement**. The conceptualization of a multidimensional construct for union participation has been well established in the literature (Sayles and Strauss, 1953; Spinrad, 1960; Tannenbaum and Kahn, 1958; Van de Vall, 1970; McShane, 1986a; McLean Parks et al., 1995). What follows is a determination of what specific union activities are comprised in different union participation categories.

The second reason for a multidimensional construct is that these behaviours may be influenced by different factors to varying degrees. That is, some behaviors will be influenced by only one variable in a study, while another may be influenced by many. Even if two behaviors are influenced by the same variable, the effect may be different for
each. For example, in studies related to voting behavior or meeting attendance, different attitudes, demographics, and various constraints, impacted differently on each of those behaviors, thus providing further support for the multidimensional structure of participation.

As indicated, the results of this study suggest that participation is a multidimensional construct. Fortunately, with each successive study, we are growing nearer to a more definitive measure of union participation, as particular factors become more firmly defined. Administrative participation is by far the most stable of all other factors identified in research on participation (McLean Parks et al., 1995; McShane, 1986a). A comparison with previous studies (see Table 6, Chapter 4) demonstrated that with each successive study, researchers have continued to add to a better understanding of administrative participation, and have increased the reliability measures. This study was very successful in developing an internally consistent scale for administrative participation ($\alpha = .97$). As well, two other dimensions of participation were found, supportive and intermittent. These results correspond with those of other researchers, suggesting that there are three factors of union participation. However, there are differences in the factors reported in previous studies. For example, what items load on supportive participation differs from previous research, such as McLean Parks et al. (1985). Even intermittent participation is not entirely consistent, but demonstrates that there are similar activities to be included in the intermittent factor such as "voted in elections for local officers" (Q. 16). I had expected the item "walked the picket line during a strike" (Q. 18) to load on intermittent participation, but instead, it loaded on
supportive participation. Previous studies had not included this item, so a comparison
could not be made. Although there are some contradictory findings, there is still
evidence that participation is a multidimensional construct, with at least three factors.
This has been the consistent finding across studies.

Additional support for the multidimensionality of union participation was evident
with the path analysis conducted, reporting unstandardized regression coefficients ($b$) in
Chapter 4, Table 9. Some variables were found to be associated with certain measures of
participation, and not with others. However, a majority of the variables were related with
each of the measures of participation, but to different degrees of statistical significance,
thus providing further evidence for the multidimensionality of participation.

Unfortunately, there still remain some unanswered questions as to the unique
factor structure of participation. No two studies have arrived at the same results, in terms
of the dimensionality of participation (one or three factors), and what particular union
activities actually comprise each of the factors. Even though the results in this study
indicate emphatically that participation is a multidimensional construct, further
investigation is required in order to determine the particular activities that comprise the
supportive and intermittent factors. A replication of the results would undoubtedly
provide a more convincing argument for the three measures of participation discussed in
this study.

The Theory of Planned Behavior (TPB) as a Predictive Model of Union
Participation. The current study tested the ability of the TPB in predicting local union
member’s intentions and subsequent behavior in relation to union participation. The amount of variance accounted for increased by 1 percent in subsequent behavior for administrative and supportive participation. Arriving at a predictive model of participation has become increasingly important as unions continue to search for ways in which their members can actively participate in local union activities. The results of this study provide convincing support for the predictive ability of these measures of participation.

Intention to participate had significant and direct relationships with each of the measures of participation ($p<.001$), which was consistent with the literature. Another significant relationship was found between seniority and the three measures of union participation ($p<.001$). This was unexpected, as the original hypothesis had predicted an indirect effect on participation through beliefs. However, this direct relationship between seniority and participation is also consistent with previous research in industrial relations. Therefore, future studies should ensure that a direct, rather than indirect, relationship is hypothesized. Seniority serves as a qualifier to those wishing to participate at more senior levels of the local union, particularly for administrative participation, that may include active involvement in committees such as bargaining, or being elected as a local president.

Intermittent participation is the least explained of all the measures of participation. No relationship was found to exist between intermittent participation and PBC. However, even though no significant relationship was found, PBC may very well still be the best predictor of intermittent participation. That is, if a member has full
volitional control over their situation, intermittent participation may be the easiest way to participate, as it is the least demanding, and therefore no relationship would probably exist. Therefore the TPB may not be an appropriate theoretical framework to use in this case, and the TRA may be a better theoretical framework when testing intermittent participation. Activities associated with supportive and administrative participation may not be performed by just any of the members, and so a lack of volitional control would be expected. For example, activities such as "serving as an elected official" or "serving on a local union committee" may not be easily available to new members, or to members with other obligations. The TPB may be the appropriate framework to test these levels of participation where PBC is questionable. The relationship between gender and the intermittent model was also found to be statistically significant ($p<.01$), indicating that males are more likely to engage in union activities at the intermittent level, than are females. Union activities included at this level include "voting in contract ratification" or "reading parts of the collective agreement". This result is puzzling since the activities associated with intermittent participation are not too demanding, and females would be expected to more easily engage in union activities at this level.

Why would it be difficult to become involved in other activities? The findings indicate that when there were children under 12, which would imply childcare needs, there was less PBC to participate in union activities, than for those who did not have children under 12. It would be difficult for those with childcare issues to participate in local union participation because they may not have full volitional control over their situation. There was also a direct and statistically significant relationship found between
gender and PBC ($p<.001$), suggesting that males have more PBC over union participation decisions, than do females.

A gender effect was found to exist for behavioral beliefs. The findings indicate that males have stronger instrumental beliefs about union participation, than do females. This is not consistent with previous findings (Gallagher and Clark, 1989; and Gordon et al., 1980), where women generally had higher instrumental beliefs with respect to union participation, but actually participated less.

Eldercare responsibility was another variable that was expected to show statistical significance due to its similarity to the presence of children under 12, and the potential for barriers to participation. Surprisingly though, eldercare did not show any statistical significance. Considering the importance placed on our aging population, and the fact that a considerable number of participants in this study were responsible for eldercare, a relationship was expected. The fact that so many members showed responsibility to eldercare is an early warning sign. It is for variables such as these, where longitudinal studies would prove to be advantageous. To the best of my knowledge, this is one of the first union participation studies to include eldercare responsibility as a possible explanatory variable. The lack of statistical significance in this study should not serve as an indication of its unimportance, but rather, an effort to study a phenomenon that will become increasingly important in the near future.

The implications are, that females do not believe that participating in the union will be of benefit to them, that they have less PBC over participation compared to males, and that they are less likely to engage in intermittent participation, than will males. It
would appear that union participation is far more difficult for females in this study, and this would indeed impact on union policy decisions.

The relationship between beliefs and PBC is statistically significant ($p<.001$). When a member holds strong instrumental beliefs about participating in the union, but the ability to participate may be a problem because of volitional control, then volitional control (PBC) will override beliefs in determining behavior. Not only is it important to consider the use of the TPB as a predictive model of union participation, but also for understanding the particular factors that may impact on one's intentions to participate, either through attitudes, beliefs, or PBC. A replication of the results is required to confirm these hypothesized relationships.

Within the theoretical framework, attitudes have long been established as the most important predictor of intentions, and were hypothesized as such in this study. Past studies have found attitude to be the variable most likely to be positively related to intention to participate. Building positive images about the local union can increase a member's intention to participate (Kuruvilla and Fiorito, 1994). However, subjective norms were found to be more statistically significant with intentions ($p<.001$), than with attitudes ($p<.01$), in this study. Similar results have emerged in previous studies. Participation and commitment studies have indicated the importance of socializing new members into the union in the first year of employment. Therefore, referent others are important to the union initiative of increased participation.

There are significant relationships between beliefs and attitudes, as one would expect in such studies ($p<.001$). The importance of this relationship between beliefs and
attitudes is further explained by the significant relationships between subjective norms and attitudes ($p<.001$). The relationship between subjective norms and attitudes had not been considered in the original TPB framework, developed by Ajzen (1985). However, the relationship between subjective norms and attitudes have been found to exist in various studies (Chang, 1998; Fullagar et al., 1992; Shepherd and O’Keefe, 1984; Shimp and Kavas, 1984; Vallerand et al., 1982; and Wetzel et al., 1991). A possible explanation for this finding concerns how individuals form beliefs about intentions and behaviors. For example, subjective norms reflect the opinions of referent others about participating in a given behavior. Most information that shapes an individual's attitudes is obtained from peers, family, unions, coworkers, and his or her experiences. How much the individual may be influenced by the opinion of referent others depends on how much he or she values the advice given (Clark, 2000). Therefore, if the information secured from referent others is also used to form an individual’s attitudes, then a direct relationship, between attitudes and subjective norms, would be expected. The implication is that members are more inclined to form attitudes based on both beliefs and subjective norms.

Subjective norms were also found to be directly related to both administrative ($p<.05$) and supportive participation ($p<.01$). This occurred in only one other study that I could find (Millstein, 1996). Even though there is little research to confirm these findings, a strong argument exists that a direct relationship between subjective norms and the actual behavior is quite feasible. In this study, local union members possessed stronger intentions to participate in their local’s union activities, and they were more
likely able to translate those intentions into behavior. In several cases, because participants in this study were already actively participating in their local union, their level of intention was already known, and may further explain the direct relationship.

Beliefs were also found to be significantly related to intention to participate \( (p<.01) \). This finding was puzzling. A review of the literature did not reveal another study reporting the same or similar results. Attitudes are usually the most important predictor of intention to participate. As discussed in Chapter 4, beliefs may be the most important predictor of intention to participate in a study of union participation, rather than attitudes. This requires further research to determine if the behavior, union participation, makes a difference in terms of the type of predictors that will emerge.

As discussed, it was believed that adding external variables (demographics factors and personality) would increase the predictive ability of the theoretical model. Gaining an appreciation for the predictive ability of variables such as beliefs, attitudes, subjective norms, and PBC, are important in this theoretical framework, but also gaining an understanding of the external factors "affecting" those variables is equally important. The effect of gender and presence of children under 12 on PBC, and seniority on participation, has already been discussed. Their effects on this model cannot be ignored since they contribute to an explanation of the factors that may impede a union member's ability to participate, as well as to provide some explanation for participation in union activities. There are still other factors not yet discussed.

The study of personality within the union participation research is quite sparse for reasons discussed in Chapter 2. The social psychological literature reveals more frequent
inclusion of personality variables in both the TRA and the TPB. One would naturally expect conscientiousness to be related with beliefs. Conscientiousness is the personality trait that has proven to be the best predictor of performance across almost all occupations (Barrick and Mount, 1991). No significant relationship was found between conscientiousness and beliefs in this study. Although there was no statistically significant relationship found between beliefs and conscientiousness, there is some evidence that conscientiousness should be tested in future studies. This is consistent with previous research in social psychology that found conscientiousness to be consistently related with intentions and behavior (Conner and Abraham, 2001). What did emerge in this study was a significant relation between extraversion and beliefs \((p<.01)\). This finding suggests that extraverts see union participation as providing more of a benefit, than do introverts. Perhaps the various activities that administrative participation offers suits their extraverted personality. For example, bargaining, defending someone in a grievance procedure, or other such activities, may be roles with which they may want to engage. This is an important finding, because inclusion of personality measures in union participation has not yet been tested empirically using the NEO-PI-R, and this study confirms the need for such research.

There was a significant relationship found between disabilities and beliefs \((p<.01)\). As such, persons with disabilities were found to have stronger instrumental beliefs about union participation, than did those with no disabilities. The findings indicate that persons with disabilities find value in union participation. This is important to union policy, as unions must address the needs of their members, and try to determine
ways to increase their participation levels within the union. Unfortunately, there is little literature regarding union participation and disabilities. Persons with disabilities will certainly face barriers to participation, and those barriers must be addressed. Further research is required in order to gain a better understanding of what the particular barriers are to persons with disabilities.

Consistent with previous research, education had a negative, but significant effect on beliefs \( (p < .05) \), suggesting that those with lower levels of education have stronger instrumental beliefs about union participation, than those who have higher levels of education. This has implications for the union. If more educated workers do not believe in the instrumental value associated with participating in a union, then it could eventually lead to less positive attitudes, and thus decrease their intention to participate. In this study, the impetus for intentions to participate and actual participation appear to stem from beliefs and subjective norms, and not from attitudes, as in past studies. The concern would be, that, if participating in a union does not provide instrumental value, why bother to participate? Therefore, increased levels of education may become detrimental to union participation. This is an avenue of research that should be pursued to gain a better understanding of the relationships between education, instrumental beliefs and attitudes.

Contrary to my original hypothesis, race was not found to be significantly related to PBC, suggesting that race is not a barrier to participation. In this study, the two unions surveyed are fairly culturally diverse, and may not be representative of the minority distribution in most unions. There are difficulties in studying race in union studies. As posited by Reitz and Verma (1999), “the problem in investigating these possibilities is
that, as yet, we do not have large enough numbers of racial minorities in all industries to permit a rigorous test of these differences. In this study, however, the number of non-White members was fairly representative of the population. Race was also found to have marginally, significant effects on beliefs ($p<.05$), with non-White union members holding stronger instrumental beliefs about participating in the union, than did white members. With the growing numbers of visible minorities, it is imperative that local unions take advantage of the available resources that these groups may provide. As such, encouraging visible minorities to become active in their local union needs to be a priority for unions.

In addition to testing the various relationships within the TPB, it had been further hypothesized that the TPB, with the addition of external variables, would prove to be a better model of prediction. In addition to this hypothesis, it was anticipated that even without the external variables, the TPB would still be a better predictor than the TRA. Both of these are discussed in the following section.

The Theory of Planned Behavior Compared to the Theory of Reasoned Action. One of the goals of the research was to determine if the TPB accounted for more variance in union participation, than did the TRA. When used as a model for explaining behaviors that are not fully volitional, the TPB is expected to perform better than the TRA. The findings indicate that the TPB does add 1 percent to the amount of variance accounted for over the TRA. This finding might suggest that the use of the TPB over the TRA may not be warranted, considering the small effect size. But effect size should not be the only
basis for judging the success of the theoretical model. When you consider the value that the PBC has added to this study, it is worth much more than the 1 percent of variance accounted for in this model. Through the PBC, I was able to identify that barriers to participation may exist for females, as well as for families with children under 12. This is an important result because it provides researchers with a model that can predict union participation, while simultaneously identifying barriers to union participation.

Implications

A number of findings lead to suggestions for policy development within the union. This study demonstrated the difficulties faced by females for participating in local union activities. Generally women are the caregivers, and the ones who are most burdened by these types of activities. When the goals are to increase female participation, but the burdens keep adding up, eventually there will be difficulties in enticing females to actively participate. Unions may have to be more creative at the bargaining table in securing better eldercare and daycare benefits for families, so that barriers to participation are eliminated, and PBC over certain situations can be accomplished. Alternatively, a paid allowance that covers basic expenses related to these obligations may also have to be negotiated, to make it easier for women to actively participate.

Non-White union members and persons with disabilities both emerged as groups possessing strong instrumental beliefs about union participation. As such, unions must ensure that policies make it easy for these members to actively participate, since these
members are already positive about the value of participating in a union. For non-White members, policies relating to non-discrimination in the workplace, and in the union, need to be developed and implemented. Diversity training should also be considered to ensure a bias free environment. As for persons with disabilities, ensuring easy access to meetings is necessary. This may require transportation to and from meetings, barrier-free meeting places, ergonomically designed seating, or even ensuring that meetings are not held too late in the evening. Each remedy will have to meet the particular needs of both the individual and the union.

Measuring personality in these studies is important so that the appropriate members can be identified, in order to carry out particular activities for the union. While it is important to have members participate in union activities, participation will be easier for some, than for others. Having to stand up and speak on behalf of the member's can be daunting, and while many members have the ability, they may be just too shy. Extraversion should not, however, be confused with ability. For those who are less extraverted, appropriate training programs will be required, so that they too can understand that they can benefit by participating in union activities that fit within their realm of comfort. The adoption of assertiveness and leadership training is required, so that unions can achieve their goals of increased participation.

There are indications that forming positive attitudes towards union activism may not be the most effective way to encourage member participation. What this model seems to suggest is that subjective norms lead to increased intention to participate, and that in some cases, it has a direct relationship to participation. Therefore, programs that
socialize new members into the union are extremely important. Referent others such as parents, spouses, friends, co-workers, and union members, may have more influence on encouraging a member to participate. Therefore, policies need to be strengthened to address these issues. Mentorship programs may be appropriate. Perhaps using retired union official's as mentors would be an effective way to encourage participation. This could be achieved by offering small incentives through recognition programs, highlighting their involvement. Early socialization of members has also proven to be an important predictor of union participation in past studies, and should continue with new members, as well as ongoing dialogue with older members who may have become disconnected from the union. A successful program to model from is the United Steelworkers Program "You and Your Union", discussed in Chapter 3.

This study found that members with lower levels of education held stronger instrumental beliefs about union participation, than did members with higher levels of education. Encouraging active participation from all members is important. More educated members can be very effective in union administration, and therefore are important to the union. Considering the trend towards increasing levels of education, this may be problematic in the future if members with higher levels of education feel that they are better able to negotiate for themselves, and opt out of the collective process ingrained within the union doctrine. For example, they may be in a position to negotiate their own working conditions, compensation packages, or job design, and not need anyone to assist them. Unions may need to provide incentives to encourage such participation from these groups.
While no significant effect was found for eldercare, it is something unions need to be concerned with for the future. With our aging population it has two implications for unions. The first, that there may be very few members to replace those who are leaving. As indicated in this study, the majority of activists were over 40 years old. The second has to do with the extra burden that will be placed on members, as they care for their elderly parents or grandparents.

Union policy development is somewhat hampered by what employers do. Encouraging females, visible minority, and persons with disabilities, to participate in union activities is certainly up to the union. However, if organizations do not hire in the appropriate numbers of designated group members, then access to these groups is made more difficult for the union. Unions need to determine ways to be involved with recruitment and selection of new employees so that they can ensure a more diverse workforce. This will not be easy to achieve.

Union leaders must collectively encourage research in industrial relations. Securing a sample for this research proved to be frustrating. It took nearly two years to find two unions willing to participate in this study. Additionally I wanted to investigate the effects of race on participation, but I was not able to exclusively identify a union willing to help me, even though they had access to the information. We continually talk about longitudinal studies, but do not easily have access to a sample. Also the structure of the union needs to be studied in conjunction with such studies, in order to gain a better understanding of the role the union plays in union participation. It is difficult to
determine the reasons without knowing all the facts. This would help everyone achieve the answers we need for continued growth and survival of the union movement.

The original model specified by Ajzen (1985) may be under-identified, since it appears that the TPB may be much more complex than had been previously posited. The nature of this study, where the behavior requires a long-term commitment in some cases, gives rise to more closely examine the relationships within this theoretical framework. A replication of the results would undoubtedly reaffirm the appropriate participation measures required to predict local union participation.

Limitations

Limitations are inherent in any study, and although the findings in research can add valuable contribution to any type of research, there are usually qualifiers to the findings in question. First, a discussion regarding the composition of the participants in this study is warranted. The respondents from CUPE are predominantly female non-activists, and the respondents from USWA are predominantly male activists. The sample is divided with half the respondents being activists, and the other half non-activists. The female participation rate in this study is just over 45 percent, which is exceptionally high for union research that usually reports figures under 20 percent. The advantage of surveying two very different unions, blue-collar versus white-collar, provides researchers with a good cross-section of participants. It would have been better to have equal numbers of participants and non-participants respond from both of their respective unions. What may be more concerning is the response rate of 23 percent. Although this
is lower than would have been desired, it is similar to previous union participation surveys.

The second limitation in this study is the issue of common method variance. The study was based on self-report data. However, in a study conducted by McShane (1986b), a self-report measure of union participation was found to be significantly and positively correlated ($r = .89$) with actual meeting attendance. This suggests that when participants complete surveys, they are responding honestly, and it may not be necessary to have their responses confirmed by another party. Thus, this may not have been an issue, and the problem of common method variance may have been attenuated.

A third limitation of this study is the confounding of the PBC measure. As indicated in the literature review and subsequent hypotheses, PBC should measure both volitional control and self-efficacy. Although the intentions were to measure self-efficacy and volitional control, a methodological error resulted, and this measure could not be used in the study. Based on the results of this study, self-efficacy would have been an important measure to retain, given that a relationship was found to exist between PBC and gender. Previous research in industrial relations has also shown the importance of self-efficacy in studies of gender. Future studies must include more complete measures for both PBC and self-efficacy.

A fourth limitation of this study is the use of a cross-sectional research design, rather than a longitudinal design. This is unfortunately a recurring issue in research. I could find only one study that employed a longitudinal design to determine the impact of early socialization on union commitment and participation (Fullagar et al., 1995).
Adopting a longitudinal design would help to test causal propositions in the union participation models. Particularly given the temporal nature of certain union activities, such a design would contribute to a better understanding of union participation. However, practically speaking, it is very difficult to secure the required samples for a cross-sectional research design, and securing a sample for a longitudinal design would be extremely difficult to achieve.

Overall, the limitations described above do not severely restrict either the validity, or the generalizability, of the results. However, based on the limitations discussed, future research could be improved upon by addressing some of those limitations. Replication of the results is needed, since the TPB has not been previously tested with local union participation. Further investigations that address the limitations should lead to increased amount of variance accounted for in the models, and expand our understanding of member's decisions to participate in their local union's activities.

Conclusion

To the best of my knowledge, I could not find any evidence to suggest that the TPB had ever been used as a predictive model of local union participation, thus providing a unique opportunity to test its predictive ability in this context. Two streams of research were reviewed for a comprehensive understanding of the theoretical construct: the social psychological and industrial relations domains. Drawing parallels from each of the theories was challenging at best, but proved to be enlightening, as each field contributes to a better understanding of the behavior in question. This addresses the call for research
in industrial relations to consider the work of social psychologists (Clark, 2000; Gordon et al., 1980).

This study builds on previous research by identifying additional activities that should be measured, and classified as administrative participation. Therefore, the multidimensionality of participation has been further developed, but there still remain some unresolved issues. As discussed earlier, with each successive study on union participation, advances have been achieved. This study has contributed to a better understanding of the dimensionality of participation, but has also called into question some of the constructs. Further research must be conducted to resolve these issues.

Large gender effects were found in this study, indicating that females were more affected by issues concerning participation than were males. The relationship between males and intermittent participation demonstrates the ease with which they are able to participate, compared to females. Males also held stronger instrumental beliefs with respect to union participation than did females. A review of the PBC indicates the presence of children is one factor that may be impacting on the ability to participate.

Subjective norms were found to be the most important predictor of union participation, showing support for previous research concerning union socialization. Referent others play a large role in encouraging union participation. There is no doubt that building positive images about local unions still remains important. Relying on referent others is probably more important, and therefore, socializing members cannot be taken for granted.
Attitudes, on the other hand, were found to be less important predictors of intentions to participate than were beliefs or subjective norms, in this study. This may very well mark the beginning of changing attitudes of more educated union members, which appears to be the norm today.

Finally, race, disabilities, eldercare, presence of children less than 12, and personality, should be studied further to determine their exact effects on participation. This is increasingly becoming more important, given the issues concerning our aging population and increased levels of immigration.

Future research should attempt to replicate the findings of this study. The use of the TPB as a theoretical framework has proven to be a very relevant model. The dimensionality of participation requires further attention, as the structure is not yet defined. Self-efficacy measures should be incorporated in union studies using the TPB framework to determine the differences between PBC and self-efficacy, and whether both measures are essential to understanding the barriers present for females. Another study that would be worth pursuing is the determination of barrier measures incorporated into the TPB framework, to better understand the effects they have on PBC.

In conclusion, the theory of planned behavior provided the necessary theoretical framework from which to predict union participation. Combined with the multidimensional approach to participation, and the inclusion of external variables, this framework emerged as a parsimonious framework from which to study union participation. The combination of the industrial relations and the social psychological literature provided much more breadth to this study, thus increasing our understanding of
union participation. Future studies must continue to use this approach. However, until researchers can build better relationships with union executives who have the foresight to allow us access to their members, it will be difficult to advance this research. More inventive ways to gain access to membership are needed in order to achieve our goals, for the sake of the labor movement. Until this relationship is strengthened, research in union phenomena will not progress. For the sake of union growth and prosperity, this is an essential ingredient to success.
Appendix A - Questionnaire

January 2002

Dear Brother or Sister:

The purpose of this survey is to find out about your level of participation in your local unions' activities. Your name and individual responses will be kept confidential, and only I will have access to the information. Your union will only receive a final report, summarizing the results (without any names attached).

The contents of this survey have been reviewed and approved by McMaster Research Ethics Board (MREB). If you have any concerns on the content or the delivery process of this survey, please contact Dr. Harish Jain, my thesis supervisor, at 1-905-525-9140, ext. 27952, e-mail jainhar@mcmaster.ca.

I truly appreciate your participation in this study and look forward to your quick response to the survey. You will find a self-addressed envelope, with prepaid postage, enclosed so that you can forward the completed survey to me at McMaster University. If you have any questions regarding the survey or need help to complete it, you may contact me, Deborah Zinni, at zinnidm@mcmaster.ca, or call me at 1-905-525-9140 (Hamilton, Ontario), extension 27019. The survey should take about 20 minutes to complete. Again, your prompt response would be very much appreciated.

For your assistance in this survey I am offering a draw as a means to increase participation from activists and nonactivists at the local level. If a completed survey is returned by February 20, your name will be entered into a draw to be held on February 26, 2002 for the following prizes:

1st prize - $300 gift certificate for DVD player or cash if you prefer
2nd prize - $50 Sears gift certificate or cash if you prefer

Please see the enclosed ballot for details and conditions.

Thank you again for your participation.
As you fill out this questionnaire we ask that you kindly *answer all questions*.

**SECTION A:**

**UNION AND LOCAL:** ___________  **CITY (Work):** ___________

**CURRENT SENIORITY (NUMBER OF YEARS):** ________________

Please check off the appropriate boxes for each category presented below.

AGE:  
- [ ] 20 or younger  
- [ ] 31 - 40  
- [ ] 51 - 60  
- [ ] 65+
- [ ] 21 - 30  
- [ ] 41 - 50  
- [ ] 61 - 65

**EMPLOYMENT STATUS:**  
- [ ] Full-Time  
- [ ] Part-Time

**GENDER:**  
- [ ] Male  
- [ ] Female

**CHILDREN:**  
- [ ] Yes  
- [ ] No  

**AGES OF CHILDREN:** __ __

Are you the main care giver in your home?  
- [ ] Yes  
- [ ] No  
- [ ] N/A

Do you share the housework and child care with your spouse/partner or someone else?  
- [ ] Yes  
- [ ] No  
- [ ] N/A

Are you responsible for taking care of older parents/grandparents/other family members?  
- [ ] Yes  
- [ ] No

If you answered yes above, is it shared with someone else?  
- [ ] Yes  
- [ ] No
MARITAL STATUS:  
- Married/Common-Law
- Single/Widowed/Separated/Divorced
- Same Sex Partner

EDUCATION: (Highest Level)  
- Elementary School
- University Degree/Some University
- High School
- Graduate Degree (Masters/PhD)
- College Diploma/Some College
- Professional Designation (Engineer, CA, etc)

RACE: Are you:
- White
- Chinese
- Black
- South Asian (e.g. East Indian, Pakistani, Sir Lankan, etc.)
- Filipino
- Latin American
- Arab
- South East Asian (e.g. Cambodian, Indonesian, Laotian, Vietnamese, etc.)
- West Asian (Iranian, etc.)
- Korean
- Japanese
- Other ____________________________

ETHNICITY: Please check off your origin (select the one you identify with most). Please select only one.
- Chinese
- French
- English
- Jamaican
- Portuguese
- Chilean
- Italian
- German
- Scottish
- Irish
- Filipino
- Vietnamese
- Cree
- Micmac
- Métis
- Inuit (Eskimo)
- Jewish
- Lebanese
- East Indian
- Ukrainian
- Dutch
- Polish
- Greek
- Other ____________________________

DISABILITY:  
- Yes
- No

If you answered yes, please indicate what your disability is by checking off the appropriate category:
- I am blind or visually impaired (do not include problems correctable with lenses (glasses)
- I am deaf or hard of hearing
- I have a medical disability (including arthritis, diabetes, epilepsy, hemophilia, heart condition, multiple sclerosis, muscular dystrophy, psychiatric illness)
- I have a mobility disability, such as the need to use a wheelchair
### OCCUPATION:

- Child Care
- Health Care
- Educator
- Skilled Tradesperson
- Transportation (Drivers)
- Managerial and Professional Specialty
- Technical, Sale and Administrative Support
- Operators, Fabricators and Laborers
- Miner
- Service (Specify)
- Other (Specify)

### SECTION B*

For each statement below, please circle or check off the response that best represents your opinion for each of the questions using the scale listed just below. Please answer all questions:

**SD** = Strongly disagree or definitely false  
**A** = Agree or mostly true  
**D** = Disagree or mostly false  
**SA** = Strongly agree or definitely true  
**N** = Neither agree nor disagree, cannot decide

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. I like to have a lot of people around me.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>2. I keep my belongings clean and neat.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>3. I laugh easily</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>4. I’m pretty good about pacing myself so as to get things done on time.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>5. I don’t consider myself especially “light-hearted.”</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>6. I am not a very methodical person.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>7. I really enjoy talking to people.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>8. I try to perform all the tasks assigned to me conscientiously.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>9. I like to be where the action is.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>10. I have a clear set of goals and work toward them in an orderly fashion.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>11. I usually prefer to do things alone.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>12. I waste a lot of time before settling down to work.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>13. I often feel as if I’m bursting with energy.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>14. I work hard to accomplish my goals.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>15. I am a cheerful, high-spirited person.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>16. When I make a commitment, I can always be counted on to follow through.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>17. I am not a cheerful optimist.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>18. Sometimes I’m not as dependable or reliable as I should be.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>19. My life is fast-paced.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>20. I am a productive person who always gets the job done.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>21. I am a very active person.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>22. I never seem to be able to get organized.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>23. I would rather go my own way than be a leader of others.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
<tr>
<td>24. I strive for excellence in everything I do.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
</tr>
</tbody>
</table>

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SECTION C:

(a) How easy would it be for you to hold an elected/appointed position and/or sit on a union committee in your local if you could. Please select one response for each of the four questions.

<table>
<thead>
<tr>
<th>1. For me, holding an elected/appointed position and/or sitting on a union committee in my local at this time would be:</th>
<th>2. If I wanted to, I could easily hold an elected/appointed position and/or sit on a union committee in my local at this time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely difficult</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Difficult</td>
<td>Disagree</td>
</tr>
<tr>
<td>Easy</td>
<td>Agree</td>
</tr>
<tr>
<td>Extremely Easy</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. How much control do you have over holding an elected/appointed position and/or sitting on a union committee in your local at this time?</th>
<th>4. The number of events outside my control which could prevent me from holding an elected/appointed position and/or sitting on a union committee in my local at this time are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolutely no control</td>
<td>Quite a lot</td>
</tr>
<tr>
<td>A little control</td>
<td>A few</td>
</tr>
<tr>
<td>A lot of control</td>
<td>Hardly any</td>
</tr>
<tr>
<td>Complete control</td>
<td>None at all</td>
</tr>
</tbody>
</table>

(b) For the following section, we would like to know about your intentions (your plans) to hold an elected/appointed position and/or sit on a committee in your local. Please select one response for each of the five questions. Please answer all questions.

<table>
<thead>
<tr>
<th>1. How likely is it that you will hold an elected/appointed position and/or sit on a union committee in your local?</th>
<th>2. I intend to hold an elected/appointed position and/or sit on a committee in my local.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely unlikely</td>
<td>Extremely unlikely</td>
</tr>
<tr>
<td>Quite unlikely</td>
<td>Quite unlikely</td>
</tr>
<tr>
<td>Unsure</td>
<td>Unsure</td>
</tr>
<tr>
<td>Very likely</td>
<td>Very likely</td>
</tr>
<tr>
<td>Extremely likely</td>
<td>Extremely likely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. I very much want to hold an elected/appointed position in my local.</th>
<th>4. I intend to participate, but not in an elected/appointed position.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. I very much want to sit on a union committee in my local.</th>
<th>6. I intend to participate, but not in a committee position.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>
(c) Most people who are important to me think that *I should* hold and elected/appointed position and/or sit on a committee in my local.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

(d) For each question below, please circle or check off the response for each question that represents *your* beliefs about holding an elected/appointed position and/or sitting on a union committee in your local.

1 = Very Unlikely  
2 = Somewhat unlikely  
3 = Undecided  
4 = Somewhat likely  
5 = Very likely

If you were to hold an elected/appointed position and/or sit on a union committee, how likely is it that you would:

| 1. Be more satisfied with your job | 1 2 3 4 5 |
| 2. Have better working conditions | 1 2 3 4 5 |
| 3. See more fairness and justice in the workplace | 1 2 3 4 5 |
| 4. See less discrimination in the workplace | 1 2 3 4 5 |
| 5. See less sexual harassment in the workplace | 1 2 3 4 5 |
| 6. Have improved job security | 1 2 3 4 5 |
| 7. Be able to keep up-to-date on situations between the company and the union | 1 2 3 4 5 |
| 8. Have better pay and benefits | 1 2 3 4 5 |
| 9. Have a safe workplace | 1 2 3 4 5 |
| 10. Make a difference | 1 2 3 4 5 |

(e) For each question below, please circle or check off the response for each question using the following scale:

1 = Strongly disagree or definitely false  
2 = Disagree or mostly false  
3 = Neither agree nor disagree, cannot decide  
4 = Agree or mostly true  
5 = Strongly agree or definitely true

| 1. My father thinks I should participate in union activities | 1 2 3 4 5 |
| 2. My mother thinks I should participate in union activities | 1 2 3 4 5 |
| 3. My spouse/partner/boyfriend/girlfriend think I should participate in union activities | 1 2 3 4 5 |
| 4. My close friends outside work think I should participate in union activities | 1 2 3 4 5 |
| 5. The people at my workplace think I should participate in union activities | 1 2 3 4 5 |
| 6. My local union representatives think I should participate in union activities | 1 2 3 4 5 |
| 7. Management thinks I should participate in union activities | 1 2 3 4 5 |
(f) For each question below, please check off the response for each of the four questions that tells us what your attitude is towards holding an elected/appointed position and/or sitting on a union committee in your local.

<table>
<thead>
<tr>
<th>1. Holding an elected/appointed position and/or sitting on a union committee is:</th>
<th>2. Holding an elected/appointed position and/or sitting on a union committee is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely unrewarding ____</td>
<td>Very bad ____</td>
</tr>
<tr>
<td>Very unrewarding ____</td>
<td>Slightly bad ____</td>
</tr>
<tr>
<td>Neither unrewarding or rewarding ____</td>
<td>Neither bad nor good ____</td>
</tr>
<tr>
<td>Very rewarding ____</td>
<td>Slightly good ____</td>
</tr>
<tr>
<td>Extremely rewarding ____</td>
<td>Very good ____</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Holding an elected/appointed position and/or sitting on a union committee is:</th>
<th>4. Holding an elected/appointed position and/or sitting on a union committee is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely foolish ____</td>
<td>Very useless ____</td>
</tr>
<tr>
<td>Very foolish ____</td>
<td>Slightly useless ____</td>
</tr>
<tr>
<td>Neither foolish nor wise ____</td>
<td>Neither useless or useful ____</td>
</tr>
<tr>
<td>Very wise ____</td>
<td>Slightly useful ____</td>
</tr>
<tr>
<td>Extremely wise ____</td>
<td>Very useful ____</td>
</tr>
</tbody>
</table>
SECTION D

(a) I am interested in finding out how many things you do for your union and how much time you have spent in your union's activities over the past three years. For each question below, please check off the response for each of the questions, to indicate your level of union participation on average over the past three years (1999 – end 2001) in your local. Please answer all questions.

1 = Never (no time spent at all)
2 = Hardly (a little bit of time, or a few times during the year)
3 = Sometimes (several times during the year or as required)
4 = More often (takes up a lot of time, but not as much as others in my local)
5 = Always (a lot of time spent on activities on a regular basis; almost everyday)

My level of participation in the following union activities over the past three years has been:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Hardly</th>
<th>Sometimes</th>
<th>More Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Served as an elected union official</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Served on a local union committee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Served as a union steward</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Run for an elected union office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Been appointed as a union official</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Been a delegate to a union convention or seminar</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Helped a union member prepare a grievance</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8. Read parts of the collective agreement</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9. Helped a new member learn about the union</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Filed grievance(s)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>11. Spoke up at a union meeting(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12. Shown another member how the union could help him or her with a problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Helped another member campaign for a union office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Encouraged other members to support union position on an issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Attended general membership meetings of union local</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Voted in elections for local officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Voted for contract in contract ratification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Walked the picket line during a strike</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Taken part in an illegal/wildcat strike</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Marched in a rally in support of my union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Involved in decision-making processes within the union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
SECTION E

To be completed only by those union members who do not hold an elected/appointed position and/or sit on a committee in their local. For union members who hold an elected/appointed position and/or who sit on a union committee, please proceed to Section F.

(a) For each of the questions listed below, please indicate your agreement or disagreement about “your” reason for choosing to remain inactive in your local union. Please circle or check off the response that represents your opinion using the scale below. Please answer all questions:

1 = Strongly disagree  3 = Slightly disagree  5 = Slightly agree  7 = Strongly Agree
2 = Disagree  4 = neither agree nor disagree  6 = Agree

I do not hold and elected/appointed position and/or sit on a union committee because:

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that the dues I contribute are enough.</td>
<td></td>
<td></td>
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<td>2. I just don’t have any interest.</td>
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<td>3. I have better things to do with my time.</td>
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<td>4. I don’t get paid for it.</td>
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<td>5. I do not believe in unions.</td>
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<td>6. I am not that interested in worrying about other people’s problems.</td>
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<td>7. All I want is a job.</td>
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<td>8. I believe that I would receive the same benefits without a union.</td>
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<td>9. The company will do what it wants any ways.</td>
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<td>10. I really don’t care about the union.</td>
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<td>11. The union is always fighting.</td>
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<td>12. The union seems like a cult.</td>
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</table>

(b) For certain union members there may be other reasons why they cannot actively participate. Please circle or check off the response that best describes why you are not able to hold and elected/appointed position and/or sit on a union committee. Please answer all questions, using the same rating system as above.

The reason I do not hold an elected/appointed position and/or sit on a union committee in my union is because:

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have a part-time business on the side and don’t have enough time.</td>
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<td>2. I am holding down two jobs and I do not have enough time.</td>
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<td>3. I have children and don’t have enough time.</td>
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<td>4. I am upgrading my education and I don’t have time.</td>
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<td>5. I have a busy lifestyle.</td>
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<td>6. I have no time to get involved.</td>
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<td>7. I would rather be with my kids.</td>
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<td>8. I am afraid to risk my friendships.</td>
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<td>9. I am afraid of management.</td>
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<td>10. I would be the only female union activist.</td>
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<tr>
<td>11. I would be the only male union activist.</td>
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<td>12. I would be the only white member.</td>
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<tr>
<td>13. I would be the only non-white member.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. If I became active I would be discriminated against.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I am afraid to lose my job.</td>
<td></td>
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<td>2</td>
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<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16. I do not read very well.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17. I do not write very well.</td>
<td></td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
<td>6</td>
</tr>
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<td>18. I am afraid I would lose my overtime if I got involved.</td>
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<td>6</td>
</tr>
</tbody>
</table>

Would you say that there is one event (incident) that stands out more than another about why you are not actively involved in your local union?  Yes [ ] No [ ]

If there is one event (incident) that has caused you not to hold an elected/appointed position and/or sit on a union committee, could you please describe it for me. You can complete your answer in the back of the booklet:
SECTION F:

To be completed only by union members who hold elected/appointed positions and/or sit on a union committee in their local.

For each of the following questions, please indicate your agreement or disagreement as to why you may have become active in your union. Please circle or check off the response that most closely represents your opinion about the questions based on the scale listed below. Please answer all questions.

1 = Strongly disagree  
2 = Disagree  
3 = Slightly disagree  
4 = Neither agree nor disagree  
5 = Slightly agree  
6 = Agree  
7 = Strongly agree

The reason that I hold an elected/appointed position and/or sit on a union committee in my local is because:

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>My family has always been involved in the union and it is in my blood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>I was raised to be proud of unions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>One of my close family members was a long time activist.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>I like helping to mediate and resolve problems and complaints.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>I wanted to make a safer workplace.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>I wanted to help others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>There was a need to protect the rights of fellow brothers and sisters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>I like to help fellow employees.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>I want to help my fellow workers understand their rights.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>I was not happy with union executive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>I wasn't happy with the representation that I or anyone of my brothers or sisters were getting, and I wanted to do something about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>Most representatives took the position to only better their own personal cause.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>I didn't feel the officers were open enough with the membership.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14.</td>
<td>I wasn't happy with the union officers at the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td>There was a lack of respect from management towards union members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>There are a lot of problems with management dealing with employees.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td>My supervisors demonstrated a total lack of concern towards safety, health and welfare.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18.</td>
<td>Supervisors were making up rules as they went along.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19.</td>
<td>I saw too many people getting screwed by the company so I started getting involved with the hope that I could protect my fellow employees.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20.</td>
<td>Management's attitude toward workers was very militant.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>21.</td>
<td>Health and safety issues weren't addressed.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>22.</td>
<td>Workers were disciplined for very minor infractions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23.</td>
<td>Benefits and wages were below industry standards.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
</tbody>
</table>
Would you say that there is one event (incident) that stands out more than another, that has led you to become active?

Yes ☐ No ☐

If there is one event (incident) that has led you to become active please describe it for me (there is space at the back of the booklet):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

I wish to thank you for taking the time to complete this survey. I can be reached at 905-525-9140, extension 27019.

Deborah M. Zinni  Dr. Harish Jain
McMaster University, PhD Candidate  Thesis Supervisor, McMaster
University

If you wish to add any comments, please do so in the space below:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix B - Letter of Endorsement from Union

Date:

Dear Brothers and Sisters:

At this time we are working in conjunction with McMaster University on a Research study concerning members decisions to either participate or not in local union’s activities. This is a study that is particularly important to all of us, and we are therefore endorsing the efforts of McMaster University, and their researcher, Deborah Zinni, who is a PhD candidate.

Attached you will find a survey which we ask all members, whether active, or not, to complete and return in the enclosed self-addressed envelope, with prepaid postage, to the researcher at McMaster University. Only she will have access to the data, and will not, under any circumstance, reveal anything about individual responses back to our union. She is bound by rules of ethics within the academic community to maintain confidentiality, therefore not allowing her to disclose anything about any particular member, or local. For our interest in the study, she will be sending us a consolidation of the results only. Deborah explains more about confidentiality at the beginning of the survey.

We ask that you take the time to complete this survey, as the results are beneficial not only to the researchers and the union, but also to you. The results of these types of studies help us to form policies that help all of our members, therefore it is important that both active and inactive members participate so that everyone’s voice is heard.

In solidarity,
Appendix C - Reminder Card

(Front of Card)
Deborah M. Zinni, PhD Candidate
McMaster University
1280 Main Street West
Room MGD503
Hamilton, Ontario L8S 4L8

FRIENDLY REMINDER!!

(Back of Card)

In the past few weeks you were sent a survey which was endorsed by your Union. A self-addressed return envelope with prepaid postage was also enclosed. Some surveys have been returned, however, I am still waiting for further responses.

If you have already returned your survey I sincerely thank you. For those who have not yet completed or returned the survey, I encourage you to do so. Please call me if you require any assistance in completing the survey at 905-525-9140, ext. 27019, or e-mail me at zinnidm@mcmaster.ca.

Deborah Zinni, PhD Candidate
McMaster University
COMPLETE THE ATTACHED SURVEY AND HAVE A CHANCE TO WIN A GIFT CERTIFICATE TOWARDS A DVD PLAYER
(Value not to exceed $300)

I really need your participation!! If you complete this survey and I receive it by February 20, 2002, your name will be entered into a draw to be held February 26, 2002 for a chance to win one of the following prizes:

1st Prize: $300 Gift Certificate for a DVD player (or cash if you prefer)
2nd Prize: $50 Sears Gift Certificate

The information on the survey will remain separate from this draw. However, in order to qualify for the draw, you must answer all questions in the survey. If you are not comfortable providing your full name below, please only provide your first name, and put in your telephone number or e-mail address, so that if you win, I can easily contact you. I am personally paying for the "prizes" in order to encourage participation. No one, other than myself, will have access to either your survey or this ballot. Kindly complete the information below and return it with your survey in the enclosed envelope with prepaid postage.

Your name (first name only): ____________________________________________

Your telephone number or e-mail (this must be completed): ____________________

Deborah Zinni, PhD Candidate
McMaster University
zinnidm@mcmaster.ca
1-905-525-9140
Appendix E – Factor Distributions

Administrative

Supportive
Intermittent

Frequency

Std. Dev = 2.79
Mean = 7.6
N = 254.00

Intermittent
Appendix F

Scree Plot

Eigenvalue

Component Number
References


196


