



Extraversion and Organizational Work Beliefs as Pre-Employment Predictors of Union Attitudes

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Abstract

In order to examine the role of personality and work beliefs as determinants of general union attitudes and the willingness to join a union, a model of extraversion, organizational work beliefs, union attitudes, and joining intentions was developed and tested. Structural equation modeling procedures indicated significant linear relationships among these constructs as hypothesized within the model. The ramifications of these relationships for both union leaders and company executives are discussed, along with directions for future research endeavors.

In an attempt to better understand labor unions and the unionization process, researchers have often examined the issues surrounding the individual decision to vote for union certification, or more generally, the willingness to join a union. These researchers have consistently shown a significant relationship between voting/joining intentions and general individual attitudes toward labor unions (e.g., Brett, 1980). And yet, despite the apparent importance of general union attitudes as a predictor of the willingness to join a union, relatively few efforts have been made to examine the determinants of these attitudes. The purpose of this paper is to more clearly delineate the antecedents of general union attitudes. Specifically, this study examines the role of extraversion and organizational work beliefs as predictors of general union attitudes.

General Determinants of Union Voting Intentions

The willingness to join or vote for a union has often been utilized as an indicator of actual joining or voting behaviors (e.g., Getman, Goldberg, & Herman, 1976). Indeed, as Fishbein and Ajzen (1975) have suggested, a behavioral intention (in this case, the intention to join or vote for a union) is the single best predictor of actual behavior. Utilizing Fishbein and Ajzen's (1975) general model of behavioral intentions as a theoretical framework, Montgomery (1989) has proposed that the willingness to join or vote for a union is influenced by two main categories of determinants: attitudinal factors and normative factors. Attitudinal influences can include both general attitudes toward unions and specific attitudes toward unions (i.e., attitudes based upon instrumentality evaluations of unionization in a specific context). In contrast, normative influences are a function of the extent to which the individual feels pressure to comply with the thoughts and opinions of family members, co-workers, supervisors, and other referents. Although normative influences undoubtedly have a significant impact on individual voting intentions, a complete review of this category of influence is beyond the scope of this paper. The main focus of the present study is on the attitudinal factors that influence individual willingness to join a union.



Attitudinal Determinants of Union Voting Intentions

A growing body of research has addressed the influences of union attitudes on an individual's willingness to join a union. Based on this literature, a fundamental attitudinal model of union voting intentions is presented in Figure 1. As demonstrated in the model, the willingness to join a union is influenced by both general union attitudes and specific union-related instrumentalities. A careful distinction between these two concepts has been drawn in the literature (Barling, Fullagar, & Kelloway, 1992; Desphande & Fiorito, 1989). This distinction can be easily illustrated by the fact that while many non-unionized Americans view unions as generally effective in increasing wages and improving working conditions (i.e., general union attitudes), most insist that a union would not improve *their own* wages and working conditions (i.e., specific union instrumentalities) (Kochan, Katz, & McKersie, 1986). General union attitudes tend to be measured with items referring simply to "unions" with no greater degree of specificity (e.g., McShane, 1986). The statement "Unions are a positive force in this country" represents a typical assessment item. In contrast, union instrumentality is a much narrower construct (Desphande & Fiorito, 1989). Union instrumentality refers to the extent to which a specific union is perceived as instrumental in resolving dissatisfaction or in leading to valued outcomes (Barling et al., 1992). The distinction in union attitude specificity is not a new concept. Scholars, such as Bakke (1945), have long noted that workers join specific unions, not unions in general.

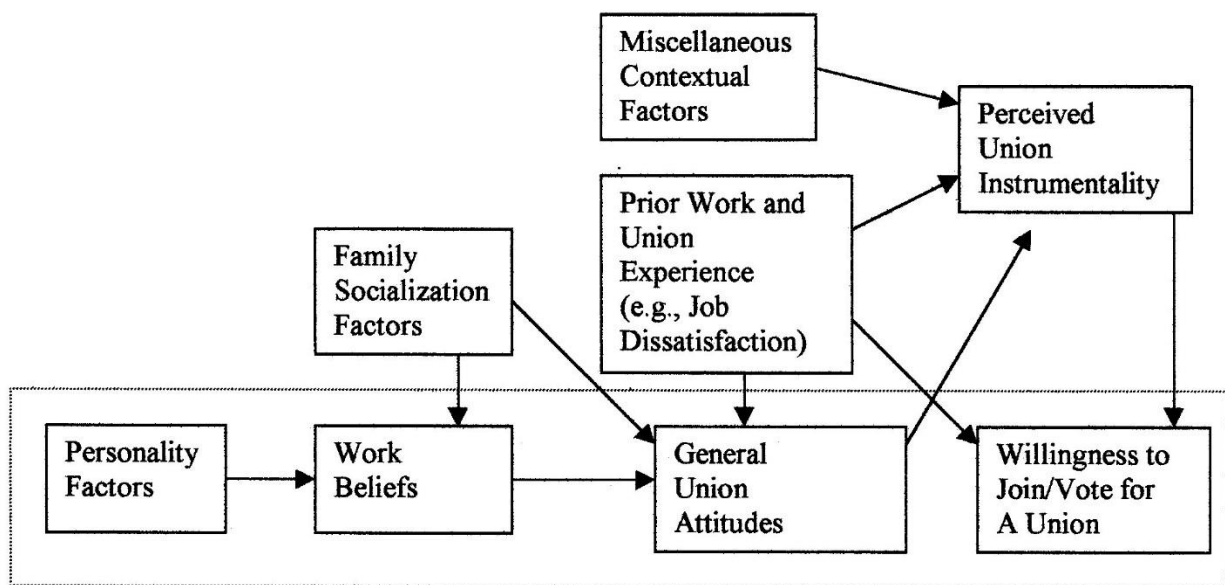


Figure 1
Fundamental Attitudinal Model of Union Voting Intentions

According to the Fishbein and Ajzen (1975) model of behavioral intentions, it seems likely that union instrumentalities would be much more efficacious in predicting the willingness to join a union than would general union attitudes. Indeed, Fishbein and Ajzen have cautioned



that "accurate prediction of a given intention...can be expected only when the attitudinal and normative components of the model are measured at the same level of specificity as is the intention" (p. 333). It is not surprising then that a number of studies have demonstrated support for a positive relationship between perceived union instrumentalities and intentions to join or vote for a union (e.g., Beutell & Biggs, 1984; DeCotiis & LeLouarn, 1981; Deshpande & Fiorito, 1989; Premack & Hunter, 1988). On the other hand, beginning with the findings of Getman et al. (1976), research studies have also consistently supported a relationship between *general* union attitudes and the willingness to join a union (e.g., Barling, Kelloway, & Bremermann, 1991; Deshpande & Fiorito, 1989; Dickens, 1983; Schriesheim, 1978).

Clearly, as Barling et al. have noted, "it is apparent that both general and specific attitudes predict union voting preferences" (1992, p. 56). In fact, based on zero-order correlations alone, general and specific attitudes appear equally important (e.g., Deshpande & Fiorito, 1989; Schriesheim, 1978). However, multivariate techniques that allow for the examination of both influences simultaneously have generally supported the notion that specific perceptions of union instrumentality are more predictive of joining intentions than general union attitudes (Barling et al., 1992; Deshpande & Fiorito, 1989). Nevertheless, while it appears that specific instrumentality perceptions may be of greater importance in terms of relative predictive power, the effectiveness of general union attitudes as a predictor of the willingness to join a union has been clearly established.

While a substantial amount of research has addressed the relationship between attitudes and voting/joining intentions, relatively few efforts have been made to identify the origins of union attitudes. Antecedents to union instrumentality may be divided into two broad categories: prior work/union experiences and miscellaneous contextual factors. Within the category of prior work experience, job dissatisfaction has received the majority of research attention. In fact, the hypothesis that dissatisfied workers are more likely to join or vote for a union has been more closely investigated than any other hypothesis aimed at understanding union voting behavior (Barling et al., 1992). The general conclusion from this stream of research is that dissatisfied individuals are more likely to vote pro-union (DeCotiis & LeLouarn, 1981; Fiorito, Gallagher, & Greer, 1986; Getman et al., 1976; Heneman & Sandver, 1983; Youngblood, DeNisi, Molleston, & Mobley, 1984; Zalesney, 1985). Within this body of literature, research has focused on specific issues such as dissatisfaction with pay, job security, working conditions, and job characteristics (Barling et al., 1992). In addition to job dissatisfaction, it is likely that other prior experiences with a specific union or with a specific job will help to shape specific individual instrumentalities regarding unionization.

Aside from work experiences and job dissatisfaction, a number of miscellaneous contextual factors have been suggested as determinants of individual union voting intentions. For example, some studies have examined the influence of campaigns for and against union representation (e.g., Getman et al., 1976), while others (e.g., Cooke, 1983) have investigated the impact of financial and economic factors such as the inflation rate, the unemployment rate, and personal financial strain. Finally, past research (e.g., Barling et al., 1992; Premack & Hunter, 1988) has suggested that work experience factors such as job dissatisfaction can influence union voting intentions both directly and indirectly, with instrumentality perceptions and general union attitudes serving as potential mediators of the relationship (see Figure 1).



The present study focuses on the predictors of general union attitudes. As demonstrated in Figure 1, prior research has suggested that general union attitudes may be influenced by three categories of factors: work beliefs, family socialization, and personality factors. In the area of work beliefs, several studies have demonstrated significant relationships between Marxist work beliefs, humanistic work beliefs, and union attitudes (Barling et al., 1991; Buchholz, 1978; Fuller & Hester, 1997; Kelloway & Newton, 1996; Kelloway & Watts, 1994). Family socialization factors have also been examined as antecedents to both work beliefs and general union attitudes. Specifically, research has provided evidence supporting significant relationships between parents' work beliefs, parents' union participation, parents' union attitudes, and students' union attitudes (Barling et al., 1991; Dekker, Greenberg, & Barling, 1998; Fuller & Hester, 1997; Kelloway, Barling, & Agar, 1996; Kelloway & Newton, 1996; Kelloway & Watts, 1994;).

While much research attention has been given to family socialization factors, individual personality factors have been almost completely ignored as potential antecedents to union attitudes. There are, however, two notable exceptions. Utilizing Rotter's (1966) locus of control concept, Beutell and Biggs (1984) and Bigoness (1978) have tested the hypothesis that externals (i.e., those that perceive their environments as being under the control of powerful external forces) are more likely to have positive attitudes toward unions. Unfortunately, the results of these two studies were mixed. Beutell and Biggs (1984) found no significant relationship between locus of control and union attitudes while Bigoness (1978) found only a relatively weak positive relationship. Beyond these attempts, investigations of personality variables as predictors of union attitudes have been virtually nonexistent. Nevertheless, despite limited research evidence, Barling et al. (1992) have speculated that personality characteristics and work beliefs are likely to exert a significant but indirect effect on union voting intentions as mediated by general union attitudes. These relationships, as shown within the broken-line box in Figure 1, are the focus of the current study.

Extraversion, Organizational Work Beliefs, and General Union Attitudes

The present study makes significant contributions to the literature in two important ways. First, this study takes an initial step toward filling a substantive gap in the literature by investigating the role of personality characteristics as determinants of general union attitudes. Specifically, this research investigates the role of extraversion as a predictor of union attitudes and joining intentions. Second, while other researchers (e.g., Barling et al., 1991; Buchholz, 1978; Fuller & Hester, 1997; Kelloway & Newton, 1996; Kelloway & Watts, 1994) have examined the role of Marxist work beliefs, humanistic work beliefs, and work ethic beliefs in determining union attitudes, the current study is the first to examine the role of organizational work beliefs as predictors of union attitudes. A hypothesized model showing the relationships among extraversion, organizational beliefs, union attitudes, and willingness to join a union is presented in Figure 2. As indicated in the model, extraversion, organizational work beliefs, general union attitudes, and willingness to join a union are hypothesized to be related in a linear causal chain. In the following sections, theoretical rationale will be developed to support the proposed linkages in the model and research hypotheses will be presented based on these linkages.

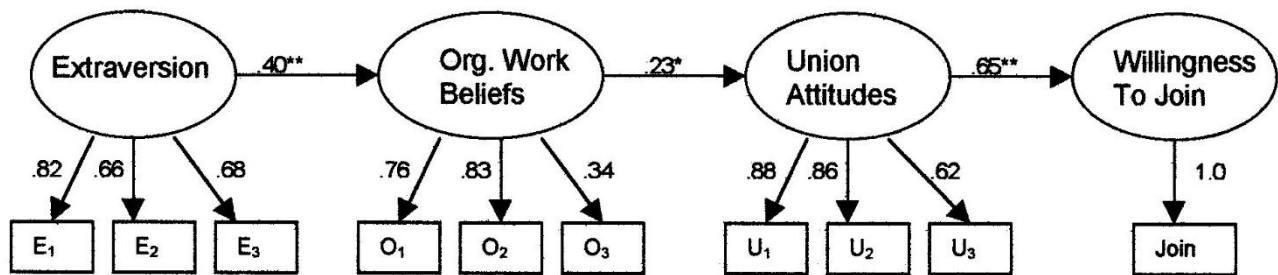


Figure 2
Proposed Model and Standardized Parameter Estimates * $p < .05$, ** $p < .01$

General union attitudes have received a substantial amount of research attention as a predictor of several union-related outcomes such as commitment to a union (e.g., Fullagar, McCoy, & Shull, 1992), participation in union activities (e.g., McShane, 1986), and willingness to join or vote for a union (e.g., Barling et al., 1991; Brett, 1980; Desphande & Fiorito, 1989; Dickens, 1983; Schriesheim, 1978). In one notable study examining the willingness to join or vote for a union, Getman et al. (1976) were able to successfully predict 79% of the union vote in 33 representation elections on the basis of general union attitudes alone. Evidence such as this suggests a strong positive relationship between general union attitudes and the willingness to join a union. Based on such evidence,

Hypothesis 1: Pre-employment union attitudes are positively related to the willingness to join a union.

As conceptualized by Buchholz (1978), organizational beliefs address the relative importance of the group or organization as compared to the individual. Work is meaningful only as it affects one's group or organization (Buchholz, 1978). People with well-developed organizational beliefs have a preference for working in a group as opposed to working alone. Furthermore, those holding such beliefs view the group as superior to the individual as a mechanism for decision making and goal attainment (Buchholz, 1978). Indeed, empirical research has demonstrated linkages between strong organizational beliefs and the collectivist-oriented cultures found in Russia and Arabic nations (Abdalla, 1997; Puffer, McCarthy, & Naumov, 1997). Given the Buchholz (1978) conceptualization of organizational beliefs, it may be logically hypothesized that those individuals who prefer to accomplish objectives through association with a group or organization (i.e., those holding organizational work beliefs) will have more positive general attitudes toward unions. A labor union is simply a group or organization of workers that serves as a collective mechanism for gaining work-related outcomes. While no prior research has directly examined the relationship between organizational work beliefs and union attitudes, Buchholz (1978) reported much stronger organizational work beliefs for union leaders than for any other category of individuals surveyed. Specifically, union leaders had a standardized mean score of .77 for organizational beliefs, as compared with standardized mean scores of -.28 for top managers and professionals, .20 for hourly workers, .38 for high school graduates, and -.10 for college graduates. Given this evidence and based on the logic outlined above,



Hypothesis 2: Organizational work beliefs are positively related to pre-employment union attitudes.

The extraversion construct is most often represented by those who are sociable, gregarious, talkative, assertive, adventurous, active, energetic, and ambitious (Mount & Barrick, 1995). Sociability is perhaps the most manifest aspect of extraversion. Costa and McCrae (1992) have noted that extroverts like being around other people and have a highly developed need for affiliation, preferring large groups and gatherings. Research has shown that extraverts prefer social activities and team sports as opposed to being alone when deciding how to spend their leisure time (Emmons, Diener, & Larsen, 1986). Furthermore, extraverts and those with a higher need for affiliation show a preference for socially oriented vocations (Costa, McCrae, & Holland, 1984) and team-oriented organizational cultures (Judge & Cable, 1997; O'Reilly, Chatman, & Caldwell, 1991). Finally, research evidence has shown significant positive relationships between extraversion and self-efficacy for participating in a self-managed work group (Thoms, Moore, & Scott, 1996) and between extraversion and work team performance (Barrick, Stewart, Neubert, & Mount, 1998; Barry & Stewart, 1997). Given this evidence, it seems logical to predict that extraverts would generally value the group or the organization above the individual. Hence it follows,

Hypothesis 3: Extraversion is positively related to Organizational Work Beliefs.

Finally, there is no theoretical justification for any direct effects of extraversion on either union attitudes or the willingness to join a union. Thus, the relationships among these constructs are likely to be linear, as demonstrated in Figure 2. Accordingly,

Hypothesis 4: The relationships among extraversion, organizational work beliefs, general union attitudes, and the willingness to join a union are linear such that no direct relationship exists between extraversion and union attitudes and no direct relationship exists between extraversion and the willingness to join a union.

Method

Participants

Questionnaires were administered to 177 undergraduate students in a large southeastern university. List wise deletion due to missing data resulted in a final sample of 168 students (mean age = 21.26, $SD = 2.26$, 115 men, 53 women). Pre-employed young adult subjects are especially befitting to the objectives of the current study since their beliefs and attitudes can be assessed independently, apart from work and organizational experiences (Barling et al., 1991; Barling et al., 1992; Fuller & Hester, 1997).

Measures

Extraversion. Participants completed the warmth, gregariousness, and positive emotion facet scales from the NEO-Personality Inventory (NEO-PI) (Costa & McCrae, 1992). Each facet scale consists of 8 statements. Respondents are asked the extent to which they agree or disagree with



each statement on the basis of a five-point Likert-type scale ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree." Examples of NEO-PI extraversion facet statements are "I really enjoy talking to people" and "I like to have a lot of people around me." The warmth, gregariousness, and positive emotion facet scales were internally consistent in the present sample ($\alpha = .78, .82, \text{ and } .70$ respectively)

Organizational Work Beliefs. Organizational Work Beliefs were assessed using Buchholz's (1978) inventory of belief statements. The Organizational Work Belief sub-scale consists of 8 items ($\alpha = .73$) including "Working with a group is better than working alone." The items are measured using a five-point Likert-type scale ranging from 1 = "Strong Disagreement" to 5 = "Strong Agreement."

Pre-Employment General Union Attitudes. General union attitudes were assessed with a 14-item union attitude questionnaire ($\alpha = .87$) similar to that used in earlier research by Barling et al. (1991), Kelloway and Watts (1994), and Kelloway and Newton (1996). This scale is comprised of McShane's (1986) General Union Attitude Scale and items from Getman et al.'s (1976) Union Attitude Index. The combined scale utilized in the present study consists of items such as "Unions are a positive force in this country" and "Unions are becoming too strong." Each item was assessed using a five-point Likert-type scale ranging from 1 = "Strong Disagreement" to 5 = "Strong Agreement."

Willingness to Join a Union. Subjects' willingness to join a union was assessed with the single item: "I would willingly join a union" (*yes, uncertain, no*). Although single-item scales can be problematic, this means of assessment is consistent with the approach taken in other studies examining willingness to join or union voting intentions (e.g., Barling et al., 1991; Beutell & Biggs, 1984; Bigoness & Tosi, 1984; Deshpande & Fiorito, 1989).

Analysis

The fit of the hypothesized model was assessed by using the maximum likelihood estimation technique in LISREL 8 (Jöreskog & Sörbom, 1993). In accordance with the recommendations of Hoyle and Panter (1995), the following fit indexes were used to assess the fit of the hypothesized model: chi-square (χ^2 , e.g., Bollen, 1989a), the goodness-of-fit-index (GFI, Jöreskog & Sörbom, 1981), the nonnormed fit index (NNFI, Bentler & Bonnett, 1980), the incremental fit index (IFI, Bollen, 1989b), and the comparative fit index (CFI, Bentler, 1990). The use of multiple fit indexes is generally advisable in order to provide convergent evidence of model fit. The values of GFI, NNFI, IFI, and CFI range from 0 to 1.0, with values above .90 commonly indicating acceptable model fit (Bentler & Bonnet, 1980; Hoyle & Panter, 1995). Finally, sequential χ^2 difference tests were used to assess changes in fit between the hypothesized model and competing nested models (e.g., Anderson & Gerbing, 1988; Bollen, 1989a).

Model fit indexes can be misleading when the number of latent variables is small relative to the number of observed variables (Collin & Gleaves, 1998; Marsh, Antill, & Cunningham, 1989; Schmit & Ryan, 1993). Hence, established item-parceling procedures (e.g., Barry & Stewart, 1997; Collins & Gleaves, 1998; Schmit & Ryan, 1993) were utilized in the current



study. Items were randomly divided and summed to form representative item composites for organizational work beliefs and general union attitudes. In addition, the items for the warmth, gregariousness, and positive emotion facet scales were summed to form composite indicators for extraversion. Forming composites allows for fewer parameter estimations and greater stability of estimates given a relatively small sample size (e.g., Marsh et al., 1989). Finally, the willingness to join a union was treated as a manifest variable in the hypothesized model; that is, perfect measurement was assumed. Accordingly, the factor loading for willingness to join was set to one and the error variance was set to zero. In sum, ten indicator variables were used to estimate the measurement model: three each for extraversion, organizational work beliefs, and union attitudes, and one for willingness to join a union.

The analysis of the hypothesized model was conducted utilizing a two-step modeling approach as recommended by Anderson and Gerbing (1988). The first step involved the analysis of the measurement model, while the second step tested the structural relationships among latent constructs. A two-step process is preferred because it allows for an examination of the structural relationships in the model after first ensuring that the latent constructs are adequately measured.

Results

Descriptive statistics and intercorrelations among indicator variables are presented in Table 1. The measurement model was assessed using a confirmatory factor analysis model that specified the relations of indicator variables to the underlying constructs with the constructs allowed to intercorrelate freely (Anderson & Gerbing, 1988). As indicated in Table 2, the measurement model demonstrated fairly good fit ($\chi^2 [30, N = 168] = 46.61$, GFI = .95, NNFI = .95, IFI = .97, CFI = .97). Accordingly, respecification of the measurement model was deemed unnecessary.



Indicator Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Join	1.12	.708	----									
2. U ₁	10.66	3.36	.534**	----								
3. U ₂	10.27	2.70	.603**	.765**	----							
4. U ₃	9.44	1.97	.433**	.569**	.491**	----						
5. O ₁	7.14	2.25	.060	.182*	.054	.227**	----					
6. O ₂	7.36	1.95	.123	.249**	.077	.221**	.637**	----				
7. O ₃	5.60	1.13	-.038	.020	-.017	.202**	.278**	.261**	----			
8. E ₁	21.42	4.61	-.023	.051	.018	.062	.201**	.297**	.168*	----		
9. E ₂	18.32	5.96	.035	.076	.051	.109	.225**	.233**	.192*	.534**	----	
10. E ₃	20.89	4.28	.004	.134	.074	.129	.193*	.163*	.216**	.565**	.449**	----

Table 1. Means, Standard Deviations, and Intercorrelations Among Indicator Variables

Note. *N* = 168. Join = Willingness to Join a Union, U₁=Union Attitudes Composite 1, U₂=Union Attitudes Composite 2, U₃=Union Attitudes Composite 3, O₁=Organizational Work Beliefs Composite 1, O₂=Organizational Work Beliefs Composite 2, O₃= Organizational Work Beliefs Composite 3, E₁=Warmth Facet Composite, E₂=Gregariousness Facet Composite, E₃=Positive Emotions Facet Composite.
 ***p*<.01 (two-tailed), **p*<.05 (two-tailed).

Table 1
Means, Standard Deviations, and Intercorrelations Among Indicator Variables

Fit indexes for the covariance structure models tested are shown in Table 2. The hypothesized model (Model 3 in Table 2) demonstrated an acceptable fit to the data (χ^2 [33, *N*= 168] = 47.72, GFI = .95, NNFI = .96, IFI = .97, CFI = .97). The standardized solution for the hypothesized model is shown in Figure 2 with measurement error effects omitted for clarity. All hypothesized linkages were significant at the α = .05 level. Thus, hypotheses 1-3 were fully supported.



Model	χ^2	df	GFI	NNFI	IFI	CFI	χ^2 difference	df
1. Measurement	46.61	30	.95	.95	.97	.97		
2. Null	590.52	45						
3. Hypothesized	47.72	33	.95	.96	.97	.97		
Model 3-2 difference							542.80	12
4. Add path: Extraversion→Union Attitudes	47.72	32	.95	.96	.97	.97		
Model 4-3 difference							.00	1
5. Add path: Extraversion→Willingness to Join	46.67	32	.95	.96	.97	.97		
Model 5-3 difference							1.05	1
6. Add path: Org. Work Beliefs→Willingness to Join	47.30	32	.95	.96	.97	.97		
Model 6-3 difference							.42	1

Table 2
Fit Indexes for Covariance Structure Analysis

Alternative nested models were then tested to assess whether fit might be improved by adding paths from extraversion to union attitudes (Model 4 in Table 2), from extraversion to willingness to join a union (Model 5 in Table 2), and from organizational work beliefs to willingness to join a union (Model 6 in Table 2). As reflected in Table 2, sequential χ^2 difference tests indicate that the addition of each respective path created only a miniscule and non-significant change in the χ^2 values. Hence, the more parsimonious hypothesized model was retained. Additionally, the standardized parameter estimates for the paths added in Models 4-6 were non-significant with values of .00, -.07, and -.05 for each path respectively. Thus, hypothesis 4 was supported; the relationships among these constructs are linear with no direct relationships between extraversion and either union attitudes or the willingness to join a union.

Discussion

The purpose of this study was to more clearly delineate the antecedents of union attitudes and joining intentions. This research makes a significant contribution in this area by expanding an existing process model of union attitudes (e.g., Barling et al., 1992) to examine the role of personality characteristics as predictors of organizational work beliefs. The current study replicated previous findings linking general union attitudes with the willingness to join a union. Further, the present results confirmed hypothesized relationships between extraversion, organizational work beliefs, union attitudes, and the willingness to join a union. These findings have important theoretical implications for future researchers. First, the evident role of extraversion as a determinant of organizational work beliefs indicates the potential for other personality characteristics to serve as antecedents of other work belief systems. Thus, future researchers should attempt to investigate the role of other personality factors as predictors of work beliefs. For example, the openness to experience construct could possibly be related to



humanistic work beliefs, while certain facets of conscientiousness may be predictive of work ethic beliefs.

Second, the significant linear relationships demonstrated here provide additional evidence for the utility of a process model of non-job-related factors in predicting union attitudes as suggested by Barling et al. (1992). It is important to note that there were no direct effects of extraversion on either general union attitudes or willingness to join a union. Extraverts apparently do not generally hold more favorable attitudes toward unions, nor are they more likely to be willing to join a union. Rather, in this context, extraversion is predictive only to the extent that it leads to the development of organizational work beliefs. Likewise, organizational work beliefs are not in themselves predictive of joining intentions. Their effects on joining intentions must be processed through the development of positive general union attitudes. Future research should continue to develop this process-oriented model by examining alternative work beliefs as well as other possible predictors beyond family socialization and personality factors. For instance, researchers could examine the role of gender or culture in determining certain work beliefs. As mentioned above, prior research has demonstrated highly developed work belief systems within certain cultures (Abdalla, 1997; Puffer, McCarthy, & Naumov, 1997). It is possible that such research could be refined and incorporated into a more comprehensive model of union attitudes.

The present findings also have significant practical implications. The question of voting intention is one of great interest to union and company officials alike. To the extent that the predictors of pro-union voting intentions can be understood and delineated, both labor and management will gain a better perspective on the ways in which these behavioral intentions may be anticipated and influenced. The results of the current study, coupled with previous findings, suggest that the unionization process is influenced by a variety of non-job factors long before the union certification campaign and election process. If voting intentions are largely determined by dispositional and family socialization influences, then the utility of many tactics employed by labor and management may need to be reexamined. Indeed, Getman et al. (1976) found that, despite the presence of intense and occasionally illegal campaigning by both union and management, employees' voting behaviors were consistently predicted by *pre-campaign* union attitudes.

Finally, the research reported here has certain limitations. First, although the structural equation modeling methodology employed in this study enjoys certain advantages over other methods utilized in testing causal relationships, causality cannot be unequivocally determined given the cross-sectional nature of the data. However, theoretical justification and logical arguments have been provided in support of the proposed directionality of the relationships examined. In addition, extraversion is generally conceptualized as trait that is relatively stable across time and situation. It therefore seems unlikely that the possession of organizational work beliefs would cause an individual to become more extraverted. Further, it seems illogical to argue that positive attitudes toward unions would necessarily cause a person to value the organization or group over the individual. Nevertheless, future research involving longitudinal data would be useful in determining causality and the extent to which joining intentions lead to actual behavior.



Second, given the exploratory nature of this study, future researchers should attempt to replicate these findings in another sample. Furthermore, although the present sample of pre-employed young adults was of interest because their work beliefs were not job dependent, future researchers should also examine the extent to which the present findings generalize in samples from other populations of interest.

In summation, the results of this study support a process model of non-job factors, including personality characteristics, as antecedents of union attitudes and joining or voting intentions. Specifically, the findings reported here suggest that extraversion predicts organizational work beliefs, which in turn predict union attitudes and the willingness to join a union. By examining extraversion and organizational work beliefs, this study has made an important contribution to the understanding of the predictors of union attitudes and voting intentions.

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