The psychological impact of industrial strikes: Does involvement in union activity
during strikes make a difference?

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Abstract

The current study investigated the psychological impact of a United Steelworkers of America strike on the steelworkers involved, and the relationship between psychological well-being and individuals' levels of involvement in union activity during the strike. Three hundred and fifty-one steelworkers (302 'strikers' and 49 'non-strikers') completed surveys measuring a range of demographic and psychological well-being variables. Strikers, compared to non-strikers, reported higher levels of depression, anxiety, and irritation, and lower levels of mental health. For strikers, engaging in higher levels of union activity during the strike was associated with better psychological well-being. Jahoda's theory of deprivation during unemployment is used as the lens through which to explain some of the results, supporting the view that latent benefits associated with work are important for psychological well-being. A range of practical implications are offered for unions and their members.

Background

On 18 November, 2004, the members of United Steelworkers of America¹ (USWA) Local Union 5760 voted to go on strike. They were employees who worked at the Ormet Corporation's aluminum rolling mill in Hannibal, Ohio. From the Union's perspective, strike was an undesirable, but unavoidable, option given that their employer, over a period of 18 months, had refused to negotiate a fair labour agreement. Of particular concern was the employer's intention to drastically reduce health insurance benefits to retirees. On the same day, their union colleagues from Local 5724, employed at Ormet's aluminum reduction facility situated one mile up the Ohio River, also voted to strike.

Four days later, at 8.00am on 22 November, 2004, the strike commenced with hundreds of steelworkers picketing the gates of Ormet's rolling mill and reduction facilities. The strikers shared a passion for their cause and considerable optimism about the outcome of their action. They hoped for a short-term strike resulting in a fair labour agreement and a speedy return to work. Instead, a 19-month battle continued until June 2006 with devastating outcomes for hundreds of the 1200 steelworkers on strike.

The current study investigated the psychological impact of this strike² (i.e., depression, anxiety, irritation, mental health, and marital quality) for the steelworkers involved. The study also examined the relationships between psychological well-being and individuals' levels of involvement in union activity during the strike.

The Psychological Impact of Strikes

A great deal of research has been conducted on the effects of strikes on industry and community (see MacBride et al. 1981 for a brief review), including stock market prices (Becker & Olson 1986), organisations and companies (Ackermann 1979; Aussieker 1977; Fuess 1990), competitors (McDonald & Bloch 1999), industries associated with the strike (Maki 1983), and social problems (Chermesh 1985). There is considerable evidence that strikes are associated with negative social outcomes, for example, acts of violence against persons and property (Thompson & Borglum 1973), increased hostility between management and workers (Nicholson & Kelly 1980), and divisions between union leaders and rank-and-file members (Lane & Roberts 1971). Further, it has been widely reported in the popular media and via personal communication with strikers and their families that there are severe negative psychological (e.g., depression, anxiety, suicidal thoughts) and behavioural (e.g.,

substance abuse, marital breakdown, violence, suicide) consequences of involvement in labour disputes. However, with the exception of two studies (i.e., Barling & Milligan 1987 and MacBride et al. 1981), there has been little empirical investigation of the link between involvement in strikes and the psychological well-being of those most directly and personally involved, the strikers themselves.

MacBride and his colleagues (1981) examined the psychosocial impact of a labour dispute involving Canadian air traffic controllers. Although the controllers had voted to strike, they were prevented from doing so by federal government legislation passed before the strike commenced. MacBride et al., using the 30-item General Health Questionnaire to measure mental health, found that the level of psychological distress was significantly higher during the dispute than when measured four and 10 months later. The dispute was also accompanied by deterioration in perceived general functioning, perceived physical health and perceived anxiety.

Barling and Milligan (1987) also examined the psychological consequences of involvement in a strike. They collected data from white collar union members immediately following a 22 day strike and again two and six months later. Marital dysfunction, psychosomatic symptoms and psychological disturbance were present on completion of the strike, and unfavourable changes in psychological well-being continued over the next two and six months. Barling and Milligan attributed the decline in psychological well-being to several processes that occur for individuals during strike, viz. changes in financial and employment status, shifting of relationships and roles, and uncertainty and unpredictability about outcomes.

There is considerable similarity in the psychological processes that occur during and following a strike (Barling & Milligan 1987) and those that account for negative psychological change during and following unemployment (Warr 1984). Thus, it is not difficult to draw a parallel between the research on unemployment or under-employment with the current research on long-term strike, in regard to psychological well-being. Fryer (1986) pointed out that research findings concur that unemployment is causally responsible for negative psychological change that is, in most but not all cases, distressing and debilitating. Jahoda (1979) explained the cause of this negative change. She argued that people engaged in paid employment receive a manifest benefit (i.e., earn a living) and are also supported psychologically from five latent benefits of employment, viz. time structure on the day, social contacts outside the nuclear family, collective goals and purposes, status and social identity, and regular activity. Jahoda proposed that while people who lose their jobs or are underemployed are deprived of both manifest and latent benefits of employment, it is the deprivation of the latter that reduces psychological well-being. Certainly, Feather and Bond (1983) associated the lack of time structuring during unemployment with depression and a lower state of psychological health. Conversely, Fryer (1986) argued that lower levels of psychological well-being were caused by the loss of the manifest benefit of employment (i.e., income). Jahoda's and Fryer's propositions, however, are not mutually exclusive. Evidence from a number of studies (see Creed & Muller 2006 for a brief review) is that those having less access to the latent *and* manifest benefits of employment have lowered levels of psychological well-being. Given that similar benefits associated with work are withdrawn during an industrial strike, it could be expected that lower levels of psychological well-being would be

experienced by strikers. Specifically, it could be expected that strikers, compared to non-strikers, would experience higher levels of depression, anxiety, and irritation, and lower levels of mental health and marital quality.

Further, if deprivation of the latent benefits of work is associated with lower levels of psychological well-being (as purported by Jahoda 1981 and investigated in the current study), it may be hypothesized that engaging in forms of activity that replace the latent benefits will lead to higher levels of psychological well-being. In other words, individuals who engage in regular activity that provides structure to their day, enables social contact and participation in collective purposes, and enhances status and personal identity will have higher levels of psychological well-being than those who do not undertake such activity. Indeed, Knoke (1981), in reviewing the literature on voluntary associations, determined that individuals who participated, in contrast to non-participants, displayed much higher levels of morale, self esteem, and community orientation and much lower levels of alienation, apathy, and social withdrawal.

One obvious vehicle for replacing the latent variables that are normally associated with work, in the context of the current study, was to engage in activities associated with the strike. During the USW strike, for example, union members had the opportunity to engage in and support a wide range of activities including picket line duty, interstate trips to picket at company headquarters, raising public awareness (e.g., distributing flyers, writing to newspapers), administrative work at the Union office (e.g., organising road trips, phoning members), distributing strike fund cheques and goods from the union food-bank to members, cooking and serving meals for fellow union workers, etc. If lower levels of psychological well-being were experienced by those (strikers) who were not

receiving the latent benefits associated with work (Jahoda 1981), then higher levels of psychological well-being were likely to be experienced by strikers who engaged in activities that provided those benefits. For example, union members who engaged in regular picket line duty or administrative work at the Union office had structure in their day, social contact with other union members, and were part of a collectivity with common goals and purposes. Thus, on the basis of Jahoda's (1979) theory, it seemed logical to predict that individuals' psychological well-being would be affected by their level of engagement in strike activity. Indeed, MacBride and his colleagues (1981) called for investigation into the relationship between the psychosocial impact of an industrial dispute and strikers' involvement in the dispute. In the current study, it was predicted that higher engagement in strike activity would be associated with lower levels of depression, anxiety, and irritation, and higher levels of mental health and marital quality.

The variables employed to provide a multi-dimensional measure of 'psychological well-being' in the current study (viz. depression, anxiety, irritation, and general mental health) were chosen on the basis that they are the most common, popular, and frequently used measures in research on mental health and work. Indeed, a review of 16 studies (Murphy & Athanasou, 1999) comparing the psychological well-being or mental health of employed and unemployed persons showed that all 16 studies had used a measure of depression, anxiety, irritation, or general health, or a combination of these variables in measuring the concept of psychological well-being. Further, the only two studies to date that have empirically investigated the link between involvement in strikes and psychological well-being (i.e., Barling & Milligan 1987 and MacBride et al. 1981) have also used some combination of measures of general mental health, anxiety,

depression, and marital quality. Thus, employing the same variables will enable comparison of results in the limited research conducted in this area.

In those two previous studies (i.e., MacBride et al. 1981 and Barling & Milligan 1987), post-dispute measures were used to examine well-being over a period of time, thus providing some evidence of the negative impact of the dispute. However, there were no comparative data available from either a pre-dispute measure or a comparison group (e.g., non-strikers). Arguably, pre- and post-strike designs are not practical for research on strike populations. First, it is difficult to identify a 'pre-strike' population as the majority of union-management negotiations and/or disputes are settled without engaging in strike action (De Cieri & Kramar 2003). Thus, it is serendipitous for a researcher to have advance knowledge of and access to a population of workers who will be involved in a future strike. Second, pre-strike data on psychological well-being collected immediately prior to a strike (e.g., during the breakdown of union-management negotiations) would be influenced by union members' dissatisfaction with their current work situation and/or anxiety about potential industrial action. Thus, this type of measurement would not provide a valid and reliable baseline. Alternatively, recruiting and utilising an appropriate comparison group (i.e., non-strikers), in addition to a sample of strikers, would strengthen conclusions about the psychological impact of the strike. Indeed, Bluen and Jubiler-Lurie (1990) suggested that future research on industrial disputes would benefit from the inclusion of control group comparisons. The current study recruited an appropriate comparison group (i.e., steelworkers who were not on strike and were working and living in the same geographical region) to investigate two hypotheses about the psychological impact of long-term strike. Hypothesis 1 was that

strikers, compared to non-strikers, would experience higher levels of depression, anxiety, and irritation, and lower levels of mental health and marital quality. Hypothesis 2 was that, for strikers, higher engagement in strike activity would be associated with lower levels of depression, anxiety, and irritation, and higher levels of mental health and marital quality.

Method

Participants

Three hundred and fifty-one members of the USW, employed in the south-eastern region of Ohio, USA, participated in the study. Of the 351 participants, 302 were steelworkers who were currently on strike and had been for a period of six months ('strikers'³) and 49 were steelworkers who were not on strike and had not been for 10 years ('non-strikers'). Twenty-one (7%) of the strikers were living with partners (either married or de facto) who were also on strike and 80 (26.5%) had gained employment elsewhere while on strike.

The 49 non-strikers were considered to be an appropriate comparison group, for the purpose of this study, for several reasons. As shown in Table 1 they did not differ significantly, from the strikers, in terms of demographics, viz. gender, age, marital status, and whether they were the sole earner in their family. Neither did they differ significantly on union or organisational variables such as length of union and company tenure, whether they held an official position in the union, and views on optional union membership or political affiliation (see Table 1).

INSERT TABLE 1 ABOUT HERE

Further, although the strikers and non-strikers were employed by different companies, both groups were steelworkers working in the steel manufacturing industry. The companies for which they worked were predominantly male-oriented organisations with similar working conditions (e.g., shift-work and remuneration) and workforce structure (e.g., hourly employees who were union members and salaried management who were not union members). Strikers and non-strikers were all members of the same union (i.e., USW) albeit in different Locals due to their different work locations. Finally, both companies were based in south-eastern Ohio and their employees lived in similar socio-economic regions in Ohio and nearby West Virginia, USA.

Measures

Demographic, union and organisational variables. Participants provided information about their gender, age, marital status, and whether they were the sole earner in their family. They were also asked about a range of union and organisational variables, such as the length of their union and company tenure, whether they would choose to be a member if union membership was optional, and whether they held an official position in the union. Participants also nominated the political party with which they most closely identified (i.e., democrat, republican, or independent). In addition, strikers were asked whether their partner was currently on strike and whether they had gained employment elsewhere while on strike.

Strike activity. To obtain a measure of strike activity, strikers were asked to report how many times they had visited the picket line, attended union meetings, attended union rallies or gatherings, and engaged in other union activities. These scores were summed to provide a total score of strike activity. This turned out to be an inadequate measure of activity. For example, several participants worked on union ‘road crews’ that were on stand-by to follow delivery trucks that crossed the picket-line, in order to identify the company for which they worked. A crew might be on the road for a 16-hour return trip but this would be recorded as one single incident (or not at all) of strike activity using on the simple quantitative measure. In an extreme example, one highly active union member recorded a very low score on this measure because he was banned by the Court from attending picket line duty (after having been arrested during a picket line incident during the first week of the strike) and therefore had recorded zero visits to the picket line. At the same time, he did not realize that the frequent and lengthy trips he made interstate to picket at company headquarters fell into any of the categories provided in the measure.

To overcome, or at least minimize this limitation, a paid full-time worker at each of the two Union locals, who was involved with all aspects of union operation, rated each member on a scale from 1 (‘low activity’) to 5 (‘high activity’). These expert raters were prompted with a comprehensive list of possible union activities and asked to consider each participant’s overall activity, during the strike, and rate them accordingly. This was a very time consuming but seemingly more accurate, or in this case ‘best possible’, measure of strike activity. To check the reliability of this measure, a second paid full-time worker from each of the two Locals rated a sample (one-third) of the participants from their Local. Inter-rater agreement was 98% and 96% respectively.

Work-related depression, anxiety, and irritation. A 13-item measure developed by Caplan et al. (1975) assessed three dimensions of employee stress and strain. Six items measured depression, e.g., 'I feel unhappy', 4 items measured anxiety, e.g., 'I feel nervous', and 3 items measured irritation, e.g., 'I get angry. All items were measured on a scale from 1 ('never or a little of the time') to 4 ('most of the time'). Three items were reverse-scored and the higher the score the higher the level of depression, anxiety or irritation. Previous research found internal reliability coefficients that ranged from .80 to .86 (Begley & Czajka 1993); in the present study the coefficients were .90, .84, and .92, respectively.

Mental health. The 12-item General Health Questionnaire (GHQ-12) (Goldberg 1972) measured mental health. Items were rated on a 7-point scale ranging from 1 ('not at all') to 7 ('most of the time'). Using the prompt 'during the time that you have been on strike, have you...', participants were asked to respond to, for example, 'been able to concentrate on whatever you're doing' and 'lost much sleep over worry'. Six items were reverse-scored and higher scores represented better mental health. Banks and his colleagues (1980) concluded, in a validation study of the GHQ-12, that it is a useful instrument for the measurement of mental health, particularly in employment-related problems. They reported Cronbach's alphas on three samples from .82 to .90 and the present study calculated .91.

Marital quality. The Dyadic Adjustment Scale – Short Form (Hunsley et al. 1995), developed for married and co-habiting couples, is a 7-item measure of marital quality. A single item measured the degree of happiness in the respondent's relationship with their spouse/partner on a scale from 1 ('extremely unhappy') to 7 ('perfect'). Three

items measured the extent of agreement between the respondent and their partner on, for example, 'philosophy of life', from 1 ('always disagree') to 6 ('always agree'). The final three items measured how often events occur between the respondent and their partner, for example, 'work together on a project', from 1 ('never') to 6 ('more often than once a day'). Higher scores represented a higher degree of quality in the relationship. Hunsley and his colleagues reported internal reliability of .82 in their validation study and the current study recorded .86.

Procedure

Questionnaires were distributed by the researchers, over three consecutive Thursdays, to individuals when they collected their strike funds at the Union hall. Approximately 500 strikers were approached and 302 accepted and completed the questionnaires on the premises for a response rate of approximately 60%. An additional 100 questionnaires were distributed to non-strikers by the union officials at their Local. Forty-nine non-strikers returned questionnaires for a response rate of 49%. Each questionnaire took approximately 20 minutes to complete.

Results

T-tests were used to examine differences between strikers and non-strikers on levels of depression, anxiety, irritation, mental health, and marital quality. Significant effects ($p < .05/5$, i.e., $p \leq .01$) (a Bonferroni adjustment was calculated to avoid inflation of the Type I error rate) were obtained for all dependent variables except for marital quality. Specifically, strikers reported higher levels of depression ($t = 3.79$, p

<.001), anxiety ($t = 4.41, p <.001$), and irritation ($t = 3.06, p <.01$) than non-strikers. In addition, strikers reported lower levels of mental health ($t = -3.52, p <.001$) than non-strikers. Thus, Hypothesis 1 was supported, except in relation to marital quality. Results of the t-tests are reported in Table 2.

INSERT TABLE 2 ABOUT HERE

To examine the relationships between amount of strike activity while on strike ($M = 2.34; SD = 1.298$) and levels of depression, anxiety, irritation, mental health, and marital quality, correlations were conducted. Previous research has suggested a relationship between a number of demographic variables and psychological well-being. Thus, prior to testing the correlations between strike activity and psychological well-being, these relationships were assessed in the present data. First, t-tests were conducted to examine if levels of depression, anxiety, irritation, mental health, and marital quality were affected by whether strikers had gained employment elsewhere while on strike, held an official position in the union, were the sole earner in their family, and the plant at which they were employed. There were no significant effects obtained for any of these variables. Second, bivariate correlations examined whether strikers' age and length of union tenure were significantly related to measures of psychological well-being. Again, there were no significant relationships between the variables. Thus, these demographics were not included in the final analyses.

Results of the analyses conducted to examine relationships between amount of strike activity and psychological well-being indicated that higher amounts of strike

activity were associated with lower levels of depression ($r^2 = .03, p < .01$) and anxiety ($r^2 = .03, p < .01$). However, there was no significant relationship between level of irritation for strikers and strike activity. Results also indicated that higher amounts of strike activity were associated with higher levels of mental health ($r^2 = .02, p < .05$) and that there was no significant relationship between strike activity and marital quality. Thus, in the main, support was found for Hypothesis 2. Results of the analyses are reported in Table 3.

INSERT TABLE 3 ABOUT HERE

Discussion

The current study investigated the psychological impact of being on long-term strike. First, strikers were compared with non-strikers on a range of variables associated with psychological well-being, viz. depression, anxiety, irritation, mental health, and marital quality. Then, the relationships between those psychological variables and the level of strike activity engaged in by strikers were examined.

As stated in Hypothesis 1, strikers reported higher levels of depression, anxiety, and irritation, and lower levels of mental health (but not marital quality) than non-strikers. The results make common sense when reflecting on the processes that Barling and Milligan (1987) suggested occur for individuals during strike (e.g., financial concerns, changing relationships and roles, and uncertainty about outcomes). However, it is useful to have confirmed by empirical methods the data of common sense. The results also support the findings of the small amount of existing literature (i.e., MacBride et al. 1981 and Barling & Milligan 1987) that found unfavourable changes in psychological

well-being for those involved in an industrial dispute. However, the current study extends those findings in two important ways. First, the use of a comparison group of non-strikers from the same industry (who were similar in terms of demographics and working and living conditions) adds considerable weight to the claim that the lower levels of psychological well-being reported by the strikers was attributable to the strike itself.

Second, the sample groups were blue-collar workers from the steel manufacturing industry. The MacBride et al. (1981) and Barling and Milligan (1987) studies investigated disputes involving air traffic controllers and teachers/counsellors, respectively. According to Smith and his colleagues (2000), in a detailed analysis of occupational stress and 'type of job', these two occupations were identified as belonging in the 'highest reported stress' category on the basis of their high levels of educational attainment, salary and socio-economic status. Conversely, Smith et al. found that metal and electrical processors (or steelworkers) were categorized in the second 'lowest reported stress' category. The implication here is that previous conclusions may have been drawn on the basis of samples who, regardless of industrial unrest, regularly report high levels of occupational stress. Given the relationship between occupational stress and psychological well-being (Shirom & Kirmeyer 1988), air traffic controllers and teachers/counsellors may not be the most appropriate samples on which to make generalisations about the relationship between well-being and industrial strike.

The findings of the current study also supported Hypothesis 2 that strikers' psychological well-being would be related to the amount of involvement they had in strike activity. Specifically, as predicted, higher involvement in strike activity was associated with lower levels of depression and anxiety and higher levels of general

mental health (although there was no significant difference in irritation or marital quality). This hypothesis, based on Jahoda's (1979; 1981) theory of deprivation in unemployment, predicted that if the latent (or psychological) benefits normally associated with work activities are gained through alternative activities while on strike, then psychological well-being may not be negatively affected. In finding that strikers who engaged in higher levels of strike activity (e.g., picket line duty, raising public awareness, administrative work for the Union) had higher levels of psychological well-being, the current study lends credence to Jahoda's (adapted) theory that strikers would benefit from regular activity, daily structure, social contact with union members, and a sense of being part of a collective. Further, in finding a relationship between level of strike activity and psychological well-being, despite the fact that the manifest benefit of employment (i.e., income) was not more or less present for strikers regardless of their level of activity, this study supports Jahoda's (1981) claim that it is loss of the latent benefits associated with work that leads to a reduction in psychological well-being and not solely the reduction in income. This is not to suggest, however, that income does not play any part in the lack of psychological well-being reported by strikers (compared to non-strikers). The findings of the current study also support the use of Jahoda's theory in analysing other organisational and social issues and examining populations beyond the unemployed.

There was no significant difference between strikers and non-strikers in regard to marital quality, thus the current study did not support Barling and Milligan's (1987) finding that strike was associated with marital adjustment. This finding does not claim that there were high or low degrees of quality in the relationships per se, simply that there was no difference between strikers and non-strikers in terms of quality. One possible

reason for this finding is that the strikers' spouses/partners viewed the strike as a necessary and appropriate step to take in the face of unsuccessful negotiations. As such, they did not change their pre-strike attitude or behaviour toward their partner. Further, the close knit communities in which the strikers and their families lived were such that many of the spouses/partners saw each other on a regular basis and possibly reinforced the strike as an appropriate and acceptable action.

Practical implications for unions and their members

So what are the implications of these findings for unions and other practitioners? Anti-unionists might suggest that if strike action is deleterious to the psychological well-being of workers then unions and their members should not engage in such action. This view is naïve. In some cases, strike action is the only effective and legitimate means of making organisational change and solving long-standing grievances (Nicholson & Kelly 1980). Fortunately, there are several mechanisms that unions can put in place to avoid or minimize the deleterious psychological effects on their members. For example, workers can be advised to prepare, in terms of financial savings and other arrangements, for a possible strike. Similar advice in terms of the psychological changes that may occur during strike will prepare members and their families to be aware of and take steps to deal with these changes. This is also likely to 'normalize' the experience for members and particularly benefit those who are otherwise less inclined to seek help when needed.

Unions can also ensure that psychological assistance is available. Depending on the strike population this assistance may be more or less taken up by strikers. For example, men are among those less likely to seek psychological help (Gove 1984; Vessey & Howard 1993); particularly men with traditional attitudes about the male gender role

(Good et al. 1989). This brings into play the practical role of the industrial-organisational psychologist in labour disputes and strikes, who may engage with the daily activities of the union and its members. A psychologist who is engaged in a manner that builds relationships with, and provides regular and easy access for, members is more likely to be accessed by those who would otherwise not seek professional assistance. Also, union officials and members can take measures to increase participation. During the USW strike investigated in the current study, the Union hosted a range of activities, including union rallies and social events and gatherings, for strikers and the families. These types of activities enabled the 'strike community' to connect together. In relation to the latent benefits that have been reduced as a result of the strike, such activities provide social contact, a sense of feeling part of the collectivity, and increased solidarity.

Unions could take extra measures to structure and organize various methods of engaging in strike activity to either encourage and/or expect maximum participation. Indeed, depending on union rules and regulations, it might be possible to require members to participate in strike activity in order to collect strike remuneration. Encouragement, expectation, or requirement of engagement in strike activity will assist unions and their members in two ways. First, according to the findings of the current study, it will enhance the psychological well-being of strikers by undertaking activities that provide the latent benefits normally associated with work. Second, it will benefit the union cause as wider membership involvement increases the successful performance of collective actions (Knoke 1981).

Limitations of the current research

There are limitations to the current study that require attention when considering the conclusions drawn and planning future research. As described earlier, the process of asking strikers to self-report on amount of strike activity resulted in an inadequate measure. To minimize this limitation, full-time workers at the Union halls were recruited to rate members' level of activity. Although a more detailed list of union activities may have overcome this limitation at the outset, it must be noted that strikes in different contexts (e.g., industries or locations) utilize different strike activities. For example, USW strikers travelled interstate to picket at the company's headquarters (a time consuming union activity); this activity would not occur during a strike in a locally-owned company. Similarly, cooking and sharing meals may be less likely to occur in a less community-based region than in the rural areas of Ohio and West Virginia. Thus, it would be difficult to develop an instrument that measures strike activity across contexts.

A second limitation is that cause and effect cannot be assumed in the current cross-sectional study. For example, although there is a relationship between strike activity and depression, it cannot be determined whether involvement in strike activity causes less depression or that lower levels of depression cause more involvement in strike activity. Nevertheless, the results are suggestive of a link that should be explored in more depth to establish validity.

In addition, the current findings are not necessarily generalisable. Cook and Campbell (1976) pointed out that generalisations from research in organisational settings are limited when only one setting is sampled. Although the current study drew samples

from three separate plants, the findings would be strengthened by investigating the issue across organisations, industries, occupations, and populations.

Future research

There is little doubt that the paucity of research on the psychological impact of strike is due to the difficulty in gaining access to participants involved in strike action. The following suggestions for future research are offered with recognition of this constraint. First, finding that the amount of involvement in strike activity can enhance psychological well-being for strikers raises the question of whether there are other factors that contribute to enhanced well-being. For example, does the amount of social support given to strikers, or their individual coping styles or strategies, affect their psychological functioning? Do these factors interact with involvement in strike activity to affect well-being? Indeed, Barling and Milligan (1987) called for investigation of moderating processes such as family and co-worker support in psychological studies of strikers.

Second, the current study investigated the impact of strike on members in various union roles and included both rank-and-file members and union officials. Although it is likely to involve a relatively small sample drawn from a larger population it would be interesting to explore the psychological impact on union officials specifically. It may be that their closer involvement with, and level of responsibility during, the strike may lead to more or less positive or negative outcomes. Given their already heavy participation in strike activity, it is likely that alternative approaches may be needed to ensure their psychological well-being.

Third, this study investigated a sample of workers who had been on strike for a period of six months, that is, a long-term or chronic strike. The same conclusions may not

be drawn from a sample that had been on a shorter or longer strike. Further, it would be interesting to investigate whether the strikers' psychological well-being changed over a period of time and whether those changes were dependent on if the strike continued or concluded.

Fourth, several researchers have commenced the process of mapping relationships between union commitment, work experiences, personal characteristics, union loyalty, and participation in union activities (e.g., Barling et al. 1990; Cohn et al. 2003; Fullagar & Barling 1989; Kelloway & Barling 1993). Some consolidation and future direction for this research domain may assist in identifying the variables that are most likely to be associated with greater involvement in union activities. Since involvement in union activities (during strike) is associated with psychological well-being, unions should actively work on establishing and reinforcing these values, experiences, and characteristics in their members.

Finally, the current study used Jahoda's (1979) latent deprivation theory to interpret some of the results. Future research, using Muller and her colleagues (2005) LAMB scale (designed to measure both the latent and manifest benefits of employment), could be used to identify which particular benefits, or lack thereof, are related to lower levels of psychological well-being during strike. In practice, the scale could be used to identify the benefits not being met for individuals and interventions may be designed to meet the latent needs that enhance psychological well-being.

The current study has identified negative psychological consequences of a particular labour strike conducted by the USW. Strikes in general, however, are employed internationally as a legitimate and effective means of solving long-standing

workplace grievances. Continued research on the psychological impact of those most directly and personally affected, the strikers themselves, will lead to practical steps to reduce the deleterious effects of strike.

DRAFT

Acknowledgements

The authors express their heartfelt thanks to the members of USWA Locals 5760 & 5724 who generously shared their time and experiences in such difficult personal circumstances. We also thank the members of USWA 4836 who contributed to the research. We extend our deepest gratitude and appreciation to Chuck Ballard, Lloyd Henderson, and Loren Hartshorn for permission to conduct the research, access to their members, and the support and assistance they provided throughout the research project.

The conduct of this research and preparation of this article was supported practically and financially to the first author from the School of Human Services, Griffith University, Australia and the Provost's Office, West Virginia University, USA.

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Endnotes

¹ Since the research project was undertaken, the USWA merged with the Paper, Allied-Industrial, Chemical and Energy Workers (PACE) International Union to form the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (USW) and will hereafter be referred to in this paper as the USW.

² This study did not delve into the circumstances that led to the USW strike, the nature of the battle between management and the Union that persisted during the strike, or the industrial outcomes of the strike.

³ The terms 'strikers' and 'non-strikers' have been used in this paper as a simplified way of distinguishing between the two sample groups. It is not intended that those terms have any negative connotations or to imply in any form that one group was more or less likely to undertake a labour strike in any circumstances.

Table 1

Results of tests for significant differences between strikers and non-strikers on a range of demographic, union, and organisational variables

Variable	Strikers		Non-strikers		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Age (years)	46.67	8.75	48.37	8.79	<i>ns</i>
Union tenure (years)	21.63	10.66	24.39	8.99	<i>ns</i>
Company tenure (years)	20.07	10.84	21.25	9.28	<i>ns</i>
	<i>N</i>	%	<i>N</i>	%	χ^2
Gender					<i>ns</i>
Male	273	90.4	48	98.0	
Female	29	9.6	1	2.0	
Living with partner	253	83.8	44	89.8	<i>ns</i>
Sole earner	171	56.6	21	42.9	<i>ns</i>
Union membership choice					<i>ns</i>
Yes	288	96.6	43	91.5	
No	6	2.0	2	4.3	
Maybe	4	1.3	2	4.3	
Official union position	45	15.2	10	21.7	<i>ns</i>
Political party					<i>ns</i>
Democrat	253	86.1	31	67.4	
Republican	16	5.4	7	15.2	
Independent	25	8.5	8	17.4	

Table 2

Results of t-tests for differences between strikers and non-strikers on depression, anxiety, irritation, mental health, and marital quality

Variable	Strikers		Non-strikers		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Depression	2.05	.66	1.73	.52	3.79**
Anxiety	2.08	.71	1.65	.61	4.41**
Irritation	2.23	.76	1.92	.63	3.06*
Mental health	4.02	1.07	4.56	.99	-3.52**
Marital quality	4.03	.85	3.97	.93	0.39

Note. * $p < .01$; ** $p < .001$.

Table 3

Results of analyses to examine relationships between amount of strike activity and depression, anxiety, irritation, mental health, and marital quality for strikers

Variable	Pearson's r	Variance explained (r^2)	p
Depression	-.17	.03	<.01
Anxiety	-.17	.03	<.01
Irritation	-.09	.01	ns
Mental health	.14	.02	<.05
Marital quality	.07	.005	ns