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Work-group cohesion in stable and closing manufacturing plants

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Work-group cohesion in stable and closing manufacturing plants

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San Jose State University, 1992

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**WORK-GROUP COHESION IN STABLE AND CLOSING
MANUFACTURING PLANTS**

A Thesis

Presented to

the Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

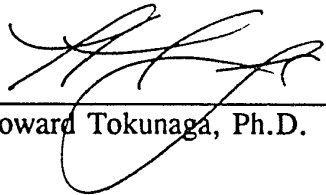
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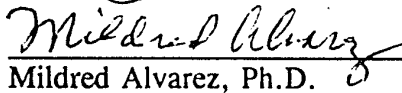
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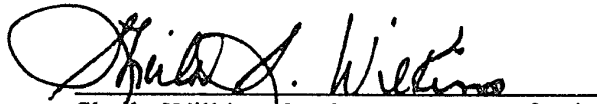
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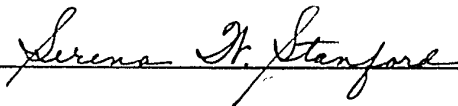


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ABSTRACT

Work-Group Cohesion In Stable and Closing Manufacturing Plants

by Jane E. Gehring

The purpose of this study was to determine whether there exists a significant difference in group cohesion and organizational commitment between male and female employees in stable and closing manufacturing plants. A questionnaire comprised of the Organizational Commitment Questionnaire (OCQ) and the Wheelless Solidarity Measure was administered to 101 manufacturing employees. Except for a significant main effect for gender on the commitment variable (women scored higher), the main effects and interactions for tenure and manufacturing sites were non-significant. With this knowledge, corporations can better prepare for crisis situations such as plant shutdowns.

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**Work-Group Cohesion in Stable and Closing
Manufacturing Plants**

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Running Head: WORK-GROUP COHESION

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Abstract

The purpose of this study was to determine whether there exists a significant difference in work-group cohesion and organizational commitment between male and female employees in stable and closing manufacturing plants. A questionnaire comprised of the Organizational Commitment Questionnaire (OCQ) and the Wheelless solidarity measure was administered to 101 manufacturing employees. Except for a significant main effect for gender on the commitment variable (women scored higher), the main effects and interactions for tenure and manufacturing sites were non-significant. With this knowledge, corporations can better prepare for crisis situations such as plant shutdowns.

Work-Group Cohesion in Stable and Closing

Manufacturing Plants

The economic conditions in the United States are causing many corporations to evaluate their own financial status. A new survey of 1005 corporations conducted jointly by Fortune and the Wyatt Company consulting firm found that 86% of the companies have reduced their managerial ranks in the past 5 years, 52% of them in 1990. Since August, 1989, the number of unemployed workers has jumped by 485,000, 65% of them in the managerial ranks (Kirkpatrick, 1991). It is not just younger companies that are affected, nor the less profitable. Layoffs are occurring at Apple Computer Inc., Citicorp, Occidental, Peat Marwick (Fortune, 1991) and for the very first time, "stable" IBM announced that they too are reducing their headcount. Layoffs are no longer isolated to any one group, they are affecting the entire United States workforce.

In addition to company layoffs, for many companies a viable solution to alleviating financial hardship is plant shutdown. For the workers at a plant, shutdown can be a stressful and disruptive life change with economic, social and psychological implications (Taber, Cooke & Walsh, 1990). It now takes the average laid-off executive more than eight months to find a new position, two months longer than in 1989, according to Drake Beam Morin (DBM), the nation's largest outplacement firm

(Kirkpatrick, 1991). Faced with these disappointments, an increasing number of job hunters have succumbed to depression (Fortune, April 8, 1990).

The type and severity of problems experienced by an individual can be affected by many variables, including the age of the person, the transferability of job skills, the amount of financial reserves, and the level of family ties and support (Ferman & Gordus 1979; Gordus, Jarley & Ferman, 1981). Researchers have found that the severe economic problems accompanying shutdowns cause a range of real physical ailments and mental health problems. Job loss, especially followed by prolonged unemployment, is a traumatic experience for workers; loss of self-esteem, social disruption, and increased incidence of illness typically follow. These effects may be short-term, disappearing after a successful reemployment experience (C&R Associates, 1984). Since unemployment is often protracted and dissatisfaction with the new job is common, however, psychological stress may persist long after a shutdown occurs. Various researchers have noted that those remaining unemployed because of shutdowns suffer more stress than those who succeed in finding new jobs (Snyder & Nowak, 1984). Even with the best financial, social and psychological foundation, job loss is a critical, and highly stressful event for many individuals.

An epidemiological analysis by Brenner (1973) found strong correlations between aggregated levels of unemployment (period of unemployment) and numbers of first-time admissions to mental institutions. The implication here is that

unemployment is a highly stressful event that can exceed a person's ability to cope (Taber, Cooke & Walsh, 1990). Ways in which the suddenly unemployed cope include counseling, group therapy, volunteer work, outplacement programs, and unfortunately, many turn to drugs and alcohol. An element shared by some of the more positive coping strategies involve interactions with others.

Group cohesion is an area of organizational study that has been researched extensively, with a large proportion of the research conducted in the 1950's (Lott & Lott, 1965; Richards & Greenlaw, 1972; Seashore, 1954). Cohesiveness is defined as "that group property which is inferred from the number and strength of mutual positive attitudes among the members of a group" (Lott & Lott, 1965). It can also be defined as "a certain closeness, or common attitudes, behavior and performance that is lacking in other groups" (Szilagyi & Wallace, 1980). Early research on group cohesion focused on the relationships between cohesion and variables such as satisfaction, productivity, social status, similarity, group success and external threat to the group. This research concluded that individuals tend to prefer friendly associations with others who are compatible to themselves in interest, values or personality. In recent years, research efforts have explored work-group cohesion and behavior as they may relate to work organizations (Jemison, 1981; Dailey, 1978; Summers, Coffelt & Horton, 1988). Three general findings emerged from Dailey's (1978) research. First, workers with an internal locus of control experienced less

satisfaction with coworkers than those with an external locus of control. Secondly, the study reinforced the importance of perceived group attractiveness or cohesiveness (the high frequency of positive social cues from group members) for understanding satisfaction with coworkers. Due to the nature of the items and their factor loadings in the study, this cohesiveness factor was called team attractiveness. Finally, this study indicated the presence of a weak interaction between locus of control and cohesiveness with respect to satisfaction with coworkers. For externally and internally oriented subjects, there were not significant differences between the correlations. Thus, it cannot be concluded that externally oriented respondents perceive a significantly stronger relationship between the two variables than internally oriented respondents. The fact that the interaction was not stronger may have been due to the way locus of control was measured. The revised instrument used in this research was developed from Rotter's (1966) original instrument by selecting work-related items (Andrisani & Nestle, 1976). The fact remains that neither instrument (i.e., original Rotter scale nor the revised Rotter scale) was specifically designed for measuring locus of control in the work setting. Some factors found to be related to group cohesion are job satisfaction (Bass & Barrett, 1981; Dailey, 1978; Szilagyi & Wallace, 1980), productivity (Bass & Barrett, 1981; Berkowitz, 1956; Peteroy, 1980; Steiner, 1972), social status (Lott & Lott, 1965), similarity (Lott & Lott, 1965), group success (Staw, 1975; Downey et al., 1979), locus of control (Dailey, 1978),

and most important to this study, external threat (i.e., threat of job loss). Cohesion is one visible response displayed by workers experiencing a great loss such as plant shutdown, and consequently the loss of their jobs. The presence of an external threat increases group cohesion if two conditions are met: a) agreement among group members that "the aggregate is a group and its preservation is worthwhile" (Markides & Cohn, 1982, p.88) and b) the perceived threat is against the group as a whole (Markides & Cohn, 1982). With these conditions met, the group using its collective resources will pull together in an effort to deal with the threat.

Although group cohesion is difficult to measure because of the lack of precise and rigorous definition, several researchers have developed instruments to measure this process. The Wheelless solidarity measure (Wheelless, 1982) asks respondents to rate statements such as "the group is very close, and I trust the group completely" on a Likert scale. This instrument has a reported split-half reliability of .90. Wheelless (1982) states that his study demonstrates that perceptions of the quality of interaction, goal attainment, group satisfaction and group solidarity are significantly and positively related. The Wheelless (1982) findings suggest that research can be designed using this instrument and measures of organizational results.

Dailey (1978) constructed an instrument that produced a rating of co-workers' comparative perceptions of cohesiveness within a work-group, department, or some other organizational subdivision. This scale is also scored on a Likert scale ranging

from "much better than most" to "worse than most" regarding such statements as "how the team gets along together," and "how the team sticks together."

It is of interest to both closing and stable organizations to determine if group cohesion is achieved at the expense of commitment to the organization.

Organizational commitment is viewed as the relative strength of an individual's identification with and involvement in a particular organization, as well as the willingness to exert effort and remain in the organization (Ferris & Aranya, 1983). According to Hall (1979), the definition of commitment includes a number of variables which should be separated with respect to both attitudes and behavioral intentions. The attitudes, all of which seem to tap moral development, include: (1) identification with the organization (acceptance of its goals, which is the basis for attachment to the organization); (2) involvement in the organizational work role (assessing the strength of attachment); and (3) warm, affective regard for, or loyalty to, the organization (the evaluation of attachment). The behavior-intention variables include: (1) a willingness to exert effort; and (2) a desire or willingness to remain in the organization.

Organizational commitment is an important variable which can reliably be used to predict such organizational behaviors as the likelihood of withdrawing from the work environment (i.e., quitting) and general performance (Tetrick & Farkas, 1988). Group cohesion is also relevant to organizational effectiveness, especially during a

crisis such as plant shutdown. The purpose of this study is to validate the difference in group cohesion between those employees facing plant shutdown and those not facing this crisis. It is hypothesized that employees facing shutdown will perceive their own site as having a stronger sense of cohesion than those at other sites not facing shutdown. It is also hypothesized that those facing shutdown will have a lower organizational commitment score as a result. They will feel stronger as a group, but at the expense of the organization. This study is important in understanding the variables that contribute to teamwork, and also the effects of plant shutdown on employees. With a better knowledge of the implications of shutdown, more emphasis can be placed on the early identification of organizational needs regarding group cohesion and effective teamwork.

According to Cummings, Blumenthal and Greiner (1983) and Price and D'Aunno (1983), employing organizations have the capacity and possibly the responsibility to help terminated employees solve problems associated with job loss. Traditionally, assistance has come most frequently in the form of "outplacement" programs (Rendero, 1980) aimed at assisting individuals to get new jobs. However, the problems that can be effectively addressed by traditional outplacement programs may be much more complex in situations involving large-scale layoffs, plant relocations and plant closings.

There is a growing interest in solving the problems associated with job loss.

Recent research concludes that providing valid information to employees and to the community on a planned closing is essential (Sutton, 1983), and that coordinated systems increasingly seem to be necessary to deal with the complexities of a large-scale layoff. Providing such information, developing an interorganizational structure, and installing a counseling program can be accomplished if organizations take a strategic approach to redundancy planning. Optimally, human resource planning can be integrated with organizational strategy to prevent major layoffs; however, when organizational decline cannot be avoided, programs can be designed to improve the ability of the affected employees to solve the problems they inevitably will face.

Method

Subjects

One hundred and one randomly selected employees of a large, Silicon Valley microprocessor company served as the subjects. The control group consisted of 37 employees at a manufacturing plant (fab) division of the company that was not facing shutdown, and the experimental group were the employees at a similar site manufacturing plant that was facing shutdown. The manufacturing fabs used in this study were matched on such characteristics as size, manufacturing processes and

number of employees. Participation was voluntary, and the subjects were not compensated by Intel nor the researcher for participation in the study. All subjects were treated in accordance with the ethical standards of the American Psychological Association.

Materials

The instrument utilized in this study was a questionnaire comprised of two widely used measures, the Wheelless solidarity measure (Wheelless, 1982) and Factor 1 (Value Commitment Dimension) of the Organizational Commitment Questionnaire (OCQ) measuring self-perceived teamwork (Mowday, Steers & Porter, 1979) (see Appendix B). The split-half reliability for the Wheelless solidarity measure is .90. The short form of the OCQ has been shown to be valid when used separately from the full form. The questionnaire consists of 28 questions that were answered in an agree/disagree Likert scale format. Items 1-18 (Wheelless solidarity measure) measured group cohesiveness, items 20-28 measured organizational commitment. Item 19 -"I feel that this group works together for the common goal" was designed by and for Intel Corporation. In addition, demographic characteristics (sex, age, position, number of years at Intel, number of years at particular fab) (see Appendix C) were collected to determine similarity of employees in the two groups.

Design and Procedure

The design of this study is a static-group comparison. Questionnaires were administered to both the experimental and control groups by their supervisors during employee meetings. Instructions were read by the supervisors to maintain uniformity across both groups (see Appendix D). The subjects had 15 minutes to complete the questionnaire. The questionnaires were returned via confidential inter-office mail. A cover letter outlining the instructions was attached.

Results

The means and standard deviations for the three dependent variables (cohesiveness, "common goal," and commitment) broken down by gender and group are listed in Table 1. Fab 3 consistently had lower means on each of the three scales. Furthermore, women who were both high tenure (working for Intel more than 11 years) and low tenure (working for Intel less than 11 years) scored higher on the commitment variable than men in both fabs. On the cohesiveness variable, low tenure men scored higher than the low tenure women at Fab 4; however, at Fab 3 both high and low tenure females scored higher than the men, and at Fab 4 the high tenure women scored higher than the high tenure men.

On the question that Intel added ("I feel that this group works for the common goal"), low tenure females scored higher than low tenure men at Fab 3, but low tenure men scored higher at Fab 4. High tenure males scored higher than high tenure females at both fabs.

Table 1
Descriptive statistics, three criterion variables
by group, tenure and gender

"Our group works for the common goal"

Male	Fab 3		Fab 4	
	Tenure <11 yrs	Tenure >11 yrs	Tenure <11 yrs	Tenure >11 yrs
mean	3.00	2.50	2.73	3.20
sd	.76	.71	1.95	.45
N	8	2	11	5

Female				
mean	2.88	2.53	2.88	3.23
sd	1.36	.92	1.41	1.88
N	8	15	16	26

Commitment score

Male	Fab 3		Fab 4	
	Tenure <11 yrs	Tenure >11yrs	Tenure <11 yrs	Tenure >11 yrs
mean	31.63	36.00	27.36	36.60
sd	4.30	1.41	12.82	2.88
N	8	2	11	5

Female				
mean	25.75	22.13	27.25	29.04
sd	7.92	8.48	7.28	11.57
N	8	15	16	26

Table 1 (Cont.)
Descriptive statistics, three criterion variables,
by group, tenure and gender

Cohesiveness score

Male	Fab 3		Fab 4	
	Tenure <11 yrs	Tenure >11 yrs	Tenure <11 yrs	Tenure >11yrs
mean	64.63	62.26	63.36	70.20
sd	7.69	3.19	16.65	5.17
N	8	2	11	5
Female				
mean	59.50	55.93	67.47	64.63
sd	14.77	12.39	12.75	19.84
N	8	15	16	26

In order to test the hypothesis that Fab 3 would have a higher cohesiveness score and lower commitment score than Fab 4, a multivariate analysis of variance (MANOVA) was performed in order to examine the differences between the two overall groups on the three cohesion scales (see Table 2). Other analyses were performed to determine differences between gender and tenure at the two fabs. The three way interaction (fab * gender * tenure) on the variables commitment, "common goal," and cohesiveness, was not significant ($F(3,81) = .139, p > .05.$)

The subsequent two way interaction between tenure and fab also yielded non-significant results ($F(3,85) = 1.43, p > .05$), as did the two way interaction between fab and gender ($F(3,81) = .520, p > .05.$). Moreover, the two way interaction between gender and tenure was non-significant ($F(3,81) = .96, p > .05.$). The main effect for fab was non-significant ($F(3,81) = .72, p > .05$), as was the main effect for tenure ($F(3,81) = .58, p > .05$). However, there was a significant main effect for gender on the commitment variable, ($F(1,83) = 6.98, p < .01$), with women scoring higher than men on this variable.

Table 2
Commitment

Source	SS	df	MS	F
Fab	18.62	1	18.62	.21
Tenure	114.89	1	114.89	1.29
Gender	621.98	1	621.98	6.98
Fab * Tenure	87.21	1	87.21	.98
Fab * Gender	120.48	1	120.48	1.35
Gender * Tenure	197.25	1	197.25	2.21
Fab * Gender * Tenure	.25	1	.25	.00
Error	7392.82	83	89.07	

Table 2 (Cont.)
"Works toward common goal"

Source	SS	df	MS	F
Fab	1.05	1	1.05	.47
Tenure	.00	1	.00	.00
Gender	.01	1	.01	.00
Fab * Tenure	2.31	1	2.31	1.03
Fab * Gender	.06	1	.06	.03
Gender * Tenure	.00	1	.00	.00
Fab * Gender * Tenure	.06	1	.06	.03
Error	186.46	83	2.25	

Table 2 (Cont.)
Cohesion

Source	SS	df	MS	F
Fab	451.71	1	451.71	1.95
Tenure	3.11	1	3.11	.01
Gender	137.69	1	137.69	.59
Fab * Tenure	81.73	1	81.73	.35
Fab * Gender	82.70	1	82.70	.36
Gender * Tenure	97.79	1	97.79	.42
Fab * Gender * Tenure	59.42	1	59.42	.26
Error	19257.65	83	232.02	

Discussion

In this study, it was hypothesized that workers facing shutdown would perceive their own site as having a stronger sense of cohesion than employees at other sites not facing shutdown. It was also hypothesized that those facing shutdown would have a lower organizational commitment score as a result.

The results indicate that the hypothesis was not supported. The shutdown plant was not significantly more cohesive than the open plant, nor was the shutdown plant less organizationally committed than the plant remaining open. This is perplexing because almost all of those employees interviewed at Fab 3 (closing plant) volunteered the information that Fab 3 had a real "family-like, close, team work oriented" atmosphere, something that many employees had not experienced at any other Intel site. One possible explanation for the non-significant results could be in the methodology. The test perhaps did not accurately distinguish between the work groups on site, and Intel as a whole. That is, the subjects may have had difficulties in determining what group the questions were pertaining to, either their own immediate work group or Intel Corporation. For further research in this area, the distinction between Intel as a whole, and the immediate work team should be made more clear.

Another contributing factor may be that Fab 4 faced a similar situation several

years ago. Because they were "threatened" with shutdown, they really pulled together. In fact, Fab 4 was able to get better results in terms of line yields, WIP turns, etc. than did Fab 3. Perhaps this attitude has remained throughout the years, and is still in practice today, thus accounting for no significant differences between fabs.

Both high and low tenure women scored higher than men on the commitment variable in both fabs. This could be due to the idea that women are often perceived as being more demonstrative with their feelings, both written and verbal. They may have been more "open" on the questionnaire, scoring high (lower numbers equaling a higher score) on commitment to their organization. In addition, Intel provides what many consider above industry-standard benefits and pay, and women may feel a stronger sense of loyalty. Men are usually compensated better than women, so they might not feel that Intel's benefits are extraordinary (Solomon, 1990).

On the statement "I feel that this group works together for the common goal," low tenure females scored higher than low tenure males at Fab 3, but the reverse was true for Fab 4. High tenure males scored higher than high tenure females at both fabs. In this case, most men scored higher than their female counterparts, except low tenure employees at Fab 3. A possible explanation might be that there are some organizational dynamics present that women are being excluded or are experiencing differently. One example might be the "glass ceiling" effect we see in many

organizations. Perhaps the feeling among women is that men are being promoted or recognized disproportionately, leaving the women teamworkers unsatisfied in the process of achieving the common goal (Solomon, 1990). Again, this area would need to be further researched in more specific details.

On the cohesiveness variable, low tenure men scored higher than the low tenure women at Fab 4. But both high and low tenure females at Fab 3 scored higher than the men, and the high tenure women scored higher than the high tenure men at Fab 4. In this case, most women scored higher than their male counterparts, except at Fab 4 with newer employees. Again, this may be attributed to the idea that women seem to be more "relationship oriented" and have better "people skills" (Saltzman, 1991), and this carries into their work relationships as well. They feel a stronger sense of teamwork, and are more apt to express this feeling.

The significant main effect of sex on commitment demonstrates that women and men at Intel feel differently about commitment to their organization as a whole. Women feel more committed to their organization, possibly due to the fact that women may be more emotionally attached and responsive to their environment, co-workers, workplaces etc., and demonstrate their feelings more openly.

The implications of this study would suggest that there are differences between male and female attitudes toward cohesiveness, and they should be further researched in the case of more plant shutdowns. Understanding and practicing how to treat men

and women differently in crisis situations would greatly enhance a company's program to assist those laid off in terms of severance, benefits, re-training, etc. It may be that women and men have different needs in these situations.

Tenure is also a contributing factor that organizations may want to pursue in their research. If there is a strong correlation discovered between tenure and a facet of organizational commitment, companies can utilize this information when developing training programs before there are any layoffs. This, in turn, may help prevent turnover, low morale, and other contributing factors to low productivity which can cycle into a layoff. With a broader knowledge base of female and male employee attitude differences, and the effects of length of employment, corporations can be even better prepared to effectively handle crisis situations.

One of the most effective ways to learn about the future of a corporation is to study its past. By studying the factors leading to the closure of Fab 3, and the ramifications for the employees, Intel was able to gain knowledge to better prepare their future concerning outplacement, plant closures, and reduction in force. Determining what affects productivity, turnover and morale in terms of gender, tenure and plant location will also help companies ensure a stable growth and possibly prevent those events leading to reduction in force.

To be truly competitive in today's global marketplace, the successful companies will be those that focus on managing change, creating vision,

understanding cultural diversity, developing strategy, and preparing for contingencies such as downsizing and closure. By utilizing their collective skills, people and knowledge to circumvent crisis situations, these proactive companies will rise above their competitors.

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Appendix A

To: Jane Gehring, Psychology
350 Budd Avenue L-8
Campbell, CA 95008

From: Serena W. Stanford *Serena W. Stanford*
AAVP, Graduate Studies and Research

Date: December 4, 1991

The Human Subjects Institutional Review Board has approved your request to use human subjects in the study entitled:

"Self-Perceived Work Group Cohesion in Closing
and Stable Organizations"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that each subject needs to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have questions, please contact me at 408-924-2480.

CC: Howard Tokunaga, Ph.D.

Appendix B

Please use the following scale to rate the questions as they pertain to your particular work group: Place the number to the left of each question.

strongly agree	somewhat agree	agree	neutral	disagree	somewhat disagree	strongly disagree
1	2	3	4	5	6	7

1. The group is very close.
2. I trust the group completely.
3. The group members do not really understand each other.
4. I distrust the group
5. I like this group much more than other groups I have participated in.
6. I really enjoy this group.
7. I understand the people in this group.
8. I dislike this group.
9. I interact/communicate with this group much more than with most groups I have been in.
10. This group is not very close at all.
11. The members of the group share a lot in common.
12. The group members do a lot of helpful things for each other.
13. I feel very close to this group.
14. The group members feel very close to each other.
15. We (the group) share some private ways of communicating with each other.
16. Our group relationship satisfies an important need for group affiliation.
17. There is a great deal of hostility and aggression between the group members.
18. I feel an interpersonal need for affiliation with the group.
19. I feel that this group works together for the common goal.
20. I am willing to put in a great deal of effort beyond that normally expected in order to help Intel be successful.
21. I talk up Intel to my friends as a great organization to work for.
22. I would accept almost any type of job assignment in order to keep working at Intel.
23. I find that my values and Intel's values are very similar.
24. I am proud to tell others that I am part of Intel.
25. Intel really inspires the best in me in the way of job performance.
26. I am extremely glad I chose Intel to work for over others I was considering at the time I joined.
27. I really care about the fate of Intel.
28. For me, this is the best of all organizations for which to work.

Appendix C

Demographic Characteristics

This information will be used only to characterize the sample. Please do not include your name on this form.

1. Sex _____
2. Age _____
3. Job Title _____
4. Number of years working at Intel _____
5. Number of years working at Fab 3 _____

Appendix D

Dear Intel Supervisor:

Thank you for taking the time to administer this questionnaire on work-group cohesion in the realm of plant shutdown. I really appreciate your efforts. The instructions for administering this questionnaire are basic:

1. Please pass out one copy of the letter and questionnaire (pages 1 and 2) to approximately 60 participants (less if the response return rate is assured; I need a sample of 30 questionnaires for a valid study).

2. Please read these instructions to the participants:

"Please read the following questions on the first page of the questionnaire, and using the scale at the top of the questionnaire, rate each question accordingly. To the left of each question, write in the appropriate number, ranging from (1) strongly agree to (7) strongly disagree. The first 19 questions are based on your perceptions of your particular work-group in (California or Oregon) and the last 9 questions pertain to Intel in general.

The second page is used for demographic characteristics only. Please answer the questions on page 2, but do not write your name on it. This questionnaire should take approximately 10 minutes to fill out. Thank you for your cooperation. Please remember that it is voluntary and if you do not feel comfortable cooperating, please refrain. When you are finished, please put your completed questionnaire in the sealed inter-office confidential mailer. Thank you for your cooperation."

3. Please place collected questionnaires in a sealed envelope and return them to me either at my home address or to Sheila Wilkins in the manner that you see fit.

4. You may reach me at :

350 Budd Ave. L-8 Campbell, Ca 95008
(408)997-3443

Thank you,
Jane Gehring