



Manual for an Australian  
Version of the SWS-Survey of  
Stress and Mental Health



**Centre for Work Leisure  
and Community Research**

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# **THE SWS—SURVEY OF STRESS AND MENTAL HEALTH<sup>©</sup>**

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*An international research project with the sponsorship of  
The World Federation for Mental Health*

## **AUSTRALIAN VERSION**

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Over 800 professionals, including psychologists, psychiatrists, occupational health physicians and nurses, human resource specialists, university professors and representatives of national ministries of health and labor, from 21 country-groups participated in the native language translations and cultural validation of the *SWS—International Survey of Occupational Health<sup>®</sup>*. These country groups including Australia, Austria, Belgium, Brazil, China (Beijing, Hangzhou, Hong Kong and Shanghai), Cuba, Indonesia, Japan, Malaysia, Mexico, Pakistan, Philippines (Cebu), Romania, South Korea, Spain, Thailand, Taiwan and the United States of America. The project was sponsored by the World Federation for Mental Health and received assistance in some of the developing countries from the World Health Organization's Collaborating Centers for Occupational Health.

This 200 item, multi-dimensional questionnaire was based on the SWS—Model of Occupational Health (Ostermann, 1991), which described occupational health as the interactive effects of stress and support factors from three domains, namely: (S) Socio-environ, (W) Work and (S) Self (disposition, attitude and life style). It is original in that it considers all three domains of life and not only includes the negative

variables but also the positive variables, which offset the causes and effects of stress, such as personal strengths and the support characteristics of one's work situation and life outside of work. Included in the self-administered questionnaire are items related to mental health – not just the traditional, negative assessment of mental health, which is called “Poor Mental Health”, but also a new, positive scale of “Good Mental Health” indicators. This scale makes possible the assessment of *eustress* or “good stress” – a stress condition, which is not disabling, but which facilitates performance beyond usual limits. Recent studies confirm the strong correlation between mental health and productivity.

The instrument also contains ten demographic questions regarding, gender, age, education, family status, type of work, field of work, type of employer and economic status. For individual identification each respondent provides his/her job title, department and an I.D. Code for anonymity and cross-referencing to other measures.

The *SWS—International Survey of Occupational Health*<sup>®</sup> was specifically designed to solve some of the problems of cross-cultural research by having a universal instrument with all the same items validated cross-culturally and in several languages. It also solves the problem of the lack of national research in some countries as WHO found in 1986: “the condition of occupational health in developing countries is difficult to assess since native language instruments are largely nonexistent.”

Hopefully this instrument will be used not only as a diagnostic instrument to identify the causes of job stress, but as a prescriptive tool by identifying support factors, which, when strengthened, will improve occupational health, especially in situations where stress factors cannot be eliminated or significantly reduced.

The initial instrument was composed of items in simple, American English, abstracted from previous research in Western and Eastern countries, translated into the native language of each participating country-group, back translated and then subjected to content validation, item by item, by a group of experts who were presented each item in its appropriate stress or support domain (see above) and who considered separately whether the item could or could not be used in their culture for men and for women.

Extensive statistical analysis of the data from each country-group identified those items that were rated acceptable for use in each country and those which were not. Data did not reflect gender differences, in as much as there were only differences in the degree of acceptance (or rejection) but not in opposed differences of the same items. By compiling the data of these 21 samples from five continents, 150 items were termed “universal” i.e. valid in over 75% of the country-groups.

Although there was some variation among the country-groups as to the specific items accepted, the design of a single, universal instrument was chosen over separate instruments for each country-group for two reasons, 1) for analysis purposes in any one culture it is easier to eliminate some items that are considered not useable in the culture, while still retaining a single instrument for cross-cultural studies; and 2) in the cross-cultural analysis it was found that in country-groups where there appeared to be more Western influence, in contrast with the less developed and more remote country-groups, results were more similar to the United States. Considering the further expansion of Western influence this trend is likely to continue and prevailing cultural characteristics are just as likely to change to reflect this trend. In the future, those items now not accepted may become accepted. The cross-cultural database of the full

instrument will be able to track those changes, if this occurs, and make adjustments in the scoring without changing the instrument.

During the years while translation and validation data were being completed and analyzed in various countries, a 200 item preliminary version called the *SWS—Survey of Stress and Mental Health*<sup>®</sup>, 25 items for each of eight scales randomly arranged, has been tested. This instrument has been used in Mexico, Philippines, Austria, Australia, Pakistan and the United States at various organizational levels with managers, technicians, nurses, professional and clerical hospital staff, factory workers and truck drivers. The most extensive was a comprehensive, nationwide study of 1000 workers, including disability claimants, in Australia. One major finding of preliminary research was in Mexico where the factorial components of mental health were found to vary at organizational levels and in all instances Good Mental Health indicators were not negatively correlated with Poor Mental Health. This evidence confirms other research that positive measures of health are independent of negative indicators. This finding, in contrast to traditional Western, negative diagnosis, added strength to the position of WHO, which maintains that “health is more than just the absence of illness.”

A simple Excel format for scoring can facilitate both individual and group analysis. Studies are proposed to establish normative data in participating country-groups and to carry out cross-cultural comparisons. A web site is being readied to display the SWS—Network, maintain an international database, provide resource material for additional participating countries, and eventually an on-line assessment and feedback procedure for individuals and organizations.

It is expected that the *SWS—International Survey of Occupational Health*® will be a valuable tool for workers and their families and for organizations not only to enhance the human dimension of work by eliminating those factors that are risks to personal health and productivity but also by strengthening those factors that enrich human experience and improve organizational outcomes.

## **ADMINISTRATION**

### **DESCRIPTION OF THE SWS**

The *SWS—Survey of Stress and Mental Health*® is a 200 item, self-administered questionnaire intended to measure both the negative and positive indicators of workers' health. On a five-point, Likert-type scale from “never” to “very often”, individuals respond to the question “How often does each item fit you?” Responses produce results on six scales separately for stress and for support indicators in three domains: (S) Socioenviron, (W) Work, and (S) Self (one's personal attitudes, dispositions and life style). Two additional scales reflect indicators of Poor Mental Health and Good Mental Health.

The instrument also contains ten demographic questions regarding gender, age, education, family status, type of work, field of work, type of employer, and economic status. For individual identification each respondent provides his/her job title, department and an I. D. code.

The questionnaire is printed two-sided on 11 x 17 paper, center-folded to form a four-page, 8 ½ x 11 booklet. Individuals mark their responses directly on the questionnaire opposite each item.

This Manual includes information about the background and development of the *SWS—Survey of Stress and Mental Health*<sup>©</sup>, its composition, validity, purposes and uses of the instrument, method of administration, scoring and interpretation.

## **BACKGROUND AND DEVELOPMENT**

The *SWS—Survey of Stress and Mental Health*<sup>©</sup> is based on the SWS—Model of Occupational Health (Ostermann, 1991), which illustrated that occupational health was the result of the interplay of both negative factors (stressors) and positive factors (supports or strengths) found in three domains: 1) conditions of work, 2) conditions of the workers' lives outside of work and 3) personal conditions or characteristics of the workers themselves. It is thought that stressors from each domain can intensify stress in any other domain and conversely, supports from each domain can intensify support and offset stress in any other domain. With recent emphasis on global enterprises, the World Health Organization's cross-cultural study of occupational health had already found that stress and support indicators were not the same for all workers in all cultures. (1989) Worker health in developing countries was a major concern as the WHO health concept, "Health is more than just the absence of illness," went beyond the traditional Western concern of just alleviating illness. With the support of the World Federation for Mental Health, and with assistance from the WHO Coordinating Centers for Occupational Health in some developing countries, the SWS—International Survey of Stress and Mental Health was conducted to test these ideas.

The *SWS—Survey of Stress and Mental Health*<sup>©</sup>, was composed by abstracting from prior research, items relevant to the SWS model, then translating and culturally

validating each item in the native language of each distinct country-groups\*. Rigorous statistical analysis identified those items accepted and those rejected in each separate country-group as well as items that are considered ‘universal’. Australia is one of those countries participating in the international study.

### COMPOSITION OF THE INSTRUMENT

The 200 items of the *SWS—Survey of Stress and Mental Health*® are randomly sorted items from eight scales:

**SST – Socioenviron Stress:** Life situations outside of work, living conditions and interpersonal relations that are consistent with distress.

**SSP – Socioenviron Support:** Life situations outside of work, living conditions and interpersonal relations that are consistent with well-being.

**WST – Work Stress:** Negative perceptions of work, conditions and interpersonal relations consistent with distressful work life.

**WSP – Work Support:** Positive perceptions of work, conditions and interpersonal relations consistent with work life satisfaction.

**PST – Self Stress:** An individual’s perceptions, behaviors, attitudes, life style, etc. consistent with personal distress.

**PSP – Self Support:** An individual’s perceptions, behaviors, attitudes, life style, etc. consistent with strength and well-being.

**PMH – Poor Mental Health:** Characteristic personal traits which are indicative of emotional illness and maladaptive behavior.

**GMH – Good Mental Health:** Characteristic personal traits consistent with emotional health and well-being.

### VALIDITY

The Australian version of the *SWS—Survey* was prepared by a group of professionals who “translated” each item and the directions from the original American English version. Some adjustments were made in the choice of words, spelling and method of expression in order to be consistent with colloquial Australian speech. For national use, slang and local jargon was avoided as well as professional terminology and

elaborate vocabulary. The conceptual equivalence of the translation was tested by an independent back translation.

The final version was then subjected to a rigorous procedure of content validation, commonly called “expert validation”. A group of 61 Australian male and female professionals consisting of specialists in rehabilitation, counseling, psychology, occupational therapy and social work; general medical practitioners, psychiatrists and nurses; human resource personnel, occupational health and safety professionals and disability specialists; and industrial officers were given copies of the *SWS—Survey of Stress and Mental Health -pf*<sup>®</sup>. This special professional form consists of a short demographic section, a brief explanation and diagram of the SWS—Model and 200 items arranged on separate page lists of 25 items for each of the eight dimensional scales: Socioenvironmental Stress and Socioenvironmental Support, Work Stress and Work Support, Personal Stress and Personal Support, Poor Mental Health and Good Mental Health.

For each scale the professional respondent is given a short description of the scale and asked to consider each of the 25 items as to whether it can or cannot be used in their culture as an item for that scale. Each item was rated twice: once for “use for men” and again for “use for women” on separate five-point, Likert-type scales from 1, “NO” to 5, “YES”. At the bottom of each page there is room for the professional respondent to make comments about the items and/or suggest other items for that scale.

After all 61 response sets were collected, each set was independently examined by the two international project directors to assure that each set was properly completed and

free from any obvious bias or contamination. Four response sets were eliminated in this review for such reasons as incompleteness, repetitive response patterns or nondiscriminatory responses.

The final group of 57 responses sets were subjected to extensive statistical analysis which included, for each item, the mean rating, standard deviation, standard error, percent of “NO” responses (rating points 1 & 2), percent of “?” responses (rating point 3) and percent of “YES” responses (rating points 4 & 5); significance of the difference between “NO” and “YES” responses (as determined by Chi Square), and Pearson Product Moment correlation of each item with the other 24 items of the scale and the Cronbach Alpha for all the items of the scale excluding this one item. Finally, the mean rating for “use with men” was compared with the mean rating for “use with women” and differences between the means were tested for significance by Student t-ratio.

The Cronbach Alpha was computed for each total scale of 25 items. This measure of the consistency or reliability of the expert ratings is considered the standard measure of validity for content validation. This total scale alpha was recalculated by rotating the elimination of each of the 25 items of the scale, one by one, to determine the separate effect of each item on the total scale alpha. A summary of the Cronbach Alphas appears in the Appendix.

Item **acceptance** was determined by the following criteria:

- Item mean greater than  $3 + 1 \text{ SE}$
- Percent of “YES” greater than 50% and higher than percent of “NO”
- Positive correlation with the other items in the same scale
- Total scale Alpha appreciably decreased by the elimination of this item
- The “use with men” and “use with women” ratings were **not** of reverse polarity **and** significantly different.

Item **rejection** was determined by the following criteria:

- Item mean less than  $3 - 1 \text{ SE}$
- Percent of “NO” greater than 50% and significantly higher than percent of “YES”
- Negative correlation with the other items in the same scale
- Total scale Alpha appreciably increased by the elimination of this item
- The “use with men” and “use with women” ratings were of reverse polarity **and** significantly different

### Validity results in Australia

By the application of these criteria to the item validity ratings in Australia, all but one item met the acceptance criteria. The ratings for that one item, “Feel the spirit of my parents and/or children lives in me” did not meet the criteria for acceptance, but neither did it meet the criteria for rejection. The acceptance and rejection criteria were deliberately designed to be non-continuous so that there would be no

“borderline” judgments. Consequently, it was possible for the ratings of some items to fall into a category called “undefined”. It was the policy of the test designers to tentatively include these undefined items among the accepted items until field-testing was completed. Therefore, all 200 items are included in the SWS—Survey for Australia. However, further validation will result in refinement of the scale.

### **PURPOSES AND USES OF THE INSTRUMENT**

The *SWS—Survey*<sup>©</sup> is intended as a research instrument to identify specific circumstances, which are indicative of health risks for workers whether these circumstances are characteristic of where the worker works, characteristic of situations outside of work, or characteristic of the worker’s attitudes, dispositions and life style. The instrument also identifies circumstances that could offset health risks. These circumstances are referred to as “strengths” or “support indicators” and are also descriptive of situations at work, outside of work or are part of the worker’s attitudes, dispositions and life style. While more often than not concern about health risks is focused on physical health problems, this questionnaire gives additional concern to mental health characteristics. Although designed as an instrument for group research, the *SWS—Survey*<sup>©</sup> also has value as a comprehensive, descriptive inventory for individuals.

Effective stress management requires that employers and workers need to know whether the stress is dysfunctional or not and from where the stress originates. Results from the *SWS—Survey*<sup>©</sup> can be both diagnostic (pointing to problems) and prescriptive (pointing to solutions). High aggregate scores on the stress items can identify work situations and workers “at risk” and high individual item scores can identify the specific reasons for the risk so that corrective action can be taken.

Furthermore, while low scores on the support items can compound the “at risk” dimension for work and for workers, these items can indicate further areas of corrective action, i.e. increasing support.

Oftentimes employers are ‘surprised’ by the negative effects of stress even though they have been well documented by research; some affect the company, some the worker and some affect both: reductions in productivity and quality of performance, job injury, illness and absenteeism; high medical costs, poor morale, job dissatisfaction, unwanted turnover and even sabotage or violence. Sometimes, employers get blamed unfairly for stressed workers, when the source is not the work, but situations outside of work or the worker’s own attitude and behavior (e.g. Type A). The *SWS—Survey*<sup>©</sup> can not only provide an early warning to employers and workers, but also suggest preventative and corrective action.

Unfortunately, stress management too often focuses just on the reduction of stress. In some instances stress on the job cannot (or should not) be reduced and for most workers, some degree of stress can be invigorating and even necessary for adequate performance – certainly necessary for exceptional performance. Recent research has also documented that good job performance is highly correlated with good mental health. Responses to the mental health items can gauge the impact of stress on the individual, both in positive or negative terms.

Apart from descriptive individual results, statistical group results by scale and by item for type of work, department, age and gender categories can be a basis for changes in company policy, work procedures and conditions, assignment of managers, etc. and evaluating the effectiveness of those changes.

## **ADMINISTRATION OF THE SURVEY**

### **Preparation**

The *SWS—Survey*® can be administered individually or in groups of varying size. A sharpened pencil with an eraser and a copy of the questionnaire should be provided to each person. The questionnaire is not timed and completion should take about 35 to 45 minutes. Care should be taken that each person has sufficient space in order to feel a sense of privacy and that sufficient time is available to complete the questionnaire without interruption.

The test administrator should be prepared with extra sharpened pencils and a large 9 x 12 envelope for the completed questionnaires.

### **Directions to the administrator:**

After distributing the questionnaire and a pencil to each person, direct their attention to the demographic section at the top of the page and read aloud, the introductory statement, which appears at the top of the cover page and below.

**THIS SURVEY IS ABOUT YOU AND YOUR WORK, HOW YOU FEEL  
ABOUT YOURSELF AND ABOUT LIFE AROUND YOU. MARK THE BOX  
OR FILL IN THE BLANK FOR YOUR ANSWER. YOUR ANSWERS ARE  
CONFIDENTIAL**

Be prepared to further explain or describe the response categories if the respondents ask for help.

For group research (no results given to participants):

- Emphasize that their participation is anonymous.
- Leave the I.D. Code # blank unless this questionnaire is given as part of a test battery.
- The same I.D. Code # must be used on each form, test, or questionnaire, medical exam, etc. so separate results can be matched.

For situations of individual counseling:

- Emphasize that responses are confidential; their identity is not known to the scorer nor anyone else except their counselor. Assign an I.D. Code # (usually birth date, telephone number, Social Security number, auto tag, etc.) to protect their identity. The counselor should keep the confidential record of I.D. Code #'s.

After the demographic questions are completed, read aloud the directions, right above item 1.

**READ EACH STATEMENT BELOW AND THINK HOW OFTEN EACH STATEMENT DESCRIBES OR FITS YOU. MARK ONLY ONE BOX AT THE RIGHT FOR YOUR ANSWER.**

**READ ITEM # 1**

**“Find the people where I live to be agreeable.”**

**MARK YOUR RESPONSE AT THE RIGHT.**

**IF YOU NEVER FIND PEOPLE WHERE YOU LIVE TO BE AGREEABLE, MARK #1; IF RARELY, MARK #2; IF SOMETIMES, MARK #3; IF OFTEN, MARK #4;  
IF VERY OFTEN, MARK #5.**

**MAKE YOUR MARKS CLEAR AND DISTINCT. MAKE SURE YOU MAKE ONLY ONE MARK FOR EACH ITEM. IF YOU WANT TO CHANGE YOUR MARK, MAKE SURE YOU THOROUGHLY ERASE YOUR FIRST MARK.**

**IF YOU HAVE NO QUESTIONS, THEN CONTINUE THROUGH THE REST OF THE QUESTIONNAIRE. RAISE YOUR HAND WHEN YOU ARE FINISHED.**

If someone asks for clarification of an item, try to substitute equivalent words without giving a tone of approval or disapproval or say: “I am not allowed to interpret the questions for you, try to think it out yourself as best you can and then mark one answer.”

As each person finishes and is ready to hand in the questionnaire, say:

**TAKE A SECOND LOOK THROUGH YOUR QUESTIONNAIRE AND MAKE SURE YOU HAVE MARKED ONE ANSWER AND ONLY ONE ANSWER FOR EACH ITEM.**

Collect the questionnaires and place each one in the large envelope so the respondents can see that their questionnaire will not be left around for anyone to read.

## **SCORING AND INTERPRETATION**

### **Preparation**

The first step in scoring is to review the completed questionnaire to make sure the responses are clearly marked and “appropriate”. In some rare instances respondents may “sabotage” a survey by making ‘silly’ responses. Review the responses to the demographic questions and the I.D. Code for ‘silly’ responses. Review the responses to the 200 items and be suspicious of any repetitive response patterns and large numbers of responses left blank. Such questionnaires should be discarded – but not ignored, as such responses may be symptoms of very serious problems brewing.

Also rare are the occasions when there are a few blank responses and/or more than one response marked for an item. In cases of individual counseling, the respondent

should be asked to resolve these problems. If that is not possible, such as in the case of anonymous responses of a large sample, follow these suggestions:

Blank responses: If there are only a few blanks, - say, no more than 6, - make no adjustment. If there are several blanks, consider discarding the questionnaire from the sample. The final decision to discard or not may depend on the size of the sample, or the size of a demographic sub-sample.

More than one response marked: If there are two responses and it cannot be determined which was the final, intended response (e.g. one noticeably darker, one partially erased or crossed out) toss a coin and select one of the two responses by chance. If there are more than two responses marked, consider the response as a blank response.

In cases of both individual counseling and group research, a high frequency of blanks, multiple responses, or repetitive responses patterns, these may suggest deliberate 'sabotage' and should be viewed with clinical suspicion as possibly indicative of broader, more serious behavior problems or of organizational difficulties.

In instances where the scoring is assigned to a non-professional assistant, review the demographic responses to make sure the identity of the respondent is not compromised.

### **Scoring**

The "score" for each item is the number (1, 2, 3, 4, or 5) as marked by the respondent.

The purpose of scoring is to compute a separate total score for each of the eight

scales. Scoring of individual questionnaires can be easily accomplished by an Excel spreadsheet or any statistical, data base software. Once the responses for all 200 items have been recorded separately for each respondent, the items can be grouped according to their corresponding scales (See Table 2) and then several summaries easily produced.

- A. Total score for each separate scale.
- B. Total stress score by combining SST, WST, and PST scores
- C. Total support score by combining SSP, WSP and PSP scores
- D. Total Poor Mental Health Score (PMH)\*
- E. Total Good Mental Health Score (GMH)\*

For research studies the interest is in the results for specific groups of respondents. In order to do this, in addition to the item responses for each individual the responses to the demographic questions must also be entered in the spreadsheet as descriptive variables. Some demographic response choices need to be coded for entry. (See Table 3 in the Appendix for demographic entry codes.) Specific group designation can then be made by selecting some characteristic from the demographic details such as department, gender, type of work, economic level, etc. Group Scoring is then easily accomplished by combining the individual responses.

- F. Group average score for each separate scale.
- G. Group average total stress score by combining SST, WST, and PST
- H. Group average total support score by combining SSP, WSP and PSP
- I. Group average Poor Mental Health Score (PMH)
- J. Group average Good Mental Health Score (GMH)
- K. Group average score for any single item.

## **Interpretation:**

### Organizational Feedback

Results from the *SWS—Survey* most certainly provide a sound basis for assessing the degree of work stress and identifying specific areas of concern. Average WST scores for a specific group sample will range from 25 to 125 (midpoint 75) and this will identify low, medium and high stress situations in the work place. However, since individual low scores offset individual high scores, attention should also be paid to the 50<sup>th</sup> percentile and the inter-quartile range which will identify the stress level for half the workers in a particular group sample. This analysis will also identify individuals, although anonymously, who present the most serious stress risks. Employee assistance programs can be made available on a voluntary, cost-free basis or department efforts can still reach out to individuals through department-wide programs.

An examination of the specific items that have a high average stress score and those that have a low average support score will suggest where corrective actions can be beneficial. The scores for the other stress and support scales should not be ignored. A close examination of these items, especially high SST and PST scores as well as low SSP and PSP scores reveal, surprisingly, some areas, which are susceptible to employer intervention. For example, one of the common employee reactions to work stress is to work longer hours. This reaction invariably results in raised stress and lowered support outside of work as well as raised personal stress concerns and lowered personal strength indicators.

Organizational leaders should pay particular attention to evident stress at upper levels of the organization. While executives and managers typically have more sources of work stress than those employees at lower levels of the organization, higher level employees have more ways of dealing with stress: flexible work hours, longer lunch periods, more control over their work. However, employees at higher levels also have the power to dispose of their stress by pushing it off on to others. An executive 'stress carrier' can cause a chain reaction of dysfunctional stress for several other employees.

None of this is to say that stress among lower level worker does not occur or can be ignored. All employees can experience work stress and bring stress to the job. But workers at lower levels of an organization have less flexibility in their work and research has shown that the more a worker has control over their work, the more they are able to manage the stress. Clerical workers and production workers as well as others rarely have this kind of control. Therefore it is not surprising to find more frequent and more serious health risks among employees doing simple, repetitive tasks being held accountable to production demands and rigid time schedules or being responsive to someone else's insistent demands.

### Mental Health Issues

Scores on the two mental health scales should also be analyzed in terms of averages, medians and inter-quartile ranges. High scores for stress and low scores for support may be found in specific items because of situational commonality. But mental health reactions are likely to be more diverse since each individual has their own "soft spot" or "hard spot". More attention should be paid to overall scale results.

Nonetheless, an organization should have a keen interest in employee mental health since studies demonstrate a high relationship between productivity and mental health and because mental health concerns are a precursor to a host of other work related problems – some which present dangers not only to the individual worker but to other workers as well. Often times, mental health concerns lie hidden behind an organization’s insistence on “executive bravado”. Suicide, violence, or health catastrophes like alcohol and drug abuse occur with surprise and put the problem and its costs beyond redemption.

Examining the average and median item scores for Poor Mental Health and Good Mental Health may suggest some employee assistance programs, which can be generally beneficial and cost effective. Others may suggest changes in company culture and in policies and procedures (written as well as unwritten). Organizational leaders should realize that company policies often times contribute to Poor Mental Health problems or, at the very least, contribute to their inattention. Changes can just as readily contribute to the increase and maintenance of Good Mental Health.

None of this is to suggest that an organization should be without stress and should do everything possible to reduce it. That would be far from wise. Without some prevailing degree of stress a company would not be competitive and individuals, except for a few, would not perform at their best. Management may need to maintain a certain stress level in the workplace. The success of such a strategy can be determined by increases in productivity, that do not have negative effects on mental health and are accompanied by efforts that boost good mental health. Put another way, the more that is done to raise good mental health, increase support and to help

employees deal with stress, the more a company can safely increase the stress level at work and protect itself from the “cost and damage” due to employee illness.

That is the commercial argument, which, at times, is hard to defend because “cost and damage” is not always evident – certainly not short range. There is another argument – the humane one – treating employees as people (not as commodities nor as competitors) fairly, ethically, and as one would like oneself to be treated.

### **Individual Counseling:**

#### Feed back on Stress and Support Scores

Reviewing the total scores for each separate scale (A) and total scores for stress (B) and for support (C) will give a broad indication of the individual’s stress/support condition.

1. Considering that the score range for the total stress scores (B) or total support scores (C) is from 75 to 375 (midpoint 225) the total stress score and the total support score can be classified as low, medium or high. Ideally stress scores should be low and support scores should be high. High stress scores, especially higher than support scores are problematic.
2. Considering that the score range for each separate scale (A) is from 25 to 125 (midpoint 75) each scale total score can be classified as low, medium or high. Comparing the three domains, some rough determination can be made as to the likely source(s) of high total stress scores or low support scores.

A more detailed analysis can be conducted by looking at the individual item scores:

3. List those stress items for which the response 4 or 5 was marked.
4. Lists those support item for which the response 1 or 2 was marked.

Form A, in the Appendix, is a sample of a printout of scale scores, total scores and specific high stress items and low support items which can done from an Excel spreadsheet or any other statistical data base software and given to an individual respondent as feedback.

A review of these selected lists will suggest some situational and behavioral changes that would reduce stress or increase support. Possibly some situational changes cannot be made (e.g. removing the risks and hazards from a fire fighter's job). But, where sources of stress cannot be eliminated or reduced, attention should be drawn to support factors that could be increased. Counseling may need to reach beyond just working with the individual and secure help in making changes. Where necessary, referrals (medical, recreational, educational, etc.) should be made for further consultation and assistance. High SST scores or low SSP scores may suggest family counseling and high WST scores or low WSP scores may suggest interventions in the workplace. Numerous self-help books are readily available, but some behavioral or dispositional changes suggested by high PST scores or low PSP scores may require extended counseling or therapy.

### Feedback on Mental Health Scores

The two mental health scales are primarily for the counselor's use and not necessarily for individual feedback. So far, research has shown that these two scales are not

correlated and this is consistent with other research and theory, which is just beginning to emerge regarding new measures in the field of positive psychology. **This means that the two scales cannot be combined for an “overall mental health score”** as more or less of one does not compensate for more or less of the other.

The Mental Health Scores also have the same range of 25 to 125 (midpoint 75) and can be classified as low, medium or high. Obviously a high PMH score is symptomatic and so too is a low GMH score. In the context of this survey, the two scores serve to underline the seriousness of the individual's stress demands. High stress is likely to have negative effects on Mental Health, but not necessarily. Eustress, i.e. good stress, is that kind and level of stress, which makes life more interesting and exciting; it promotes enthusiasm and exceptional performance. Before determining that high levels of stress are dysfunctional, counselors should look at the PMH score and GMH score to evaluate the mental health effects.

On the other hand, some theorists believe that changes in mental health, either heightened PMH or more subtly lowered GMH are early warning signs of serious stress problems. Individuals may be aware of these changes even before they experience any of the serious physiological consequences of stress. A lack of happiness often occurs before depression or heart problems. It is also possible that PMH and GMH scores may reveal underlying problems, which are broader in nature than just their relationship to stress. Counselors may find the need for extended counseling or therapy even though individual stress scores are not problematic.

A counselor must always be cautious about accepting numbers as incontrovertible data. People are more complex than test and questionnaires can determine. It is

always good professional practice to engage the individuals in the interpretation process by discussing their reaction to the questionnaire, discussing whether they thought the assessment correct and whether there were other questions and concern, which were not tapped by the 200 items of the survey.

The *SWS—Survey of Stress and Mental Health*<sup>®</sup> provides a comprehensive and detailed description of individual circumstances indicative of stress, support and mental health. It can suitably serve as a tool for intake and for follow up evaluation. However, until appropriate normative data has been developed from relevant group research, evaluations as to low, medium or high scores must be regarded as descriptive not necessarily as clinically diagnostic. To evaluate individual responses as “normal” or not, data needs to be collected regarding representative group samples.