



The *Coping & Stress Profile*[®] EPIC Online Version

Development and Validation Report

David H. Olson, Ph.D.*

The *Coping & Stress Profile*[®] EPIC Online Version Research Report

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* David H. Olson, Ph.D. is the developer of the *Coping & Stress Profile*. He is Professor Emeritus, University of Minnesota, and President of Life Innovations.

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Theoretical and Research Evaluation

The MASH Model

The EPIC online version of the *Coping & Stress Profile*[®] is based on a theoretical model called the Multisystem Assessment of Stress and Health (MASH) Model. The MASH Model builds upon previous stress research to form a comprehensive biopsychosocial model of stress and health (Aldwin, 1984; Boss, 1989; Doherty & Campbell, 1988). Earlier work in the field of stress concentrated on stress and coping at only one conceptual level, most often either at the personal level or in a work setting (Aldwin, 1994).

The MASH Model contains three primary components: **stress, coping resources, and satisfaction**. The online version of the *Coping & Stress Profile* assesses stress at the personal and work levels. Coping resources are organized into a skill dimension and a relationship dimension. The skill dimensions are Problem Solving and Communication. The relationship dimensions are Closeness and Flexibility. Each of these four resources are assessed at two levels, thereby developing eight coping resources.

The basic hypothesis of the *Coping & Stress Profile* is that the greater the number of coping resources a person has developed, the better he or she is able to manage stress and, thereby, increase satisfaction.

Integration of Earlier Theories

The MASH Model draws on earlier models of stress, including the ABCX Model of Family Stress by Reuben Hill (1958), the Family Adjustment and Adaptation Response (FAAR) Model by McCubbin and Paterson (1994), and the Cognitive Appraisal Model of Stress and Coping by Lazarus and Folkman (1985).

All these models of stress and coping are similar in that they look at three components: level of stress, coping resources, and adaptation (satisfaction). The newer theoretical models have mainly identified more coping resources.

The online version of the *Coping & Stress Profile* is unique because it focuses on these three components across two key life areas. It also integrates ideas and resources from previous theory and research.

Coping & Stress Profile® Scales

Instrument Scaling

Twelve scales were developed for the online version of the *Coping and Stress Profile®*: two stress scales (one for each life area); eight scales for assessing coping resources (four for each life area); and two satisfaction scales (one for each life area).

Reliability of Scales

All twelve scales used in the *Coping and Stress Profile* have very high internal consistency reliability (alpha) with a median of .86 and ranging from .73 to .96. An overview of the source of the scale, number of items, and the reliability of the scale is provided. (See Table 1)

Stress Focus on Daily Hassles and Life Strains

In assessing stress, the focus is on persistent problems and hassles of everyday life, rather than on life events. Even though major life events (e.g., moving, weddings, promotions, births, divorces) were the basis for earlier stress research, recent findings show that minor life **strains** or daily hassles are better predictors of subsequent physical and psychological symptoms (DeLongis, 1985). **Strains** are ongoing issues that cause an underlying tension in a person.

Table 1: Coping & Stress Profile® Scales

	Scales	Source	Items	Reliability
<u>Stress</u>				
Personal	Personal Stress	Olson & Stewart, 1988	50	.93
Work	Work Stress	Fournier, 1981	28	.89
<u>Coping Resources</u>				
Personal	Problem Solving Style	Olson & Stewart, 1988	7	.79
	Communication Style	Olson & Stewart, 1988	10	.79
	Closeness Style	Olson & Stewart, 1988	10	.76
	Flexibility Style	Olson & Stewart, 1988	10	.73
Work	Work Problem Solving Style	Olson & Stewart, 1988	6	.82
	Work Communication Style	Olson & Stewart, 1988	10	.88
	Work Closeness Style	Olson & Stewart, 1988	10	.85
	Work Flexibility Style	Olson & Stewart, 1988	10	.87
<u>Satisfaction</u>				
Personal	Personal Satisfaction	Viet & Ware, 1983	10	.96
Work	Work Satisfaction	Olson & Stewart, 1988	10	.88

The Holmes and Rahe Stress Scale is a popular example of measuring stress by focusing on life events. The problem is that some people interpret life events as positive, while others might see them as negative. Only negative interpretations of life events are problematic stressors.

Research by DeLongis (1985) clearly demonstrated that physical symptoms (e.g., headaches, ulcers, high blood pressure) and/or psychological symptoms (depression or anxiety) could be better predicted using strains than by life events. The strains, or stressors, have a more direct effect on a person. Therefore, if a person has a high level of stressors over time, he or she could develop either psychological or physical symptoms.

Research by Lavee, McCubbin, and Olson (1986), also found that life events were less significant predictors of stress and coping than were life strains. Just knowing the number of events that a person or family experienced did *not* predict the level of satisfaction. The study also found that strains changed more predictably over a family life cycle, and were more variable across family system types, than were life events.

Stress

Personal Stress

Three new scales were developed by Olson and Stewart (1988) to provide an inclusive array of strains rather than life events.

A comprehensive scale focusing on strains was developed to measure Personal Stress because all past measures of stress focused on life events. Consequently, it was necessary to develop new items that focused on strains.

Work Stress

The items used to assess the level of stress in the workplace are from an instrument developed by David Fournier (1981) called PROFILE (Personal Reflections On Family Life and Employment).

The PROFILE instrument has four basic domains:

- Problems associated with work
- Problems associated with the family
- Impacts or effects associated with work
- Impacts associated with the family

Only the items from the first and third areas of the PROFILE, dealing with the work environment, are used in the work stress assessment in the *Coping & Stress Profile*[®].

For the category of Work Problems, the following PROFILE sub-categories are used in developing the *Coping & Stress Profile*: work schedule, salary and benefits, work supervisors, work relationships, and job characteristics. In the category of Work Impacts, the sub-category of work productivity is used.

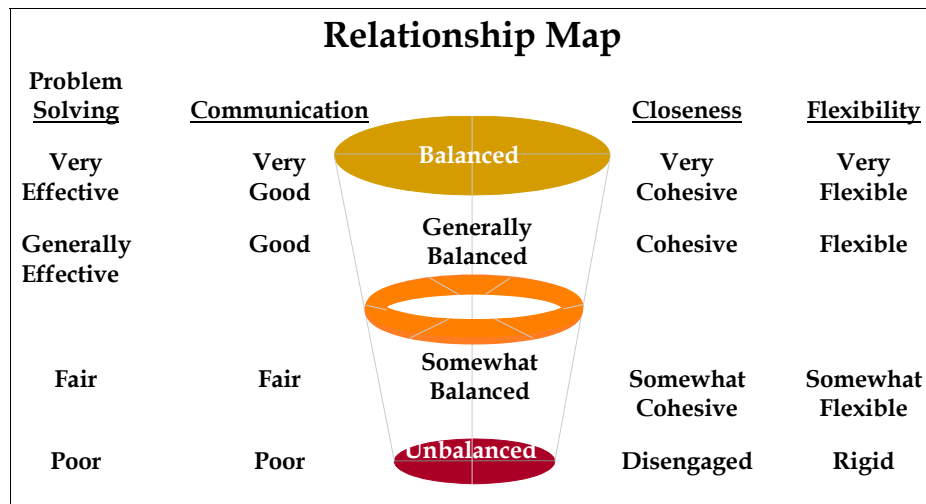
Coping Resources

There are four generic coping resources assessed for two areas of life. Two of the coping resources are the skill dimensions of Problem Solving and Communication. Problem Solving is defined as the positive and active process of dealing directly with problems and making positive changes to resolve them. Communication is defined as a process of effective exchange of information.

The other two coping resources are the relationship dimensions of Closeness and Flexibility. Closeness is defined as the amount of emotional bonding, while Flexibility is the degree the person changes his or her roles and rules over time.

The four coping resources of Communication, Problem Solving, Closeness, and Flexibility are linear dimensions. In this case, linear means the greater the level of the resource, the better it is for helping a person manage stress, increase productivity, and increase satisfaction. A high score is, therefore, more desirable (balanced) than a low score (unbalanced). It has been found that those with balanced scores are happier and better equipped to deal with stress (Olson, McCubbin, et al., 1989). (See Figure 1)

Figure 1: Relationship Map



Skill Dimensions

Problem Solving and Communication are the skill dimensions integrated into the two life areas. Research has shown these dimensions to be consistently important for managing stress.

Problem Solving

A variety of studies by Perlin (1989) and Lazarus and Folkman (1984) have identified the first skill dimension, Problem Solving, as a very useful resource to manage stress. People who are high in Problem Solving tend to deal with stress in a more effective manner. A new scale was developed, based on current research findings, that focuses on taking direct, positive steps to set goals, to arrive at new or different solutions, and to remain empathic with others.

The coping resource of Problem Solving is integrated into both life areas represented in the online version of the *Coping & Stress Profile*[®]. The questions are based on positive Problem Solving, which involves taking direct, positive steps to set goals and to arrive at new or different solutions to problems.

Personal Problem Solving

The ten questions on personal Problem Solving focus on how well the person is able to create new ideas and solutions. It emphasizes the person's creative ability and skills at working directly with issues.

Work Problem Solving

The work Problem Solving scale contains ten items that focus on the following: assertiveness, sense of humor, positive reforming, and collaborating with others. These components are very important and are used in most conceptual models dealing with effective Problem Solving.

Communication

Communication is the second skill resource. As with the other coping resources, Communication is assessed in both areas. This dimension focuses on how a person communicates with others. The link between expressed and unexpressed emotions and adverse health outcomes has been well-documented in literature on psychosomatic medicine (Doherty & Campbell, 1988). Therefore, including an assessment of emotional Communication was deemed an important component for the profile.

Personal Communication

A ten-item self-report scale, developed by Olson and Stewart (1988) assesses how often one expresses frustration or disappointment, how clearly the person explains himself or herself, how well the person remains in control of his or her feelings, and if the person is appropriately assertive with others.

Work Communication

This ten-item assessment measures the effectiveness and clarity of interpersonal Communication at work among co-workers, supervisors, and other levels of management.

Relationship Dimensions

The relationship dimensions of the Relationship Map (Figure 2), Closeness and Flexibility, are integrated into both system levels.

Closeness and Flexibility

Closeness is one of the most important factors in helping people effectively manage stress. The focus is on emotional Closeness with others who can offer support and help when it is needed.

Flexibility is the ability to change when necessary. The focus is on looking for alternative ways of operating, and knowing how and when to shift from current ways of doing things.

Personal Closeness and Flexibility

Personal Closeness and Flexibility focuses on the preferences and ability of the person to relate to others in ways that would facilitate these dimensions.

Work Closeness and Flexibility

To assess the level of Closeness and Flexibility in the work system, two scales were developed by Olson and Stewart (1988) based on observation of work groups.

Consultants in a position to make observations of both families and work groups discovered that many of the same factors contributing to problems within the family are also true for work groups. That is, unbalanced systems are often low in Closeness (disengaged) and Flexibility (rigid). Unbalanced groups can have negative consequences, not only for the effectiveness of the group, but also for employee morale and health.

These factors translate to issues of work-group productivity. Very productive work groups are high in coping resources and are identified as balanced systems. Unproductive work groups, on the other hand, have poor coping resources, and are unbalanced systems. (See Table 2) Refer back to Figure 1 for additional information.

Table 2: Productivity and Relationship Resources

Productivity of Work Groups	Work Resources			
	Problem Solving	Communication	Closeness	Flexibility
Very Productive	Very Effective	Very Good	Very Cohesive	Very Flexible
Generally Productive	Generally Effective	Good	Cohesive	Flexible
Somewhat Productive	Fair	Fair	Somewhat Cohesive	Structured
Unproductive	Poor	Poor	Disengaged	Rigid

Satisfaction

Satisfaction is an important outcome assessment that focuses on how well a person is adapting to all aspects of life. In addition to personal satisfaction, an additional measure is used for evaluating levels of satisfaction at work. These scales are included in order to provide outcome measures at both system levels, rather than having only one general outcome measure. The separate scales provide a more accurate and valid assessment of satisfaction.

Personal Satisfaction

A ten-item scale was developed by Viet and Ware (1983) that measures global life satisfaction and a meaningful life. Considerable research has demonstrated the empirical and clinical value of this domain. People higher in satisfaction are not only happier about their life, but tend to have higher levels of self-esteem, fewer physical symptoms, and fewer emotional problems.

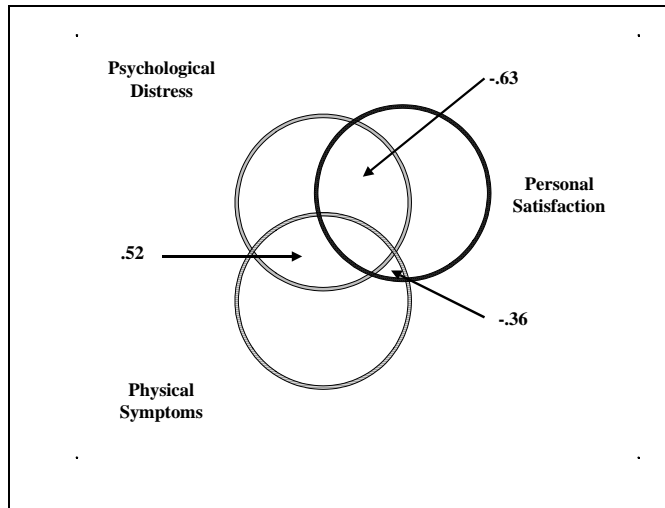
Work Satisfaction

This is a ten-item scale developed by Olson and Stewart (1988) that assesses the degree of satisfaction gained from a person's work, and the degree to which an individual is enriched by his or her work. It includes items that assess many of the same factors measured in the Work Stress scale. These items include satisfaction regarding work schedules, salary and benefits, job characteristics, and work relationships. It is assumed that since these items assess most of the significant occupational issues conceptualized by Fournier in his Work Stress scale (1981), the satisfaction scale should reflect similar dimensions.

There is a direct relationship between satisfaction scales in both areas of life. This means that a person satisfied with his or her work life will generally be happy with his or her personal life, as well.

There is also a direct relationship between health (physical and psychological) and satisfaction as shown by the *Coping & Stress Profile*[®]. Personal satisfaction is negatively correlated to physical symptoms (-.36) and to psychological distress (-.63). As expected, there is a positive correlation (.52) between physical symptoms and psychological distress. (See Figure 2)

Figure 2: Interconnection of Health and Satisfaction



Personal Coping Resources

There are six additional personal-coping resources people use, in conjunction with the Relationship Coping Resources, to manage their levels of stress. These consist of Self-Esteem, Mastery, Social Support, Spiritual Beliefs, Exercise, and Nutrition. While these personal resources are important for one to have a healthy life style, Dr. Olson's research and that of others has not found that they predict satisfaction and other outcomes as well as the eight Relationship Coping Resources that form the core of the online version of the *Coping & Stress Profile*[®].

Research Study Validation

A study by Kenneth Stewart (1988) tested the reliability and validity of the *Coping & Stress Profile*. The research demonstrated that the profile is a very reliable and valid assessment instrument.

It clearly identified individuals who coped well with stress, and had no major physical or psychological symptoms, and those who were stressed and had some symptoms. The value of the profile, as a comprehensive assessment, was demonstrated by the fact that those who coped well with stress used resources from all areas of their lives.

A sample of 440 adults was taken from three populations: two corporate sites (51%), a family medical practice (23%), and a stress-management class (26%). The questionnaires from each of these diverse sampling sites were pooled into one group for data analysis, since the purpose was not to make comparisons among groups, but to focus on the variables in question.

Validity Findings

This pooled sample of females (62%) and males (38%) was primarily Caucasian and relatively well-educated (28.8% had a post-graduate or professional education). 82% were either married or in a significant relationship and 59% were in families with children.

Validity of the *Coping & Stress Profile*[®] scales and the MASH Model were supported by the research.

- It clearly discriminated between individuals who coped well with stress and those who did not.
- Individuals who coped well with stress used resources from all areas of their life.
- The findings demonstrated the value of a comprehensive assessment of stress and coping.

The following five coping resources were found to discriminate between individuals who coped well with stress and those who did not. These five resources consistently accounted for a very high percentage (76-80%) of overall satisfaction:

- Couple Cohesion
- Self-Esteem
- Family Flexibility
- Work Communication
- Couple Problem Solving

People who were high in these resources coped well with stress; they tended to have no major physical or psychological symptoms and used several coping resources from different areas of their life.

National Normative Data

Normative data for the *Coping & Stress Profile*[®] is periodically updated, and research is ongoing. In 1995, norms were available on about 8,500 people.