

## Reference List for Project GRAD Measures Revised February 2000

Project GRAD used an extensive set of measures in an attempt to explain mediators of physical activity. This reference list may help you understand and use the measures on the GRAD survey. Most of these measures have been described in publications from GRAD.

- Sallis, J.F., Calfas, K.J., Nichols, J.F., Sarkin, J.A., Johnson, M.F., Caparosa, S., Thompson, S., and Alcaraz, J.E. (1999). Evaluation of a university course to promote physical activity: Project GRAD. *Research Quarterly for Exercise for Sport*, 70, 1-10.
- Williams, C.D., Sallis, J.F., Calfas, K.J., and Burke, R.S. (1999). Psychosocial correlates of television viewing. *American Journal of Health Promotion*, 13, 207-214.
- Sallis, J.F., Calfas, K.J., Alcaraz, J.E., Gehrman, C., and Johnson, M.F. (1999). Potential mediators of change in a physical activity promotion course for university students: Project GRAD. *Annals of Behavioral Medicine*, 21, 149-158.
- Sarkin, J.A., Nichols, J.F., Sallis, J.F., and Calfas, K.J. (2000). Self-report measures and scoring protocols affect prevalence estimates of meeting physical activity guidelines. *Medicine and Science in Sports and Exercise*, 32, 149-156.
- Calfas, K.J., Sallis, J.F., Nichols, J.F., Sarkin, J.A., Johnson, M.F., Caparosa, S., Thompson, S., Gehrman, C.A., and Alcaraz, J.E. (2000). Project GRAD: Two-year outcomes of a randomized controlled physical activity intervention among young adults. *American Journal of Preventive Medicine*, 18, 28-37.

### ***For further information:***

James F. Sallis, Ph.D.  
Department of Psychology  
San Diego State University  
6363 Alvarado Court, #103  
San Diego, CA 92120 USA  
Fax: 619-594-8707

### **Barriers to Physical Activity**

- Sallis, J.F., Hovell, M.F., Hofstetter, C.R., Faucher, P., Elder, J.P., Blanchard, J., Caspersen, C.J., Powell, K.E., & Christenson, G.M. (1989). A multivariate study of determinants of vigorous exercise in a community sample. *Preventive Medicine*, 18, 20-34.
- Calfas, K.J., Sallis, J.F., Lovato, C.Y., & Campbell, J. (1994). Physical activity and its determinants before and after college graduation. *Medicine, Exercise, Nutrition, and Health*, 3, 323-334.

## **Benefits of Physical Activity**

Hovell, M.F., Sallis, J.F., Hofstetter, C.R., Spry, V.M., Faucher, P.F., & Caspersen, C.J. (1989). Identifying correlates of walking for exercise: an epidemiologic prerequisite for physical activity promotion. *Preventive Medicine, 18*, 856-866.

Calfas, K.J., Sallis, J.F., Lovato, C.Y., and Campbell, J. (1994). Physical activity and its determinants before and after college graduation. *Medicine, Exercise, Nutrition, and Health, 3*, 323-334.

## **Body Image**

Garner, D.M., Olmsted, M.P. (1984). *Manual for eating disorder inventory (EDI)*. Psychological Assessment Resources, Inc.

## **Enjoyment**

Kendzierski, D., & Decarlo, K.J. (1991). Physical activity enjoyment scale: two validation studies. *Journal of Sport and Exercise Psychology, 13*, 50-64.

## **Life Experiences Survey**

Sarason, I.G., Johnson, J.H., & Siegal, J.M. (1978). Assessing the impact of life changes: development of the life experience of the life experience survey. *Journal of Consulting and Clinical Psychology, 46*, 932-946.

## **Perceived Physical Environment**

Describe Your Environment

Sallis, J.F., Johnson, M.F., Calfas, K.J., Caparosa, S., and Nichols, J. (1997). Assessing perceived physical environment variables that may influence physical activity. *Research Quarterly for Exercise and Sport, 68*, 345-351.

## **Seven-day Physical Activity Recall (PAR) Interview**

Blair, S.N. (1984). How to assess exercise habits and physical fitness. In J.D. Matarazzo, J.A. Herd, N.E. Miller, & S.M. Weiss (Eds). *Behavioral health: A handbook of health enhancement and disease prevention* (pp. 424-447). New York: Wiley.

Dishman, R.K., & Steinhardt, M. (1988). Reliability and concurrent validity for a 7-day recall of physical activity in college students. *Medicine and Science in Sports and Exercise, 20*, 14-24.

Gross, L.D., Sallis, J.F., Buono, M.J., Roby, J.A., & Nelson, J.A. (1990). Reliability of interviewers using the seven-day physical activity recall. *Research Quarterly for Exercise and Sport, 61*, 321-325.

- Nader, P.R., Baranowski, T., Vanderpool, N.A., Dunn, K., Dworkin, R., & Ray, L. (1983). The Family Health Project: Cardiovascular risk reduction education for children and parents. *Developmental and Behavioral Pediatrics, 4*, 3-10.
- Sallis, J.F., Patterson, T.L., Buono, M.J., & Nader, P.R. (1988). Relation of cardiovascular fitness and physical activity to cardiovascular disease risk factors in children and adults. *American Journal of Epidemiology, 127*, 933-941.
- Sallis, J.F., Buono, M.J., Roby, J.J., Micale, F.G., & Nelson, J.A. (1993). Seven-day recall and other physical activity self-reports in children and adolescents. *Medicine and Science in Sports and Exercise, 25*, 99-108.
- Sallis, J.F., Haskell, W.L., Wood, P.D., Fortmann, S.P., Rogers, T., Blair, S.N., and Paffenbarger, R. (1985). Physical activity assessment methodology in the Five City Project. *American Journal of Epidemiology, 121*, 91-106.
- Rauh, M.J.D., Hovell, M.F., Hofstetter, C.R., Sallis, J.F., & Gleghorn, A. (1992). Reliability and validity of self-reported physical activity in Latinos. *International Journal of Epidemiology, 21*, 966-971.
- Sarkin, J., Campbell, J., Gross, L., Roby, J., Bazzo, S., Sallis, J., and Calfas, K. (1997). Project GRAD Seven-Day Physical Activity Recall Interviewer's Manual. *Medicine and Science in Sports and Exercise, 29 (Supplement)*, S91-S102.

### **Physical Activity Readiness Questionnaire (PAR-Q)**

- Thomas, S., Reading, J., & Shephard, R.J. (1992). Revision of the physical activity readiness questionnaire (PAR-Q). *Canadian Journal of Sports Science, 17*, 338-345.

### **Processes of Change**

- Marcus, B.H., Rossi, J.S., Selby, V.C., Niaura, R.S., & Abrams, D.B. (1992). The stages and processes of exercise adoption and maintenance in a worksite sample. *Health Psychology, 11*, 386-395.

### **Pros/Cons**

- Marcus, B.H., Rakowski, W., & Rossi, J.S. (1992). Assessing motivational readiness and decision making exercise. *Health Psychology, 11*, 257-261.

### **Quality of Life**

- Woodruff, S.I., & Conway, T.L. (1990). Perceived quality of life and health-related correlates among men aboard Navy ships. *Military Psychology, 2*, 79-94.

### **Self Efficacy for Exercise**

Exercise Confidence

Hofstetter, C.R., Hovell, M.F., & Sallis, J.F. (1990). Social learning correlates of exercise self-efficacy: early experiences with physical activity. *Social Science and Medicine*, 31, 1169-1176.

Sallis, J.F., Pinski, R.B., Grossman, R.M., Patterson, T.L., & Nader, P.R. (1988). The development of self-efficacy scales for health-related diet and exercise behaviors. *Health Education Research: Theory and Practice*, 3, 283-292.

### **Social Support for Exercise**

Sallis, J.F., Grossman, R.M., Pinski, R.B., Patterson, T.L., & Nader, P.R. (1987). The development of scales to measure social support for diet and exercise behaviors. *Preventive Medicine*, 16, 825-836.

### **Stages of Change**

Armstrong, C. A., Sallis, J. F., Hovell, M. F., & Hofstetter, C. R. (1993). Stages of change, self-efficacy, and the adoption of vigorous exercise: A prospective analysis. *Journal of Sport and Exercise Psychology*, 15, 390-402.

Barke, C. R., & Nicholas, D. R. (1990). Physical activity in older adults: The stages of change. *Journal of Applied Gerontology*, 9, 216-223.

Marcus, B. H., Banspach, S. W., Lefebvre, R. C., Rossi, J. S., Carleton, R. A., & Abrams, D. B. (1992). Using the stages of change model to increase the adoption of physical activity among community participants. *American Journal of Health Promotion*, 6, 424-429.

Marcus, B. H., & Owen, N. (1992). Motivational readiness, self-efficacy and decision-making for exercise. *Journal of Applied Social Psychology*, 22, 3-16.

Marcus, B. H., Rakowski, W., & Rossi, J. S. (1992). Assessing motivational readiness and decision-making for exercise. *Health Psychology*, 11, 257-261.

Marcus, B. H., Rossi, J. S., Selby, V. C., Niaura, R. S., & Abrams, D. B. (1992). The stages and processes of exercise adoption and maintenance in a worksite sample. *Health Psychology*, 11, 386-395.

Marcus, B. H., Selby, V. C., Niaura, R. S., & Rossi, J. S. (1992). Self-efficacy and the stages of exercise behavior change. *Research Quarterly for Exercise and Sport*, 63, 60-66.

Marcus, B. H., & Simkin, L. R. (1993). The stages of exercise behavior. *The Journal of Sports Medicine and Physical Fitness*, 33, 83-88.

Prochaska, J.O., & Marcus, B.H. (1994). The transtheoretical model: Applications to exercise. In R. K. Dishman (Ed.), *Advances in exercise adherence* (pp. 1-9). Champaign, IL: Human Kinetics Books.

## **Youth Risk Behavior Survey (YRBS)**

### General Health - National College Health Risk Behavior

Patrick K, Covin, J, Fulop M, Calfas K, Lovato C. (1997) Health risk behaviors among California college students. *J of Am College Health*, 45, 265-272.

Brener, N.D., Collins, J.L., Kann, L., Warren, C.W., & Williams, B.I. (1995). Reliability of the youth risk behavior survey questionnaire. *American Journal of Epidemiology*, 141, 575-580.

Heath G.W., Pratt, M., Warren, C.W., & Kann, L. (1994). Physical activity patterns in American high school students: Results from the 1990 youth risk behavior survey. *Archives of Pediatrics and Adolescent Medicine*, 148, 1131-1136

Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., & Kolbe, L.J. (1995). Youth risk behavior surveillance- United States. *MMWR*, 44(SS-1).

Heath, G.W., Pate, R.R., & Pratt, M. (1993). Measuring physical activity among adolescents. *Public Health Reports*, 108, Supplement 1, 42-46.