Social Influences on Physical Activity in Older Adults: A Review

Makoto Chogahara, Sandra O’Brien Cousins, and Leonard M. Wankel

The interpersonal relationships of older adults have long been recognized as important determinants for their physical activity involvement. To date, researchers in this field have tended to focus on positive social influences, such as social support. Furthermore, in most studies, operational definitions of social support have stressed the source of the support (e.g., family support and friend support) rather than the nature of the support provided by these groups and individuals. In order to clarify the social context of physical activity among older adults, more attention should be paid to exploring both positive and negative social influences on physical activity. The objectives of this paper were to consolidate current findings concerning social influences and physical activity among aging adults, and to identify major positive and negative social influences from the literature that are associated with physical activity and health-promoting behaviors among aging adults. The development of a more comprehensive and representative method of measuring social influences in physical activity settings is advocated.

Key Words: elderly, social support, social networks, aging, exercise

A growing body of research evidence supports the hypothesis that regular physical activity reduces the risk of several life-threatening conditions among older adults, including coronary heart disease, hypertension, diabetes, metabolic disorders, osteoporosis, osteoarthritis, and cancer (Elward & Larson, 1992; Haskell et al., 1992; Kovar et al., 1992; Lee, 1994; McCarter, 1996; U.S. Surgeon General, 1996). Furthermore, research evidence is growing regarding the social and psychological benefits of physical activity (McAuley & Rudolph, 1995). For example, physical activity decreases depression, anxiety, and stress and is also associated with improved cognitive function, self-confidence, and life satisfaction among older adults (Dustman, Emmerson, & Shearer, 1994; O’Connor, Aenchbacher, & Dishman, 1993).

Despite the many health benefits of physical activity, cross-sectional data generally indicate a decline in participation in physical activity with advancing age (Stephens & Caspersion, 1994). For example, the 1988 Campbell’s Survey on the Well-Being of Canadians (Stephens & Craig, 1990) reported that 50% of men and 70% of women over the age of 65 were not participating in regular physical activity.

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(i.e., at least 30 min every other day) at a moderate level of intensity (i.e., 50% or greater of age-specific capacity). Because a significant number of preventable health problems are caused by a sedentary lifestyle, it is important to identify effective and efficient intervention programs that can increase older persons' participation in physical activity.

Most physical activity intervention programs tend to focus on the need to change personal attributes (e.g., attitudes, intentions, self-efficacy) among individual exercise participants (King, 1994). An alternative to individualized exercise prescription is an approach that attempts to address social factors influencing physical activity at the group and community level (Carron, Hausenblas, & Mack, 1996; King, 1991). Social influences are expected to have significant roles in physical activity settings, because research indicates that more than 65% of those who exercise choose to do so in groups rather than alone (Courneya & McAuley, 1995).

The most frequently studied social construct in physical activity and health promotion research is social support. Numerous studies have demonstrated that formal and informal social support has a strong positive impact on physical and psychological well-being. In the physical activity sciences, social support interventions have been recognized as effective intervention strategies, particularly in group exercise settings (Courneya & McAuley, 1995; Duncan & Stoolmiller, 1993). Although social support is a meaningful construct, both inside and outside a group exercise setting, relatively little is known about the various dimensions of social support that exist in extended social networks in community settings. As more research studies are directed at the community level, it becomes increasingly important to understand the various influences that are activated across the full range of social relationships. Most previous social support research in community settings has employed an additive model which assumes that more support is better.

Recently, the conceptualization of social influences as an exclusively supportive construct has been questioned. Several investigators (e.g., Krause, 1995; Rook, 1992) have noted that this one-sided perspective fails to account for the proposition advanced by exchange theorists, that social influences in social relationships entail benefits and costs and act as a “double-edged sword” (Burg & Seeman, 1994). Thus, social influences can have both positive and negative consequences (Okun, Melichar, & Hill, 1990; Rook, 1992). Among the negative social influences that have been identified are “social hindrance” (Norris, Stephens, & Kinney, 1990; Ruehlman & Wolchik, 1988), “social rejection” (Hirsch & Rapkin, 1986), “social inhibition” (Guerin, 1988), and “social strain” (Rook, 1992). Although these negative social influences may occur less often than positive social influences such as social support, studies have shown that the negative influences are sometimes stronger determinants of health outcomes than the positive ones (Finch, Okun, Brrera, Zautra, & Reich, 1989; Okun, Melichar, & Hill, 1990; Pagel, Erdly, & Becker, 1987; Schuster, Kessler, & Aseltine, 1990) or are equally important determinants (Berner, Norvell, & Limacher, 1989; Lakey, Tardiff, & Drew, 1994).

Little information is available on the role of negative social influences in physical activity settings. The past decade of research in the physical activity sciences has emphasized the positive influences in social relationships such as social support, almost always to the exclusion of their negative properties. For
example, authors of social support studies have assumed that supportive and unsupportive behaviors from others are polar opposites that define one social support domain, only rarely examining both dimensions simultaneously. Several recent studies in health promotion have demonstrated that positive and negative social influences are two relatively independent social experiences (Oostrom, Tijhuis, De Haes, Tempelaar, & Kromhout, 1995; Rook, 1992). This suggests that research studies which examine both the positive and negative functions of social relationships have the potential to provide new perspectives on community intervention strategies for the promotion of physical activity.

The objectives of this paper are to consolidate current findings from the interdisciplinary literature concerning social influences on physical activity for aging adults, and to identify major positive and negative social influences that are associated with physical activity among aging adults. In this review, positive social influences for physical activity are supportive behaviors and helpful actions of others that encourage physical activity involvement. Social support is used interchangeably with positive social influences in this review. On the other hand, negative social influences for physical activity are unsupportive, inhibitive, and resistive behaviors of others that discourage physical activity involvement. Social support theorists suggest that negative social influences (or unsupportive behaviors) are distinguished from a mere absence of support (Ruehlman & Karoly, 1991).

**Positive Social Influences**

In the physical activity sciences, social support has been recognized as an important determinant of leisure-time physical activity; social support is related to adherence to exercise classes, intention to be physically active, self-efficacy for physical activity, and perceived behavioral control in physical activity settings. In Table 1, data from 29 studies examining social support for physical activity are summarized. The table provides descriptions of the subjects, outcome variables, support sources (network members), and types of social support. The major findings are summarized for each outcome variable.

Among 85 social support items identified in the 29 articles, 42 support items had a statistically significant impact on the outcome variable(s), while the remaining 43 social support items did not. The sources of social support were primarily spouses, children, other family members, peers, exercise instructors, and physicians.

In the seven studies employing subjects age 65 or over (Clark, Patrick, Grembowski, & Durham, 1995; Howze, Smith, & DiGilio, 1989; Krause, Goldenhar, Liang, Jay, & Maeda, 1993; O'Brien Cousins, 1995; Potts, Hurwicz, Goldstein, & Berkanovic, 1992; Rifflé, Yoho, & Sams, 1989; Wankel, Mummery, Stephens, & Craig, 1994), 11 social support items were significantly associated with the outcome variable(s), whereas 4 support items were not. Although it is premature to conclude that there is an age difference in the relationships between social support and physical activity, there is some evidence that social support is even more important to physical activity involvement in older age. For example, Wankel et al. (1994) reported that social support from spouses, family members, friends, and doctors contributed more to the intention to become physically active for the older population (60 years old or more) than for a younger population (less than 60 years
### Table 1: Social Support Research in Physical Activity Sciences

<table>
<thead>
<tr>
<th></th>
<th><strong>Subjects</strong></th>
<th><strong>Outcome variable</strong></th>
<th><strong>Support sources</strong></th>
<th><strong>Support types</strong></th>
<th><strong>Support Type Example</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Calfas et al. (1996)</td>
<td>212 sedentary patients over age 18 (34 males and 178 females, mean age = 39)</td>
<td>Change in exercise level during 6 years</td>
<td>Family, friends, physician</td>
<td>Structured support from physicians: helping to establish an activity goal and overcome barriers, discussing the benefits of activity, and suggesting adequate sources of social support ($p &lt; .05$)</td>
</tr>
<tr>
<td>2</td>
<td>Clark et al. (1995)</td>
<td>2,713 older adults who enrolled at a health care organization (1,058 males and 655 females, mean age = 73)</td>
<td>Exercise self-efficacy</td>
<td>Not specified</td>
<td>1) General emotional support for well-being: the presence of someone to discuss problems and decisions with regularly (n.s.) 2) General instrumental support for well-being: the presence of someone who could care for the respondent more than occasionally if he or she were to become ill (n.s.)</td>
</tr>
<tr>
<td>3</td>
<td>Courneya &amp; McAuley (1995)</td>
<td>104 university students, faculty and staff, pregnant women, disabled persons</td>
<td>Exercise class attendance, intention and perceived behavioral control (PBC) during 12 weeks</td>
<td>Instructor and exercise class attendant</td>
<td>Replication of support measurement of Social Provision Scale (see Duncan et al., 1993) 1) Guidance (PBC, n.s.) 2) Reassurance of worth (PBC, $p &lt; .05$) 3) Social integration (PBC, n.s.) 4) Attachment (PBC, $p &lt; .05$) 5) Reliable alliance (PBC, n.s.) 6) Opportunity for nurturance (PBC, $p &lt; .05$)</td>
</tr>
<tr>
<td>4</td>
<td>Duncan et al. (1993)</td>
<td>85 exercise class attendants (41 males and 44 females, age range = 45 to 64)</td>
<td>Exercise class attendance, exercise self-efficacy during 10 weeks</td>
<td>Instructors and exercise class attendants</td>
<td>1) Guidance: There is someone in my exercise class I could talk to about important decisions in my life (attendance $p &lt; .05$; efficacy, n.s.). 2) Reassurance of worth: I have relationships in my exercise class where my competence and skill are recognized (attendance, n.s.; efficacy, $p &lt; .05$).</td>
</tr>
</tbody>
</table>
3) Social integration: Within my exercise class I feel part of a
group of people who share my attitudes and beliefs (atten-
dance, n.s.; efficacy, n.s.).
4) Attachment: I have close relationships in my exercise class
that provide me with a sense of emotional security and well-
being (attendance, \( p < .05 \); efficacy, n.s.).
5) Reliable alliance: There are people in this exercise class
whom I can depend on to help me if I really need it (atten-
dance, n.s.; efficacy, n.s.).
6) Opportunity for nurturance: There are people in this
exercise class who depend on me to help them (attendance,
\( p < .05 \); efficacy, n.s.).

5. Eaton et al. (1993)
Subjects 1,018 community residents (424 males and 657 females, mean
age = 42.2)
Outcome variable Change in frequency of physical activity
Support sources Children and organization
Support types 1) Children’s recommendation of exercise (\( p < .001 \))
   2) Organization membership (\( p < .01 \))

Subjects 587 masters athletes (468 males and 119 females, age
range = 30 to 88, mean = 50.1)
Outcome variable Training frequency
Support sources Spouse, work associates, relatives, and friends
Support types Spouse’s emotional (caring) support (n.s.), co-workers’
   emotional support (n.s.), relatives’ emotional support (n.s.),
   and friends’ emotional support (\( p < .05 \)).

Subjects 672 adults (290 males and 292 females, age range = 50 to 65)
Outcome variable Stage of exercise behavior
Support sources Not specified
Support types Combined index (n.s.) of four types of perceived availability
   of support:
   1) I have someone on whom I can depend when I am having
      problems with exercising.
   2) I have a healthy friend who encourages me to exercise when
      I don’t feel up to it.
   3) I have someone who points out my rationalizations for not
      exercising.
   4) I have someone who provides feedback about my exercis-
      ing.

Subjects 1,140 members of a health maintenance organization (521
   males and 619 females, > 50 years old)
Outcome variable Physical exertion level among leisure-time physical activities
Table 1 (continued)

<table>
<thead>
<tr>
<th>Support sources</th>
<th>Support types</th>
<th>Study Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse, friends, relatives, neighbors, and organization</td>
<td>A combined index (p &lt; .05) of five kinds of available support sources: 1) Marital status 2) Number and frequency of contact with close friends 3) Number of relatives seen often 4) Number of neighbors known well enough to drop in on 5) Involvement in social, civic, professional, or recreational groups or associations</td>
<td>9. Horne (1994) Subjects: 630 women at home full time with at least one child under 6 years of age Outcome variable: Intention of exercise Support sources: Spouse or partner Support types: The degree to which spouse or partner encouraged the respondent to participate in physical activity (among active respondents, p &lt; .05; among inactive respondents, n.s.)</td>
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<td>10. Hovell et al. (1989) Subjects: 1,789 community residents (1,021 males and 768 females, mean age = 48.25) Outcome variable: Frequency and duration of walking Support sources: Family members and friends Support type: 1) Frequency with which family members encouraged, exercised with, or offered to exercise with subject (p &lt; .001) 2) Frequency with which friends encouraged, exercised with, or offered to exercise with subject (n.s.)</td>
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<td>11. Howze et al. (1989) Subjects: 102 previously sedentary older adults (34 males and 68 females, age range = 55 to 84) Outcome variable: Program attendance level during 6 weeks Support sources: Physician, spouse, and significant other Support types: Approval of exercise from physician, spouse, and significant others at baseline of support (n.s.)</td>
</tr>
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<td></td>
<td>12. Kelly et al. (1991) Subjects: 264 outpatients (age range = 18 to 60) Outcome variable: Change of exercise level during 6-week health promotion program Support sources: Family members and others Support type: 1) The degree of reliance on family to support the respondent in making the exercise change (n.s.) 2) The degree of reliance on others to support the respondent in making the exercise change (p &lt; .05)</td>
</tr>
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<td></td>
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<td>13. Krause et al. (1993) Subjects: 1,351 community residents (662 males and 689 females, mean age = 68.7)</td>
</tr>
</tbody>
</table>
Outcome variable: Frequency of engaging in active sport or exercise, walking, and gardening

Support sources: Family and friends

Support types: A combined index (p < .001) of two types of emotional support for well-being:
1) Frequency with which the closest significant other is willing to listen to the respondent talk about his or her worries and problems
2) Frequency with which the most important significant other makes the respondent feel loved and cared for

Subjects: 103 adults
Outcome variable: Exercise class attendance during 16 weeks
Support sources: Instructor and exercise class attendants
Support types: 1) Instructor’s verbal encouragement (n.s.)
2) Perceived social support from class attendants (n.s.)

15. Lee (1993)
Subjects: 286 community residents (286 females, age range = 50 to 64)
Outcome variable: Stage of change in exercise
Support sources: Family members
Support types: Perceived family support: (e.g., my family would pitch in and help so I could have more time to exercise), action/maintenance > precontemplator (p < .05)

16. Lock & Wister (1992)
Subjects: 11,181 national survey samples (mean age = 40.5 years)
Outcome variable: Perceived increased exercise level in the previous year of the survey
Support sources: Family members and friends
Support types: 1) Spouse’s regular exercise (n.s.)
2) Number of friends who exercise regularly (p < .05)

17. Martin & Mushett (1996)
Subjects: 78 swimmers with disabilities (44 males, 34 females, age range = 12 to 44)
Outcome variable: Athletic self-efficacy
Support sources: Friends, parents, and coaches
Support types: 1) Listening support: the perception that others genuinely care about what you have to say and listen nonjudgmentally (p < .05)
2) Shared social reality support: the belief that others share your understanding of the world (n.s.)
3) Emotional support: the idea that others care about you and are on your side (n.s.)
4) Emotional challenge: the perception that others appreciate and support your efforts and accomplishments in a specific
5) Technical challenge: the support encourages the individual to do better or achieve more in a specific setting (p < .05)

(continued)
### Table 1 (continued)

<table>
<thead>
<tr>
<th>18. O'Brien Cousins (1995)</th>
<th>Subjects</th>
<th>327 community residents (327 females, age range = 70 to 98, mean age = 76.7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Activity status calculated by duration and intensity (MET units) adjusted for body weight</td>
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<tr>
<td>Support sources</td>
<td>Family members, friends, physician, and significant others</td>
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<tr>
<td>Support types</td>
<td>1) Being part of an athletic family during one’s middle years ($p &lt; .001$)</td>
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<td></td>
<td>2) Encouragement by at least one person to develop and maintain physical activities ($p &lt; .001$)</td>
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<td>3) Encouragement from physicians ($p &lt; .001$)</td>
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<tr>
<td></td>
<td>4) Having friends interested in physical fitness activities ($p &lt; .001$)</td>
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<thead>
<tr>
<th>19. Östergren et al. (1991)</th>
<th>Subjects</th>
<th>73 consecutive patients under the age of 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Physical working capacity</td>
<td></td>
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<tr>
<td>Support sources</td>
<td>Significant others</td>
<td></td>
</tr>
<tr>
<td>Support types</td>
<td>1) General emotional support for well-being: existence of trustworthy, reliable, intimate persons (n.s.)</td>
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<tr>
<td></td>
<td>2) General informational support for well-being: existence of persons who could provide advice and information on problems (n.s.)</td>
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<td></td>
<td>3) General material support for well-being: existence of persons who could provide goods or money in times of trouble ($p &lt; .05$)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>20. Potts et al. (1992)</th>
<th>Subjects</th>
<th>936 members of a health maintenance organization (378 males and 558 females, mean age = 72.52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Frequency of exercise</td>
<td></td>
</tr>
<tr>
<td>Support sources</td>
<td>Family and friends</td>
<td></td>
</tr>
<tr>
<td>Support types</td>
<td>A combined index ($p &lt; .05$) of the three types of general support sources for well-being:</td>
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<tr>
<td></td>
<td>1) Frequency of contact with family and friends</td>
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<td></td>
<td>2) Number of family members and friends to whom the respondents feel close</td>
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<tr>
<td></td>
<td>3) Number of family members and friends with whom contact is maintained and confident relationships</td>
<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th>21. Riffle et al. (1989)</th>
<th>Subjects</th>
<th>109 attendants of meal programs (21 males and 88 females, age range = 56 to 94)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Frequency of exercise</td>
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<tr>
<td>Support sources</td>
<td>Significant others</td>
<td></td>
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<tr>
<td>Support types</td>
<td>A combined index of perceived availability of general emotional, informational, and material assistance for well-being (n.s.)</td>
<td></td>
</tr>
</tbody>
</table>
22. Sallis et al. (1987)
Subjects 171 university students and staff (43 males, 128 females, mean age = 21.3)
Outcome variable Regular physical activity (at least 20 min without stopping, three times a week, vigorous enough to make you breathe hard and sweat)
Support sources Household family members and friends
Support types A combined index resulted from factor analysis (p < .001)
1) Exercised with me
2) Gave me encouragement to stick with my exercise program
3) Changed their schedule so we could exercise together
4) Offered to exercise with me
5) Gave me helpful reminders to exercise
6) Planned for exercise on recreational outings
7) Discussed exercise with me
8) Talked about how much they are likely to exercise
9) Helped plan activities around my exercise
10) Asked me for ideas on how they can get more exercise
11) Took over chores so I had more time to exercise
12) Made positive comments about my physical appearance

23. Sallis et al. (1989)
Subjects 1,789 community residents (1,021 males and 768 females, mean age = 48.25)
Dependent variable Frequency of vigorous activity
Support sources Family and friends
Support types 1) Frequency with which family members encouraged, exercised with, or offered to exercise with subject (n.s.)
2) Frequency with which friends encouraged, exercised with, or offered to exercise with subject (p < .01)

24. Treiber et al. (1991)
Subjects 230 elementary school teachers (89 males, 141 females)
Outcome variable Leisure-time physical activity
Support sources Household family members and friends
Support types Replication of social support measure by Sallis et al. (1987)
A combined index of supportive behavior (p < .01)

25. Wankel, Yardley & Graham (1985)
Subjects 186 adult females who attended the first session of a 10-week, community-based aerobic dance program
Outcome variable Attendance in a 10-week exercise program
Support sources Exercise leaders, exercise class attendants, and family members
Support types Structured social support treatment (p < .05) based on the three support sources:
1) Exercise leader's support: ongoing interest in the exercise behavior of the participants, encouraging the participants to

(continued)
establish and maintain their home and buddy support systems, facilitating the development of a positive class atmosphere, and ensuring that the class attendance and social support charts were systematically marked.

2) Buddy support: phone reminders, reinforcement of desired behaviors, encouragement, and shared transportation

3) Home support: sharing the booklet with family, discussing the problem of irregular attendance

<table>
<thead>
<tr>
<th>26. Winkel et al. (1994)</th>
<th>Subjects</th>
<th>3,679 national survey samples (1,733 males and 1,946 females)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Intention of involvement in physical activity</td>
<td></td>
</tr>
<tr>
<td>Support sources</td>
<td>Spouse/boyfriend/girlfriend, parents, son/daughter, other family members, close friends, employer, and doctor</td>
<td></td>
</tr>
<tr>
<td>Support types</td>
<td>The degree to which people encouraged the respondent to participate in vigorous physical activity (19 years old &amp; under, p &lt; .1; 20-39, p &lt; .001; 40-59, p &lt; .001; 60 &amp; over, p &lt; .001)</td>
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</tbody>
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<thead>
<tr>
<th>27. Williams et al. (1991)</th>
<th>Subjects</th>
<th>40 patients at a hemodialysis clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Adherence and nonadherence during 12 weeks</td>
<td></td>
</tr>
<tr>
<td>Support sources</td>
<td>Exercise class attendants</td>
<td></td>
</tr>
<tr>
<td>Support types</td>
<td>Perceived reinforcement and encouragement from class group (p &lt; .01)</td>
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</tbody>
</table>

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<thead>
<tr>
<th>28. Young, King &amp; Oka (1995)</th>
<th>Subjects</th>
<th>326 community residents (185 males and 141 females, age range = 50 to 65 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Activity level calculated by frequency, duration, and intensity</td>
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<tr>
<td>Support sources</td>
<td>Significant others</td>
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<tr>
<td>Support types</td>
<td>A general index of perceived support for well-being (p &lt; .05)</td>
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<thead>
<tr>
<th>29. Zimmerman &amp; Connor (1989)</th>
<th>Subjects</th>
<th>116 employees of a local public/private hospital enrolled in a worksite health promotion program (54 males and 92 females, age range = 30 to 39, mean age = 38.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variable</td>
<td>Change in exercise level</td>
<td></td>
</tr>
<tr>
<td>Support sources</td>
<td>Family, friends, co-workers</td>
<td></td>
</tr>
<tr>
<td>Support types</td>
<td>Supportiveness (p &lt; .05), others’ exercise changes (n.s.), encouragement (p &lt; .01), family helpfulness (p &lt; .05), friends’ helpfulness (n.s.), co-workers’ helpfulness (n.s.)</td>
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</table>

old). Sallis et al. (1989) examined the influence of peer support on physical activity in younger women (less than 50 years old) and older women (more than 51 years old). The physical activity level of older women was more strongly determined by peer support than was the case for the younger women. O’Brien Cousins (1995) reported that among women over age 70, social support is at least as important as self-efficacy in explaining late-life physical activity.
To date, social support measures in physical activity studies have employed operational definitions based on the source of support (e.g., spouse, families, and friends) rather than on the functional or behavioral characteristics of the support. Moreover, the total amounts of support (e.g., one simple measure or one combined index from several measures) have been used frequently in previous studies (e.g., Hibbard, 1988; Potts et al., 1992; Riffle, Yoho, & Sams, 1989).

The operational definition of social support differs from study to study. For example, in some studies, social support has been defined as the existence of social relationships or a social network, such as organizational membership (Eaton, 1993), marital status or involvement in social groups (Hibbard, 1988), existence of persons who could provide advice and information on problems (Östergren et al., 1991), number of friends who exercise regularly (Lock & Wister, 1992), or number of family members and friends to whom the respondents felt close (Potts et al., 1992).

In contrast, in other studies, social support is defined by the behavioral or functional dimensions of social relationships, such as the frequency with which friends encouraged, exercised with, or offered to exercise with subjects (Sallis et al., 1989), or approval of exercise from physician, spouse, and significant others (Howze, Smith, & DiGilio, 1989). O’Reilly (1988) noted that maintaining distinctions between functions and existence of social relationships is important to clarify the differences or relationships between behavioral or structural interventions.

Substantial research has been conducted in other disciplines exploring various positive social influences on health. Although a large number of positive social influences have been identified, there is some agreement that four major dimensions of positive influences can be identified. They are instrumental (companionship, direct assistance, and tangible aid), emotional (attitudinal and affective assistance in caring about support recipients), informational (knowledge assistance), and esteem support (self-esteem information provision and skill assistance for enhancing self-esteem) (Cutrona, 1990; Sarason & Sarason, 1994; Stansfeld & Marmot, 1992; Vaux, 1992). These four dimensions have been reported to provide different information about supportiveness and to have different effects on health-related outcomes (Courneya & McAuley, 1995; Duncan, McAuley, Stoolmiller, & Duncan, 1993; Dunkel-Schetter & Bennet, 1990; Gottlieb, 1988).

**Negative Social Influences**

Although some negative constructs in physical activity settings among older adults have been identified, for example, perceived barriers (Connell, Davis, Gallant, & Sharpe, 1994; O’Neill & Reid, 1991), environmental barriers (McPherson, 1994), leisure constraints (Crawford, Jackson, 1993; Jackson & Godbey, 1991), social disapproval (O’Brien Cousins, 1994, 1996), and stereotypes (Vertinsky, 1995), there has been a striking absence of research examining negative social influences on physical activity in older adults. Researchers have tended to focus on personal barriers such as physical, cognitive, and knowledge-based constructs (O’Neill & Reid, 1991), and little attention has been paid to negative aspects of social relationships that may apply in physical activity settings. For example, the most frequently cited perceived barriers among sedentary elderly are “I’m too old” and “physical activity is too risky” (O’Neill & Reid, 1991; Vertinsky, 1995). The extent to which such personal negative attitudes (personal disengagement) might be
influenced by a more persuasive negative social climate is unclear. The impact of peer statements such as "act your age" has not been studied.

In gerontology, health psychology, and community psychology, many negative social influences have been identified; for example, social hindrance (Norris, Stephens, & Kinney, 1990; Ruehlman & Wolchik, 1988), social rejection (Hirsch & Rapkin, 1986), social inhibition (Guerin, 1988), unsupportive behaviors (Gurovka & Lightman, 1995), unhelpful behaviors (Patterson, 1995), negative social ties (Burg & Seeman, 1994; Okun, Melichar & Hill, 1990), social strain (Rook, 1992), and negative social interactions (Krause, 1995; Lakey, Tardiff, & Drew, 1994) are all thought to influence subsequent behavior.

Most nonexercise research has reported that negative social influences occur less often than do positive social influences (Finch et al., 1989; Okunet al., 1990; Pagel et al., 1987; Rook, 1992; Schuster et al., 1990). However, several studies have shown that negative social influences either are as strong as positive ones (Berner et al., 1989; Lakey et al., 1994; Okun et al., 1990) or are even stronger determinants of health outcomes than positive ones (Finch et al., 1989; Pagel et al., 1987; Schuster et al., 1990). Furthermore, the effects of negative social influences have been reported to be long lasting compared with those of positive influences, and the effects are more pronounced over a short period (Finch & Zautra, 1992; Krause, Liang & Yatomi, 1989).

Clearly, there is a need for closer attention to the psychometric properties of both positive and negative social influence constructs. Since a comprehensive understanding of social influences requires a consideration of the interplay between positive and negative domains, it is important to more thoroughly investigate the extent to which positive and negative elements of social relationships are related (Finch et al., 1989). Some studies have reported that positive and negative social influences are only weakly correlated, indicating that they may be independent dimensions rather than opposite ends of one continuous dimension (e.g., Finch et al., 1989; Hirsch & Rapkin, 1986; Oostrom et al., 1995; Pagel et al., 1987; Rook, 1992; Ruehlman & Wolchik, 1988). For example, an older adult may be surrounded by sedentary peers and may perceive that social norms for an active retirement are low, all while his or her physician may be advocating higher levels of physical activity.

**Conclusion**

Social influences from the interpersonal relationships of older adults have been recognized as important determinants of their physical activity involvement. However, research has focused primarily on the positive side of social influences such as social support, while the measurement of social influences has focused mainly on their sources (e.g., support from family or friends). In order to fully understand the influence of social relationships on physical activity involvement among older adults, more attention should be paid to negative social influences on physical activity. Moreover, in measuring social influences, researchers should account for both the sources and the nature of positive and negative social influences that are mobilized and activated in older adults' social world.

The quality of both research and practice will be enhanced if information about the whole social experience can be marshaled. Currently, the measurement of
social influences in the physical activity setting is often too simplistic. For example, authors of many social support studies in community settings have either assessed a single support category or combined several support types into one index. Such oversimplified measures limit reliability and do not adequately represent the construct that they are supposed to measure. Many researchers have noted that the lack of agreement over conceptualization and measurement of social support has impeded the development of valid generalizations. For progress in understanding social influences, it is critical that relevant concepts be identified and differentiated measures be developed and explicitly defined. In order to fully examine the social mechanisms promoting or inhibiting an active lifestyle in older adults, future studies would benefit from careful scrutiny of both positive and negative social influences, how they are communicated, and by whom.

References


