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Social Support Theoretical Perspective

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Overweight and obesity have been noted as a major health problems among Hispanics, particularly Hispanic women.¹ Data indicates that approximately 39% of Hispanic women are overweight, with 47% having a body mass index (BMI) greater than 27.1 Mexican Americans exhibit the highest rate of obesity and the lowest rate of physical activity among Hispanic populations.²

Physical activity both prevents and helps to treat many established CHD risk factors, including obesity and its associated risks.³ Healthy People objectives 4 pertaining to adults include increasing the number of adults who participate in physical activity. Data from the National Health Interview Survey showed that Hispanics were 2.09 times more likely to report inadequate levels of physical activity compared with non-Hispanic whites.⁵ Given this data, there is growing concern over the substantial public health burden of sedentary lifestyle among Hispanic women.

Community-based interventions offer important opportunities to decrease premature morbidity, disability, and enhance the health status of underserved populations. However, the few community-based interventions designed to promote physical activity among Hispanic women have shown varying effectiveness.^{6, 7} Further, culturally relevant, theory-driven interventions designed to foster support systems and supportive environments to promote physical activity are few. The combination of health risks for disease, disability, and mortality, particularly among underserved populations, might be best addressed via programs designed to enhance awareness and develop resources within a context of

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community support. Integrative, theory-driven designs for community-based interventions have been recommended, including interventions which foster social network support.

The purpose of this paper is to describe a theory-driven approach to developing a culturally relevant social support intervention to promote physical activity among Hispanic women. A social support framework guided development of *Mujeres en Accion por Su Salud* [Women in Action for Their Health], grounded in formative research, partnership with community members, and strengths of community-based physical activity interventions with Hispanic women. *Mujeres en Accion por Su Salud* focuses on the mechanisms that link social supports to physical activity, fostering naturally-occurring social networks, role models, and community resources. Intervention development was based on program theory as advanced by Lipsey:⁸ problem definition, critical inputs, mediating processes, expected outcomes, and implementation issues. A summary of the critical elements of program theory underlying *Mujeres en Accion por Su Salud* appears in Table 1.

Problem Definition

For many women, lifestyle changes such as physical activity occur in a context of friends, family members, and social contextual settings that contribute to the behavior change process.⁹ Integration in a social network has been shown to provide a sense of purpose, recognition of self-worth, ability to meet expectations, motivation for self-care, and identification and use of resources.^{9, 10} Social support systems are consistent with both cultural factors and social norms linked to health behavior change.¹¹ Social support has been shown to be especially relevant, and perhaps a more potent factor in health promotion among Hispanic women when compared with women of other ethnic groups; greater social support is associated with higher levels of physical activity.^{9, 12-14} *Mujeres en Accion por Su Salud* focuses on providing supportive resources designed to promote the adoption and maintenance of regular physical activity within a culturally-relevant community context.

Critical Inputs

Existing research indicates that Hispanic women may be more responsive to programs which specifically provide needed support and role models for physical activity. The mobilization of naturally-occurring social networks through intervention is important because such networks are indigenous to the community, and offer culturally relevant and effective social support. To meet its goal of promoting the adoption and maintenance of physical activity among Hispanic women, *Mujeres en Accion* incorporates key dimensions of social support. Social support is defined as aid and assistance exchanged through social relationships and interpersonal transactions, and includes four distinct types of support: (a) emotional support, including expressions of empathy, trust, caring, (b) instrumental support, including tangible aid or service, (c) appraisal support, including information that is used for self evaluation, and (d) informational support, including advice, suggestions, information.¹⁵ *Mujeres en Accion* critical inputs target planned changes in the structure of supportive mechanisms, operationalized through supportive interaction between group members and community-based *Promotoras*, changes in interactions between women themselves, and

group engagement and role modeling of self-paced, moderate intensity walking as the behavioral change of interest.

A useful approach for health promotion through social support is the use of peer counselors or lay health educators, also known as *Promotoras*. A *Promotora* is a member of the community to whom other community members turn for care, advice, information, and support or to overcome barriers inherent in health promoting behavior, such as physical activity. As a social network strategy, interventions including *Promotoras* are guided by the assumption that an individual's behavior is influenced by the social groups to which they belong, and from which they derive their "social identity."¹⁶ *Mujeres en Accion* includes Hispanic women community members as *Promotoras*, which will extend understanding of culturally relevant and supportive resources and mechanisms for promoting physical activity among Hispanic women.

The component of emotional support is operationalized through verbal and emotional support provided by *Promotoras* to share ideas and experiences, as ways to initiate and sustain walking, offer encouragement, and develop opportunities to create enhanced relationships.¹⁷ Social support is promoted within the groups, so that the women themselves will become significant sources of emotional support to one another. Instrumental support is operationalized through activities that provide tangible support such as assistance in the form of time and services.¹⁸ Instrumental support includes the use of pedometers to monitor progress in goal achievement for regular walking, maps showing safe walking areas around the member's neighborhood, the formation of community walking groups by participants themselves, and the identification and development of resources to promote walking in the community. Appraisal support is operationalized through feedback consistent with the use of goal setting and self-monitoring activities. Women are encouraged to set clear and specific self-selected goals for physical activity. Women record their progress (pedometer step counts, number and duration of activity bouts) on weekly Activity Calendars that will be shared with *Promotoras*. *Promotoras* offer positive reinforcement for each woman's progress. Women are encouraged to turn to one another for appraisal support in the form of sharing goals, progress, and strategies and resources for physical activity initiation and maintenance. Informational support is operationalized through *Promotoras* who function as advocates to promote the safe performance of walking, building skills necessary for physical activity initiation and maintenance, for problem-solving and overcoming barriers to physical activity, and for monitoring progress in goal achievement. Information may consist of facts, advice, and reassurance.¹⁷

To facilitate the dimension of support, course content is delivered over 24 sessions; 12 weeks are delivered in a group format, using three teaching modes: didactic, group discussion, and "hands-on" experience. Twelve follow-up sessions are delivered using a combination of telephone contact with *Promotoras* and group interaction. Women are given the chance to demonstrate the skills taught and role model for each other using brief guided walks to experience physical activity as part of the supportive process. Moderate-intensity, "lifestyle" physical activity interventions represent a key attempt to address public health concerns regarding inactivity, which acknowledge the importance of individual and social contextual barriers.

Mediating Processes

The intended effect of *Mujeres en Accion* are changes in the cardiovascular health outcome variables of body mass index (BMI), body composition, and body fat distribution. . *Mujeres en Accion* mediating processes include social support as a resource provided in personal relationships, as well as supportive resources from the broader community such as neighborhoods and community organizations.¹⁹ Gains in perceived social support resources is based on the women attending 12 of the group sessions and participating in the 12 booster sessions, perceiving the content of the program as helpful, and being satisfied with the program.

Expected Outcomes

The intended effect of *Mujeres en Accion* are changes in the cardiovascular health outcome variables of body mass index (BMI), body composition, and body fat distribution. Changes in cardiovascular health outcomes are anticipated to take place at 6 to 12 months following initiation of the program and only after improvement in perceived social support and regular physical activity are attained.

Exogenous Factors

In *Mujeres en Accion*, factors identified which might impact the receipt and development of social support resources include prior experience in a supportive environment and comfort interacting with others in a group setting. Factors which may impact participation in moderate-intensity physical activity include the women's functional status and past experience with physical activity. Participants in the intervention are sedentary at baseline, and all are screened for safe participation in physical activity, decreasing variability in functional status and current participation in physical activity. As the identification of safe places to walk in the community might be an issue for participants, *Promotoras* will guide women in mapping safe walking routes as well as identifying stores and mall areas for walking.

Implementation Issues

In *Mujeres en Accion* the material resources needed include: a meeting area in a quiet, community-based setting which will allow for group discussion and interaction, written materials and picture diagrams that summarize the information provided, a safe walking path or track to conduct guided walks to experience physical activity as part of the supportive process, appropriate footwear and clothing for women to practice walking. *Promotoras* participate in a training program and are asked to adhere to the intervention protocol in order to maintain consistency in program implementation.

Application to Clinical Practice

This paper described a theory-driven approach to developing a culturally relevant social support intervention to promote physical activity among Hispanic women. The creation of a sound foundation for translational research requires that researchers and clinicians continue

to identify key areas for development in promoting physical activity among Hispanic women. Attention to culturally relevant theory-based interventions that foster social support, increase physical activity, and promote CHD health outcomes among Hispanic women may begin to address critical health disparities, and has real significance for clinical practice. Social support is a culturally-relevant and naturally occurring resource in both homes and communities; *Mujeres en Accion* provides an example of how such resources may be implemented in “real life” settings across racial and ethnic groups.

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Table 1

Elements of Program Theory Underlying *Mujeres en Accion*

Problem	Critical Inputs	Mediating Processes	Expected Outcomes	Exogenous Factors	Implementation Issues
Limited supportive resources Physical inactivity	Emotional support Instrument support Appraisal support Information support	Perceived support Perceived environment Neighborhood resources	Increased physical activity CVD health BMI Body composition Fat distribute	Participant characteristic Cultural consideration Setting safety Availability of resources	Material resources Community setting Safe walking area <i>Promotora</i> resources