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Does Shared Physical Activity Strengthen Interpersonal Relationships? — A Review on Couples and Families

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Abstract

Background. Physical activity is commonly studied as an individual health behavior, although participation with romantic partners or family members may also influence interpersonal functioning. Shared activity may provide opportunities for social support, cooperation, positive affect, and shared goal pursuit. However, evidence regarding its effects on relationship quality remains heterogeneous.

Aim. To review evidence on whether shared physical activity is associated with improved relationship quality, intimacy, family cohesion, or other interpersonal outcomes in couples

and families, while distinguishing direct relational outcomes from behavioral and mechanistic evidence.

Materials and Methods. A narrative review was conducted using targeted searches of PubMed and publisher-indexed literature in August 2026. Observational studies, randomized controlled trials, systematic reviews, meta-analyses, and qualitative syntheses were considered.

Results. Observational studies directly examining shared activity suggest associations with positive affect and daily relationship satisfaction, whereas separate dyadic studies indicate that partner support may facilitate physical activity rather than demonstrate improvements in relationship quality. Dyadic interventions improve physical activity, but evidence for broader relationship benefits is limited. Partnered exercise has demonstrated selected improvements in physical intimacy in couples affected by cancer. Family-based interventions show more consistent effects on cohesion and organization than on global family functioning. Experimental studies support potential mechanisms involving synchrony and cooperation but provide indirect evidence for established relationships.

Conclusions. Shared physical activity may support interpersonal functioning, but current evidence does not establish a general causal effect on relationship quality. Further well-controlled dyadic and family RCTs are needed.

Key words: physical activity; exercise; couples; romantic relationships; family functioning; relationship satisfaction; social support.

Introduction

Regular physical activity is an established component of disease prevention and health promotion. Current World Health Organization recommendations emphasize its benefits for cardiovascular, metabolic, mental, cognitive, and functional health across the life course [1]. Physical activity, however, is not necessarily an individual behavior. Walking, cycling, recreational sports, dancing, resistance training, and active play may involve a partner or several family members, creating repeated interpersonal interactions within an otherwise health-oriented activity. Close relationships may influence health behavior. Partners may

facilitate behavioral change through encouragement, practical assistance, shared goals, and mutual accountability. In case of children, parents may influence their activity through modelling, logistical support, encouragement, and co-participation [2-5]. Several mechanisms could plausibly account for such reciprocal effects. Joint activity creates time spent together and may increase opportunities for communication and positive affect. Coordinated physical tasks may additionally require cooperation and behavioral synchrony. Experimental research outside the family context has shown that exercise and synchronous movement can influence cooperation and social bonding. [6] These findings cannot automatically be extrapolated to established romantic or family relationships [6]. Importantly, shared activity may also function as a form of interpersonal support: partners who assist one another in pursuing physical-activity goals can influence both behavioral engagement and subjective well-being [3,7]. The empirical literature nevertheless remains difficult to interpret. Some studies examine actual joint exercise, whereas others assess general partner support or family-based interventions in which physical activity is only one component. Likewise, relationship satisfaction, intimacy, cohesion, communication, and family organization represent different constructs and should not be treated as interchangeable outcomes. Systematic reviews have also identified substantial heterogeneity in dyadic and family interventions [2,3,8,9]. The present review therefore examines whether shared physical activity itself appears to strengthen interpersonal relationships and distinguishes direct relational outcomes from changes in physical activity or health behavior.

Research Materials and Methods

This narrative review was based on targeted searches of PubMed and publisher-indexed scientific literature conducted in August 2026. Search concepts included combinations of physical activity, exercise, shared exercise, joint physical activity, couples, romantic relationships, dyadic intervention, partner support, family physical activity, parent-child, family functioning, cohesion, relationship satisfaction, and intimacy. Relevant empirical studies and evidence syntheses addressing physical activity and interpersonal relationships were considered, with emphasis on observational studies, randomized controlled trials, systematic reviews, meta-analyses, and qualitative syntheses.

Results

Couples: shared activity, support, and relationship satisfaction

Direct observational evidence from romantic couples suggests that shared exercise may influence short-term interpersonal experiences, although these findings do not establish

causality. In this daily-diary observational study, Sackett-Fox et al. followed 95 young adults in relationships using 14 daily assessments. On days when participants exercised with their romantic partner rather than alone, they reported greater positive affect during exercise, greater positive affect across the day, and higher relationship satisfaction. Importantly, joint exercise was not associated with a greater amount of exercise or lower negative affect [10]. Thus, the study provides direct evidence of association between shared exercise and relational experience, but not evidence of a causal effect. Related evidence indicates that the interpersonal context surrounding physical activity may be as important as co-participation itself. In a 28-day diary study of 119 heterosexual couples, greater partner-provided support was associated with approximately 25 additional minutes of objectively measured activity on days with higher support. Joint engagement in activities accounted for approximately half of the associations between support and activity, suggesting that shared behavior may represent one pathway through which interpersonal support is translated into action [3]. Related dyadic evidence indicates that partner-related perceptions may also influence physical-activity intentions: in a dyadic study of 200 romantic couples, partners' perceived behavioral control and other TPB-related perceptions predicted individuals' intentions to engage in physical activity, with relationship quality moderating some partner effects [13]. However, this study addresses behavioral intentions rather than changes in relationship quality. These findings are consistent with dyadic models of health behavior. However, they do not establish that exercising together causes stronger relationships. Couples who already have more satisfying relationships may simply be more willing to exercise together and provide effective support. This possibility of reverse direction is particularly important because relationship satisfaction and joint health behaviors have also been shown to be associated with one another, indicating that the relationship may be bidirectional rather than simply driven by shared activity [11]. The importance of the relational context is further demonstrated by Novak et al., who studied 462 heterosexual and gay male couples. Greater exercise encouragement was associated with higher relationship satisfaction across groups, whereas associations with physical activity and psychological distress varied according to sex and sexual orientation [12]. Thus, supportive interaction appears potentially beneficial, but its behavioral effects are not uniform across dyads.

Does the shared activity itself matter?

Research on joint leisure provides indirect support for the proposition that the activity may matter beyond generic relationship quality. In ballroom-dancing couples, Ricard et al. found

reciprocal associations between motivation for the joint activity and relationship satisfaction, suggesting that satisfaction with the shared activity and satisfaction with the relationship may reinforce one another [14]. Similarly, a study of 1,382 newly married couples found that shared leisure could buffer some adverse associations between financial distress and relationship outcomes, although the effect depended strongly on household economic circumstances [15]. Experimental work provides a possible mechanism but requires cautious interpretation. Cohen et al. provided experimental evidence that exercise and behavioral synchrony may influence social bonding and cooperative behavior [6]. A more recent experimental study using synchronized cycling similarly investigated interpersonal cooperation and neural mechanisms [16]. These findings support the plausibility of behavioral synchrony as a relational mechanism, but participants in such experiments are not necessarily comparable to couples or families, and cooperation in a laboratory task is not equivalent to relationship satisfaction.

Intervention evidence in couples

Randomized interventions provide the strongest evidence for causal effects, but their relevance to the present question depends on whether relationship outcomes were directly assessed. Dyadic interventions overall appear to produce a small increase in physical activity compared with equivalent individually oriented approaches. A systematic review and meta-analysis of 59 studies found an overall effect of $g = 0.203$ (95% CI, 0.123–0.282), but effects were highly heterogeneous. Shared target-oriented goals were among the factors associated with larger effects [8]. This supports the value of involving another person in behavior change but does not demonstrate an improvement in relationship quality. A particularly informative clinical model is the Exercising Together program for couples affected by cancer. In an RCT involving 64 couples coping with prostate cancer, six months of partnered resistance training improved several physical outcomes in both survivors and spouses [17]. However, physical-health improvements should not be conflated with relational improvement. A separate analysis of the same trial found increased affectionate behavior among wives participating in partnered exercise, whereas no significant intervention effect was observed in husbands [18]. The finding represents a direct relational outcome, but its sex-specific nature and relatively small sample limit generalizability. A later pilot involving eight couples undergoing prostate-cancer radiotherapy found high intervention adherence and improvements in several physical and psychological outcomes, together with preliminary changes in dyadic coping, but its single-arm design prevented causal attribution [19]. A larger three-arm randomized trial was

subsequently designed specifically to distinguish partnered exercise from supervised exercise performed separately and unsupervised individual exercise, with relationship quality designated as a primary outcome [20]. This design addresses an important limitation of earlier research: if both partners simply become more physically active, improvements cannot necessarily be attributed to the shared nature of exercise.

Families and parent-child relationships

The family literature provides somewhat stronger evidence for selected aspects of family functioning than for global relationship quality. A systematic review of 20 family-based physical-activity interventions found mixed effects on overall family functioning, but more favorable findings for cohesion and organization, particularly among families with children aged 5–12 years [9]. The review also suggested that interventions targeting specific family subsystems or combining physical activity with other behavioral components may produce more reliable effects. The distinction between activity and relational outcomes is again important. A systematic review and meta-analysis of family-based interventions involving children aged 5–12 years identified 47 studies; 19 contributed to meta-analysis, which showed a small improvement in children's physical activity (SMD 0.41, 95% CI 0.15–0.67) [21]. This demonstrates that involving families can increase activity, but increased activity alone does not establish improved family relationships. Observational evidence is similarly modest. A 2025 systematic review of 43 studies found small associations between child or adolescent physical activity and domains such as family cohesion and communication, with stronger associations observed for some youth outcomes than for younger children [22]. Because these studies were observational, directionality remains uncertain. Qualitative evidence nevertheless provides a consistent explanation for why families may perceive shared activity as relationally valuable. A 2025 synthesis of 82 studies reported that parents frequently described spending time together, family cohesion, enjoyment, and a sense of unity as perceived benefits of family-based physical-activity interventions [23]. These findings are useful for understanding acceptability and potential mechanisms, but perceived benefits cannot substitute for controlled evidence of causal changes in family functioning.

Discussion

Taken together, the literature supports a plausible but not definitive relationship between shared physical activity and interpersonal functioning. The most consistent pattern is not that exercise universally improves relationships, but that physical activity can become a context in

which existing relational processes—support, cooperation, shared goals, positive affect, and time together—are expressed and potentially reinforced. The strength and directness of evidence vary substantially across study types. Observational daily-diary studies provide direct evidence of associations between shared exercise and relationship satisfaction, but cannot establish causality [10,14]. Dyadic observational studies additionally suggest that partner support and relational processes influence physical-activity behavior, although these studies address behavioral mechanisms rather than direct improvements in relationship quality [3,7,12,13]. Randomized evidence provides stronger causal inference: partnered exercise has demonstrated benefits for physical outcomes and selected dimensions of intimacy, but evidence for broader improvements in relationship quality remains limited [17,18]. Family-based systematic reviews similarly suggest more consistent effects on specific domains such as cohesion and organization than on global family functioning [9]. Several factors may explain the heterogeneity. First, shared physical activity is not a single intervention. A relaxed walk with a partner differs substantially from competitive exercise, supervised resistance training, dancing, or parent-child play. Activities requiring cooperation may generate different interpersonal experiences from activities performed side-by-side with minimal interaction. Second, baseline relationship quality may modify intervention effects. The dyadic-planning RCT involving 338 couples found no straightforward overall benefit and suggested that intervention effects differed according to pre-existing relationship quality [24]. Third, socioeconomic circumstances can determine whether shared leisure is feasible and beneficial; longitudinal evidence indicates that the effects of shared leisure may vary according to financial resources [15]. Family interventions face additional developmental and practical constraints. Parents must balance work, childcare, transportation, safety, and children's preferences. Systematic reviews indicate that parental co-participation is a common component of support, but parental support itself is influenced by child age, parental cognitions, and environmental factors [4]. Qualitative evidence similarly identifies resource availability, child interest, and intervention flexibility as important determinants of participation [23,25]. From a clinical and public-health perspective, the evidence therefore supports encouraging enjoyable, sustainable, mutually acceptable activity involving close others, particularly when it simultaneously promotes health and meaningful interaction. However, recommending exercise specifically as a relationship-treatment strategy would currently exceed the evidence. Relationship interventions and physical-activity interventions should not be considered interchangeable. Future RCTs should directly compare partnered and individually performed activity while controlling for exercise dose, social contact, and

intervention intensity. They should also use validated relational outcomes, objective physical-activity measurements, longer follow-up, and mediation analyses to determine whether changes in relationship quality actually arise through shared activity, increased positive affect, support, or behavioral synchrony.

Conclusions

Shared physical activity is associated with several favorable interpersonal outcomes in couples and families, particularly positive affect, daily relationship satisfaction, selected dimensions of intimacy, family cohesion, and organization. Nevertheless, the evidence is heterogeneous and predominantly supports association or preliminary intervention effects rather than a definitive causal relationship. The most plausible interpretation is that physical activity can serve as a context for strengthening existing relational processes, with benefits depending on the quality of the relationship, characteristics of the activity, developmental stage, and social circumstances. More rigorously controlled dyadic and family trials are required before shared physical activity can be regarded as an established intervention for improving relationship quality.

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