Physical Activity Opportunities Mitigate the Negative Effects of Caregiving Obligations on Subjective Health

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Shifting family structures, increased rates of disabilities, and an ageing population are among the many reasons people are more likely today to have dependent care obligations. While caring for dependents provides an important service for those involved, the act can also have a negative effect on the caregiver, putting the individual at risk for both physical and mental health problems (Pinquart & Sorensen, 2003; Saban, Sherwood, DeVon, & Hynes, 2010).

The purpose of this study is to examine the way in which sport managers can help alleviate mitigate this relationship by offering sport and recreation opportunities. As physical activity can increase both physical and psychological health (Lox et al., 2014), opportunities to be active potentially help mitigate the otherwise negative effects of caregiver obligations.

**Theoretical Framework**

According to role strain theory, people can assume different roles in their lives, including that of partner, daughter, employee, and the like. It is possible that as one assumes more and divergent roles, strain occurs. This is the case with caregivers, as people who assume caregiving duties for family members frequently have negative psychological and physical health outcomes (DeSalvo, Fan, McDonnell, & Fihn, 2005; Miller & Wolinsky, 2007)). Illustrative of these effects, Perkins et al. (2012) conducted a population-based study, observing that 12 percent had caregiving responsibilities. Of these persons, those with high caregiving strain had higher mortality rates than their peers, and the effects were consistent across race, sex, and type of caregiving relationship (e.g., spouse, parent, child). Given these findings, the first hypothesis was that caregiving responsibility would be negatively related with subjective health (H1).

While caregiving obligations can reduce one’s health, it is also possible that having opportunities to be physically active can alleviate these negative effects. Physical activity is associated with a host of benefits, including various indices of physical and psychological health (for a review, see Lox et al., 2014), and as such might buffer the effects of negative factors. For example, Walker and Cunningham (2014) observed that people experiencing food insecurity had negative subjective health, but these effects were reduced when the study participants had the chance to be active. Edwards and Cunningham (2013) observed similar benefits of sport and recreation opportunities in the ability to overcome community racism. In building from this work, it was hypothesized that the negative relationship between caregiver obligations and subjective health will be moderated by sport and recreation opportunities, such that as opportunities increase, the relationship between caregiver obligations and subjective health will be buffered (H2).

**Method**

Data were analyzed from a large-scale data set collected as part of the Brazos Valley Health Assessment. The purpose of this project was to examine health and health indicators of residents across 10 counties in the Brazos Valley (Texas), nine of which are rural and one of which is largely metropolitan. Multiple community partners collaborated in the construction and dissemination of the assessment, as well as communication of the results to the residents. Data were collected from 3141 persons (49.8 percent women; 80 percent White). The average age was 44.54 years (SD = 16.14), and the average income was US$83,973.

Among other items on the assessment, participants provided their demographic information and responded to items measuring subjective health, caregiving obligations, and sport and recreation opportunities. Subjective health was measured with a single item from XX, a single item measuring sport and recreation opportunities (Edward & Cunningham, 2013), and a single item assessing whether the individual had had caregiving obligations.

**Results**
Results show 12 percent of the study participants had caregiving responsibilities and 15 percent lacked sport and recreational opportunities. An analysis of covariance (ANCOVA) was computed to test the hypotheses, with caregiver responsibilities and sport and recreation opportunities serving as the independent variables, while subjective health served as the dependent variable. Race, sex, age, and the log function of income served as covariates. The total model accounted for 18.1 percent of the variance.

Caregiver status was significantly associated with subjective health $F (1, 1771) = 10.05, p = .002$. Consistent with H1, people with healthcare obligations had lower subjective health ($M = 3.78, SE = .03$) than their peers ($M = 3.5, SE = .08$). The interaction term between caregiver status and sport and recreation opportunities was also significant, $F (1, 1771) = 4.93, p = .03$. When sport and recreation opportunities were low, caregiver status negatively affected subjective health ($M = 3.27, SE = .15$ and $M = 3.74, SE = .06$, respectively); however, when sport and recreation opportunities were high, the negative effects disappeared ($M = 3.83, SE = .2$, and $M = 3.75, SE = .07$, respectively).

Discussion

Results indicate sport and recreation opportunities can buffer the negative effects of caregiver status on subjective health. These findings are consistent with the growing research that being active, or the opportunity to do so, can help alleviate health detriments. Sport management practitioners can play a role in improving public health by ensuring opportunities to be active for community members.