










Abstract

Walk or be walked by the dog? The attachment role

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The recruitment of dogs as a source of encouragement and motivation for physical activity (PA) has garnered increased scientific attention (Christian et al., 2016; Morrison et al., 2014; Soares et al., 2015; Westgarth et al., 2014). Accelerometers are a valuable instrument for quantifying PA and energy expenditure in both humans and dogs (Montoye et al., 2020; Yam et al., 2011). However, a recent meta-analytical study (Martins et al., 2023) has suggested the relevance of studying the possible influence of the human-animal bond on PA levels. The objectives of this study are to verify the relationship between the PA levels of owners and their dogs in the at-home environment and to analyse the attachment to pets to the levels of owners' PA. Sociodemographic data, the Subjective Perceptive Health Scale (SPHS), and the Lexington Pet Attachment Scale (LAPS) were assessed. PA was measured in both the owner and the dog using an Actigraph GT3X accelerometer. A total of 38 owner participants were included, with 66% females, 43.11 ± 16.57 years, and a BMI of 24.51 ± 5.19 kg/m². Significant correlations were found between the owners' light-level PA, the pet's METS ($\rho = 0.35$) and the pet's vigorous-

level PA ($\rho = 0.45$). The owners' SPHS scores were significantly correlated with their pets' weight ($\rho = 0.39$). Furthermore, the importance of the pets' health and the LAPS subscales, namely proximity and attachment, were related to taking the pet for a walk ($\rho = 0.46$, $\rho = 0.36$, $\rho = 0.34$, respectively). Our study contributes to filling one of the gaps identified in the literature. Indeed, our results highlight that the presence of a pet is associated with a higher level of owner PA, depending on the strength of the human-animal bond and not solely on having a dog. These findings also indicate that owners who are more concerned about their pets' health are more likely to be concerned about their pets' health and take them for walks. As a result, the PA levels of the owner and the pet increased. Consequently, proposing pet ownership as a strategy to increase owner PA levels may be ineffective if there is no strong bonding relationship.

Keywords: Dogs, Pet ownership, Physical Activity, Lifestyle, Accelerometry

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