

MASTER'S THESIS

Physiological and psychological factors related to falls for elderly in Hong Kong

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Physiological and Psychological Factors
Related to Falls for Elderly in Hong Kong

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ABSTRACT

The objective of this study was to investigate physiological and psychological factors associated with falls in elderly people of Hong Kong. The subjects were a total of 241 (52 males and 189 females) elderly people. The age ranged from 65 to 85 years ($\underline{M} = 72.72$, $\underline{SD} = 5.51$). They were divided into two groups according to their ages (65-74 years old and ≥ 75 years old) and into three groups according to their histories of falls (non-fallers, single fallers and multiple fallers). Their histories of falls were examined. Their functional fitness, balance abilities, fear of falling and physical activity levels were assessed by functional fitness test (Jones and Rikli, 1999), the Berg Balance Scale (Berg et al., 1992), the Falls Efficacy Scale (Powell, Richmand and Tinetti, 1990) and the Physical Activity Scale for the Elderly (Janney et al., 1993) respectively. The Statistical Package for the Social Science (SPSS) was utilized to analyze the data collected. 2 x 2 x 3 ANOVA, Pearson Correlation, coefficient alphas and linear regression analysis were utilized. Interaction effect of age, gender and history of falls on dependent variables were not significant. Significant difference in balance ability, fear of

falling and physical activity level were shown among elderly people with various histories of falls. Also, significant difference in height, weight, upper body strength and lower body flexibility were shown between females and males. No significant difference was found between the two age groups. Significant ($p < .05$) relationships were found between physiological and psychological measures. Percentile scores equivalent for males and females on functional test items were developed. Age, balance ability and fear of falling were found to be significant predictor for falls of elderly people. The Falls Efficacy Scale and the Berg Balance Scale were found to have acceptable reliability.

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