REPEATED MEASURES ANALYSIS OF COVARIANCE: EFFECTS OF PET

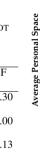
OWNERSHIP, EXPERIENCE WITH ROBOTS, AND ROBOT VS. PERSON APPROACH UPON MINIMUM DISTANCE BETWEEN PERSON AND ROBOT

TABLE I

Sources of Variance Sum of df* Mean

for Minimum Proxemic Distance	Squares		Square	
Robot vs. person approaches	0.002	1	0.002	0.30
Robot vs. person approaches				
x Pet ownership	0.000	1	0.000	0.00
Robot vs. person approaches				
x Robot experience	0.001	1	0.001	0.13
Error	0.202	27	0.007	
Pet ownership	0.035	1	0.035	1.72
Robot experience	0.119	1	0.119	5.60**

0.621



0.022

0.7

Œ

0.1



robotics experience also correlates with smaller comfortable distances.

Pet Ownership

Personal experience influences on proxemic behaviors with robots. The left-hand chart shows that participants who had owned a pet at some point in their lives were comfortable at closer average distances to the robot than those who had never owned a pet. The right-hand chart shows that

0.35

0.3

0.25 Personal Œ

0.15

0.1 0.05

Space

Minimum

Experience with Robots

** *p*<.05

Error

df = Degrees of Freedom