

# Importance-Performance Analysis of Muscle-Strengthening Activities Offered at a University Recreation Center

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## INTRODUCTION

Understanding how users perceive certain recreational activities is crucial for college recreation programs to be able to advertise and implement their services effectively. Fitness is an area that deserves ample examination as engaging in fitness activities directly benefits the participant. Muscular strength is becoming an increasingly important factor for overall health, with studies showing an inverse relationship between muscular strength and all-cause mortality (Arturo et al., 2012). Health clubs and universities alike are offering more muscle-strengthening programs and classes due in part to this growing understanding. However, the shift is still in an initial stage and needs further examination to understand how participants perceive the importance and performance of these programs. The current study explored how college students perceive aspects of a university recreation program specifically regarding the importance and performance of muscle-strengthening activities (msa's).

## GUIDING LITERATURE

- Individuals should be engaging in muscle-strengthening activities at least two days per week (Esco, 2013)
- Muscular-strength has an inverse relationship with all-cause mortality (Arturo et al., 2012)
- Motivation for muscle-strengthening activities varies across different user groups (Egli et al., 2011)



## OBJECTIVES

- The objectives of this study include:
- Establishing whether or not students are meeting the ACSM guidelines for muscle-strengthening exercise frequency and complete muscle-group involvement
- Revealing differences in strength-training activity engagement across various demographic variables
- Providing insight into the general health of students on campus

## METHODS

- Importance-Performance Analysis (IPA) implemented
- Surveys randomly administered on-site
- Two hundred (n=200) participants completed survey

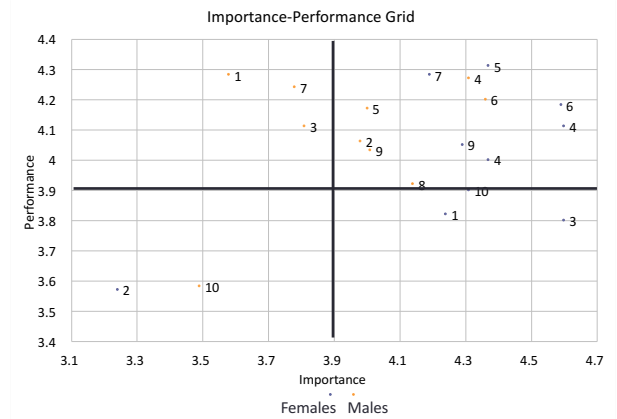


## RESULTS

- Males and females reported high importance for muscle-strengthening activities
- Males were more confident in their abilities to execute msa's with proper technique during open recreation
- Females reported lower performance for facility and staff than males

Items	Importance			Performance		
	Female	Male	Sig. (t,p)	Female	Male	Sig. (t,p)
MS equipment is easy to use	4.24	3.58	t(195)=4.78, p<.001	3.82	4.28	t(195)=-4.57, p<.001
User has access to supportive equipment	3.24	3.98	t(196)=-5.05, p<.001	3.57	4.06	t(196)=-4.24, p<.001
Facility has non-threatening atmosphere	4.60	3.81	t(196)=6.08, p<.001	3.80	4.11	t(196)=-2.58, p=.011
Facility free of physical hazards	4.60	4.31	t(196)=2.63, p=.009	4.11	4.27	t(196)=-1.7, p=.091
Staff have welcoming demeanor	4.37	4.00	t(196)=3.26, p=.001	4.31	4.17	t(196)=1.36, p=.175
Staff are responsive to inquiries	4.59	4.36	t(196)=2.46, p=.015	4.18	4.20	t(196)=-0.27, p=.789
Staff are easily identifiable	4.19	3.78	t(196)=3.37, p=.001	4.28	4.24	t(196)=0.412, p=.680
Staff seem skillful	4.37	4.14	t(196)=2.1, p=.037	4.00	3.92	t(196)=0.769, p=.443
Staff enforce policies	4.29	4.01	t(196)=2.52, p=.013	4.05	4.03	t(196)=0.202, p=.840
Group fitness classes offered at time that user can attend	4.31	3.49	t(196)=6.78, p<.001	3.90	3.58	t(196)=3.06, p=.003

## CONCLUSIONS



- BMI:  $\bar{x}$  = 23.35 (normal weight)
- Importance:  $\bar{x}$  = 4.11
- Performance:  $\bar{x}$  = 4.04

## IMPLICATIONS

- Advertising for msa's should be conducted to intentionally encourage multi-group engagement
- Adequate attention should be paid to creating a welcoming environment for all users
- Ensuring that staff can facilitate safe and effective muscle-strengthening activities should be paramount for campus recreation administrators

