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Relationship between e-lifestyles and the use of the fitness centre app

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1. INTRODUCTION

Because of the increase in the number of fitness centres and the fierce competition in the market, these organizations have had to reinvent themselves and differentiate in their service offerings, e.g. through the use of technology. Furthermore, the emergence of the covid19 pandemic also highlighted the importance of utilizing technologies in order to provide members with an alternative across online exercise, on-demand classes, mobile devices and apps. Regarding the apps, they are used in approximately 68 percent of fitness centres in Portugal (Pedragosa & Cardadeiro, 2021). These businesses have provided a variety of services to their clients via the applications in order to operationalize services and procedures while lowering administrative expenses (Ferreira Barbosa & Pedragosa, 2021). The term e-lifestyle were first used by Kim et al. (2022), to define what consumers want, what they are interested in, and what their opinions and thoughts are about cyberspace. E-lifestyles reflect people's values about digital developments (Yu, 2011). E-lifestyles have been shown to be one of the determining factors for the intention to use mobile applications (Goodyear et al., 2019). In their study, García-Fernandez et al. (2020), revealed that there is a positive relationship between e-lifestyles, perceived ease of use, perceived usefulness and attitude towards fitness apps. However, this relationship between e-lifestyles and the use of fitness centre applications has not yet been investigated. For this reason, and based on Brengman et al. (2005) idea that the better we understand consumers the more effectively we can communicate and market to them, the aim of this study is to analyse the relationship between e-lifestyles and the use of the fitness centre application.

2. METHODOLOGY

The sample included 1676 members of Portuguese fitness centres. It was found that the number of female members (59%, n = 982) was higher than the number of male members (41%; n = 696). Most members (84%; n = 1,403) reported using the fitness centre app. The questionnaire consisted of 19 questions about the e-lifestyles of the members. All items were measured on a Likert scale (1-5).

Regarding data analysis, firstly, the average of the answers to the 19 questions, which indicate the e-lifestyles of the members, was calculated. The results were compared with the members who use and who do not use the fitness centre app, in

order to analyse the relationship between e-lifestyles and the use of the fitness centre application. Normality was tested with the Shapiro-Wilk test and equality of variance was tested with Levene's test. An Independent Sample T-test was performed to compare whether there were differences in e-lifestyles for the two groups. The data were processed with JASP 0.14.1 software.

3. RESULTS

Through the Shapiro-Wilk test (Table 1) it was found that it was not possible to assume normality, since the p value is significant ($p < 0.001$) in the group that use the fitness centre app. Therefore, the results suggest a deviation from normality. Despite the assumption of normality has been violated, given that the sample is large, the central limit theorem can be evoked (Oliveira de Almeida, 2019).

From Levene's test (Table 2), it was found that the variances can be assumed to be equal, since $p = 0.448$ ($p > 0.05$). It means that the results are non-significant, variances do not differ. The assumption of homogeneity of variance has been met.

Table 1. Test of Normality (Shapiro-Wilk).

	Use the app	W	p
E-lifestyles	No	0.991	0.096
	Yes	0.987	< .001

Note. Significant results suggest a deviation from normality.

Table 2. Test of Equality of Variances (Levene's).

	F	df	p
E-lifestyles	0.577	1	0.448

The description revealed that e-lifestyles are more prevalent among users who use the fitness centre app ($M = 3.331$; $SD = 0.557$) than among those who do not ($M = 3.193$; $SD = 0.509$). An independent sample T-test was performed to compare whether there were differences in e-lifestyles for the two groups of members (Table 3). The independent samples t-test was associated with statistically significant effect $t(1674) = 3,793$, $p < 0.001$. *Cohen's d* was estimated in 0,251, which is considered a medium effect, according to Gignac & Szodorai (2016) guidelines.

Table 3. Independent sample T-test.

	t	df	p	Cohen's d
E-lifestyles	3.793	1674	< 0.001	0.251

4. CONCLUSIONS

The aim of the study was to analyse the relationship between e-lifestyles and the use of the fitness centre application. The results showed that there were differences in e-lifestyles for the two groups, the users of the app were associated with a statistically significantly larger e-lifestyles behaviours than the non-users. Thus, the members e-lifestyle, i.e. member's values about digital developments are correlated with the fitness centre app use.

Despite these results, a limitation found for the study was the difference in the members who use the application and those who do not, since the number of members who revealed using it was much higher.

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