





STUDY & RESEARCH FUNDED BY THE MALTA COMMUNICATIONS AUTHORITY

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Digital and Video Game Usage in Malta

A study in the use of digital and video games of the Maltese population in 2012.

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Table of Contents

LIST OF TABLES	4
LIST OF CHARTS	4
BACKGROUND	5
OVERVIEW OF STUDY AIMS	7
METHODOLOGY	8
RESULTS OF STUDY	10
DIGITAL AND VIDEO GAME PLAY FOR THE MALTESE - HOW MANY PEOPLE PLAY?	10
GENDER AND PLAY: WHO PLAYS MOST?	11
DIGITAL AND VIDEO GAMES: CONSOLES, PERSONAL COMPUTERS OR MOBILE GADGETS?	12
GAME PLAY: HOW OFTEN AND HOW LONG DO THE MALTESE PLAY FOR?	15
DIGITAL AND VIDEO GAMES MALTESE PLAY	20
MALTESE AND DIGITAL GAME PLAY: HOW DO PEOPLE LIKE TO PLAY?	24
ONLINE SOCIAL GAMES: THE MALTESE POPULATION AND FACEBOOK	26
DIGITAL AND VIDEO GAMES AND THE MALTESE POPULATION: WHY DO PEOPLE PLAY?	29
MALTESE PARENTS AND THEIR PERCEPTIONS ON GAMES THEIR CHILDREN PLAY	32
CONCLUSION AND IMPLICATIONS	35

List of Tables

TABLE 1 - SAMPLE DISTRIBUTION BY AGE AND INTERNET ACCESS	
TABLE 2 - DIGITAL GAME PLAY FOR THE MALTESE POPULATION	10
TABLE 3 - DIGITAL AND VIDEO GAME PLAY BY AGE AND GENDER	12
TABLE 4 - DIGITAL AND VIDEO GAME PLAY BY AGE GROUP	13
TABLE 5 - DIGITAL AND VIDEO GAME PLAY BY AGE AND GENDER	14
TABLE 6 - DIGITAL GAME AND VIDEO PLAY BY FREQUENCY	16
TABLE 7 - DIGITAL AND VIDEO GAME PLAY FREQUENCY BY AGE AND GENDER	17
TABLE 8 - DIGITAL AND VIDEO GAME PLAY DURATION BY AGE	18
TABLE 9 - DIGITAL AND GAME PLAY DURATION BY AGE AND GENDER	19
TABLE 10 - DIGITAL AND VIDEO GAMES MALTESE PLAY BY AGE GROUP	21
TABLE 11 - DIGITAL AND VIDEO GAMES MALTESE PLAY BY AGE AND GENDER	22
TABLE 12 - DIGITAL AND VIDEO GAME PLAY PREFERENCE BY AGE	24
TABLE 13 - DIGITAL AND VIDEO GAME PLAY PREFERENCE BY AGE AND GENDER	25
TABLE 14 - FACEBOOK ACCOUNT BY AGE GROUP	26
TABLE 15 - FACEBOOK ACCOUNT REGISTRATION BY AGE AND GENDER	27
TABLE 16 - FACEBOOK GAME PLAY BY AGE	28
TABLE 17 - REASONS WHY MALTESE PEOPLE PLAY BY AGE	29
TABLE 18 - REASONS MALTESE PEOPLE PLAY BY AGE AND GENDER	31
TABLE 19 - PARENTS' DIGITAL AND VIDEO GAME PLAY	32
TABLE 20 - PARENTS' ALLOWANCE FOR CHILD DIGITAL AND VIDEO GAME PLAY	32
TABLE 21 - PARENTS' MONITORING OF CHILD'S DIGITAL AND VIDEO GAME PLAY	32
TABLE 22 - PARENTS' KNOWLEDGE ABOUT CHILD'S DIGITAL AND VIDEO GAME PLAY	33
TABLE 23 - PARENTS' MODERATION OF DIGITAL AND VIDEO GAME PLAY	
TABLE 24 - CHILD'S USE OF DIGITAL AND VIDEO GAME PLAY DEVICES	

List of Charts

CHART 1 - DIGITAL AND VIDEO GAME PLAY FOR THE MALTESE POPULATION	10
CHART 2 - DIGITAL GAME PLAY BY DIFFERENT AGE GROUP	11
CHART 3 - DIGITAL AND VIDEO GAME PLAY BY GENDER	11
CHART 4 - DIGITAL AND VIDEO GAME PLAY PREFERENCE BY AGE GROUP	13
CHART 5 - VIDEO GAME PLAY FREQUENCY AND DURATION - HOW MUCH DO THE MALTESE PEOPLE PLAY?	15
CHART 6 - DIGITAL AND VIDEO GAME PLAY BY FREQUENCY	16
CHART 7 - DIGITAL AND VIDEO GAME PLAY DURATION DISTRIBUTION BY AGE GROUP	19
CHART 8 - DIGITAL AND VIDEO GAMES MALTESE PLAY	21
CHART 9 - DIGITAL AND VIDEO GAME PLAY PREFERENCE BY AGE GROUP	25
CHART 10 - FACEBOOK ACCOUNT REGISTRATION BY AGE GROUP	27
CHART 11 - FACEBOOK GAME PLAY BY AGE GROUP	28
CHART 12 - REASONS WHY MALTESE PEOPLE PLAY	30
CHART 13 - CHILD PLAY BY FREQUENCY AND DURATION	

Background

Digital gaming is a pervasive activity in the life of many Maltese. Although playing digital video games is often associated with children, various studies (ESA, 2011) have concluded that that perception could not be further from the truth. According to the report, the average age of digital gamers in the US is 37 (ESA, 2011).

Studies such as Nielsen's report (Video Gamers in Europe, 2008), as well as Game Vision's report (Video Gamers in Europe, 2010), as well as studies like the Digital Australia study (Brand, 2012), are lacking in Malta.

The inter-faculty research group, Games in Education (gamED), have investigated the use of digital and video games by the Maltese population. This project was carried out between 2012 and 2013 and has been funded by the Malta Communications Authority.

Representative samples of the Maltese population were chosen to give insights into the penetration rate of digital and video games inside the Maltese households. The results emergent from these studies are comparable to and reflect other such studies carried out across European and International countries. These studies give insights into the market potential of the sector through the societal trends, along with implications for education and social policies.

According to a report submitted by Nielsen (2008), interactive software sales¹ in Europe reached a total of €7.3 billion in 2007. However, this growth in software sales also reflected the growth in hardware sales of consoles, amongst which were Sony PlayStation 3, Nintendo WII, and Microsoft's XBOX 360.

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 $^{^1\,} Interactive \ software \ sales \ represent \ game \ software \ excluding \ game \ hardware \ and \ additional \ devices.$

The government of Malta is currently trying to promote Malta as a hub for digital game development through initiatives such as the setup of the Malta Games Fund ². Although game developers are generally avid gamers themselves, there is no nationally representative study which maps the extent of digital gaming in the Maltese society. This study aims at satisfying this demand. Although there are many indications that figures such as the ones given by the Nielsen report are on the rise³, there is the need for an investigation into the current situation across the Maltese islands. At the time of this writing, indications are rather vague and none are supported by hard evidence.

It is the main scope of this study to determine the frequency and usage of digital and video games in the Maltese context. This objective finds its importance in the future directions which Malta wishes to undertake in the digital and video games industry. European reports are indicating that this is a niche which is driving the economy in various countries and which would increase Malta's competitiveness in the market. This has implications at the educational level (training the workforce), at the industrial level (as more software-based companies are encouraged to exploit opportunities in the leisure gaming industry) and at the social level (as more employment is generated).

These study findings also focus on the socio-demographics of attitudes and behaviours related to video and online game play, as well as the digital and video game device usage.

The importance and strength of these studies also lies in the frequency with which such studies are repeated in order to get a measure of the change in societal trends across the years.

http://finance.gov.mt/image.aspx?site=MFIN&ref=2012_Budget%20Speech%20English & http://www.financemalta.org/content.aspx?id=300264 Last Accessed: February 2012.

6

² A Malta Games Fund is being set up with a budget allocation of €150,000 for digital and video game development as well as a new fiscal measure for companies commissioning development of educational or digital game giving a tax-value credit of up to €15,000. Available online:

³ A number of current market research reports for the UK and other European countries are available at a cost. Available online: http://www.marketresearch.com/seek/Video-Games-United-Kingdom/774/1323/1.html Last Accessed: February 2012.

Overview of Study Aims

According to the latest ISFE Video Gamers report (Video Gamers in Europe, 2010), an adult living in Europe has a 25.4% probability of being addressed as a gamer. The results from this study would like to establish percentagewise where Malta lies in relation to other European countries.

The scope of this report is to establish the market size of digital and video games in Malta and give statistical evidence in terms of age groups and gender and their relationship with digital games and game devices.

This report addresses these specific goals:

- Game playing patterns among Maltese people from 3 to 54 years of age;
- A measurement of the tendencies of a representative sample of the Maltese gamer population aged 7 to 54;
- Gender and age influences on digital and video game play.

This research agenda also lends itself to more specific research questions:

- 1. What percentage of the Maltese population plays digital and video games?
- 2. How is this percentage influenced by gender and age?
- 3. How often do they play and what is the duration of their game play?
- 4. What games do the Maltese people play and how does this vary with gender and age?
- 5. Why do people in Malta play digital and video games?

Using these initial research findings, the report additionally proposes further research and projects in the field, linking academia to industry and policy, thus strengthening Malta's competitive edge on the market.

Methodology

The target population for this study consisted of the Maltese section of the population aged between 3 and 54. This specific age range was chosen on the basis of a number of other international and European reports that have previously been published.

A sample of 1,268 individuals was selected by means of a stratified random sampling to ensure a representative count by age and gender. The percentage counts were drawn out from the population register maintained by NSO and respective reports for Internet access within households. The results yielded a percentage of the Maltese population having Internet access versus those not having Internet access. This sample was further stratified by age. The figures give indications that for the younger age groups, the percentage results of how many people have Internet access reflect findings from other published studies such as the recently published PIRLS 2011 study⁴. The table below, however, also indicates that for the population of adults from 45 to 54 years, the proportion of people who have Internet access is lower than for the other age groups.

Table 1 - Sample Distribution by Age and Internet Access⁵

	Percentage %				
	Internet	No Internet Access			
16-24	92.9%	7.1%			
25-34	90.5%	9.5%			
35-44	92.2%	7.8%			
45-54	79.4%	20.6%			

Data was collected using two methods. The Internet survey method was carried out with a representative sample of the population having Internet access, whilst face-to-face surveys were carried out with a representative sample of the population not having access to the Internet.

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⁴ PIRLS 2011 International Results in Reading. Online: https://www.education.gov.mt/News.aspx?newsid=239&depid=13 Last Accessed June 2013

⁵ This data was collated and compiled from the NSO report [to insert reference]

For children aged 3 to 6, data was collected directly from their parents. Parental consent was also obtained for respondents aged 7-15. A pilot study was run prior to the actual survey using measures to check the clarity of the questionnaire items, eliminate the ambiguities in the wording, instructions and layout, as well as validate the questions asked.

The Chi square test was used to assess how game playing patterns differ between the different age groups, either for males and females separately or as a whole group. P-values less than 0.05 indicate that game playing patterns differ significantly between the age groups.

Results of Study

Digital and Video Game Play for the Maltese – how many people play?

74% of the representative sample of the Maltese population that has been interviewed plays digital and video games.

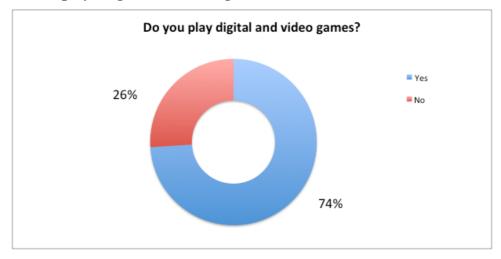


Chart 1 - Digital and Video Game Play for the Maltese Population

The percentages above, showing the proportion of the population who play digital and video games, were calculated after rescaling the percentages of game players onto the Maltese population stratified by age as provided by the NSO.

Table 2 - Digital Game Play for the Maltese Population

			Age Group				
			3-6 years	7-12 years	13-24 years	25-54 years	
Do you play digital and video games?	Yes	Count	166	181	320	333	
		Percentage	97.6%	88.7%	84.0%	64.9%	
	No	Count	4	23	61	180	
	INO	Percentage	2.4%	11.3%	16.0%	35.1%	

 $X^{2}(3) = 113.80, p < 0.001$

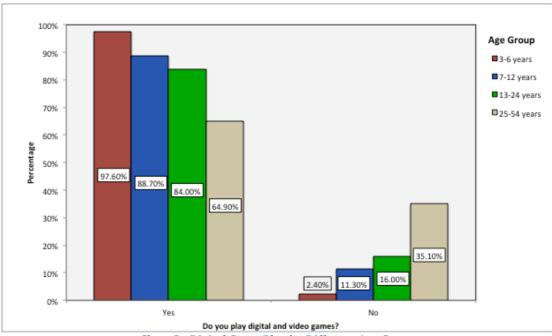


Chart 2 - Digital Game Play by Different Age Group

The highest reported digital and video game play was by 3 to 6-year-olds, with 97.6% of the parents claiming that their children played digital and video games. This percentage was followed closely by respondents aged 7-12 and 13-24, at 88.7% and 84.0% respectively. The age group which reported the lowest percentage of game play was the 25-54 years one. Correspondingly, this latter age group reported the highest percentage of respondents who do not play digital and video games.

Gender and Play: who plays most?

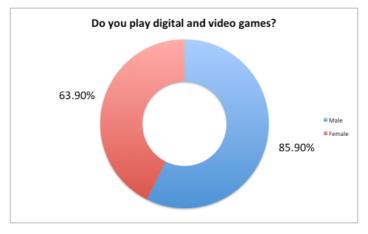


Chart 3 - Digital and Video Game Play by Gender

Table 3 - Digital and Video Game Play by Age and Gender

Do you play digital						
Gender	and video ga	and video games?		13-24 years	25-54 years	Total
V		Count	84	225	208	517
Male	Yes	Percentage	95.5%	95.3%	74.8%	85.9%
iviale	No	Count	4	11	70	85
	INO	Percentage	4.5%	4.7%	25.2%	14.1%
Female -	Voc	Count	97	95	125	317
	Yes	Percentage	83.6%	65.5%	53.2%	63.9%
	No	Count	19	50	110	179
	INO	Percentage	16.4%	34.5%	46.8%	36.1%

 $X^{2}(2) = 52.11, p < 0.001$

 $X^{2}(2) = 31.41, p < 0.001$

According to the respondents, the highest percentage of male gamers was in the 7-12 and 13-24 age groups with 95.5% and 95.3% respectively. The lowest gamer percentage was for the female age group of 25-54 years, with 53.2% of the respondents replying that they played digital and video games. The percentage differences are significant and not attributed to chance.

Digital and Video Games: consoles, personal computers or mobile gadgets?

This question asked respondents to list their preference for playing digital and video games. Do the Maltese prefer to use their desktop computer, or do they prefer to use portable or mobile gaming devices?

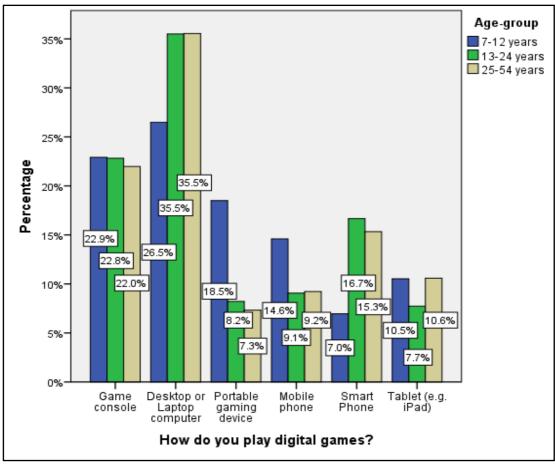


Chart 4 - Digital and Video Game Play Preference by Age Group

Table 4 - Digital and Video Game Play by Age Group

				Age-group			
			7-12 years	13-24 years	25-54 years	Total	
	Game console	Count	135	189	162	486	
	Game console	Percentage	22.9%	22.8%	22.0%	22.6%	
	Desktop or Laptop	Count	156	294	262	712	
	computer	Percentage	26.5%	35.5%	35.5%	33.1%	
How do	Portable gaming	Count	109	68	54	231	
you play	device	Percentage	18.5%	8.2%	7.3%	10.7%	
digital	Mobile phone	Count	86	75	68	229	
games?	Mobile phone	Percentage	14.6%	9.1%	9.2%	10.6%	
	Smart Phone	Count	41	138	113	292	
	Siliait Pilone	Percentage	7.0%	16.7%	15.3%	13.6%	
	Tablet (e.g. iDed)	Count	62	64	78	204	
Tablet (e.	Tablet (e.g. iPad)	Percentage	10.5%	7.7%	10.6%	9.5%	
Total		Count	589	828	737	2154	
Total		Percentage	100.0%	100.0%	100.0%	100.0%	

 $X^{2}(10) = 99.67, p < 0.001$

33.1% of the respondents between the ages of 7-54 stated that they prefer to use the desktop or laptop computer to play games, whereas only 9.5% mentioned that they use the tablet to play games. 22.6% of the respondents mentioned that they use game consoles to play. The crosstab also displays a

significant association between age and how the participants play digital and video games. Respondents aged 13 years or above are more likely to use desktop, laptop computers or smart phones than their younger counterparts. On the other hand, respondents aged 13 years or less are more likely to use portable gaming devices and mobile phones than older participants.

There was not a notable difference between the male and female respondents in their preference for game play. 33.5% of female and 32.8% of male respondents declared that they preferred using a computer or the laptop to play digital and video games. The most notable differences were in the use of the game console for men versus women, and the use of the mobile phone to play digital games. Game consoles are more popular with males whilst gaming on the mobile phone is more popular with females. While the percentage was higher at 24.6% for males for the former, 13.7% females versus 8.8% male respondents mentioned that they play games using their mobile phone.

Table 5 - Digital and Video Game Play by Age and Gender

	How do you play			Age-group			
Gender	digital games?		7-12 years	13-24 years	25-54 years	Total	
	Cama aanaala	Count	72	137	122	331	
Game consol	Game console	Percentage	25.5%	23.7%	25.1%	24.6%	
	Desktop or	Count	70	209	162	441	
	Laptop computer	Percentage	24.8%	36.2%	33.3%	32.8%	
	Portable gaming	Count	54	52	34	140	
Male	device	Percentage	19.1%	9.0%	7.0%	10.4%	
IVIAIC	Mobile phone	Count	35	45	38	118	
	Mobile priorie	Percentage	12.4%	7.8%	7.8%	8.8%	
	Smart Phone	Count	18	96	78	192	
	Smart Hone	Percentage	6.4%	16.6%	16.0%	14.3%	
Tablet (e.g.	Tablet (e.g.	Count	33	39	52	124	
	iPad)	Percentage	11.7%	6.7%	10.7%	9.2%	
	Game console	Count	63	52	40	155	
	Gairle Console	Percentage	20.5%	20.8%	15.9%	19.2%	
	Desktop or	Count	86	85	100	271	
	Laptop computer	Percentage	28.0%	34.0%	39.8%	33.5%	
	Portable gaming	Count	55	16	20	91	
Female	device	Percentage	17.9%	6.4%	8.0%	11.3%	
l ciliale	Mobile phone	Count	51	30	30	111	
	Mobile priorie	Percentage	16.6%	12.0%	12.0%	13.7%	
	Smart Phone	Count	23	42	35	100	
	Siliait Filone	Percentage	7.5%	16.8%	13.9%	12.4%	
	Tablet (e.g.	Count	29	25	26	80	
	iPad)	Percentage	9.4%	10.0%	10.4%	9.9%	

 $X^{2}(10) = 62.99, p < 0.001$

 $X^{2}(10) = 40.99, p < 0.001$

Game Play: how often and how long do the Maltese play for?

The results show that as a population in general, Maltese people tend to play digital and video games about once a day for an average of 1 hour. The people who tend to play several times in a day also play for a greater amount of hours, for an average of 4-6 hours.

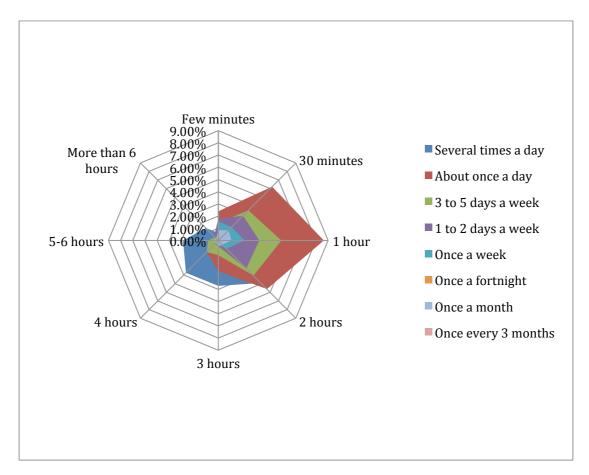


Chart 5 - Video Game Play Frequency and Duration - how much do the Maltese people play?

From the results obtained, unsurprisingly the largest percentage of respondents who declare playing at least once a day, are found in the 7-12 age group. Surprisingly, youths in the 13-24 age group play several times a day, and 3 to five days a week. Only 1.3% of the respondents mentioned that they play digital and video games once in every 3 months. All of these respondents belonged to the 25-54 age group. There is a significantly larger proportion of adults aged 25-54 years (around 13%) who play these games, at most, once a fortnight.

Table 6 - Digital Game and Video Play by Frequency

				Age-group		
			7-12 years	13-24 years	25-54 years	Total
	Several times a	Count	44	94	75	213
	day	Percentage	24.3%	29.4%	22.5%	25.5%
	About once a day	Count	64	71	95	230
	About once a day	Percentage	35.4%	22.2%	28.4%	27.5%
	2 to 5 days a wook	Count	29	76	44	149
	3 to 5 days a week	Percentage	16.0%	23.8%	13.2%	17.8%
Llaw aftan	1 to 2 days a week	Count	22	35	49	106
How often		Percentage	12.2%	10.9%	14.7%	12.7%
do you play games?	Once a week	Count	18	16	27	61
ganies	Office a week	Percentage	9.9%	5.0%	8.1%	7.3%
	Once a fortnight	Count	2	10	12	24
	Office a fortilight	Percentage	1.1%	3.1%	3.6%	2.9%
	Once a month	Count	2	18	21	41
	Once a month	Percentage	1.1%	5.6%	6.3%	4.9%
	Once every 3	Count	0	0	11	11
	months	Percentage	0.0%	0.0%	3.3%	1.3%
Total		Count	181	320	334	835
Total		Percentage	100.0%	100.0%	100.0%	100.0%

 $X^{2}(14) = 53.60, p < 0.001$

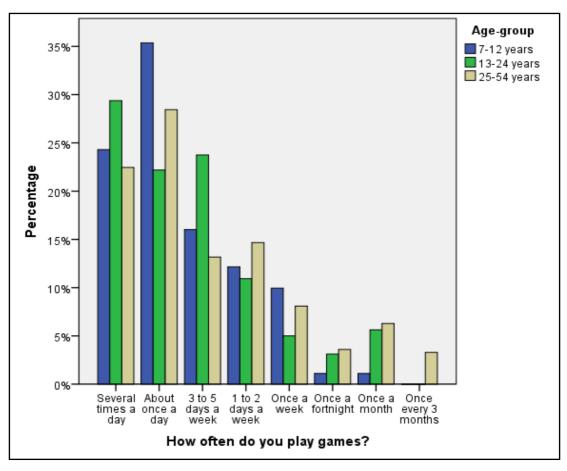


Chart 6 - Digital and Video Game Play by Frequency

In total, 25.5% and 27.5% of the respondents between 7-54 years answered that they play digital video games, several times a day and once a day respectively.

Table 7 - Digital and Video Game Play Frequency by Age and Gender

	How often do yo	ou		Age-group		
Gender	play games?		7-12 years	13-24 years	25-54 years	Total
	Several times	Count	22	83	51	156
	a day	Percentage	26.2%	36.9%	24.5%	30.2%
	About once a	Count	32	52	58	142
	day	Percentage	38.1%	23.1%	27.9%	27.5%
	3 to 5 days a	Count	13	51	29	93
	week	Percentage	15.5%	22.7%	13.9%	18.0%
	1 to 2 days a	Count	10	21	29	60
Male	week	Percentage	11.9%	9.3%	13.9%	11.6%
Male	Once a week	Count	5	4	17	26
	Office a week	Percentage	6.0%	1.8%	8.2%	5.0%
	Once a	Count	2	7	7	16
	fortnight	Percentage	2.4%	3.1%	3.4%	3.1%
	Once a month	Count	0	7	10	17
	Office a month	Percentage	0.0%	3.1%	4.8%	3.3%
	Once every 3 months	Count	0	0	7	7
		Percentage	0.0%	0.0%	3.4%	1.4%
	Several times	Count	22	11	24	57
	a day	Percentage	22.7%	11.6%	19.0%	17.9%
	About once a	Count	32	19	37	88
	day	Percentage	33.0%	20.0%	29.4%	27.7%
	3 to 5 days a	Count	16	25	15	56
	week	Percentage	16.5%	26.3%	11.9%	17.6%
	1 to 2 days a	Count	12	14	20	46
Female	week	Percentage	12.4%	14.7%	15.9%	14.5%
remale	Once a week	Count	13	12	10	35
	Office a week	Percentage	13.4%	12.6%	7.9%	11.0%
	Once a	Count	0	3	5	8
	fortnight	Percentage	0.0%	3.2%	4.0%	2.5%
	Once a month	Count	2	11	11	24
Ì	Once a month	Percentage	2.1%	11.6%	8.7%	7.5%
Ì	Once every 3	Count	0	0	4	4
	months	Percentage	0.0%	0.0%	3.2%	1.3%

 $X^{2}(14) = 41.73, p < 0.001$

The greatest gender difference in percentage of participants engaged in game play is for those who have responded as playing several times a day. Whilst 30.2% of males (with the greatest majority being in the 13-24 age group) responded as playing several times daily, only 17.9% (with the minority being in the 13-24 age group) of the female respondents replied that they play several times in a day. From this table, it is also evident that whereas more males tend to play more frequently, more females tend to play less frequently and more sporadically. A large proportion of females aged 13-24 years (26.3%) play digital and video games 3-5 days weekly, whereas for the same age group, a large proportion of males (36.9%) play these games several times a day.

 $X^{2}(14) = 31.25$, p = 0.005

The greatest amount of respondents mentioned that they play 1-2 hours daily. The overall top percentage score was for respondents in the 7-12 age group (40.3%) who declared that they spend 1 hour of game play daily. This large percentage score for this game play duration is also reflected in the 25-54 age group, whilst for the 13-24 age group the greatest percentage score was 24.7% for a 2 hour game play duration. The proportion of respondents aged 13-24 years who play at least 5 hours daily (11.9%) is considerably larger than the proportion of children aged 7-12 years (2.2%) and older adults aged 25-54 years (7.2%).

Table 8 - Digital and Video Game Play Duration by Age

			Age-group			
			7-12 years	13-24 years	25-54 years	Total
	Few minutes	Count	23	15	45	83
	rew minutes	Percentage	12.7%	4.7%	13.6%	10.0%
	30 minutes	Count	40	32	77	149
	30 minutes	Percentage	22.1%	10.0%	23.3%	17.9%
	1 hour	Count	73	65	92	230
	1 Hour	Percentage	40.3%	20.3%	27.8%	27.6%
How many	2 hours	Count	32	79	54	165
hours do	2 110015	Percentage	17.7%	24.7%	16.3%	19.8%
you play	3 hours	Count	6	51	20	77
daily?	3 Hours	Percentage	3.3%	15.9%	6.0%	9.3%
	4 hours	Count	3	40	19	62
	4 110015	Percentage	1.7%	12.5%	5.7%	7.5%
	5-6 hours	Count	2	24	16	42
	5-0 Hours	Percentage	1.1%	7.5%	4.8%	5.0%
	More than 6	Count	2	14	8	24
	hours	Percentage	1.1%	4.4%	2.4%	2.9%
Total	_	Count	181	320	331	832
Total		Percentage	100.0%	100.0%	100.0%	100.0%

 $X^{2}(14) = 116.53$, p < 0.001

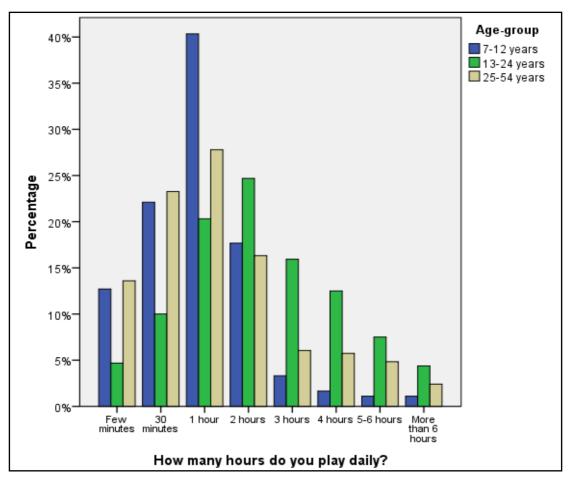


Chart 7 - Digital and Video Game Play Duration Distribution by Age Group

Table 9 - Digital and Game Play Duration by Age and Gender

	How many hour			Age-group		
Gender	do you play daily	y?	7-12 years	13-24 years	25-54 years	Total
	Few minutes	Count	10	4	20	34
	rew minutes	Percentage	11.9%	1.8%	9.6%	6.6%
	30 minutes	Count	15	14	38	67
	30 minutes	Percentage	17.9%	6.2%	18.3%	13.0%
	1 hour	Count	38	37	55	130
	1 Hour	Percentage	45.2%	16.4%	26.4%	25.1%
Male	2 hours	Count	16	63	43	122
	2 hours	Percentage	19.0%	28.0%	20.7%	23.6%
Male	3 hours	Count	2	39	17	58
	3 110015	Percentage	2.4%	17.3%	8.2%	11.2%
	4 hours	Count	2	35	18	55
	4 110015	Percentage	2.4%	15.6%	8.7%	10.6%
	5-6 hours	Count	1	20	12	33
	5-6 Hours	Percentage	1.2%	8.9%	5.8%	6.4%
	More than 6	Count	0	13	5	18
	hours	Percentage	0.0%	5.8%	2.4%	3.5%
	Few minutes	Count	13	11	25	49
	l rew minutes	Percentage	13.4%	11.6%	20.3%	15.6%
	30 minutes	Count	25	18	39	82
Female	30 minutes	Percentage	25.8%	18.9%	31.7%	26.0%
	1 hour	Count	35	28	37	100
	1 Hour	Percentage	36.1%	29.5%	30.1%	31.7%
	2 hours	Count	16	16	11	43

		Percentage	16.5%	16.8%	8.9%	13.7%
	3 hours	Count	4	12	3	19
		Percentage	4.1%	12.6%	2.4%	6.0%
	4 hours	Count	1	5	1	7
	4 hours	Percentage	1.0%	5.3%	0.8%	2.2%
	5-6 hours	Count	1	4	4	9
		Percentage	1.0%	4.2%	3.3%	2.9%
	More than 6	Count	2	1	3	6
	hours	Percentage	2.1%	1.1%	2.4%	1.9%

 $X^{2}(14) = 90.37, p < 0.001$

 $X^{2}(14) = 28.64$, p = 0.012

Gender is a strong predictor of duration of game play. Whereas females reported a higher percentage of low game play time, males show a tendency to play for a longer time period. The proportion of males playing between 1-2 hours daily (48.7%) is greater than the proportion of females playing for the same duration (45.4%). Moreover, the proportion of males playing for at least 5 hours daily (9.9%) is significantly higher than the proportion of females (4.8%).

Digital and Video Games Maltese Play

The two genres, which are more popular with the Maltese population, are Puzzle games (such as 'Tetris' and 'Solitaire') and Action games (such as 'Call of Duty' and 'Grand Theft Auto') with 11.9% and 11.4% respectively of the population aged between 7-54 years.

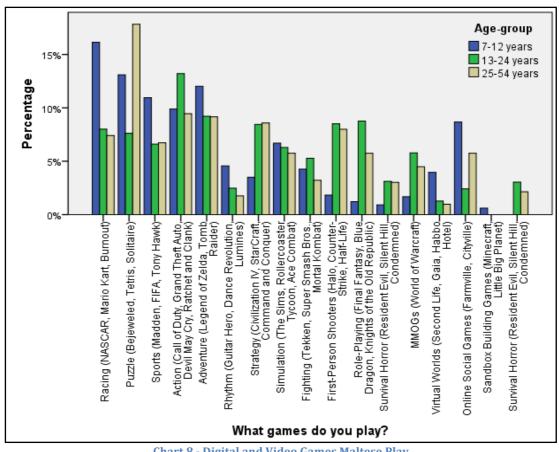


Chart 8 - Digital and Video Games Maltese Play

13.2% of the respondents in the 13-24 age group have declared that they prefer to play Action games like 'Call of Duty', whilst the younger audience tend to show a preference towards Adventure games, such as 'Legend of Zelda' or 'Tomb Raider'. The most popular game genre for the 25-54 age group seems to be the Puzzle games, like 'Solitaire'.

Table 10 - Digital and Video Games Maltese Play by Age Group

				Age-group		
			7-12	13-24	25-54	
			years	years	years	Total
	Racing (NASCAR, Mario Kart,	Count	106	126	76	308
	Burnout)	Percentage	16.1%	8.0%	7.4%	9.5%
	Puzzle (Bejeweled, Tetris,	Count	86	120	183	389
	Solitaire)	Percentage	13.1%	7.6%	17.8%	11.9%
	Sports (Madden, FIFA, Tony Hawk)	Count	72	104	69	245
		Percentage	11.0%	6.6%	6.7%	7.5%
\A/b = 4	Action (Call of Duty, Grand	Count	65	208	97	370
What	Theft Auto, Devil May Cry)	Percentage	9.9%	13.2%	9.5%	11.4%
games do you play?	Adventure (Legend of Zelda,	Count	79	145	94	318
you play :	Tomb Raider)	Percentage	12.0%	9.2%	9.2%	9.8%
	Rhythm (Guitar Hero, Dance	Count	30	39	18	87
	Revolution, Lumines)	Percentage	4.6%	2.5%	1.8%	2.7%
	Strategy (Civilization IV, Star	Count	23	133	88	244
	Craft, Command Conquer)	Percentage	3.5%	8.4%	8.6%	7.5%
	Simulation (The Sims, Roller	Count	44	99	59	202
	coaster Tycoon, Ace Combat)	Percentage	6.7%	6.3%	5.8%	6.2%

	Fighting (Tekken, Super Smash	Count	28	83	33	144
	Bros., Mortal combat)	Percentage	4.3%	5.3%	3.2%	4.4%
	First-Person Shooters (Halo,	Count	12	134	82	228
	Counter-Strike, Half-Life)	Percentage	1.8%	8.5%	8.0%	7.0%
	Role-Playing (Final Fantasy,	Count	8	138	59	205
	Knights of the Old Republic)	Percentage	1.2%	8.8%	5.8%	6.3%
	Survival Horror (Resident Evil,	Count	6	49	31	86
	Silent Hill, Condemned)	Percentage	0.9%	3.1%	3.0%	2.6%
	MMOCa (World of Wararaft)	Count	11	91	46	148
	MMOGs (World of Warcraft) Virtual Worlds (Second Life,	Percentage	1.7%	5.8%	4.5%	4.5%
		Count	26	20	10	56
	Gaia, Habbo Hotel)	Percentage	4.0%	1.3%	1.0%	1.7%
	Online Social Games	Count	57	38	59	154
	(Farmville, Cityville)	Percentage	8.7%	2.4%	5.8%	4.7%
	Sandbox Building Games	Count	4	0	0	4
	(Minecraft, Little Big Planet)	Percentage	0.6%	0.0%	0.0%	0.1%
	Survival Horror (Resident Evil,	Count	0	48	22	70
	Silent Hill, Condemned)	Percentage	0.0%	3.0%	2.1%	2.1%
Total		Count	657	1575	1026	3258
TOTAL		Percentage	100.0%	100.0%	100.0%	100.0%

 $X^{2}(32) = 360.02, p < 0.001$

The study also shows that whilst a higher percentage of males (13.4%) choose to play Action games like 'Call of Duty' and 'Grand Theft Auto', a higher percentage of females (23.1% and 11.1%) choose to play Puzzle games and online Social games like 'Solitaire' and 'Farmville'.

Table 11 - Digital and Video Games Maltese Play by Age and Gender

				Age-group		
			7-12	13-24	25-54	
Gender	What games do you play?		years	years	years	Total
	Racing (NASCAR, Mario Kart,	Count	57	97	62	216
	Burnout)	Percentage	16.7%	8.1%	8.0%	9.3%
	Puzzle (Bejeweled, Tetris,	Count	30	51	92	173
	Solitaire)	Percentage	8.8%	4.2%	11.8%	7.5%
	Sports (Madden, FIFA, Tony	Count	48	93	60	201
	Hawk)	Percentage	14.1%	7.7%	7.7%	8.7%
	Action (Call of Duty, Grand	Count	45	177	90	312
	Theft Auto, Devil May Cry)	Percentage	13.2%	14.7%	11.6%	13.4%
	Adventure (Legend of Zelda,	Count	46	107	72	225
	Tomb Raider)	Percentage	13.5%	8.9%	9.3%	9.7%
	Rhythm (Guitar Hero, Dance	Count	14	22	14	50
	Revolution, Lumines)	Percentage	4.1%	1.8%	1.8%	2.2%
Male	Strategy (Civilization IV, Star	Count	16	119	80	215
iviale	Craft, Command & Conquer)	Percentage	4.7%	9.9%	10.3%	9.3%
	Simulation (The Sims, Roller	Count	21	58	38	117
	coaster Tycoon, Ace Combat)	Percentage	6.2%	4.8%	4.9%	5.0%
	Fighting (Tekken, Super Smash	Count	18	68	28	114
	Bros., Mortal Kombat)	Percentage	5.3%	5.7%	3.6%	4.9%
	First-Person Shooters (Halo,	Count	9	117	74	200
	Counter-Strike, Half-Life)	Percentage	2.6%	9.7%	9.5%	8.6%
	Role-Playing (Final Fantasy,	Count	5	110	54	169
	Knights of the Old Republic)	Percentage	1.5%	9.2%	6.9%	7.3%
	Survival Horror (Resident Evil,	Count	3	40	28	71
	Silent Hill, Condemned)	Percentage	0.9%	3.3%	3.6%	3.1%
	MMOCa (World of Worareft)	Count	4	75	39	118
	MMOGs (World of Warcraft)	Percentage	1.2%	6.2%	5.0%	5.1%

	Virtual Worlds (Second Life,	Count	9	13	5	27
	Gaia, Habbo Hotel)	Percentage	2.6%	1.1%	0.6%	1.2%
	Online Social Games (Farmville,	Count	15	14	21	50
	Cityville)	Percentage	4.4%	1.2%	2.7%	2.2%
	Sandbox Building Games	Count	1	0	0	1
	(Minecraft, Little Big Planet)	Percentage	0.3%	0.0%	0.0%	0.0%
	Survival Horror (Resident Evil,	Count	0	41	20	61
	Silent Hill, Condemned)	Percentage	0.0%	3.4%	2.6%	2.6%
	Racing (NASCAR, Mario Kart,	Count	49	29	14	92
	Burnout)	Percentage	15.5%	7.8%	5.6%	9.8%
	Puzzle (Bejeweled, Tetris,	Count	56	69	91	216
	Solitaire)	Percentage	17.7%	18.6%	36.5%	23.1%
	Sports (Madden, FIFA, Tony	Count	24	10	9	43
	Hawk)	Percentage	7.6%	2.7%	3.6%	4.6%
	Action (Call of Duty, Grand	Count	20	31	7	58
	Theft Auto, Devil May Cry,)	Percentage	6.3%	8.4%	2.8%	6.2%
	Adventure (Legend of Zelda, Tomb Raider)	Count	33	38	22	93
		Percentage	10.4%	10.3%	8.8%	9.9%
	Rhythm (Guitar Hero, Dance	Count	16	17	4	37
	Revolution, Lumines)	Percentage	5.1%	4.6%	1.6%	4.0%
	Strategy (Civilization IV, Star	Count	7	14	8	29
	Craft, Command & Conquer)	Percentage	2.2%	3.8%	3.2%	3.1%
	Simulation (The Sims, Roller	Count	23	40	21	84
	coaster Tycoon, Ace Combat)	Percentage	7.3%	10.8%	8.4%	9.0%
Female	Fighting (Tekken, Super Smash	Count	10	15	5	30
remale	Bros., Mortal Kombat)	Percentage	3.2%	4.1%	2.0%	3.2%
	First-Person Shooters (Halo,	Count	3	17	8	28
	Counter-Strike, Half-Life)	Percentage	0.9%	4.6%	3.2%	3.0%
	Role-Playing (Final Fantasy,	Count	3	27	5	35
	Knights of the Old Republic)	Percentage	0.9%	7.3%	2.0%	3.7%
	Survival Horror (Resident Evil,	Count	3	9	3	15
	Silent Hill, Condemned)	Percentage	0.9%	2.4%	1.2%	1.6%
	MMOGs (World of Warcraft)	Count	7	16	7	30
	,	Percentage	2.2%	4.3%	2.8%	3.2%
	Virtual Worlds (Second Life,	Count	17	7	5	29
	Gaia, Habbo Hotel)	Percentage	5.4%	1.9%	2.0%	3.1%
	Online Social Games (Farmville,	Count	42	24	38	104
	Cityville)	Percentage	13.3%	6.5%	15.3%	11.1%
	Sandbox Building Games	Count	3	0	0	3
	(Minecraft, Little Big Planet)	Percentage	0.9%	0.0%	0.0%	0.3%
	Survival Horror (Resident Evil,	Count	0	7	2	9
	Silent Hill, Condemned)	Percentage	0.0%	1.9%	0.8%	1.0%

 $X^{2}(32) = 203.77, p < 0.001$

The reported studies indicate that whilst Racing (16.7%), Sports (14.1%), Action (13.2%) and Adventure (13.5%) games are more popular with males in the 7-12 age group, Action, Strategy and First Person Shooter games are more popular with males in the 13-24 and 25-54 age groups. Role playing games fare better with age group 13-24 (9.2%), whilst Puzzle games are more popular with the older male group 25-54 (11.8%). The trend amongst females is that for the7-12 age group, the more popular game genres are Racing (15.5%), Puzzle (17.7%), Adventure (10.4%) and Online Social games (13.3%). For the 13-24 age group, there is a slight change in preference where aside from

 $X^{2}(32) = 137.54$, p < 0.001

Puzzle (18.6%) and Adventure (10.3%), female respondents indicated Simulation games, e.g. The Sims, as being quite popular (10.8%). For the 25-54 female age group, the most popular game genre by far are Puzzle games with 36.5% of the respondents indicating them as their most popular preference. These are followed closely by Online Social games at 15.3%.

Maltese and Digital Game Play: how do people like to play?

40.8% of the representative sample of the population between 7 and 54 years like to play alone. 21.2% of the respondents stated that they like to play with friends over the Internet. This was followed by family (14.5%), strangers over the Internet (12.3%), and finally with friends (11.2%).

Table 12 - Digital and Video Game Play Preference by Age

				Age-group		
			7-12 years	13-24 years	25-54 years	Total
	Alone	Count	105	261	265	631
Alone	Alone	Percentage	41.2%	36.5%	45.8%	40.8%
	At a party / with friends	Count	96	53	25	174
Have da		Percentage	37.6%	7.4%	4.3%	11.2%
How do you like	With my children / with family	Count	0	89	136	225
to play?		Percentage	0.0%	12.4%	23.5%	14.5%
to play:	With friends I know	Count	49	189	90	328
	over the Internet	Percentage	19.2%	26.4%	15.6%	21.2%
	With people I don't	Count	5	123	62	190
k	know over the Internet	Percentage	2.0%	17.2%	10.7%	12.3%
Total	Total		255	715	578	1548
TOIAI		Percentage	100.0%	100.0%	100.0%	100.0%

 $X^{2}(8) = 326.08, p < 0.001$

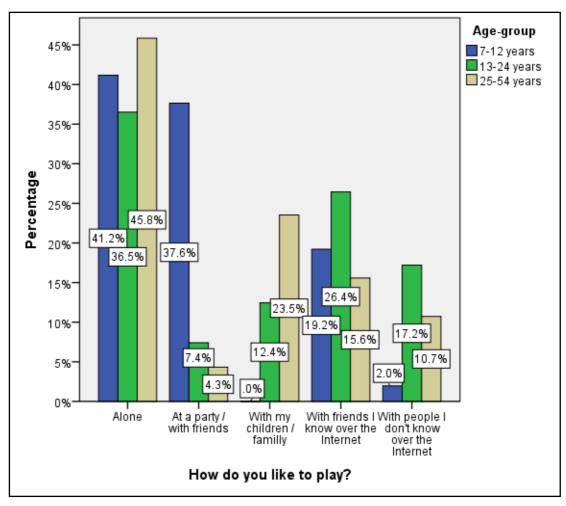


Chart 9 - Digital and Video Game Play Preference by Age Group

From the responses by both males and females, both groups agree that they prefer playing alone to playing in a group (39.0% and 44.3% respectively). However, while males seem to be more open to play with people they do not know over the Internet (14.8%), only 7.1% of the females reported that they like to play with strangers over the Internet. More females showed an increased preference to playing with family (18.7%) than males (10.2%), whereas more males prefer to play with friends over the Internet (23.5%).

Table 13 - Digital and Video Game Play Preference by Age and Gender

				Age-group			
			7-12	13-24	25-54		
Gender	How do you like to play?)	years	years	years	Total	
	Alone	Count	49	185	172	406	
	Alone	Percentage	40.2%	34.6%	44.8%	39.0%	
	At a party / with friends	Count	49	41	16	106	
Male	At a party / with friends	Percentage	40.2%	7.7%	4.2%	10.2%	
Male	With my children /	Count	0	48	82	130	
	family	Percentage	0.0%	9.0%	21.4%	12.5%	
	With friends I know	Count	22	153	69	244	
	over the Internet	Percentage	18.0%	28.7%	18.0%	23.5%	

	With people I don't	Count	2	107	45	154
	know over the Internet	Percentage	1.6%	20.0%	11.7%	14.8%
	Alono	Count	56	76	93	225
	Alone	Percentage	42.1%	42.0%	47.9%	44.3%
	At a party / with friends	Count	47	12	9	68
	At a party / with friends	Percentage	35.3%	6.6%	4.6%	13.4%
Female	With my children /	Count	0	41	54	95
remale	family	Percentage	0.0%	22.7%	27.8%	18.7%
	With friends I know	Count	27	36	21	84
	over the Internet	Percentage	20.3%	19.9%	10.8%	16.5%
	With people I don't	Count	3	16	17	36
	know over the Internet	Percentage	2.3%	8.8%	8.8%	7.1%

X²(8) = 214.28, p < 0.001 X²(8) = 113.26, p < 0.001

Online Social Games: The Maltese Population and Facebook

76.0% of the representative sample of the Maltese population surveyed, declared that they have a Facebook account. Of these 93.1% are found in the 13-24 age group. More surprisingly, 39.8% are found in the 7-12 age group, despite the fact that registration for Facebook is for ages 13 and up.

Table 14 - Facebook account by Age Group

				Age-group				
			7-12 years	13-24 years	25-54 years	Total		
Do you have a	Yes	Count	72	299	260	631		
Do you have a Facebook		Percentage	39.8%	93.1%	79.3%	76.0%		
account?	No	Count	109	22	68	199		
accounts		Percentage	60.2%	6.9%	20.7%	24.0%		
Total		Count	181	321	328	830		
Total		Percentage	100.0%	100.0%	100.0%	100.0%		

 $X^{2}(2) = 170.3, p < 0.001$

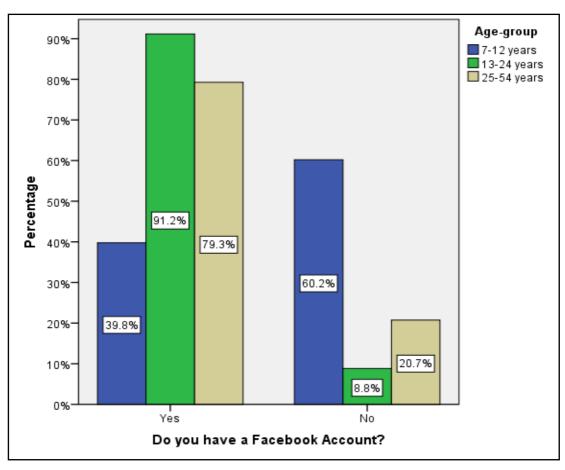


Chart 10 - Facebook Account Registration by Age Group

Both males and females have approximately the same percentage registration of Facebook accounts. However, there are marginally more females in the 25-54 age group (81.8%) than males (77.8%). There are also more female respondents in the 7-12 age group who have declared that they have a Facebook account than males in the same age group (28.6% and 49.5% respectively).

Table 15 - Facebook Account Registration by Age and Gender

Gender	Gender Do you have a Facebook account?			13-24 years	25-54 years	Total
Vac		Count	24	212	161	397
Male	Yes	Percentage	28.6%	93.8%	77.8%	76.8%
1	No	Count	60	14	46	120
		Percentage	71.4%	6.2%	22.2%	23.2%
	Yes	Count	48	87	99	234
Female	162	Percentage	49.5%	91.6%	81.8%	74.8%
remale	No	Count	49	8	22	79
	INO	Percentage	50.5%	8.4%	18.2%	25.2%

X² (2) = 146.4, p < 0.001 X² (2) = 50.28, p < 0.001

Only 35.1% of the people surveyed answered that they play games on Facebook with the majority of them being in the 7-12 age group. The age group for which Facebook games hold the least appeal is for males in the 13-24 age group.

Table 16 - Facebook Game Play by Age

				Age-group				
			7-12 years	13-24 years	25-54 years	Total		
	Yes	Count	75	84	97	256		
Do you play games	165	Percentage	41.4%	28.8%	37.7%	35.1%		
over Facebook?	Na	Count	106	208	160	474		
	No	Percentage	58.6%	71.2%	62.3%	64.9%		
Total		Count	181	292	257	730		
		Percentage	100.0%	100.0%	100.0%	100.0%		

 $X^{2}(2) = 9.123$, p = 0.010

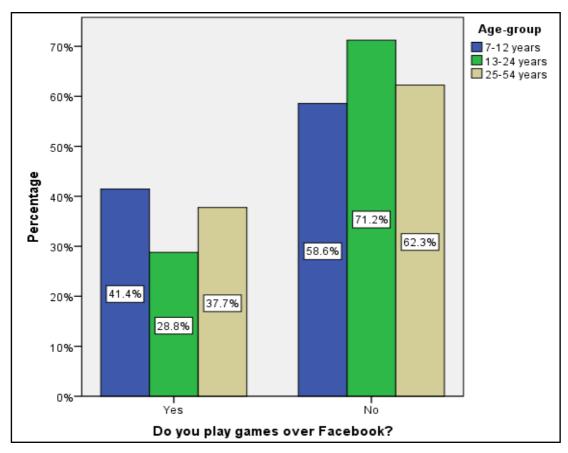


Chart 11 - Facebook Game Play by Age Group

59.2% of females aged 25-54, declared that they play games on Facebook, whilst only 24.5% of the males in the same age group responded that they play games on Facebook. The proportion of females who declared that they play games on Facebook (46.8%) is significantly higher than the corresponding proportion of males (24.5%). For both gender groups the proportion of

respondents playing games on Facebook is lowest for the 13-24 age group; however, differences between proportions do not differ significantly between age groups.

		Age-group				
Gender	Do you play g	james over Facebook?	7-12 years	13-24 years	25-54 years	Total
Yes		Count	22	46	39	107
Male	165	Percentage	26.2%	22.2%	24.5%	23.8%
iviale	Nie	Count	62	161	120	343
	No	Percentage	73.8%	77.8%	75.5%	76.2%
	Yes	Count	53	38	58	149
Female	162	Percentage	54.6%	44.7%	59.2%	53.2%
	No Count Percentage	Count	44	47	40	131
		Percentage	45.4%	55.3%	40.8%	46.8%

 $X^{2}(2) = 0.596$, p = 0.742

Digital and Video Games and the Maltese Population: Why do people play?

26.7% and 26.8% of the Maltese participants play digital and video games to have fun and relax. While 33.5% of the 7-12 age group declared that they play digital and video games to have fun, a larger proportion of the respondents in the 25-54 age group (32.8%) declared that they play digital and video games to relax. This could also explain why the different age groups choose different game genres.

Table 17 - Reasons why Maltese People Play by Age

				Age-group		
			7-12	13-24	25-54	
			years	years	years	Total
	To have fun	Count	164	285	203	652
	To have full	Percentage	33.5%	25.4%	24.5%	26.7%
	To relax	Count	111	271	272	654
	TOTEIAX	Percentage	22.7%	24.1%	32.8%	26.8%
	To waste time	Count	15	61	38	114
	To waste time	Percentage	3.1%	5.4%	4.6%	4.7%
	Because it's	Count	56	166	118	340
	challenging	Percentage	11.5%	14.8%	14.2%	13.9%
Mby do	Because it's exciting	Count	71	165	82	318
Why do you choose		Percentage	14.5%	14.7%	9.9%	13.0%
to play?	Because it's not real	Count	5	35	12	52
to play:		Percentage	1.0%	3.1%	1.4%	2.1%
	Because it's like the real world	Count	18	22	6	46
		Percentage	3.7%	2.0%	0.7%	1.9%
	Because I like to make new friends	Count	14	34	22	70
		Percentage	2.9%	3.0%	2.7%	2.9%
	Because I learn	Count	35	66	35	136
	Decause Health	Percentage	7.2%	5.9%	4.2%	5.6%
	Because it gives us	Count	0	19	42	61
	quality family time	Percentage	0.0%	1.7%	5.1%	2.5%
Total		Count	489	1124	830	2443
Total		Percentage	100.0%	100.0%	100.0%	100.0%

 $X^{2}(18) = 110.88, p < 0.001$

 $X^{2}(2) = 3.953, p = 0.139$

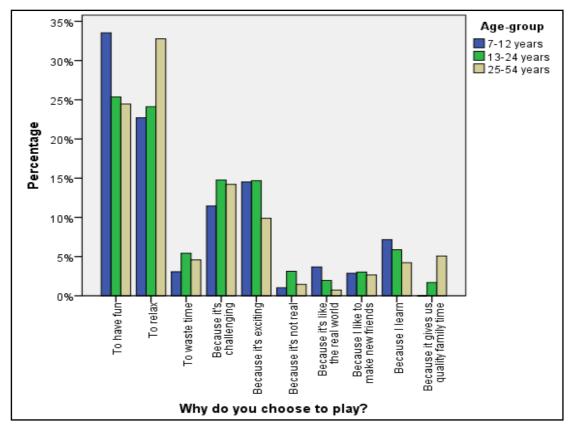


Chart 12 - Reasons why Maltese People Play

26.2% of the males responded that they play to have fun, whereas 25.7% responded that they play to relax. On the other hand, females showed a a tendency to prefer relaxing over having fun when playing digital and video games (29.0% and 27.8% respectively).

The largest percentages related to the fun factor in playing digital and video games were recorded in the 7-12 age groups for both males and females (34.9% and 32.5% respectively). The largest percentages recording relaxation as the more popular motive for playing digital games were found in the 25-54 age group with 30.0% for males and 39.2% for females.

Table 18 - Reasons Maltese People Play by Age and Gender

			Age-group			
Gender	Why do you choose to play?		7-12 years	13-24 years	25-54 years	Total
	To have fun	Count	75	209	146	430
	To have fun	Percentage	34.9%	24.6%	25.2%	26.2%
	To relev	Count	53	195	174	422
	To relax	Percentage	24.7%	23.0%	30.0%	25.7%
	To woods time	Count	5	43	23	71
	To waste time	Percentage	2.3%	5.1%	4.0%	4.3%
	Because it's	Count	28	133	89	250
	challenging	Percentage	13.0%	15.7%	15.3%	15.2%
	Because it's	Count	31	127	71	229
Male	exciting	Percentage	14.4%	15.0%	12.2%	13.9%
iviale	Because it's not real	Count	2	31	8	41
	because it's not real	Percentage	0.9%	3.7%	1.4%	2.5%
	Because it's like the	Count	9	19	4	32
	real world	Percentage	4.2%	2.2%	0.7%	1.9%
	Because I like to	Count	4	30	16	50
	make new friends	Percentage	1.9%	3.5%	2.8%	3.0%
	Because I learn	Count	8	57	29	94
	because Health	Percentage	3.7%	6.7%	5.0%	5.7%
	Because it gives us	Count	0	5	20	25
	quality family time	Percentage	0.0%	0.6%	3.4%	1.5%
	To have fun	Count	89	76	57	222
		Percentage	32.5%	27.6%	22.8%	27.8%
	To relax	Count	58	76	98	232
		Percentage	21.2%	27.6%	39.2%	29.0%
	To waste time	Count	10	18	15	43
		Percentage	3.6%	6.5%	6.0%	5.4%
	Because it's	Count	28	33	29	90
	challenging	Percentage	10.2%	12.0%	11.6%	11.3%
	Because it's	Count	40	38	11	89
Female	exciting	Percentage	14.6%	13.8%	4.4%	11.1%
remale	Because it's not real	Count	3	4	4	11
		Percentage	1.1%	1.5%	1.6%	1.4%
	Because it's like the	Count	9	3	2	14
	real world	Percentage	3.3%	1.1%	0.8%	1.8%
	Because I like to	Count	10	4	6	20
	make new friends	Percentage	3.6%	1.5%	2.4%	2.5%
	Because I learn	Count	27	9	6	42
	Decause Health	Percentage	9.9%	3.3%	2.4%	5.3%
	Because it gives us	Count	0	14	22	36
	quality family time	Percentage	0.0%	5.1%	8.8%	4.5%

 X^{2} (18) = 67.66, p < 0.001 X^{2} (18) = 85.38, p < 0.001

Maltese Parents and their Perceptions on Games their Children Play

Amongst the adult survey respondents, 73% of the parents of children aged 3 to 12 declared that they play digital and video games.

Table 19 - Parents' Digital and Video Game Play

As a parent, do you play digital and/or video games?	Frequency	Percentage
Yes	646	73.0%
No	239	27.0%

When the parents were asked if they allow their children to play digital and video games, 97.6% and 98.6% of the parents of 3-6 year-olds and 7-12 year-olds respectively declared that they allow their children to play.

Table 20 - Parents' Allowance for Child Digital and Video Game Play

As a parent, do you allow your child to play digital and video games?	3-6 year olds	7-12 year olds
Yes	97.6%	98.6%
No	2.4%	1.4%

When parents were asked whether they check for age appropriateness of digital games which their children play, 95.7% of the parents of children aged 7-12 mentioned that they do. The survey shows that 78.2% of the parents monitor regularly their child's online playtime and 84% stated that they know which digital games their children are playing.

Table 21 - Parents' Monitoring of Child's Digital and Video Game Play

How many times do you monitor your child's online play time?	Percentage
Always	30.4%
Often	47.8%
Sometimes	13.0%
Rarely	8.7%
Never	0.0%

Table 22 - Parents' Knowledge about Child's Digital and Video Game Play

When your child plays video games, how often do you know which game your child is playing?	Percentage	
Always	42.0%	
Often	42.0%	
Sometimes	13.0%	
Rarely	2.9%	
Never	0.0%	

However, when the same parents of the same child age group were asked if they have ever read or visited websites, reviews or discussion boards related to the games, 43.5% mentioned that they have never done so.

49.3% of the parents of children between 7-12 years mentioned that they sometimes play digital and video games with their children, whereas 17.4% and 15.9% mentioned that they rarely or never play games with their children. When asked how many of the parents stop their children from playing digital and video games, 42% mentioned that they sometimes stop their children from playing. Only 5.8% declared that they always or never stop their children from playing digital and video games.

Table 23 - Parents' Moderation of Digital and Video Game Play

When your child plays video games, how often do you stop him/her from playing a game?	Percentage
Always	5.8%
Often	24.6%
Sometimes	42.0%
Rarely	21.7%
Never	5.8%

48.8% of parents of children in the 3-6 age group responded that their children play at least once a day, where 37.3% stated that they play for an average of 30 minutes daily. 28.3% declared that their children play only for a few minutes.

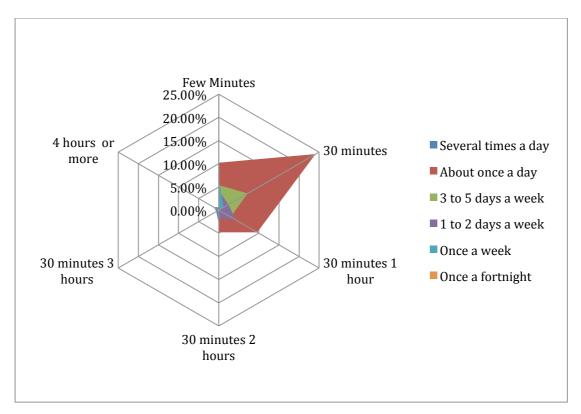


Chart 13 - Child Play by Frequency and Duration

When asked what devices their children use most to play, 66.9% declared that most children use the desktop computer or laptop, whereas 56.6% of the respondents mentioned that they use a game console (e.g. PlayStation or Wii). Only 15.1% mentioned that their children use the tablet to play games.

Table 24 - Child's Use of Digital and Video Game Play Devices

What does your child use to play digital and video games?	Percentage
Game console (e.g. Xbox, PlayStation, Wii)	56.6%
Desktop or Laptop computer	66.9%
Portable gaming device (e.g. PSP, DS, VTECH (Mobigo), etc.)	32.5%
Mobile phone	10.2%
Smart Phone	14.5%
Tablet (e.g. iPad)	15.1%

The most popular games for this age group seem to be Online Games (from popular TV channels such as Cartoonito, NickJr TV and BBC games) at 43.3%, followed by Racing games (such as 'Crazy Karts', etc.) at 42.8%. The least popular games are the Virtual World Games such as 'Club Penguin' with 14.5% of the overall responses.

Conclusion and Implications

At present, there is speculation as to the number of hours children and adults in the Maltese society are spending playing various types of digital and video games. Little is also known about the potential usage of digital and video games, such as which digital game genre is the most popular in the Maltese households.

On the other hand, there is a growing interest in various countries worldwide⁶ to drive research in the field of digital and video games, not only for its economic impact, but also for impacts on driving Education at a schooling, as well as lifelong learning level. Driving factors for its sustainability are described both in terms of industry, as well as academia, as a growing body of researchers is working towards increasing future competitiveness in terms of the digital transformation of society.

This study presents a bird's eye view of the digital and video game scene in Malta and how the Maltese population perceives the different games and related devices that are on the market. It has been shown that as a population, the Maltese tend to engage in digital and video game play activities. In fact, 74% of the survey respondents between the ages of 3 and 54 have indicated that they play digital and video games, 85.9% of which are male and 63.9% are female.

As other European and international (Video Gamers in Europe 2010, 2010) studies have shown, the majority of people play to have fun and to relax and most often they will play on their personal computers.

However, the possible implications emerging from this study are insightful for the economy sector, for education and also for further research in the area. In the study, the respondents' views and trends have been expressed both in terms of age and gender. It is quite evident from the results that the age

[www.nmc.org/pdf/2011-Horizon-Report-K12.pdf] and **Australia** [http://www.igea.net/2011/10/digita australia-2012-da12/]

⁶ A number of reports are available online from the **UK** [www.nesta.org.uk/publications/reports/assets/features/next_gen], **Europe** [www.isfe.eu/content/video-gamers-europe-2010-gamevision-study] / [ftp://ftp.jrd.es/pub/EURdoc/JRC60711.pdf], **US** [www.nmc.org/pdf/2011-Horizon-Report-K12.pdf] and **Australia** [http://www.igea.net/2011/10/digital-

groups and gender have a great impact on the games people choose to play, the frequency with which they play and the length of time which they spend playing.

Interestingly, the people who were surveyed declared that their most preferred mode of playing digital and video games is by using the desktop or laptop computer (33.1%), followed by the use of a game console (22.6%). Only 9.5 % of the surveyed responses showed a preference for the use of a tablet device to play games.

97.6% of the parents of 3-6 year-old children stated that their children play digital and video games.

From the results obtained, the respondents in the 7-12 age group showed the second highest percentage of game play, with the highest frequency of play of at least once a day (35.4%) for an hour (40.3%). Only 1.1% of the respondents in this age category indicated that they play for more than 6 hours daily. The most preferred game genres for this age group are Racing (e.g. 'Mario Kart'), Puzzle, Adventure and Sports, in that order. It is also interesting to note that for this age group there are no particular distinctions between gender and game genres, except that females seem to prefer Puzzle games most, whilst males show a higher preference for Sports games.

Contrary to popular belief, not all teenagers enjoy playing games as their primary activity. A significant portion of female 13-24 year-olds responded that they do not play games. This carries impact for educational policies and the possible introduction of game-based learning activities in the curriculum. When this is analyzed further and the same age group was asked what genres of games they prefer playing, they indicated that they prefer playing Puzzle games like 'Solitaire' and 'Tetris', Adventure games and Simulation games like 'The Sims'. In terms of the frequency with which they play, and the length of time they spend playing, there we also find strong indications that they prefer to play 3-5 days a week, followed by once a day, for an average of 30 minutes to 1 hour. This is in contrast to males in the same age group sector, who prefer Action games, followed by Strategy and First Person Shooter games. The same age group also indicated that they play several times a day for an average of 1-2 hours.

28.4% of the respondents in the 25-54 age group indicated that they play at least once a day. Whilst males have declared that they play for an average of 1 – 2 hours daily, females recorded an average game play of 30 minutes daily with a distinguished preference towards online social games, such as 'Farmville'. When asked whether they play games on Facebook, 59.2% of the female respondents aged 25-54, indicated that they do, whereas only 24.5% of the male counterparts showed a preference towards playing games on Facebook. Although 93.1% of the respondents in the 13-24 age group declared that they have Facebook accounts, 71.2% of them stated that they do not play games on Facebook. This means that for the most part, youths prefer to use Facebook for online social communication rather than for playing digital and video games.

The results from the study give indications that Maltese parents are far from being averse to allowing their children to play digital and video games. Parents also answered that they are mostly aware of which digital and video games their children play and that they mostly check the age rating. However, the indications are that there is a general tendency that parents do not play digital and video games with their children. This tallies with other survey results, which show that Maltese people across all age groups prefer to play alone or with friends over the Internet rather than with family or friends in a traditional home setting.

This study gives an overview of some of the trends and habits of a representative sample of the Maltese population from ages 3 to 54. The results pose a series of implications for game development companies as well as for education policy makers, who need to take into consideration the preferences for digital gaming to provide for the various age groups and gender categories within the Maltese population.

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