



Impact Assessment

Final field tests

October—November 2012, Finland and Sweden

Laurea UAS

Contents

	Page
1. Summary	3
2. Interaction during the game	5
3. Game experience	18
4. Anticipated long-term impacts of the gaming	27
5. Willingness to play the games in the future	34
6. Socio-demographics	42
7. Other comments	53

Summary

In October-November 2012 the final field trial of the three Storyville games was organized in Finland and Sweden. Feedback on the interaction during the game sessions, the game experience, and anticipated impacts was received from 150 test players, 117 of whom were Finnish and 33 were Swedish. In Finland the younger test players were asked to fill in the questionnaires, too. Thus we received feedback from 40 Finnish test players who were younger than 50 years. In Sweden feedback was received from two test players who were younger than 50 years.

In this summary we focus on the feedback received from the test players who were 50 years or older. In this group there were 107 test persons altogether, 31 from Sweden and 77 from Finland. 20 % of them were 50–60 years of age, 35 % were 61–70 years, 32 % were 71–80 years, and 13 % were older than 80 years.

Feedback on the interaction during the game sessions

The interaction during the gaming sessions was perceived very positive by the older test persons (50 years or older). Almost all of them (94 %) said that the atmosphere amongst the players was relaxed. Nine out of ten players reported that the players showed willingness to help each other (90 %) and approval towards each other (86 %). Three players out of four felt close to other players (77 %) - thus it can be concluded that the gaming sessions offer opportunities for strengthening social connectedness among the players. The games succeeded in arousing interesting discussions during the session (74 % of all the older test players agree), and the other players listened to the stories told by older participants (72 % agree).

Older test players perceived the interaction during the gaming sessions more positive than the younger test players (younger than 50 years, including grandchildren). Half of the test players had played the games only once or twice, and the other half three times or more. Those test persons who had been involved in three or more gaming sessions gave more positive evaluations on the interaction during the gaming sessions than those test persons who had played the Storyville games only once or twice. We don't know if they, "the heavy users", liked the games more from the very first session or if they learnt to enjoy the games more during the test period.

Feedback on the game experience

Playing the Storyville games was perceived as fun (83 %) and the gaming experience was perceived as a positive surprise (69 %) by the older test persons. Two thirds of them maintained that it was interesting to get to know the games (67 %). Using the iPad was easy for two thirds of the older test persons (67 %), and the same amount of them (63 %) said that the game flow was easy to follow. The majority of the older test players (65 %) had experienced the joy of success during the game play. Six out of ten older test players thought that playing was interesting throughout the whole gaming session, and the playing was suitably challenging during all the gaming sessions.

It is interesting that six out of ten older test players kept on discussing about the games and gaming after the sessions. One of the basic ideas behind the Storyville games is that they trigger storytelling. Therefore it is important that the players return to the stories inspired by or linked with the photos after the gaming sessions. The test period was a short one, lasting only for two or three weeks, and thus it is understandable that every test player didn't even have a chance to go on discussing about the photos and stories after the gaming session. However, half of the older test persons (53 %) said that they had kept on discussing about the photos and stories after the gaming session.

Anticipated long-term impacts

The participants were asked to imagine that they had played the games for months, even for a year. There were 15 items in the scale. The total number of valid answers per item is 81–85. All the respondents were 50 years or older.

At least six out of ten older test players agreed with the following items:

- I am at peace with myself and with the current state of my life. (77 % agreed)
- I feel that I am of importance to somebody. (65 %)
- The feeling of closeness to people important to me has grown stronger. (61 %)
- A sense of belonging has grown stronger between me and my friends/peers. (61 %)

Out of 15 items 11 pass the threshold of 50 % of YES-answers. When the gaming sessions create opportunities for high quality encounters between family members, next of kin, friends, acquaintances, neighbours, and peers at the meetings of senior associations the social connectedness of the players will be strengthened and thus the risk of falling into loneliness will be diminished significantly. When interpreting the answers given to the questions concerning the anticipated impacts we have to keep in mind the shortness of the testing period.

Willingness to keep on playing

Half of the older test players (56 %) are willing to play games like these also in the future. Every third of them (33 %) is willing to organise new gaming sessions, and 41 % is willing to invite new players. Those test players who had opportunities to play the games three or more times are more willing to keep on playing than others.

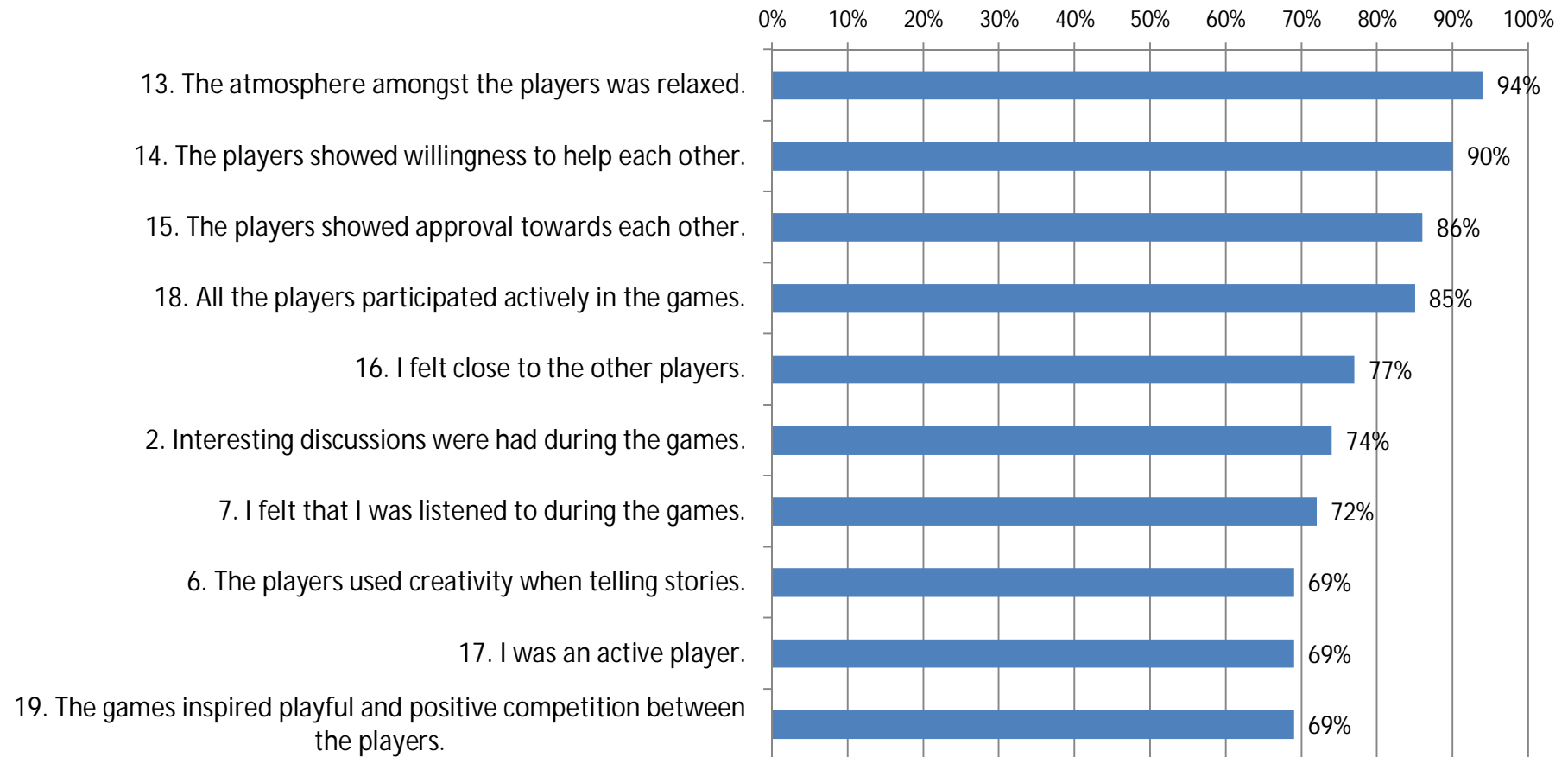
Conclusion in a nutshell

The final field test results show that the prerequisites for gaining the desired outcomes of Storyville gaming, positive interaction and game experience, are met. Based on the results on the anticipated impacts, we expect at least half of the older adults who start playing and continue playing gain positive impacts on their social connectedness, and enhance wellbeing in the long run.

PART I: INTERACTION DURING THE GAME

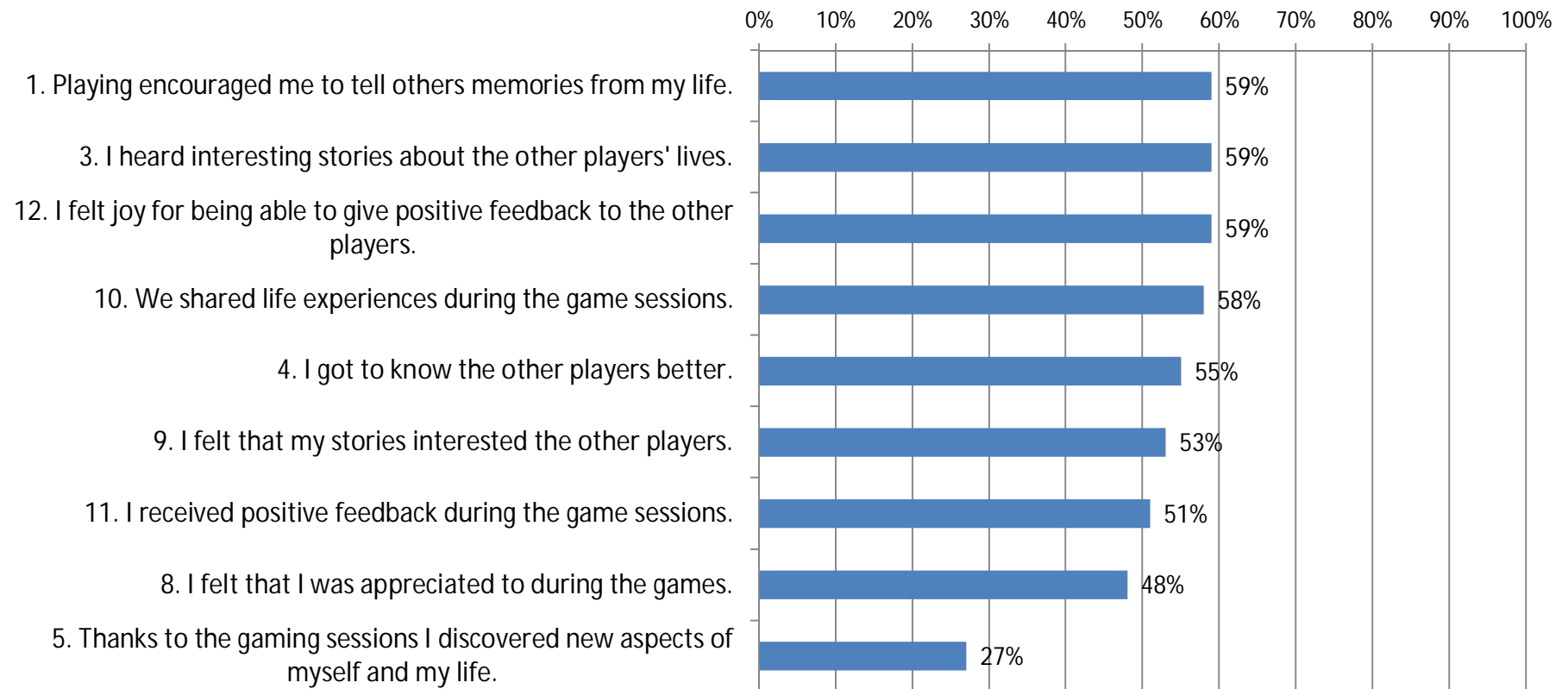
Interaction during the game, % of YES-answers

Age group: 50 years or older (N=107)

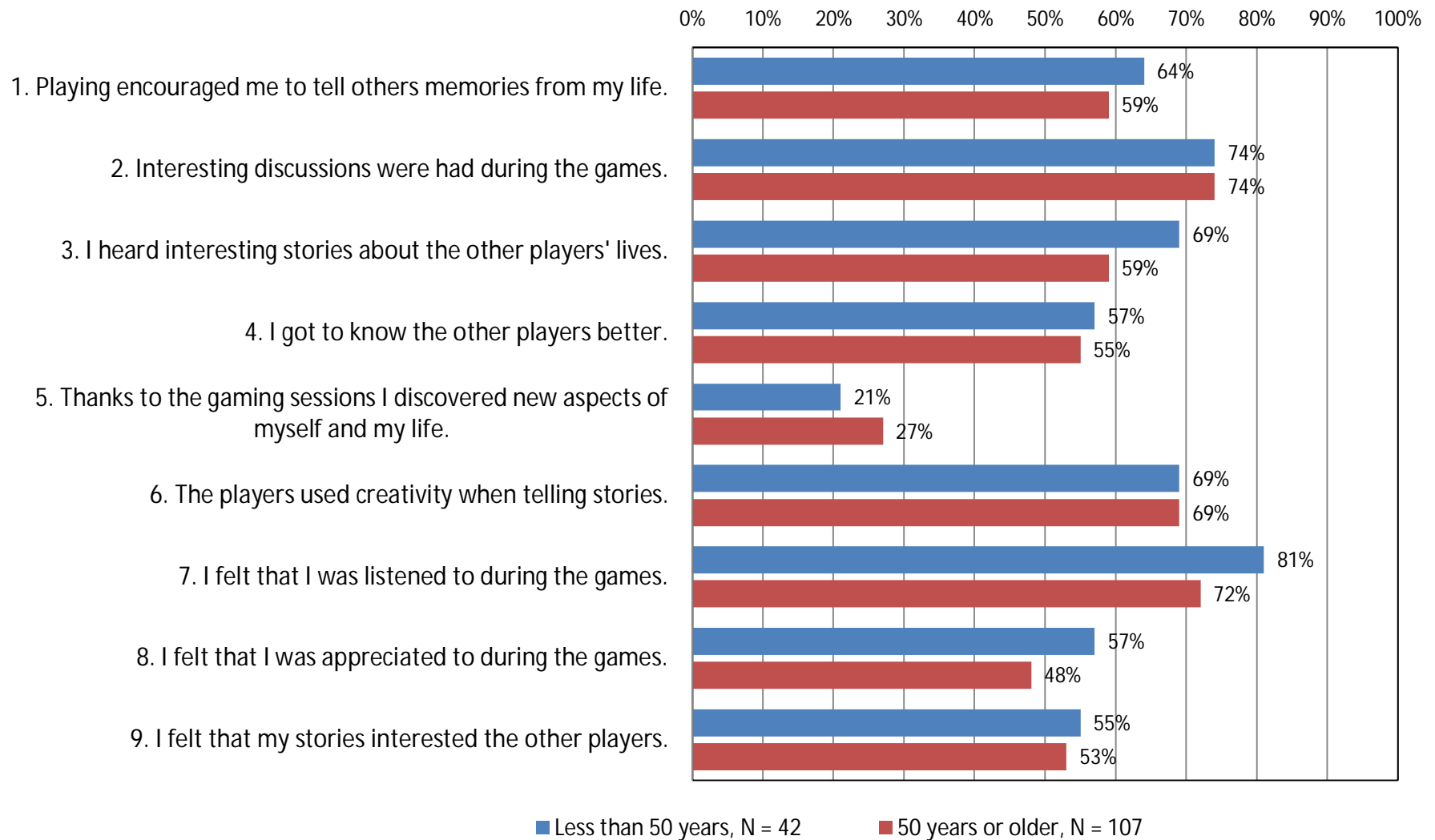


Interaction during the game, % of YES-answers

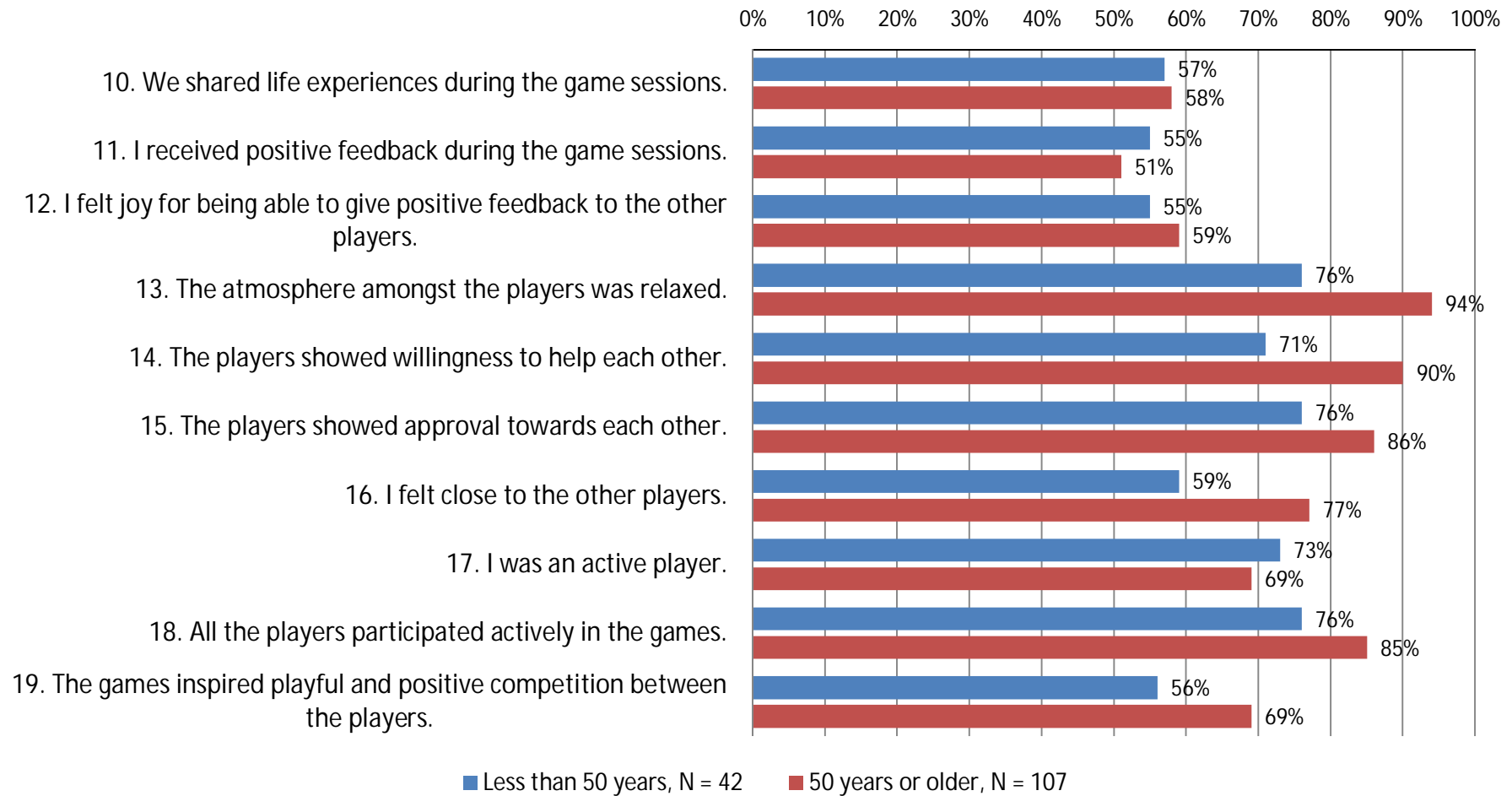
Age group: 50 years or older (N=107)



Interaction during the game, % of YES-answers, age groups

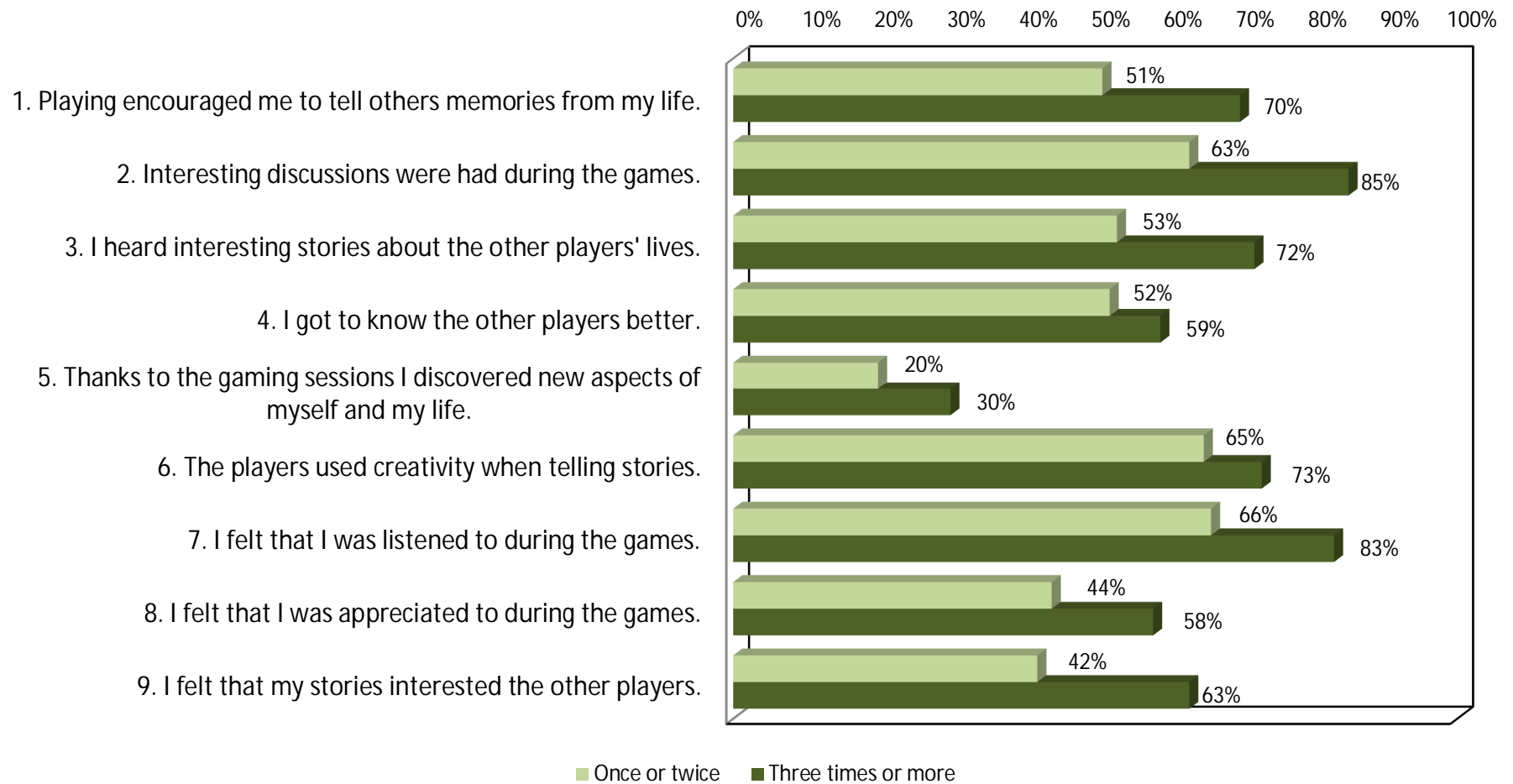


Interaction during the game, % of YES answers, age groups



Interaction, % of YES-answers

Subgroups: Number of gaming sessions (N=150)



Interaction, % of YES-answers

Subgroups: Number of gaming sessions (N=150)

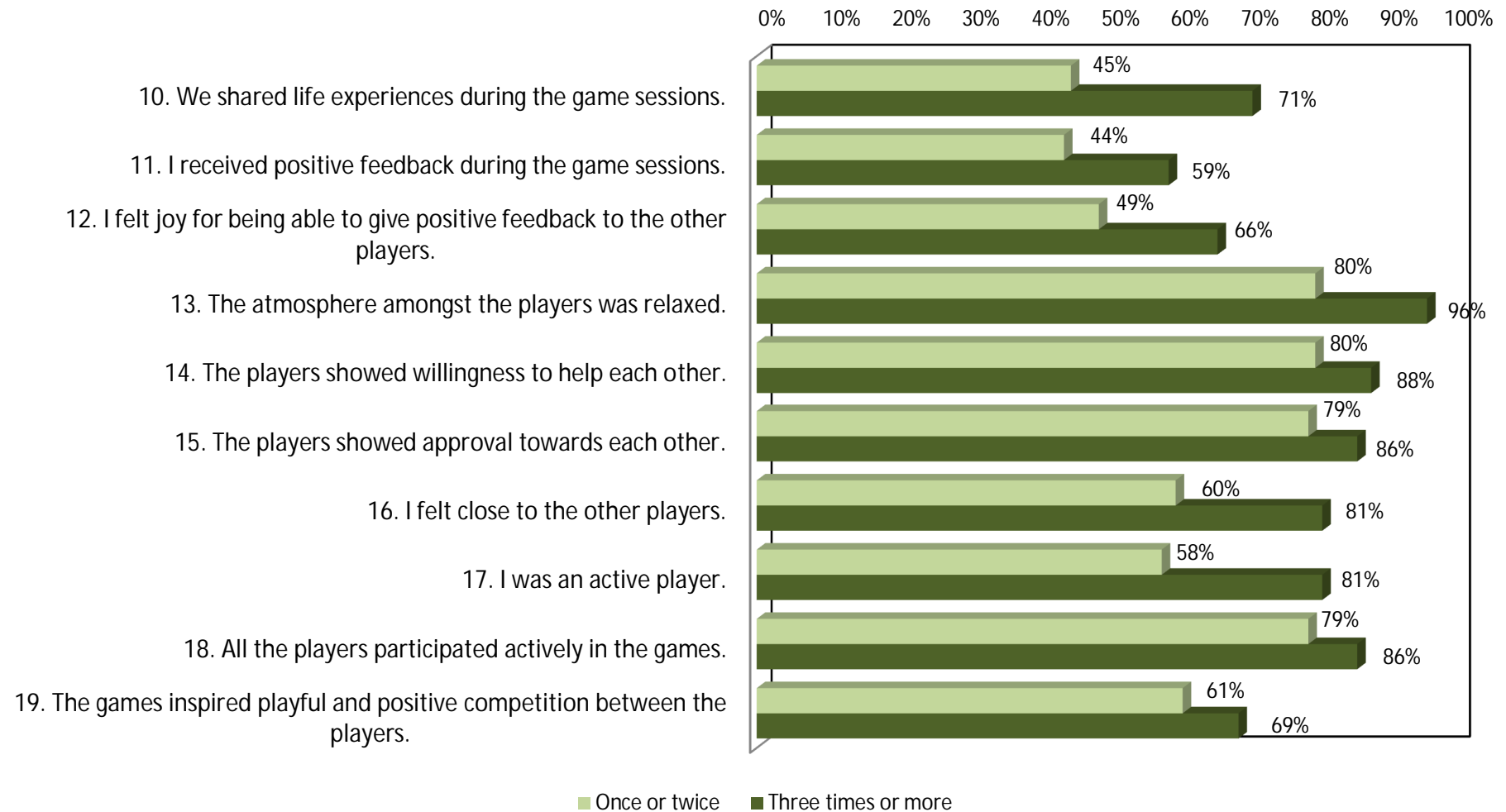


Table 1. Interaction during the game, items 1–9, results from ALL the respondents (N=150, number of valid answers 133–139)

		YES	NO	Don't know	Number of valid answers
1	Playing encouraged me to tell others memories from my life.	61 %	24 %	15 %	136
2	Interesting discussions were had during the games.	74 %	17 %	9 %	139
3	I heard interesting stories about the other players' lives.	62 %	28 %	9 %	138
4	I got to know the other players better.	56 %	28 %	16 %	136
5	Thanks to the gaming sessions I discovered new aspects of myself and my life.	25 %	47 %	27 %	135
6	The players used creativity when telling stories.	69 %	13 %	18 %	136
7	I felt that I was listened to during the games.	75 %	10 %	15 %	134
8	I felt I was appreciated during the games.	51 %	11 %	38 %	135
9	I felt that my stories interested the other players.	53 %	13 %	34 %	133

Table 2. Interaction during the game, items 10–19, results from ALL the respondents (N=150, number of valid answers 131–139)

		YES	NO	Don't know	Number of valid answers
10	We shared life experiences during the game sessions.	58 %	24 %	18 %	135
11	I received positive feedback during the game sessions.	52 %	22 %	27 %	135
12	I felt joy for being able to give positive feedback to the other players.	58 %	16 %	26 %	133
13	The atmosphere amongst the players was relaxed.	89 %	7 %	4 %	139
14	The players showed willingness to help each other.	84 %	7 %	10 %	137
15	The players showed approval towards each other.	83 %	5 %	12 %	139
16	I felt close to the other players.	71 %	12 %	17 %	132
17	I was an active player.	70 %	13 %	17 %	131
18	All the players participated actively in the games.	82 %	12 %	6 %	133
19	The games inspired playful and positive competition between the players.	65 %	16 %	19 %	132

Interaction – statistically significant differences between subgroups

Pearson Chi-Square Test was used to test the differences between subgroups. Asymp.Sig. had to be less than 0,100. There had to be max 10 % chance that the difference occurred due to a coincidence.

Age

Older respondents perceived the interaction during the gaming sessions more positive than the younger test players: 94 % of the older respondents considered the atmosphere amongst the players relaxed while 76 % of the younger respondents chose the option "Yes", and 19 % of them said "No". Additionally, nine out of ten older test players perceived that the players showed willingness to help each other. Within the younger group, 71 % of the respondents agreed with the item, and 14 % disagreed.

Three out of four older players (77 %) felt close to the other players. 59 % of the younger respondents felt the same.

Country

All the respondents who were 50 years or older were taken into consideration when comparing the results between Finland and Sweden. (In the Finnish sample the number of younger respondents was considerably higher than in the Swedish sample, and therefore all the comparisons between these two countries will be based on the answers of older respondents.)

There are significant differences in five items out of 19.

5. Thanks to the gaming sessions I discovered new aspects of myself and my life.

Swedish: 27 % YES

Finnish: 27 % YES

Swedish: 67 % NO

Finnish: 32 % NO.

8. I felt I was appreciated during the games.

Swedish: 70 % YES

Finnish: 38 % YES

Swedish: 7 % NO

Finnish: 16 % NO.

11. I received positive feedback during the game sessions.

Swedish: 67 % YES
Swedish: 23 % NO

Finnish: 43 % YES
Finnish: 19 % NO.

12. I felt joy for being able to give positive feedback to the other players.

Swedish: 70 % YES
Swedish: 20 % NO

Finnish: 54 % YES
Finnish: 13 % NO.

17. I was an active player.

Swedish: 90 % YES
Swedish: 7 % NO

Finnish: 58 % YES
Finnish: 18 % NO.

Gender

There are no significant differences in the results of female and male respondents.

Gaming frequency

Those test persons who had been involved in three or more gaming sessions gave more positive evaluations on the interaction during the gaming sessions than those test persons who had played the Storyville games only once or twice. We don't know if they, "the heavy users", liked the games more from the very first session or if they learnt to enjoy the games more during the test period. There are statistically significant differences in the results of the following items:

6. Playing encouraged me to tell others from my life.

Played once or twice: 51 % YES
Played once or twice: 32 % NO

Played three times or more: 70 % YES
Played three times or more: 17 % NO.

7. Interesting discussions were had during the games.

Played once or twice: 63 % YES
Played once or twice: 24 % NO

Played three times or more: 85 % YES
Played three times or more: 10 % NO.

8. I heard interesting stories about other players' lives.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 53 % YES | Played three times or more: 72 % YES |
| Played once or twice: 44 % NO | Played three times or more: 14 % NO. |
7. I felt that I was listened to during the games.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 66 % YES | Played three times or more: 83 % YES |
| Played once or twice: 16 % NO | Played three times or more: 6 % NO. |
8. I felt I was appreciated during the games.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 44 % YES | Played three times or more: 58 % YES |
| Played once or twice: 18 % NO | Played three times or more: 6 % NO. |
9. I felt that my stories interested the other players.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 42 % YES | Played three times or more: 63 % YES |
| Played once or twice: 18 % NO | Played three times or more: 9 % NO. |
10. We shared life experiences during the game sessions.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 45 % YES | Played three times or more: 71 % YES |
| Played once or twice: 32 % NO | Played three times or more: 17 % NO. |
11. I felt joy for being able to give positive feedback to the other players.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 50 % YES | Played three times or more: 66 % YES |
| Played once or twice: 22 % NO | Played three times or more: 10 % NO. |
12. The atmosphere amongst the players was relaxed.
- | | |
|--------------------------------|--------------------------------------|
| Played once or twice: 80 % YES | Played three times or more: 96 % YES |
| Played once or twice: 12 % NO | Played three times or more: 3 % NO. |

16. I felt close to the other players.

Played once or twice: 60 % YES

Played once or twice: 19 % NO

Played three times or more: 81 % YES

Played three times or more: 6 % NO.

17. I was an active player.

Played once or twice: 58 % YES

Played once or twice: 18 % NO

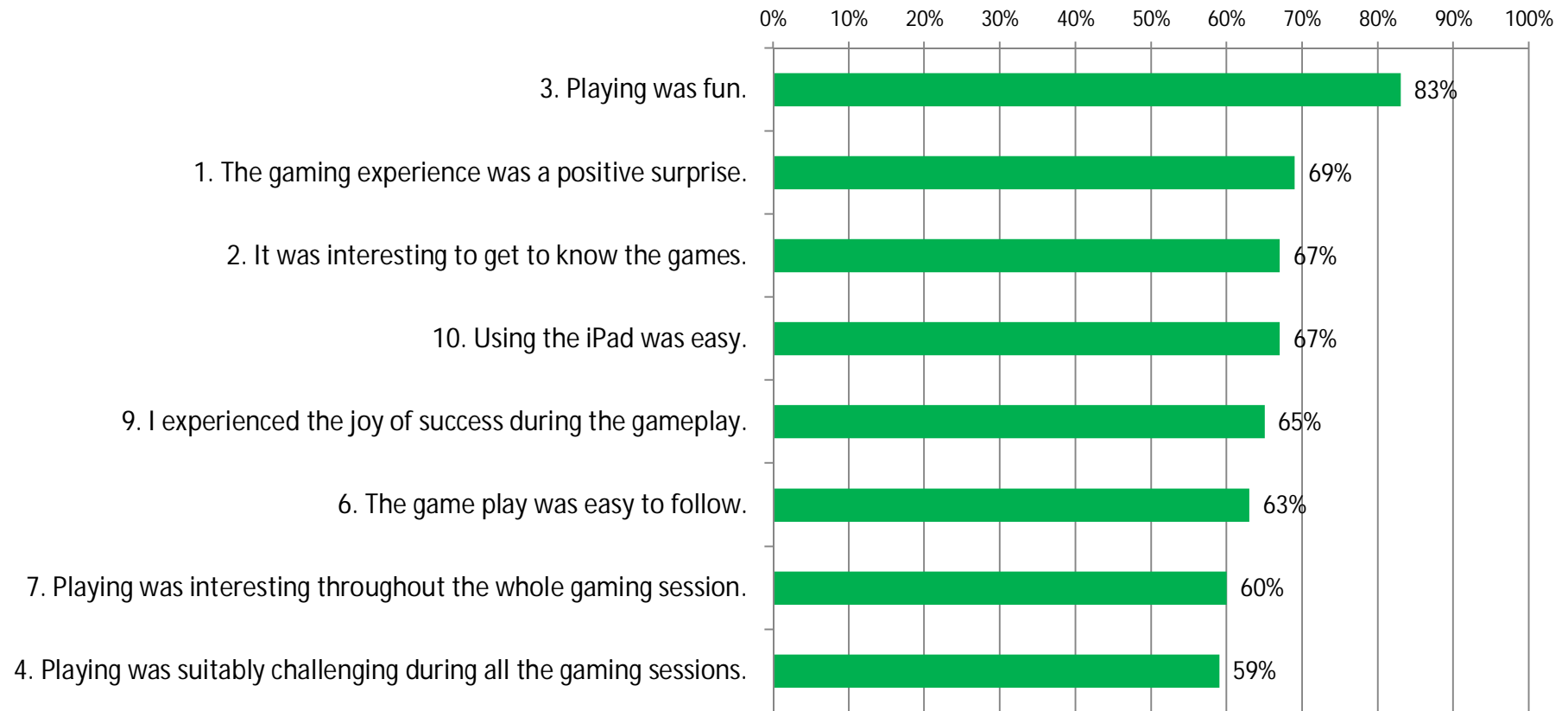
Played three times or more: 81 % YES

Played three times or more: 9 % NO.

There were 19 items in the interaction scale. "The heavy users" gave more positive evaluations on 11 items.

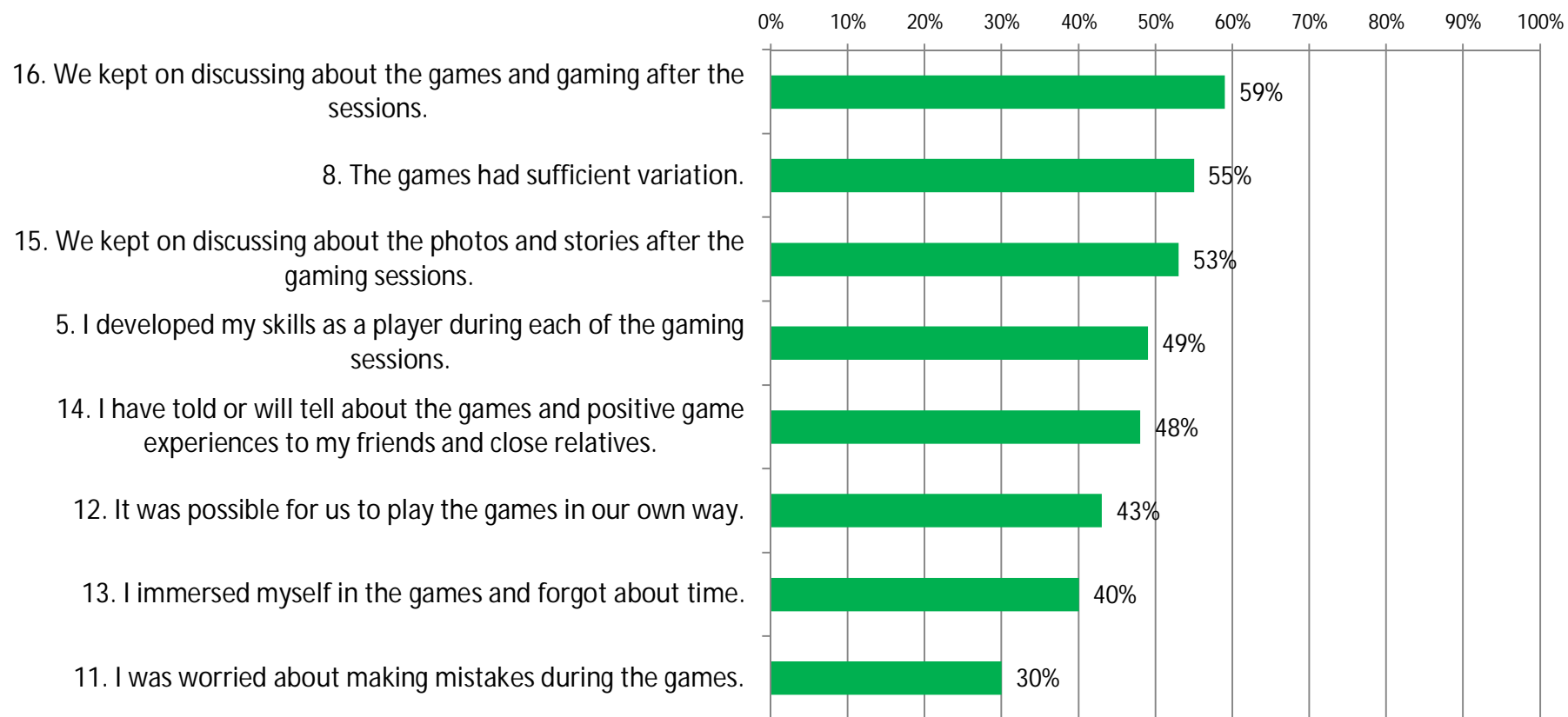
PART II: GAME EXPERIENCE

Game experience, % of YES-answers
Age group: 50 years or older (N=107)

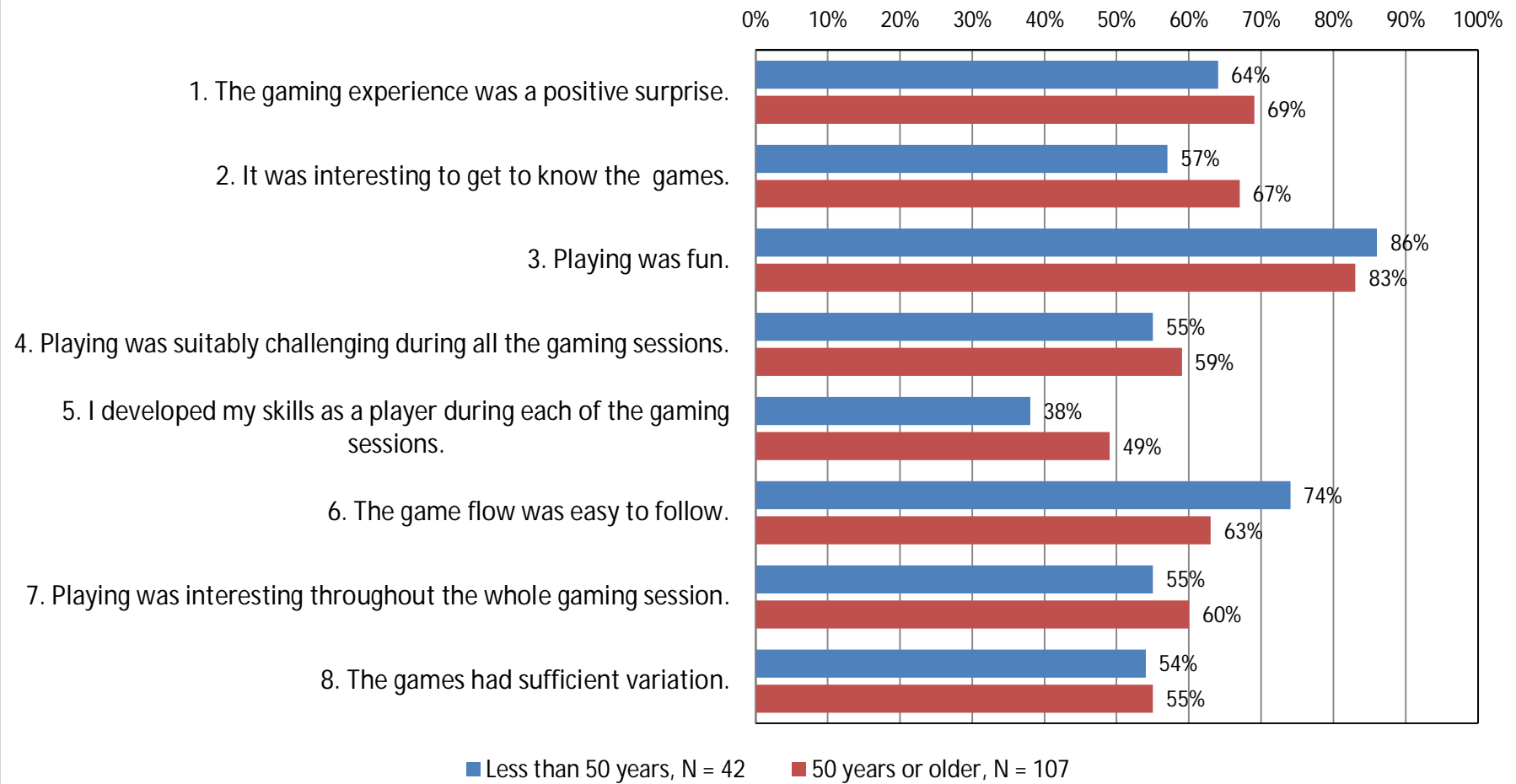


Game experience, % of YES answers

Age group: 50 years and older (N=107)



Game experience, % of YES answers, age groups



Game experience, % of YES-answers, age groups

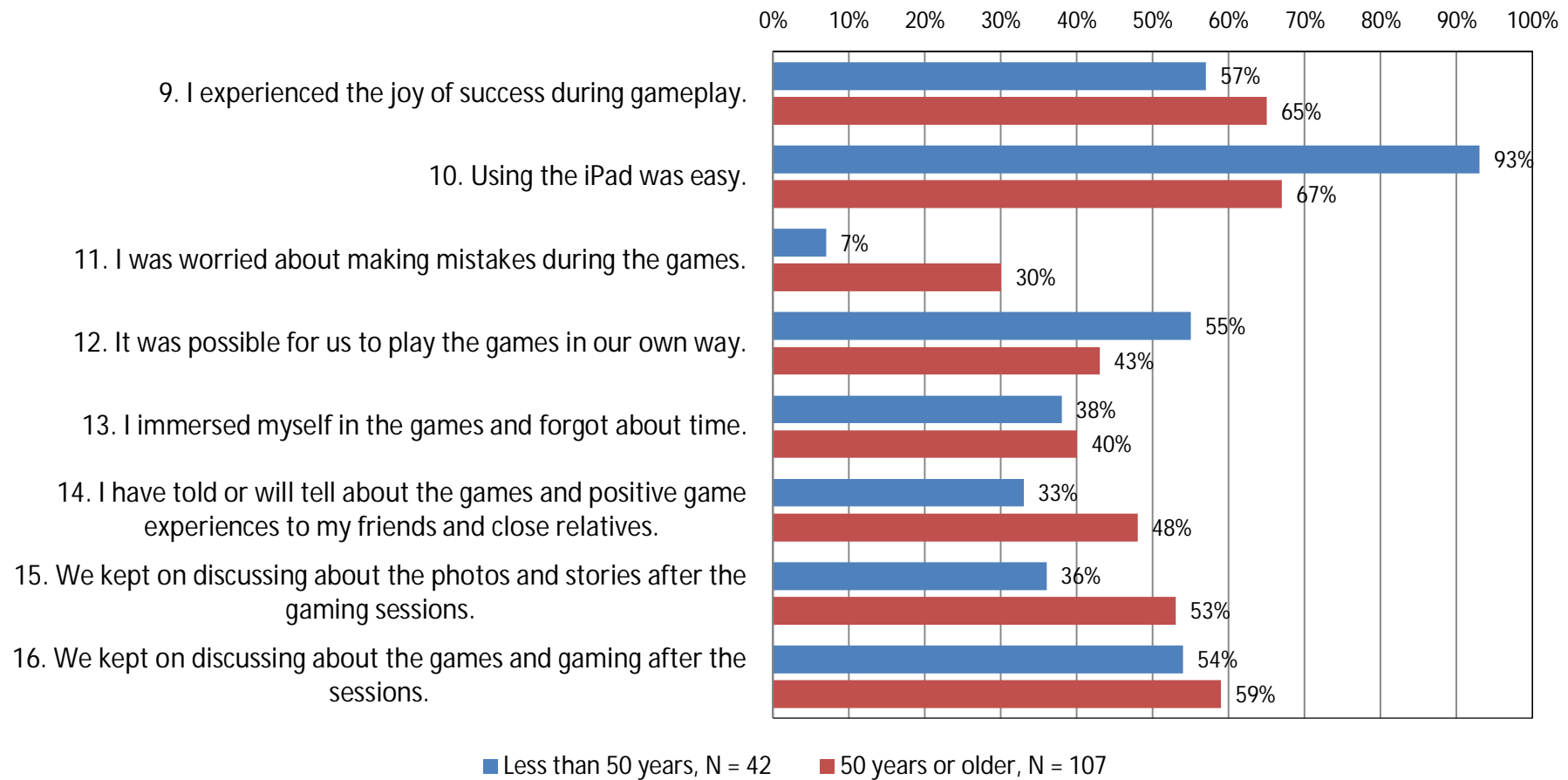


Table 3. Game experience, items 1–8, results from ALL the respondents (N=150, number of valid answers 133–136)

		YES	NO	Don't know	Number of valid answers
1	The gaming experience was a positive surprise.	68 %	19 %	13 %	136
2	It was interesting to get to know the games.	64 %	22 %	14 %	136
3	Playing was fun.	84 %	8 %	8 %	136
4	Playing was suitably challenging during all of the gaming sessions.	58 %	20 %	22 %	133
5	I developed my skills as a player during each of the gaming sessions.	46 %	22 %	33 %	134
6	The game flow was easy to follow.	67 %	23 %	10 %	135
7	Playing was interesting throughout the whole game session.	58 %	29 %	13 %	134
8	The games had sufficient variation.	55 %	23 %	22 %	133

Table 4. Game experience, items 9–16, results from ALL the respondents (N=150, number of valid answers 103–136)

		YES	NO	Don't know	Number of valid answers
9	I experienced the joy of success during gameplay.	62 %	17 %	21 %	133
10	Using the iPad was easy.	75 %	17 %	8 %	136
11	I was worried about making mistakes during the games.	23 %	76 %	2 %	135
12	It was possible for us to play the games in our own way.	47 %	22 %	32 %	135
13	I immersed myself in the games and forgot about time.	39 %	47 %	14 %	135
14	I have told or will tell about the games and positive game experiences to my friends and close relatives.	44 %	34 %	22 %	135
15	We kept on discussing about the photos and stories after the gaming sessions.	48 %	47 %	5 %	136
16	We kept on discussing about the games and gaming after the sessions.	57 %	37 %	6 %	103

Item 16 was missing from the Swedish questionnaire.

Game experience – statistically significant differences between subgroups

Age

It seems that it was easier for the younger players to follow the game flow. 74 % of them agreed with the item and 12 % disagreed. In the older group, 64 % found the game flow easy to follow but 28 % didn't. Using the iPad was easier for the younger, too. 93 % of the younger respondents found the iPad easy to use, and only 5 % didn't think it was easy. Using the iPad was easy for two thirds (67 %) of the older group. However, 22 % of the older respondents disagreed with the item.

About every third older player (30 %) was worried making mistakes during games whereas only 7 % of the younger group was worried making mistakes.

Half of the older group (53 %) kept on discussing about the photos and stories after the gaming sessions, and 36 % of the younger players did the same.

Country

There was only one significant difference between the Swedish and Finnish players:

9. I experienced the joy of success during gameplay.

Swedish: 60 % YES

Finnish: 67 % YES

Swedish: 30 % NO

Finnish: 10 % NO.

Gender

Female players found the usage of an iPad easy more often than the male players. 84 % of the female respondents agreed with the item "Using the iPad was easy", and 11 % disagreed. Within the group of male test persons, the percentages are 63 % and 25 %.

Half of the female players (53 %) has told or will tell about the games and positive game experiences to their friends and close relatives, and 23 % of them is not willing to tell others about the games. Male respondents are more reluctant to tell about the gaming: half of them has not told or will not tell about the games to their friends and relatives. 30 % agrees with the item.

Gaming frequency

The differences between the results of “the heavy users” and the others were significant when the interaction during the games was evaluated (see pp.13–15). In the game experience scale there were 16 items. The results of these two groups differ only in the following three items when the game experience was evaluated:

1. Gaming experience was a positive surprise.

Played once or twice: 59 % YES

Played once or twice: 30 % NO

Played three times or more: 75 % YES

Played three times or more: 10 % NO.

3. Playing was fun.

Played once or twice: 73 % YES

Played once or twice: 14 % NO

Played three times or more: 93 % YES

Played three times or more: 3 % NO.

8. The games had sufficient variation.

Played once or twice: 44 % YES

Played once or twice: 25 % NO

Played three times or more: 63 % YES

Played three times or more: 23 % NO.

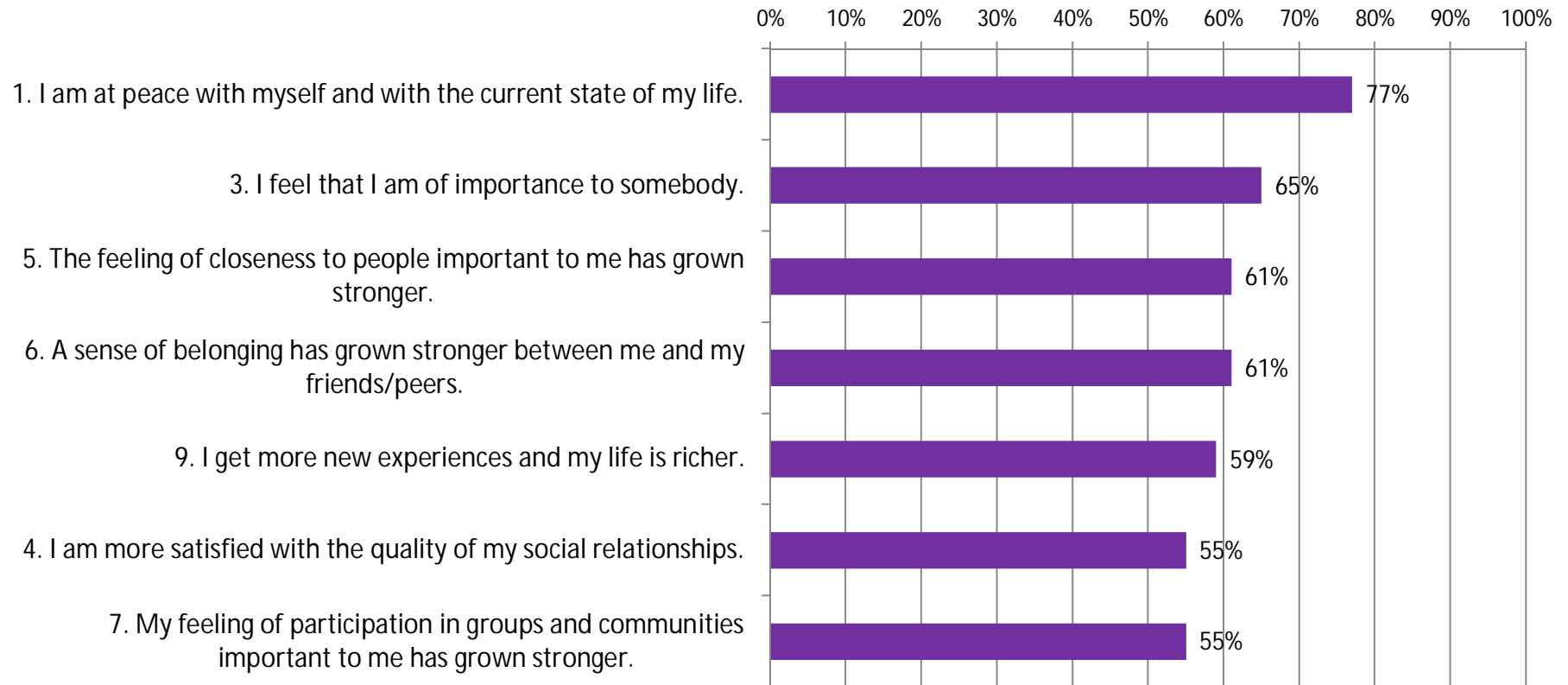
PART III: ANTICIPATED LONG-TERM IMPACTS OF THE GAMING

The next part assumes that you have played the game for several months or even years. Evaluate how playing the games with your friends, relatives and acquaintances has affected your life and wellbeing. Using your imagination is permissible and even desirable!

- 1 YES, playing the game has had some effect.
- 2 NO, playing the game has had no effect.
- 3 Don't know.

Anticipated impacts, % of YES-answers

Age group: 50 years or older, N = 107



Anticipated impacts, % of YES-answers

Age group: 50 years or older (N=107)

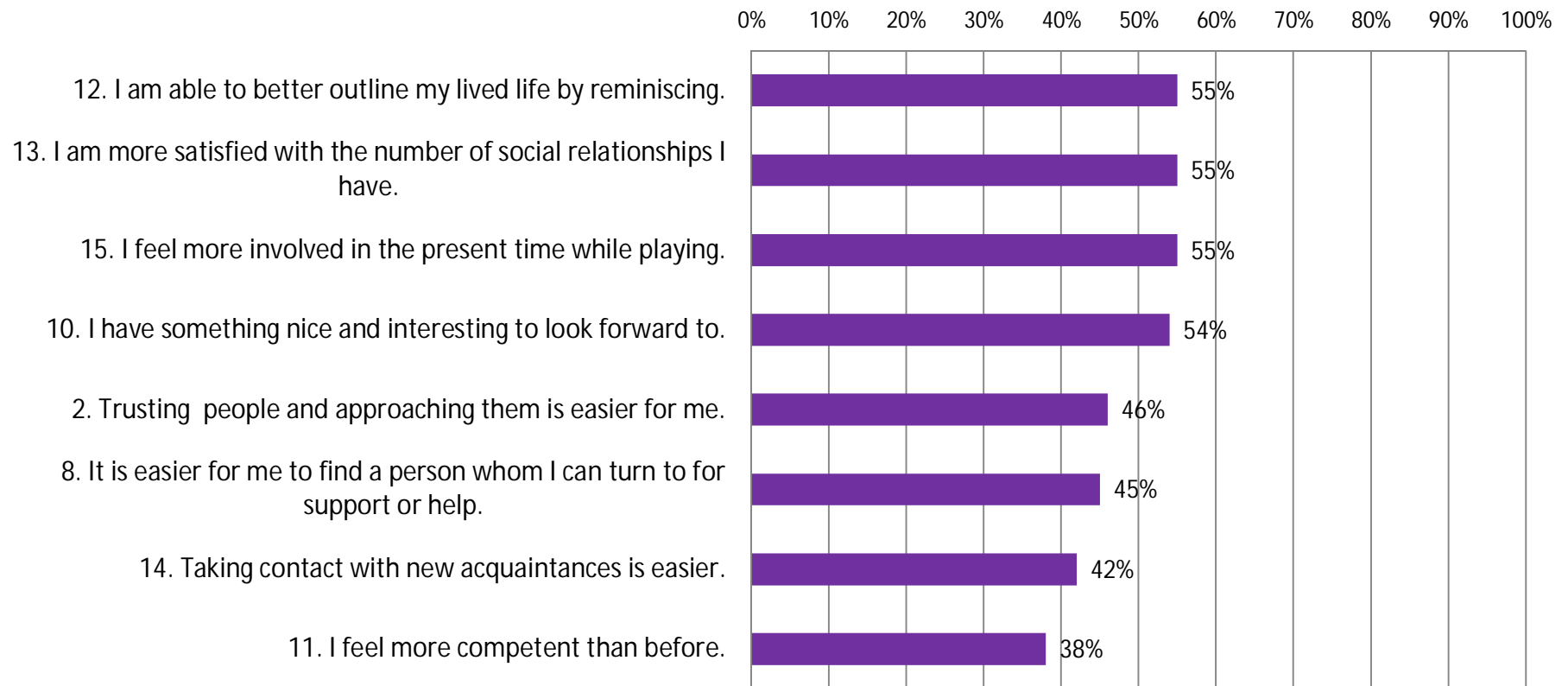


Table 5. Anticipated long-term impacts, age group "50 years or older". (N=104, number of valid answers 81–85)

		YES	NO	Don't know	Number of valid answers
1	I am at peace with myself and with the current state of my life.	77 %	8 %	15 %	85
2	Trusting people and approaching them is easier for me.	46 %	28 %	26 %	81
3	I feel that I am of importance to somebody.	65 %	19 %	16 %	83
4	I am more satisfied with the quality of my social relationships.	55 %	15 %	30 %	85
5	The feeling of closeness to people important to me has grown stronger.	61 %	14 %	25 %	85
6	A sense of belonging has grown stronger between me and my friends/peers.	61 %	16 %	23 %	83
7	My feeling of participation in groups and communities important to me has grown stronger.	55 %	21 %	24 %	83
8	It is easier for me to find a person whom I can turn to for support or help.	45 %	28 %	28 %	83
9	I get more new experiences and my life is richer.	59 %	23 %	18 %	83
10	I have something nice and interesting to look forward to.	54 %	22 %	24 %	83
11	I feel more competent than before.	34 %	35 %	31 %	83
12	I am able to better outline my lived life by reminiscing.	55 %	23 %	22 %	82
13	I am more satisfied with the number of social relationships I have.	55 %	21 %	24 %	83
14	Taking contact with new acquaintances is easier.	42 %	31 %	28 %	82
15	I feel more involved in the present time while playing.	55 %	19 %	25 %	83

Long-term impacts – statistically significant differences between subgroups

Age

The questions concerning the long-term impacts of gaming were constructed especially for the older adults. The items are based on the results of the ethnographic studies conducted in the beginning of the project. It is understandable that the younger respondents quite often chose the option "Don't know". The figures and the table 5 above present the opinions of the older test players. Both of the age groups have been analysed, and there are statistically significant differences in the results of the following items:

7. My feeling of participation in groups and communities important to me has grown stronger.

Younger: 34 % YES	Older: 55 % YES
Younger: 29 % NO	Older: 21 % NO

9. I get more new experiences and my life is richer.

Younger: 49 % YES	Older: 59 % YES
Younger: 15 % NO	Older: 23 % NO

12. I am able to better outline my lived life by reminiscing.

Younger: 46 % YES	Older: 55 % YES
Younger: 12 % NO	Older: 23 % NO

Country

According to the Chi Square Test there are significant differences in two items:

4. I am more satisfied with the quality of my social relationships.

Swedish: 62 % YES	Finnish: 52 % YES
Swedish: 30 % NO	Finnish: 10 % NO.

5. My feeling of participation in groups and communities important to me has grown stronger.

Swedish: 59 % YES	Finnish: 54 % YES
Swedish: 32 % NO	Finnish: 16 % NO.

It is, however, hard to say if there are any real differences as the number of "Don't know" -answers is higher within the Finnish group.

Gender

There are significant differences in three items:

6. The feeling of closeness to people important to me has grown stronger.

Male: 49 % YES	Female: 69 % YES
Male: 20 % NO	Female: 11 % NO.

9. I get more new experiences and my life is richer.

Male: 49 % YES	Female: 60 % YES
Male: 29 % NO	Female: 14 % NO.

10. I have something nice and interesting to look forward to.

Male: 43 % YES	Female: 63 % YES
Male: 28 % NO	Female: 14 % NO.

Female players seem to be more confident on the positive impacts of gaming than male players.

Gaming frequency

The anticipated long-term impacts are more or less the same in both of the groups. There are differences in two items out of 15.

1. I am at peace with myself and with the current state of my life.

Played once or twice: 71 % YES

Played once or twice: 14 % NO

Played three times or more: 75 % YES

Played three times or more: 3 % NO.

12. I am able to better outline my lived life by reminiscing.

Played once or twice: 44 % YES

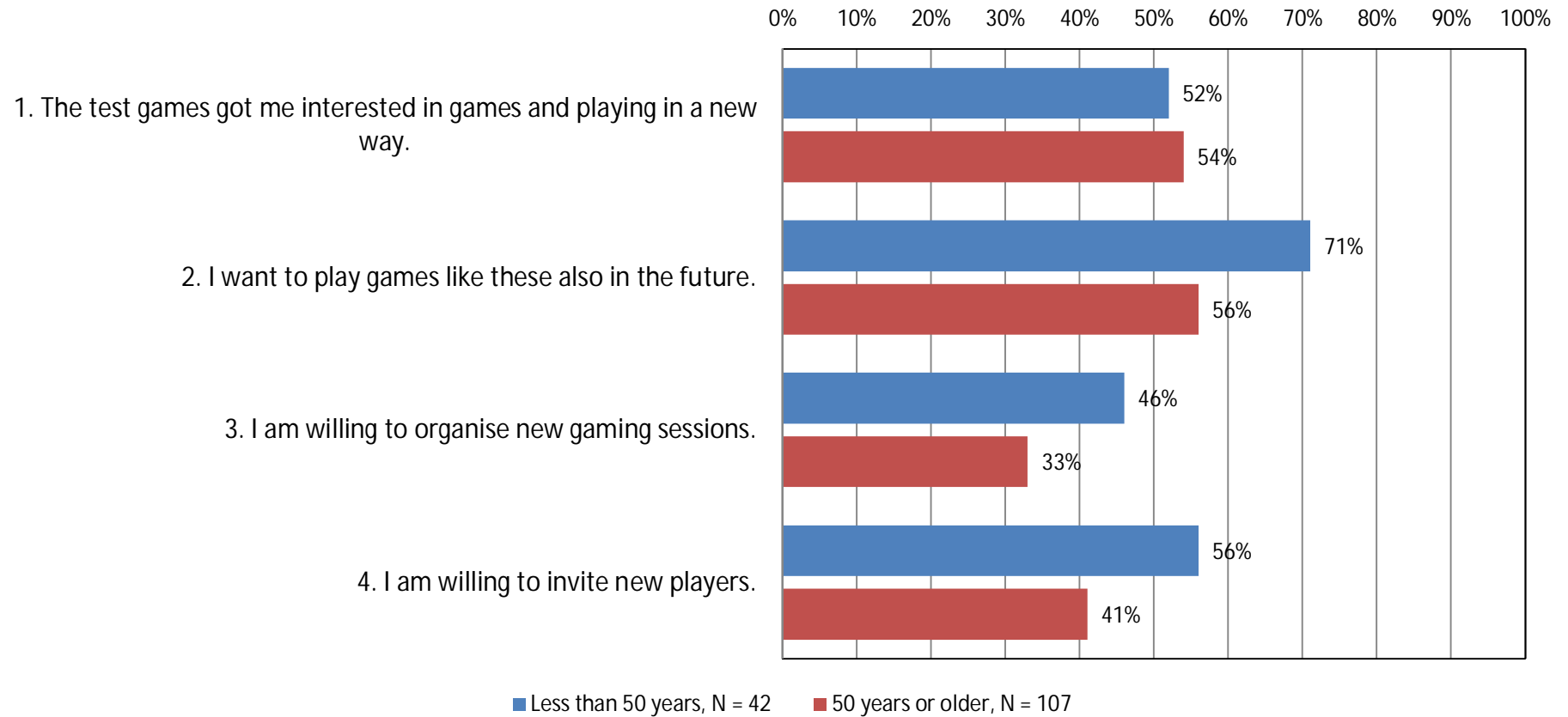
Played once or twice: 28 % NO

Played three times or more: 60 % YES

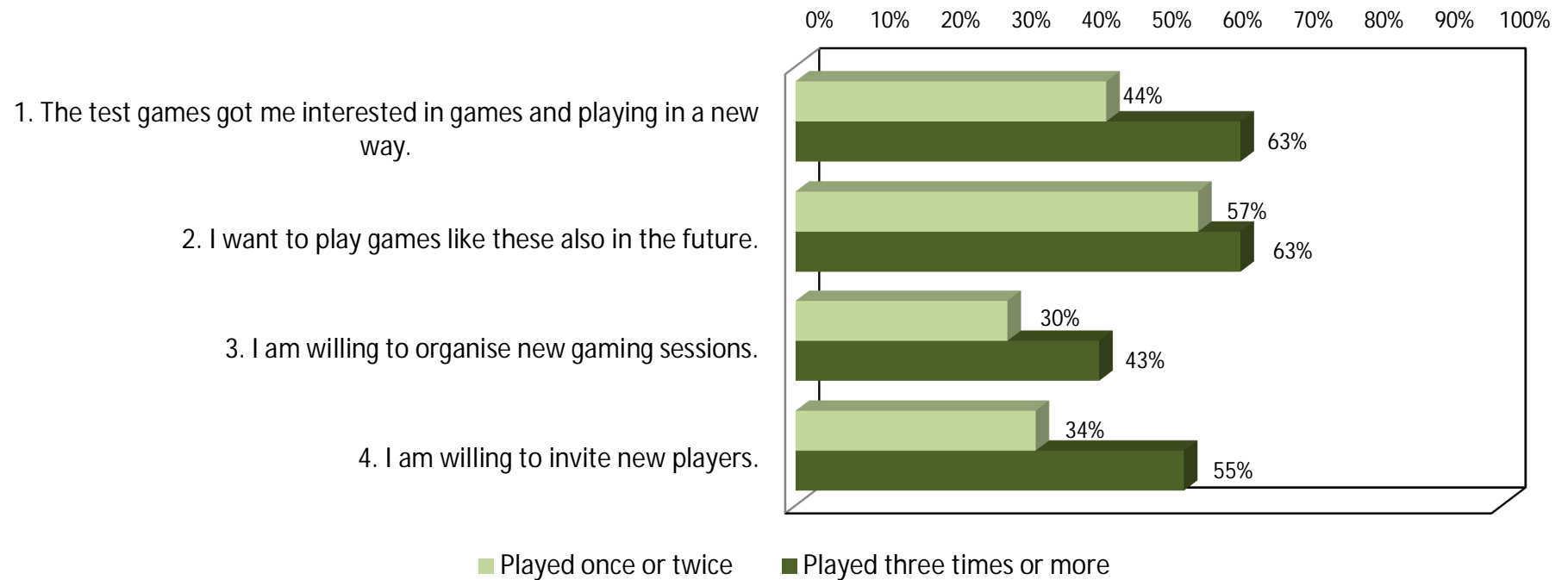
Played three times or more: 12 % NO.

PART IV. WILLINGNESS TO PLAY THE GAMES IN THE FUTURE

Willingness to keep on gaming, % of YES-answers, age groups

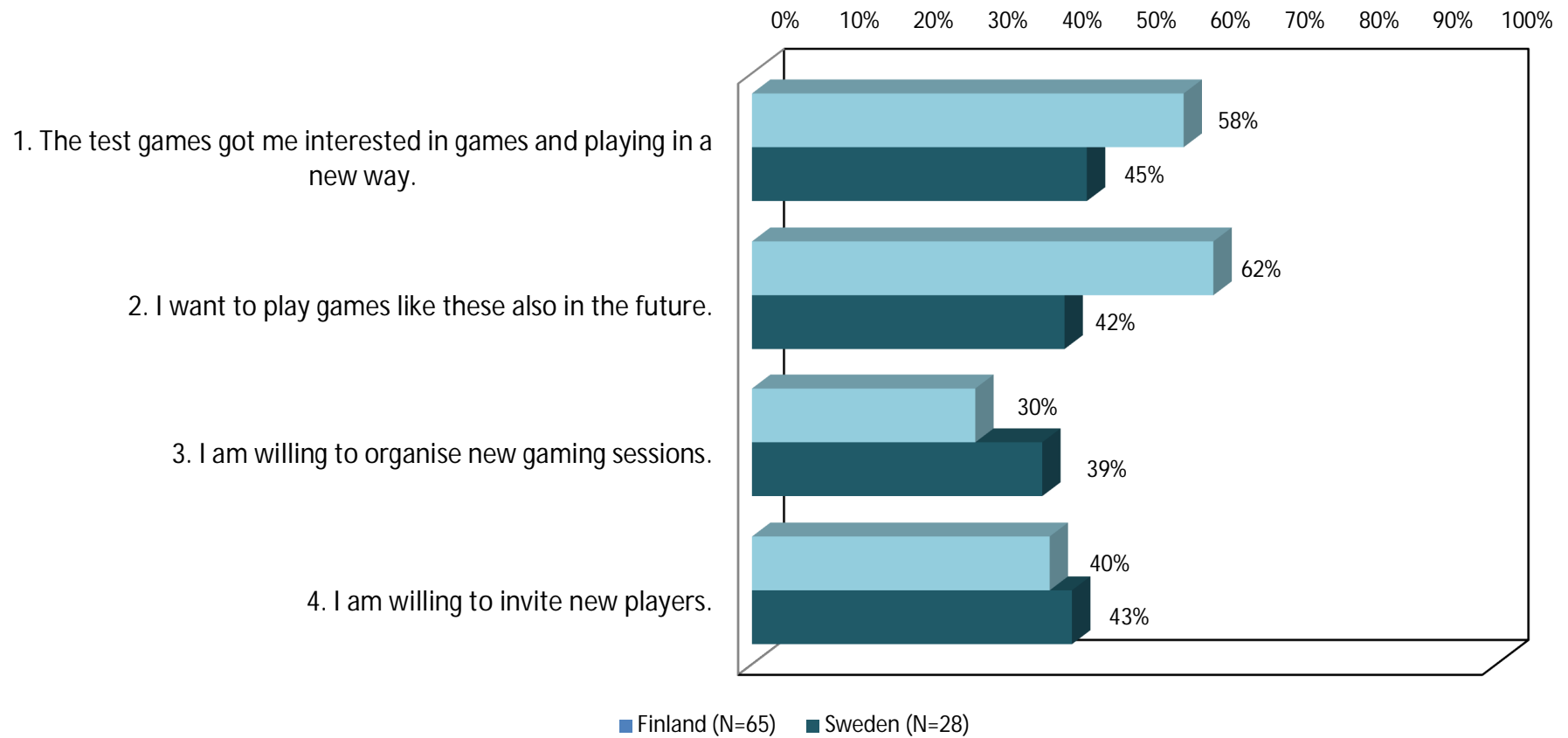


Willingness to keep on playing, % of YES-answers,
subgroups: number of gaming sessions (N= 150)



Willingness to keep on playing, % of YES-answers

Subgroups: Finland, 50+ and Sweden, 50+



Willingness to keep on playing, % of YES-answers Subgroups: female and male respondents

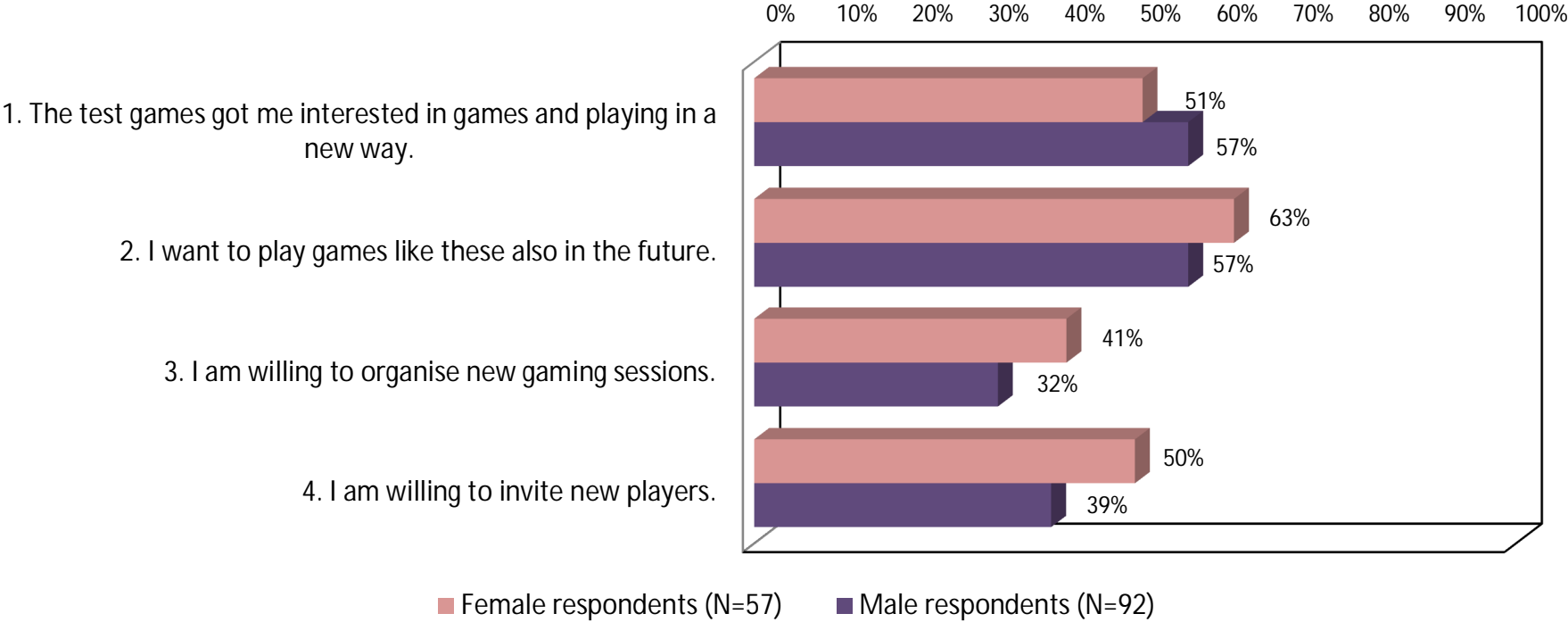


Table 6. Willingness to play the games in the future, results from ALL the respondents (N=150, number of valid answers 132–135)

		YES	NO	Don't know	Number of valid answers
1	The test games got me interested in games and playing in a new way.	53 %	30 %	16 %	135
2	I want to play games like these also in the future.	61 %	24 %	16 %	135
3	I am willing to organise new gaming sessions.	37 %	39 %	24 %	132
4	I am willing to invite new players.	46 %	29 %	26 %	132

Willingness to keep on playing – statistically significant differences between subgroups

Age

Younger respondents seem to be more interested in organizing new gaming sessions than the older respondents: 46 % of the younger ones answered “Yes”, whereas 33 % of the older testers said “Yes”. The difference is more drastic when we compare the frequencies of “No”-answers: 24 % of the younger players are not willing to organize new gaming sessions, but almost half of the older testers (45 %) refuse to organize new sessions.

Country

There are no significant differences when we compare the Finnish 50+ respondents’ answers to the Swedish 50+ respondents’ answers.

Gender

No statistically significant differences between female and male respondents.

Gaming frequency

Those testers who had opportunities to play the games three or more times are more willing to keep on playing than others.

1. The test games got me interested in games and playing in a new way.

Played once or twice: 44 % YES

Played once or twice: 39 % NO

Played three times or more: 63 % YES

Played three times or more: 24 % NO.

2. I want to play games like these also in the future.

Played once or twice: 57 % YES

Played once or twice: 32 % NO

Played three times or more: 63 % YES

Played three times or more: 17 % NO.

3. I am willing to organize new gaming sessions.

Played once or twice: 30 % YES
Played once or twice: 51 % NO

Played three times or more: 43 % YES
Played three times or more: 29 % NO.

4. I am willing to invite new players.

Played once or twice: 34 % YES
Played once or twice: 40 % NO

Played three times or more: 55 % YES
Played three times or more: 19 % NO.

V. SOCIO-DEMOGRAPHICS

Table 7. Gender

	FINLAND		SWEDEN		TOTAL	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	41	35,0 %	16	48,5 %	57	38,0 %
Female	75	64,1 %	17	51,5 %	92	61,3 %
Missing	1	0,9 %	0	0 %	1	0,7 %
TOTAL	117	100 %	33	100 %	150	100 %

Table 8. Age

	FINLAND		SWEDEN		TOTAL	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Less than 50 years	40	34,2 %	2	6,1 %	42	28,0 %
50–60 years	13	11,1 %	9	27,3 %	22	14,7 %
61–70 years	27	23,1 %	10	30,3 %	37	24,7 %
71–80 years	27	23,1 %	7	21,2 %	34	22,7 %
Over 80 years	9	7,7 %	5	15,2 %	14	9,3 %
Missing	1	0,9 %	0	0,0 %	1	0,7 %
TOTAL	117	100 %	33	100 %	150	100 %

Table 9. Occupation

	FINLAND		SWEDEN		TOTAL	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Gainfully employed	39	33,3 %	9	27,3 %	48	32,0 %
Unemployed	3	2,6 %	1	3,0 %	4	2,7 %
Retired	62	53,0 %	22	66,7 %	84	56,0 %
Part time retired, part time employed	4	3,4 %	1	3,0 %	5	3,3 %
Missing	9	7,7 %	0	0 %	9	6,0 %
TOTAL	117	100 %	33	100 %	150	100 %

Table 10. Living environment

	FINLAND		SWEDEN		TOTAL	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
I live alone.	42	35,9 %	17	51,5 %	59	39,3 %
I live with my spouse (and family).	74	63,2 %	16	48,5 %	90	60 %
Missing	1	0,9 %	0	0 %	1	0,7 %
TOTAL	117	100 %	33	100 %	150	100 %

Table 11. How many times did you play these test games?

	FINLAND		SWEDEN		TOTAL	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Once	44	37,6 %	8	24,2 %	52	34,7 %
Two times	15	12,8 %	8	24,2 %	23	15,3 %
Three times	38	32,5 %	9	27,3 %	47	31,3 %
More than three times	18	15,4 %	8	24,2 %	26	17,3 %
Missing	2	1,7 %	0	0 %	2	1,3 %
TOTAL	117	100 %	33	100 %	150	100 %

Table 12. Do you normally ever play parlor or board games?

	TOTAL	
	Frequency	Percent
Yes	85	56,7 %
No	59	39,3 %
Missing	6	4,0 %
TOTAL	150	100,0 %

Table 13. Why not?

	TOTAL Frequency	Percent
Boring/does not interest me.	23	56,1 %
I have no one to play with.	16	39,0 %
Other reason	2	4,9 %
TOTAL	41	100,0 %

Other reasons:

- I don't have time.
- There isn't enough options here, didn't find one to choose.

Table 15. With whom do you play? (circle all that apply)

	TOTAL Frequency	Percent
Friends	64	70,3 %
Spouse	15	16,5 %
Family	50	54,9 %
Other	17	18,7 %
Number of respondents	91	

Other:

- grandchildren (5), relatives (3), girlfriend, grandmother, a friend, the children of siblings and friends, colleagues, clients, computer.

Table 16. Why do you play? (circle all that apply)

	TOTAL	
	Frequency	Percent
To have fun	56	65,1 %
To compete and win	6	7,0 %
To learn something new	12	14,0 %
To spend time	51	59,3 %
To keep mentally fit	17	19,8 %
Other	8	9,3 %
Number of respondents	86	

Other:

- grandchildren; to be together with the grandchildren; grandchildren, grand-grandchildren; to entertain grandchildren and their children; grandchildren want to play; children like it; it makes me think; a good tool for my work.

Table 17. How often do you play?

	TOTAL	
	Frequency	Percent
Several times a week	15	16,1 %
Several times a month	21	22,6 %
Several times a year	12	43,0 %
A few times every year	17	18,3 %
Number of respondents	93	100,0 %

Table 18. At what occasions do you play? (circle all that apply)

	TOTAL	
	Frequency	Percent
At family events (such as e.g. birthdays)	37	37,8 %
At meetings with friends (such as e.g. dinner parties)	54	55,1 %
At national holidays	27	27,6 %
At vacations and during travels	31	31,6 %
No special occasion	20	20,4 %
Other	10	10,2 %
Number of respondents	98	

Other:

- when the children are visiting (2); when the grandchildren are visiting; when visiting children and grandchildren; with the grandchildren; when a friend is visiting; when there is nothing else to do; computer games every night; at work and situations while working.

Table 19. How do you associate to games/gaming in general?

	TOTAL	
	Frequency	Percent
Positively, it's lively and dynamic!	105	70,0 %
Negatively, it's silly/indifferent!	7	4,7 %
No association	23	15,3 %
Other	7	4,7 %
Missing	8	5,3 %
Number of respondents	150	100,0 %

Other:

- It's not nice to compete, but just to play without pressure is ok (associates positively); everything on its own time; it's nice, as long as all the necessary parts of the game are all there; some games are interesting; to pass time; don't have the time; just spending time, fun, social sometimes.

Table 20. How often do you access the internet?

	TOTAL		OLDER	
	Frequency	Percent	Frequency	Percent
Once a month or less	21	14,0 %	20	18,7 %
Once a week	14	9,3 %	12	11,2 %
Several times a week	21	14,0 %	18	16,8 %
Every day	36	24,0 %	24	22,4 %
Several times a day	45	30,0 %	21	19,6 %
Missing	13	8,7 %	12	11,2 %
Number of respondents	150	100,0 %	107	100,0 %

Table 21: When you access the Internet, which of the following do you usually do?

	TOTAL	
	Frequency	Percent
Use the World Wide Web for your own entertainment	68	55,3 %
Use the World Wide Web for work purposes	64	52,0 %
Send or receive e-mail	98	79,7 %
Use Instant Messenger, Skype, or other one to one conversation tools	32	26,0 %
Play computer games	42	34,1 %
Download music or video or TV	26	21,1 %
Use other computer applications such as:	41	33,3, %
Number of respondents	123	100,0 %

Use other computer applications, such as:

- information searching (11)
- pay bills (5), on-line bank (2), bank matters (2)
- news (2); newspapers (2)
- weather (3)
- music; listen to music
- Word, Excel; Word Pad
- to keep up; Blocked (buying and selling site); communication; photo browsing and modering; Facebook; Solitaire; library; studying; SVT PLAY (Swedish television site).

Table 22. If you play computer games, with whom do you play?

	TOTAL	
	Frequency	Percent
I play alone.	76	89,4 %
With online players whom you know.	14	16,5 %
With online players whom you don't know.	19	22,4 %
TOTAL	85	

Table 23. Are you using any social media?

	TOTAL		OLDER	
	Frequency	Percent	Frequency	Percent
N	62	45,3 %	57	52,3 %
Yes, Facebook.	58	42,3 %	24	22,4 %
Yes, Blogs	20	14,6 %	6	5,6 %
Yes, Internet Forums	28	20,4 %	11	10,3 %
Yes, Wikis	14	10,2 %	2	1,9 %
Yes, other:	8	7,3 %	5	4,7 %
Missing	13	9,5 %	12	11,2 %
TOTAL	150		107	

Yes, other:

- Senior Net Sweden (2); Skype; Google+; Health information; Iltalehti (newspaper)

Table 24. Are you familiar with the iPad or tablet PC's?

	TOTAL	
	Frequency	Percent
Yes	38	25,3 %
Yes, I own one.	16	10,7 %
No	85	56,7 %
Missing	2	7,3 %
TOTAL	150	100 %

VI. OTHER COMMENTS

Do you have some other comments you would like to share?

Fi = Finnish respondent, SWE = Swedish respondent, O = 50 years or older, Y = younger than 50 years

- A very good tool to work with old people, handicapped, children with special needs etc. I hope the games and "tools" get better. But is this kind of service/a way to maintain health possible to offer to everyone, or would this widen the social and economical differences? The marketing of these games could start at the municipal level, for example for the day centers. It would often be necessary to have a sign mark translator or a image communicator at the iPad! (FI, Y)
- I haven't been into games before. It could be fun, if you have your own pictures and family. (FI, O)
- I mostly play quiz games and I do not think this adds anything in my life. Good games to get to know each other better. (SWE, O)
- I only played once, but I noticed clearly what was the aim of the developers and what kind of benefits these games at their best could have. (FI, Y)
- I'm over 41-year-old, and action packed games are more to my taste. These games are suitable for older people. But it was nice to play these games with old people. (FI, Y)
- It was fun playing with the youngers, even though I didn't match their skills. (FI, O)
- It was fun to play. (FI, Y)
- It was fun, the playing. (FI, O)
- It was great fun to play when everyone were willing to share their memories. If someone lost their interest, it was not as fun anymore. If we were one player too much, we didn't play. (SWE, Y)
- It was nice to play together with my children, grandchildren and husband. We had many pleasant evenings together. (FI, O)
- More games like these. (FI, Y)
- Nice to be together with people from different ages. (FI, O)
- Pleasantly surprised by the simplicity of the technique. Skeptical of computer games. (SWE, O)
- PhotoBluff could have better instructions. Adding the self-build photoalbum to the PhotoBluff didn't work, even though it would have been important to have your own pictures in this game. (FI, O)
- PhotoBluff took too much time, when there were 5 players. (FI, O)
- PhotoBluff was too slow tempo for five players. Pic My Choice was quite nice. Picture Pong was a bit boring. All in all, this was a nice experience. (FI, Y)

- PhotoBluff: There should be a "go back button". When writing, it should be possible to zoom in. Forward button should be bigger or it should happen by swiping. There should be a big photo of the each player. It should be possible to zoom out when choosing the picture. When guessing, it should be possible to see, who has chosen the picture in question. Pick My Choice: The instructions were difficult. Should others see what you have chosen or not? (FI, O)
- Pic my Choice was more liked than PhotoBluff. (FI, O)
- Picture Pong wasn't as nice as Pic my Choice. If you chose a wrong answer by accident, you couldn't change it. (FI, O)
- Possible testers: fingerti.com, this game was boring and not developed enough (FI, O)
- The games are probably not that interesting for people 70-years. They aren't challenging enough. (FI, Y)
- The games could be more challenging, there could be different levels. (FI, O)
- It should be possible to alter the severity of the games. The game is too up beat for people with memory disorders. Own pictures would bring more content and a feeling of closeness for players. (FI, O)
- Games for people with memory illness should be easier. There should be an assistant present. For younger the games should be harder. You should come up with a different use of the computer. It should be possible to watch the photos for longer time. Reminiscence is important. (FI, Y)
- The price of the machine should be suitable for the pensioners, around 20-50 euros. (FI, O)
- I do play a lot of games, but this game wasn't for me. (FI, O)
- I don't have a computer of my own - it was a bit difficult to use the computer and all new to me. (FI, O)
- I'm not so much in to this where you have to tell stories. I like card games and online games. Card games by myself on the computer works as well. (SWE, O)
- I'm not interested. I didn't get excited at the first try. (FI, O)
- My situation in life isn't good for playing these games. (FI, O)
- One of the games didn't work, we got stuck going back and forth (the one with the guessing). Some kind of intro would be good, so you could know, how long the game takes. We should have concentrated better. (FI, O)
- iPad wasn't functioning properly. There should be pictures of Finnish culture and nature. (FI, O)
- Is the technology really fully developed? If so, do a step by step instruction of what to do if you get stuck. (SWE, O)
- It was a bit tiring to always tap the text-box away (the white box with the instructions to the next player). It should be possible to tap the whole box, not just the arrow. The game could come equipped with interesting pictures, because not everyone has good photos on their iPad. There could be for example three photo albums, where you could choose the ones you want. (FI, Y)
- There was way too much clicking to get forward in the games. You should cut them down after the first round, when the players know how the game is played. (FI, Y)

- The technical details could be improved a little. There should be a "go back -button". There should be a big picture, when the player changes. The text box should be higher on the screen, maybe more narrow. (FI, O)
- The test-situation was not natural; you didn't bother to get to know the idea of the game. It was difficult to play with only one machine. I don't believe that I need these kinds of games right now. (FI, O)
- The translations in the game were confusing in some parts of the games. Otherwise very interesting experience and the games were surprisingly easy to use. (FI, Y)
- There were minor shortcomings at the games.(FI, Y)
- There were some parts of the game that need fixing and made the playing a bit hard. (FI, Y)
- There was too little time. I would have wanted to play each of the game few times more. Compared to the ready photos, if you have your own pictures there, you get a lot more out of the stories. Especially when playing with the family and friends. (FI, O)
- When I have gotten older, I haven't played games anymore. They are not that interesting anymore. (FI, O)
- Wife says: My husband has a memory illness and he needs "help" while playing. But we had a good time. (FI, O)
- Would rather play without computer. (SWE, O)
- You should be able to get pictures through your USB. Too slow. Better instructions for Photo Bluff are needed. The kids thought it was boring. (SWE, O)
- Bad games without enough variation. The questionnaire was badly done, if the focus group is 50-80-year-old people. The questions should be more detailed and in some parts there weren't enough options to choose. (FI, Y)
- The game in the middle was bad. The questions in this questionnaire were bad, especially the part 3. (FI, O)
- Too many questions. (FI, Y)
- The questionnaire is too long. (FI, Y)