

Reporting your Analytical Results

Guidelines for students of Communication Science

April 2014

Introduction

This text is intended for students and staff of Communication Science. In this document we offer you additional guidelines for reporting qualitative and quantitative research. The starting point for these guidelines is the APA6 publication guidelines. Where appropriate, commonly used alternative forms of presentation are mentioned as well.

The guidelines reflect how students learn to report analytical results in the methods courses that are part of the bachelor program of Communication Science. Students should therefore be able to report their results in the manner described here at the end of the bachelor programme and in the master programme.

Information on the Research Design and Operationalization

The research design refers both to the chosen research method as well as the method of data collection. Since these two are also closely connect to the operationalization of concepts used in the research – the way in which concepts are made measurable – this subject is discussed here as well.

Qualitative research

Students who successfully completed the course Kwalitatief Onderzoek (Qualitative Research – Bachelor, year 2), are able to conduct in-depth interviews, focus groups, participant observation and qualitative content analysis, and are able to report on this in the following way:

- Motivate the choice for the research method used.
 - Why did you choose qualitative research?
 - Why did you choose in-depth interviews, focus groups, participant observation, or qualitative content analysis?
- Motivate the purposeful and/or theoretical sampling.
 - Which criteria were used to select units of observation?
 - Why these criteria?
 - What is the number of units per category? For example, “respondents between 65 and 74 years old ($N = 39$) and respondents aged 75 and older ($N = 47$).”
- Describe the measurement instrument. For in-depth interviews and focus groups:
 - Describe the goal, introduction, initial question, and probing techniques for each topic.
 - Report the names of the interviewer(s) and describe interviewer training.
- Discuss the analytical procedure.
 - Describe open coding. Give specific examples.
 - Describe selective coding. Give specific examples.
 - How was the concept-indicator model developed?

- Which software was used and in which way was it used?
In the course Kwalitatief Onderzoek (Qualitative Research), Atlas.ti is used; students may use the department's license for this software package.
- Indicate the strategies applied to improve the validity and reliability. Examples: member checks, peer debriefing, thick description, memo writing.
- In the description of the research design, it should be clear what the sensitizing concepts were. Specify how the sensitizing concepts, derived from the literature, directed the data collection and analysis.

In the appendices:

- A list of respondents and / or the research material.
- The measurement instrument used, such as the interview guide.
- Lists of codes, matrices, and memos providing insight in the analytical procedure.

Quantitative methods: sampling and operationalization

Reporting on the sample and the description of the operationalization of concepts into variables is broadly similar for all quantitative methods. Method-specific details are described in following sections. Students who successfully passed MCO/BS and the Onderzoekspracticum Survey (Research Training Survey – Bachelor Year 1) can be expected to adhere to the following guidelines.

Sample:

- Description of the (target) population:
 - Which properties determine inclusion in the target population, in other words, what is the sampling frame?
 - How was or can access to the data be obtained?
- Description of the sampling design:
 - Specify how the target sample size was determined.
 - Describe sampling procedure: random or non-random and the type of sample, e.g., multi-stage sample.
 - If relevant to the results, describe the circumstances under which the sample was drawn and data were collected.
- Describe the sample response (survey, experiment):
 - Report the number of respondents contacted, the number (percentage) of respondents who participated, and the number (percentage) of refusals. For an opt-in design (self-selection), report the number of successful interviews/respondents participated.
 - Specify whether the completed sample deviates from the target population, and for which characteristics (variables), if known.
 - If multiple modes of administration are used, specify (non-)response information per mode.

Operationalization of concepts to variables:

- Discuss each variable used in the analysis and describe the distribution of the variable briefly, through the use of measures of central tendency and dispersion (see *Reporting Specific Results*).
- For the study's central variables, describe the theoretical concept on which it is based and how the variable has been measured.

Survey

After successful completion of Onderzoekspracticum Survey (Research Training Survey – Bachelor Year 1) students are able to report the following, in addition to the above.

- How the survey is / has been administered: by personal interview, telephone, paper and pencil, internet, etc.
- How respondents have been contacted initially.
- Whether multiple modes of administration have been employed, such as initial contact by phone, followed by internet.
- Whether and, if so, how respondents could determine the mode of administration.
- Optional: include the full survey in an appendix.

Quantitative content analysis

After successful completion of Onderzoekspracticum Inhoudsanalyse (Research Training Content Analysis – Bachelor Year 1) students report the following items in addition to the above instructions for sampling and operationalization.

- Report the inter-coder reliability (Krippendorff's Alpha) for all variables. For a limited number of variables the figures may be presented in the text, but for a large number of variables a univariate table is preferred (including at least the frequencies per category or mean as well as the inter-coder reliability score per variable). Variables that are coded but not used in the eventual analysis may be skipped.
- If variables in the final dataset are found to be not reliable, this may be mentioned in a footnote (so as to indicate that attempts were made to include the variable).
- If variables are constructed by aggregation of information from multiple variables, reliability should also be included for the original variables (as coded).
- For variables that consist of multiple encoded variables or fields without a fixed coding order (such as a maximum of 3 themes for an analysis of news, or a number of free fields to include the names of characters in a movie), the inter-coder reliability for the new, composite variable must be reported.

Experimental Research

After successful completion of Onderzoekspracticum Experiment (Research Training Experiment – Bachelor, year 2) students are able to report an experiment as follows. As above, the following instructions are in addition to the general rules regarding reporting samples and operationalization. Note that this is the only method for which APA6 offers explicit guidelines, in section 2.06 and Appendix Tables 2 and 3.

- Study design: the number of independent variables, the number and time order of the measurements (observations) of the dependent variable(s).
- The manner in which subjects are randomized over experimental and control conditions.
- The experimental manipulation applied.
- If a power analysis was performed, present the figures assumed and used in the analysis.

Reporting Specific Results

Qualitative research

Students who successfully completed the course Kwalitatief Onderzoek (Qualitative Research – Bachelor, year 2) are able to develop a concept-indicator model. A report of a concept-indicator model includes:

- The concept-indicator model as a figure or as an appendix.
- A description of the model, that is, the concept, dimensions, and the poles of each dimension are discussed.
- Each pole is illustrated with quotes and other examples from the empirical data.
- Dimensions and their poles can be presented as subheadings in the text.

In the discussion of the concept-indicator model, it is important that:

- the model is relevant for the research question and sensitizing concepts;
- the dimensions are attributes that show variation ('variables') and that the poles are the values for this 'variable';
- the labels for the concepts, dimensions, and poles are comprehensible and logical;
- the model is grounded in the data; each pole must be grounded in the data. this can be shown by illustrating each pole with quotes or examples. Quotes must be elucidated, and should not be just added to the text without further clarification. It should be noted explicitly in case no empirical data were found to support a pole;
- all empirical data regarding a concept must be used in the model;

Guideline: A complete model contains at least three dimensions and each dimension has at least two poles.

Appendix 1 contains an example of a concept-indicator model and how it may be reported.

There are alternatives to the concept-indicator model; for example, reporting categories, themes, types, or patterns in the data. The following general criteria apply:

- Categories (themes etc.) have clear and meaningful labels/names.
- Categories are grounded in the data. This is shown with verbatim quotations from interviews, focus groups, field notes or media content. Quotations are always accompanied by an interpretation of how they must be read or what they exemplify .
- The results are logically structured.
- The use of quantifying language should be avoided.

Quantitative research

Students who successfully completed MCO/BS (Bachelor Year 1) and Inferential Statistics (Bachelor Year 2), are aware of the guidelines summarized in this section.

- To clarify the subject of the investigation to the reader, an interpretation must always clearly state:
 - the research units: subjects, respondents, etc.,
 - the variables or categories.

Example: "We compared average internet use among students of three types of secondary education in the Netherlands."

Students in secondary education in the Netherlands are the research units. Internet use and three types of secondary education are the variables.

- Use N for the total number of research units and n to indicate the size of a subgroup (APA 6: Table 4.5). It is however not uncommon to use N to denote the size of a subgroup as well.
- Never use percentages when the total number of observations is less than 20.
- Results are always reported using 2 decimals, except critical values (*p-values*) which should be reported with 3 decimal places (APA 6: 4.35).
- In English text, use a period to denote decimals and use a comma to separate thousands, e.g., 10,000 for ten thousand. In English, values are *not* preceded by a 0 when the minimum and maximum value of the statistic is -1 and +1, respectively.
When writing in Dutch, use a comma to denote decimals. In Dutch, always preceded a comma by a 0, even if the statistic has a minimum and maximum of -1 and +1.
- Italics: Statistical symbols (including abbreviations, e.g. *SD*) and variables must be in italics (APA 6: 4.21).
Do not use italics for subscripts and Greek letters (APA 6: 4.21) and abbreviations.
- Tables and graphs should always include a header that enables the reader to understand and interpret the table or graph without reading the body text of the article.
- Always start an explanatory note or a table starting with *Note*. (APA 6: 5.16).

Do not present any tables or graphs without discussing these in the body text. Test results are preferably combined and presented in tables. Only when a test result can be presented in a single sentence should a table be omitted. When presenting results in a sentence, adhere to the guidelines of APA6:

- Degrees of freedom are in parentheses immediately after the test statistic (APA 6: 4.09).
- Present exact *p-values* instead of significance levels (APA 6: 4.35, 5.16) where possible, even for non-significant results.
Exception: probabilities of less than 0.1% are listed as $p < .001$ (APA 6: 4.35).
- Include confidence intervals where possible: 95% CI [<lower limit>, <upper limit>] (APA 6: 4.44).
- State the test statistic, the degrees of freedom, the critical value and where applicable the confidence interval in a sentence clause and not in parentheses (APA 6: 4.09).
- However, single *p-values* (without additional figures or values) are presented parentheses (APA 6: 4.09).

Example: "Boys scored significantly higher ($M = 3.41$, $SD = 2.01$) on the social gratification scale than girls ($M = 4.16$, $SD = 1.82$), $t(56) = 2.10$, $p = .020$, 95% CI [-1.38, -0.12]."

Statistics: presenting measures of centrality and dispersion

As a general rule, present the appropriate measure of dispersion for every measure of centrality you present, if a suitable measure of dispersion is available. If you do not mention the measure of dispersion or centrality in the sentence, then do so in brackets.

Example: "Boys score on average 3.41 ($SD = 2.01$) on the social gratification scale. This is lower than girls ($M = 4.16$, $SD = 1.82$)."

Centrality			Dispersion		
Name	Symbol	Interpretation	Name	Symbol	Interpretation
Mode	Mo	Value occurring most frequently	-	-	
median	Mdn	middle value	interquartile range	-	middle half of the observations
arithmetic mean	M, \bar{X}	average	standard deviation	SD, s	Average deviation from the arithmetic mean
			variance	s^2	

Statistics: presenting a measure of association

Whenever possible, state the strength and direction of the relationship for every measure of association you present (combinations of observations that occur particularly often or rarely). Rules of thumb for the strength of an association (absolute values):

- 0 to .10 very weak / no association
- .11 to .30 weak association;
- .31 to .50 moderate association;
- .51 to .80 strong association;
- .81 to .99 very strong association;
- 1 perfect association.

When test statistics, degrees of freedom or critical values are known, present these.

Example: "There is a significant, moderately strong negative correlation between the intensity of the Dutch to watch the news on TV and their score on a political cynicism scale: The more intensive one watches TV news, the less politically cynical, $r = .45$, $p = .003$."

Measure of association	Symbol	Interpretation
Percentages	%	specify which combinations of observations occur particularly often or rarely
Cramers V	V	
Phi		
Goodman & Kruskal's tau		Improve prediction by ...% when we take ... into account
Lambda		
Gamma		As ... increases ... increases/decreases
Kendall's tau-b		
Spearman's rank correlation coefficient	r_s	
rho		
Somers' d		
Product moment correlation coefficient r	R	proportion of explained variance; discuss the group mean scores
Eta-squared		

Statistics: presenting a scale

- Specify the type of factor analysis: This is always principal components factor analysis.
- Indicate the number of components (factors) selected, specify the selection criterion (eigenvalue, scree plot) used and the total percentage of variance explained.
- Specify the type of rotation used if two or more components are selected: This is typically orthogonal (Varimax) rotation.
- Present the (rotated) component loadings table (component matrix).
- Discuss the reliability of each (sub-)scale: Cronbach's alpha and whether the reliability of the scale has been improved by omitting items.
Rule of thumb: If Cronbach's alpha is less than .60, we consider the scale unreliable, from .60 to .80 the scale is reasonably reliable, but if Cronbach's alpha exceeds .80, we have a good, reliable scale.
- Label the factors: your interpretation of the dimensions or constructs the factors represent. Take items that load high (positive or negative) on a factor (e.g., at least .45) and the original response options of these items.

Example: "A principal component analysis (PCA) shows that the 8 items form a single uni-dimensional scale: only one component has an eigenvalue above 1 (eigenvalue 5.37) and there is a clear point of inflexion after this component in the scree plot. All items correlate positively with the first component, the variable "Interest in national politics" has the strongest association (factor loading is .90). Reliability of the scale is good, Cronbach's alpha = .82. Therefore, it appears the scale measures interest in politics or political involvement. Looking at the original variable response options we see that high scores on the

items actually indicate low interest. The scale therefore does not measure interest in politics, but rather political apathy: the higher the scale score, the higher a respondent's political apathy."

Statistics: presenting a test for 1 or 2 means

For tests of 1 or 2 means (z-tests or t-tests), the general rules for presenting statistical results apply. An example of the interpretation of a t-test for independent samples is presented there.

Report it if the requirements of the t-test are not met: If at least one of the groups contains 30 or fewer observations, and the variable is not known to be normally distributed in the population.

An example of a t-test for a single mean when the result is not summarized in a table: "The average age of the respondents in the sample ($M = 36.25$, $SD = 16.04$) lies with 95% certainty between 35.45 and 37.05 years. This does not differ significantly from the average age of Dutch adults in 2006 (36.8 years), $t(1550) = -1.35$, $p = .177$, 95% CI [35.45, 37.05]."

Statistics: presenting an analysis of variance

- If you choose to present the results of the analysis of variance in a table, use the summary table containing the sum of squares, degrees of freedom, mean squares, F -values and the probability (p -value).
- Specify the type of analysis of variance: one-way analysis of variance (ANOVA), two-way analysis of variance, factorial analysis of variance.
- Mention if the groups are not of equal size and we may *not* assume equal variances in the population on the basis of Levene's F -test.
- Provide the test result for each effect: F ($df1$, $df2$) and p . Please note, you present two degrees of freedom: first that of the numerator (between groups), followed by that of the denominator (within groups, errors).
- For every significant effect present the mean group scores (including standard deviations) and the size of the effect (weak, moderate, strong). Note: The group means and standard deviations can be presented usefully in a table. In your interpretation mention at least which group scores higher.
- If a post-hoc tests are used, indicate which group means differ significantly. Present both the mean difference ($M_{\text{difference}}$) and the associated probability (p).

Example without a table: "Subjects who had not seen the health education clip have the least negative attitude towards smoking ($M = -0.76$, $SD = 1.00$) while those who have seen the clip often have the most negative attitude ($M = -3.06$, $SD = 1.69$). Subjects who saw the clip occasionally scored in between ($M = -1.42$, $SD = 1.20$). Women ($M = -1.82$, $SD = 1.42$) and men ($M = -1.66$, $SD = 1.36$) appear to have the same attitude towards smoking.

A two-factor analysis of variance was carried out to assess the influence of exposure to a health education clip, in conjunction with the effect of sex. We found a significant, moderate effect among the subjects of exposure to the health education clip on the respondent's attitudes towards smoking, $F(2, 93) = 31.24$, $p < .001$, $\eta^2 = .35$, but no significant effect of sex, $F(1, 93) = 0.60$, $p = .442$, $\eta^2 = .003$. A post-hoc test indicated that the only significant difference found was that between subjects who frequently saw the clip and those who did not ($M_{\text{difference}} = -2.30$, $p < .001$) or only sometimes ($M_{\text{difference}} = -1.64$, p

<.001) saw the clip. No significant difference between subjects who did not or only sometimes received the health information was established.

Furthermore, there was a significant but weak interaction effect between sex and exposure to the health information clip, $F(2, 93) = 11.58, p < .001, \eta^2 = .13$. For women, attitude towards smoking is distinctly more negative after frequent exposure to the health information clip than for men, $M_{\text{difference}} = -1.82, p < .001$. However, if they have not seen the clip, women are less negative towards smoking than men, $M_{\text{difference}} = -.86, p = .043$.

It should be noted that the assumption of equal variances in the population has been violated, Levene's $F(5, 90) = 2.67, p = .027$.

Report example with data summarized in tables:

Table 1
Attitude towards smoking

	n	M	SD
Exposure			
Health clip not seen	33	-0.76	1.00
Health clip seen few times	33	-1.42	1.20
Health clip seen often	33	-3.05	1.69
Sex			
Female	50	-1.82	1.42
Male	49	-1.66	1.36

Table 2
Results of a two-factor analysis of variance

	Sum of Squares	df	Mean Square	F	p	η^2
Exposure	90.97	2	45.48	31.24	< 0.001	0.35
Sex	0.87	1	0.87	0.60	0.442	0.00
Exposure * Sex	33.72	2	16.86	11.58	< 0.001	0.13
Error	135.41	93	1.46			
Total	262.67	98				

Note. $N = 99$.

A two-factor analysis of variance was carried out to assess the influence of exposure to a health education clip, in conjunction with the effect of sex. We found a significant, moderate effect among the subjects of exposure to the health education clip on the respondent's attitudes towards smoking, but no significant effect of sex. A post-hoc test indicated that the only significant difference found was that between subjects who frequently saw the clip and those who did not ($M_{\text{difference}} = -2.30, p < .001$) or only sometimes ($M_{\text{difference}} = -1.64, p < .001$) saw the clip. No significant difference between subjects who did not or only sometimes received the health information was established.

Furthermore, there was a significant but weak interaction effect between sex and exposure to the health information clip. For women, attitude towards smoking is distinctly more negative after frequent

exposure to the health information clip than for men, $M_{\text{difference}} = -1.82, p < .001$. However, if they have not seen the clip, women are less negative towards smoking than men, $M_{\text{difference}} = -.86, p = .043$.

It should be noted that the assumption of equal variances in the population has been violated, Levene's $F(5, 90) = 2.67, p = .027$. "

Note: The post-hoc test results can also be summarized in a table.

Statistics: presenting a regression analysis

- Report the value of the test statistic (F), the degrees of freedom and the probability (p -value) of the regression model.
- If the model is significant, discuss how well the model fits on the basis of the coefficient of determination (R^2): the proportion of variance explained.
- If the model is significant, discuss the unstandardized regression coefficients (with the sign b and the 95% confidence interval) or standardized regression coefficients, the t -value and probabilities (p -values) of these coefficients.
 - The unstandardized regression coefficients show the predicted increase in the dependent variable when the independent variable increases one unit (point) while the other independent variables do not change.
Note: the unstandardized regression coefficient of a dichotomous or dummy variable (measured with 0 and 1) indicates how much the 1-category scores on average higher or lower than the 0 category while the other independent variables do not change.
 - The standardized regression coefficients indicate the strength of the partial effect/effect controlled for/holding all other independent variables/predictors constant.
 - According to APA6, the standardized regression coefficient should be denoted by b^* and not β or $Beta$ (APA 6: Table 4.5).
 - Do not interpret significant effects as causal effects: There could be a causal relationship, but this is not necessarily so.
- Indicate if the residuals are clearly not normally distributed or clearly indicate a lack of homoscedasticity.

Example: "The regression model with the number of times that a Dutch newspaper is read as dependent variable and age, sex, political distrust, and frequency of internet use as independent variables is significant, $F(4, 1541) = 131.37, p < .001$. The regression model can therefore be used to predict frequency of reading Dutch newspapers, but the strength of the prediction is moderate: 25 per cent of the variation in reading frequency can be predicted on the basis of age, sex, political distrust and internet use ($R^2 = .25$). Age, $b^* = 0.38, t = 14.45, p < .001, 95\% \text{ CI } [0.03, 0.04]$, sex, $b^* = 0.27, t = 2.36, p < .05, 95\% \text{ CI } [0.60, 0.83]$, and political distrust, $b^* = -0.21, t = -9.33, p < .001, 95\% \text{ CI } [-0.04, -0.03]$, have a significant, moderately strong association with reading frequency, while internet use has a weak association, $b^* = 0.08, t = 2.93, p = .003, 95\% \text{ CI } [0.02, 0.12]$. Per year of age, the predicted frequency newspaper reading increases by 0.03. Men read the newspaper on average 0.71 more often than women. For each additional point on the scale of political distrust, which runs from 6 (no distrust) to 52 (great distrust), the average propensity to read newspapers decreases by 0.04. Lastly, 1 point extra

internet use is associated with 0.07 extra frequency of newspaper reading. For all these effects other independent variables are assumed to be held constant."

Especially when different regression models are presented, it is better to summarize the numerical results in a table (see APA6, Table 5.12). We recommend a table with a column for each model and, for each model, the unstandardized or standardized regression coefficients for the constant and all independent variables, R^2 , and possibly the F -value. According to personal preference, standard errors (SE) or the confidence intervals can be presented with the regression coefficients. If the number of observations varies between different models, include this information in the table. Otherwise it is better to include the number of observations in the header or in a note beneath the table. If tests on the difference in R^2 are carried out, add these to the table. Do not present probability values in the table: indicate significance levels with asterisks.

Table 3 offers an example in which two different regression models are presented and compared, with the lower three rows being optional:

Table 3
Regression models to predict frequency of newspapers reading

	Frequency newspaper reading	
	Model 1 b*	Model 2 b*
Constant	5.42**	5.34***
Age	0.38***	0.38***
Sex	0.27*	0.27*
Political distrust	-0.21***	-0.21***
Use Internet		0.08**
R^2	0.21	0.25
F	121.45***	131.37***
ΔR^2		0.04
ΔF		9.92***

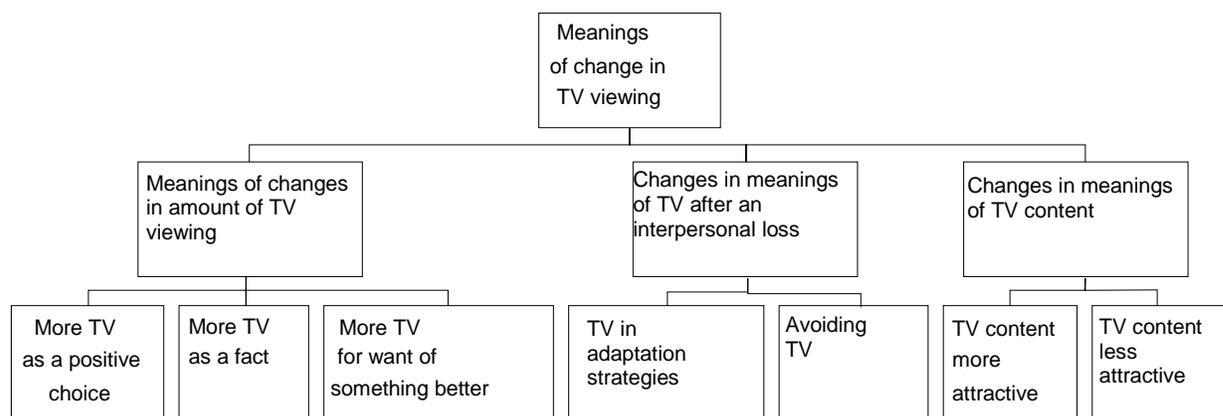
Note. $N = 342$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix 1. Reporting qualitative research with a concept-indicator model

Example: The meanings of television in older adults' lives.

- Goal: Understanding the meanings of television viewing in older adults' lives, by analysing change and continuity in their television viewing.
- Sensitizing concepts: change and continuity in television viewing. The theoretical framework therefore consists of a discussion of previous literature on change and continuity in television viewing.
- The results- section is a description of a concept-indicator model for the meanings of change in television viewing (although the model is not graphically presented in the article). The dimensions and poles are presented as subheadings in the results-section.



Meanings of television in older adults' lives: An analysis of change and continuity in television viewing

Abstract

Television viewing is an important leisure activity for older adults. The aim of the current study is to provide insight into the meanings of television in older adults' lives, by analysing change and continuity in their television viewing. A qualitative interview study was conducted that included in-depth interviews about television viewing with a diverse sample of Dutch people aged 65 years and older ($N = 86$). The interview study shows that television has a variety of meanings for older adults. The meanings of television viewing changed in response to changes in everyday life, but this did not happen unidirectionally. Retirement, physical changes and changes in household composition led to increases as well as decreases in television viewing. Watching more television was experienced in both positive and negative ways. After a loss in the interpersonal sphere, television viewing can play a valuable role in adaptation processes, but was also experienced as an activity that needs to be avoided. With regard to television content we found that some programmes gained importance when people age, whereas other programmes became less important or attractive. These changes in television viewing occurred for only part of the sample and participants experienced continuity in the status of viewing and in their content

preferences. The results are discussed in light of recent literature on leisure constraints, leisure as coping, and adaptation strategies.

Introduction

Television viewing is an important leisure activity for older adults. Research since the 1950s has consistently shown that older adults spend more time watching television than younger age groups do (e.g. Harwood 2007: 179). Given the sharp rise of the ageing population and the societal value placed on successful ageing, it is relevant to ask how this media use plays a role in older adults' lives. Therefore, the aim of the current study is to provide insight into the meanings of television in older adults' lives, by analysing change and continuity in their television viewing.

Change and continuity have been analysed in other research domains as well, for instance in personality development (e.g. Caspi, Roberts and Shiner 2005), friendship (e.g. Jerrome and Wenger 1999) and intelligence (e.g. Pushkar *et al.* 1995). Our study is particularly related to recent studies that pay attention to change and continuity in activities in later life (e.g. Nimrod 2008; Nimrod and Kleiber 2007; Pushkar *et al.* 2010). Change in activities in later life is often thought of in terms of reduced levels of participation and the substitution of challenging activities with less challenging alternatives. Important characteristics of leisure in old age are a transition from physical activities to activities that demand less physical effort, and a transition from outdoor to indoor activities (see Nimrod 2008: 832; Nimrod and Adoni 2006: 608). Television is readily available in most homes, which often leads to the expectation that watching television gains prominence when people shift their focus from challenging and outdoor activities to less challenging and indoor ones. Continuity in activities has been studied too. Researchers (e.g. Nimrod 2008; Nimrod and Kleiber 2007; Pushkar *et al.* 2010) typically refer to continuity theory (as advanced by Atchley) to explain why older adults are supposedly inclined towards constancy. Atchley argues that individuals wish for stability in familiar and customary roles. Individuals tend to maintain psychological and social patterns adopted earlier in their lives (e.g. attitudes, opinions, preferences and behaviour) by developing stable activity patterns that help them preserve continuity (Nimrod 2008: 832). According to this argument, continuity in television viewing is to be expected: The current cohorts of older adults have a long history with television viewing which can impact their viewing experiences in later life. By focusing on both change and continuity in older adults' television viewing, we can provide rich insights in the meanings of television viewing for ageing individuals.

Previous research on older adults' television viewing

In this section, we will discuss what previous research on older adults and watching television has shown about change and continuity in television viewing. Change in older adults' television viewing can be understood in light of maturational or life-course explanations for media use, which entail that media use changes across the life span in response to an individual's development. The basic notion in life-course explanations is that media use is related to biological, cognitive, and social development across the life span. Several authors (e.g. Dimmick, McCain and Bolton 1979; Rosengren and Windahl 1989) described this process, saying that developmental events and processes create needs as well as resources (such as physical or material resources), and that subsequently these needs and resources bring about certain types of media use.

Previous research on older adults and television viewing has tested some maturational explanations, regarding both amount and functions of viewing. The most widespread answer to the question why older adults watch more television than younger age groups do (e.g. Authors 2006; Harwood 2007: 179) is that they have more time available (Robinson, Skill and Turner 2004) because of retirement, physical ageing, and a decrease of social contacts (e.g. Doolittle 1979; Meyersohn 1961). To

test these assumptions, Mares and Woodard (2006) conducted a cohort analysis using the General Social Survey (1978 – 1998). Their analysis provides some support for maturational explanations: Older adults watched a bit more than younger people, even after controlling for cohort, period, gender, and educational level, and some older people watched more than younger adults because they did not have a paid job, and to a lesser extent because of poorer health or a lower income. In sum, the simplest answer to the question why older people watch more than younger people seems to be the best answer, namely that older adults have more time available, because they do not have to go to work (p. 612).

Several authors have assumed that the social functions of television are especially important for older people, because they experience a decrease in social contacts (*e.g.* Doolittle 1979; Meyersohn 1961; Schramm 1969). They suggested that television can be a substitute for diminishing contacts (*e.g.* Bliese 1986; Graney 1974). Empirical research has shown that part of the older audience watches television for company (*e.g.* Gauntlett and Hill 1999; Haddon 2000; Rubin and Rubin 1982), sometimes in response to changes such as the loss of a spouse, but the few studies that compared older people with younger age groups did not uniformly support the idea that television viewing for company is more important for older people than for younger people (*e.g.* Mundorf and Brownell 1990; Ostman and Jeffers 1983).

Research has also shown that older adults differ from younger age-groups in their content preferences: They watch more news (*e.g.* Mares and Woodard 2006; Pew Research Center for the People and the Press 2008) and quiz shows (*e.g.* Robinson, Skill and Turner 2004) than younger people. Moreover, it has been suggested that older adults watch more gentle programmes, i.e. programmes that do not contain much violence, sex, or bad language, and that have light and pleasant themes (*e.g.* Gauntlett and Hill 1999), and that nostalgia has a special function for them (*e.g.* Gauntlett and Hill 1999). Mainly maturational explanations have been offered for these differences in content preferences. For example, some authors suggested that older people have a greater need for information than younger people because they miss the information that they received through their work or on the streets before they retired (*e.g.* Kubey 1980). In addition, cognitive stimulation has been supposed to be more important to them, because they have less intellectual stimulation in their daily lives than younger people do (Willis 1995). Older adults' content preferences have also been explained by pointing at their emotional development: Older people would be more focused on spending their time in an agreeable manner, which would lead to a heightened interest in heart-warming and uplifting content (*e.g.* Mares, Oliver and Cantor 2009). Referring to Coleman (1991), Gauntlett and Hill put forward that nostalgia has a special function for older adults, because reminiscence is important for identity development as people age.

In addition to change in television viewing, continuity can be expected too. Continuity in media use can be understood in light of generational explanations that state that experiences during socialization or during adolescence, the so called *formative years*, leave long-lasting impressions on values and attitudes, and continue to influence behaviour in later stages of life (*e.g.* Elder 1998; Peiser 1999). Therefore, generations may adopt specific patterns of media use when they are young and remain faithful to those throughout the life span (Hofmann and Schwender 2007; Mares and Woodard 2006). In their cohort analysis, Mares and Woodard (2006) found that generations who were in their childhood and teens during the spread of television, i.e. who were born in the late 1940s through the 1960s, indeed watched more television than earlier and later cohorts. Also, a few researchers who conducted qualitative studies explicitly reported continuity in older adults' television viewing. Vandebosch and Eggermont (2002) described the ways in which respondents' experiences with societal evolutions influenced their current media behaviours and attitudes, and Hajjar (1998) mentioned continuity in older people's preferences for particular television content. Using Atchley's continuity

theory, Hajjar suggested that this continuity can help people to preserve their sense of self while living in a long-term care facility. Other qualitative studies implicitly acknowledged continuity in older adults' content preferences. For example, an ethnographic study among older adults in England found that social class and moral values can have enduring effects on older adults' content preferences (Tulloch 1999).

With the current study we extend the line of qualitative studies by explicitly paying attention to both change and continuity, and by studying how older people perceive such changes and continuities in television watching. We conducted a qualitative interview study in which respondents were able to explain how they adjusted their television viewing in response to changes and developments in everyday life, and what they saw as stable in their television use. Unique for the current cohorts of older adults is that they have experience with more than 50 years of television. This extensive experience with the medium makes it possible to analyse how their earlier experiences with the medium colour their current use of television, alongside possible changes in their viewing as they age.

Method

Participants

Respondents aged 65 years and older were interviewed about their television viewing ($N = 86$). We selected people aged 65 years and over, because 65 years and above is the most common definition of the point at which "old age" begins (Kite and Wagner 2002; Thorson 2000: 1). To ensure variation in the sample, we used purposeful sampling (*e.g.* Coyne 1997; Patton 2002) based on two criteria: gender and two age categories (65-74 years and 75 years and older; the oldest interviewee was 92 years). Most of the interviewees lived independently, whereas seven interviews were held with people who lived in an old people's home or nursing home. The participants lived in different cities and villages in the Netherlands. The ongoing analysis made clear that, in addition to age and gender, differences between people living alone and people living together (*i.e.* couples) were relevant for the analysis in terms of change and continuity in viewing. Therefore, we added household composition as a third sampling criterion. Table 1 shows the composition of the sample regarding age, household composition, and gender.

Table 1
Composition of the sample

	Living alone			Living together			Total
	Men	Women	Total	Men	Women	Total	
65 – 74 years	4	13	17	10	12	22	39
75 years and older	8	21	29	9	9	18	47
Total	12	34	46	19	21	40	86

Data Collection

The interviews were conducted by the first author, and by students who were trained in a research seminar on television and ageing (in 2006 and 2007). Participants were recruited through the social networks of the interviewers. Interviews took place in the homes of the participants, and lasted between half an hour and three hours. Interviews were held in Dutch, audio-taped and transcribed verbatim.

Interviewers used an interview guide (e.g. Patton 2002). The guide contained two questions as starting points for talking about meanings of television viewing: “can you describe when your television is on, on an average day?” and “what do you like to watch on television?” The interviewers probed to learn about the reasons why respondents switched the television on, and why respondents chose particular programmes. In reaction to what the respondent said, the interviewer asked retrospective questions in order to gain insight in changes and continuity in television use: Interviewers asked “since when” or “for how long” respondents had used television in the ways they mentioned. In addition, interviewers asked whether respondents experienced changes in their television viewing when growing older. Subsequently, interviewers probed to learn how respondents experienced the changes in viewing (if any).

Analysis

We derived guidelines for the analysis from methodological literature on qualitative analysis (e.g. Charmaz 2006; Strauss and Corbin 1998; Wester and Peters 2000). The first step was open coding (Strauss and Corbin 1998; Wester and Peters 2000) or initial coding (Charmaz 2006). The first author broke the interviews down into fragments, and assigned codes to them. The computer programme Atlas.Ti was used in this phase of open coding. Interviews were read line-by-line to remain open to respondents’ formulations and to all meanings expressed. Interviewees’ experiences were coded without putting their accounts in clear-cut a priori categories.

The second step is commonly referred to as focused coding (Charmaz 2006). We made an inventory in which we noted for every interview the change in television viewing that the respondent had mentioned (if any), the related change in life (if any), and how the respondent evaluated the new role of television viewing. In this inventory, we also included the aspects of continuity that came to the fore in the interviews. Subsequently we looked for possible categorizations within this inventory.

The third step is to specify the relationships between topics, concepts or variables (Wester and Peters 2000: 160; Strauss & Corbin, 1998). To understand the relation between change and continuity in television viewing, a schematic overview was made which reported what each respondent had expressed about change as well as about continuity in viewing (the schematic overview and the inventories are shown in Author 2009).

We took four measures to assure internal validity, i.e., the extent to which the findings correctly represent the phenomenon under study. The first measure was memo-writing (e.g. Charmaz 2006). The first author wrote numerous memos during the study, which helped to detect biases and to reconstruct the data collection and analyses. The second measure was peer debriefing (e.g. Guba 1981). The three authors discussed the coding and the categorizations, and the first author discussed the findings with other researchers specialized in television and ageing. The third measure were member checks (e.g. Guba 1981). Interviewers summarized respondents’ accounts so that respondents could correct interviewers if they had misinterpreted respondents’ stories. Also, an older person read a report of the study and wrote down what she recognized and added information about her television use and that of other people she knew. The fourth measure consisted of extensive engagement with the people under study. Researchers should have a prolonged engagement at a site to test their own biases and perceptions (Guba 1981: 84). Therefore, the first author did volunteer work with older adults, conducted interviews with people who worked with older people, and established long-standing relations with a few older people.

Findings

We found that changes in television viewing could be divided in three main categories: changes in the amount of viewing in response to changes in other activities (e.g. in response to retirement); changes in television in response to a loss in the interpersonal sphere, and changes in the meanings of television content. We found that continuity occurred in the sense that for part of the sample the justmentioned changes were not present, and we saw two main categories of continuity: continuity in the status of viewing and continuity in content preferences. We made inventories for each of these main categories separately, and these inventories formed the basis for the report of findings below.

How changes in the amount of viewing were experienced

The interviewees reported that they adjusted their amount of television viewing in response to three changes in their daily activities. The first change concerned available time. Typically, respondents had more time available for television and other leisure than before, because they had to spend less time on obligations such as a paid job or the primary care for children. This increased freedom meant that more than earlier in their lives, people needed to take initiative to have meaningful activities in everyday life. However, there were also new “obligations” such as volunteer work, or taking care of grandchildren. Second, changes in physical possibilities determined which activities were possible and which were not. The sample included interviewees who had physical problems as well as people who did not have limitations. Third, interviewees mentioned changes in the need for active and/or diverse activities. Some interviewees desired more rest than before: They wished for fewer activities or less active pastimes. These three changes in daily activities led to both increases and decreases in television watching, and an increase in viewing was experienced in diverse ways (as a positive choice, as a matter of fact, or for want of something better).

More TV as a positive choice. A positive evaluation of an increase in viewing came from experiencing television viewing as a voluntary choice. Respondents experienced the increased role of television after retirement as positive when they felt that now they had the freedom to choose what they wished to do, in contrast to when they had worked. For instance, a woman (#76; 73 years) explained that when she had a job she did not switch on the television that much because she did not want to be distracted from work duties she needed to do at home (such as reading reports and preparing meetings). She said: “I am retired now and now I can nicely do what I personally find most fun and relaxing.”

Physical problems sometimes meant that respondents were less able to go out and therefore watched more television. Television viewing was one of the activities still possible for them. Respondents were satisfied with the new role of television viewing when they felt that watching television was still a choice among several activities, and when they chose television because they liked it. This can be exemplified with the following story. One of the interviewed couples spent most of their time at home, mainly because of the health condition of the man; she took care of him, which was a lot of work, and therefore she was confined to the home most of the time as well. They indicated that this was not an easy situation, but they tried to accept the situation and to keep their spirits up. In good spirits they explained how they were never bored: They liked to read, to make crossword puzzles, to work with the computer. Previously they had not been really television-minded; because of their confinement they watched more television than before. They emphasized that they chose particular programmes, and they talked enthusiastically about these. She said: “We watch a bit more nowadays; actually I do like that.” In short, even in light of limitations, some respondents experienced television viewing as a positive choice.

More TV as a matter of fact. Here, participants explained that their situation had changed, which just made it *possible* to watch more or to watch at daytime; they did not evaluate this increase as either

a gain or a loss. These interviewees signalled that retirement or the decline of social contacts resulted in more spare time and therefore they automatically watched more television. A respondent (#34, man, 67 years) explained that he had resigned from several functions in social life. He enjoyed his activities and television viewing had increased simply because he had more time available; he did not evaluate the increase as either good or bad: “You have 24 hours a day; of those 24 hours you sleep say 8 hours, so you just get more time when something else stops. You fill that time, partly with television viewing.”

More TV for want of something better. Interviewees considered the growing importance of television viewing in their lives as negative, when they felt that the activities that they had previously done were more valuable. Their current situation was unsatisfactory to them: They focused on what they had had before, what they were not able to do anymore, on what they had lost. An example was a couple who lived in a nursing home. Within their situation, that she did not like, they watched out of boredom:

When we are bored, we turn the television on. We don't go anywhere. We do not have a car anymore. So we are completely dependent on the children and they are busy too. I don't get anywhere because I have trouble walking. (...) Sometimes when we are bored, we switch it on. Because we do not have anything else to do. I can't read anymore. (...) We do have to pass it, don't we, the time. (#45, woman, 91 years)

In such cases, people felt confined to television and did not really enjoy watching.

The aforementioned changes in daily activities did not only lead to increases in viewing, but also to declines. Interviewees described how they were more busy than before, which resulted in less time available for television, or how changes in activities made television viewing a less attractive leisure activity. Both retirement, new activities or obligations led to declines in television viewing. Also, a period in which respondents watched more television because physical problems (of themselves or their partners) made them homebound was sometimes followed by a period in which they watched less television again. One respondent explained this decrease in viewing after his retirement as follows:

Since I have retired from work, I watch less television than when I did work. Maybe at that time it was a form of relaxation or distraction. Now I watch a little bit of television, because at daytime I have enough distraction in the form of cycling and walking and reading for example, so now I watch television more selectively than I did before. Back then, sometimes I was hanging in front of the television the whole evening. (#55, man, 65 years)

This citation illustrates how retirement led to new activities and a decrease in viewing, which the respondent experienced as positive.

Changes in meanings of television after a loss in the interpersonal sphere

The interviews showed three ways in which television viewing changed after a loss in the interpersonal sphere, i.e., after children left home, a divorce, or the loss of a spouse.

Television viewing in adaptation strategies. When respondents utilised television in their adaptation strategies after a loss in the interpersonal sphere, television had the following functions: television provided company, television helped to pass the time, to structure the days, and television offered distraction from sadness. Regarding television as company, the interviews showed that television brought “people” and sound inside the home. This can be especially helpful in the first period after the loss of a spouse. A woman (#12; 77 years, widowed since 17 years) explained that, in the period after her

husband had died, she watched television from early in the morning till late at night: “At that time I really had the television on in the morning just to see people.”

People (both male and female) who had fewer activities outside of the house since they were alone, and who indicated that the evenings or days seemed so long to them, used television to pass the time. A woman explained that after her husband had died she started to watch television at night for passing the time (#28; 83 years, widowed since one year). She said that previously they were busy all day and the time flew by. Now she watched television to shorten the time a little. Otherwise she would just be sitting there all night, and she figured that watching television was “kind of the only thing she could do.”

Television also helped to structure the days. New routines often had to do with dinner; respondents who were not comfortable with eating alone changed their schedule so they could eat in front of the television. Television also provided structure in other ways. This can be exemplified with a woman (#14; 73 years, widowed since 10 years) who started to watch the 8 a.m. news after her husband had died in order to bring regularity in her life. After the hectic time after his death, she had said to herself that she needed to keep regularity in her life and she should not stay in bed until she felt like getting up: “Just get up at a fixed time, quarter to eight [determined tone in her voice], eight o’clock the news and you move on like that: after that, getting dressed, eating something”. Thus, the 8 a.m. news became a starting point for her days.

Another function was that television provided distraction from sadness; in some cases particularly humorous programmes fulfilled this function. An example comes from a man (#33; 84 years, widowed since 2,5 years) who did not really like television and who did not watch much, but since his wife had died he sometimes watched particular programmes that helped him to relieve his sadness. When sadness overwhelmed him, watching particular comical series improved his mood.

Avoiding television. Television was not always helpful in dealing with the loss. On the contrary, some respondents avoided television because television did not fit in with their feelings after such loss. They felt too restless or too sensitive to watch, or television reminded them too much of shared experiences from the past. A woman (#20; 87 years, widow since one year) indicated she avoided certain content. She felt emotional because she had lost her daughter to cancer and her husband had suddenly died, so she could not listen to music anymore, nor watch particular DVD’s and movies. She also said that she did not watch soap series

anymore because they “are always hatred and malice: that does not cheer me up at all. And when you are alone, like me now, you’re very sensitive to that.”

Freedom to make individual television choices. The third change in television viewing was that interviewees who had experienced the loss of their partner had the opportunity to make individual television choices, whereas when they had lived together they had needed to attune their television behaviour. This freedom led to new television choices: Some watched more than before or new programmes (that their partner had not liked); others watched less television or did not watch programmes anymore that they had mainly watched because of their spouses’ preferences. This increased freedom to make individual television choices was sometimes explicitly experienced as a gain.

Changes in the meanings of television content

Changes in viewing that we just described led people to watch new content: Increased viewing, the use of television in adaptation strategies after a social loss or the increased room for (individual) choices led to watching new types of programmes. For instance, the woman (#12; 77 years, widowed since 17 years)

who started to watch television the whole day after her husband had died, to have “people” around her, watched so much television that she had to turn to genres that she had not watched before, such as snooker. The new types of programmes that people chose were not one specific type. For example, the use of television viewing in adaptation strategies after a loss in the interpersonal sphere included that people turned to cheerful, upbeat, and optimistic content, but other uses of television after such loss were determined more by the time of day and did not involve a specific kind of television content.

In addition to this, other changes in meanings of television content were apparent. In some cases television content came to serve new functions and thus became more important, whereas in other cases television content became less attractive or important.

Television content gained importance when it was a substitute for input that older adults had previously obtained from other activities. Television gave them information which they had previously gained from going to places themselves. Some of them saw it as negative that they had to rely on television now. For instance, a woman (#16; 89 years old) said that she was confined to television to still participate in society. She followed all kinds of current affairs and interview programmes. In the past, she had participated more actively in society, for example by serving on the board of a museum. She said it was logical that her previous, more active, engagement had been much nicer. Also, television content provided cognitive stimulation, which respondents had gained in the past from other activities. Moreover, television content was a substitute for activities previously conducted by older people themselves, such as going to church, enjoying nature, or dancing.

For some interviewees, watching television to keep the brain active became more important as they grew older. The focus on keeping the brain active appeared to come from fear of forgetfulness and fear of dementia. Troubles with remembering names or words and fear of dementia triggered their motivation to keep their brain active with the help of television. They also referred to doctors and the media who hinted at the importance for older people to train their cognitive abilities. Therefore they watched quiz shows or programs in foreign languages to test themselves and keep the brain going.

There were several reasons why certain television content became less attractive. First, changes in activities led to a decrease in the importance of particular content. Here, respondents indicated that information attained from television was less necessary in their current everyday lives than it had been in the past. A man (#1; 71 years) who was still interested in the news explained that strictly speaking the information on the news had been more necessary for him when he was working with the trade unions and needed the information for that work.

Second, growing older meant that respondents did not take things on television as seriously as they had done when they were younger. As an example: A respondent was supporter of a sports team and indicated that in the past he could get very excited when watching sports. He still watched sports, but he was less touched by it now. Because he grew older, he had more eye for the relativity of things. He felt that his family was important to him, whereas soccer may not be that essential after all:

Important to me, are my wife, my children, my grandchildren (...). And the rest is less important. I think that is a kind of development, because of my age, that I find fewer and fewer things important. (...) There are more important things in life, and that is not always soccer or sports. (#34, man, 67 years)

Third, participants pointed out that they had become more sensitive as they grew older, which led to stronger reactions to emotional television content or to avoidance of such content. A woman (#76; 73 years) said that she avoided emotional programmes, because she did not want to get so emotional

that it would touch her. She related this avoidance to growing older and to her age. In her younger years she had experienced sadness too, but now that she was older she had gone through sadness more often and more consciously, and therefore she felt more emotional.

Continuity

First it is relevant to note that continuity simply occurred in the sense that the abovementioned changes in circumstances and/or television viewing applied to only part of the sample. There were respondents who still had their paid jobs and reported that they had not changed physically, or who did encounter such changes regarding work or health but did not subsequently change their television viewing. Also, there were respondents who did not report any changes in their household composition, or who did go through such changes but did not change their viewing consequently. In addition, continuity regarding two aspects of television viewing came to the fore: continuity in the status of television viewing and continuity in content preferences.

Continuity in status of television viewing

Continuity in the status of television viewing was apparent when interviewees indicated that they had always been critical towards television viewing or when they said that they had always been enthusiastic about it. Low status of watching television meant that people considered watching (too much) television as a waste of time, which was a reason why these respondents stressed that they did not watch that much television, that they also conducted other activities, and/or that they did not watch more than before. An example came from an interviewee who explained that retirement could have led to an increase in television viewing, but that because of the low status of viewing (in his eyes) he chose other activities. He said:

When you go into retirement, you think: now I have an enormous amount of time. But it has occurred to me that I actually always have too short a time. And how is that? Because you see it coming: well, I do not have a regulated job anymore; I have to make sure I stay active. There are a great many things I have jumped into. Among others: [lists several activities]. So the whole day I have work to do. And I would also feel a bit guilty when I would watch that stupid thing [television]. Like, don't you have something more useful to do? (#69, man, 75 years)

Another example was an interviewee (#39, man, 81 years) who had severe health problems and almost did not leave the house. He said that he and his family had always looked down on television viewing. Even though he spent most of the time at home, he only watched a few particular programmes that he thought were valuable and focused on things that he appreciated more, such as reading.

Continuity in content preferences

Continuity was visible in interests in content. Respondents explicitly indicated that they had particular interests since they had been young. They said things like "it has always been in me" or "it is innate." Learning and keeping abreast were regularly mentioned in this way. In relation to watching quiz shows, respondents indicated they had always been interested in learning. Another example came from a woman (#4, 74 years) who enjoyed watching programmes in which the police asked viewers for help in solving crimes. She saw continuity in her preference for sensational programmes, and related this to her innate liking of sensation. She described how she, as a child, was standing right next to an accident: "there was a child completely run over; her whole head was open; the brains..." And she stood there and watched because she wanted to see it. For her, this incident illustrated that already at a young age she was attracted to sensation. Other respondents saw continuity in interests in particular topics, such as history, languages, or medical issues.

Some of these lifelong or decades-long interests had roots in specific events in respondents' lives. For example, playing a sport when one was young or going to matches with a parent led to a lifelong interest in that sport or a sports team, or collecting pictures of the princesses when one was a child was the start of a lifelong enthusiasm for the royal family.

Personal experiences not only led to lifelong interests, but also to lifelong aversions. Personal experiences with the Second World War led to a lifelong interest in information about the war and an interest in politics, whereas other respondents did not want to be confronted with war and violence anymore because of such experiences. Like a respondent (#45, man, 89 years) said: "In the war I was deported by the Germans. Well, I have seen so much misery and blood there that such things don't interest me anymore."

In addition to continuity in such thematic interests, continuity in preferences for specific television genres was apparent too. In some cases, these genres were still available in the current programme supply. Particularly news was a genre about which respondents related that they had "always" watched it. In other cases, the genres were not available anymore; this particularly came to the fore when respondents still wanted to see the kind of cabaret, shows or plays that were broadcast in the period, roughly, between the 1950s and 1980s.

Interestingly, continuity in content preferences remained important when people increased their viewing or when they adjusted their viewing in response to losses in the interpersonal sphere. When older adults watched more than before, they tried to find programmes in line with their previous preferences. Even respondents who had changed their television viewing drastically, such as a man (#3; 72 years) who watched television all day because he did not have other meaningful activities, and a woman (#32; 66 years) who was confined to television because of a lung disease, reported continuity in particular content preferences such as nature programmes. Also, the finding that television content is used as a substitute implies that there is continuity in interests. For instance when respondents watched church services on television as a substitute for going to services themselves, they increased their viewing and became more dependent on television, but obviously there was continuity in what they were interested in.

Discussion

The aim of our paper was to provide insight in the meanings of television in older adults' lives, by analysing change and continuity in their television viewing. The interview study shows that television has a variety of meanings as people age. The meanings of television viewing sometimes change in response to changes in everyday life, but this does not happen unidirectionally. Retirement, physical changes and changes in household composition lead to increases as well as decreases in television viewing. Watching more television is experienced in both positive and negative ways. After a loss in the interpersonal sphere, television viewing can play a valuable role in adaptation processes, but is also experienced as an activity that needs to be avoided. With regard to television content we found that some programmes gain importance when people age, whereas other programmes become less important or attractive.

These findings about the changing meanings of television are helpful in interpreting results from previous research on older adults and television viewing. Earlier in this article, we wrote that a cohort analysis (Mares and Woodard 2006) provided some support for maturational explanations: Older adults watched a bit more than younger people, even after controlling for cohort, period, gender, and educational level, and some older people watched more than younger adults because they did not have a paid job, and to a lesser extent because of poorer health or a lower income. The current qualitative study adds to these insights by describing how older people experience such increase in viewing in

various ways. Furthermore, Mares and Woodard wrote that they did find these maturational differences, but less strongly or clearly than simplistic descriptions suggest and they also reported that widowhood and other variables concerning social contacts did not have an effect on the differences between age groups in amount of television viewing. Their findings are logical in view of the variety in the current interview study: in response to retirement, physical changes and the loss of their partner, some respondents increased their viewing, whereas others diminished it.

Both the previous literature on older adults' television viewing and the current interview study show that it is easier to focus on change than on continuity. Changes in television viewing are relatively salient events in people's lives (because these changes are the visible deviation from the norm), whereas continuity in television viewing behaviour and preferences is less easily detected. However, we found that television viewing has meaning for older adults because television provides opportunities for experiencing continuity. The interviews show that some people do not change their television viewing behaviour in response to changes in their lives, and that they experience continuity in the status of viewing and in their content preferences.

Several of our findings about the meanings of television viewing are understandable in light of recent research on ageing. First, one of our findings is that an increase in viewing is experienced in contrasting ways. On the one end, television viewing is seen as a positive choice even in light of limitations; on the other end, people feel confined to television, regret the loss of activities and emphasize what they are not able to do anymore. These findings echo responses to leisure constraints that have been reported in other studies: People can accept a constraint and try not to resist it, they can even feel gratitude, whereas on the other hand they can feel frustration (Kleiber *et al.* 2008; Kleiber and Nimrod 2009). How people experience their less active life style including increased television viewing seems to depend on the extent in which they accept their limitations.

Our study also describes the ways in which television viewing is used in adaptation strategies following changes in everyday life. These findings concur with findings on how leisure serves as a coping tool (*e.g.* Hutchinson *et al.* 2003; Hutchinson *et al.* 2008; Janke, Nimrod and Kleiber 2008). Kleiber, Reel, and Hutchinson (2008) review this research and write that leisure assists in adjusting to negative life events among others by being distracting, by generating optimism and giving an emotional uplift. Similarly, our interview study shows that television offers distraction from sadness and an emotional uplift, particularly after a loss in the interpersonal sphere. In addition, Kleiber, Reel, and Hutchinson point out that leisure can serve as a coping tool by restoring aspects of the self through continuity and the resumption of familiar activities. Continuity in activities and interests has been analysed particularly in the continuity theory (Atchley 1989). A central premise of continuity theory is that, in making adaptive choices, middle-aged and older adults attempt to preserve and maintain existing internal and external structures; they use continuity as a primary adaptive strategy when dealing with changes associated with normal aging. Possibly, the continuity that older people experience in their viewing behaviour (for example watching with their spouse), status of viewing, and their content preferences functions as an adaptive strategy and a way of preserving their sense of self.

Our findings on how people use television in response to developments in everyday life also reflect the adaptation strategies selection and compensation as central in the Selective Optimization with Compensation (SOC) model (P. B. Baltes and M. B. Baltes 1990) and the model of Optimization by Selection and Compensation (Heckhausen and Schulz 1993). The interviews show that television is part of selection strategies when people choose television viewing over other activities in order to reach goals that are important to them (see also Authors, 2006). For instance, they turn to cheerful television programmes because they wish to improve their moods. We have also seen that television functions as

compensation, for example when information on television serves as a substitute for information that one previously obtained through more active participation in society.

A specific instance of selectivity in our study is that some of our participants reported that they became more sensitive as they grew older, which led to stronger reactions to emotional television content or to avoidance of such content. This is understandable in light of Cartstensen's socioemotional selectivity theory which states that optimization of emotional experience is prioritized in later life, which typically results in behaviours that feel good (*e.g.* Carstensen, Fung, Charles, 2003). Therefore it makes sense that older people seek out television content that makes them feel good and avoid contents that make them too emotional.

Now that we have discussed the findings from the interview study, we will turn to some suggestions for future research. One of the questions to be answered is how these findings apply to the use of newer media, particularly the internet. Obviously, television is only one component of a more varied mix of media that older people use and it will be worthwhile to study the similarities and differences between the meanings of television viewing and internet use. Similarities can be expected. Our study shows the ways in which television serves as a coping tool. Similarly, it has been suggested that internet use and particularly online communities are used as a tool that helps older adults to cope with stress, losses and negative events (Nimrod 2009). Both television and the internet can be a substitute when other activities diminish (*e.g.* McMellon and Schiffman 2002; Nimrod 2009; Wright 2000). Also, in alignment with our observations about continuity in older adults' content preferences, McMellon and Schiffman (2000) suggest that older people use the internet to meet their continuous needs for information, entertainment and social contact. However, for the current cohort of older adults, differences between the meanings of television viewing and internet use are expected too. This generation has known television for about 50 years, whereas internet became widespread when these adults were in their 50s and older. The effort needed to learn how to use the internet can be experienced as a hindrance, but as a benefit too. Whereas many people seem to look down on watching television, the use of internet has more status: The accomplishment of becoming internet literate can provide individuals with a sense of control (McMellon and Schiffman 2002).

A limitation of our study is that it relies on onetime interviews in which retrospective questions are asked. The interviews focused on later life, and did not aim to map out full media biographies. In order to gain more insight in both continuity and change in media use, information about media use of several generations from childhood till old age is called for. In other words, longitudinal studies that offer insight in media biographies would be useful. Also, quantitative studies are necessary to study the extent in which the aspects of change and continuity as described in the present study occur in a representative sample of the older television audience.

All in all, the interview study shows how an analysis in terms of change and continuity can shed light on the diverse meanings television viewing has as people age. The meaning of television viewing changes in response to changes in everyday life, but not as unidirectional as one may expect: Television plays a valuable part in adaptation strategies, but is also experienced as something that needs to be avoided. Furthermore, continuity in the status of television viewing and in content preferences is also part of older adults' television viewing.

Reference: [Van der Goot, M., Beentjes, J. W. J., & Van Selm, M. \(2012\). Meanings of television in older adults' lives: An analysis of change and continuity in television viewing. *Ageing & Society*, 32, 147-168. DOI:10.1017/S0144686X1100016X](#)