

# Rapportage van analyseresultaten

Richtlijnen voor studenten Communicatiewetenschap

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## *Inleiding*

Deze tekst is bedoeld voor studenten en docenten Communicatiewetenschap. De tekst geeft een overzicht over de richtlijnen voor het rapporteren van kwalitatieve en kwantitatieve onderzoeksresultaten die studenten hebben aangeleerd in de methodenvakken binnen het bachelorprogramma Communicatiewetenschap. De richtlijnen in APA6 vormen het uitgangspunt maar waar nodig, hebben we alternatieve maar gangbare rapportagewijzen ook genoemd. Studenten moeten dus minstens op deze manier hun resultaten kunnen rapporteren aan het eind van het bachelorprogramma en in het masterprogramma.

## *Informatie over het onderzoeksontwerp en de operationalisering*

Het onderzoeksontwerp verwijst zowel naar de gekozen onderzoeksmethode als naar de manier waarop de gegevens verzameld zijn. Omdat deze zaken vaak nauw samenhangen met de manier waarop de concepten meetbaar gemaakt zijn (geoperationaliseerd zijn), wordt de operationalisering hier ook behandeld.

## **Kwalitatief onderzoek**

Studenten die het vak Kwalitatief Onderzoek (Bachelor, jaar 2) met goed gevolg afgelegd hebben, kunnen diepte-interviews, focusgroepen, participerende observatie of een kwalitatieve inhoudsanalyse uitvoeren en als volgt over de gebruikte methode rapporteren:

- Onderbouw de keuze van de onderzoeksmethode:
  - Waarom is gekozen voor kwalitatief onderzoek?
  - Waarom is gekozen voor diepte-interviews, focusgroepen, participerende observatie en/of kwalitatieve inhoudsanalyse?.
- Motiveer de doelgerichte en/of theoretische steekproef.
  - Welke criteria zijn gehanteerd bij het selecteren van de onderzoekseenheden?
  - Waarom deze criteria?
  - Vermeld het aantal onderzoekseenheden per categorie. Bijv. respondenten tussen 65 en 74 jaar ( $N = 39$ ) en respondenten van 75 jaar en ouder ( $N = 47$ ).
- Beschrijf het meetinstrument. Voor diepte-interviews en focusgroepen:
  - Geef per topic: doel, introductie, initiële vraag en verloop van het doorvragen.
  - Rapporteer wie de interviewer(s) was/waren en op welke manier er sprake was van interviewtraining.
- Bespreek de analyseprocedure. Geef bij onderstaande punten concrete voorbeelden uit het onderzoek:
  - Hoe verliep het open coderen?
  - Hoe verliep het selectief coderen?
  - Hoe is gewerkt bij het ontwikkelen van het concept-indicator model?

- Welke software is gebruikt en op welke manier? In het vak Kwalitatief Onderzoek wordt gewerkt met Atlas.ti; de opleiding beschikt over een licentie die de studenten mogen gebruiken.
- Bespreek de maatregelen die zijn genomen om de validiteit en betrouwbaarheid te bevorderen. Voorbeelden: member checks, peer debriefing, thick description, schrijven van memo's.
- In de zojuist beschreven verslaglegging moet duidelijk zijn wat de sensitizing concepts waren. Het moet duidelijk zijn welke begrippen uit de literatuur richting gaven aan de dataverzameling en de analyse.

In de bijlagen:

- Een overzicht van de respondenten en/of het materiaal.
- Het gebruikte meetinstrument, bijv. de interview guide.
- Codelijsten, overzichtstabellen en memo's die inzicht geven in de analyseprocedure.

### **Kwantitatieve methoden: steekproef en operationalisering**

De rapportage over de steekproef en de beschrijving van de operationalisering van concepten in variabelen is in grote lijnen gelijk voor alle kwantitatieve methoden. Methode-specifieke details volgen verderop. Studenten die MCO/BS en het Onderzoekspracticum Survey hebben gehaald (Bachelor jaar 1) kunnen aan de volgende eisen gehouden worden.

Steekproef:

- Omschrijf de (doel)populatie:
  - Welke eigenschappen bepalen opnemings in de doelpopulatie oftewel wat is het steekproefkader?
  - Hoe is toegang tot de data verkregen of kan dit verkregen worden?
- Beschrijf de steekproefopzet (design):
  - Geef aan hoe de beoogde steekproefgrootte is bepaald.
  - Omschrijf de steekproeftrekking: random of non-random (aselect) en het soort steekproef, bijvoorbeeld een getrapte steekproef.
  - Omschrijf de omstandigheden waaronder de steekproef wordt uitgevoerd, die relevant kunnen zijn voor de resultaten.
- Beschrijf de respons (survey, experiment):
  - Rapporteer het aantal respondenten dat gecontacteerd is, het aantal (percentage) respondenten dat meewerkte, en het aantal (percentage) weigeringen. Bij een zelfselectie opzet, geef het aantal succesvolle interviews/respondenten aan.
  - Geef aan of de bereikte steekproef afwijkt van beoogde populatie, en op welke factoren (variabelen), indien bekend.
  - Indien meerdere afnamevormen zijn gebruikt, geef (non-)respons informatie per vorm.

Operationalisering van concepten naar variabelen:

- Noem elke variabele die gebruikt wordt in de analyses en beschrijf de verdeling van de variabele kort, bijvoorbeeld met een centrum- en spreidingsmaat (zie *Rapportage van een concreet resultaat*)
- Leg voor elke centrale variabele in het onderzoek uit op welk theoretisch concept zij gebaseerd is en hoe zij gemeten is.

## **Survey**

Na Onderzoekspracticum 1 Survey (Bachelor, jaar 1) kunnen studenten, in aanvulling op het bovenstaande, de volgende kenmerken rapporteren.

- Hoe de survey wordt/is afgenomen: persoonlijk interview, telefonisch, schriftelijk, internet, etc.
- Hoe de respondenten in eerste instantie gecontacteerd worden.
- Of er meerdere afnamevormen gebruikt worden in het onderzoek, bijvoorbeeld eerst telefonisch, daarna internet.
- Of en, zo ja, hoe respondenten zelf de afnamevorm kunnen bepalen.
- Optioneel: neem de volledige survey op als bijlage.

## **Kwantitatieve inhoudsanalyse**

Na het Onderzoekspracticum 2 Inhoudsanalyse (Bachelor jaar 1) weten studenten dat ze over een kwantitatieve inhoudsanalyse het volgende moeten rapporteren, in aanvulling op de hierboven aanwijzingen voor steekproef en operationalisering.

- Bij alle variabelen de intercodeurbetrouwbaarheidsscore (Krippendorffs Alpha) vermelden. Dit kan bij een laag aantal variabelen in de tekst, maar bij een groot aantal variabelen, is een tabel beter met minimaal de frequenties per categorie of het gemiddelde en de intercodeurbetrouwbaarheidsscore per variabele. Variabelen die wél gecodeerd zijn, maar niet in de analyse gebruikt, hoeven niet vermeld te worden.
- Als bepaalde variabelen niet betrouwbaar bleken in het finale databestand, kan dat eventueel in een voetnoot vermeld worden teneinde aan te geven dat er wel degelijk geprobeerd is die variabele mee te nemen.
- Bij eventuele aggregatie van informatie uit meerdere variabelen, dient deze informatie ook voor de basisvariabelen (zoals ze gecodeerd zijn) gegeven te worden.
- Ook bij variabelen die uit meerdere gecodeerde variabelen/velden bestaan zonder vastgelegde codeervolgorde (zoals maximaal 3 thema's bij een nieuwsanalyse, of een aantal vrije velden om de namen van mensen die in een film voorkomen neer te schrijven), moet de intercodeurbetrouwbaarheidstest voor de nieuwe, samengestelde variabelen gerapporteerd worden.

## **Experiment**

Na Onderzoekspracticum 3 Experiment (Bachelor, jaar 2) kunnen studenten een experiment als volgt rapporteren. Ook hier geldt dat het om een aanvulling gaat op de algemene regels voor steekproef en operationalisering. NB dit is de enige methode waar APA6 richtlijnen geeft, zie paragraaf 2.06 en Appendix tabellen 2 en 3.

- Het onderzoeksdesign: het aantal onafhankelijke variabelen, het aantal en volgorde van de metingen van de afhankelijke variabele(n).
- De manier waarop proefpersonen gerandomiseerd zijn over experimentele en controlegroepen.
- De toegepaste experimentele manipulatie.
- Indien een power-analyse is uitgevoerd: de uitkomsten van deze analyse.

## ***Rapportage van een concreet resultaat***

### **Kwalitatief onderzoek**

Studenten die het vak Kwalitatief Onderzoek (Bachelor, jaar 2) met goed gevolg afgelegd hebben, kunnen een concept-indicator model ontwikkelen. Rapportage van dit onderzoeksresultaat ziet er als volgt uit:

- Het concept-indicator model is toegevoegd als figuur of als bijlage.

- De verslaglegging bestaat uit het bespreken van het model, dat wil zeggen: het concept, de dimensies en de uiteinden worden beschreven.
- Per uiteinde worden citaten en andere concrete voorbeelden uit het empirisch materiaal gerapporteerd.
- Dimensies en uiteinden kunnen als tussenkopjes in de tekst gepresenteerd worden.

Bij het concept-indicator model en de bespreking ervan is het volgende van belang:

- Het concept-indicator model is zinvol in het licht van de onderzoeksvraag en de sensitizing concepts.
- De dimensies zijn eigenschappen waarop gevarieerd wordt ('variabelen') en de uiteinden zijn de waarden van die 'variabele'.
- De benamingen van het concept, dimensies en uiteinden zijn begrijpelijk en logisch.
- Het model is gefundeerd in de data; ieder uiteinde moet gefundeerd zijn in de data. Dit kan aangetoond worden door middel van citaten en concrete voorbeelden per uiteinde. Citaten moeten toegelicht worden en mogen niet los in de tekst worden geplakt. Het moet expliciet vermeld worden als een bepaald uiteinde niet in het empirisch materiaal aanwezig was.
- Al het empirisch materiaal m.b.t. het concept moet in het model verwerkt zijn.
- Richtlijn: een volledig model bestaat uit drie of meer dimensies; iedere dimensie heeft twee of meer uiteinden.

In bijlage 1 wordt een voorbeeld gegeven van een concept-indicator model en de verslaglegging daarvan.

In plaats van een concept-indicator model zijn er ook andere manieren om de resultaten van kwalitatief onderzoek weer te geven. Het is mogelijk dat de verslaglegging bestaat uit het rapporteren van het onderzoeksmateriaal in categorieën, thema's, typen of patronen.

Bij de bespreking van de resultaten gelden de volgende algemene uitgangspunten:

- Categorieën (thema's etc.) hebben zinvolle en duidelijke labels/benamingen.
- Categorieën zijn gefundeerd in de data. Dit wordt onder andere aangetoond door de weergave van letterlijke citaten uit interviews, focusgroepen, veld aantekeningen of mediamateriaal. Er wordt steeds vermeld hoe de citaten gelezen moeten worden en wat er precies in naar voren komt.
- De bespreking volgt een logische structuur.
- Kwantificerend taalgebruik wordt vermeden.

### **Kwantitatief onderzoek**

Studenten die MCO/BS (Bachelor jaar 1) en Inferentiële Statistiek (Bachelor jaar 2) hebben afgerond, zijn bekend met de richtlijnen die in deze paragraaf worden samengevat. Nadere informatie over elke statistische techniek kan gevonden worden in de digitale werkboeken van deze vakken:

<http://www.mco.edu.fmg.uva.nl/mcoi/werkboek.htm> en

<http://www.mco.edu.fmg.uva.nl/is/werkboek.htm>.

- Om de lezer duidelijk te maken wat het onderwerp van het onderzoek is, moet in een interpretatie altijd duidelijk vermeld worden:
  - de onderzoekseenheden: proefpersonen, respondenten, subjecten, et cetera,
  - de variabelen of categorieën.
 Voorbeeld: "We hebben het gemiddelde internetgebruik vergeleken tussen leerlingen in drie vormen van voortgezet onderwijs in Nederland."

Leerlingen in het voortgezet onderwijs in Nederland zijn hier de onderzoekseenheden. Internetgebruik en drie vormen van voortgezet onderwijs zijn hier de variabelen.

- Gebruik  $N$  voor het totaal aantal onderzoekseenheden en  $n$  voor de omvang van een subgroep (APA 6: Table 4.5). Het is echter ook gangbaar om  $N$  te gebruiken voor de omvang van een subgroep.
- Gebruik nooit percentages wanneer het totaal waarop gepercenteerd is, kleiner is dan 20.
- Rapporteer resultaten altijd met 2 decimalen, behalve overschrijdingskansen ( $p$ -waarden) die altijd met 3 decimalen worden gerapporteerd (APA 6: 4.35).
- Gebruik in Nederlandse teksten een komma als decimaalscheider en laat deze *altijd* vooraf gaan door een 0, dus ook wanneer de waarde tussen 1 en -1 ligt. In een Engelstalige tekst gebruik je een punt als decimaalscheider en deze wordt *niet* vooraf gaan door een 0 wanneer de waarde alleen tussen 1 en -1 kan liggen. Je gebruikt in het Engels een komma om duizendtallen te onderscheiden, bijvoorbeeld 10,000 voor tienduizend.
- Cursivering: Statistische symbolen (ook wanneer het afkortingen zijn, bijv.  $SD$ ) en variabelen moeten cursief (APA 6: 4.21). Niet cursief: subschriften en Griekse letters (APA 6: 4.21) en afkortingen.
- Tabellen en grafieken moeten altijd voorzien zijn van een kop waarmee de tabel of grafiek begrepen kan worden zonder dat de omringende tekst gelezen hoeft te worden.
- Een toelichtende noot bij een tabel beginnen met *Note.* of *Noot.* (APA 6: 5.16).

Presenteer geen tabellen of grafieken die in de tekst niet geïnterpreteerd worden.

Toetsresultaten worden bij voorkeur in tabellen samengevoegd en gepresenteerd. Output van SPSS levert het ruwe basismateriaal voor ene tabel, dat met de hand bewerkt moet worden. Alleen wanneer een toetsresultaat in een enkele zin gepresenteerd kan worden, wordt er geen tabel gebruikt. Dan moet je je wel houden aan de richtlijnen van APA6:

- Vrijheidsgraden staan tussen haakjes direct achter de toetsingsgrootte (APA 6: 4.09).
- Indien mogelijk: exacte  $p$ -waarden i.p.v. significantieniveaus (APA 6: 4.35, 5.16), ook voor niet-significante resultaten. Uitzondering: kansen kleiner dan 0,1% noteren als  $p < 0,001$  (APA 6: 4.35).
- Het betrouwbaarheidsinterval vermelden waar mogelijk: 95% CI [<ondergrens>, <bovengrens>] (APA 6: 4.44).
- Vermeld de toetsingsgrootte, de vrijheidsgraden, de overschrijdingskans en indien van toepassing het betrouwbaarheidsinterval in een bijzin en niet tussen haakjes (APA 6: 4.09).
- Maar 'losse'  $p$ -waarden wel tussen haakjes zetten (APA 6: 4.09).

Voorbeeld: "Jongens scoren significant hoger ( $M = 3,41$ ,  $SD = 2,01$ ) op de sociale gratificatieschaal dan meisjes ( $M = 4,16$ ,  $SD = 1,82$ ),  $t(56) = 2,10$ ,  $p = 0,020$ , 95% CI [-1,38, -0,12]."

### **Statistiek: een centrum- en spreidingsmaat presenteren**

Een algemene regel is dat je bij elke centrummaat die je presenteert ook een bijpassende spreidingsmaat rapporteert, indien die beschikbaar is. Wanneer je een centrum- of spreidingsmaat niet noemt binnen de zin, vermeld je deze tussen haakjes.

Voorbeeld: "Jongens scoren gemiddeld 3,41 ( $SD = 2,01$ ) op de sociale gratificatieschaal. Dit is lager dan meisjes ( $M = 4,16$ ,  $SD = 1,82$ )."

Naam	Centrum		Naam	Spreiding	
	Symbool	Interpretatie		Symbool	Interpretatie
modus	<i>Mo</i>	meest voorkomende waarde	-	-	
mediaan	<i>Mdn</i>	middelste waarde	interkwartielafstand	-	middelste helft van de waarnemingen
rekenkundig gemiddelde	$M, \bar{X}$	gemiddeld	standaarddeviatie	<i>SD, s</i>	gemiddelde afwijking ten opzichte van het rekenkundig gemiddelde
			variantie	$s^2$	

### Statistiek: een associatiemaat presenteren

Geef bij een associatiemaat, waar mogelijk, in woorden weer wat de sterkte van het verband is en de richting of inhoud (combinaties van scores die opvallend veel of weinig samen voorkomen). Vuistregels voor de sterkte van een verband (absolute waarden):

- 0 – 0,10 zeer zwak/geen verband;
- 0,11 – 0,30 zwak verband;
- 0,31 – 0,50 redelijk verband;
- 0,51 – 0,80 sterk verband;
- 0,81 – 0,99 zeer sterk verband;
- 1 perfect verband.

Wanneer een toetsingsgrootte, vrijheidsgraden of een overschrijdingskans bekend zijn, deze vermelden.

Voorbeeld: “Er is een significante, redelijk sterke negatieve correlatie tussen de intensiteit waarmee Nederlanders naar het nieuws op tv kijken en hun score op een schaal voor politiek cynisme: hoe intensiever men tv-nieuws kijkt, des te minder politiek cynisme,  $r = -0,45, p = 0,003$ .”

Associatiemaat	Symbool	Interpretatie
Percentages	%	
Cramers V	<i>V</i>	geef aan welke combinaties van waarden relatief vaak of relatief weinig voorkomen
Phi		
Fisher exact		
Goodman & Kruskals tau		voor ..% beter voorspellen wanneer we rekening houden met ..
Lambda		
Gamma		
Kendalls tau-b		
Spearman's rangcorrelatiecoëfficiënt	$r_s$	naarmate ... neemt .... toe/af
Rho		
Somers' d		
Productmoment correlatiecoëfficiënt <i>r</i>	<i>r</i>	
Eta-kwadraat		proportie verklaarde variantie; bespreek de gemiddelde scores van de groepen

### Statistiek: een schaalanalyse presenteren

- Vermeld het soort factoranalyse: dit is altijd principale componenten factoranalyse (PCA).

- Vermeld het aantal geselecteerde componenten (factoren) met het selectie criterium (eigenwaarde, scree plot) dat gebruikt is en het totale percentage verklaarde variantie.
- Vermeld het soort rotatie wanneer er twee of meer componenten geselecteerd worden: dit is normaliter orthogonale (Varimax) rotatie.
- De tabel met (geroteerde) componentladingen.
- De betrouwbaarheid van elke (deel)schaal: Cronbach's alfa en of de betrouwbaarheid van de schaal verbeterd is door items weg te laten.  
Vuistregel: Als alfa kleiner is dan 0,60 vinden we de schaal onbetrouwbaar; van 0,60 tot en met 0,80 is de schaal redelijk betrouwbaar, maar als alfa groter is dan 0,80 hebben we een goede betrouwbare schaal.
- De benoeming van de factoren: jouw interpretatie van de dimensies of constructen die de factoren vertegenwoordigen. Kijk naar de items die hoog (positief of negatief) laden op een factor (bijvoorbeeld minstens 0,45) en de oorspronkelijke antwoordschalen van deze items.

Voorbeeld: "Een principale componenten analyse (PCA) geeft aan dat de 8 items samen een eendimensionale schaal vormen: maar één component heeft een eigenwaarde boven de 1 (eigenwaarde is 5,37) en er is een duidelijke knik na deze component in het scree plot. Alle items hangen positief samen met de eerste component, waarbij de variabele *Interesse in landelijke politiek* de hoogste samenhang heeft (componentlading is 0,90). De schaal is goed betrouwbaar, Cronbach's alfa = 0,82. De schaal lijkt dus de interesse in politiek of politieke betrokkenheid te meten. Wanneer we naar de oorspronkelijke variabelen kijken, zien we dat een hoge score op de items juist een lage interesse weergeven. De schaal meet dus geen politieke interesse, maar politieke desinteresse: hoe hoger de schaalscore, des te hoger de politieke desinteresse van de respondent."

### **Statistiek: een toets op 1 of 2 gemiddelden presenteren**

Voor toetsen op 1 of 2 gemiddelden ( $z$ -toetsen of  $t$ -toetsen) gelden de algemene regels voor het presenteren van resultaten. Een voorbeeld van de interpretatie van een  $t$ -toets voor twee onafhankelijke steekproeven staat daar.

Vermeld het wanneer niet voldaan is aan de voorwaarden van de  $t$ -toets: wanneer minstens een van de groepen 30 of minder waarnemingen bevat en tegelijk niet bekend is dat de variabele in de populatie normaal verdeeld is.

Een voorbeeld van een  $t$ -toets op één gemiddelde wanneer het toetsresultaat niet in een tabel is samengevat: "De gemiddelde leeftijd van de respondenten in de steekproef ( $M = 36,25$ ,  $SD = 16,04$ ) ligt met 95% zekerheid tussen 35,45 en 37,05 jaar. Dit wijkt niet significant af van de gemiddelde leeftijd van volwassen Nederlanders in 2006 (36,8 jaar),  $t(1550) = -1,35$ ;  $p = 0,177$ , 95%  $CI [35,45, 37,05]$ ."

### **Statistiek: een variantieanalyse presenteren**

- Wanneer je de resultaten van de variantieanalyse als tabel wilt tonen, gebruik je de samenvattende tabel met de kwadratensommen, vrijheidsgraden, gemiddelde kwadraten,  $F$ -waarden en de overschrijdingskansen.
- Vermeld het soort variantieanalyse dat je hebt uitgevoerd: eenwegs-variantieanalyse (ANOVA, one-way analysis of variance), tweewegs-variantieanalyse (two-way analysis of variance), meerwegs-variantieanalyse.
- Vermeld het wanneer de groepen niet ongeveer even groot zijn en we *niet* mogen uitgaan van gelijke varianties in de populatie op grond van Levene's  $F$ -toets.

- Vermeld het toetsresultaat voor elk effect:  $F$  (df1, df2) en  $p$ . Let op, je vermeldt twee vrijheidsgraden: eerst die van de teller (tussen groepen), dan die van de noemer (binnen groepen, fouten).
- Vermeld bij elk significant effect de gemiddelde scores van de groepen (met de standaarddeviaties) en de sterkte van het effect (zwak, matig, sterk). NB alle gemiddelden en standaardafwijkingen kunnen natuurlijk goed in een tabel gepresenteerd worden. Geef in de interpretatie in ieder geval aan welke groep hoger scoort.
- Wanneer een post-hoc toets is uitgevoerd, vermeld je tussen welke groepsgemiddelden er significante verschillen gevonden zijn. Vermeld zowel het gemiddelde verschil ( $M_{\text{verschil}}$ ) als de bijbehorende overschrijdingskans ( $p$ ).

Voorbeeld van een rapportage zonder tabellen: “De proefpersonen die de voorlichtingsfilm niet gezien hadden, hebben de minst negatieve houding ten aanzien van roken ( $M = -0,76$ ,  $SD = 1,00$ ) terwijl degenen die de film vaak hebben gezien de meest negatieve houding hebben ( $M = -3,06$ ,  $SD = 1,69$ ). De proefpersonen die de voorlichting soms zagen, scoren hier tussen in ( $M = -1,42$ ,  $SD = 1,20$ ). Vrouwen ( $M = -1,82$ ,  $SD = 1,42$ ) en mannen ( $M = -1,66$ ,  $SD = 1,36$ ) lijken vrijwel dezelfde houding ten aanzien van roken te hebben.

Er is een tweefactor-variantieanalyse uitgevoerd waarbij we effecten van het zien van de voorlichtingsfilm hebben onderzocht in samenhang met de effecten van sekse. We vonden bij de proefpersonen een significant, matig effect van het zien van de voorlichtingsfilm op hun houding ten aanzien van roken,  $F(2, 93) = 31,24$ ,  $p < 0,001$ ,  $\eta^2 = 0,35$ , maar geen significant effect van sekse,  $F(1, 93) = 0,60$ ,  $p = 0,442$ ,  $\eta^2 = 0,00$ . Uit een post-hoc meervoudige-vergelijkingentoets blijkt dat alleen het verschil tussen de proefpersonen die de voorlichting vaak zagen en de proefpersonen die deze niet ( $M_{\text{verschil}} = -2,30$ ,  $p < 0,001$ ) of soms ( $M_{\text{verschil}} = -1,64$ ,  $p < 0,001$ ) zagen significant is. Er is geen significant verschil tussen de proefpersonen die de voorlichting niet of soms zagen.

Verder bleek er een significant maar zwak interactie-effect te zijn tussen sekse en het zien van de voorlichtingsfilm,  $F(2, 93) = 11,58$ ,  $p < 0,001$ ,  $\eta^2 = 0,13$ . Bij vrouwen is de houding t.a.v. roken duidelijk negatiever bij het vaak zien van de voorlichtingsfilm dan bij mannen,  $M_{\text{verschil}} = -1,82$ ,  $p < 0,001$ . Wanneer zij de voorlichtingsfilm niet gezien hebben, score vrouwen daarentegen minder negatief ten aanzien van roken dan mannen,  $M_{\text{verschil}} = -0,86$ ,  $p = 0,043$ .

We moeten er overigens rekening mee houden dat de assumptie van gelijke varianties in de populatie geschonden is, Levene’s  $F(5, 90) = 2,67$ ,  $p = 0,027$ .”

Voorbeeld van een rapportage met tabellen:

**Tabel 1**  
*Houding ten aanzien van roken*

	n	M	SD
Exposure			
Voorlichtingsfilm niet gezien	33	-0,76	1,00
Voorlichtingsfilm soms gezien	33	-1,42	1,20
Voorlichtingsfilm vaak gezien	33	-3,05	1,69
Geslacht			
Vrouwen	50	-1,82	1,42
Mannen	49	-1,66	1,36



**Tabel 2**  
*Resultaten van de tweewegs-variantieanalyse*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
Exposure	90,97	2	45,48	31,24	< 0,001	0,35
Geslacht	0,87	1	0,87	0,60	0,442	0,00
Exposure * Geslacht	33,72	2	16,86	11,58	< 0,001	0,13
Fout	135,41	93	1,46			
Totaal	262,67	98				

Noot. N= 99.

“Er is een tweefactor-variantieanalyse uitgevoerd waarbij we effecten van het zien van de voorlichtingsfilm hebben onderzocht in samenhang met de effecten van sekse. We vonden bij de proefpersonen een significant, matig effect van het zien van de voorlichtingsfilm op hun houding ten aanzien van roken, maar geen significant effect van sekse. Uit een post-hoc meervoudige-vergelijkingentoets blijkt dat alleen het verschil tussen de proefpersonen die de voorlichting vaak zagen en de proefpersonen die deze niet ( $M_{\text{verschil}} = -2,30, p < 0,001$ ) of soms ( $M_{\text{verschil}} = -1,64, p < 0,001$ ) zagen significant is. Er is geen significant verschil tussen de proefpersonen die de voorlichting niet of soms zagen.

Verder bleek er een significant maar zwak interactie-effect te zijn tussen sekse en het zien van de voorlichtingsfilm. Bij vrouwen is de houding t.a.v. roken duidelijk negatiever bij het vaak zien van de voorlichtingsfilm dan bij mannen,  $M_{\text{verschil}} = -1,82, p < 0,001$ .

Wanneer zij de voorlichtingsfilm niet gezien hebben, score vrouwen daarentegen minder negatief ten aanzien van roken dan mannen,  $M_{\text{verschil}} = -0,86, p = 0,043$ .

We moeten er overigens rekening mee houden dat de assumptie van gelijke varianties in de populatie geschonden is, Levene's  $F(5, 90) = 2,67, p = 0,027$ .”

NB de resultaten van de meervoudige vergelijkingen kunnen eventueel ook als tabel gepresenteerd worden.

### Statistiek: een regressieanalyse presenteren

- Rapporteer de waarde van de toetsingsgrootte ( $F$ ), het aantal vrijheidsgraden en de overschrijdingskans van het regressiemodel.
- Als er een significant model is, beoordeel hoe goed het model past met de determinatiecoëfficiënt ( $R^2$ ): de proportie verklaarde variantie.
- Als er een significant model is, bespreek de ongestandaardiseerde regressiecoëfficiënten (met het teken  $b$  en het 95% betrouwbaarheidsinterval) of gestandaardiseerde regressiecoëfficiënten, de  $t$ -waarde en overschrijdingskans van deze coëfficiënten.
  - De ongestandaardiseerde regressiecoëfficiënten geven de voorspelde toename van de afhankelijke variabele wanneer de onafhankelijke variabele één (punt) hoger wordt maar de overige onafhankelijke variabelen niet veranderen.  
NB de ongestandaardiseerde regressiecoëfficiënt van een dichotomie of dummyvariabele (gemeten met 0 en 1) geeft aan hoeveel de 1-categorie gemiddeld hoger of lager scoort dan de 0-categorie maar de overige onafhankelijke variabelen niet veranderen.
  - De gestandaardiseerde regressiecoëfficiënten geven de sterkte van het partiële effect/het effect gecontroleerd voor/onder constant houding van alle andere onafhankelijke variabelen/predictoren.
  - Volgens APA6 moet de gestandaardiseerde regressiecoëfficiënt aangeduid worden met  $b^*$  en niet  $\beta$  of  $Beta$  (APA 6: Tabel 4.5). De laatste twee mogelijkheden zijn minder wenselijk maar worden wel geaccepteerd binnen CW.
  - Pas op dat je de significante effecten niet causaal interpreteert: er zou een causaal verband kunnen zijn, maar dat hoeft niet.

- Vermeld het wanneer de residuen duidelijk niet normaal verdeeld zijn en duidelijk niet wijzen op homoscedasticiteit. (Pas relevant na *Inferentiële Statistiek*.)

Voorbeeld: "Het regressiemodel met het aantal malen dat Nederlanders de krant lezen als afhankelijke variabele en de leeftijd, sekse, het politiek wantrouwen en de frequentie dat men internet gebruikt als onafhankelijke variabelen is significant,  $F(4, 1541) = 131,37$ ,  $p < 0,001$ . Het regressiemodel is dus bruikbaar om de leesfrequentie van kranten bij Nederlanders te voorspellen, maar de voorspelling is qua sterkte matig: 25 procent van de verschillen in leesfrequentie kunnen voorspeld worden op grond van de leeftijd, sekse, het politiek wantrouwen en internetgebruik ( $R^2 = 0,25$ ). Leeftijd,  $b^* = 0,38$ ,  $t = 14,45$ ,  $p < 0,001$ , 95% CI [0,03, 0,04], sekse,  $b^* = 0,27$ ,  $t = 2,36$ ,  $p < 0,05$ , 95% CI [0,60, 0,83], en politiek wantrouwen,  $b^* = -0,21$ ,  $t = -9,33$ ,  $p < 0,001$ , 95% CI [-0,04, -0,03], hebben een significante, matig sterke samenhang met leesfrequentie, terwijl internetgebruik een zwak verband heeft,  $b^* = 0,08$ ,  $t = 2,93$ ,  $p = 0,003$ , 95% CI [0,02, 0,12]. Per leeftijdsjaar neemt de geschatte leesfrequentie met 0,03 toe. Mannen lezen gemiddeld 0,71 vaker de krant dan vrouwen. Met elke punt extra op de schaal voor politiek wantrouwen, die loopt van 6 (helemaal geen wantrouwen) tot 52 (zeer veel wantrouwen), leest men gemiddeld de krant 0,04 minder. Tenslotte hangt 1 punt extra internetgebruik samen met 0,07 extra de krant lezen. Bij al deze effecten wordt ervan uitgegaan dat de overige onafhankelijke variabelen constant worden gehouden."

Zeker wanneer er verschillende regressiemodellen gepresenteerd worden, is het beter om de cijfermatige resultaten in een tabel te presenteren (zie APA6, Table 5.12). We adviseren een tabel met een kolom voor elk model en met, per model, de ongestandaardiseerde of gestandaardiseerde regressiecoëfficiënten voor de constante en voor alle onafhankelijke variabelen,  $R^2$  en eventueel de  $F$ -waarde. Naar wens kan de standaardfout (SE) of het betrouwbaarheidsinterval toegevoegd worden aan de regressiecoëfficiënten. Wanneer het aantal waarnemingen verschilt tussen de modellen, geef je deze informatie ook in de tabel. Anders is het beter om dit getal in de kop of in de noot van de tabel te zetten. Wanneer je toetsen op het verschil in  $R^2$  hebt uitgevoerd, voeg je die toe. In de tabel zet je geen toetsresultaten; je geeft de significantieniveaus aan met sterretjes.

Tabel 3 toont een voorbeeld waarin twee verschillende regressiemodellen gepresenteerd en vergeleken worden. De onderste drie rijen in deze tabel zijn optioneel.

**Tabel 3**  
*Regressiemodellen om de frequentie van het krantenlezen te voorspellen*

	Frequentie krant lezen	
	Model 1 $b^*$	Model 2 $b^*$
Constante	5,42**	5,34***
Leeftijd	0,38***	0,38***
Sexe	0,27*	0,27*
Politiek wantrouwen	-0,21***	-0,21***
Gebruik internet		0,08**
$R^2$	0,21	0,25
$F$	121,45***	131,37***
$\Delta R^2$		0,04
$\Delta F$		9,92***

Noot.  $N = 342$ .

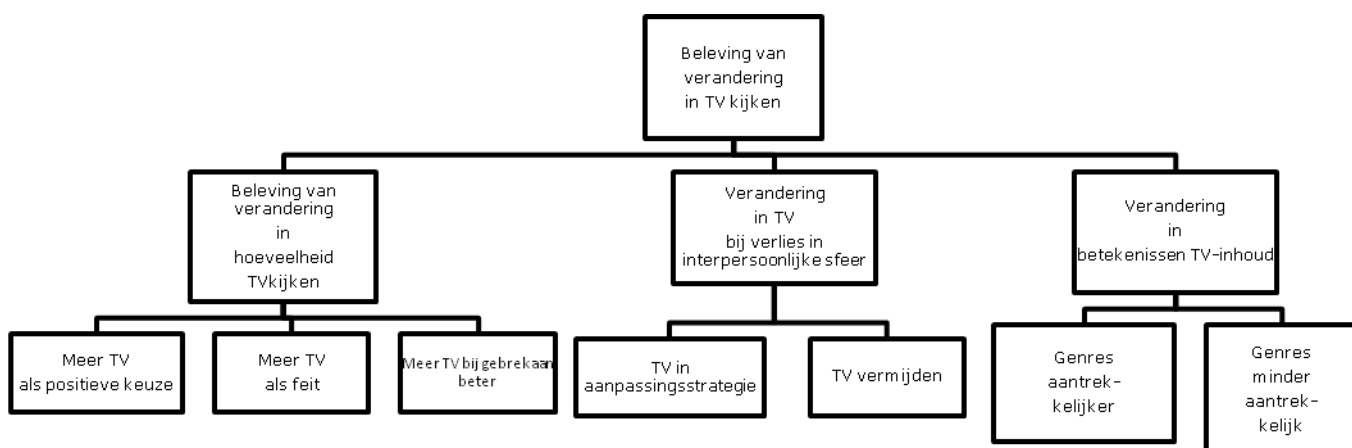
\*  $p < 0,05$ . \*\*  $p < 0,01$ . \*\*\*  $p < 0,001$ .

## Bijlage 1. Rapporteren van kwalitatief onderzoek met behulp van een concept-indicator model

Voorbeeldonderzoek “Betekenis van televisie in het leven van ouderen”

Hier een toelichting bij het artikel dat hieronder staat weergegeven.

- Doel onderzoek: inzicht in betekenis van televisiekijken in het leven van ouderen. Dit wordt onderzocht door te analyseren hoe ouderen verandering en continuïteit in televisiekijken beleven.
- Sensitizing concepts: verandering en continuïteit in televisiekijken. Het theoretisch kader van het onderzoek bestaat daarom uit het bespreken van wat er al bekend is over verandering en continuïteit in televisiekijken.
- Methodesectie is een beknopte versie van de gewenste onderdelen.
- Resultaten. Het ontwikkelde concept-indicator model voor de beleving van verandering in televisiekijken ziet er als volgt uit:



- Het verslag van de resultaten m.b.t. de beleving van de veranderingen in televisiekijken is een bespreking van dit model (zonder dat dit model in het artikel getoond wordt). De tussenkopjes zijn de dimensies en de uiteinden.

### 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.* Jerome 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.

< Insert Table 1 about here >

### *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.

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

Referentie: 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