

Appendix A. Development and pilot testing of vignettes and manipulations

Step 1: A clinician provided feedback to ensure that the shortened and adapted version of the original script was still clinically correct. Based on the feedback, the script was abbreviated further to create the shortest-possible script, while keeping it clinically accurate.

Step 2: A new version was assessed by communication science and medical communication experts, as well as another clinician (N = 4) to assess manipulation success. Based on the feedback, the differences between the conditions were made more pronounced. In addition, some quotes from the original paper describing the communication approaches¹ were added to the manipulations.

Step 3: The scripts were pilot-tested for manipulation success with cancer-naïve individuals; a generic public found through the first author's LinkedIn page (N=24). Participants were randomly exposed to two of the four written conditions (in a random order, creating 12 order options). Based on pilot-test results, the Resistance version was modified to make the clinician's communication more resistant to the patient's online seeking behavior, without coming across as rude. Moreover, the Repairing version was differentiated more clearly from Resistance, using quotes from the original article¹.

Step 4: Pilot videos were recorded of the two most extreme versions (Resistance and Enhancement) to test realism and participant engagement. The two videos were pilot-tested with 10 APs from PanelCom. APs were randomly exposed to one of the two versions, resulting in five APs per condition. A check on realism indicated that both versions were perceived as realistic (Resistance: M = 4.20, SD = 0.72; Enhancement: M = 3.95, SD = 0.72, on a 5-point scale; $t(8) = 0.55$, $p = .596$). Engagement scores were acceptable (Resistance: M = 3.65, SD = 0.83; Enhancement: M = 3.29, SD = 0.44) on a 5-point scale.

A remark from the pilot-test was the importance of having a family member join the patient during the consultation, creating a more realistic setting. Therefore, we chose to have a female actor join as the patient's daughter.

Step 5: The scripts were adapted and finalized based on the pilot-test results. The finalized scripts were recorded and edited by a professional production agency. To keep it as close as possible to a realistic consultation, an experienced clinician played the clinician. A professional female actor played the patient and a young colleague from the Medical Psychology department played the patient's daughter. The scripts were slightly adapted, to accommodate for the natural way of speech of the actors, without changing the content. The video lengths ranged between 7:12 (Resistance) and 7:54 minutes (Enhancement).

1. Caiata-Zufferey M, Schulz PJ. Physicians' communicative strategies in interacting with Internet-informed patients: results from a qualitative study. *Health Commun* 2012; 27:738-749. 10.1080/10410236.2011.636478.

Appendix B. Overview of communication approaches and examples of manipulations

Overarching communication approach	Clinician-centered		Patient-centered	
Communication approach	Resistance	Repairing	Co-Construction	Enhancement
General overview	Clinician is overall resistant to online information introduced by patient. The patient's only source of information should be the clinician.	Clinician believes that searching information online is inherently wrong because information is not reliable, but is aware that patients search information online. The clinician's role is to 'repair' the wrong information found online.	Clinician and patient communication is bi-directional. Clinician's goal is to create a shared reality in which the patient can introduce information found online. Clinician encourages searching information online and discussing this.	Clinician encourages the patient to search information online and empowers them by helping to differentiate between high and low quality online information.
Examples of manipulated clinician reactions per condition				
Patient mentions searching for online health information: 'I've been thinking about it a lot, of course. I even looked up information online'	<i>The clinician looks doubtful and responds: 'Well Ms. Bertens, you'd better not look up this kind of information online. There are a lot of contradictory things and also nonsense on the internet. Forget what you have read, I will tell you the most important things today.'</i>	<i>The clinician looks doubtful and responds: 'Well Ms Bertens, it is generally better if you get this sort of information from me. There is some conflicting information online. I will tell you the most important things today.'</i>	<i>The clinician asks: 'O, what have you read?'</i>	<i>The clinician nods enthusiastically and asks: 'Good that you have already searched for information online. What information did you read?'</i>
Patient brings up specific information found online: 'I read something about a scan?'	<i>The clinician does not seem to hear the question, and continues her story: 'After the third course of treatment, we will take a CT scan to see if the treatment is working.'</i>	<i>The clinician replies: 'There are many types of scans. That is something they do not always mention online. What we do here is a CT scan. I think that's what you mean.'</i>	<i>The clinician nods and replies encouragingly: 'Yes, that's right, a CT scan. After the third course of treatment, we do a CT scan to see if the treatment is working.'</i>	<i>The clinician nods and replies encouragingly: 'Yes, that's right, a CT scan. You read that correctly. After the third course of treatment, we will do a CT scan to see if the treatment is working.'</i>
Concluding the conversation (main take-home message the clinician gives to the patient)	<i>'Coming back to the information you looked up on the internet, online information is often inaccurate and confusing. I wouldn't spend too much time on the internet, if I were you.'</i>	<i>'Coming back to the information you looked up on the internet: you have done that before, but it is difficult to find reliable information that applies to your situation. It is better if a specialist explains it to you rather than the internet.'</i>	<i>'Coming back to the information you looked up on the internet: very good that you did so before this appointment. You can find a lot of additional information online. Should you have any questions or doubts about what you find online at a later stage, we can revisit this in the next appointment.'</i>	<i>'Coming back to the information you looked up on the internet: very good that you visited kanker.nl [often used Dutch website with information about cancer]. That's a reliable website. Besides kanker.nl, there is also the website Hematon, which belongs to the hematology patient association. Personal blogs or forums are less reliable.' Patient nods, clinician smiles and continues: 'If you still have questions or doubts about the information you read online, we can revisit this at the next appointment.'</i>

Appendix C. Vignette script with all manipulations throughout the script

Introduction, voice-over:

U gaat straks kijken naar een gesprek tussen patiënt Monique Bertens en een hematoloog, een arts die gespecialiseerd is in de diagnose en behandeling van afwijkingen van het bloed en de lymfeklieren. Probeer u zich voor te stellen dat u de patiënt in dit gesprek bent. Hoe zou u zich voelen, als u in haar schoenen zou staan?

You are about to watch a conversation between the patient Monique Bertens, and a hematologist, which is a clinician who specializes in the diagnosis and treatment of abnormalities of the blood and lymph nodes. Try to imagine that you are the patient in this conversation. How would you feel if you were walking in her shoes?

[beelden van patiënt en dochter lopend naar de wachtkamer, zittend (ongeduldig, angstig) in de wachtkamer, plaatje van kanker.nl, opstaan en lopend naar de afspraak wanneer ze 'geroepen' wordt]

[images are shown of the patient and her daughter walking to the waiting room, taking a seat and waiting (impatiently, anxious), followed by an 'over-the-shoulder camera angle, which shows the patient looking up online information on www.kanker.nl, Once the patient is called in, she and her daughter are getting up and walk toward the examination room]

Introduction, voice-over patient while images described above are shown:

Ik ben Monique Bertens. Ik ben 50 jaar oud en een paar weken geleden voelde ik plotseling een knobbeltje in mijn hals. Ik was bezorgd en op aandringen van mijn man ben ik naar de huisarts gegaan. De huisarts stuurde mij door naar de KNO-arts voor verder onderzoek. Een week later kwam de uitslag: Er waren kwaadaardige cellen gevonden. Toen begon het hele traject eigenlijk pas. Ik werd doorverwezen naar de hematoloog. In het ziekenhuis is er toen een beenmergpunctie gedaan en een PET/CT-scan gemaakt. En toen kwam de klap pas echt, de diagnose: lymfklierkanker, stadium III. Het zit dus op verschillende plekken. Dan stort je wereld in. De hematoloog heeft me verteld dat de kanker behandeld kan worden. Vandaag gaat ze me meer vertellen over de behandeling en wat ik precies kan verwachten. Gelukkig is mijn dochter er ook vandaag bij.

Om me voor te bereiden heb ik online, op de website van kanker.nl, wat informatie opgezocht over de mogelijke behandelingen. Ik las dat het te behandelen is met chemotherapie. Ik ben blij dat het behandeld kan worden, maar hoop dat het ook in mijn geval kan. Ik vind het best wel spannend eigenlijk. Ik las online ook wat enge dingen over bijwerkingen van chemotherapie. Bijvoorbeeld dat ik af zal vallen. En nog erger, dat mijn haar uit zal vallen! Ik hoop deze informatie vandaag te kunnen bespreken met de arts. Volgens mij ben ik zo aan de beurt!

My name is Monique Bertens. I am 50 years old and a few weeks ago I suddenly felt a lump in my throat. I was worried and after my husband insisted, I went to my GP. The GP sent me to a head and neck specialist for more tests. A week later, we got the results: Malignant cells had been found. That's when the whole trajectory actually started. I was referred to a hematologist at the hospital. They did a bone marrow puncture and a PET/CT scan. The diagnosis came as a shock: lymphoma, stage III, which means it had already spread into several places. Your world collapses. The hematologist told me that the cancer can be treated. Today she is going to tell me more about the treatment and what I can expect. Fortunately, my daughter is also here today.

To prepare myself, I looked up some information online on the website www.kanker.nl about possible treatment options. I read that my lymphoma is treatable with chemotherapy. I'm glad it can be treated, but I hope this also applies to my situation. I'm quite nervous actually. I also read some scary things online about the side effects of chemotherapy. For example, that I will lose weight. And even worse, that my hair will fall out! I hope to discuss this information with the clinician today. I think it is my turn now!

[Arts zit in de kamer, patiënt en dochter lopen binnen en gaan zitten]

[hematologist sits in the examination room, patient and daughter enter and sit down]

D	Zo, goedemorgen mevrouw Bertens <i>Well, good morning Mrs. Bertens</i>
P	Goedemorgen <i>Good morning</i>
D	Vertel, hoe gaat het met u? <i>Tell me, how are you?</i>
P	Nou, het heeft er wel ingehakt, hoor. Maar goed naar omstandigheden gaat het wel redelijk hoor. Ik heb gelukkig thuis ook wel heel veel steun. Dus dat is wel heel fijn. <i>[patiënt kijkt naar dochter, dochter kijkt terug, hand op de schouder van patiënt]</i> <i>Well, it really took a toll. But I'm doing fairly well -given the circumstances. Luckily I have a lot of support at home. That's really nice.</i> <i>[patient looks at daughter, daughter looks back, hand on patient's shoulder].</i>
D	Wat fijn om te horen. Dat is belangrijk. Wat fijn ook dat jij ook mee bent <i>[kijkt naar dochter]</i> , want twee horen meer dan één in zo'n gesprek. Mevrouw Bertens, zoals we vorige keer besproken hebben, is er bij u sprake van een diffuus grootcellig B-cellymfoom, op basis van de beenmergpunctie en de PET/CT-scan. Dat is een ernstige, maar veelvoorkomende vorm van lymfeklierkanker. In uw geval is er sprake van stadium 3 ziekte, dat betekent gevorderde ziekte. Er zijn op de PET/CT-scan klieren in de hals en ook in de buik gedetecteerd. Dat is een hele hoop. Heeft u het een beetje kunnen laten bezinken? <i>That's great to hear. That's important. It's great that you're also with us [looking at daughter] today, because two people always hear more than one in such a conversation.</i> <i>Mrs. Bertens, as we discussed last time, you have diffuse large cell B-cell lymphoma, based on the bone marrow puncture and the PET/CT scan. This is a serious but common form of lymphoma. In your case, it is a stage 3 disease, which means an advanced disease. Affected lymph nodes were detected in your neck and also your abdomen by the PET/CT scan. That's a lot. Were you able to let it sink in a little bit?</i>
P	Nou ja, het is allemaal wel heel erg heftig hoor. <i>Well, it's all very intense.</i>
D	Ja, dat kan ik me wel voorstellen. <i>[kijkt meelevend]</i> <i>Yes, I can imagine [looks compassionate]</i>
D	Het doel van dit gesprek vandaag is dat we ingaan op de behandeling en de bijwerkingen. <i>The purpose of our conversation today is to discuss treatment and side effects.</i>
P	Ja, ik ben er echt al heel veel mee bezig geweest. Ik heb zelfs wat informatie online opgezocht. <i>Yes, I've really been thinking about it a lot. I even looked up some information online.</i>

D	(korte stilte) <i>[brief moment of silence]</i>	(korte stilte) <i>(brief moment of silence)</i>	Oh, en wat heeft u allemaal gelezen? <i>Oh, and what did you all read?</i>	Wat goed dat u al online naar informatie heeft gezocht. Wat heeft u zoal gelezen? <i>That's good that you already looked up information online . What did you read?</i>
P	Ik las dat het nog wel te behandelen is met chemotherapie? <i>I've read that it is still treatable with chemotherapy?</i>			
D	Nou mevrouw Bertens, u kunt dit soort informatie beter niet online opzoeken. Online kan je veel tegenstrijdige informatie vinden en er staat ook veel onzin. Vergeet wat u heeft gelezen, ik ga u de belangrijkste dingen vertellen. <i>Well, Mrs. Bertens, you'd better not look up such kind of information online. You may find lots of contradictory information and also nonsense on the internet. Forget about what you have read, I will tell you the most important things.</i>	Nou mevrouw Bertens, het is over het algemeen beter om dit soort informatie van mij te krijgen, online kan er wat tegenstrijdige informatie staan. Ik zal u de belangrijkste dingen vertellen. <i>Well, Mrs. Bertens, it is actually better if you get such information from me. There may be contradicting information online. I will tell you about the most important things.</i>	Dat klopt inderdaad, dat is een deel van de behandeling. Ik zal u daar straks wat meer over vertellen. <i>That's correct, that's part of the treatment. I will tell you more about that later.</i>	
P	Ja, ja, oké <i>Yes, yes, okay</i>			
D	De behandeling bestaat uit een aantal kuren chemotherapie in combinatie met immunotherapie. De opzet van de behandeling is genezing. <i>Your treatment will consist of several rounds of chemotherapy</i>	De behandeling bestaat inderdaad uit een aantal kuren chemotherapie. Dat had u al gelezen. Maar de chemotherapie is in combinatie met immunotherapie. De opzet van de behandeling is genezing.	De behandeling bestaat, zoals u had gelezen, uit een aantal kuren chemotherapie, in combinatie met immunotherapie. De opzet van de behandeling is genezing. <i>As you have read, treatment will consist of several rounds of chemotherapy, combined with immunotherapy. The intention of the treatment is curative.</i>	

	<i>combined with immunotherapy. The intention of the treatment is curative.</i>	<i>Your treatment will indeed consist of several rounds of chemotherapy. You have already read about that. But the chemotherapy will be combined with immunotherapy. The intention of the treatment is curative.</i>		
P	Ja, ja <i>Yes, yes</i>			
D	<p>Dan ga ik u meer vertellen over hoe de behandeling eruit ziet. De behandeling heet de zogenaamde R-CHOP kuur, dat bestaat uit chemotherapie, samen met immuuntherapie, de antistof Rituximab en prednison. Dat is een ontstekingsremmend medicijn. De behandeling wordt via een infuus toegediend, alleen de prednison wordt via tabletten gegeven. Daarnaast krijgt u ook medicijnen tegen de bijwerkingen.</p> <p>[PAUZE]</p> <p>U krijgt in principe 6 kuren, elke 3 weken één kuur, en de eerste kuur staat al gepland.</p> <p><i>Now, I'm going to tell you more about what the treatment will look like. The name of the treatment is the so-called R-CHOP regimen, which consists of chemotherapy, together with immunotherapy, the antibody Rituximab, and prednisone. This is an anti-inflammatory drug. The treatment is administered intravenous; except for the prednisone, which is administered as pills. You will also be given medication against side effects.</i></p> <p><i>[PAUSE]</i></p> <p><i>You will basically receive 6 rounds of treatment, one round every 3 weeks, and the first round is scheduled already.</i></p>			
P	En ik las ook nog iets over een scan? <i>And I have also read something about a scan?</i>			
D	<i>(skip)</i>	<p>Er zijn veel soorten scans, dat wordt er online niet altijd bij gezegd. Wat wij hier doen is een CT –scan. Die bedoelt u denk ik.</p> <p><i>There are many types of scans. That is something that is not always mentioned online. Here, we typically do a CT</i></p>	<p>Ja, dat klopt, een CT-scan.</p> <p><i>Yes, that's right, a CT scan.</i></p>	<p>Ja, dat klopt, een CT-scan, dat heeft u goed gelezen!</p> <p><i>Yes, that's right, a CT scan. You've read that correctly!</i></p>

		<i>scan. I think that's what you mean.</i>		
D	<p>Na de derde kuur maken we een CT-scan, om te zien of de behandeling aanslaat.</p> <p><i>After the third course of treatment, we do a CT-scan to see if the treatment is working.</i></p> <p>De behandeling heeft ook wat bijwerkingen.</p> <p><i>The treatment also has some side effects.</i></p>			
P	<p>Ja, hoe zit het inderdaad met de bijwerkingen?</p> <p><i>Yes, indeed. What about the side effects?</i></p>			
D	<i>(skip)</i>	<p>Wat heeft u zoal gelezen?</p> <p><i>What did you read about it?</i></p>		
P	<p>Ik las dat mijn haar gaat uitvallen</p> <p><i>I read that my hair is going to fall out</i></p>			
D	<p>Het internet geeft alleen algemene informatie, niet specifiek op uw situatie toegespitst. Haaruitval hoeft helemaal niet op te treden.</p> <p><i>The Internet provides only general information, not specific to your situation. Hair loss does not necessarily have to occur at all.</i></p>	<p>Nou, dat is een mogelijkheid, maar haaruitval hoeft niet helemaal niet op te treden.</p> <p><i>Well, that is a possibility, but hair loss does not have to occur at all.</i></p>	<p>Dat kan inderdaad gebeuren, maar dat treedt niet altijd op.</p> <p><i>This can indeed happen, but not always.</i></p>	
D	<p>Ik kan me voorstellen dat u hier zich zorgen overmaakt. Uit ervaring weten we dat dit maar bij een minderheid van de patiënten gebeurt.</p> <p>Hier valt nog veel meer over te zeggen. De verpleegkundig specialist gaat u hier verder bij begeleiden.</p> <p><i>I can imagine that you are concerned about this. Based on our experience, we know that this only happens in few patients.</i></p> <p><i>There is much more to say about this. The nurse specialist is going to further support you with this.</i></p>			
P	<p>Oh, dat zal wel heel fijn zijn.</p> <p><i>Oh, that would be really nice.</i></p>			
D	<i>(skip)</i>	<p>Heeft u nog meer gelezen over</p>		

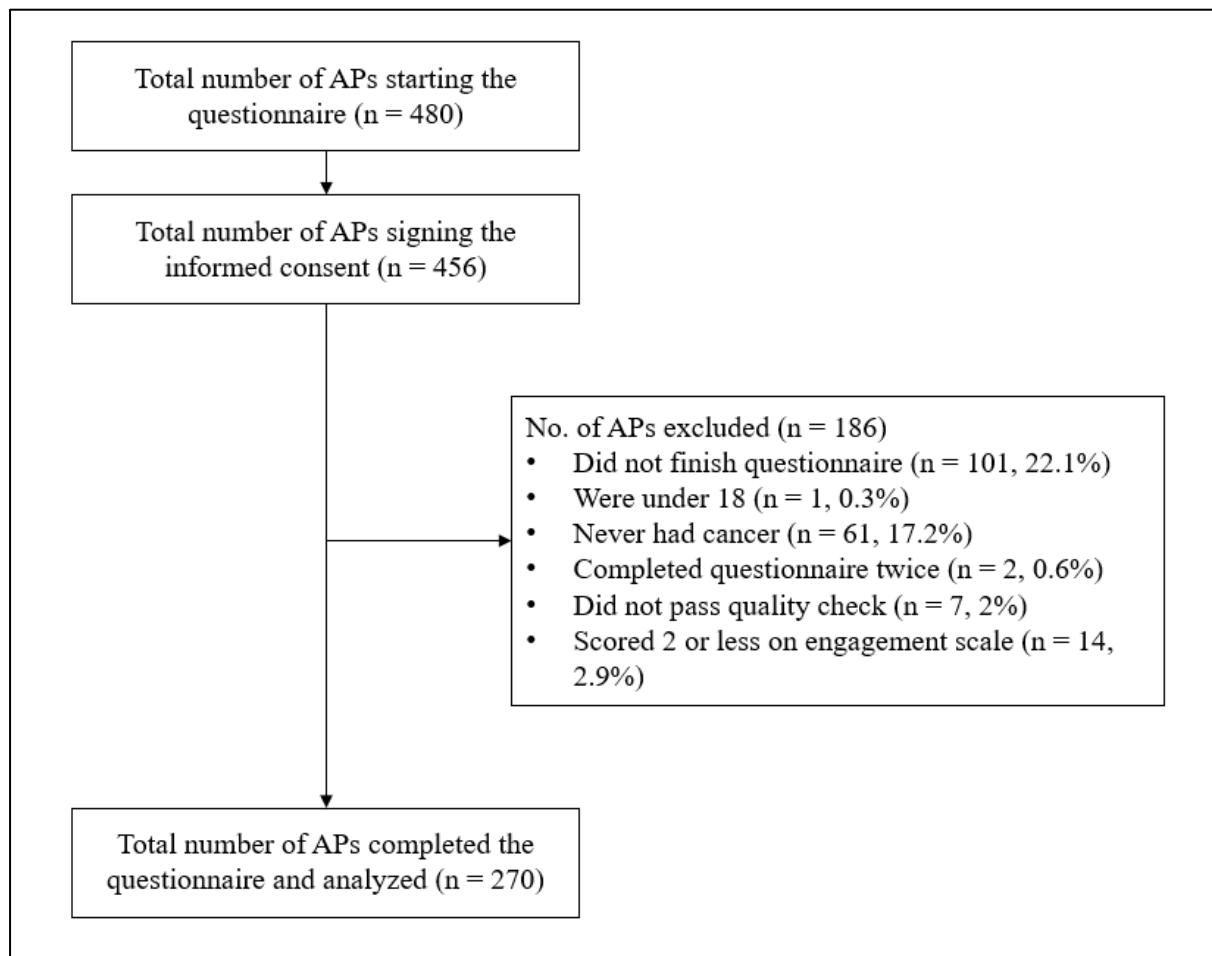
		<p>mogelijke bijwerkingen?</p> <p><i>Have you read more about possible side effects?</i></p>
P	<p>Ik las ook dat ik af zal vallen door de behandeling</p> <p><i>I also read that I will lose weight because of the treatment</i></p>	
D	<p><i>(skip)</i></p>	<p>Waar heeft u deze informatie gevonden?</p> <p><i>Where did you find this information?</i></p>
P		<p>Ik heb het allemaal gelezen op kanker.nl</p> <p><i>I've read it all on kanker.nl</i></p>
D		<p>Wat goed, dat is een goede website om naar te kijken, ik zal u straks ook nog wat meer tips voor andere bronnen geven om betrouwbare informatie op te zoeken. Terugkomend op uw vraag over afvallen,</p> <p><i>Very good, that is a good website to look at, I will also give you some more tips about other sources to look up reliable information later. Coming back to your question about losing weight,</i></p>
D	<p>Dat kan inderdaad gebeuren, maar het hoeft niet.</p> <p>Want chemotherapie doodt niet alleen de kankercellen, maar ook de gezonde cellen in het lichaam.</p> <p><i>This can indeed happen, but it doesn't have to.</i></p> <p><i>Because chemotherapy kills not only the cancer cells, but also the healthy cells in the body.</i></p>	

D	De meest voorkomende bijwerkingen van de behandeling zijn misselijkheid, braken en diarree. Dit komt bij ongeveer de helft van de patiënten voor. Als gevolg van deze klachten kunnen mensen ook minder trek in eten krijgen en daardoor afvallen. Hier monitoren we u streng op dus na elke kuur zullen we hier actief naar vragen, en zo nodig passen we de medicatie aan.			
	<i>The most common treatment side effects are nausea, vomiting, and diarrhea. This occurs in about half of all patients. Due to these symptoms, people may also lose their appetite and therefore lose weight. We will monitor this precisely: After each round of treatment we will actively ask you about it, and adjust the medication if necessary.</i>			
P	Dat is wel fijn om te weten			
	<i>That is good to know</i>			
D	(skip)	Dus vandaar dat u las over afvallen, dat komt door deze bijwerkingen	Komt dat overeen met wat u heeft gelezen?	
		<i>Thus, that's why you read about losing weight, it's due to the these side effects</i>	<i>Does that align with what you have read?</i>	
P	Ja, inderdaad			
	<i>Yes, indeed</i>			
D	Ik heb u een hoop verteld over de behandeling en de bijwerkingen. Heeft u daar op dit moment nog vragen over?			
	<i>I have told you a lot about the treatment and side effects. Do you have any questions at this point?</i>			
P	Nee, ik geloof dat het voor nu wel allemaal duidelijk is			
	<i>No, I think it's all clear for now</i>			
D	Oké, als u de informatie heeft laten bezinken en daarna nog vragen heeft, kunt u met mij of de verpleegkundig specialist altijd nog contact opnemen. En nog even terugkomend op de informatie die u op het internet had gezocht,			
	<i>Okay, once you have let the information sink in and if you then still have questions, you can always contact me or the nurse specialist. Coming back to the information you had looked up on the Internet,</i>			
D	De informatie online is vaak onjuist en verwarrend. Ik zou verder niet teveel op het internet zitten als ik u was.	Dat heeft u al eerder gedaan, maar het is lastig om betrouwbare informatie te vinden die op uw situatie van toepassing is. Het is beter als een specialist dit aan u uitlegt in plaats van het internet.	Heel mooi dat u dit al voor de afspraak heeft gedaan. Online kunt u veel aanvullende informatie vinden. Mocht u vragen of twijfels hebben over de informatie die u online leest, dan kunnen we het daar in een volgende	Heel mooi dat u dat op kanker.nl hebt gekeken, dat is een betrouwbare website. Naast kanker.nl bestaat er ook de website Hematon, dat is een patiëntenvereniging. Minder betrouwbaar zijn bijvoorbeeld persoonlijke blogs of fora. Mocht u vragen
	<i>Online information is often inaccurate and confusing. I wouldn't spend too much time on</i>			

	<i>the internet, if I were you.'</i>	<i>You have done that before, but it is difficult to find reliable information that applies to your situation. It is better if a specialist explains it to you rather than the internet.</i>	afspraak over hebben. <i>It's very good that you did that before this appointment. You can find a lot of additional information online. If you have any more questions or doubts about what you find online, we can revisit this during the next appointment.</i>	of twijfels hebben over de informatie die u vindt, dan kunnen we het daar in een volgende afspraak over hebben. <i>Its' very good that you consulted kanker.nl. That's a reliable website. Besides kanker.nl, there is also the website Hematon, which belongs to the hematology patient support organization. Personal blogs or forums are less reliable. If you still have questions or doubts about the information you read online, we can revisit this at the next appointment.</i>
D	U krijgt van ons betrouwbare schriftelijke informatie mee naar huis over de behandeling, inclusief de bijwerkingen. <i>We will give you reliable written information to take home. It includes information about the treatment, including side effects.</i>			
P	Fijn, bedankt <i>Great, thank you</i>			
D	En tot slot. De diagnose kanker en de behandeling kan veel emoties en gevoelens bij u losmaken, niet alleen bij u, maar ook bij uw dochter en naaste. Mocht u daar op enig moment behoefte aan hebben, dan is het mogelijk om hier ondersteuning bij te krijgen. <i>And finally: a cancer diagnosis and treatment can cause many emotions and feelings, not only for you, but also for your daughter and loved ones. If you need it at any point in time, it is possible to get support for this.</i>			
P	Oké fijn om te weten. We zijn er ook met z'n allen veel mee bezig, ja... <i>Okay good to know. We are all quite busy with this, yes....</i>			
D	Ja dat kan ik me voorstellen, het is een hele hoop <i>Yes, I can imagine, it's a lot</i>			
P	Ja, het is echt een rollercoaster. <i>Yes, it is truly a rollercoaster.</i>			
D	Is er op dit moment nog iets anders dat u zou willen bespreken, mevrouw Bertens?			

	<i>Is there anything else you would like to discuss at this point, Mrs. Bertens?</i>
P	Nee, volgens mij niet, nee. <i>No, I don't think so, no.</i>
D	Oké, dan wens ik u alvast heel veel sterkte en tot de volgende keer <i>Okay, I wish you all the best and see you next time</i>
P	Oké, dank u wel <i>Okay, thank you</i>
D	Dag <i>Goodbye</i>

Appendix D. Overview of patient exclusion process



Appendix E. Number of APs per experimental group

Overarching communication approach	Communication approach	Video	Written	Total
Clinician-centered	Resistance	31 (11.5%)	36 (13.3%)	67 (24.8%)
	Repairing	36 (13.3%)	38 (14.1%)	74 (27.4%)
	Total	67 (24.8%)	74 (27.4%)	141 (52.2%)
Patient-centered	Co-construction	26 (9.6%)	33 (12.2%)	59 (21.9%)
	Enhancement	34 (12.6%)	36 (13.3%)	70 (25.9%)
	Total	60 (22.2%)	69 (25.6%)	129 (47.8%)
Total		127 (47%)	143 (53%)	270 (100%)

Appendix F. Detailed results of manipulation checks

F.1 Subscale Resistance

There is a significant difference between groups on the resistance subscale ($F(3, 266) = 80.03, p < .001$). According to a Bonferroni post-hoc test, Resistance scores significantly higher on the resistance subscale than Co-construction ($p < .001$) and Enhancement ($p < .001$). Resistance scores slightly higher than Repairing, but the difference is non-significant ($p = 1.000$). In addition, Repairing scores significantly higher on the resistance subscale than Co-construction ($p < .001$) and Enhancement ($p < .001$). Enhancement scores slightly higher than Co-construction, but the difference is non-significant ($p = 1.000$). This indicates a clear manipulation of Resistance compared to Co-construction and Enhancement, but no clear manipulation compared to Repairing, especially since Repairing behaves similarly compared to Co-construction and Enhancement.

Condition	Mean (SD)
Resistance	4.10 (1.00)
Repairing	4.00 (1.03)
Co-construction	2.25 (0.92)
Enhancement	2.31 (0.77)

F.2 Subscale Repairing

There is a significant difference between groups on the resistance subscale ($F(3, 266) = 39.15, p < .001$). According to a Bonferroni post-hoc test, Repairing scores significantly higher on the repairing subscale than Co-construction ($p < .001$) and Enhancement ($p < .001$). Repairing scores slightly higher than Resistance, but the difference is non-significant ($p = 1.000$). In addition, Resistance scores significantly higher on the repairing subscale than Co-construction ($p < .001$) and Enhancement ($p < .001$). Co-Construction scores slightly higher than Enhancement, but the difference is non-significant ($p = 1.000$). This indicates a clear manipulation of Repairing compared to Co-construction and Enhancement, but no clear manipulation compared to Resistance, especially since Resistance behaves similarly compared to Co-construction and Enhancement.

Condition	Mean (SD)
Resistance	3.74 (0.99)
Repairing	3.76 (0.85)
Co-construction	2.60 (0.87)
Enhancement	2.51 (0.93)

F.3 Subscale Co-construction

There is a significant difference between groups on the co-construction subscale ($F(3, 266) = 102.20, p < .001$). According to a Bonferroni post-hoc test, Co-construction scores significantly higher on the co-construction subscale than Resistance ($p < .001$) and Repairing ($p < .001$). Enhancement scores slightly higher than Co-construction, but the difference is non-significant ($p = .196$). In addition, Enhancement scores significantly higher on the co-construction subscale than Resistance ($p < .001$) and Repairing ($p < .001$). Repairing scores slightly higher than Resistance, but the difference is non-significant ($p = 1.000$). This indicates a clear manipulation of Co-construction compared to Resistance and Repairing, but no clear manipulation compared to Enhancement, especially since Enhancement behaves similarly compared to Resistance and Repairing.

Condition	Mean (SD)
Resistance	2.01 (1.02)
Repairing	2.08 (0.91)
Co-construction	3.71 (0.76)
Enhancement	4.04 (0.76)

F.4 Subscale Enhancement

There is a significant difference between groups on the enhancement subscale (equal variances cannot be assumed; Welch(3, 144.69) = 106.13, $p < .001$). According to a Games-Howell post-hoc test, Enhancement scores significantly higher on the enhancement subscale than Resistance ($p < .001$), Repairing ($p < .001$), and Co-construction ($p < .001$). In addition, Co-construction scores significantly higher on the enhancement subscale than Resistance ($p < .001$) and Repairing ($p < .001$). Repairing scores slightly higher than Resistance, but the difference is non-significant ($p = 1.000$) This indicates a clear manipulation of Enhancement. However, Co-construction behaves similarly compared to Resistance and Repairing, in a weaker way than Enhancement.

Condition	Mean (SD)
Resistance	2.11 (1.22)
Repairing	2.13 (0.94)
Co-construction	3.37 (0.75)
Enhancement	4.30 (0.70)

Due to the differences found between the overarching communication approaches (clinician-centered vs. Patient-centered) but not so much between the communication approaches (Resistance vs Repairing and Co-construction vs Enhancement), we decided to merge them to the two overarching communication approaches. This is also in line with the ANOVA results for all four communication approaches, respectively (see Appendix 5).

Appendix G. ANOVA results for all four respective conditions

We repeated our ANOVA's for the four communication approaches respectively to investigate if results are in line with findings regarding the overarching communication approaches, with communication approach (including four conditions, i.e. Resistance (RES), Repairing (REP), Co-construction (CO), and Enhancement (EN)) as IV and patient outcomes as DV. Results indicate similar, but weaker effects as for the two overarching communication approaches.

G.1 State anxiety

There was no significant main effect of communication approach on state anxiety ($F(3, 266) = 0.38, p = .766$).

Condition	M (SD)
RES	2.81 (0.65)
REP	2.81 (0.58)
CO	2.76 (0.54)
EN	2.72 (0.66)

G.2 Clinician satisfaction

There was significant difference of communication approach on clinician ($F(3, 266) = 8.69, p < .001$). Note that groups were not of equal size, i.e. there is more than 10% difference, and variances between groups were not equal, Levene's test: $F(3,266) = 4.22, p = .006$. Due to the violated assumption of equal variances, the Welch test was performed, $Welch(3, 145.46) = 8.93, p < .001$. The Games-Howell post-hoc test showed that participants in the CO condition were significantly more satisfied than participants in the RES condition ($p = .008$) and the REP condition ($p = .003$). Participants in the EN condition were significantly more satisfied than participants in the RES condition ($p = .002$) and the REP condition ($p < .001$). There was neither a significant difference between RES and REP ($p = 1.000$), nor between CO and EN ($p = .994$).

Condition	M (SD)
RES	3.54 (1.16)
REP	3.55 (0.97)
CO	4.13 (0.88)
EN	4.17 (0.84)

G.3 Trust

There was a significant main effect of communication approach on trust, $F(3, 266) = 5.30, p = .001$. The Bonferonni post-hoc test showed that participants in the CO condition were more trusting than participants in the RES condition ($p = .029$) and the REP condition ($p = .045$). Participants in the EN condition were more trusting than participants in the RES condition ($p = .021$) and the REP condition ($p = .034$). There were no significant differences between RES and REP ($p = 1.000$), nor between CO and EN ($p = 1.000$).

Condition	M (SD)
RES	3.62 (0.84)
REP	3.65 (0.70)
CO	4.00 (0.66)
EN	4.00 (0.82)

G.4 Trust in treatment plan

There was no significant main effect of communication approach on trust in treatment ($F(3, 266) = 0.59, p = .626$).

Condition	M (SD)
RES	3.24 (0.85)
REP	3.11 (0.79)
CO	3.25 (0.80)
EN	3.13 (0.76)

G.5 Intention to search information online

There was a significant main effect of communication approach on intention to search information online; $F(3, 266) = 3.79, p = .011$. As the Bonferonni post-hoc test suggested, participants in the CO condition showed a higher intention to search information online compared to participants in the REP condition ($p = .034$). Remaining comparisons between conditions were n.s.

Condition	M (SD)
RES	3.49 (1.04)
REP	3.44 (1.10)
CO	3.93 (0.95)
EN	3.82 (0.92)

G.6 Intention to discuss information with the clinician

There was a significant main effect of communication approach on intention to discuss with clinician; $F(3, 251) = 10.81, p < .001$. Note that groups were not of equal size, i.e. there is more than 10% difference, and variances between groups were not equal, Levene's test: $F(3,251) = 6.68, p < .001$. Due to the violated assumption of equal variances, the Welch test was performed, $Welch(3, 137.21) = 11.43, p < .001$. The Games-Howell post-hoc test showed that participants in the CO condition showed a significantly lower intention to discuss online health information than participants in the RES condition ($p = .035$) and the EN condition ($p < .001$), but very similar intention to REP ($p = .993$). Participants in the REP condition demonstrated a lower intention to discuss online health information than participants in the CO condition ($p = .013$) and the EN condition ($p < .001$). There was no significant difference between CO and EN ($p = .293$).

Condition	M (SD)
RES	3.41 (1.04)
REP	3.36 (1.03)
CO	3.88 (0.83)
EN	4.13 (0.77)

Appendix H. Regression coefficients for moderation analyses

H.1 Moderation results for trait anxiety

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	2.57	0.15		17.71	<.001	[2.28; 2.85]
	Comm_overarching	-0.27	0.21	-0.22	-1.30	.196	[-0.68; 0.14]
	trait_anxiety	0.14	0.08	0.15	1.80	.073	[-0.01; 0.30]
	Comm*anxiety	0.12	0.11	-0.18	1.02	.310	[-0.11; -0.34]

a. *Dependent Variable: State anxiety*

b. *Model Fit: $F(3, 266) = 4.70, p = .003, R^2 = 0.04$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.58	0.24		15.25	<.001	[3.12; 4.04]
	Comm_overarching	0.91	0.34	0.45	2.68	.008	[0.24; 1.57]
	trait_anxiety	-0.02	0.13	-0.01	-0.14	.890	[-0.27; 0.23]
	Comm*anxiety	-0.18	0.18	-0.17	0.96	.340	[-0.54; 0.19]

a. *Dependent Variable: Patient satisfaction*

b. *Model Fit: $F(3, 266) = 9.45, p < .001, R^2 = 0.09$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.59	0.18		19.54	<.001	[3.23; 3.95]
	Comm_overarching	0.58	0.26	0.37	2.18	.030	[0.06; 1.10]
	trait_anxiety	0.02	0.10	0.02	0.24	.807	[-0.17; 0.22]
	Comm*anxiety	-0.12	0.14	-0.15	-0.84	.401	[-0.41; 0.16]

a. *Dependent Variable: Trust*

b. *Model Fit: $F(3, 266) = 5.61, p < .001, R^2 = 0.05$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.14	0.19		16.27	<.001	[2.76; 3.52]
	Comm_overarching	0.44	0.28	0.27	1.58	.117	[-0.11; 0.98]
	trait_anxiety	0.02	0.10	0.02	0.19	.848	[-0.19; 0.27]
	Comm*anxiety	-0.25	0.15	-0.30	-1.63	.105	[-0.54; 0.05]

a. *Dependent Variable: Trust in treatment*

b. *Model Fit: $F(3, 266) = 1.45, p = .229, R^2 = 0.01$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	2.94	0.24		12.18	<.001	[2.47; 3.42]
	Comm_overarching	0.82	0.34	0.40	2.37	.019	[0.14; 1.51]
	trait_anxiety	0.30	0.13	0.19	2.31	.022	[0.05; 0.56]
	Comm*anxiety	-0.24	0.19	-0.28	-1.27	.204	[-0.61; 0.13]

a. *Dependent Variable: Intention to search for online health information*
b. *Model Fit: $F(3, 266) = 5.55, p = .001, R^2 = 0.06$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	2.88	0.23		12.51	<.001	[2.43; 3.34]
	Comm_overarching	1.38	0.33	0.71	4.20	<.001	[0.74; 2.03]
	trait_anxiety	0.29	0.12	0.19	2.30	.022	[0.04; 0.53]
	Comm*anxiety	-0.43	0.18	-0.42	-2.41	.017	[-0.79; -0.08]

a. *Dependent Variable: Intention to discuss online health information*
b. *Model Fit: $F(3, 251) = 12.35, p < .001, R^2 = 0.13$*

H.2 Moderation results for uncertainty intolerance

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	2.62	0.21		12.74	<.001	[2.21; 3.02]
	Comm_overarching	-0.47	0.29	-0.38	-1.62	.106	[-1.04; 0.10]
	Uncertainty_intolerance	0.08	0.07	0.08	0.97	.333	[-0.07; 0.21]
	Comm*uncertainty	0.15	0.10	0.35	1.44	.150	[-0.05; -0.35]

a. *Dependent Variable: State anxiety*
b. *Model Fit: $F(3, 266) = 3.66, p = .013, R^2 = 0.04$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.00	0.33		9.12	<.001	[2.35; 3.02]
	Comm_overarching	1.49	0.46	0.74	3.27	.001	[0.58; 0.10]
	Uncertainty_intolerance	0.20	0.12	0.14	1.70	.090	[-0.03; 0.21]
	Comm*uncertainty	-0.33	0.17	-0.46	-1.98	.049	[-0.65; 0]

a. *Dependent Variable: Patient satisfaction*
b. *Model Fit: $F(3, 266) = 9.48, p < .001, R^2 = 0.10$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.18	0.26		12.34	<.001	[2.68; 3.69]
	Comm_overarching	0.81	0.36	0.52	2.23	.027	[0.09; 1.52]
	Uncertainty_intolerance	0.16	0.09	0.15	1.80	.074	[-0.02; 0.34]
	Comm*uncertainty	-0.16	0.13	-0.29	-1.24	.217	[-0.42; 0.10]

a. *Dependent Variable: Trust*

b. *Model Fit: $F(3, 266) = 6.42, p < .001, R^2 = 0.07$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.22	0.27		11.79	<.001	[2.68; 3.75]
	Comm_overarching	0.35	0.38	0.22	0.91	.364	[-0.41; 1.10]
	Uncertainty_intolerance	-0.02	0.10	-0.02	-0.18	.859	[-0.21; 0.17]
	Comm*uncertainty	-0.13	0.14	-0.22	-0.91	.363	[-0.40; 0.15]

a. *Dependent Variable: Trust in treatment*

b. *Model Fit: $F(3, 266) = 0.73, p = .534, R^2 = 0.01$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.22	0.34		9.39	<.001	[2.55; 3.90]
	Comm_overarching	0.51	0.48	0.25	1.05	.294	[-0.44; 1.46]
	Uncertainty_intolerance	0.09	0.12	0.06	0.72	.470	[-0.15; 0.33]
	Comm*uncertainty	-0.04	0.17	-0.05	-0.21	.835	[-0.38; 0.30]

a. *Dependent Variable: Intention to search for online health information*

b. *Model Fit: $F(3, 266) = 3.87, p = .010, R^2 = 0.04$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	2.60	0.34		7.68	<.001	[1.94; 3.27]
	Comm_overarching	1.58	0.47	0.81	3.37	<.001	[0.66; 2.50]
	Uncertainty_intolerance	0.28	0.12	0.20	2.36	.019	[0.05; 0.52]
	Comm*uncertainty	-0.35	0.17	-0.50	-2.06	.041	[-0.68; -0.01]

c. *Dependent Variable: Intention to discuss online health information*

a. *Model Fit: $F(3, 251) = 12.07, p < .001, R^2 = 0.13$*

H.3 Moderation results for monitoring coping style

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	2.43	0.18		13.33	<.001	[2.07; 2.79]
	Comm_overarching	0.07	0.28	0.06	0.24	.811	[-0.49; 0.62]
	Monitoring	0.11	0.05	0.18	2.21	.028	[0.01; 0.20]
	Comm*monitoring	-0.04	0.08	-0.13	-0.53	.596	[-0.19; 0.11]

a. *Dependent Variable: State anxiety*

b. *Model Fit: $F(3, 266) = 2.43, p = .065, R^2 = 0.03$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.92	0.29		13.52	<.001	[3.35; 4.49]
	Comm_overarching	0.71	0.45	0.35	1.59	.112	[-0.17; 1.59]
	Monitoring	-0.10	0.08	-0.10	-1.34	.182	[-0.26; 0.05]
	Comm*monitoring	-0.03	0.12	-0.06	-0.25	.805	[-0.27; 0.21]

a. *Dependent Variable: Patient satisfaction*

b. *Model Fit: $F(3, 266) = 10.10, p < .001, R^2 = 0.10$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.66	0.23		16.01	<.001	[3.21; 4.11]
	Comm_overarching	0.39	0.35	0.25	1.11	.268	[-0.30; 1.09]
	Monitoring	-0.01	0.06	-0.01	-0.10	.917	[-0.13; 0.11]
	Comm*monitoring	-0.01	0.09	-0.02	-0.06	.949	[-0.19; 0.18]

a. *Dependent Variable: Trust*

b. *Model Fit: $F(3, 266) = 5.30, p = .001, R^2 = 0.06$*

Model		Unstandardized Coefficients		Standardized	<i>t</i>	Sig.	95%CI
		B	Std. Error	Coefficients			for B
				Beta			[LB; UP]
1	(Constant)	3.65	0.24		15.34	<.001	[3.18; 4.12]
	Comm_overarching	-0.06	0.37	-0.04	-0.17	.869	[-0.78; 0.66]
	Monitoring	-0.13	0.06	-0.17	-2.11	.036	[-0.26; -0.01]
	Comm*monitoring	0.02	0.10	0.05	0.22	.826	[-0.17; 0.22]

a. *Dependent Variable: Trust in treatment*

b. *Model Fit: $F(3, 266) = 2.23, p = .085, R^2 = 0.03$*

Model		Unstandardized Coefficients		Standardized Coefficients		95%CI for B [LB; UP]	
		B	Std. Error	Beta	t		Sig.
1	(Constant)	2.06	0.26		7.85	<.001	[1.55; 2.58]
	Comm_overarching	-0.43	0.41	-0.21	-1.06	.292	[-1.23; 0.37]
	Monitoring	0.39	0.07	0.38	5.56	<.001	[0.25; 0.53]
	Comm*monitoring	0.23	0.11	0.43	2.11	.036	[0.02; 0.44]

a. *Dependent Variable: Intention to search for online health information*

b. *Model Fit: $F(3, 266) = 33.68, p < .001, R^2 = 0.28$*

Model		Unstandardized Coefficients		Standardized Coefficients		95%CI for B [LB; UP]	
		B	Std. Error	Beta	t		Sig.
1	(Constant)	2.69	0.30		8.85	<.001	[2.09; 3.29]
	Comm_overarching	0.30	0.47	0.15	0.64	.524	[-0.63; 1.27]
	Monitoring	0.19	0.08	0.18	2.36	.019	[0.03; 0.34]
	Comm*monitoring	0.09	0.12	0.18	0.74	.459	[-0.15; 0.34]

a. *Dependent Variable: Intention to discuss online health information*

b. *Model Fit: $F(3, 251) = 15.19, p < .001, R^2 = 0.15$*