

Children's television Worldwide II:

Gender Representation

in



Belgium

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1. General information about children's TV in Belgium

Belgium has a complex federal structure with several communities and two regional governments. This complex structure is also reflected in Belgium broadcasting. In 1977 the French speaking and Dutch speaking broadcasters were separated and now we have a Walloon public broadcaster RTBF and Flemish public broadcaster VRT. Commercial television was only recently introduced in 1989. At this moment the public broadcaster is very successful.

Most TV-households have access to television (96.5%), 83.1% of Flemish people are registered for digital television and 14.5% has access to a Netflix account. People no longer watch their shows just through television; only 66.4% says they watch television daily on their actual television, other modes of watching include smartphones, laptops and tablets. Television is still the preferred source for access to news (22.4%)

Time Flemish people watch specific channels (2016)

Één (public)	32.62%
Vtm	19.79%
VIER	7.68%
Canvas (public)	5.18%
Vitaya	4.64%
Q2	4.40%
VIJF	3.39%
Ketnet (public)	1.53%
Discovery Channel	1.38%
Other	11%
Other 2 (national geographic, Acht/CAZ, Nickelodeon/Spike, TLC, Nick Jr. Fox, ZES, Disney Channel, Studio 100...)	8.29%

(Kools, Leterme, Cassimon, & Soulliaert, 2017)

2. Sample selection:

The sample is based on the following Flemish television networks: Cartoon Network, Disney channel, Disney Jr., Kadet, Ketnet, Nick Jr., Nickelodeon, Studio 100 and VTM Kzoom. For these channels the children's program of the country is recorded in the agreed upon time frame and subsequently categorized and measured.

Period of recording: 19.09.2017 – 10.10.2017

The sample analyzed in Belgium consists of 166 hours of explicit children's television, 131 hours of fictional shows, 1,294 programs (559 fictional shows), 2,338 characters (fiction) and 1,427 human characters.

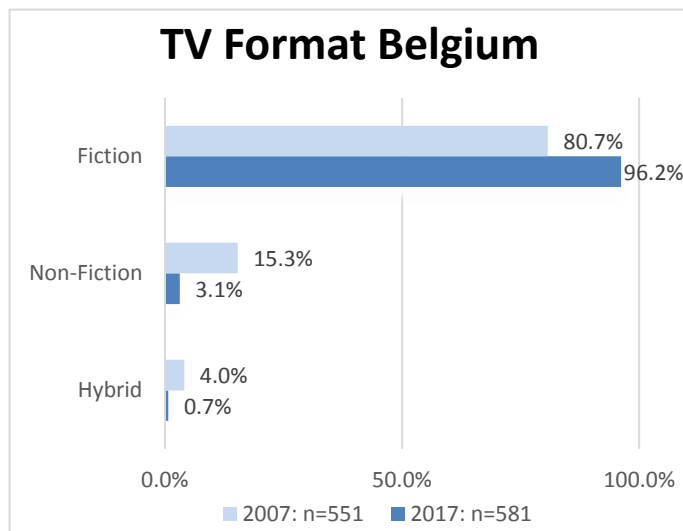
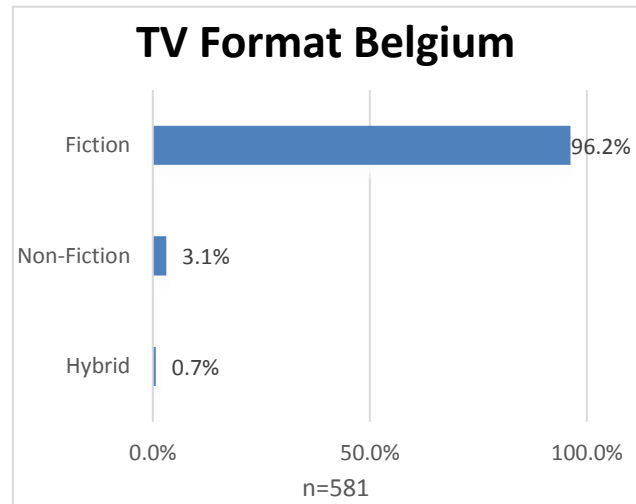
Broadcasters	Cartoon Network, Disney Channel, Disney Jr., Kadet, Ketnet, Nick Jr., Nickelodeon, Studio 100 and VTM Kzoom
Hours of recording	166:41 (131 fiction)
Programs	1,294 (559 fiction)
Characters in fiction	2,338 (1,427 human characters)

3. What is offered to children - Results at show level

3.1 Fictional or non-fictional?

Every show is analyzed and coded. The central question is as follows: What kind of program categories can be found in Flemish children's television? A show could be either "fictional", "non-fictional" or a "hybrid".

In this sample the vast majority of the shows is fictional entertainment (559 shows with 96.2%). 18 shows have no fictional elements (3.1%) and 4 shows represent a mix between the two (0.7%).

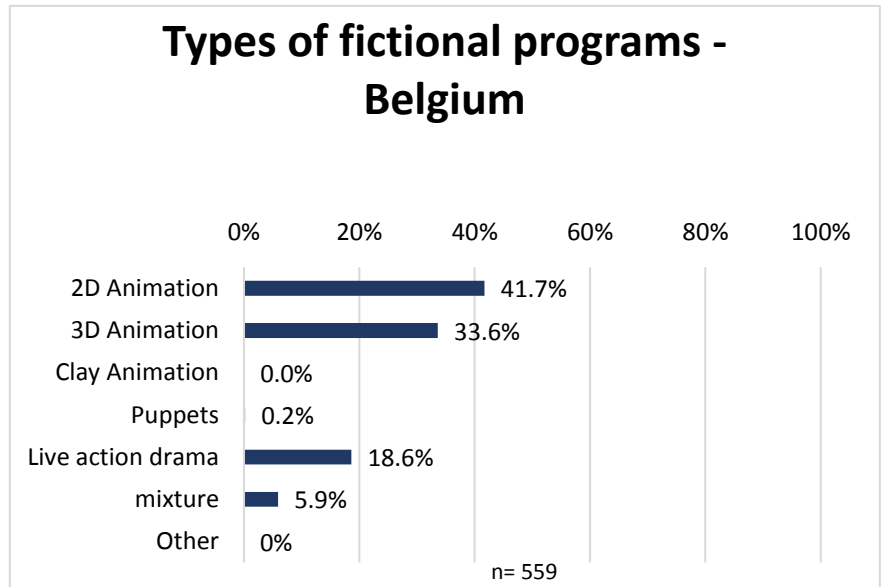


In comparison to the study in 2007 the amount of fictional entertainment has increased. In 2007, 80.7 % of the Belgian television content was fictional. In 2017, 96.2% can be categorized as fictional entertainment.

Therefore, the amount of non-fictional shows has decreased 5 times – in 2007 it was 15.3% and in 2017 – 3.1%. Regarding children's television hybrids the percentage has also declined. From 4.0% in 2007 to 0.7% ten years later. "Other" shows have been excluded in this comparison.

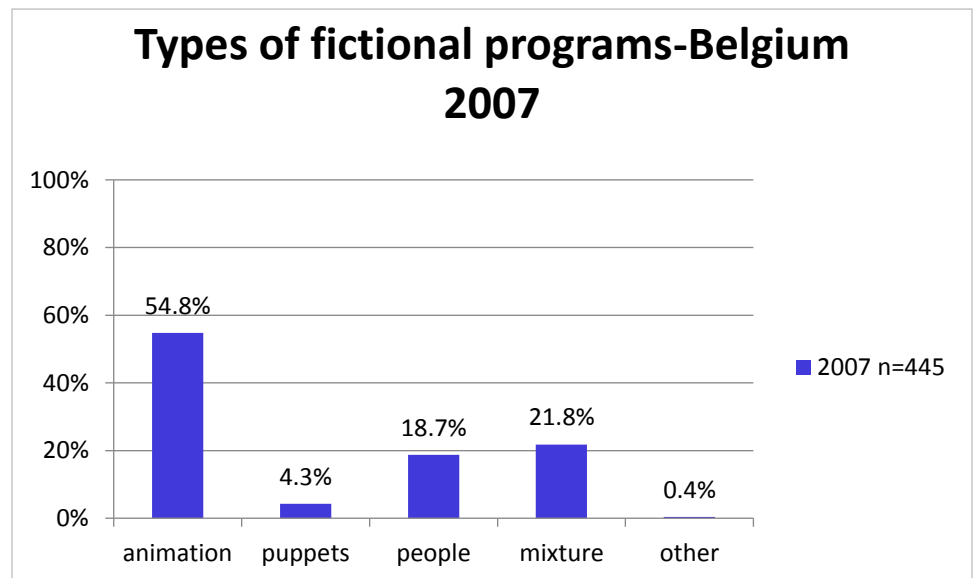
3.2 What type of fictional program?

In the section the results of the general content in children's television has been shown back in 2007. Now, the fictional entertainment itself is going to be analyzed. In this study "Fictional entertainment" is defined as shows which have staged and invented contents. The contents can also tie in with real situations. Most of the fiction shows are 2D animation (41.7%).



In 2007 there was no differentiation between 2D and 3D animation. Thus, the percentage was way higher in the former study (54.8%).

Due to the technological development, the amount of 3D animation programs raised up in the meantime.



This development can also be observed by looking at the percentage of the puppet shows.

In 2007 4.3% of the sample were puppet shows. Ten years later this type of show takes up just 0.2% of all shows.

International comparison

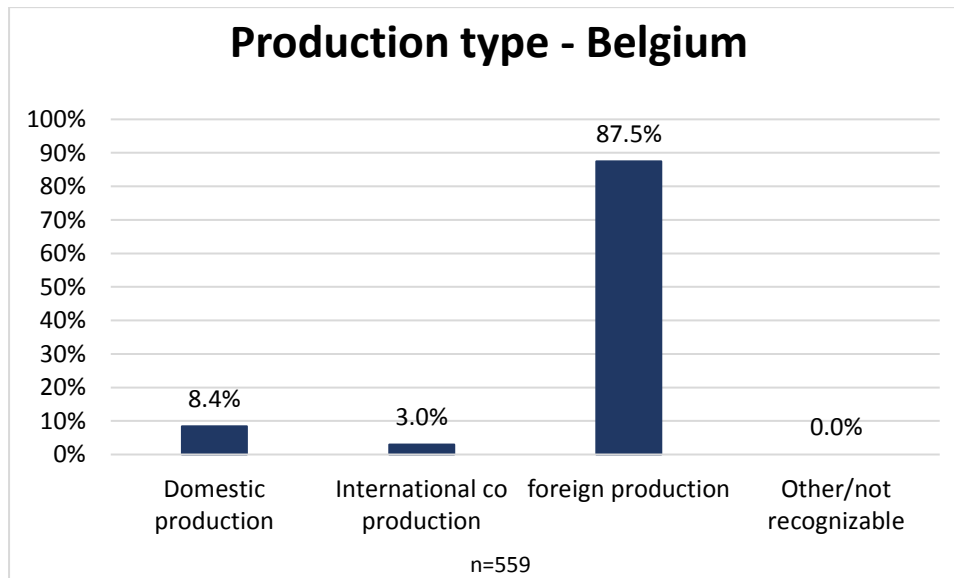
	Animation	Live action	Puppets	Mixtures
Taiwan	95.2%	4.2%	0.0%	0.6%
Canada	84.8%	2.8%	1.3%	11.1%
Cuba	83.6%	6.8%	0.0%	9.6%
Germany	83.4%	15.9%	0.2%	0.5%
USA	76.8%	12.1%	0.0%	11.1%
Israel	76.7%	19.7%	0.0%	3.7%
Belgium	75.3%	18.6%	0.2%	5.9%
UK	62.2%	25.0%	6.9%	5.8%
Average	78.1%	14.5%	1.4%	6.0%

With a percentage of 75.3% of animation on children's television Belgium comes seventh (penultimate) in the international comparison and is below the average. Belgium ranks third in the second largest group - shows with real people. With 18.6% it is above international average. In the genres of puppet shows (0.2%) and mixtures (5.9%), Belgian percentages are below the international average. The international comparison in the ten-year gap shows significantly more animation (2007: 54.8% / 2017: 75.3%) and almost no difference in the live action category (2007: 18.7% / 2017: 18.6%). In 2007, Belgium was also below the average, concerning animation (B: 54.8%; total: 83.9% in 2007) and well above the average regarding shows with real people (B: 18.7%; total: 8.9% in 2007).

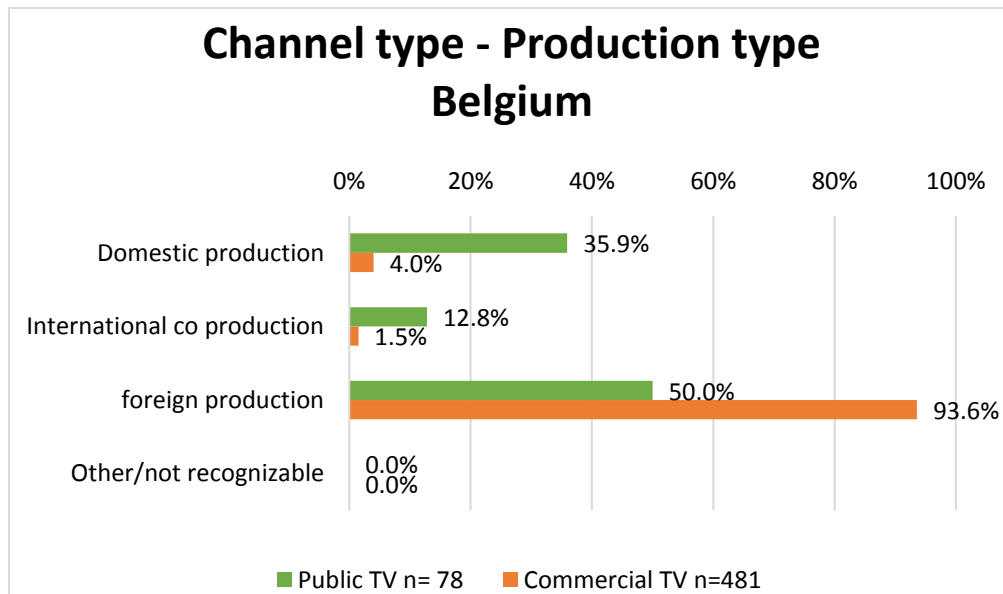
3.3 Where are the shows produced?

As far as the information in the credits, program magazine or other sources displays, every show was coded by which company/country it was produced. The shows are part of the fictional program. Three different types were analyzed. The main question: Is it a domestic production, a foreign production or an international co-production? The location where a program is produced

can give us information about the focus and quality of the specific children's television program. In this case about the content of the Belgian program. Most of the productions are foreign productions (87.5%). 8.4% are domestic productions. Shows were coded as international co-productions, if at least one non-Flemish country was involved in the production process. But international co-productions are an exception in the Belgian sample (3.0%).



Are there differences between the channel types? The data shows that domestic productions are mostly a part of public TV. 35.9% of the domestic productions are shown in Public TV channels and 4.0% are shown in commercial. This is logical, because the public broadcasters are financed and organized by the local government.



The program should reflect Belgian society and concentrate on local spectators. On the other side Commercial TV broadcasters show almost exclusively foreign productions (93.6%). It should be kept in mind that in our sample there are more Commercial TV broadcasters than Public TV broadcasters.

In 2007, foreign productions and international co-productions were summarized in one category (59.8%). 39.8% were domestic productions and 0.9% were not recognizable. Concerning the domestic productions there is a strong decrease (2007: 39.8%/2017:8.4%). This could be an effect of the sample selection of the analysis. Also, the complex federal structure, which is also reflected in the broadcasting, could have an influence.

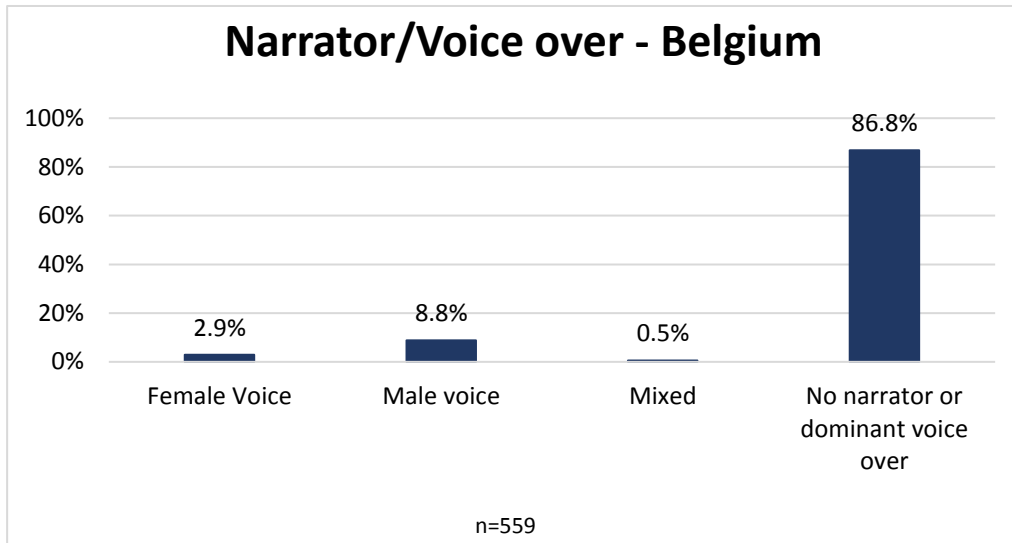
International comparison

domestic prod.	
UK	63.1%
USA	58.7%
Cuba	25.4%
Israel	21.4%
Canada	20.8%
Belgium	8.5%
Germany	6.9%
Taiwan	3.6%
Average	27.9%

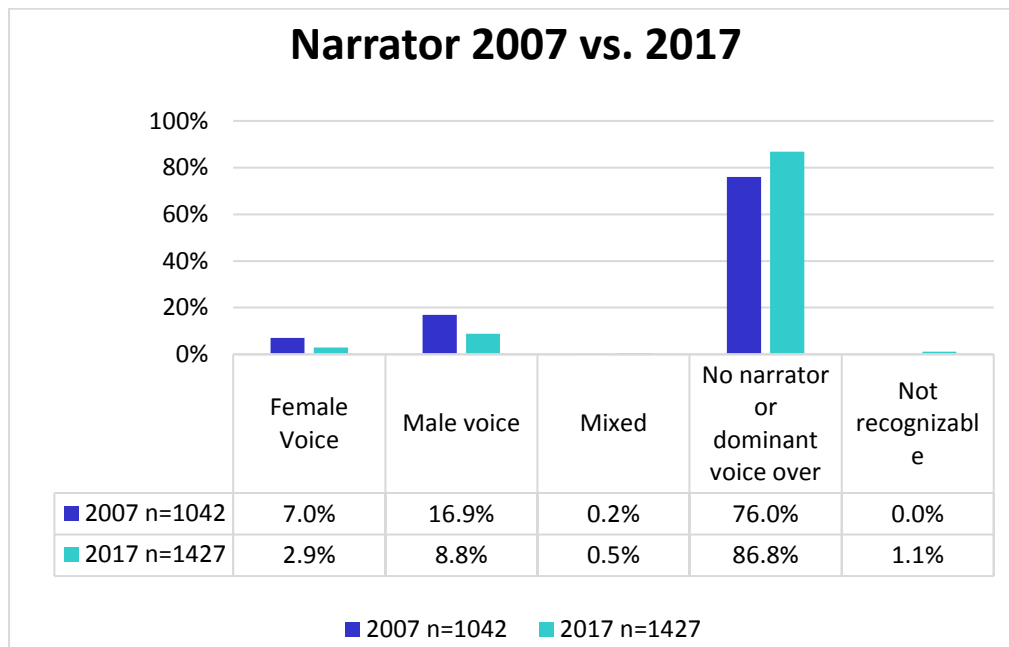
3.4 Who speaks?

We coded if there was a narrator or a voice-over in the shows of the fictional program. A “voice-over” is a voice you can hear but don’t necessarily see. Most important is if the voice was male or female. The majority of the shows did not have a narrator or voice over at all (86.8%) but if there is one it is mainly male (8.8%). In contrast, female narrators are hardly represented (2.9%).

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Regarding the comparison to the former sample, the number of female narrators has declined (2007: 7.0% vs. 2017: 2.9%). There is also a decrease in the male share (16.9%/8.8%). In conclusion, the amount of narrators in general has declined over the past ten years.

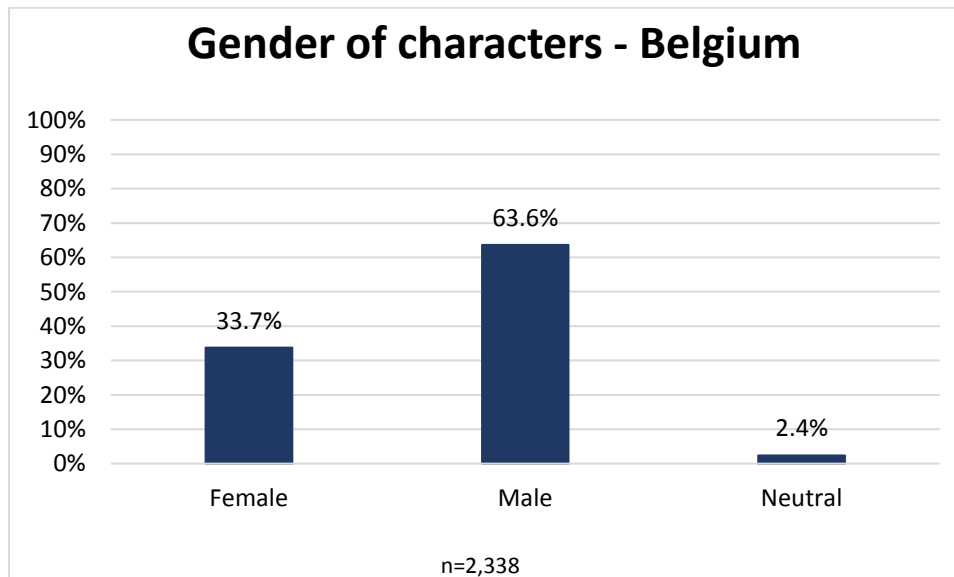


4. Who are the main characters?

To analyze the gender representation of the characters in Belgian children's television, the characters who are necessary for this should be defined. The focus is on the main characters of the fictional program. Previous studies have concluded that those who can be seen at least 30% of the duration of an episode shall be considered as main character, respectively protagonist or antagonist. The characters also had to appear in the first quarter of an episode to be coded.

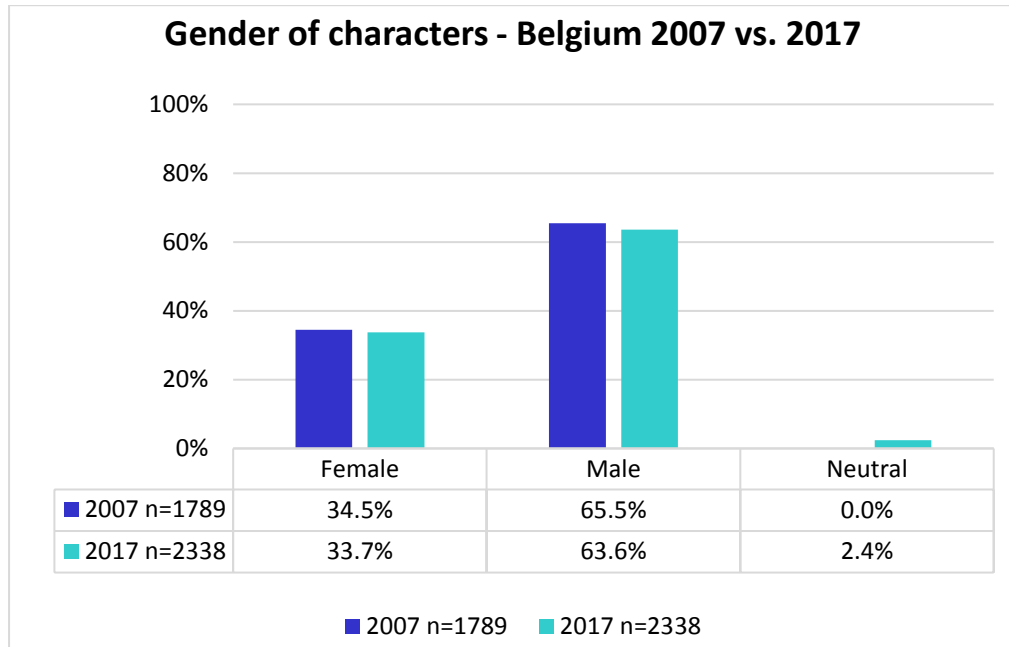
4.1 What gender does a main character have?

The gender is determined by the name of the character, grammatical terms, voice, and easily identifiable sexual characteristics. In this sample most of the characters have a male gender (63.6%). About one third is female. 2.4% is neutral or not recognizable.



Regarding the analysis ten years ago, the relation between male and female characters has not really changed. Although the number of characters in the sample increased, it did not have an impact on the relation between the genders.

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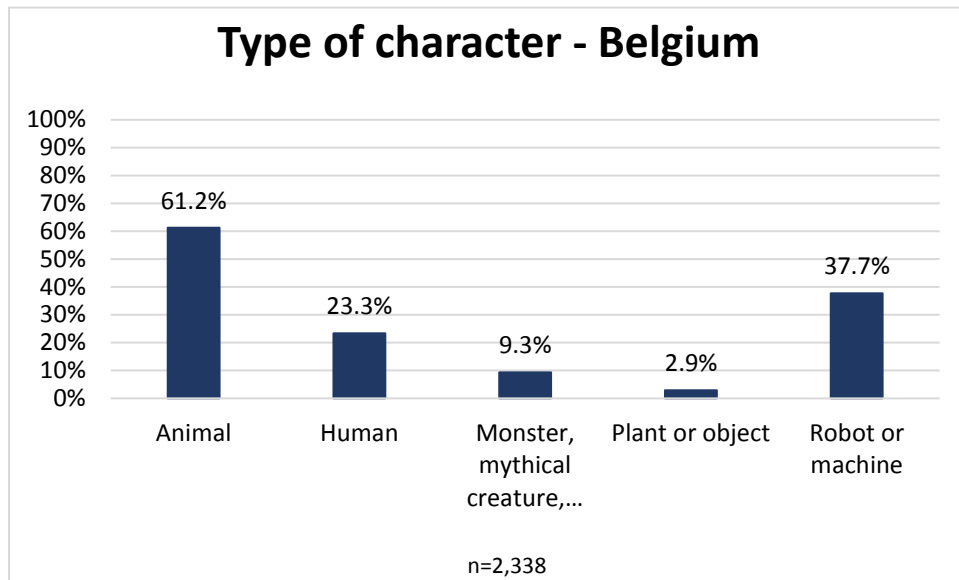
International comparison

female		male		neutral	
Cuba	41.1%	Israel	68.8%	Taiwan	12.5%
USA	38.2%	Germany	65.4%	UK	4.0%
UK	36.5%	Canada	64.3%	Belgium	2.4%
Canada	35.3%	Belgium	63.8%	Germany	1.3%
Taiwan	35.2%	USA	61.8%	Cuba	1.1%
Belgium	33.8%	UK	59.5%	Canada	0.4%
Germany	33.4%	Cuba	57.8%	Israel	0.0%
Israel	31.2%	Taiwan	52.3%	USA	0.0%
Average	35.0%	Average	62.5%	Average	2.5%

In 2007, the male characters in fiction shows made up 65.5% and the female – 34.5%. There is a small positive change, when it comes to the equilibrium between male and female characters (Male: 63.8% / Female: 33.8% in 2017).

4.2 Is the main character a human, animal, object or a monster or a machine?

For this variable, we coded if a character is a human or not. It should be said that the categories are selected more generally aimed at giving an overview. Of course, there is a various range of character types in children's television.



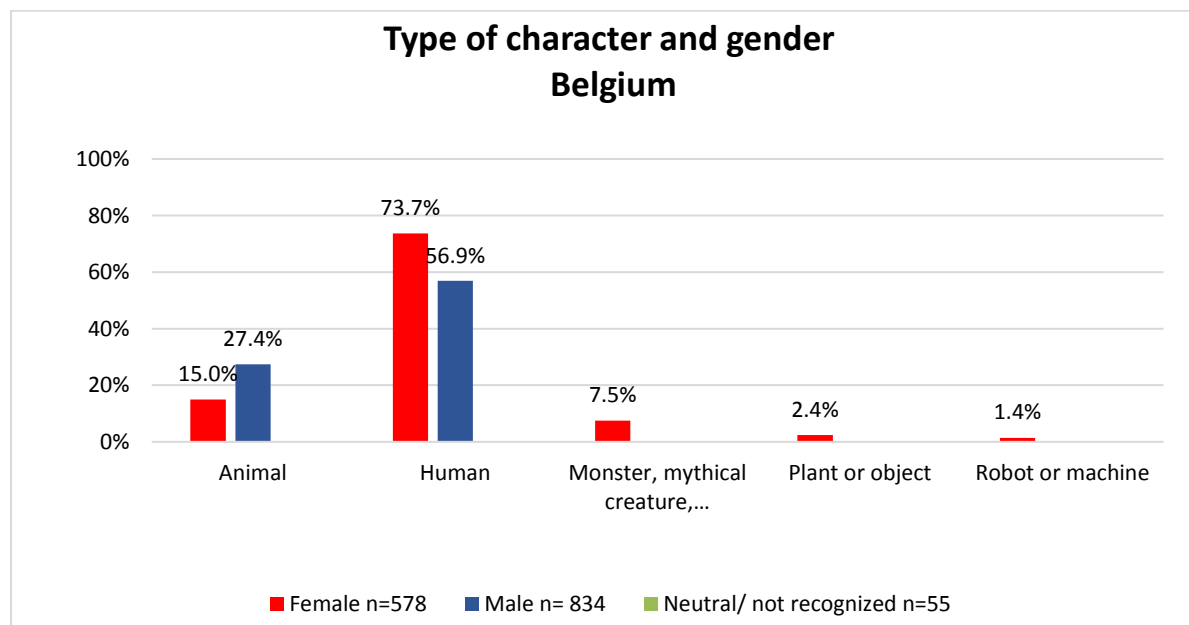
International comparison

	Human	Animal	Monster/etc.	Plant/Object	Robot/ etc.	Other
Cuba	63.4%	27.5%	8.5%	0.3%	0.3%	0%
Belgium	61.2%	23.3%	9.3%	2.9%	3.3%	0%
Germany	59.5%	23.9%	7.5%	6.5%	2.6%	0.1%
Taiwan	56.8%	20.2%	15.0%	0.5%	6.2%	1.2%
Israel	55.4%	24.9%	15.4%	0.4%	3.8%	0.1%
UK	54.9%	27.7%	14.3%	1.3%	0.1%	1.7%
Canada	46.9%	34.0%	9.1%	1.5%	5.8%	2.7%
USA	41.4%	34.8%	18.3%	0.8%	4.7%	0%
Average	54.5%	27.1%	12.6%	1.8%	3.3%	0.8%

61.2% of the characters in Belgian children's TV are human, which is above the international average. 23.3% of the characters are animals, which is below the average.

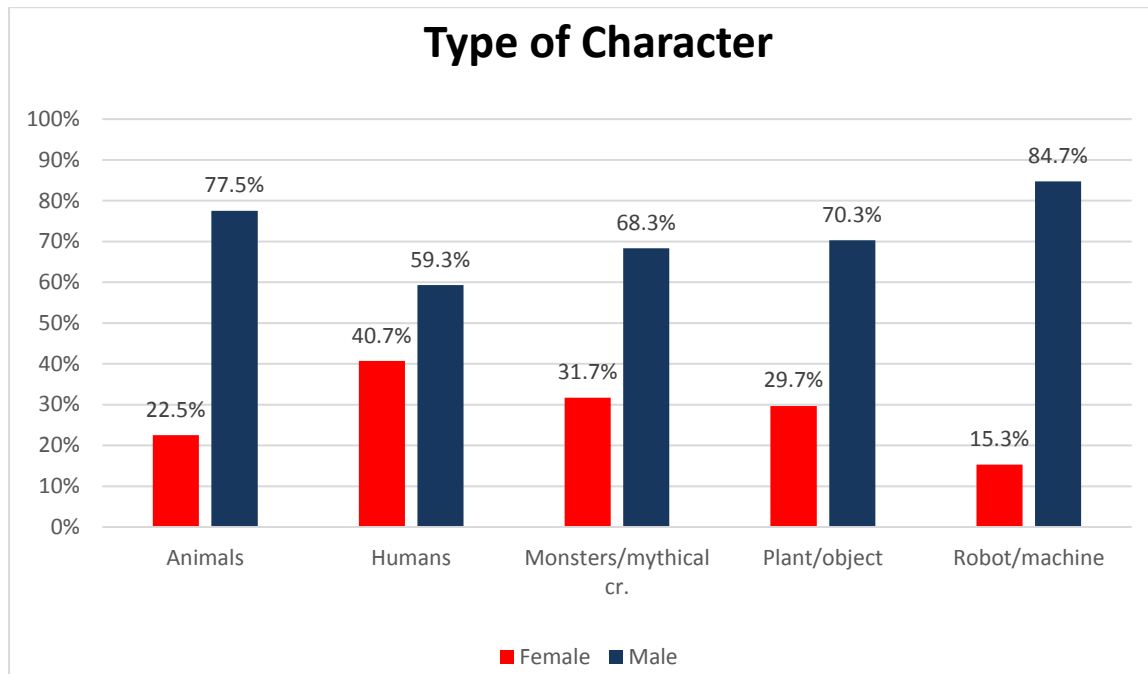
Gender Perspective: Females and males according to the nature of the character

Of the female characters 580 (73.7%) are human, 118 (15.0%) are animals, 59 (7.5%) are monsters or mythical creatures, 19 (2.4%) are plants or objects and 11 (1.4%) are robot or machine. The male characters are in 846 of the cases (56.9%) human, 407 (27.4%) are animals, 127 (8.5%) are monsters/mythical creatures, 45 (3.0%) are plants or objects and 61 (4.1%) are robots or machines.



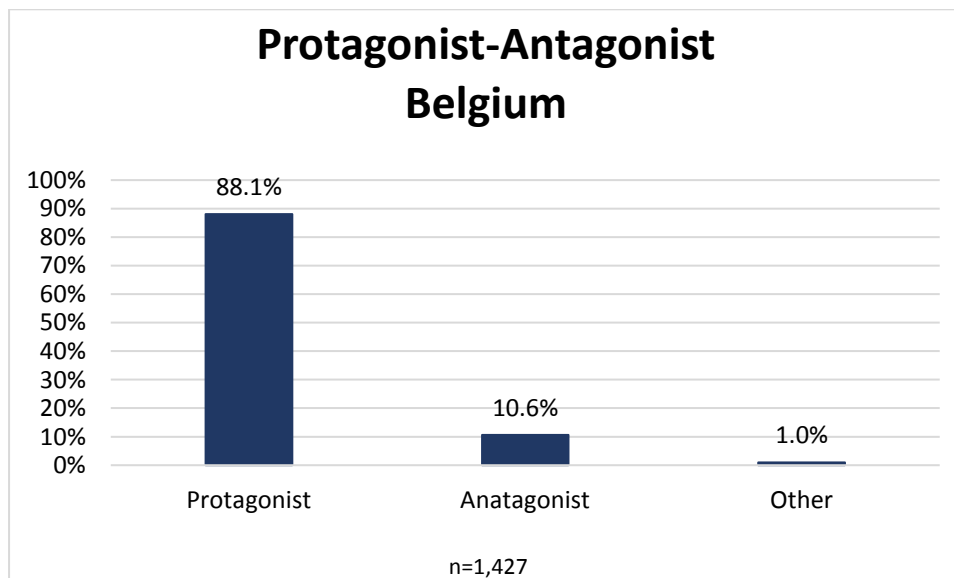
Of the human characters 580 (40.7%) are female and 846 (59.3%) are male. Among the animals, 118 (22.5%) are female and 407 (77.5%) are male. Among the monsters or mythical creatures 59 (31.7%) are female and 127 (68.3%) are male. Of the plants and objects 19 (29.7%) are female and 45 (70.3%) are male. Among the robots or machines 11 (15.3%) are female and 61 (84.7%) are male.

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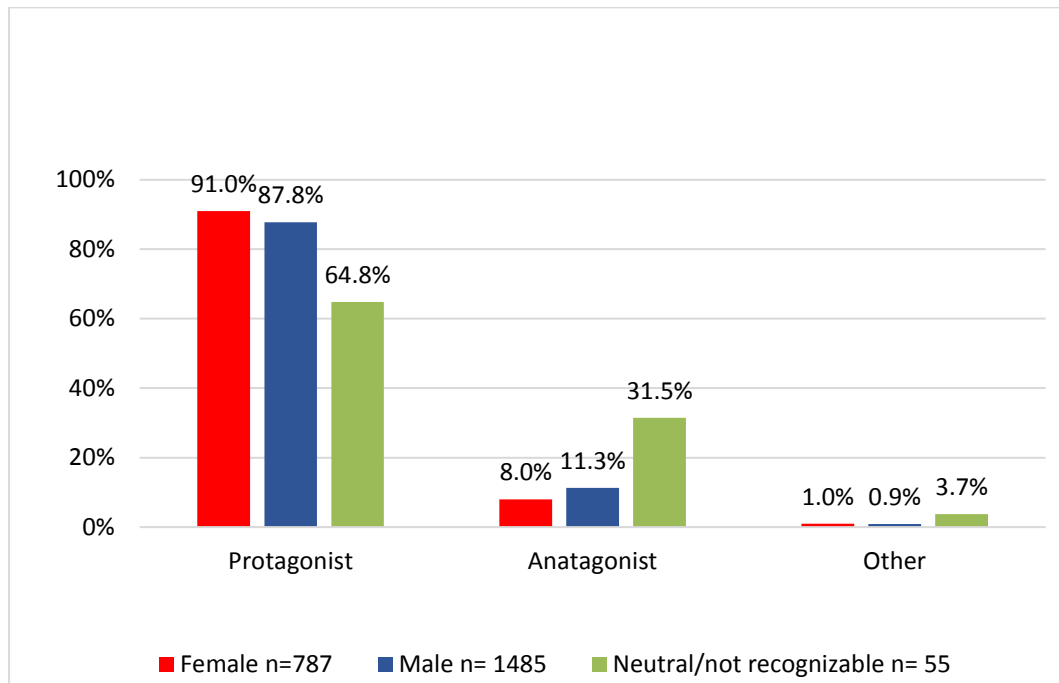
4.3 What is the general role in the story? Protagonist or antagonist

As mentioned above, the characters are differentiated for protagonist or antagonist. The following analyses these individually. More than two-thirds of the characters are protagonists and 10.6% are antagonist. A small percentage could not be categorized neither as protagonist nor as antagonist.



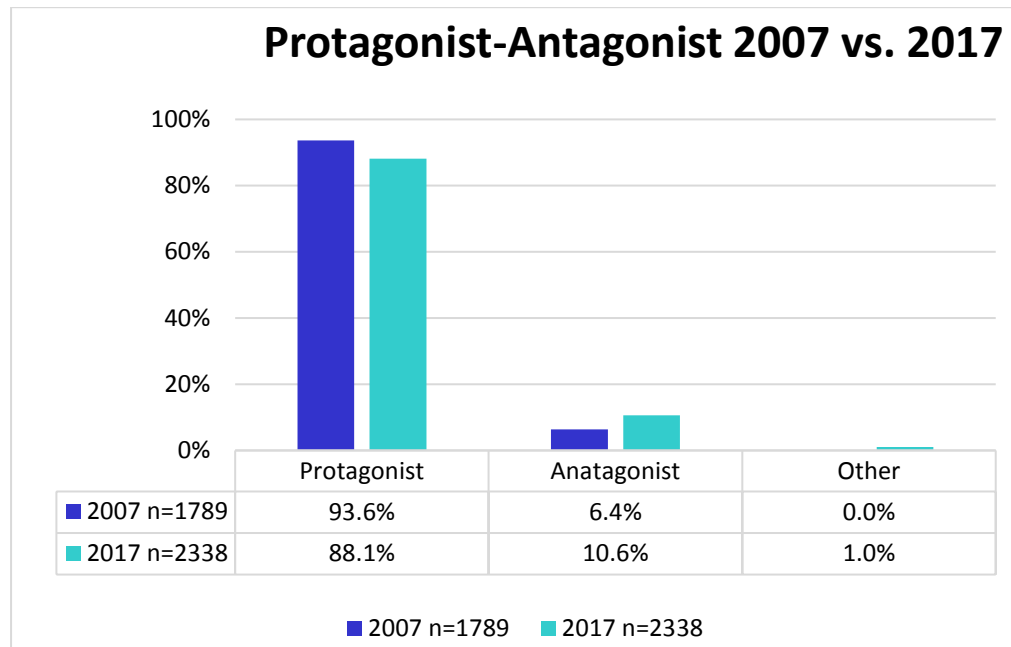
How does the gender perspective look like?

Most females are protagonists and just 8.0% are antagonists. In comparison to the 2007 sample, 11.3% of the male main characters are antagonists. Interestingly, the percentage of antagonists of the characters, whose gender could not be recognized, is high (31.5%). This can lead to stereotypes against non-binary gender people. Often people who can't be clearly identified in their gender are stigmatized. Giving them the role of the villain can have a negative effect and amplify the prejudices.



Looking at the development in the ten-year gap, the percentage of antagonists slightly rose.

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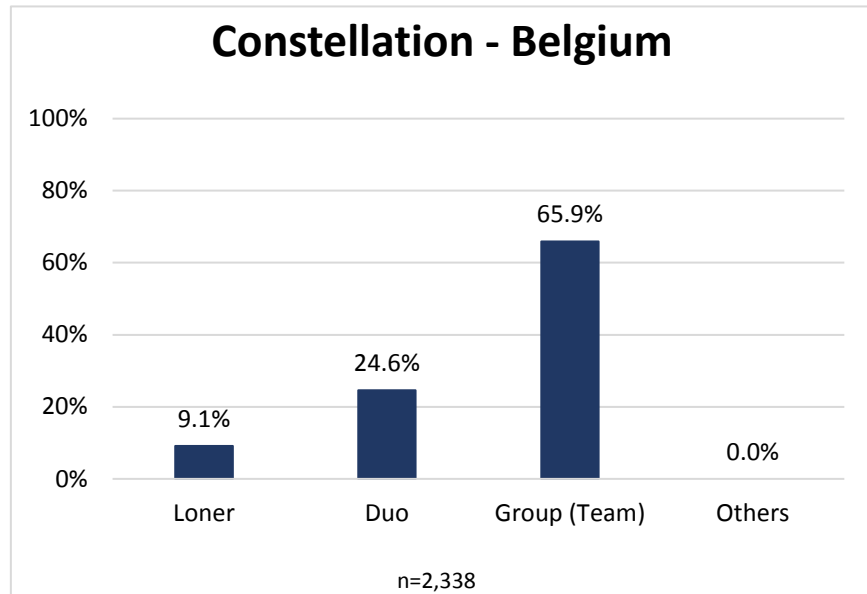


International comparison

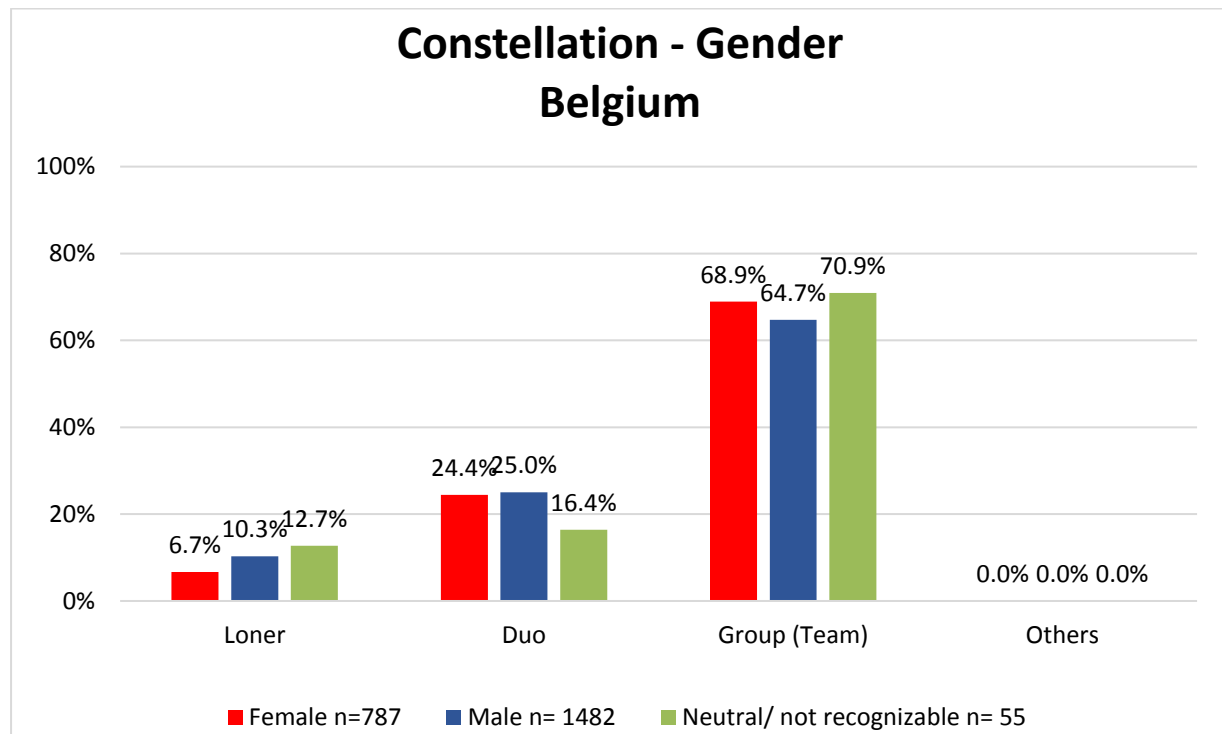
	Protagonist	Antagonist
Taiwan	78.2%	17.6%
Belgium	88.1%	10.6%
Germany	33.5%	9.9%
Cuba	90.4%	9.6%
Israel	90.3%	9.5%
UK	92.3%	7.6%
USA	93.3%	6.6%
Canada	95.0%	4.8%
Average	84.4%	9.1%

4.4 In what kind of constellation is the character portrayed?

How are the characters acting? Do they act alone or not in groups? Most of the characters are acting in groups or a team (65.9%). 9.1% of the characters act alone. About a quarter of the characters act in a duo. Regarding the *gender perspective* there are no significant

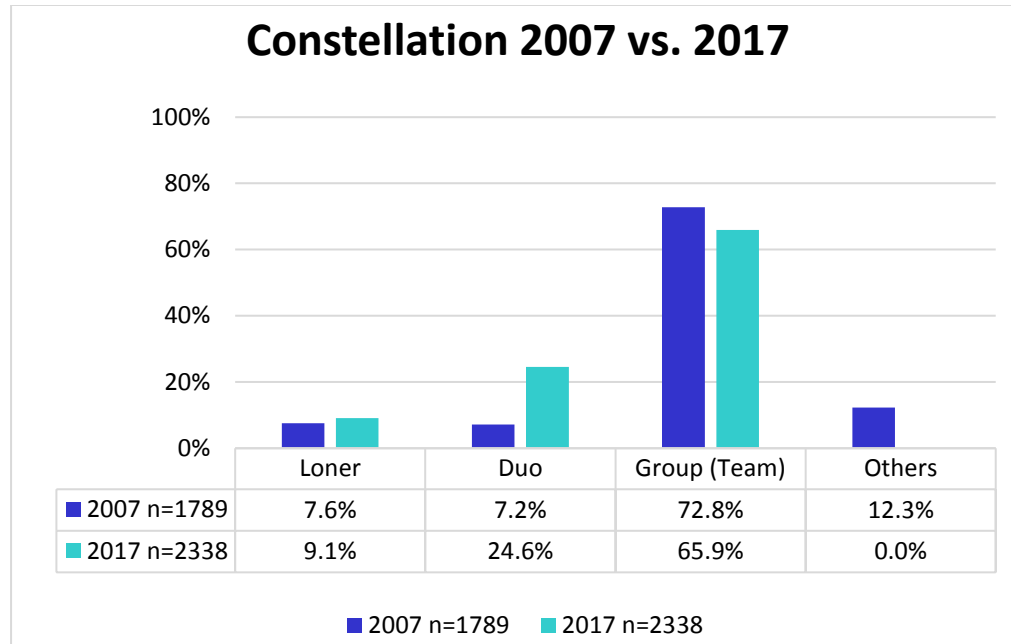


differences between the genders. Males are more often loners than females (10.3%/6.7%).



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In 2017, the percentage of teams declined in comparison to 2007 (2007: 72.8%/2017: 65.9%). There are more duos represented now than in 2007. In 2017, 24.6% are acting in duos. Ten years ago 7.2% were acting in duos.



International comparison

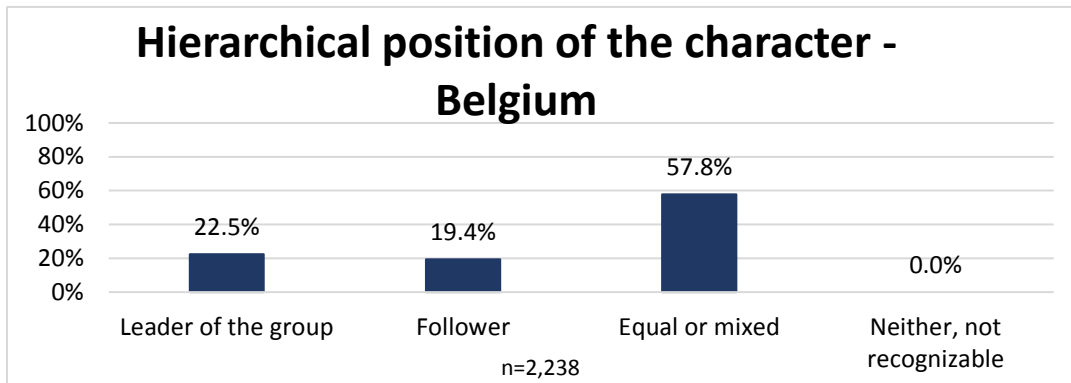
	Loner	Duo	Group / Team
USA	2.2%	5.9%	92.0%
UK	9.5%	15.0%	75.4%
Canada	11.4%	16.4%	71.4%
Belgium	9.1%	24.7%	66.2%
Germany	16.2%	17.4%	63.3%
Cuba	20.2%	22.5%	57.3%
Israel	15.1%	31.1%	53.4%
Taiwan	17.3%	25.7%	53.1%
Average	11.7%	20.0%	67.5%

66.2% of the main characters in Belgian children's TV are presented as part of a group or a team. On an international scale Belgium is in the middle with a percentage little bit below the average.

4.5 Which hierarchical position does the character assume in the show?

The variable "Hierarchical positions" gives us information about the relationship between the main characters. Who are the dominant characters? Is there a strong hierarchical structure or do the characters encounter each other equal?

More than a half of the characters encounter each other equally or are acting in mixed groups with changing leaders. 22.5% main characters can be categorized as leader of the group. 19.4% are coded as followers.

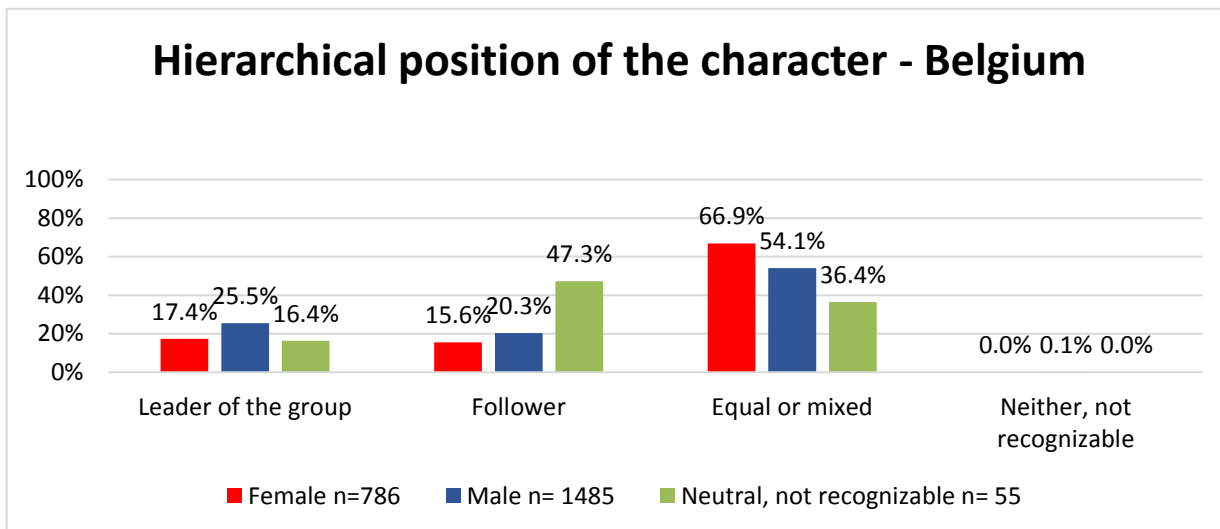


International comparison

	Leader		Follower		Equal
Cuba	54.2%	Cuba	32.7%	USA	81.2%
Israel	38.9%	Israel	25.9%	Canada	76.8%
Taiwan	27.7%	Taiwan	23.8%	Germany	67.0%
UK	25.6%	Belgium	19.4%	UK	66.0%
Belgium	22.5%	Germany	6.5%	Belgium	58.0%
Canada	13.9%	UK	6.2%	Israel	31.3%
USA	13.1%	Canada	6.1%	Taiwan	29.1%
Germany	8.0%	USA	5.7%	Cuba	10.7%
Average	24.2%	Average	14.4%	Average	56.3%

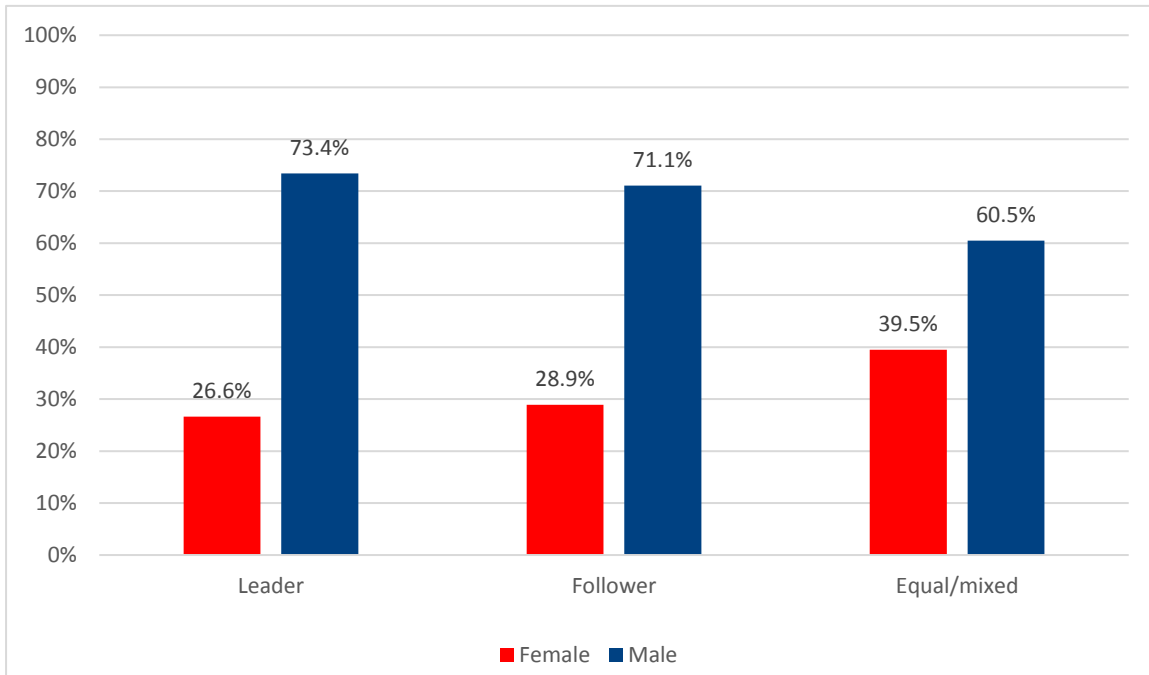
In Belgium 22.5% of the cases the main character is the leader of the group. In 19.4% of the cases the character is a follower and in 58.0% his or her hierarchical position is equal or mixed. Belgium ranks fifth concerning the Leaders and Equals and fourth regarding the Followers. The international comparison in the ten-year gap shows 10% average rise of the leaders and 7% decrease by the equals (2007: Leaders – 11.4%; Equals – 65.9% / 2017: Leaders – 22.5%; Equals – 58.0%). The followers have also increased with more than 10% (2007: 8.6%; 2017: 19.4%). In contrast to the study 10 years ago, Belgium takes now the fifth place regarding the equal characters (it came second in the 2007 sample). Belgium took the penultimate place in the follower category, now it shows a better tendency with its fourth place out of eight countries.

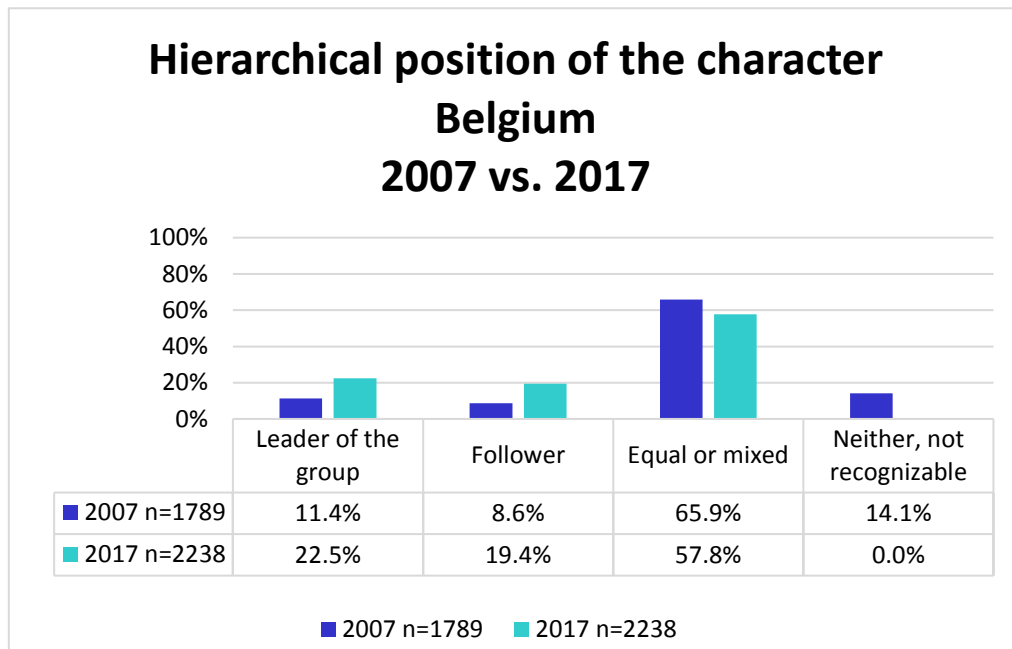
Regarding the *gender perspective*, more females are in groups with equal or mixed hierarchical positions (66.9%). Males are more often the leaders of the group. Every fourth male character is a leader. Characters with neutral gender are often followers (47.3%).



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Of the leaders 137 (26.6%) are female and 378 (73.4%) are male. Among the followers the females are 28.9% (n=123) and the male characters make up 71.1% (n=302). 526 females are equals (39.5%), whereas 60.5% of the category consists of male characters (n=804). There is only male character whose hierarchical position was not recognized (100%).





By comparing the years 2007 and 2017, it can be seen that the number of leaders rose. In the percentage was 11.4% in 2007 and 22.5% in 2017. The percentage of equal or mixed organized groups attenuated a little from 65.9% to 57.8%.

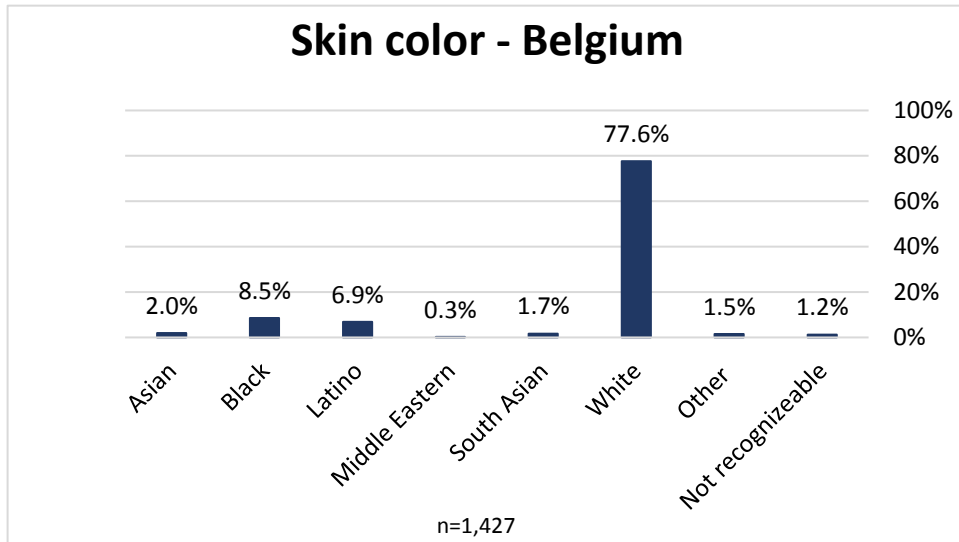
5. The analysis of the human characters

The following analysis concentrates on the main characters of the fictional entertainment who are human. We coded the skin color, hair color, age, body weight and possible existing disabilities.

5.1 What skin color or ethnic affiliation can we see?

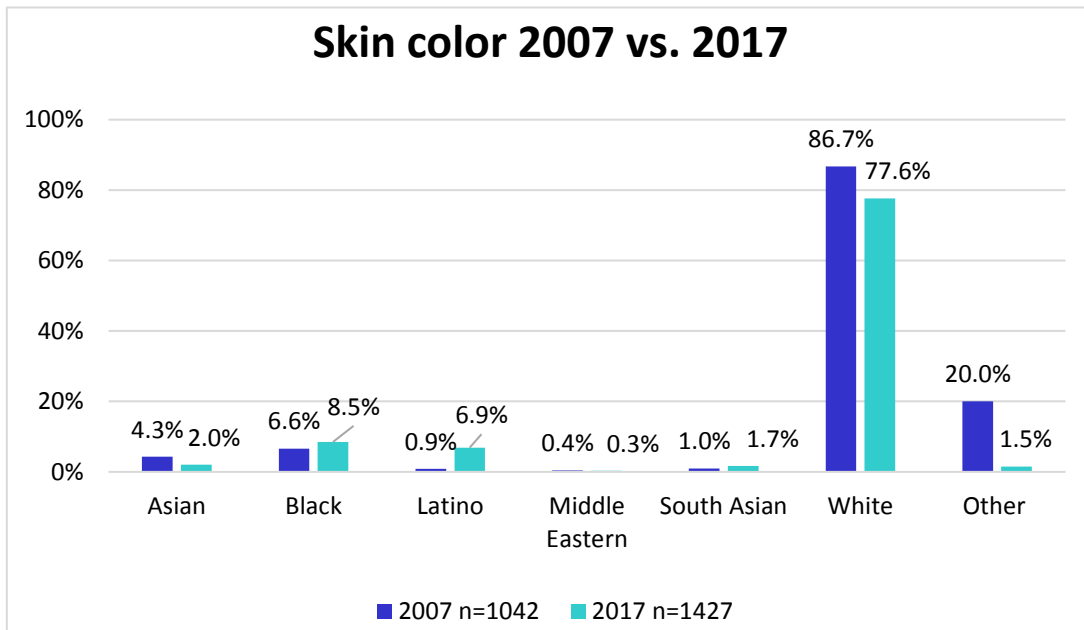
The following analyses the skin color, respectively ethnicity of the human main characters of the Belgian Children's television. We coded this, as far as it was possible or the differentiation the focus was on the skin type, hair type and color or the shape of the eyes.

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The majority of the characters are Caucasian (White). Other skin colors are also represented, but on a much smaller scale. For example, Middle Eastern characters are just for 0.3% represented. Black persons have the highest representation. 8.5% of the characters are coded as black. The percentage of Latino character is 6.9%. Asian characters have just a percentage of 2%. In a multi-culture society like Belgium it should be better.

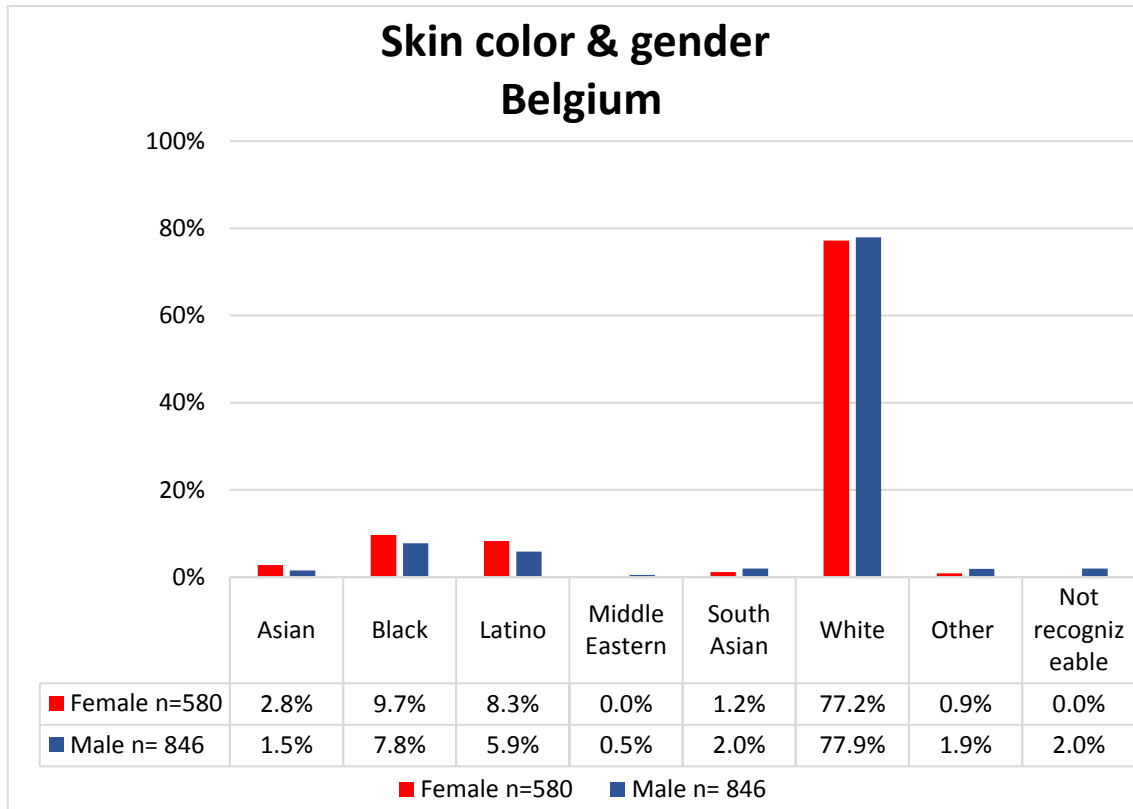
The *gender perspective* shows us that there are some differences for some groups. In the case of Blacks, more females than males have a black skin color, respectively ethnicity (Females: 9.7%, Males: 7.8%). This is also the case with the Latinos. 8.3% of the female characters are



Latinas, but just 5.9% of the Latino main characters are male. Regarding the Asian ethnicity, there is the same development. 2.8% are females and 1.5% are males.

There is a development between 2007 and 2017. The percentage of white characters shrunk. The percentage of people with another skin color characters rose, except for Asians. This could be also an effect of the coding because 20% of the characters in 2007 were coded as "Others". In 2017, just 1.5% pertain to this category. Nevertheless, the direction is the right one.

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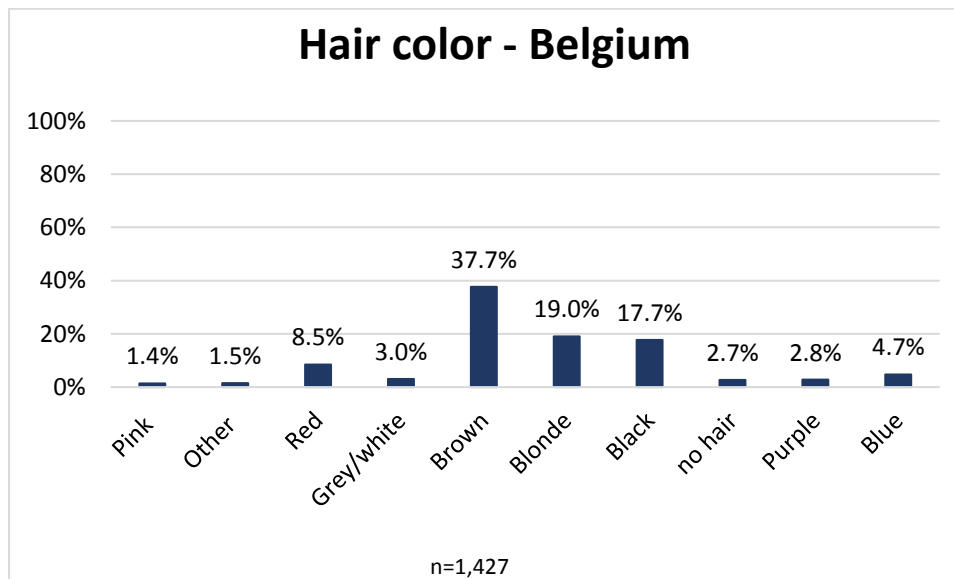
International comparison

Asian		Black		Latin-American		White	
Taiwan	47.1%	UK	16.7%	Cuba	15.4%	Germany	83.0%
Cuba	15.4%	USA	12.2%	Taiwan	9.3%	Belgium	77.9%
USA	6.9%	Israel	9.9%	USA	8.9%	UK	74.8%
Israel	4.0%	Belgium	8.6%	Belgium	6.9%	Canada	74.4%
Canada	2.1%	Germany	7.8%	Israel	6.1%	Israel	66.4%
UK	2.1%	Cuba	7.4%	Germany	2.1%	USA	65.2%
Belgium	2.0%	Canada	5.4%	Canada	1.5%	Cuba	61.2%
Germany	1.9%	Taiwan	2.7%	UK	1.4%	Taiwan	28.7%
Average	7.6%	Average	9.7%	Average	5.3%	Average	69.1%

77.9% of the characters presented in Belgian children's TV are white Caucasians, which makes the country second on an international chart. 8.6% are Blacks, making Belgium fourth out of eight countries. 6.9% are Latin-Americans and 2.0% are Asians, the percentages in both of the categories being below the international average.

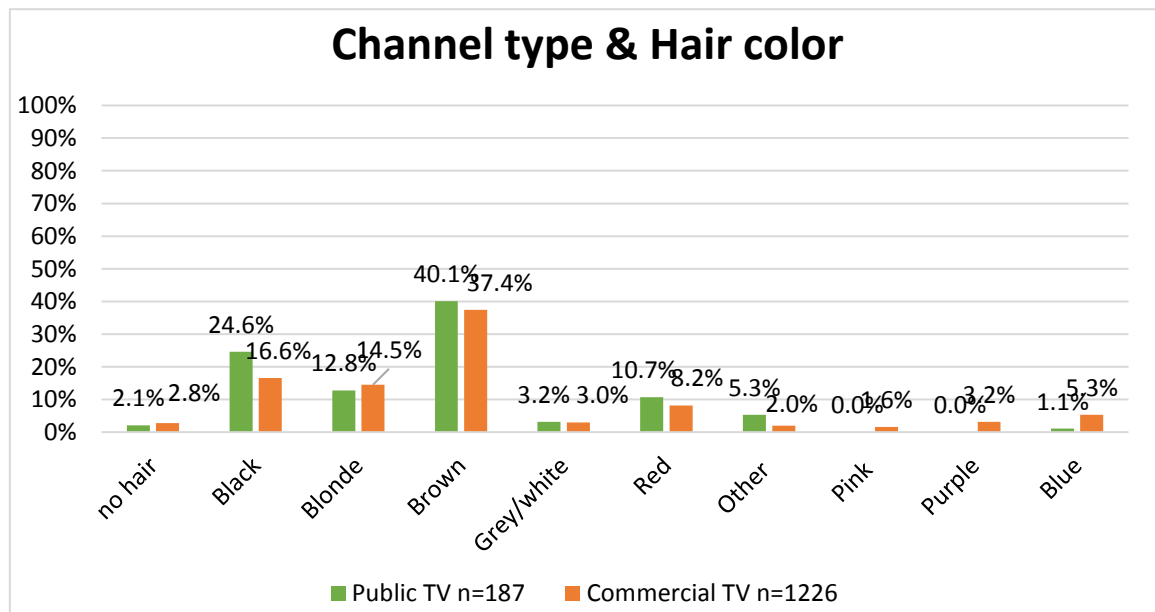
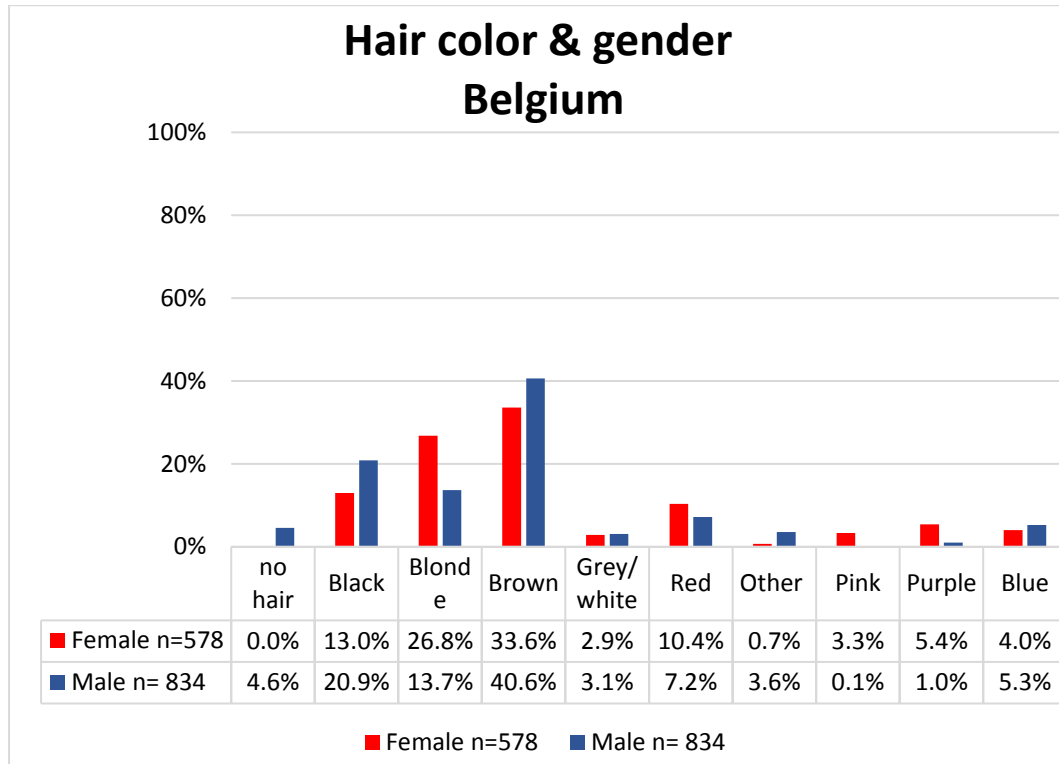
5.2 What hair color do the characters have?

We coded how the hair of the human main characters of the fictional program mostly looked like. Several colors are in the sample. The majority of the characters are brown-haired. The second place is taken by characters with blond hair (19.0%). The share of the other hair colors is around 3.0% each.



Gender perspectives in these sample: there are no females with bald hair. However, they have a greater variety of colors. Male characters are more often brown haired (40.6%). But there are no males with purple or pink hair.

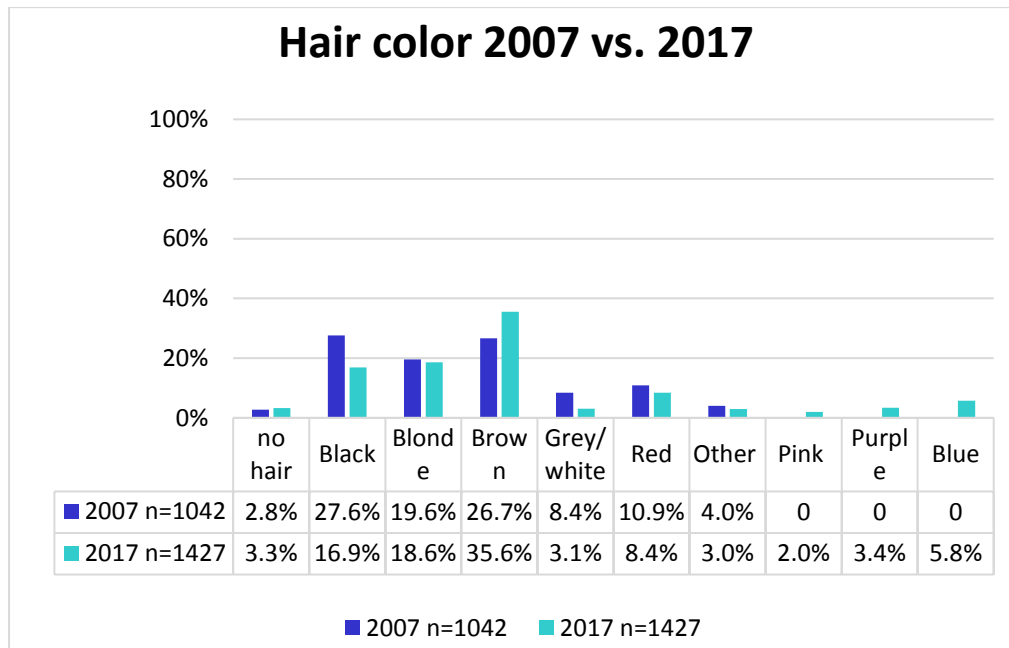
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Looking at the channel types, commercial broadcasters are more experimental with the hair color than broadcasters of the public TV. Looking at the red hair characters, they are more represented in the public TV than in the commercial TV.

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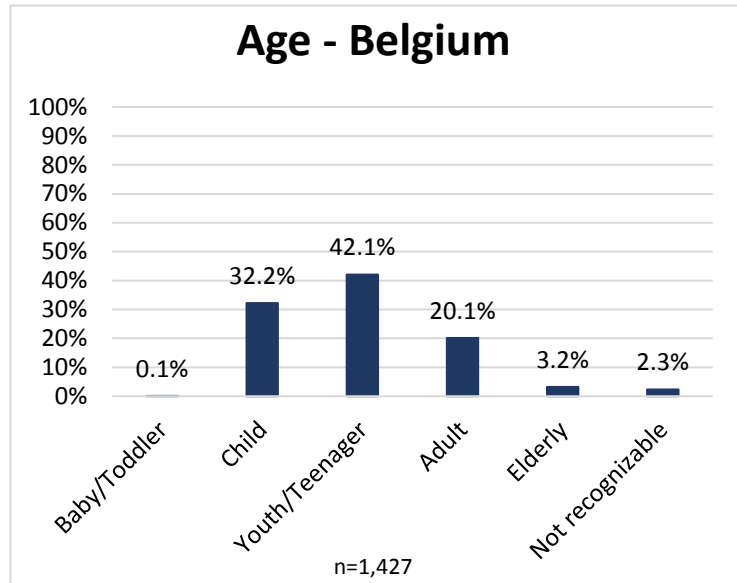
In the ten year gap some new categories were added: pink, purple and blue. The reason is that it also should be analyzed if there are non-conform hair colors in the sample and how does the gender representation look like. Also, the percentage of the brown-haired and black-haired characters increased.



5.3 What age are the characters?

An interesting characteristic is also the age. It was coded, if they were adults or children, elderly or babies.

If visible, the acquisition of earnings, the role they were playing (e.g. mother or father) or recognizable traits like a walking stick helped the distinction for coding the age of the characters. This analysis is about children's television in Belgium. So, it's clear that teenagers are the biggest groups regarding the age. Every fifth character is an adult.



Groups like elderly people are not so often represented in the shows (3.2%).

International comparison

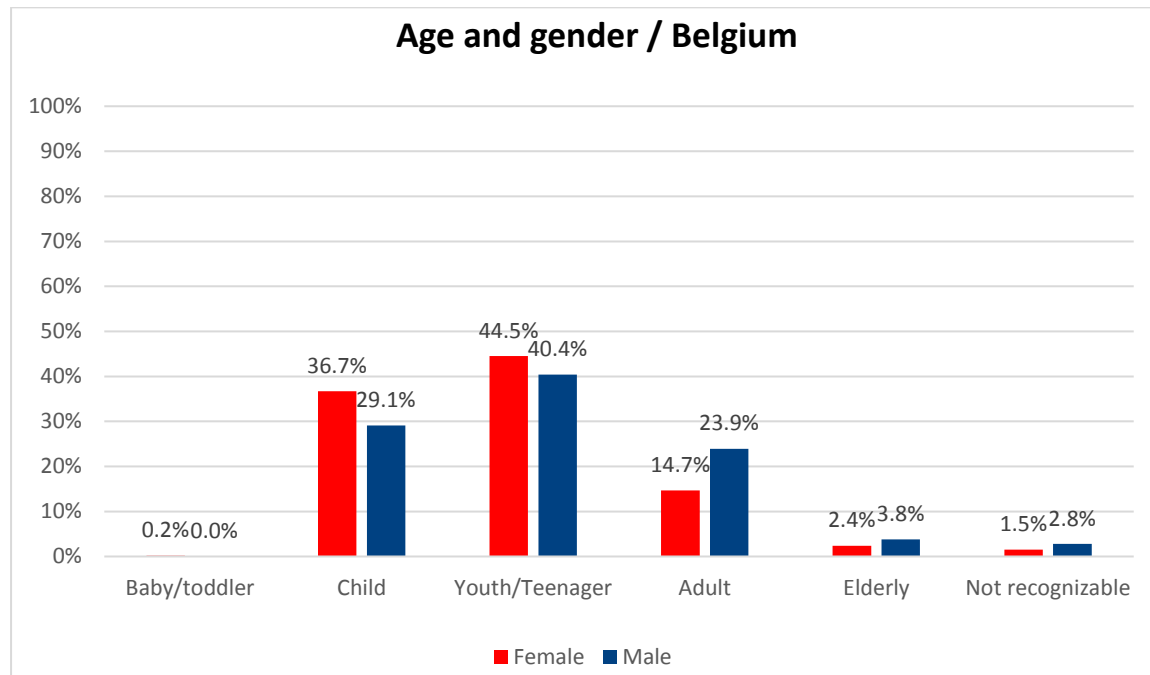
Baby/ Toddler		Child		Youth/ Teenager		Adult		Elderly	
Germany	1.8%	Canada	49.5%	Israel	47.9%	UK	31.5%	UK	4.9%
Cuba	1.6%	USA	44.7%	UK	42.6%	Taiwan	29.4%	Taiwan	3.6%
Canada	0.8%	Cuba	42.2%	Belgium	42.1%	Israel	29.0%	Belgium	3.2%
UK	0.7%	Germany	39.4%	Germany	36.5%	Cuba	28.2%	Israel	2.5%
Taiwan	0.5%	Taiwan	36.9%	USA	33.7%	Germany	20.7%	USA	1.9%
USA	0.4%	Belgium	32.2%	Canada	27.3%	Belgium	20.1%	Germany	1.6%
Israel	0.1%	Israel	20.2%	Taiwan	27.2%	Canada	19.6%	Canada	0.9%
Belgium	0.1%	UK	15.4%	Cuba	27.2%	USA	19.3%	Cuba	0.8%
Average	0.6%	Average	31.3%	Average	38.2%	Average	25.1%	Average	2.8%

Concerning the teenage characters, Belgium takes the third place with 42.1%, which is above the international average. With a share of 20.1%, Belgium ranks sixth regarding the adult characters

Children's Television Worldwide:
Gender Representation in Belgian Children's Television

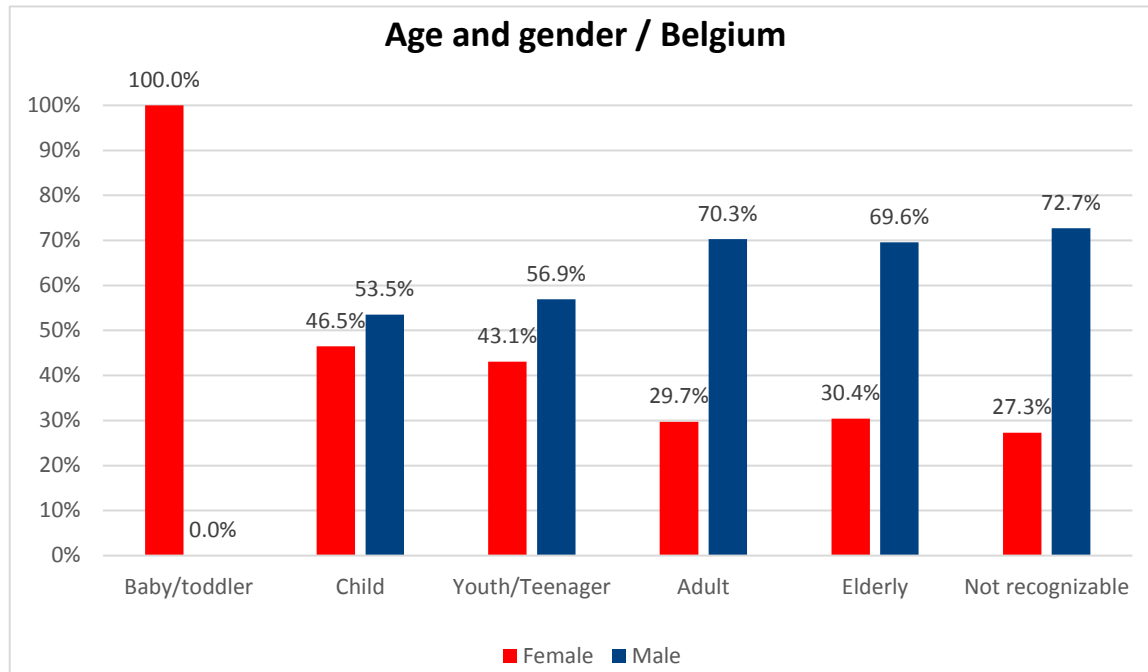
and is 5% below the average. Elderly characters constitute 3.2%, which is very close to the average. Babies and toddlers make up 0.1%, which is slightly below the international average. 32.2% of the presented characters on Belgian children's TV are children, i.e. Belgium is 1% above the international average.

Gender perspective: Girls are more often teenagers, adults are more often male.



Out of the female characters 213 (36.7%) are children, 258 (44.5%) are teens, 85 (14.7%) are adults and 14 (2.4%) are elderly. The only one baby character in the Belgian sample is also female (0.2%). The age of 9 female characters could not be recognized (1.6%). 245 male characters (29.1%) are children, 340 (40.4%) are teens, 201 (23.9%) are adults and 32 (3.8%) are elderly. The age could not be recognized for 24 male characters (2.9%).

Children's Television Worldwide:
Gender Representation in Belgian Children's Television

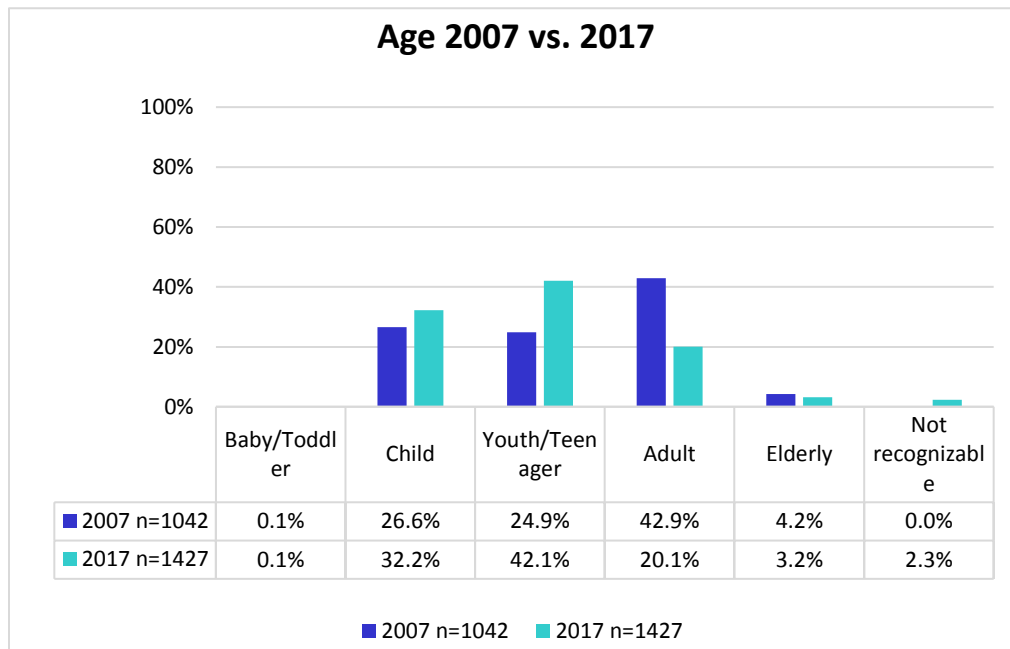


The only one baby character is female (100%). Out of the children, 245 (53.5%) are male and 213 (46.5%) are female. Among the teenagers 56.9% are male characters (n=340) and 43.1% are females (n=258). 85 female characters are coded as adults (29.7%), whereas the adult male characters are 201 (70.3%). There are also 32 senior male (69.6%) and 14 female (30.4%) characters. Another 33 characters' age could not be recognized: 9 females (27.3%) and 24 males (72.7%).

Gender perspective: There is no significant difference between the genders.

Between 2007 and 2017 the percentage of adults has decreased by half. In 2007, 42.9% were coded as adults. In 2017, just 20.1 % are. In contrast, the percentage of teenagers has doubled. In 2007, 24.9% were youth or teenagers. In 2017, the share of this group is 42.1%. Also, the percentage of children increased from 26.6% to 32.2%.

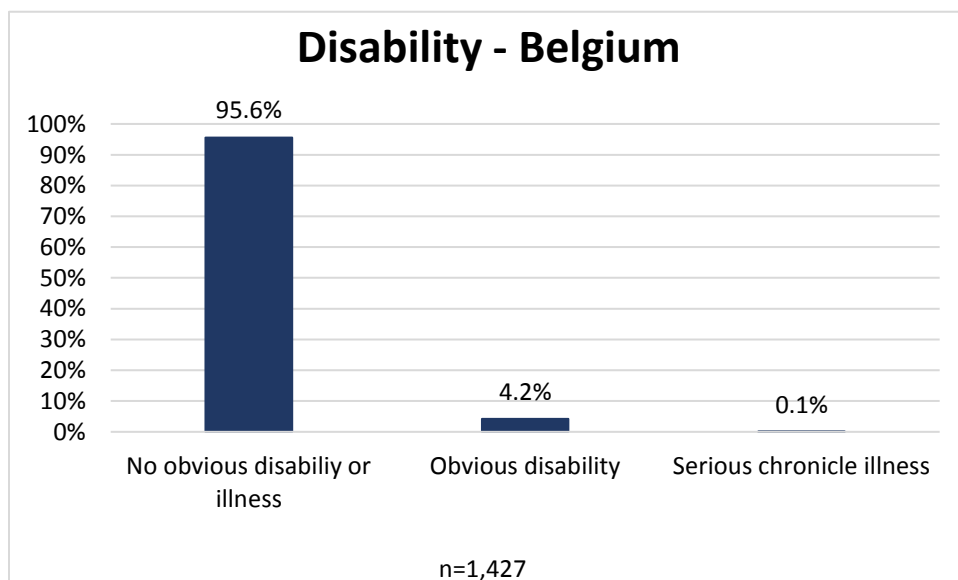
Children's Television Worldwide:
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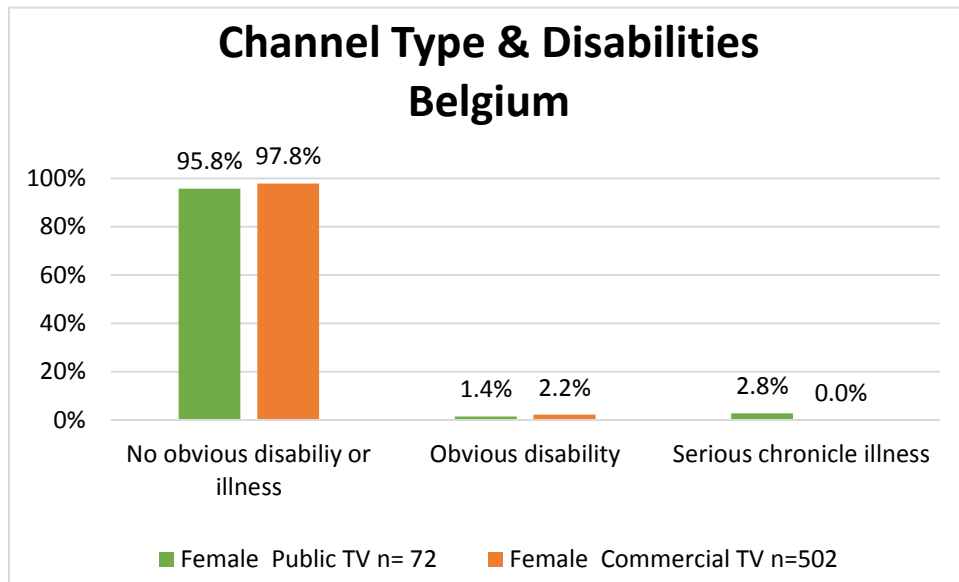


5.4 Which disabilities do the characters have?

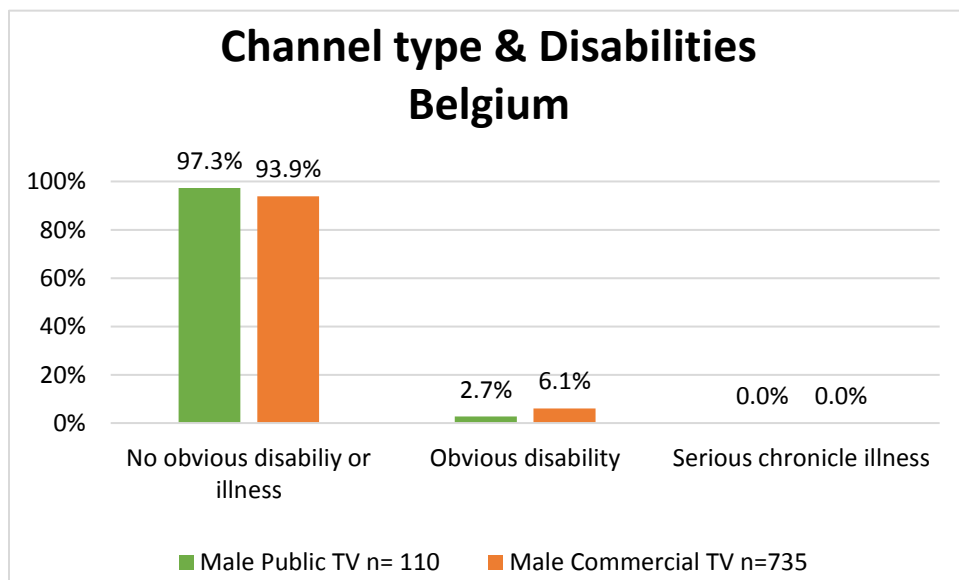
Does the character have an identifiable disability or a serious chronic illness? Most characters don't have an obvious disability or illness (95.6%). About 4.2% have one. Just 0.1% of the characters have a disability.

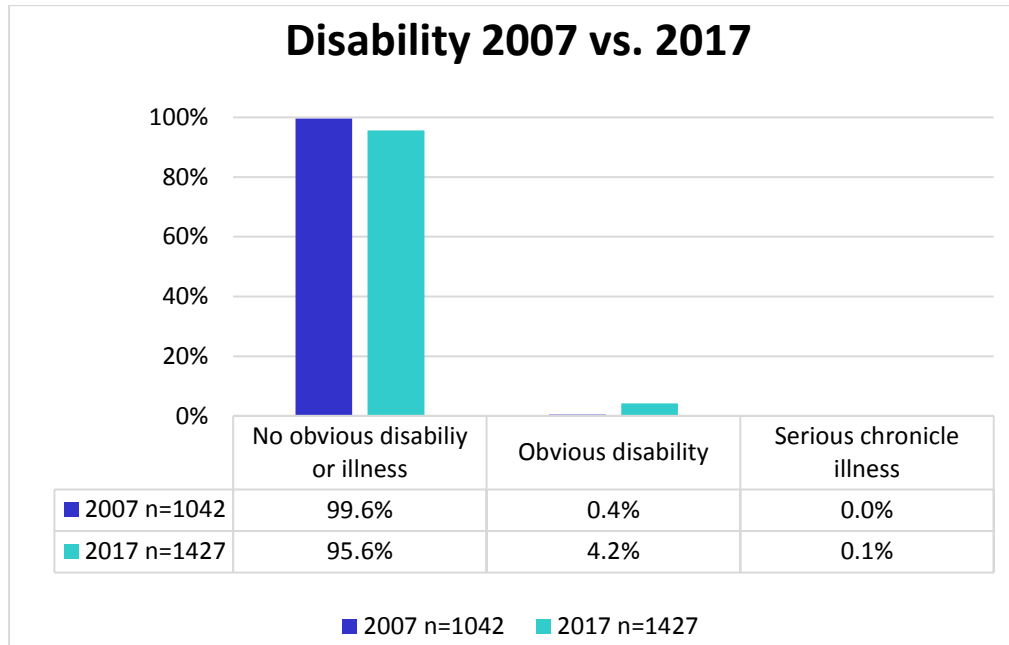
This does not correspond to the reality. Children with disabilities should also be represented in the shows.





Analyzing the channel type and the gender, there is no real difference between Public TV and Commercial TV. Neither in the case of female characters nor in the case of male characters. There is a small difference between Public and Commercial TV for male characters. Male characters in Commercial TV have more disabilities than the male characters in Public TV (6.1%/ 2.7%). Females in Commercial TV have a percentage of 2.2%.

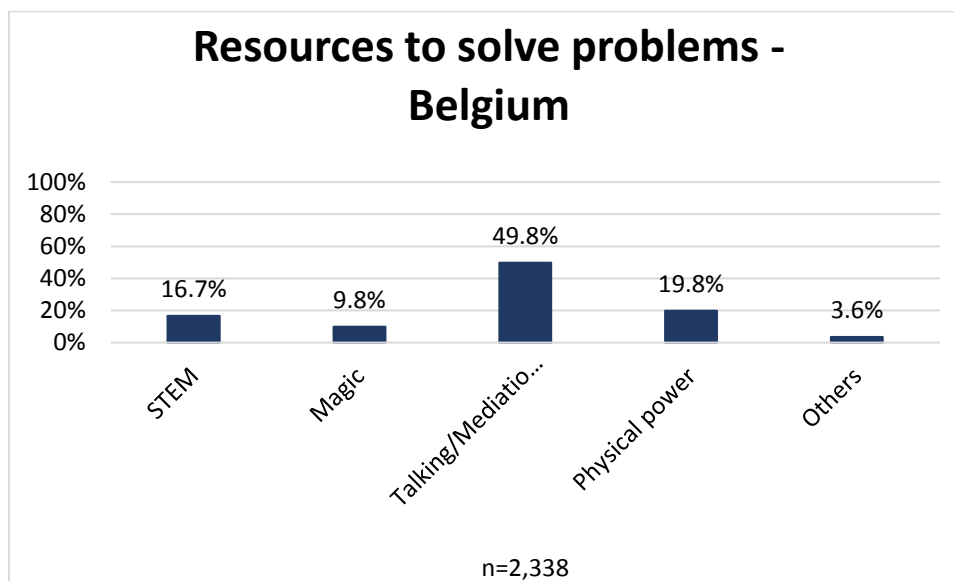




Over the ten year gap a small development can be mentioned. The percentage of obvious disabilities increased from 0.4% to 4.2%.

5.5 What is their main resource to solve problems?

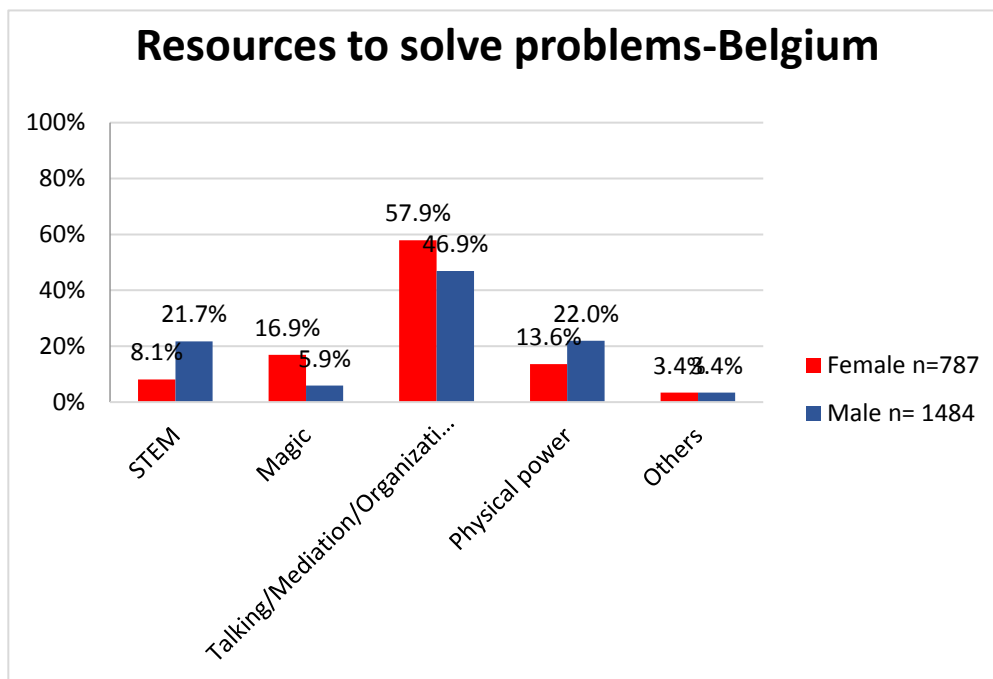
We analyzed how the characters act in problematic situations. How do they solve problems? Which kind of coping strategies is presented?



The characters mostly talk, mediate or organize to solve a problem (49.8%). Every fifth character uses STEM (Science, technology, engineering and/or math). About 20% use physical power and 9.8% use magical power.

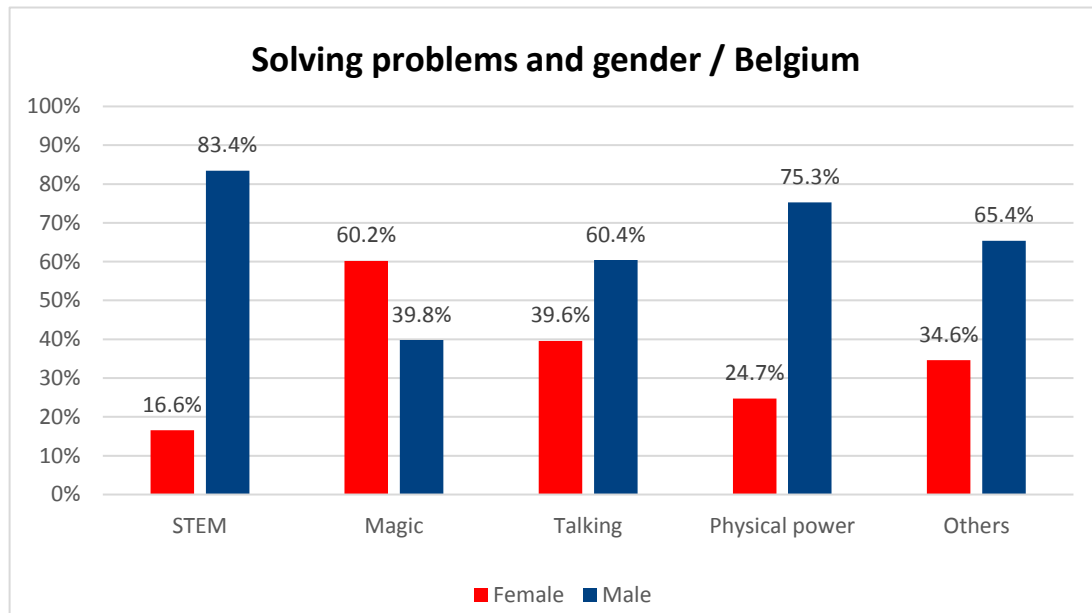
Gender perspective

The gender perspective shows, that females are using most often “talking, mediation and organizing” as a problem-solver (57.9%). Just 13.6% of the girls are using physical power. But in contrast, 16.9% are using magical powers. Male characters who use magical powers have a percentage of 5.9%. Male characters also mainly use talking or mediation (46.9%). But they are using STEM clearly more often than female characters do (21.7% male, 8.1% female). The percentages of male characters using STEM and physical power are relatively similar (in both cases we have about 22%).



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Out of the characters, who use STEM as a problem-solver 16.6% are female (n=64) and 83.4% are male (n=322). The magic category consists of 60.2% female characters (n=133) and 39.8% males (n=88). 456 females are using talking, mediation, organizing etc. as a problem-solver (39.6%), whereas the male share in this category is bigger (696 characters with 60.4%). 327 males make up 75.3% of the physical power group and the females, who use this method are 107 (24.7%). The "Other" category consists of 34.6% female characters (n=27) and 65.4% male characters (n=51).



International comparison

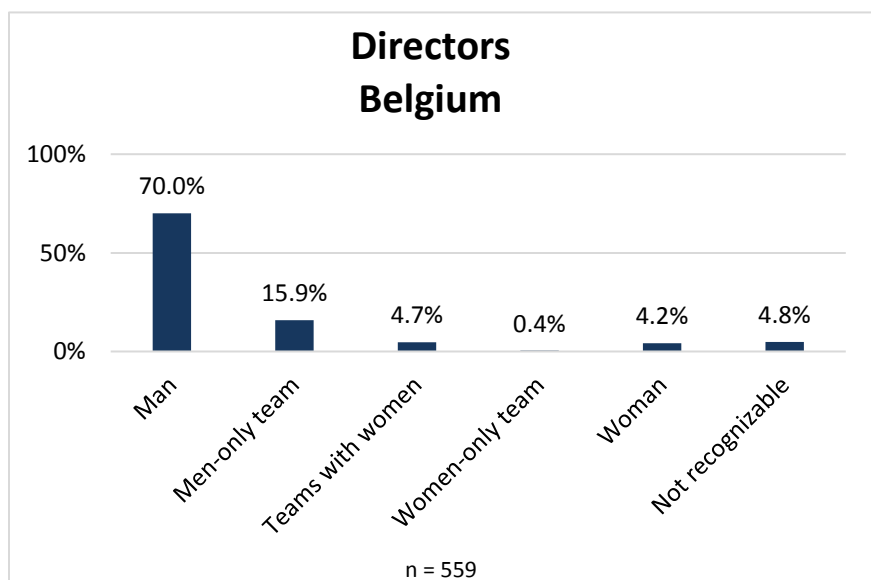
STEM		Magic		Talking		Power	
Israel	24.4%	Cuba	15.5%	UK	53.4%	Cuba	23.2%
UK	24.0%	Taiwan	10.8%	Taiwan	52.9%	Belgium	19.9%
USA	21.1%	Israel	9.9%	USA	51.8%	USA	17.8%
Canada	18.5%	Belgium	9.8%	Canada	50.3%	Canada	16.3%
Belgium	16.7%	USA	9.1%	Belgium	50.0%	UK	15.1%
Taiwan	11.1%	Canada	8.7%	Israel	48.7%	Taiwan	14.3%
Germany	8.8%	Germany	6.7%	Cuba	24.8%	Israel	13.5%
Cuba	7.2%	UK	3.6%	Germany	24.3%	Germany	6.4%
Average	18.5%	Average	8.4%	Average	47.2%	Average	15.4%

Belgium takes the fifth place in the category 'STEM' and is 2% below the international average. It ranks fourth in terms of using magic to solve problems and is a little bit above the average. Concerning 'Talking' Belgium is % above the international average. It is penultimate in respect of using power and is 2% below the international average. The 'Others' category is excluded here.

6. Production: How is the show directed, produced, written and created?

6.1 Director

The following concentrates on the gender distribution of the production teams, beginning with the director. Most directors are men 70.4% and 15.9% of the teams are without women. Just 4.2% of the directors in Belgian Children's television are women.



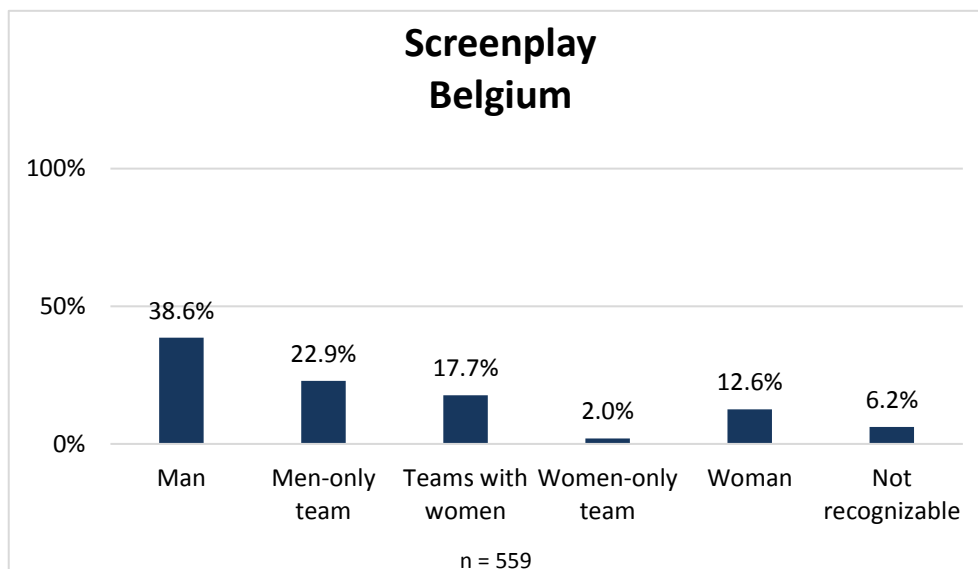
International comparison

Woman		Man		Team with		Men-only		Women-only	
Canada	9.9%	Belgium	70.0%	Taiwan	10.8%	USA	20.9%	USA	1.4%
Cuba	9.8%	Canada	69.6%	Israel	8.9%	Israel	17.5%	UK	0.7%
UK	8.6%	Israel	68.4%	USA	8.6%	Cuba	16.7%	Belgium	0.4%
Germany	5.8%	Taiwan	66.7%	Cuba	8.5%	Germany	16.4%	Canada	0.2%
USA	4.9%	Germany	66.1%	UK	6.8%	Belgium	15.9%	Germany	0.0%
Taiwan	4.4%	Cuba	64.9%	Canada	6.3%	Taiwan	15.0%	Taiwan	0.0%
Israel	4.3%	USA	59.2%	Belgium	4.7%	Canada	12.1%	Cuba	0.0%
Belgium	4.2%	UK	56.1%	Germany	3.2%	UK	9.1%	Israel	0.0%
Average	6.5%	Average	66.1%	Average	6.7%	Average	14.4%	Average	0.2%

Belgium is the leader in terms of men directors. Then again, is pretty close to the international average in all categories.

6.2 Screenwriter

Regarding the screenplay, 3 times more men than women write the screenplay (38.6% males vs. 12.6% females). Almost a quarter of the teams don't have a woman screenwriter. Just 2.0% of the teams consist only of women.



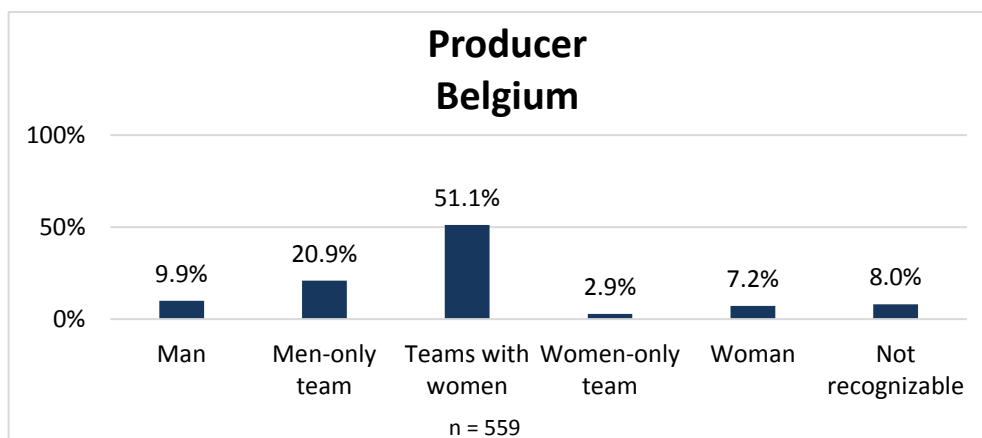
International comparison

Woman		Man		Team with		Men-only		Women-only	
Canada	20.3%	Cuba	58.0%	Israel	54.1%	Germany	25.2%	USA	4.6%
UK	18.4%	Canada	43.8%	Taiwan	42.5%	USA	23.7%	Germany	2.8%
Germany	15.9%	Belgium	38.6%	Cuba	28.7%	Belgium	22.9%	Belgium	2.0%
USA	13.0%	Taiwan	32.2%	UK	28.3%	Israel	22.4%	Canada	1.3%
Belgium	12.6%	Germany	32.1%	USA	25.3%	Canada	19.0%	Taiwan	1.1%
Cuba	12.2%	USA	29.2%	Belgium	17.7%	Taiwan	13.1%	UK	1.0%
Taiwan	8.1%	UK	23.5%	Germany	16.4%	UK	12.5%	Israel	0.3%
Israel	4.9%	Israel	17.0%	Canada	14.2%	Cuba	1.1%	Cuba	0.0%
Average	12.9%	Average	30.0%	Average	29.0%	Average	20.5%	Average	1.8%

Compared to the other countries Belgium is taking the sixth place in terms of writing teams with women. With a percentage of 17.7% this category is over 10% below the international average. In all other categories except for the first one (one woman as a screenwriter) Belgium's share is above the international average.

6.3 Producer

Women are a part of more than the half of the producing teams in Belgium. Looking only at the producers, the difference is not so big like it was by the directors. 7.2% are women and 9.9% are men. But it has to be mentioned that 20.9% of the teams don't have a woman in them.



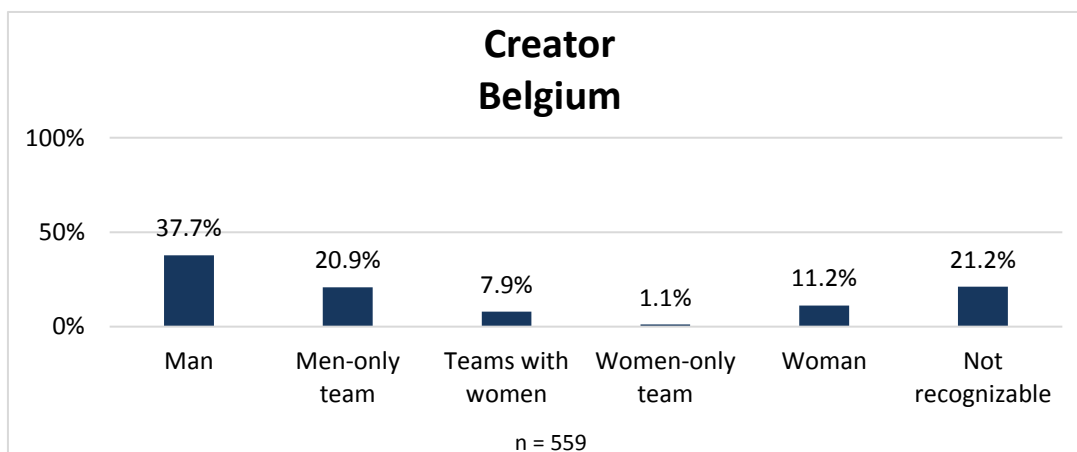
International comparison

Woman		Man		Team with		Men-only		Women-only	
UK	31.5%	Cuba	42.4%	USA	64.3%	Cuba	25.0%	Israel	3.8%
Israel	16.5%	Taiwan	34.2%	Canada	56.8%	Taiwan	23.6%	Belgium	2.9%
Canada	15.8%	Israel	23.3%	Belgium	51.1%	USA	23.0%	Canada	1.7%
Taiwan	11.7%	UK	21.2%	Israel	37.9%	Germany	22.4%	Germany	1.6%
Belgium	7.2%	Canada	11.2%	Germany	34.2%	Belgium	20.9%	USA	1.4%
Cuba	6.3%	Belgium	9.9%	UK	29.4%	Israel	15.1%	UK	1.2%
Germany	5.8%	Germany	7.9%	Taiwan	27.2%	Canada	12.7%	Cuba	0.4%
USA	0.7%	USA	7.4%	Cuba	25.9%	UK	7.1%	Taiwan	0.3%
Average	14.5%	Average	17.7%	Average	41.1%	Average	17.4%	Average	1.8%

Concerning the women-only teams, Belgium ranks second (1% above the international average), but the percentage is still very low. Among the female producers Belgium takes the fifth place and is half as big as the international average. Among the teams with women Belgium ranks third and is almost 10% above the international average.

6.4 Creator

Last but not least - the category of the creators. Also, in this category men are overrepresented. 37.7% of the Belgian creators are men. Just 11.2% are female. 20.8% of the creator teams are men-only. 21.2% are not recognizable.



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Gender Representation in Belgian Children's Television

International comparison

Woman		Man		Team with		Men-only		Women-only	
Cuba	17.6%	USA	49.2%	Israel	16.3%	Cuba	27.7%	USA	1.9%
Canada	16.8%	Cuba	45.7%	UK	13.5%	Israel	24.4%	Canada	1.9%
UK	16.0%	Canada	45.1%	Canada	10.7%	USA	22.0%	Germany	1.6%
USA	13.0%	Belgium	37.7%	Taiwan	10.6%	Belgium	20.9%	Belgium	1.1%
Belgium	11.2%	Israel	36.0%	USA	10.2%	Germany	17.3%	Israel	0.3%
Israel	9.8%	Taiwan	26.9%	Cuba	9.0%	Canada	16.8%	Taiwan	0.0%
Taiwan	6.9%	UK	25.7%	Belgium	7.9%	UK	12.5%	Cuba	0.0%
Germany	5.5%	Germany	18.5%	Germany	6.9%	Taiwan	7.8%	UK	0.0%
Average	12.2%	Average	33.7%	Average	11.2%	Average	18.4%	Average	0.6%

In almost all categories the Belgian share brings the country to the middle of the chart. Eye-catching is the penultimate place of Belgium regarding creator teams with women (4% below the international average).

7. Summary of the results

Mostly all of the shows in The Flemish Children's television are fictional entertainment (96%). Within them, one added new categories: 2D animation, 3D animation and "Clay animation". One third of the fictional animation is 3D. These types of shows are getting more popular with time. Over the ten years, the percentage of live action shows is quite the same. The majority of the shows are foreign productions mostly because of the share of such productions in Commercial broadcasters. In many of the shows, there is no narrator. However, if there is one, the voice is male. In the "new categories"¹, we can find more information about the situation behind the scenes. The male domination in the production process is quite apparent in the Belgian Children's television. Other interests of the study are directors, screenwriters, creators and producers of the shows. Most of them are male (with the exception of producers). This dominance has to be ameliorated. Moreover, if we look at the teams, the percentage of the ones which do not have any women is still awfully high, relative to the women-only teams.

Regarding the main characters and their gender, no category changed extremely over the ten-year gap. Males are almost two times more often represented than females. The distribution of protagonist - antagonist slightly changed. More characters are antagonists, whereby the trend is evident for both binary genders. The constellation of the main characters changed too. They are acting less equally to each other, regarding their hierarchical position. Instead, the percentage of leaders in a group increased. The gender perspective shows that females are rarely leaders and neutral genders are followers.

White characters are dominant in the Belgian children's television (77.6%). Nonetheless, in comparison to 2007 the situation has improved. More non-white characters are now present in these shows. This development should be further expanded, especially on the male side more characters could represent persons of color. Also, groups like Asians or Middle Eastern, should be more properly represented. A slight development over the last ten years could be observed, when it comes to people with disabilities, but the end result is still not representative enough.

¹ i.e. categories that were not present in the 2007 study

The variable "Resources to solve problems" provides some interesting results. It shows that half of the characters use talking, mediation or organization, in order to solve problems, but the gender perspective implies gender stereotypes. Boys use their muscles and girls - magical power. In this case the screenwriters can be more confident to write omnifarious characters.