

Children's Television Worldwide II:

Gender Representation

in

Taiwan

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1 General information about Children's Television in Taiwan

The Taiwan television system consists of 6 terrestrial channels and over 335 cable and satellite channels. Terrestrial channels include 4 commercial television stations, and Taiwan Public Television Service, Taiwan Indigenous Television. The commercial ones offer very few children-oriented content for kids, except for cartoon at certain time slot, but are heavily watched by entire family during prime time. Most of the Taiwanese population (consisting over 59% of the entire household) receives all the above through subscription to cable. The most popular children's channels that are provided by cable and satellite are YOYOTV, Cartoon Network, Disney Channel, Momo Kids.

2 Sample Selection

Several popular programs and the prime hours of Taiwanese children's television viewing were chosen to be the target objects.

From October 2017 to November 2017, from 7 a.m. to 9 p.m., 14 hours of content per day were recorded. The last week of November was chosen to be the week of sampling with replacement. A number of popular children channels were chosen, including YOYOTV, Cartoon Network, Disney Channel, Momo Kids and the Public Television Service of Taiwan. One weekday and the weekend were recorded. 174 hours in total were selected. Among 383 children's television programs, there were 126 newly broadcasted shows. On average, the replay rates of each program were around 66.8%.

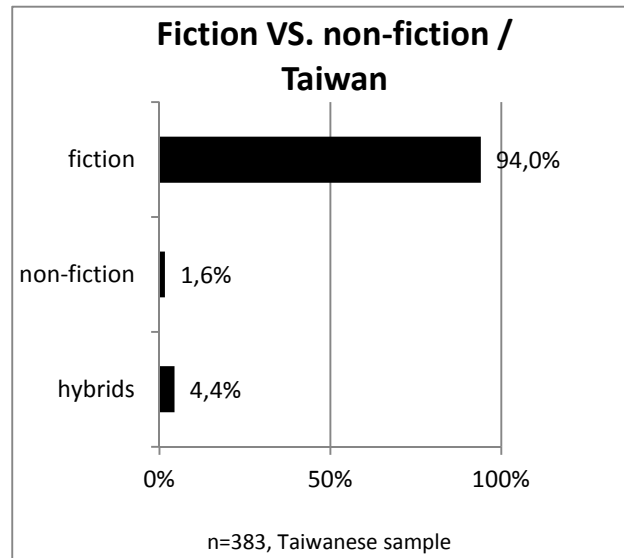
The sample analyses consists of 147 hours of explicit children's television (excluding teasers, advertisement etc.), 107 hours of fictional shows, 383 programs (360 fictional shows), 1,284 characters (fiction) and 729 human characters.

Broadcasters	Cartoon Network, Disney Channel, Momo Kids, PTVS Taiwan, YOKO TV
Hours of recording	147:28 (107 fiction)
Programs	383 (360 fiction)
Characters in fiction	1,284 (729 human characters)

3 What is offered to children – Results at show level:

3.1 Fictional or more non-fictional programs?

Every show/piece of program of our sample has been coded. Advertisements and trailers are coded in blocks (i.e. there are 6 different commercials between two shows, they are coded as one block). A show begins with the opening and normally ends with the credits (sometimes one show consists of 2 episodes, like in *Sponge Bob*, but they are still one show.)

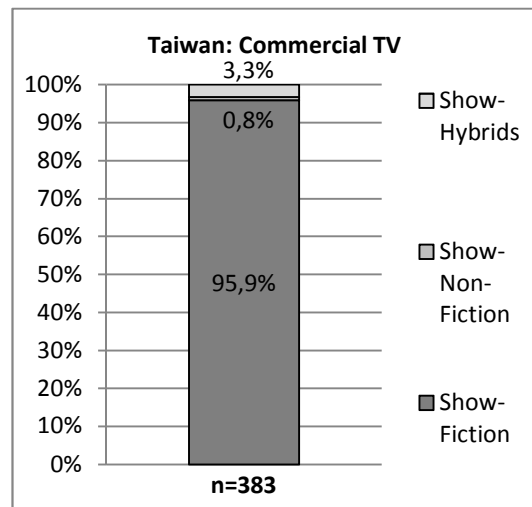
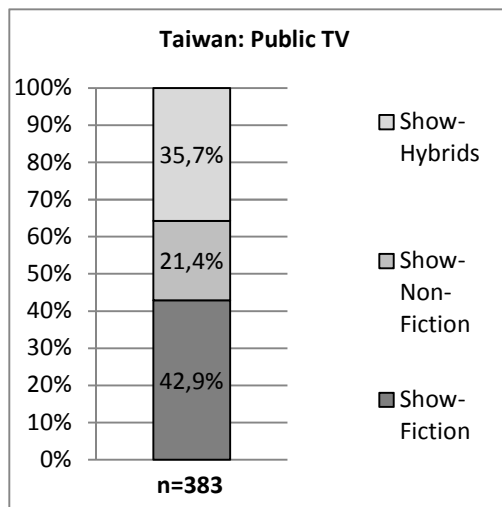


The sample in 2017 altogether comprises 383

shows that can be categorized into different program types. 360 shows or 94.0% can be referred to as fiction, 6 shows (1.6%) were non-fictional entertainment and 17 were children's television hybrids (4.4%). Of interest for the further analysis of the children's programs are only the 360 fictional shows that were coded. Those are in 95.1% of the cases animation shows and in 4.2% of the cases shows with real people (n=11). There is no puppet show and 2 mixed formats with 0.6%. Taiwan is participating in the study for the first time. Therefore, no comparisons to 2007 could be observed.

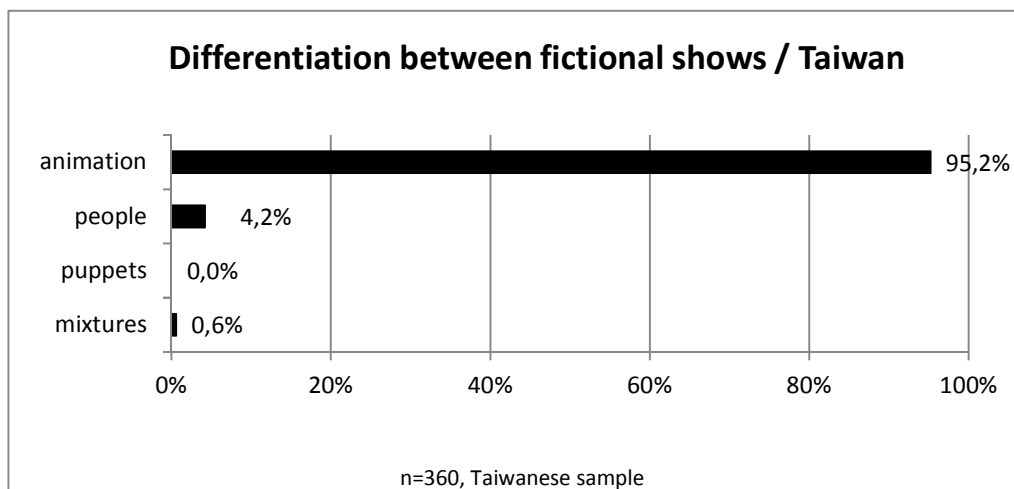
On the Public TV channels 42.9% of the children's programs are Show-Fiction. Similarly to Public TV, Show-Fiction also dominates on Commercial TV, but with a much greater percentage. The Commercial TV programs consist mostly, if not only, of fictional programs.

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3.2 What types of fictional programs could be found?

Among all coded fictional programs, 4 general types can be made out. The question here is: Is it an animation or a puppet show or are there real people in it? Among the 360 recorded fictional shows there are 338 (95.2%) animation shows; in 15 shows (4.2%) real people are the actors/actresses, none is a puppet show and 2 are mixed formats (0.6%). "Other" category is excluded.



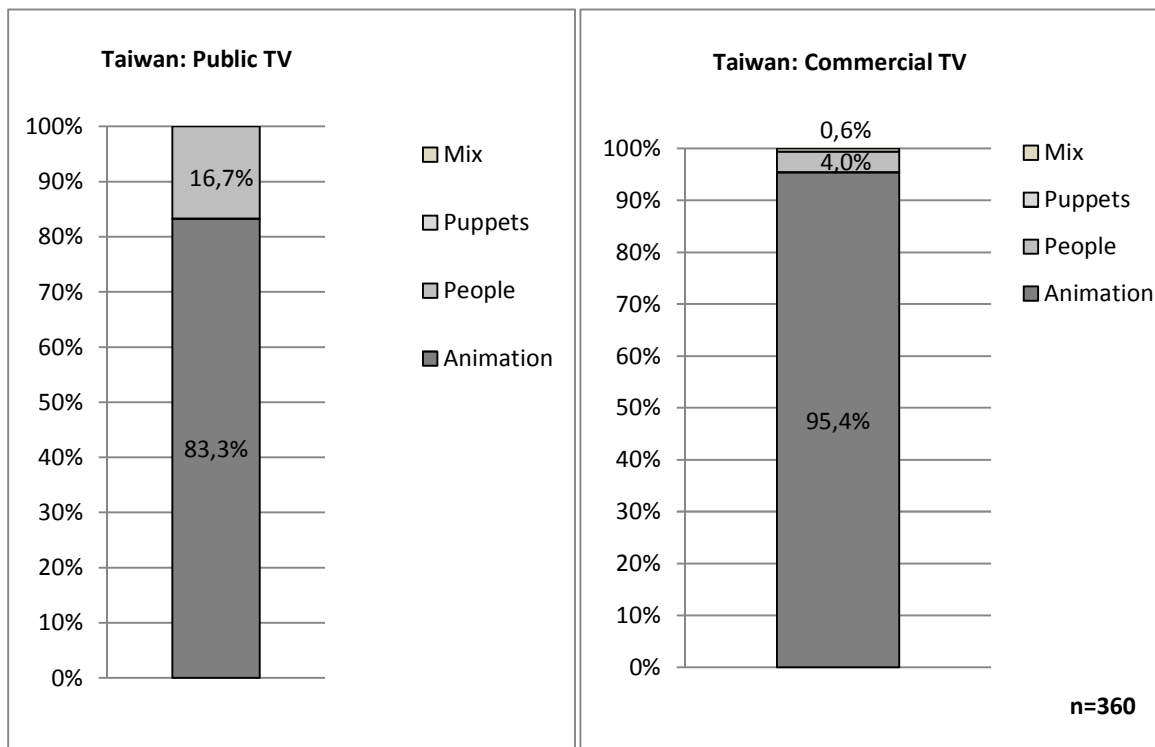
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International comparison

	Animation	Live action	Puppets	Mixtures
Taiwan	95.2%	4.2%	0.0%	0.6%
Canada	84.7%	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	79.7%	13.1%	1.1%	6.0%

With a percentage of 95.1% of animation on children's television Taiwan comes first in the international comparison and is above the average. The second largest group, shows with real people, is with 4.2% below international average. In the genres of puppet shows (0.0%) and mixtures (0.6%), Taiwanese percentages are also below the international average.

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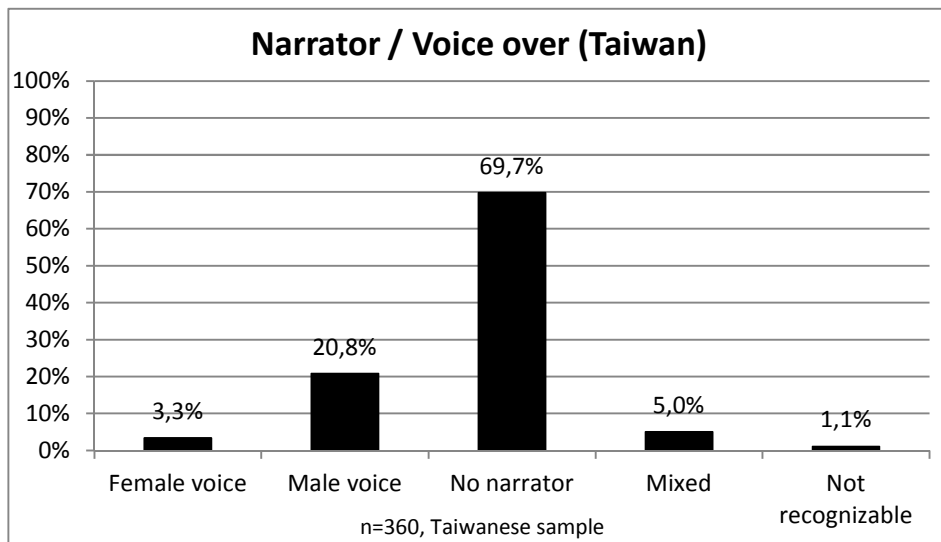


On Public TV, animation programs make up 83.3% of all programs, whereas Commercial TV consists of 95.4% animation. Real people could be seen four times more often on Public TV (16.7%). Mixed fictional programs appear only on Commercial TV.

3.3 Who speaks?

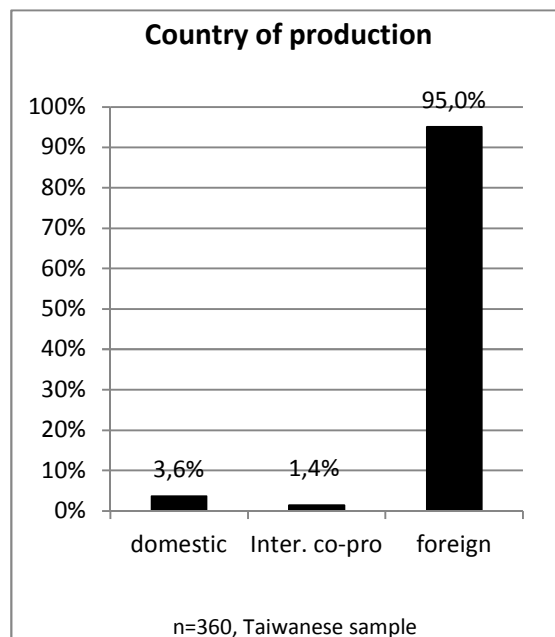
The narrator figures were also coded. In 12 of all programs (3.3%) the voice of the narrator is female, whereas the number of the programs with male narrators is 75 (20.8%). No narrator is found in 251 of the programs (69.7%), both female and male narrators could be found in 18 programs (5.0%) and in 4 programs it is not recognizable, if there is a narrator or not (1.1%). Although most fictional shows have no dominant voice-over (69.7%), if there is a narrator, it is more than 6 times more often a male voice (20.8%) than a female voice (3.3%).

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3.4 Where are the shows produced?

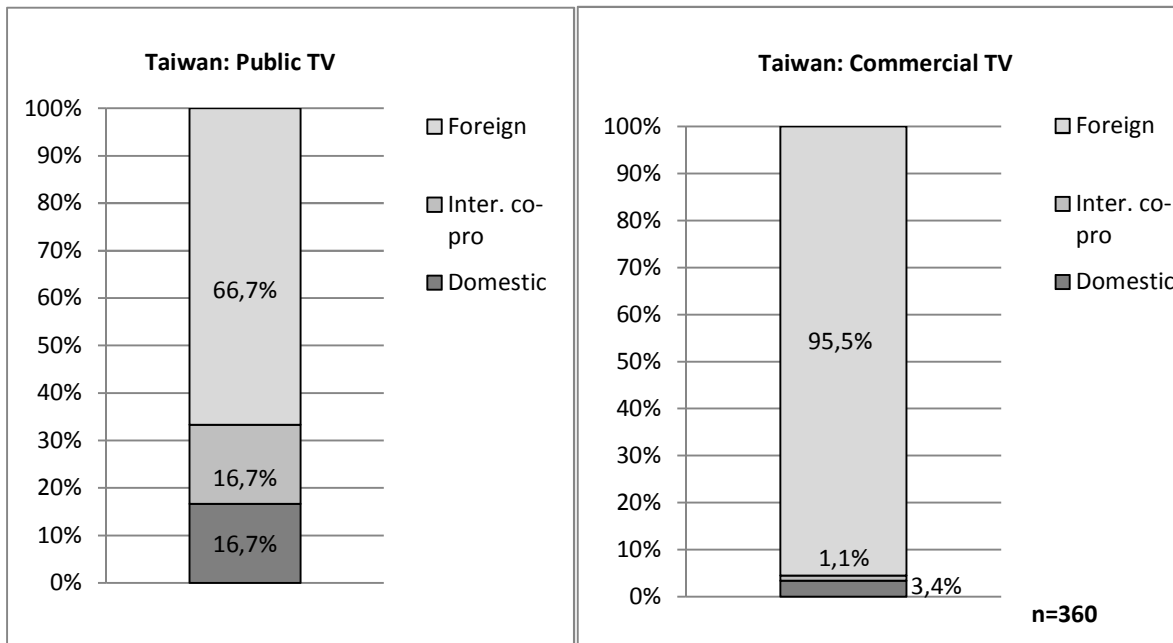
To answer this question, the country in which the show is produced was coded. Basis for evaluation were the final credits of the programs, the TV guide magazines or other sources. The main question was whether it is a company from one's own country or from a foreign country, or whether the show is a co-production of the domestic broadcast with other countries. The fiction shows are in 95% of the cases productions from another country (n=342), 3.6% are produced in Taiwan (n=13) and 1.4% are international co-productions (n=5). The "other/not recognizable" category is excluded.



Of all programs shown in Taiwanese children's television, 95.0% are foreign or international productions, while only 3.6% are domestic. Taiwan takes the last, eighth place and is considerably below international average in terms of domestic productions.

International comparison

domestic prod.	
UK	63.1%
USA	58.7%
Cuba	25.4%
Israel	21.4%
Canada	20.7%
Belgium	8.5%
Germany	6.9%
Taiwan	3.6%
average	26.0%



The comparison of Public and Commercial TV in Taiwan reveal a great difference in terms of the domestic and foreign productions. Domestic productions appear almost five times more often in Public TV than in Commercial TV. Commercial TV has little international co-productions (1.1%), over 15% less than Public TV, but it is the definite leader in terms of foreign productions (95.5%).

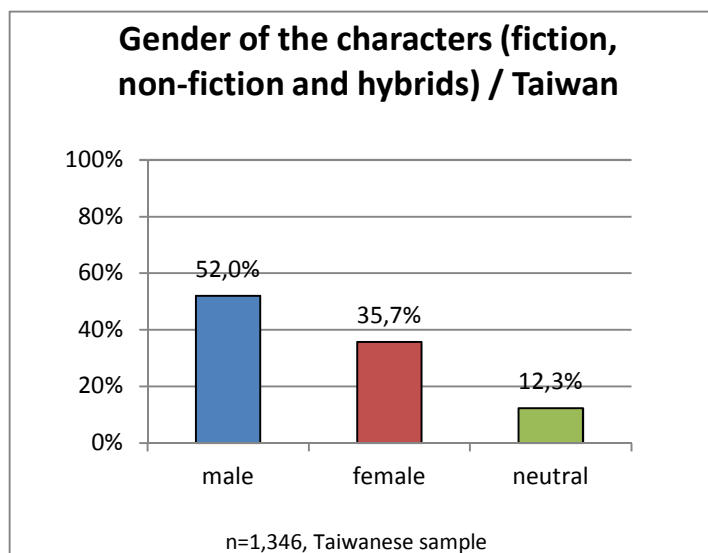
4 Who are the main characters?

A main character is a character that stands out due to constant presence and the explicit naming in the title or theme melody, or, in the context of an individual episode, a character that stands out due to constant presence and a significant role in moving the plot forward, even if not named in the title or theme melody. The first step is the analysis of the main characters' gender, based on grammatical terms, name of character, voice, and easily identifiable bodily characteristics.

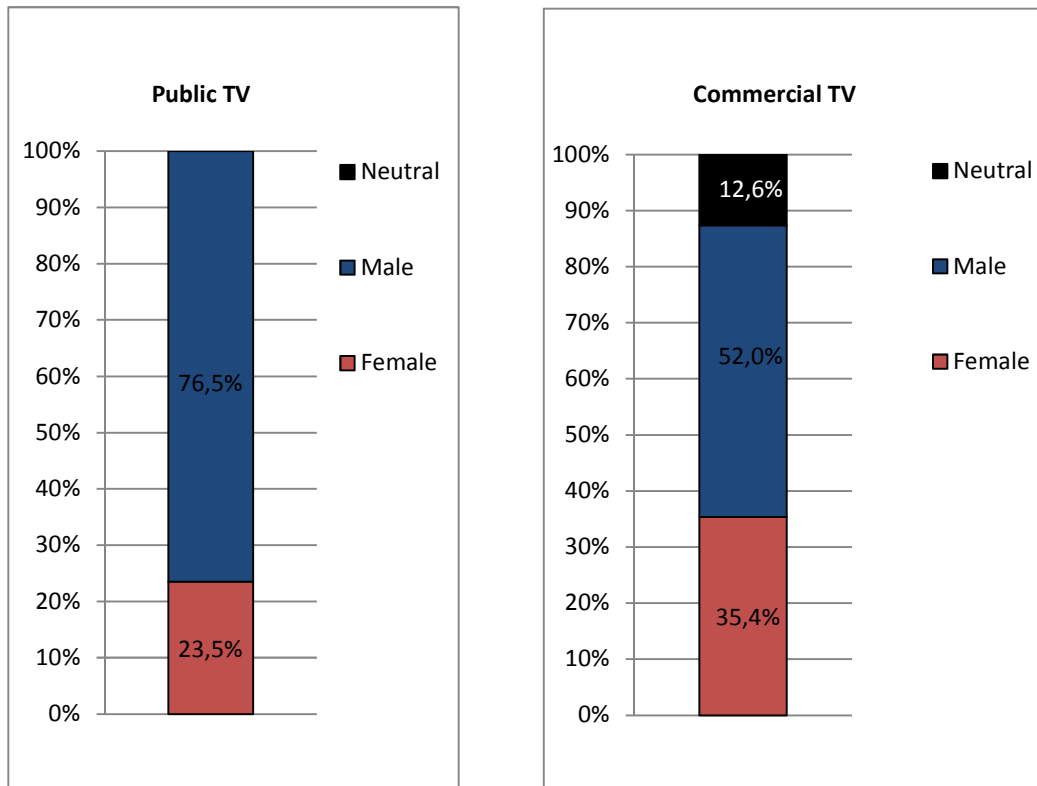
In terms of characters, in all shows (fiction, non-fiction and hybrids) 35.7% are female and 52% are male, which contradicts the idea of equal representation of both genders. Another 12.3% have no identifiable gender or were neutral.

Looking only at non-fictional programs, 50% of the main characters are female, 41.7% are male, and 8.3% of the main characters have no identifiable gender.

In the 360 fiction shows, 1,284 characters are identified as main characters. 35.2% of those main characters (n=452) are female. Male fictional characters constitute 52.3 % (n=679). 160 fictional characters (12.5%) have no recognizable gender.



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Although female main characters are underrepresented on both Public and Commercial TV, with a share of 35.4% they are more often represented on commercial TV than on Public TV (23.5%). Neutral characters do not appear on Public TV. With 12.6% they appear comparatively common on Commercial TV.

Gender perspective: International comparison

The main characters of the fictional shows in Taiwanese children's television are in 35.2% of the cases female, in 52.3% male and in 12.5% neutral. Among the examined countries Taiwan obtains the fifth place in terms of female characters, correlates with the average and obtains, the last, eighth place in terms of male characters. With a share of 12.5% Taiwan is considerably above the international average, when it comes to neutral characters. After Cuba, Taiwan has the most balanced gender ratio.

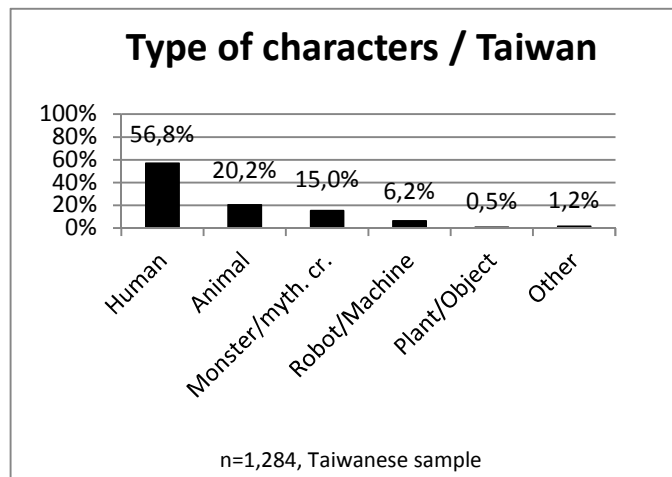
International comparison

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	35.6%	average	61.7%	average	2.7%

4.1 Fiction: Is the main character a human – animal – monster – object – machine?

Another interest of the study was finding out what the nature of the characters is. Is it a human, an animal, an object, a machine, etc.?

729 characters of the recorded are humans, which corresponds to a percentage of 56.8%. 260 characters (20.2%) are animals. The “monsters or mythical creatures” appear as the third largest group. 192 characters (15%) can be assigned to this group. Furthermore, “robots or machines” consists of 80 characters (6.2%), “plants or objects” includes 7 characters (0.5%) and 16 characters are coded as “others” (1.2%).



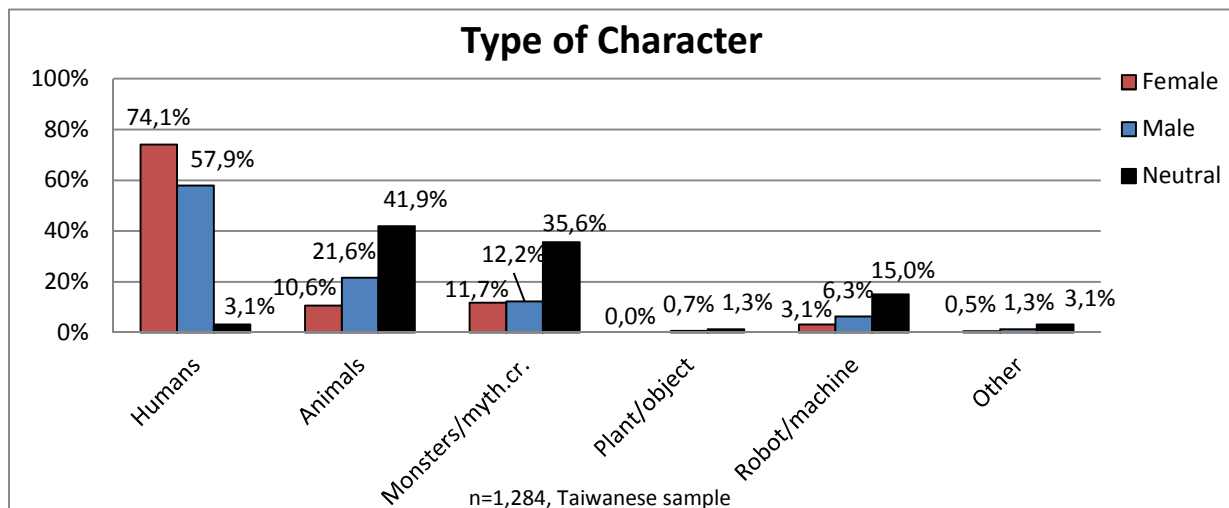
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International comparison

	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	54.9%	27.0%	12.2%	1.8%	3.4%	0.7%

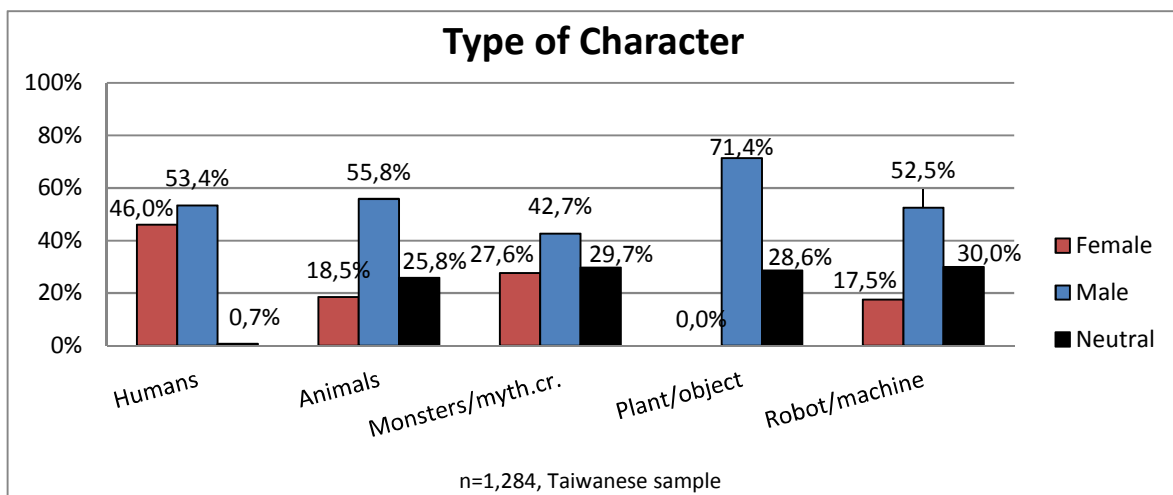
Gender Perspective: Females and males according to the nature of the character

Of the female characters 335 (74.1%) are humans, 48 (10.6%) are animals, 53 (11.4%) are monsters or mythical creatures, 14 (3.1%) are robots or machines and 2 pertain to the “other” category. The male characters are represented in 389 cases (57.9%) as humans and in 145 cases (21.6%) as animals. Monsters and mythical creatures with male gender are found in 82 characters (12.2%), 5 (0.7%) are plants or objects, 42 (6.3%) are robots or machines and 9 characters are other creatures (1.3%).



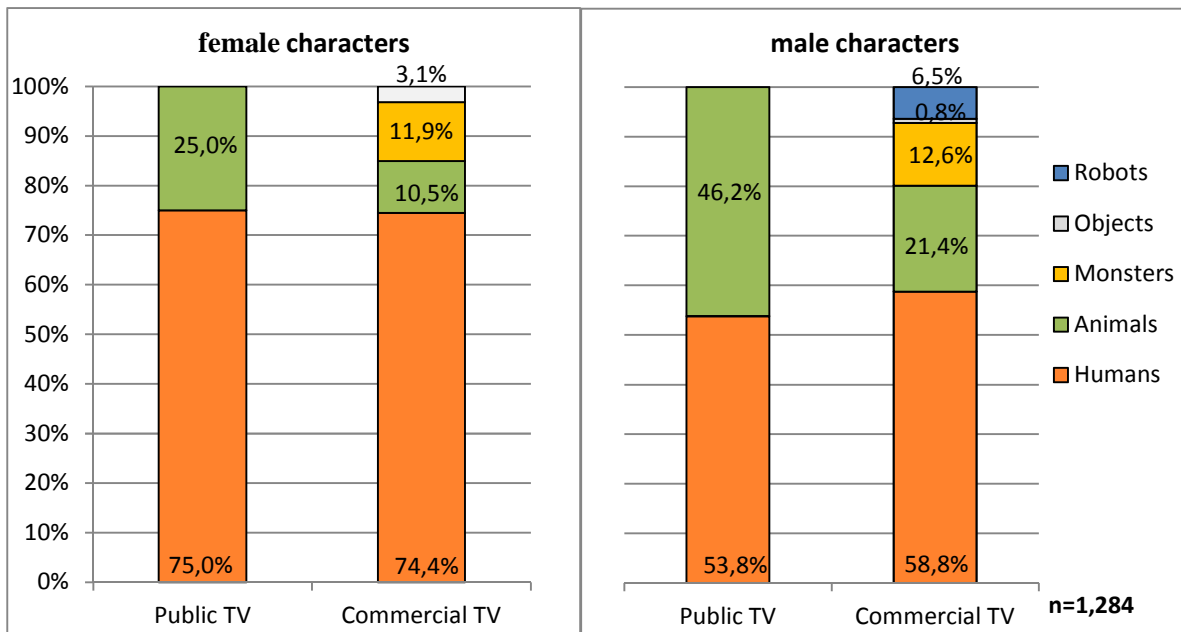
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Of the humans 335 (46%) are female and 389 (53.4%) are male. The gender of the remaining 5 human characters (0.7%) is not identifiable. Among the animals, 48 (18.5%) are female and 145 (55.8%) are male. 67 animal characters (25.8%) have no identifiable gender. Among the monsters or mythical creatures 53 (27.6%) are female, 82 (42.7%) are male and 57 (29.7%) are gender-neutral. Among the plants and objects there are none female characters. However, 5 characters (71.4%) are male and 2 (28.6%) are gender-neutral. Of the robots or machines 14



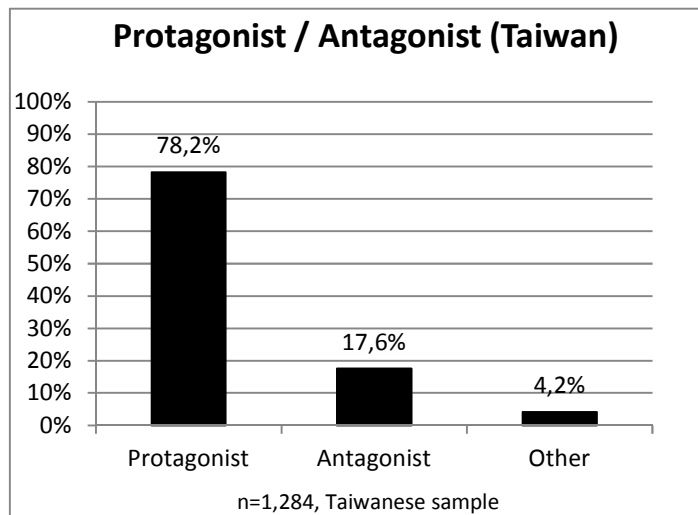
(17.5%) are female, 42 (52.5%) are male and 24 (30.0%) are neutral. Two of the "other" characters are female (12.5%), 9 (56.3%) are male and 5 (31.3%) do not have an identifiable gender. The percentage of female human characters on Public and Commercial TV is with a share of 75.0% and 74.4% almost the same. The percentage of male human characters on Commercial TV (58.8%) is slightly higher than on Public TV (53.8%).

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4.2 What is the general role in the story: Protagonist or Antagonist?

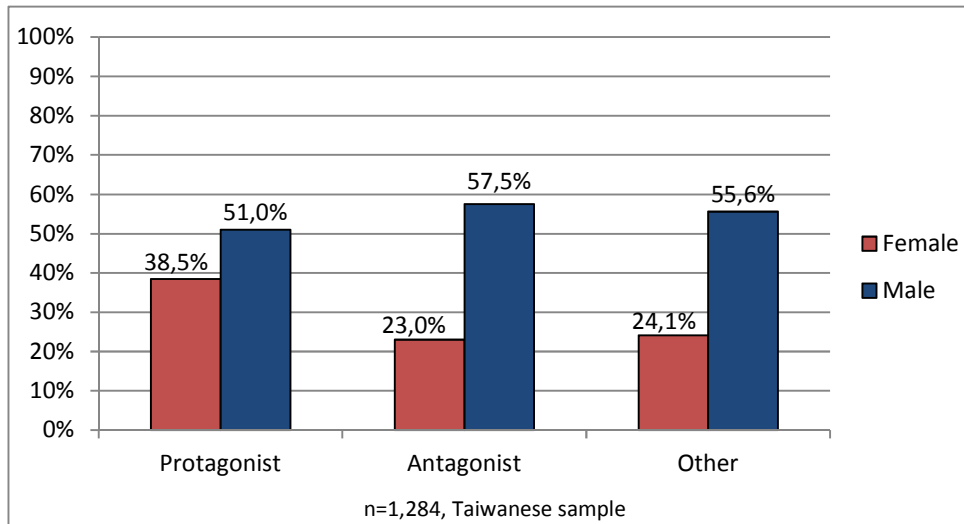
The analysis of the “general part” of the character in the context of the story shows that 1,004 of the characters in Taiwan’s fictional children’s programs are identified as protagonists. This corresponds to a relative part of 78.2%. On the other hand, there are 226 antagonists that constitute 17.6% of the characters. 54 characters could not be grouped neither as a protagonist nor as an antagonist (4.2%).



Of the protagonists counted, 387 (38.5%) are female and 512 (51%) are male. 105 (10.5%) protagonists are gender-neutral. Among the antagonists 52 (23%) are female, 130 (57.5%) are male and 44 antagonists (19.5%) are neutral. The characters that can't be classified as neither

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protagonists nor antagonists can be split up as follows: 13 (24.1%) female, 30 (55.6%) male and 11 (20.4%) neutral.



Among the female characters 387 (85.6%) are protagonists, 52 (11.5%) are antagonists and 13 (2.9%) are not identifiable. With regard to male characters, 512 (76.2%) are protagonists, 130 (19.3%) are antagonists and 30 (4.5%) are not identifiable. There are more female than male protagonists and more male than female antagonists.

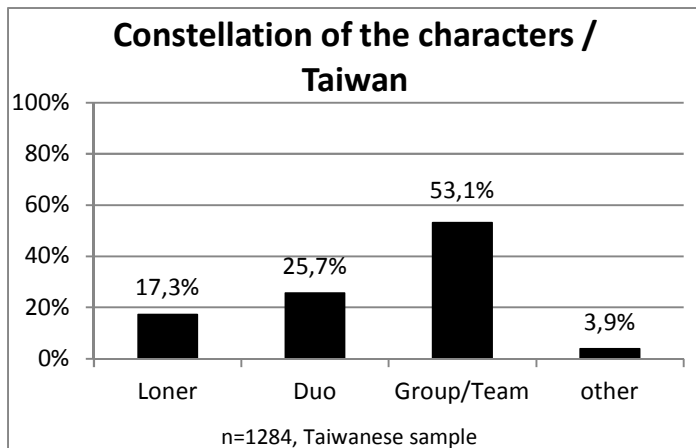
With a percentage of 17.6% of antagonists in children's TV, Taiwan ranks first in the international comparison and is well above the average.

International comparison

	Protagonist	Antagonist
Taiwan	78.2%	17.6%
Belgium	88.4%	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	82.7%	9.5%

4.3 In what kind of constellation does the main character act?

To analyse in what kind of constellation the main character is acting, the following questions was asked: Does he/she work and appear alone, in a group, or a duo? 222 of the characters (17.3%) are integrated into the plots as loners. 330 of the coded characters are part of a duo (25.7%). 682 of the characters (53.1%) and thus the majority are part of a group or a team. 50 (3.9%) could not be grouped into any of the categories.



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International comparison

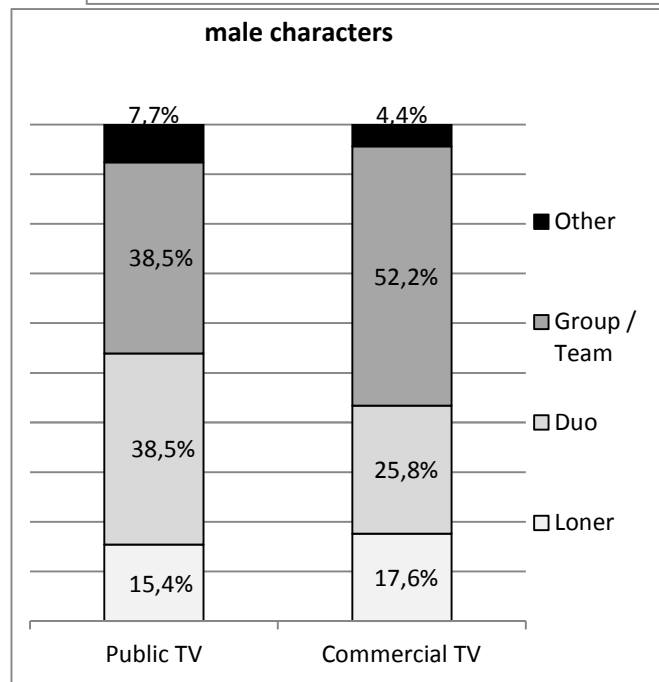
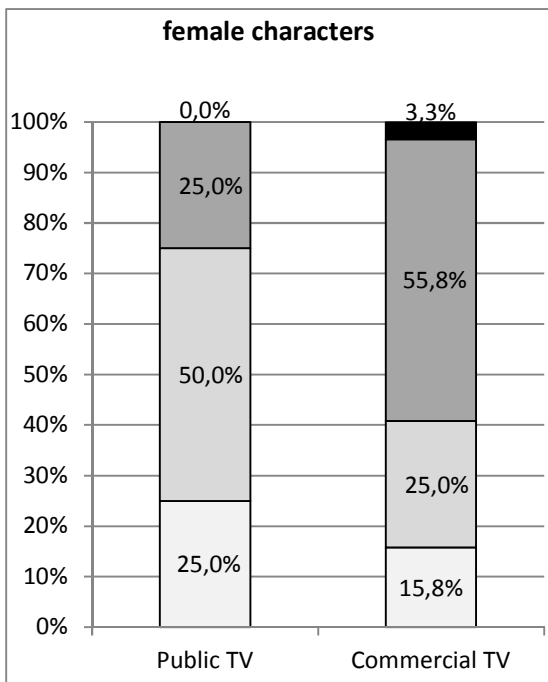
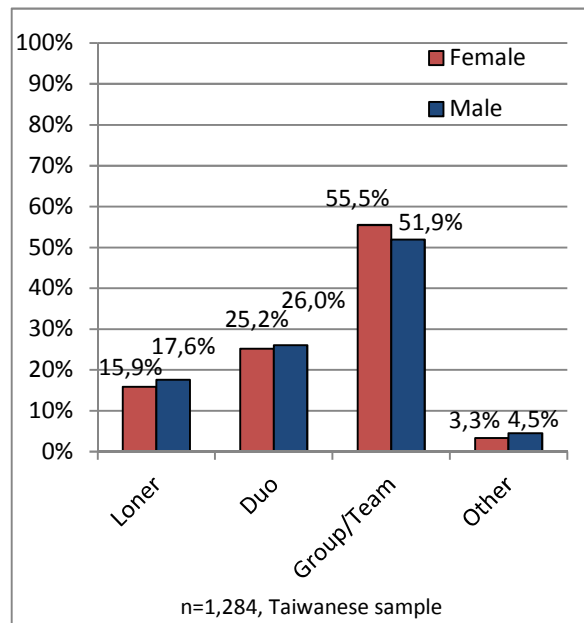
	Loner	Duo	Group / Team
USA	2.2%	5.9%	92.0%
UK	9.5%	15.0%	75.4%
Canada	11.4%	16.4%	71.4%
Belgium	9.1%	24.7%	66.2%
Germany	16.2%	17.4%	63.3%
Cuba	20.2%	22.5%	57.3%
Israel	15.1%	31.1%	53.4%
Taiwan	17.3%	25.7%	53.1%
average	12.6%	19.8%	66.5%

53.1% of the main characters in Taiwanese children's TV are presented as part of a group or a team. On an international scale Taiwan ranks last and is well below average.

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Gender Perspective: Males are loners

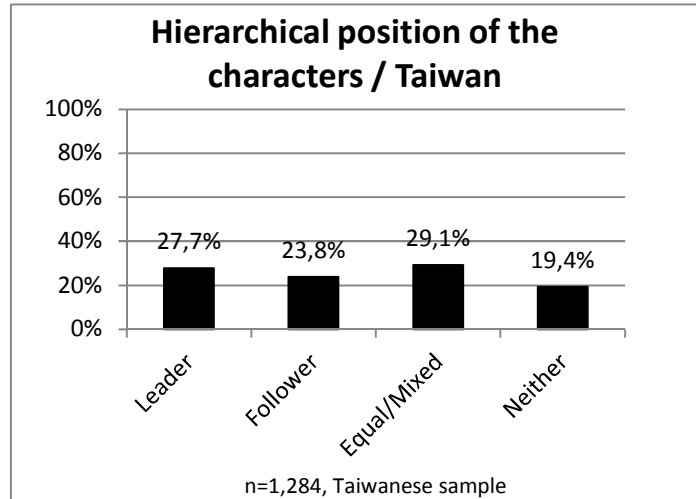
Of the female characters 72 (15.9%) are loners, 114 (25.2%) are in duos, 251 (55.5%) are a part of a group. The male characters are with 118 (17.6%) loners, 175 (26.0%) duos and 349 (51.9%) are a part of a group. Males are more often loners (F: 15.9%; M: 17.6% in 2007). Females are more often presented in groups (F: 55.5%; M: 51.9%). Males and females are almost the same in terms of duo presentation (F: 25.2%; M: 26%).



The percentage of female loners is higher on Public TV (25%) than on Commercial TV (15.8%). Female characters appear twice as often in a duo on Public TV (50%) than on Commercial TV (25%). They appear more than twice as often in groups on Commercial TV (55.8%) than on Public TV (25%).

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

This question concerns the characters' role in the social context. Who is dominant in the relationship and solution of the problem? Is there a clear leading character? 372 (29.1%) of the characters appear as equals, regarding hierarchical positions. 335 (27.7%) are leaders, 305 (23.8%) are followers and for 248 (19.4%) characters the position is not clearly identifiable.



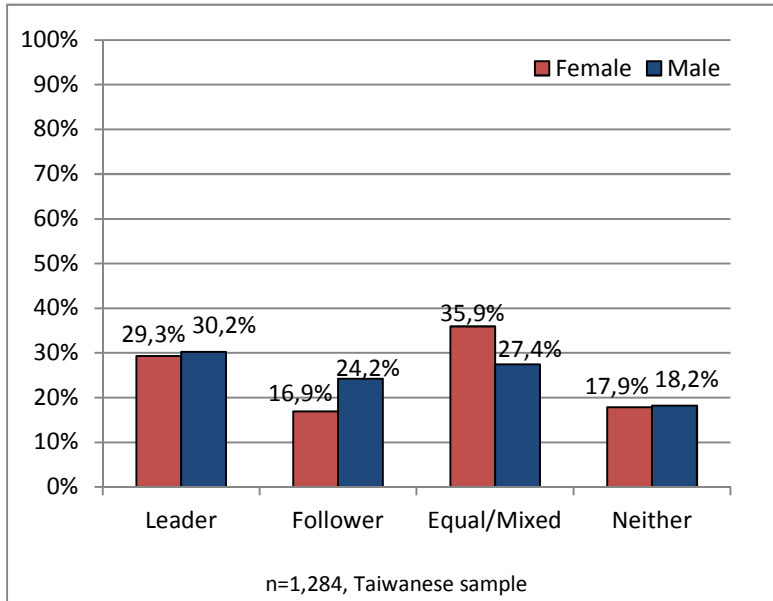
International comparison

	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	67.1%
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	25.5%	average	15.8%	average	52.5%

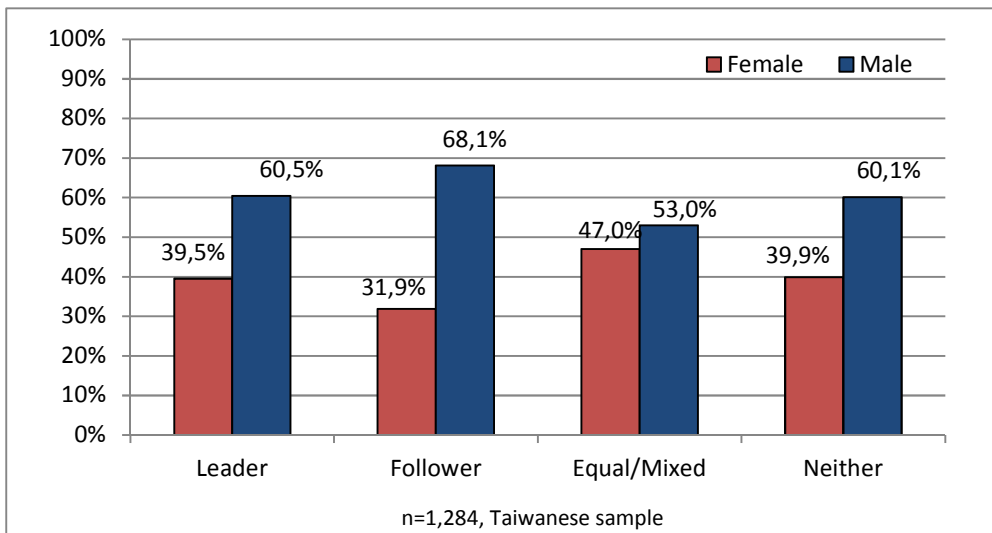
In 27.7% of the cases the main character is the leader of the group. In 23.8% of the cases the character is a follower and in 29.1% his or her hierarchical position is equal or mixed.

Gender Perspective: Females more often equal, males more often leaders

The female characters are in 132 (29.3%) of the cases leaders, 76 (16.9%) are followers, 162 (35.9%) are equal or mixed and for 81 (18%) it is not identifiable. The male characters are in 202 (30.2%) of the cases leaders, 162 (24.2%) are followers, 183 (27.4%) are equal or mixed and for 122 (18.2%) the hierarchical position was not identifiable.



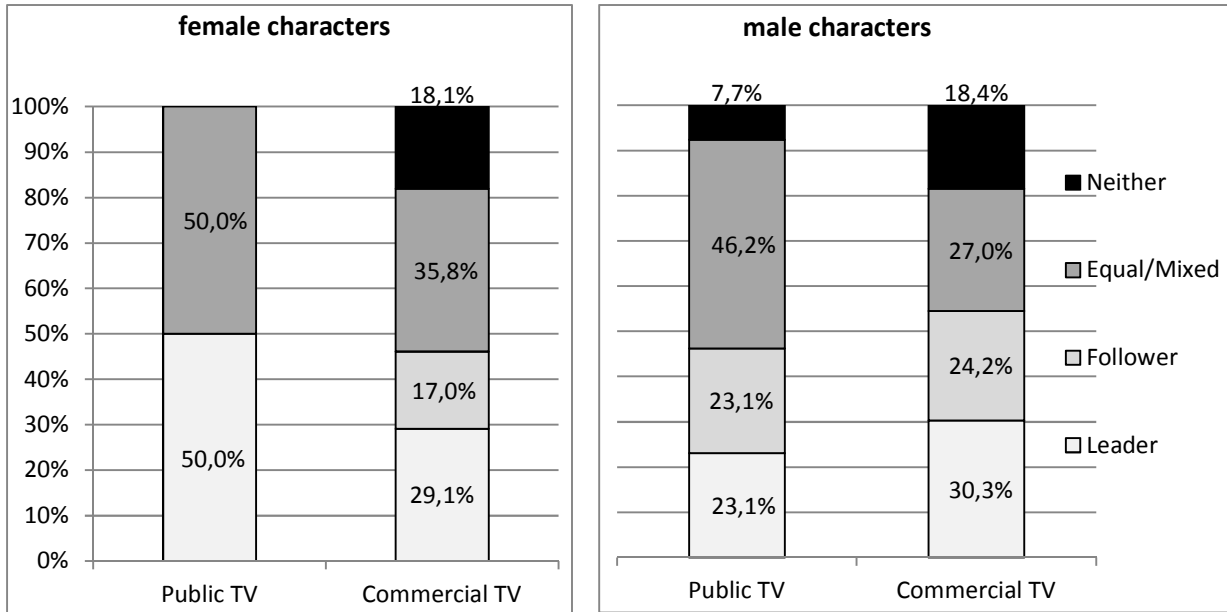
There are more than twice as many male leaders than female leaders. Also, there are slightly more male followers. Female characters (72.7%) are more often equals or mixed than male characters (64.5%).



Of the leaders 132 (39.5%) are female and 202 (60.5%) are male. Among the followers the females are 31.9% (n=76) and the male characters make up 68.1% (n=162). 162 females are equals (47.0%), whereas 53.0% of the category consists of male characters (n=183). 39.9% of the not

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recognizable leadership group are females and 60.1% are males. The group of characters, whose gender could not be recognized is excluded.

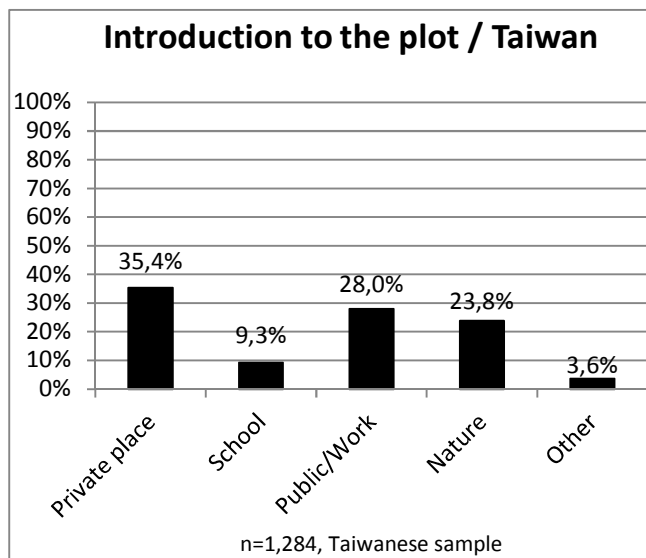


The percentage of female leaders is higher on Public TV (50%) than on Commercial TV (29.1%).

4.5 In which kind of surrounding is the character first shown?

To analyze the surroundings in which the characters first appear in the show, the opening songs or titles have not been taken into account.

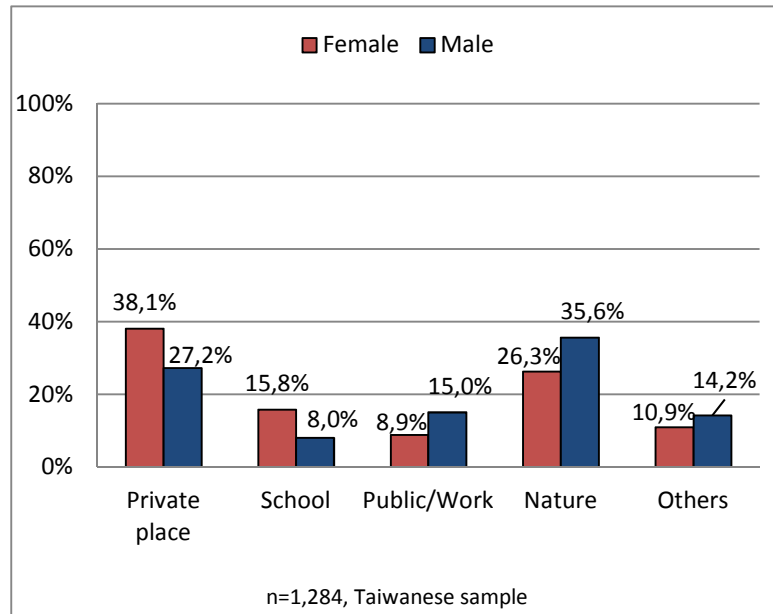
The most common surrounding in which the character is introduced into the plot is 'private place'. 454 (35.4%) of the recorded characters of this category appear here for the first time. 'Public or work places' rank second with 359 (28.0%). 306 (23.8%) are introduced in nature places and 119 (9.3%) characters are at school when they first appear. 46 (3.6%) are in other surroundings.



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Gender Perspective: Females appear more in private places and in school, males more often in public/work places and in nature

176 (38.9%) of the female characters in the sample are introduced to the plot in private settings, 57 (12.6%) are in school, 111 (24.6%) are in public places or at work and 90 (19.9%) are in nature. 18 (4%) are in other surroundings. 244 (36.3%) of the male characters are first introduced at a private place, 50 (7.4%) are in school, 197 (29.3%) are in public or at work and 156 (23.2%) are in nature. 25 (3.7%) are in other surroundings.



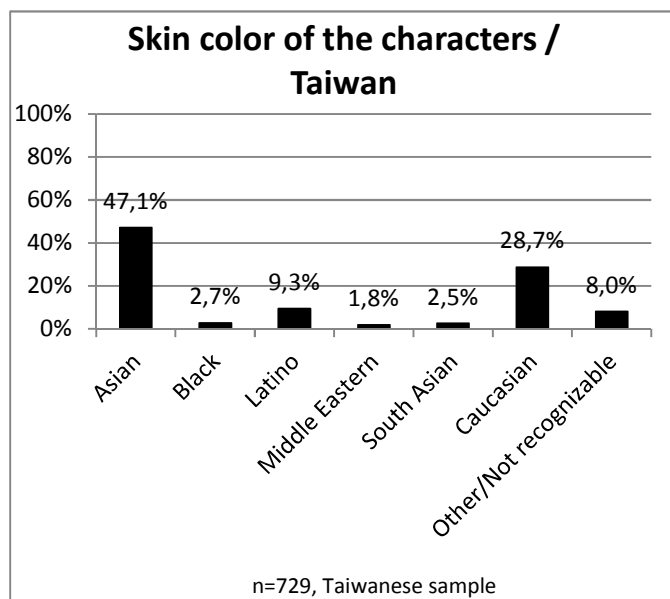
5 The analysis of the Human Characters

The characters which were coded as humans were furthermore coded according to their skin color, hair color, their age and their physique as well as to possibly existing disabilities.

5.1 What skin colors or general ethnic affiliations can we see?

For coding the skin colors and ethnicities of the main human characters, the shape of the characters' eyes, their dark or tanned skin, etc. were taken into account.

343 (47.1%) of the human characters showed Asian physical traits. Black characters are found in 20 (2.7%) cases. 68 (9.3%) are classified as Latin-American, 13 (1.8%) as Middle-Eastern and 18 (2.5%) as South Asian. The majority, with 209 characters (28.7%), are Caucasian. 58 characters (8%) are classified as "Other" or are not identifiable.



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International comparison

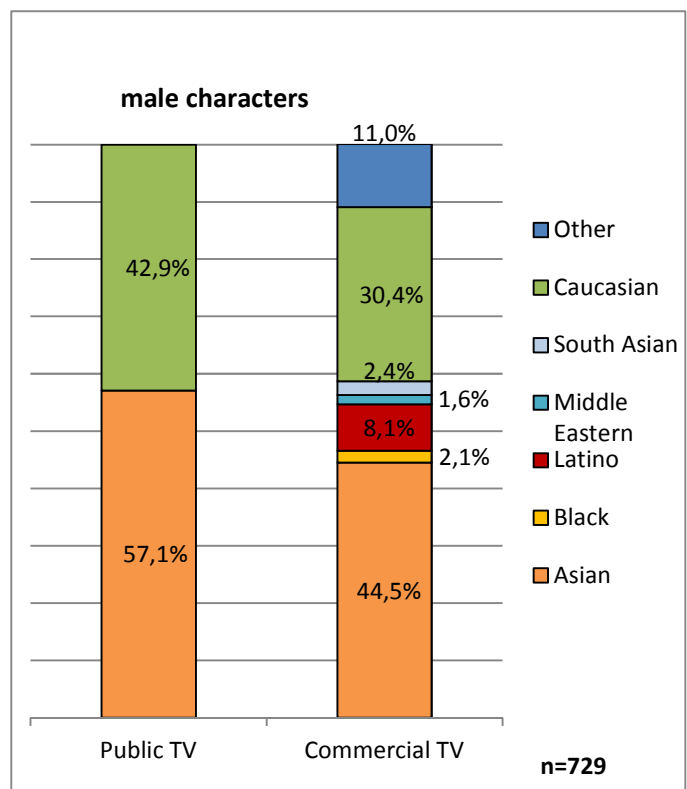
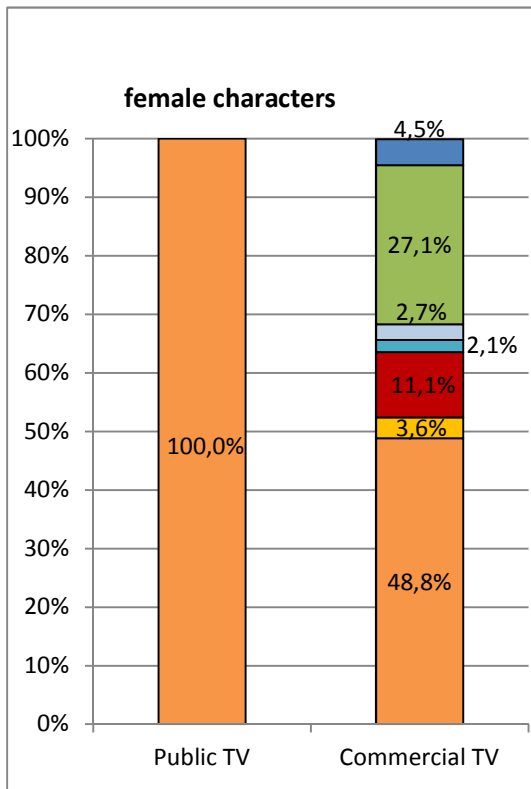
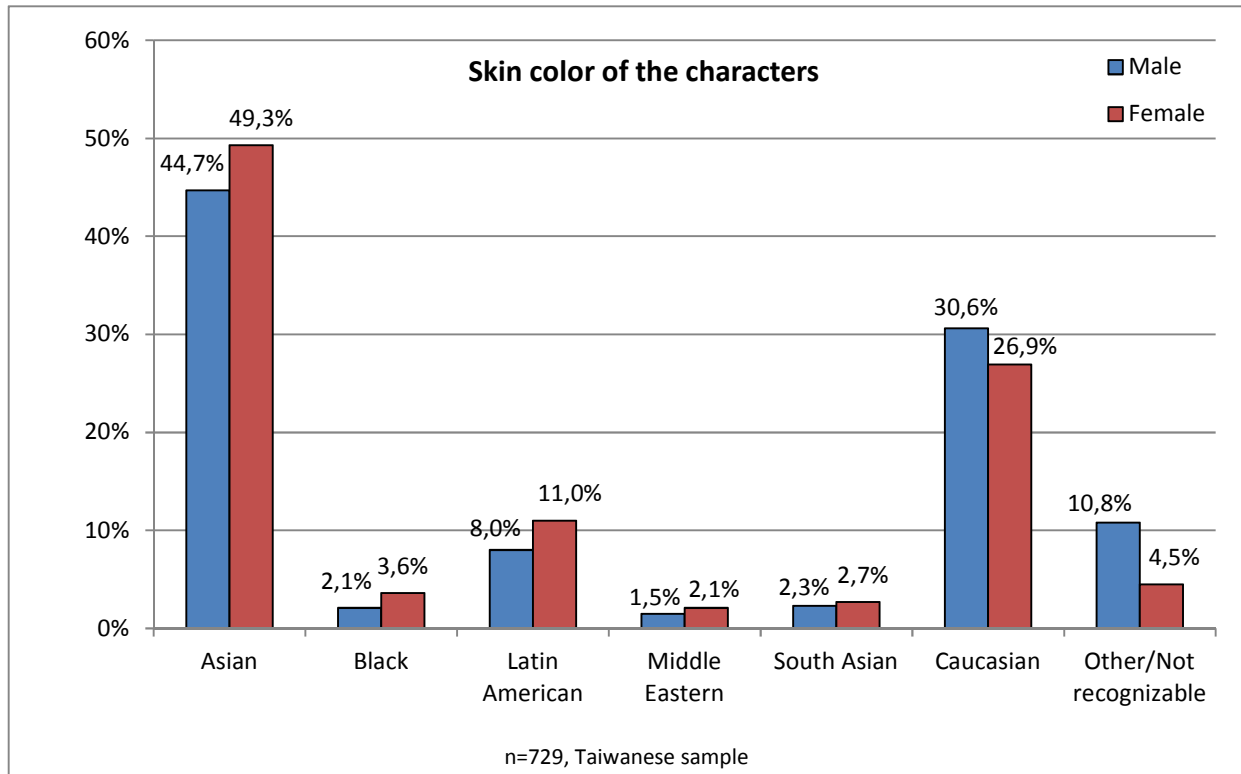
Asian		Black		Latin-American		White	
Taiwan	47.1%	UK	16.7%	Cuba	15.4%	Germany	83.0%
Cuba	15.4%	USA	12.2%	Taiwan	9.3%	Belgium	77.9%
USA	6.9%	Israel	9.9%	USA	8.9%	UK	74.8%
Israel	4.0%	Belgium	8.6%	Belgium	6.9%	Canada	74.4%
Canada	2.1%	Germany	7.8%	Israel	6.1%	Israel	66.4%
UK	2.1%	Cuba	7.4%	Germany	2.1%	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	10.2%	average	8.8%	average	6.5%	average	66.5%

28.7% of the characters presented in Taiwanese children's TV are Caucasian, 2.7% are Blacks, 9.3% are Latin-Americans and 47.1% are Asians. On an international scale, the representation of Asians is far above average, which constitutes the first position of Taiwan in terms of featuring Asian characters. Latin-Americans are represented above average, too. Therefore, Taiwan is far below international average when it comes to Caucasians and Blacks. Taiwan is the leader with regard to the Asian characters and takes the last place in regard to the Black and Caucasian characters. After Cuba Taiwan ranks second place when it comes to the representation of Latin American characters.

Gender perspective: More male Asian characters, more female Black characters

Out of the female characters, 165 (49.3%) are Asian, 12 (3.6%) are Blacks, 37 (11.0%) are Latin-American, 7 (2.1%) are Middle-Eastern, 9 (2.7%) are South Asian, 90 (26.9%) are Caucasian and 15 (4.5%) are other or are not recognizable. The male characters comprise 174 (44.7%) Asians, 8 (2.1%) Blacks, 31 (8%) Latin-Americans, 6 (1.5%) Middle-Easterners, 9 (2.3%) South Asians, 119 (30.6%) Caucasian and 42 (10.8%) other or not recognizable. Asian characters are more often female, Caucasian more often male.

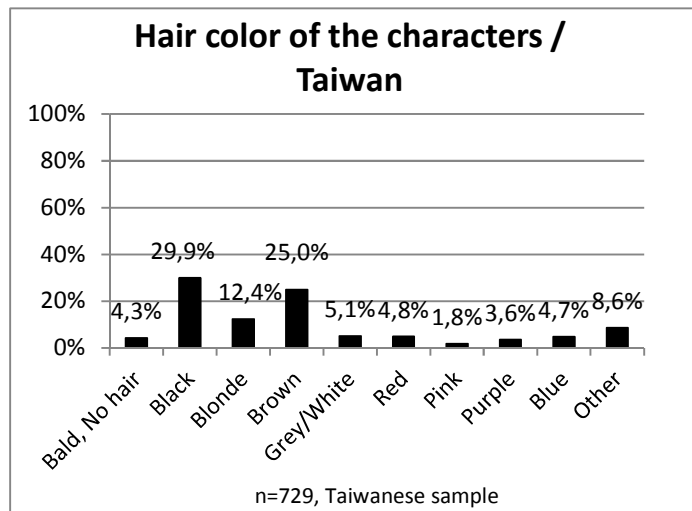
Children's Television Worldwide:
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All female characters seen on Taiwan's Public TV are Asian (n=3). With a share of 48.8% (n=162) most female characters on Commercial TV are Asian, too.

5.2 What hair color does the characters have?

The characters' hair colors can be divided up into 10 different categories. 31 (4.3%) characters do not have any hair, 218 (29.9%) characters have black hair, 90 (12.4%) are blonde-haired and 182 (25.0%) have brown hair. 37 (5.1%) have grey or white hair, 35 (4.8%) have red hair, 13 (1.8%) are pink-haired, 26 (3.6%) have purple hair and 34 (4.7%) are blue-haired. 63 (8.6%) could not be categorized in any of the categories.

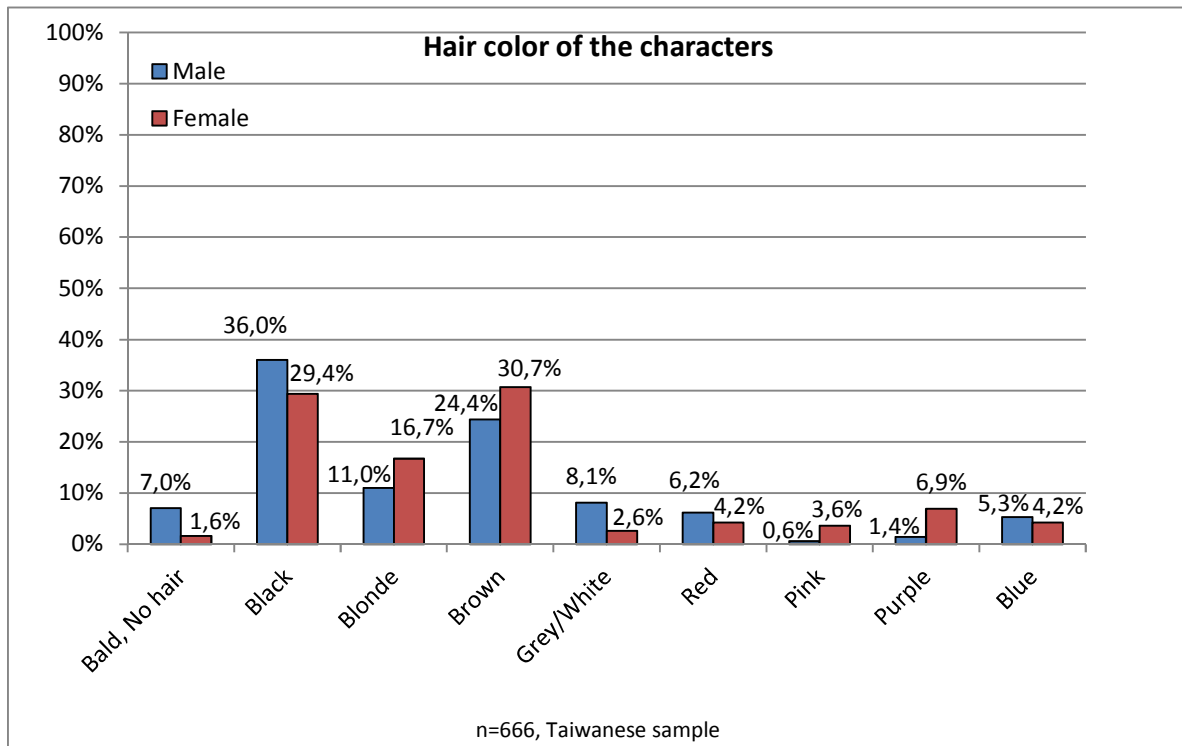


Gender perspective: Three times as many grey-haired males

Out of the female characters not every character has hair. There are 5 bald ones (1.6%) seen. 90 characters (29.4%) have black hair, 51 (16.7%) have blonde hair and 94 (30.71%) have brown hair. Grey- or white-haired are 8 female characters (2.6%), red-haired are 13 female characters (4.2%), 11 (3.6%) have pink hair, 21 (6.9%) have purple hair and 13 (4.2%) have blue hair.

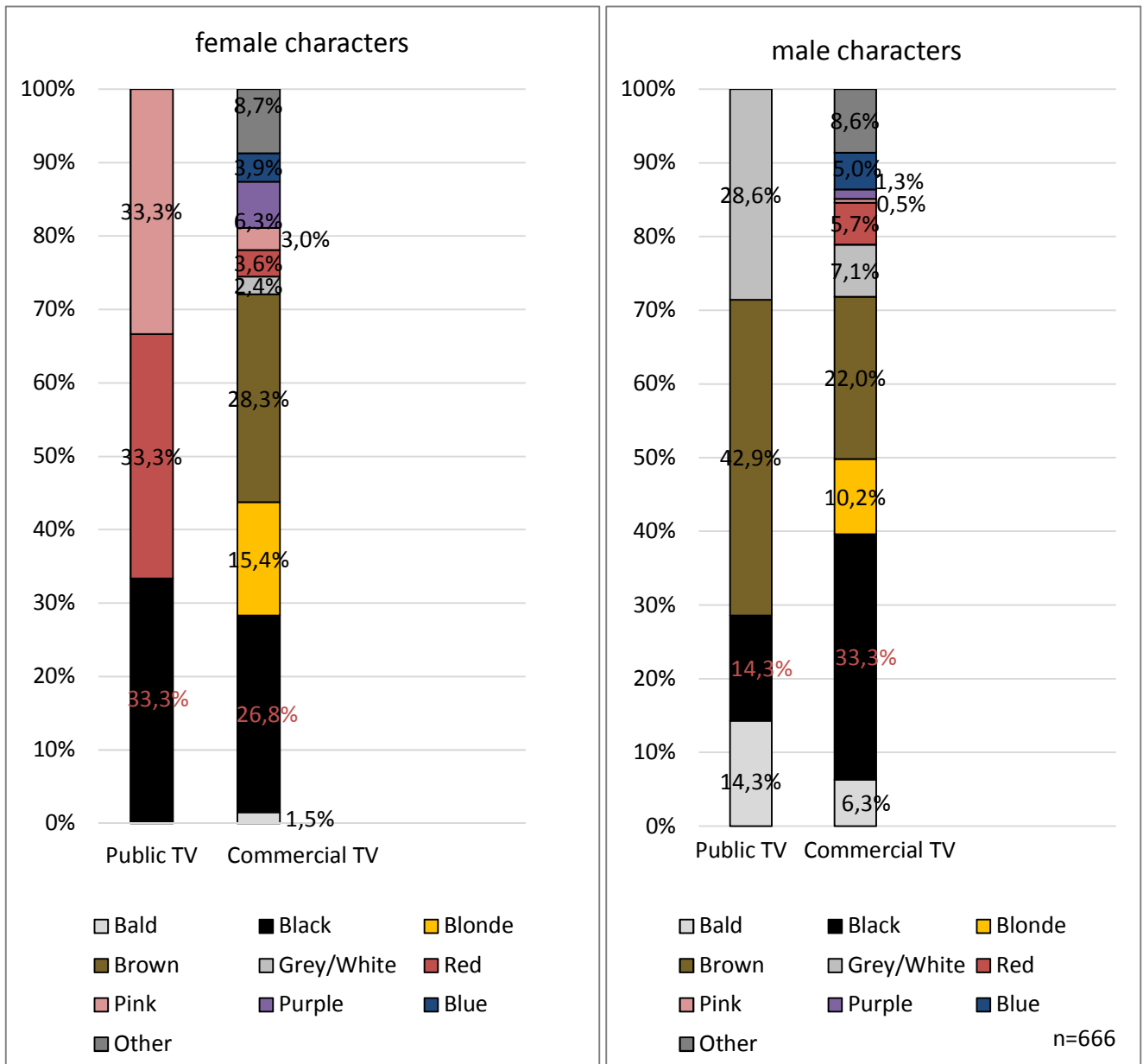
The male characters are with 25 (7.0%) with no hair, 128 (36.0%) have black hair, 39 (11.0%) have blonde hair and 87 (24.4%) have brown hair. 29 male characters are grey- or white-haired (8.1%), 22 are red-haired (6.2%), 2 are pink-haired (0.6%), 5 are purple-haired (1.4%) and 19 have blue hair (5.3%).

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The results of two of the categories could be referred as conspicuous. The purple-haired characters are almost five times more female than male. Three times more males than females could be observed among the characters with grey/white hair.

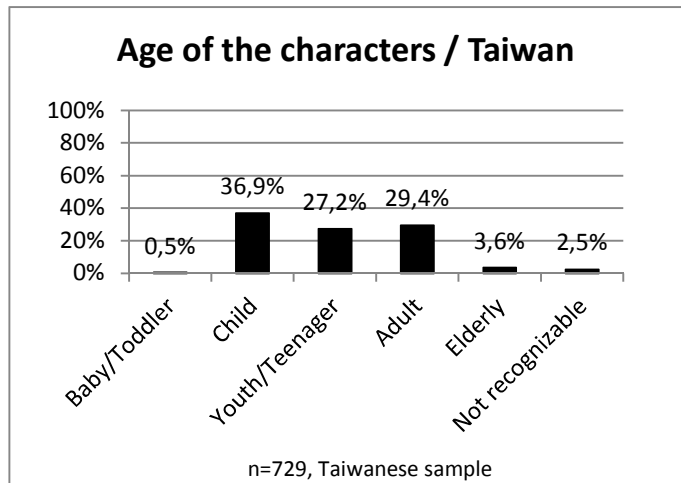
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The female characters on Public TV are one third each black-, red- or pink-haired. There are nine times more red- and-pink haired female characters on Public TV than on Commercial TV. Among the male characters, no unnatural or nonlocal hair colors appear on Public TV. On Public TV, grey- or white-haired male characters (28.6%) are seen four times more often than on Commercial TV (7.1%).

5.3 What age are the characters?

The coding of age is based on outward appearance and content. Adult, if they have recognizable activities such as working, driving or have the role of a mother or a father. Elderly, if they have recognizable traits such as the role of a grandma or a grandpa or if they walk with a cane, for example.



In terms of age three larger groups could be found in the sample: 269 (36.9%) are children, 198 (27.2%) are teens and 214 (29.4%) are adults. Only 4 (0.5%) are babies and 26 (3.6%) are elderly. For 18 characters (2.5%) no exact age parameters could be given.

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	0.8%	average	35.1%	average	35.6%	average	24.7%	average	2.4%

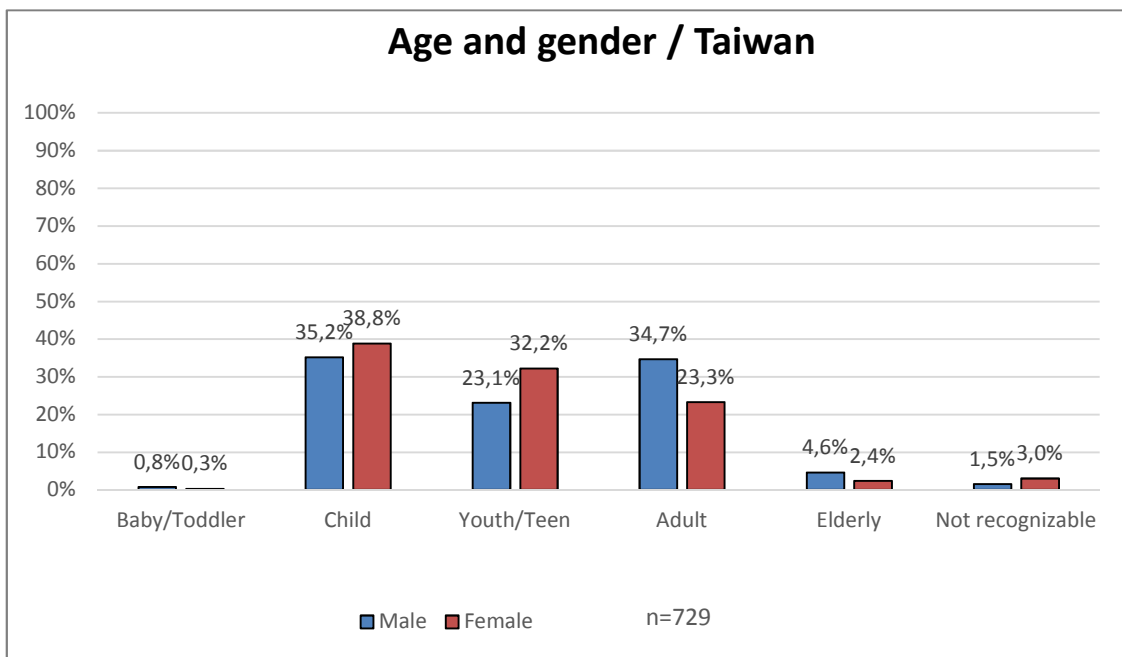
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36.9% of the characters presented in Taiwanese children's TV are children, i.e. Taiwan is slightly above international average. 0.5% are babies or toddlers, which is very close to the average. Teens constitute 27.2%, which is 8 percent below average. Concerning the adult characters, Taiwan takes the second place with 29.4%, which is 5 percent above average. Taiwan also ranks second in question of the representation of elderly characters. With a percentage of 3.6% it is also above average.

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

Out of the female characters 1 (0.3%) is a baby or toddler, 130 (38.8%) are children, 108 (32.2%) are teens, 78 (23.3%) are adults and 8 (2.4%) are elderly.

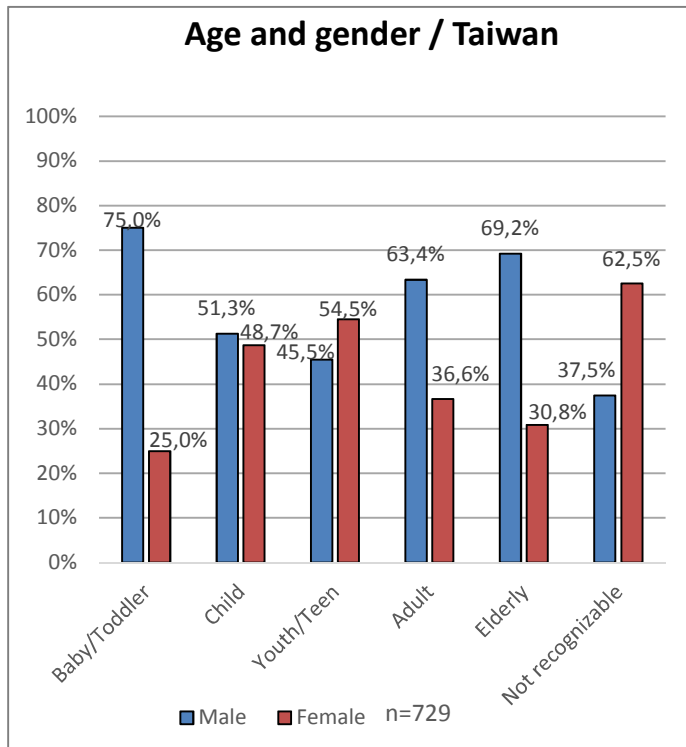
3 male characters (0.8%) are babies/toddlers, 137 (35.2%) are children, 90 (23.1%) are teens, 135 (34.7%) are adults and 18 (4.6%) are elders.



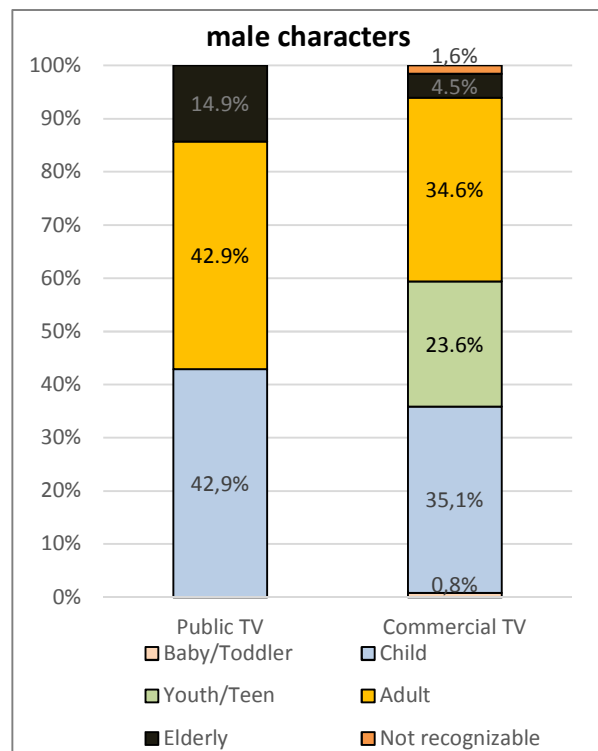
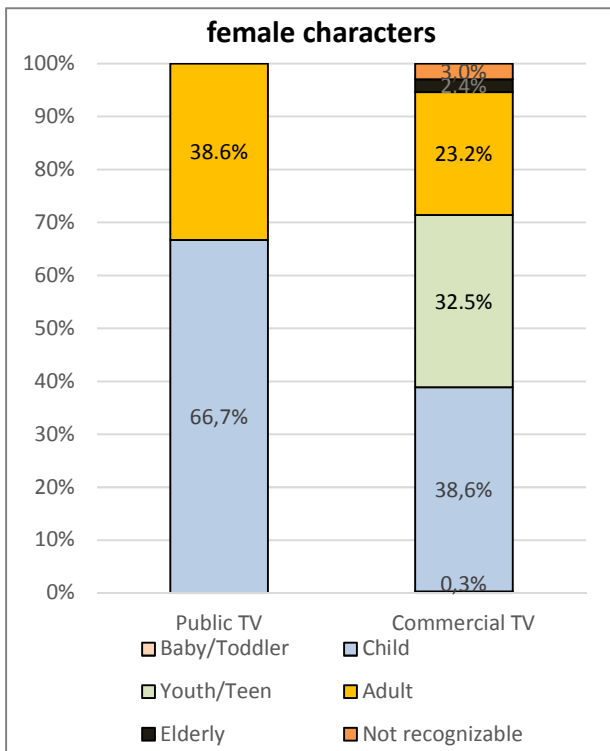
1 of the baby characters is female (25.0%) and the other 3 are male (75.0%). Out of the children, 137 (51.3%) are male and 130 (48.7%) are female. Among the teenagers 45.5% are male characters (n=90) and 54.5% are females (n=108). 78 female characters are coded as adults (36.6%), whereas the adult male characters are 135 (63.4%). There are also 18 senior male

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(69.2%) and 8 female (30.8%) characters. Another 16 characters' age could not be recognized: 10 females (62.5%) and 6 males (37.5%).

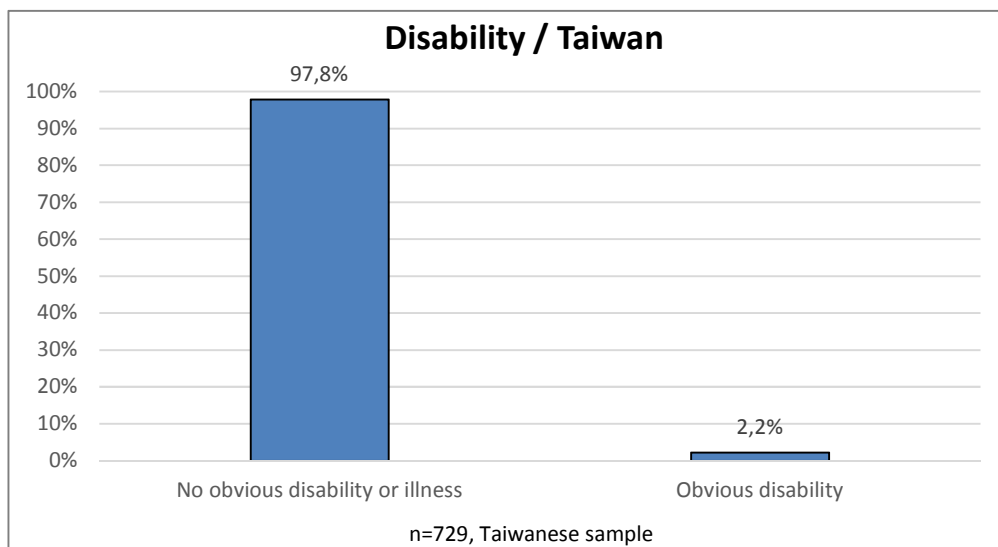


Babies and teens only appear on Commercial TV. The percentage of female teens (32.5%) is higher than the share of male teens (23.6%). The percentage of female child characters on Public TV (66.7%) is 28% higher than on Commercial TV (38.6%). Still child characters are created more often female than male. Adult and elderly characters are more often male. Public TV has around three times as more male elderly characters (14.3%) as the Commercial TV (4.5%).



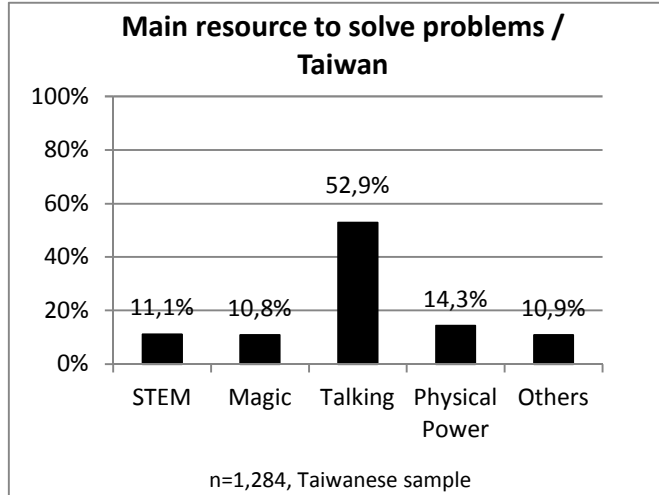
5.4 Which disabilities do the characters have?

In this study, the main characters were coded as disabled if the character has a clearly identifiable disability (e.g. wheelchair, blindness) or a severe chronic illness (e.g. HIV/AIDS, cancer, diabetes), which can be seen obviously or is an important part of the character development. In the Taiwanese sample, there are 16 human characters (2.2%) – male: 8 (2.1%) and female: 8 (2.4%) - who have obvious disabilities. No character with a serious chronic disease has been found among the Taiwanese characters. 97.8% of the characters have no recognizable disability.



5.5 What is their main resource to solve problems?

142 characters (11.1%) solve problems by using science, technology, engineering and/or mathematics (STEM). 139 characters (10.8%) are solving issues with magic, which is the use of supernatural powers to make things happen that would usually be impossible, such as making people disappear and/or the use of means such as charms or spells believed to have

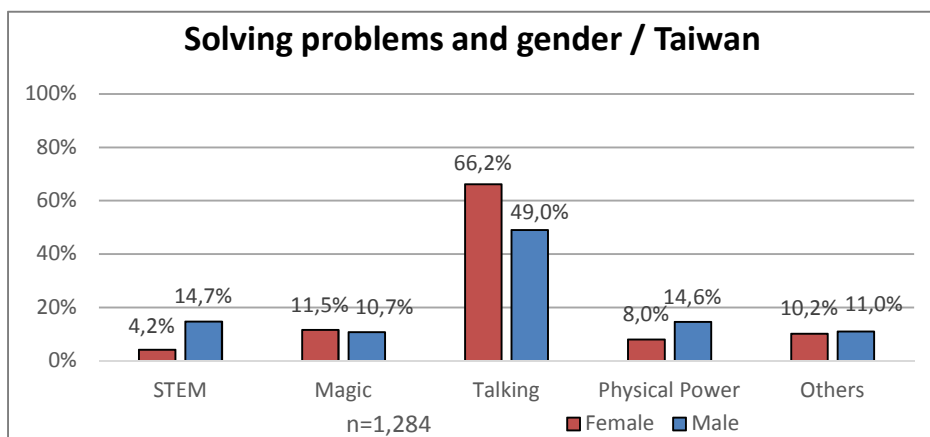


supernatural powers over natural forces. 679 (52.9%) are using talking, mediation, organizing and/or understanding. 184 (14.3%) use (natural or enhanced) physical power as their main resource to solve problems. 140 (10.9%) could not be categorized to any of the categories.

Gender perspective: Female characters solve their problems more often with talking, male characters use physical power and STEM (over three times) more often

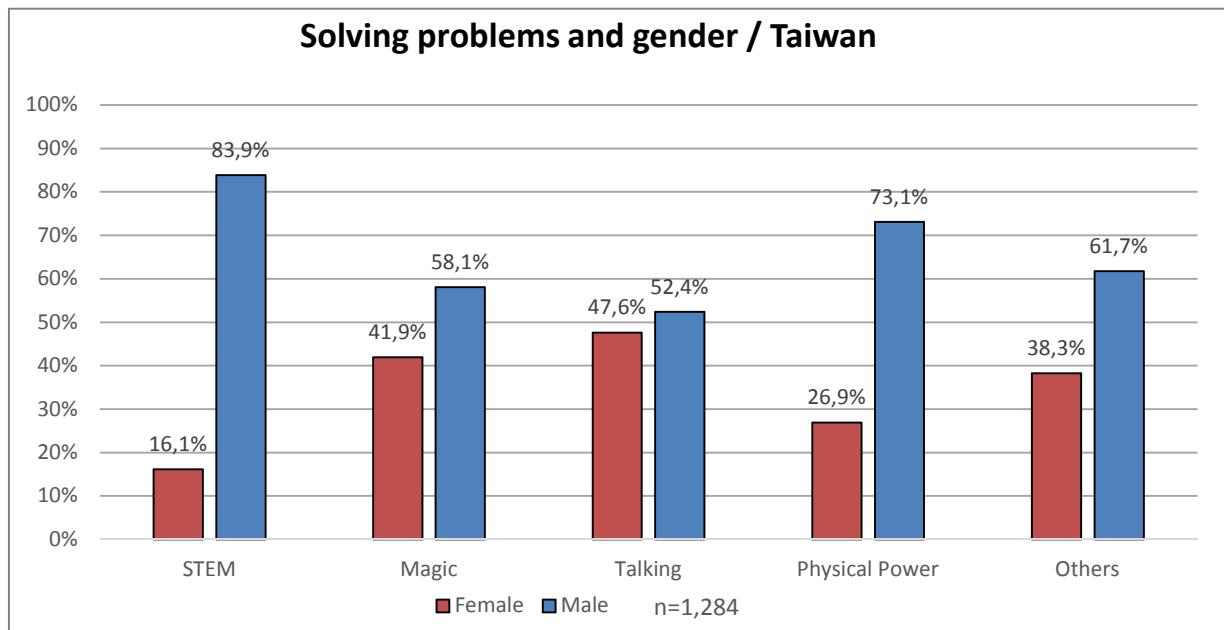
Of the female characters 19 (4.2%) use STEM, 52 (11.5%) use magic, 299 (66.2%) solve problems by talking, mediating, organizing and understanding, 36 (8.0%) use physical power and 46 (10.2%) solve their problems in another way.

Of the male characters 99 (14.7%) do STEM, 72 (10.7%) do magic, 329 (49.0%) solve their problems by talking, mediating, organizing and understanding, 98 (14.6%) solve problems with



the help of physical power. For 74 characters (11.0%) solving problems was done differently.

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Out of the characters, who use STEM as a problem-solver 16.1% are female (n=19) and 83.9% are male (n=99). The magic category consists of 41.9% female characters (n=52) and 58.1% males (n=72). 299 females are using talking, mediation, organizing etc. as a problem-solver (47.6%), whereas the male share in this category is a bit higher (329 characters with 52.4%). 98 males make up 73.1% of the physical power group and the females, who use this method are 36 (26.9%). The “Other” category consists of 38.3% female characters (n=46) and 61.7% male characters (n=74).

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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	16.5%	average	9.3%	average	44.5%	average	15.8%

With a percentage of 52.9% Taiwan ranks second in the category “talking” and is 8% above the international average. With a share of 10.8%, slightly above the average, it also ranks second by using “magic” to solve problems. In terms of using STEM and physical power Taiwan is slightly below the average. The “others” category here is excluded.

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

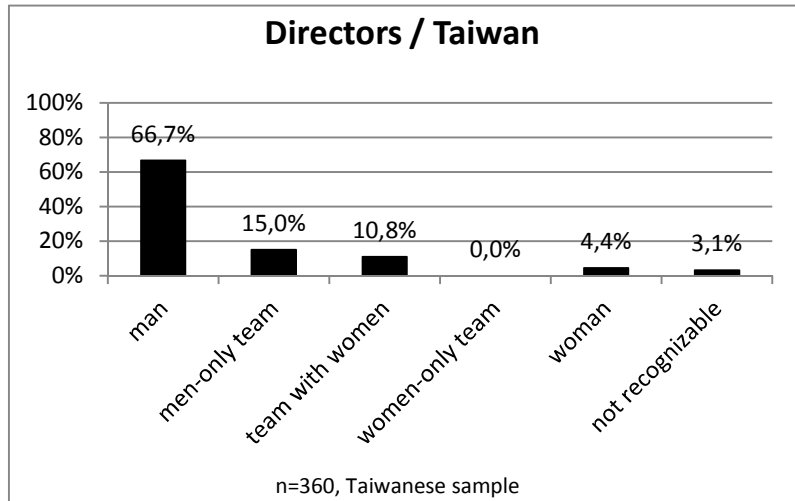
The information required for this abstract was derived from the credits of the show or when needed, from the internet.

6.1 Director

In the director category mostly there are autonomous male directors. 240 (66.7%) shows are directed by a man. 16 (4.4%) are directed by a woman. Taiwanese shows are directed 15 times more often by one man than by one woman.

Teams with women constitute

39 (10.8%) of the directed shows and men-only teams direct 54 shows (15.0%). There are no directing teams in Taiwan, which consist only of women. For 11 shows (3.1%) it is not clear who and/or how many are the directors.



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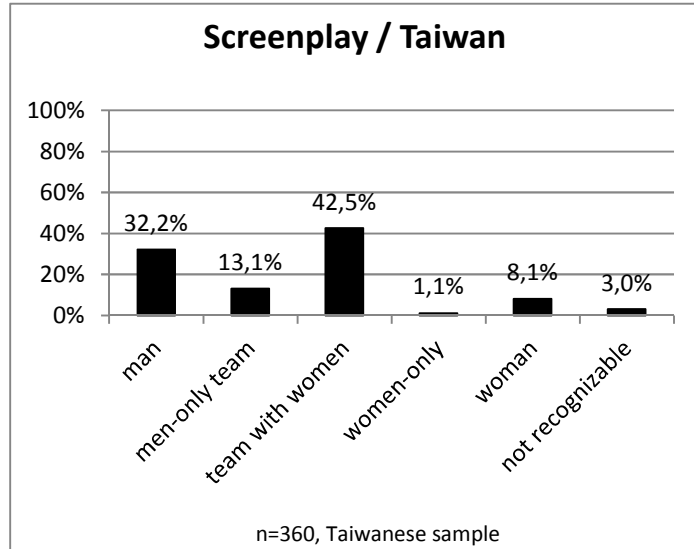
International comparison

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	91%	Israel	0.0%
average	6.5%	average	65.1%	average	7.2%	average	15.5%	average	0.3%

Among the teams with women Taiwan ranks first and is more than 3% above the international average. In terms of male directors Taiwan is slightly above the average. With a share of 4.4% the female directors are about 2% under the international average. There are no teams consisting only of women.

6.2 Screenwriter

Teams with women constitute the highest share of the screenwriters - 153 (42.5%) shows. 116 shows (32.2%) are written by a man, whilst 29 (8.1%) are written by a woman. Taiwanese shows are written four times more often by one man than by one woman. 47 shows (13.1%) are written by men-only teams and 4 (1.1%) are written by women-only teams. For 11 shows (3.0%) it is not possible to say whether one person or a team wrote the script.



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	13.2%	average	34.3%	average	28.4%	average	17.5%	average	1.6%

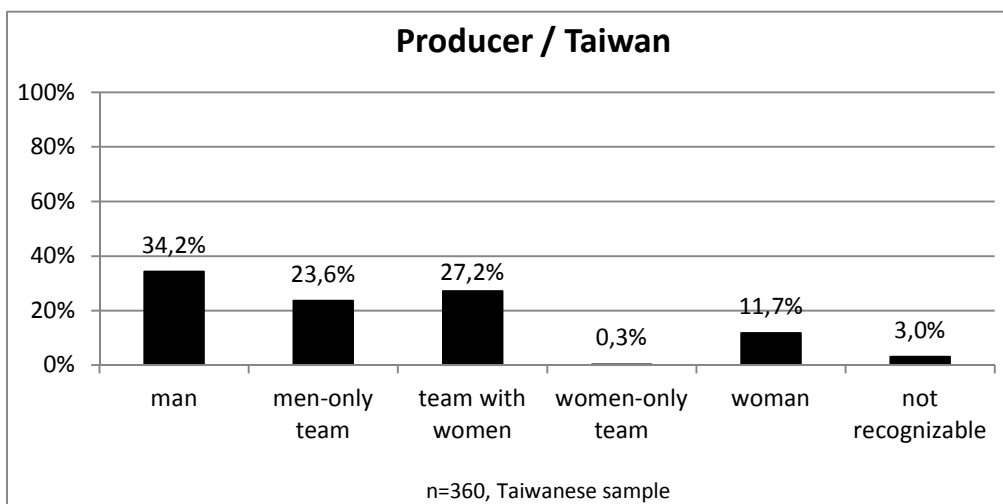
Among the teams with women Taiwan ranks second. With a share of 42.5% it is 14% above the international average. The other constellations are a bit under the international average.

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Female screenwriters are 5% under the international average of 13.2%. Men-only teams (13.1%) are 4% under the average. Male screenwriters and women-only teams are also slightly under the international average.

6.3 Producer

Most Taiwanese shows are produced by one man. There are 123 shows (34.2%) produced by a man and 42 (11.7%) shows produced by a woman. The number of shows produced by teams with women is 98 (27.2%). The number of shows produced by men-only teams is 85 (23.6%). There is one show (0.3%) produced by a women-only team. Producer categorization is not possible for 11 shows (3.1%).



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International comparison

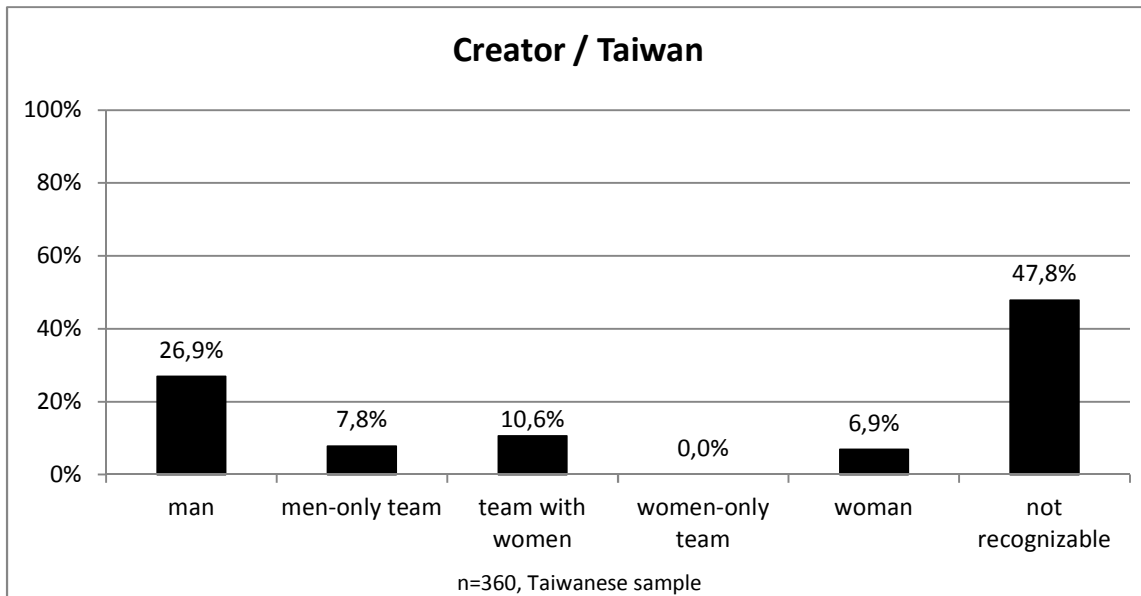
Woman		Man		Team with		Men-only		Women-only	
UK	31.5%	Cuba	42.4%	USA	64.3%	Cuba	25.0%	Israel	3.8%
Israel	16.5%	Taiwan	34.2%	Canada	56.8%	Taiwan	23.6%	Belgium	2.9%
Canada	15.8%	Israel	23.3%	Belgium	51.1%	USA	23.0%	Canada	1.7%
Taiwan	11.7%	UK	21.2%	Israel	37.9%	Germany	22.4%	Germany	1.6%
Belgium	7.2%	Canada	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	11.9%	average	19.7%	average	40.9%	average	18.7%	average	1.7%

Taiwan is in second place for the shows, which are produced by a man. With a share of 34.2%, it is 15% above the international average. Also with regard to the shows produced by men-only teams, Taiwan ranks second. With a share of 23.6 % it is 5% above the international average. Women-only teams and teams with women are drastically under the international average. With a share of 11.7%, shows produced by only one woman are very close to the international average and are three times less common than shows produced by one man.

6.4 Creator

Most Taiwanese shows are created only by one man. 97 shows (26.9%) are created by a man, while 25 (6.9%) are created by a woman. This makes a difference of 20%. The teams with women make up 38 shows (10.6%) and men-only teams - 28 shows (7.8%). There is no team consisting only of female creators. 172 shows (47.8%) could not be grouped in any of the categories.

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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	12.1%	average	35.6%	average	10.6%	average	18.7%	average	0.9%

In the Taiwanese sample the 'not recognizable' category consists of 47.8%. This may be the reason of the partially low percentages of Taiwan in most categories. Taiwan is equal to the international average, concerning shows that are created by teams with women. The other categories are drastically below the international average.

7 Summary of the results:

7.1 Taiwan's children's television in international comparison

The sample analyses of Taiwan consists of 147 hours of explicit children's television, 107 hours of fictional shows, 383 programs (360 fictional shows), 1,284 characters (fiction) and 729 human characters. Taiwan ranks last in terms of domestic productions. Only 3.6% of the productions are produced in Taiwan. Most of the shows seen in Taiwanese children's television are produced in the USA (52%). In terms of skin color still none of the recorded nations shows more Asian (47.1%), less Caucasian (28.7%) and less colored (2.7%) characters than Taiwan.

Most shows in the Taiwanese sample are directed by one man (66.7%), produced by one man (34.2%) and created by one man (26.9%). Only the scripts mostly are written in teams with women (42.5%).

In terms of the broadcasters some results are worthy of being pointed out:

- With a share of 95.9% far more animated programs are offered to children on commercial TV than on public TV (42.9%).
- Domestic shows are broadcasted almost five times more often on public TV (16.7%) than on commercial TV (3.4%).
- The gender representation is more balanced on commercial TV (F: 35.4%; M: 52.0%; N: 12.6%) than on public TV (F: 23.5%; M: 76.5%). In addition, no country has a higher number of neutral characters than Taiwan (12.6%).
- On public TV teamwork is less common than on commercial TV. With a difference of over 30%, especially among female characters.
- Female characters are more often the leaders on public TV (50.0%) than on commercial TV (29.1%), while male characters are less often the leader on public TV (23.1%) than on commercial TV (30.3%).
- Female characters on public TV are exclusively Asiatic, male characters are 57.1% Asian and 42.9% Caucasian. Commercial TV includes all categories of skin-colors.
- Male characters on public TV have no unnatural or atypical Asian hair-colors (like blond), while female characters on public TV are black-, red-, or pink-haired (one third each).