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Is She an Expert or Just a Woman? Gender Differences in the Presentation of Experts in TV Talk Shows

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Abstract In order to explore gender differences in the presentation of experts on television this study used a content analysis of 238 h of 64 Israeli talk shows from 2012 where 495 experts took part. Men experts outnumbered women experts in a 1.7:1 ratio. These men were significantly older than the women and tended to have a higher academic rank. The topics on which the experts commentated reflect familiar gender stereotypes with men more likely to talk about security and self defense, politics and economy and women more often talk about body grooming and child care. The results, which partly accord with feminist criticisms that blame the popular media with symbolic annihilation of scholarly women and partly reflect an actual over-representation of men in senior academic ranks, are also analyzed in relation to the findings of studies that looked at the gender of scientists and scholars in fictional TV programming.

Keywords Television · Talk shows · Content analysis · Israel · Academic experts · Skirt syndrome · Symbolic annihilation · Cultural lag · Gender

Introduction

This study uses content analysis to explore similarities and dissimilarities in the appearance of male and female experts in Israeli TV talk shows. For many years, feminist activists have been asserting that biased depictions of gender roles in the media help to strengthen stereotypes about women and their place in the society (Cavender et al. 1999; Paek et al. 2011). By avoiding presenting women in prestigious positions as experts TV broadcasts may reinforce attitudes according to which women are intellectually inferior to men (Holbert et al. 2006). This criticism led gender researchers to document gender differences in esteemed roles in popular fictional TV formats (Lauzen et al. 2008) and in news programs (Desmond and Danilewicz 2010) in the USA, but only scant attention has been given hitherto to the construction of gender dominancy and gender roles in non-fictional non-news genres as talk shows, which occupy a major share of the programming schedule (Johnson et al. 1999), and play a vital role in supplying knowledge and providing advice to large publics (Holderman 2003). Hence, examining differences and similarities in the representation of male and female experts in talk shows would teach us about the significance of gender in marking knowledge authority in the popular media, grant us a better understanding of the interaction between media and gender in mapping cultural trends (van Zoonen 1996), and empirically test the veracity of feminist media criticism.

Israel, which is the field of our study, makes an interesting touchstone for comparing the media representation of women experts vis-à-vis reality, since even though the representation of women in senior positions in academe, politics, military and business (domains from which experts are recruited to take part in talk shows) has been historically low, it was rapidly improving just prior to the study (Almagor-Lotem & Keen 2013; Shapira et al. 2013). Therefore, this study which investigates the appearance of male and female experts in talk shows aired by the most highly watched networks in a transitional society such as Israel is also an examination of Ogburn's (1964, p.459) *cultural lag* concept according to which popular mass-cultural representations of social changes are often belated due to power structures which use their control of media corporations to slow down the speed of change.

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Gender Portrayals and Gender Roles in Television

Since its early days, television has been regarded a major socialization agent which transmits values, beliefs and attitudes (Gerbner 1998) and enculturates behaviors (Bandura 2009). This raised the scientific community's interest in mapping the demographics and qualities of individuals and groups who appear on the small screen, and whose appearance indicates what is acceptable in society (Greenberg 1980, p.XII). It goes without saying that the lenses through which the media represent "reality" reflect the view of powerful political, economic and creative elites (Gamson et al. 1992). People who belong to powerful societal sectors (e.g. rich people, men) not only appear in the media more frequently, but are also portrayed as more reasonable and more rational than persons of weaker strata (van Dijk 1995). Viewers who belong to these weaker strata may even sometimes lower their self esteem in accordance with the unflattering reflection of their lives in the media (Cohen and Young 1981). As Weimann (2000) notes, television provides a rather restricted set of contents for a much less restricted number of viewers. The process through which the contents are chosen (for instance – inviting certain family law experts to comment in a talk show on the legal aspects of divorce) is intentionally selective, prioritizing certain societal segments. The outcome is a (re)constructed reality which seems "natural" to ordinary viewers. In this regard, Tuchman (1978) suggested the term *symbolic annihilation* to denote an ongoing non-representation or under-representation of women in prestigious roles in the media. *Omission* (refraining altogether from featuring women in broadcasts), *trivialization* (presenting females as callous) and *condemnation* (documenting females' involvement in unlawful behavior) are forms of such annihilation, which are abundantly found in popular broadcasts. The existence of symbolic annihilation can be critical to young female viewers, who then lack role models with whom they can identify and use as icons of aspiration (Fourie 2001, p.503). The existence of such icons is often helpful to women in the early stages of career development, particularly in fields traditionally predominated by men like engineering and science (Steinke 2003).

As part of the general interest in reality reconstruction, symbolic annihilation and the media representation of privileged and deprived social groups, numerous studies regarding the appearance of men and women on television took place (Jones and Jones 1999, p.113). Since the most comprehensive examinations of the portrayal of men and women in fictional TV genres analyzed U.S. programming, their findings relate mainly to the U.S. However, since many of the programs have been broadcast successfully worldwide, the following review of *U.S. studies* may teach us partly on what viewers in other countries (including Israel - see Eurodata TV 2011) are exposed to when it comes to gender role distinctions and gender differences.

In the 1950s, there were two males for every female in U.S. TV drama. An analysis of one month of evening programming from that period revealed that the women were portrayed in a stereotypical manner - being passive in their behavior, domestic in their interests, and housewives by their profession (Smythe 1954). While the numerical ratio of males to females in U.S. TV drama hardly changed in five decades as deemed from a comprehensive analysis of one week of early millennium programming (Glascock 2001), the share of career women among female protagonists did increase in the last two decades, a trend that reflects changes in the makeup of the U.S. labor force (Lauzen et al. 2008). Still, across a range of TV formats, women in U.S. TV programming remain younger than men, rarely have an academic degree higher than baccalaureate (Davis 1990), and frequently engage in traditional female occupations such as secretaries and teachers (Signorielli 2012). Such portrayal can have a prevailing *cultivation* effect on males, who may underestimate the capability of women to succeed in complicated male tasks, and on women viewers who – in the absence of successful role models of their own gender - may internalize an underestimation of their talents (Morgan 1982; Signorielli 1989).

Studies of news programming show that there, too, males who appear in front of the camera as anchors and reporters outnumber women in the same roles as evidenced from an analysis of 160 news items aired by the major networks in the mid 1990s (Liebler and Smith 1997) and a similar analysis of 580 items broadcast a decade later (Desmond and Danilewicz 2010). In both cases the findings refer to the United States.

The Israeli Context

Studies concerning gender roles in any TV format other than commercials are hard to come by outside the United States. Research regarding the representation of gender in Israeli television, whose broadcasts form the dataset of the current investigation, is not an exception of this rule; still, what was published adheres to the renowned trend of stereotyping alongside a recent move towards more egalitarianism. Avraham, First and Elephant-Loffler (2004) coded 20 weeks' worth of Israeli network news magazines and dramatic series from the early 2000s and detected a 3:1 ratio of men to women in both genres. A follow-up study that took place half a decade later found, in a sample similar in size, that in both genres the ratio of men to women shrank to 2:1 (Leor et al. 2006).

This pattern of findings may represent an ongoing collision between opposite forces that operate within Israeli society. The secular Zionist ideology aiming to cut ties between the modern Israeli Jew and diasporic comminutes where

traditional gender roles were the norm, and the close contacts with western countries push Israelis to adopt an egalitarian position with regards to gender roles (Almog 2004). Yet, at the same time, the predominance of the Orthodox fraction of Judaism, the sect to which officially nearly all Israeli Jews belong (Levy et al. 2002), may shove the Israeli public to adopt a more traditional view of gender roles in accordance with religious customs that posit men as heads of the family and women as stay at home moms (Ariel 1993). In practice, Israeli women develop business careers in smaller number than men and are severely under-represented in senior positions, making up only 4 % of the CEOs in companies whose stokes are traded in the local stock-exchange (Cohanim 2013). Only one-fifth of the members of the national parliament (*Knesset* – Heb.) and only one out of twenty-nine generals who are members of the military's headquarters (*Matkal* – Heb.) are women, possibly also due to the negative view on women involvement in politics and service in combat units among observant Israelis (Maagar Mohot Research Institute 2012). In academe, while females constitute as many as 51 % of the junior non-tenured lecturers, they fill only 33 % of the tenured faculty slots. Israeli female academics make their career often in academic variants of traditional feminine occupations such as nursing and education. Sociologists of higher education name this the *skirt syndrome* – a tendency among female scholars not to cross-over to masculine knowledge domains like engineering and mathematics in order to avoid personal mockery and criticism (Ariel 1993). In Israel, where research in masculine knowledge domains is often conducted in collaboration with the military which is still predominantly male organization in higher ranks (Pesso 2013), this syndrome is even more notable. Yet, one cannot ignore rapid changes that have occurred in Israel in recent years: For example, in 2012–2013 alone women doubled their parliamentary representation, conquered a CEO position in 3 out of the 5 largest banks and a rector's position in 2 of the 8 research-first universities. The question to what extent will this change find manifestation in a large media share of female experts on Television (including prestigious domains that have been traditionally reserved mainly to men) brings to mind Ogburn's (1964) concept of *cultural lag*. According to Ogburn, mass culture is often the last venue where swift or profound social changes find expression because the shareholders of corporations which operate this culture have the least interest in these changes. This may apply to the TV scene in Israel, which is controlled by two commercial channels (*Channel 2* and *Channel 10*) owned by an array of male tycoons (Caspi 2012).

The bottom line is that in a society like Israel, where conservative and liberal forces fiercely battle over the division of gender roles, media expressions of egalitarianism alongside traditional stereotypes may coexist.

The Presentation of Experts on Television

TV programs may categorize knowledge and signify expertise by employing certain narratives and featuring certain figures. Experts appear on television either as fictional characters or as themselves in non-fictional programs such as news and talk shows. There are no studies regarding the appearance of experts in TV news, but an Australian study of "source expertise", i.e. an interviewee whose occupation is noted and appears to be relevant to the story, found – after analyzing one week of news programming - that females are less likely than males to serve in this role (Cann and Mohr 2001). This finding was replicated in a study of two weeks of U.S. newscasts (Desmond and Danilewicz 2010). As for talk shows, a genre concerned with day to day issues that are not necessarily hard core politics, a study that closely examined eight of the most successful U.S. talk shows from the mid-1990s pointed that non-fictional scholars who take part in these programs are quite similar in social characteristics to fictional TV experts who appear in drama, possibly because mainstream productions tend not to deviate much from commercially successful formulas and since even though talk shows are non-fictional by definition themes with which they are often concerned like relationship problems, health crisis and design trends share more in common with fictional drama than with news (Johnson et al. 1999). Therefore, from reviewing literature concerning gender differences in the appearance of expert figures in fictional TV formats, we may learn of trends that are relevant to our study. A recent study regarding the representation of scientific experts as fictional characters in U.S. TV drama found in eight weeks' worth of dramatic programming that their share of the overall protagonists' population was negligible - around 1 % (Dudo et al. 2011). A 2:1 ratio of men to women characterizes the makeup of the academic scholars population in fictional programming now, as it did in the 1980s (Dudo et al. 2011; Gerbner et al. 1985). A tendency to downplay the expertise of women scientists, which was still noted in U.S. programming in the 1990s (Steinke 1997), vanished recently as part of a general pattern of diminishing gender gaps in the professional background of fictional TV scientists (Long et al. 2010). In fact, the under-representation of female academics in TV drama still exists only when the baseline for the comparison is fictional male academics, as the share of female scientific protagonists in U.S. dramatic programming is not lower than the share of women in the faculty body of U.S. universities. In other words, women are under-represented in scientists' roles on television just as they are less likely to be employed as professors of science in higher education institutes (Ceci et al. 2009). The last point bears special significance to our case, as in Israel only one-third of the tenured faculty members in research universities (a body that supplies many of the experts who appear as commentators on television – for data

based on the ten most successful U.S. talk shows see Holderman 2003) are women (Pundak 2013).

When it comes to the representation of scientists in non-fictional programming, talk shows constitute the arena wherein - all over the world - scholars receive the largest exposure (Abt and Mustazza 1997; Patrona 2005). In programs such as *Oprah Winfrey Show*, *Good Morning America* and *Dr. Phil* (and their international clones) experts answer layman questions posed by a host and reply to in-studio audience or viewers at home who ask about medical problems, emotional difficulties, legal hurdles and other domestic issues (Lunt and Lewis 2008, p.10). Typically presented as the voice of authority (Munson 1993), experts give advice that is within the program (Holderman 2003, p.47), and is often unconditionally accepted by the viewers, especially the less educated ones (Heaton and Wilson 1995). Such viewers tend to shape their view of intellectuals and scientists partly on the basis of popular talk shows (Johnson et al. 1999), which are quite often their only opportunity to see and hear academics showcasing their expertise (Holderman 2003, p.47), even if in a somewhat simplified manner due to the medium's constrains. Given all of that, the lack of studies concerning gender differences and similarities in the presentation of experts in talk shows in general and in Israel in particular highlights the timeliness of our research.

Research Hypotheses and Rationale

We posit three hypotheses. In the absence of previous studies on gender representation of experts in talk shows, we base our rationale partly on results of research that dealt with gender differences in newscasts and examined the representation of scientists and experts in fictional genres. We do not ignore the fact that these studies took place in a different culture (USA), but besides the fact that more than half of the programming aired by major Israeli broadcasters consists of imports and local versions of U.S. formats (Eurodata TV 2011), a common assumption among media scholars suggests that worldwide the popular programming is – because of its commercial constraints - a relatively coherent universe of cohesive messages (Gerbner 1998; Weimann 2000).

H1: Men would Outnumber Women as Experts in Talk Shows

In fictional TV formats male academics and scientists outnumber women in these roles (Dudo et al. 2011; Long et al. 2010). More generally speaking, male protagonists outnumber women characters in nearly any fictional format (Glascock 2001). This trend is not absent from fictional Israeli TV shows (Leor et al. 2006) and newscasts (Avraham et al. 2004). We expect it to prevail in talk shows. Furthermore, even if the shows would not intentionally symbolically annihilate scholarly women and would merely replicate the gender demographics of higher education faculties in Israel – we would still expect to find a minority of women (see Goldschmidt 2012).

H2: Female Experts Would More Often Comment on Feminine Domestic Topics (e.g. Child Care) and Body Grooming (e.g. Beauty and Design), Whereas Male Experts would more Often Talk about Masculine Topics Like Politics, Economy and Security

Warren (2002) has shown that even by this millennium issues on the agenda are socially perceived as masculine (e.g. security), feminine (e.g. child care) or gender neutral (e.g. medicine) and that masculine topics are usually regarded more important. The gender based division of topics corresponds to a division of occupations. Content analyses of various TV formats found that – at least to some extent - men still engage in typical male occupations (e.g. professional soldiers) and women still hinge to traditional female vocations and practice child-care (Signorielli 2012). This trend might be even stronger in Israel where the *skirt syndrome* (see Ariel 1993) prevails in academe, business and politics. We conceive the topic of discussion in the program to be not only a potential reflection of gender-based topic division, but also closely related to the expert's occupation: an ex-general would likely commentate about security and a successful businessman would probably share a business advice, whereas a cosmetician would be able to share her expertise when it comes to skin peeling, and midwife would give advice about birth. Since in Israel politicians, military personnel, successful businessmen and economists are more often men, whereas educators and cosmeticians are more frequently women (see data on Table 5), we expect to find gender differences accordingly in the topic of experts' commentary in talk shows.

H3: Male Experts in Talk Shows Would Be Older And Senior (in Academic Ranking) than Female Experts

Abundant evidence exists that women who appear on TV – either in fictional formats (Davis 1990; Signorielli 2012) or in newscasts (Cann and Mohr 2001) - are younger than the men who appear in those programs. Since worldwide (and Israel is not an exception – see Goldschmidt 2012) academic seniority correlates with age, we expect female experts to be not only younger than male experts but also positioned lower in academic ranking.

Method

The study took place in Israel in 2012. Content analysis was used to determine the number of men and women who appear as experts in TV talk shows, their characteristics, and qualities related to the discussion in which they took part in the program.

Sample

The data were obtained from a systematic coding of four weeks' worth of broadcasting of talk shows aired in Israel throughout February-June 2012 between 8 am and midnight in two terrestrial commercial networks (Channel 2 and Channel 10), and one public broadcasting station (Channel 1). Channel 2 and Channel 10 are the most popular TV stations in Israel. Combined, they attract 60 % of the viewers. Channel 1 is the only public broadcasting station in Israel. It is ranked third in the number of viewers (Eurodata TV 2011).

The constructed week method was used to sample the programs. In this method, one day is picked randomly for each channel in each week until a complete constructed week representing week days and weekend days emerges. However, weeks that contain official state holidays or religious holidays were not sampled so as not to contaminate the dataset with non-representative content related specifically to the holidays. Any talk show that was aired in one of the sampled days was included in the sample. Sixteen different talk shows broadcast daily (of which seven were morning programs, eight were evening programs and one was a late night show) were identified (see Appendix 1 for titles). The sampling process was repeated to obtain four weeks' worth of broadcasting consisting of 1428 h of programming (476 h from each channel) of which 238 h consisted of talk shows. These shows, 64 in number (4 episodes of 16 distinct programs), featured 495 experts.

Coding Book and Coding Reliability

Two *units of analysis* were used throughout the coding: the expert and the discussion in which the expert took part. *Expert categories* (variables) consisted of *gender*, *age* and *education. Discussion* had one *categor*y (variable), namely *topic*.

The coding was done by two students (one male and one female), who worked separately without being privy to the goals of the research. The coders were trained together for 6 hours and on an individual basis for additional 2 hours. Before starting to code the dataset they practiced on 2 hours of talk shows that were not included in the final sample. Then, each broadcast was coded twice by the two coders i.e. no data analyzed for this paper was coded by a single coder. Intercoder reliability was computed separately for each category using *Cohen's Kappa* coefficient. The values that ranged from K=.810 K=.998 indicate high reliability. The high reliability should be attributed to proper training of coders and well-defined operational definitions (the lowest reliability, K=.810, relates to the expert's age which is obviously the least clear-cut variable in the scheme). The coders were allowed to consult external sources to determine the accuracy of their coding where such consultation could be useful (e.g. verifying the expert's academic degree by calling the university where s/he works and ascertaining his age by examining official CV). This consultation was also helpful in securing coding accuracy. Table 1 lists - for each variable - the coding options and intercoder reliability.

Results

H1

To test H1, according to which the share of women experts in talk shows is lower than the share of men experts in the programs, we look at the gender breakdown across the

Table 1 Coding options and reliability values of content variables

Unit of analysis	Variable	Coding options	Reliability value (Cohen's Kappa)
Expert			
	Gender	Male; female	K=.998
	Age	Less then 20 years old; 21 to 30 years old; 31 to 40 years old; 40 to 49 years old; 50 to 59 years old; 60 to 69 years old; 70 years old or older	K=.810
	Education	Non-academic; BA or MA; Ph.D.; Professor	K=.927
Topic			
	Topic	Economy; politics; security and self defense; medicine; body grooming (e.g. beauty and fashion); construction and architecture; entertainment; child care and education (domestic matters); law and insurance; computers and internet; sciences; other	K=.902

sample. The 495 experts consisted of 313 men (63.2 %) and 182 women (36.8 %). The majority of men is statistically significant and H1 is confirmed, since the null hypothesis suggesting equal proportions among the genders is rejected ($\chi^2_{(df=1)}$=34.7 P<.001).

H2

To test H2, according to which female experts more often comment on feminine topics like child care and body grooming, whereas male experts more often talk about masculine topics as politics, economy and security, let us look at Table 2 which shows the distribution of topics (classified as masculine, feminine or gender neutral) by gender. The classification of topics is based on Warren (2002).

The difference in gender distribution across the topics is significant ($\chi^2_{(df=7)}$=41.8 P<.001 λ=.046). As expected, compared to men, women are significantly over-represented in discussions about body grooming (13.7 % vs. 3.7 %; $\chi^2_{(df=1)}$=8.4 P=.004 λ=.030) and child care and education (13.7 % vs. 4.6 %; $\chi^2_{(df=1)}$=26.2 P<.001 λ=.087), but they are under-represented in discussions concerning security and self defense (0.0 % vs. 10.6 %; $\chi^2_{(df=1)}$=13.8 P<.001 λ=.004), politics (2.9 % vs. 10.1 %; $\chi^2_{(df=1)}$=7.5 P=.006 λ=.020), and economy (9.6 % vs. 16.6 %; $\chi^2_{(df=1)}$=18.4 P<.001 λ=.007). Altogether, the share of female experts in feminine domains (27.4 %) is significantly ($\chi^2_{(df=1)}$=7.75 P<.007 λ=.077) larger than the share of male experts in these domains (8.3 %), whereas the share of male experts in masculine topics (37.3 %) is significantly ($\chi^2_{(df=1)}$=64.9 P<.001 λ=.091) larger than the share of female experts in these topics (12.5 %). H2, which predicted these differences, is confirmed. In gender neutral topics gender differences are minor (60.2 % females vs. 54.3 % males) and not significant ($\chi^2_{(df=1)}$=3.3 P>.05). This means that there is no tendency among any of the genders to concentrate in these topics.

Table 2 Topic of discussion by expert gender

Masculine/ Feminine/ Neutral	Topic	Males (*N*= *313*)		Females (*N*= *182*)	
		(%)	(N)	(%)	(N)
Masculine					
	Economy	16.6 %	52	9.6 %	18
	Politics	10.1 %	32	2.9 %	4
	Security and Self defense	10.6 %	33	0.0 %	0
Total		37.3 %	117	12.5 %	22
Feminine					
	Body grooming	3.7 %	12	13.7 %	25
	Child care and education	4.6 %	14	13.7 %	25
Total		8.3 %	26	27.4 %	50
Neutral					
	Medicine	33.6 %	106	33.0 %	60
	Construction and architecture	1.4 %	4	3.9 %	7
	Entertainment	.9 %	3	0.0 %	0
	Law and insurance	5.5 %	17	13.7 %	25
	Computers and internet	1.4 %	4	0.0 %	0
	Sciences	1.8 %	6	1 %	2
	Other	9.7 %	30	8.6 %	16
Total		54.3 %	170	60.2 %	110

Table 3 Age of experts by gender

Age	Males (*N*= *313*)		Females (*N*= *182*)	
	(%)	(N)	(%)	(N)
Less than 20	1.4 %	4	2.0 %	4
21-29	1.4 %	4	1.0 %	2
30-39	16.6 %	52	31.4 %	57
40-49	24.4 %	76	38.2 %	70
50-59	31.3 %	99	18.6 %	34
60-69	23.0 %	72	8.8 %	15
70+	1.8 %	6	0.0 %	0

H3

To test H3, which predicted that male experts, who appear in talk shows, would be older and higher in academic ranking) than their female counterparts, we look at two cross-tabulations: gender by age (Table 3) and gender by academic rank (Table 4).

From Table 3 we learn that the share of male experts in the older age brackets (50 years old and older) is higher than the share of women experts in the same brackets (31.3 % vs. 18.6 % in the 50–59 age group; 23.0 % vs. 8.8 % in the 60–69 years old age group; 1.8 % vs. 0.0 % in the 70 years old and more age group). In the youngest cohorts (experts who are younger than 30) the shares of men and women are quite similar, but in the 30 to 50 year old age range, the share of female experts exceeds the share of male experts (31.4 % vs. 16.6 % in the 30–39 years old age group; 38.2 % vs. 24.4 % in

Table 4 Education of experts by gender

Education	Males (*N*= *313*)		Females (*N*= *182*)	
	(%)	(N)	(%)	(N)
Non-academic	17.5 %	55	24.5 %	45
Junior academics (BA, MA)	27.6 %	86	36.3 %	66
Doctors (Ph.D.)	42.9 %	134	35.3 %	64
Professors	12.0 %	38	3.9 %	7

the 40–49 years old age group). Since age groups (contrary to age) constitute an ordinal scale (young to old), *Mann–Whitney test* with approximation to normal distribution is used to assess gender differences in this category. The *Rank Biserial coefficient* measures the size of the effect. The results of the procedure indicate a significant gender difference in age group distribution with a moderate effect ($Z=4.7$, $P<.001$, $r_{rb}=.283$). Given that, we confer that male experts are older than female experts.

From Table 4 we learn that the share of male experts who are doctors (42.9 %) and professors (12 %) is higher than the share of women experts in these ranks (35.3 % and 3.9 % respectively). In contrast, the share of women experts who hold only junior academic degrees (BA, MA) (36.3 %) and the share of women who have no academic diploma at all (24.5 %) are higher than the share of men in these groups (27.6 % and 15.5 % respectively). Since academic ranks (that express seniority) constitute an ordinal scale, Mann–Whitney test with approximation to normal distribution is used to assess gender differences in this category. The Rank Biserial coefficient measures the size of the effect. The results of the procedure indicate a significant gender difference in academic rank distribution with a small effect ($Z=2.8$, $P=.004$, $r_{rb}=.170$). In light of that, we conclude that male experts are ranked higher at the academic ladder than female experts. H3 is supported.

Discussion

As predicted, men experts outnumber women experts in talk shows. In accordance with expectations, male experts are more likely to talk about security, politics and economy and less likely to give advice on beauty, fashion and child care. They also tend to be older and more senior than female experts. The last finding contradicts some of the results of studies regarding the professional-academic background of scientists in fictional programming (Dudo et al. 2011; Long et al. 2010), but it is in line with the general mode of portraying gender distinctions in popular TV formats; specifically the tendency of female characters to be younger and less senior in their position (Davis 1990; Signorielli 2012). The differentiation of discussion topics across gender lines that we found in talk shows is in line with well known distinctions between masculine topics and feminine topics (Warren 2002) and accords with the results of studies that examined the distribution of occupations among fictional TV characters and concluded that even though gender gaps are closing in recent years they have not vanished altogether (Glascock 2001). Just as in fictional programming men are still more likely to play roles of military personnel while women are more often play teachers (Signorielli 2012), in our investigation of talk shows female experts more often commentate on child care while men experts are more likely to speak about security and self defense. Thus, the picture – when it comes to the comparison of gender differences across the fictional/non-fictional genre axis - is that there are more similarities than differences across formats (and also across cultures – as we should not forget that the baseline for comparison consists mainly of U.S. studies).

The depiction of women experts in talk shows as younger and not as senior as male counterparts replicates a pattern known from popular fictional programming (Davis 1990; Signorielli 2012) more than it is consonant with the representation of scholars in high-brow science programs (Dudo et al. 2011; Long et al. 2010), possibly because the audience to which talk shows appeal is more similar (in SES) to the audience that watches popular fictional programming (Johnson et al. 1999).

Yet, as in any study of gender differences in media content any conclusion about the receivers of the message remains somewhat speculative and the inevitable question is whether the effects that we found reflect only what the production views as the right way of presenting gender roles, or whether they reflect actual societal circumstances. Of course, a broadcasters' survey conducted concurrently with a content analysis is needed to fully answer this question, but from an earlier British study which relied on in-depth interviews with six talk shows producers we know that media outlets select scientists to commentate as experts mainly based on their availability, professional reputation, and capability to explicate complex processes in an easily digestible manner (Haran et al. 2008). That British study further revealed that even though the most common answer given by TV producers to the question whether the scientist's gender is relevant in the decision to invite him/her to the studio is 'no', these producers do admit that physical appearance is taken into consideration in such decisions. If we add to that the common myth according to which, physically speaking, women age faster than men (Saar 2012), this may partly explain why in our sample female experts were younger than males in the same roles. Yet, the 1:1.7 ratio of female experts to male experts in Israeli talk shows expresses gender equality more than the 1:3 ratio of females to males among senior faculty members in Israeli institutes of higher education does (Goldschmidt 2012). That male experts – compared to female experts - are over-represented in the senior academic subgroups of doctors and professors (55 % vs. 40 %), whereas female experts – compared to male experts - are over-represented in the junior academics and non-academic subgroups (36 % vs. 27.5 %) in fact echoes the gender reality in Israeli higher education system, where females constitute only 33 % of the senior faculty positions (Goldschmidt 2012).

The majority of male experts in talk shows and their tendency to be more senior may reflect not only a trend among TV producers to prefer interviewing older men (who are

Table 5 Share of female experts in masculine and feminine topics in talk shows and in reality

Masculine/ Feminine	Topic	Share of women in talk shows	Share of women in reality
Masculine	Economy	25.7 %	27 %[a]
Masculine	Politics	11.1 %	22.5 %[b]
Masculine	Security and self defense	0.0 %	3.5 %[c]
Feminine	Body grooming	67.5 %	93.2 %[d]
Feminine	Child care and education	64.1 %	78.6 %[e]

[a] Magen (2009)
[b] Kenig (2013)
[c] Pesso (2013)
[d] CBS (2007)
[e] CBS (2009)

usually more senior) and younger woman (who are typically less senior) but also – and perhaps even mainly – express the demographic makeup of the academic body from which most of the experts are recruited to take part in the programs. To investigate further, let us look at Table 5 which shows the share of female TV experts in masculine and feminine topics as deemed from our analysis vis-à-vis the share of women in higher positions in these fields (data gathered from various official sources) (Table 6).

Compared to reality, there is no consistent pattern of over-representing women experts in feminine topics and under-representing them in masculine domains. In other words, the under-representation of women experts in talk shows is quite possibly not intentional. The programs may reflect rather than invent gender bias certain fields as the military (where only one out of the 29 generals who constitute the central headquarters is a woman) and in senior academic positions where only one-third of the tenured faculty members are women. Furthermore, the majority of women experts in child care and education reflects anomaly of a discipline wherein more than three fourths of the faculty members are women (Goldschmidt 2012). In this case, a popular TV genre (talk shows) transmits to masses the presence of the *skirt syndrome* in Israeli academe. Some recent changes in the gender composition of senior positions in gendered fields (e.g. women filling in rector positions at universities) have no concrete reflection in the universe of talk shows experts and commentators perhaps because the format appeals to traditional viewers who are not yet ready to face revolutionary representations (Holderman 2003) Still, we have to note that in about half of the topics, which are classified as neither masculine nor feminine, there is no tendency on the part of any gender to be over represented. As Ogburn (1964) observed, cultural lag is likely to be present when the media is about to reflect non-hegemonic social changes and the media themselves may feature contradicting messages which reflect on-going power struggles.

However, even if the gender makeup of experts in Israeli talk shows is an accurate representation of objective conditions, one cannot deny that the programs do symbolically annihilate scholarly women (see Tuchman 1978). The annihilation exists mainly in the form of omission (fewer female experts appear in the programs), but also finds some expression in trivialization (note the over-representation of female experts who talk about body grooming). The last finding is in

Table 6 List of sampled programs

Program title [Hebrew]	Day part	Program title [English Translation]	Broadcast station
Yom hadash	Morning	A new day	Channel 2 (commercial – private)
Osim sedder	Evening	Putting things in order	Channel 2 (commercial - private)
Lichiot tov	Morning	Good living	Channel 2 (commercial – private)
Haolam haboker	Morning	The world this morning	Channel 2 (commercial – private)
Tochnit havra'a	Evening	Recovery show	Channel 2 (commercial – private)
Tihyu bri'im	Morning	Be healthy	Channel 2 (commercial – private)
Layla kalkali	Late night	Economic evening	Channel 2 (commercial - private)
Shesh im	Evening	Six O'clock with…	Channel 2 (commercial – private)
Kol boker	Morning	Every morning	Channel 10 (commercial- private)
Odetta	Evening	Odetta (host name – authors)	Channel 10 (commercial- private)
Hamesh im Raffi Reshef	Evening	Five o'Clock with Raffi Reshef (host name – authors)	Channel 10 (commercial- private)
London ve-Kirshenbaum	Evening	London and Kirshenbaum (hosts names – authors)	Channel 10 (commercial- private)
Mishpaha 10	Morning	Family 10	Channel 10 (commercial- private)
Orly ve-Guy	Morning	Orly and Guy (hosts names – authors)	Channel 10 (commercial- private)
Ha'erev im Geula Even	Evening	This evening with Geula Even (host name – authors)	Channel 1 (public)
Erev Hadash	Evening	New evening	Channel 1 (public)

line with the often heard feminist critique of popular programming for discouraging young female viewers, who (contrary to males) lack role models of their own gender, from attempting to climb higher in the academic ladder (Durkin 1985). It also accords with voices of Israeli feminists, who claim that local broadcasts contribute to the preservation of a status quo in which women remain out of the socio-political limelight (Liebes 2001). The often heard partly political call from these voices that commercial TV has a moral obligation to over-represent women in esteemed positions (e.g. talk show experts) in order to supply young female viewers role models with whom they can identify and use as icons of aspiration (Steinke 2003) remains beyond the scope of this study.

The representation of "hard core" scientists (physicists, chemists, etc.) in talk shows is miniscule regardless of gender (less than 2 % of the experts). This low frequency is similar to findings of studies concerning the prevalence of scientists in fictional programming (Dudo et al. 2011), which concluded that the meager exposure of scientific occupants on successful TV shows is considerably limiting the capability of science to reach out to larger publics. Our study reveals that while talk shows refrain from inviting "hard core" scientists to the studio in large numbers there is no connection between the expert's gender and his chances of being one of the few "hard core scientists" who do take part in the program.

Cultural Considerations, Study Limitations, Suggestions for Further Studies and Practical Implications

In the absence of previous studies of similar content with which our findings can be compared, no claim concerning persistent tendencies can be made. In the Israeli context, the lower prevalence of women experts, their tendency to commentate on traditional feminine areas of expertise (body grooming, child care), and the fact they are not criticized or disagreed with more frequently than male experts together portray a society in transition. In such society expressions of egalitarianism alongside traditional stereotypes coexist in the media just like they do in the parliament, which hosts concurrently a zealous group of feminist politicians and an active family values political club that aims to assist women in actualizing themselves as homemakers. In other words, the results of the content analysis portray cultural trends (Greenberg 1980, p. XII), a fact which serves as raison d'être for this work, even without a proof of effect, but at the same time limits the validity of the findings to mixed transitional societies such as Israel.

Beyond the need to replicate the study to ascertain the consistency of findings across time, conducting interviews with media producers is recommended to gain a better understanding of the decision to invite (or not to invite) men (or women) experts to commentate in TV programs. Audience studies of talk shows viewers would allow bracing the assumption that a repetitive presentation of gender differences among experts, who participate in popular programs, fortifies a gendered image of authorized knowledge. Yet, with all due respect that audience studies deserve, one should not forget that a work like ours which examines the relationships between different aspects of message variables related to gender expands our understanding of the representation of gender roles in the media in a meaningful way (Neuendorf 2011, p. 278).

This study dealt solely with differences in the presentation of men and women as TV experts, but fe/male is not the only relevant distinction in studying the appearance of gender in the media. Gender identity and sexual orientation might be equally important. The fact that the gender identity of none of the experts was in doubt may say something about the conservative character of the talk show format when it comes to gender (see also Gamson 1998). Yet, with homosexuality, bisexuality and even transsexualism gradually becoming more socially acceptable, openly gay and transsexuals may become more visible as experts in talk shows and in other programs, but possibly not as visible as their share of the population would suggest. Future studies should look into this point.

Even though this study is not applied in essence, we can still draw a couple of practical recommendations that can be used for persuasive communication purposes. Advertisers who seek spokespersons for their products may use the gender-education-age profile of experts who appear in popular talk shows as a benchmark directing them who to approach. In contrast, experts who often appear in the programs despite the fact that their demographic profile is not in line with the norm (e.g. young woman commenting on national security) might be used as role models in campaigns that promote social egalitarianism.

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