

Evidence for the influence of the mere-exposure effect on voting in the Eurovision Song Contest

Diarmuid B. Verrier*

Abstract

The mere exposure, or familiarity, effect is the tendency for people to feel more positive about stimuli to which they have previously been exposed. The Eurovision Song Contest is a two-stage event, in which some contestants in the final will be more familiar to viewers than others. Thus, viewers' voting is likely to be influenced by this effect. Previous work attempting to demonstrate this effect in this context has been unable to control for contestant quality. The current study, which used a novel procedure to analyse the way in which contestant countries distributed their points (a function of how viewers voted in those countries) between 2008 and 2011, showed that contestants did better if they previously appeared in a semifinal that was seen by voters. This is evidence that the mere exposure effect, alongside previously studied factors such as cultural and geographical closeness, influences the way viewers vote in the Eurovision.

Keywords: mere exposure, familiarity, Eurovision, voting.

1 Introduction

The mere-exposure effect is the tendency for people to like something more as a result of repeated exposure to it; the greater the degree of prior exposure, the more potent the effect. Mere exposure has been most famously studied by Robert Zajonc and, since his initial studies, has been found to be a tremendously robust effect—one that has been demonstrated in a huge array of different contexts. For example, Zajonc (1968) demonstrated that repeated exposure to nonsense words, Chinese ideographs, or photographs was enough to induce positive evaluations of the objects. Subsequent studies have found that familiarity effects also influence liking for sounds, shapes, people, and names (Bornstein, 1989; Harmon-Jones & Allen, 2001). Amongst other things, mere exposure has been shown to affect food preference in infants (Houston-Price et al., 2009), ratings of journals by academics (Serenko & Bontis, 2011), gambling (Choliz, 2010), and voting behaviour in elections (Verhulst, Lodge, & Lavine, 2010). It has often been observed in studies of interpersonal attraction, where repeatedly encountering an individual increases ratings of how attractive and likable they are (Peskin & Newell, 2004). Mere exposure appears to be effective even when the stimuli are presented subliminally (Zajonc, 2001).

As already mentioned, the mere-exposure effect has been shown to affect voting behaviour (Olivola &

Todorov, 2010; Verhulst, Lodge, & Lavine, 2010). Olivola and Todorov found that both familiarity and perceptions of competency were associated with the share of votes achieved by political candidates in Senate elections in the USA. Verhulst et al. re-examined this analysis and gave greater primacy to familiarity. They concluded that perceptions of competency were a mediator of familiarity and suggested that greater familiarity may result in candidates being perceived as more competent. As judgements of familiarity happen in part at a preconscious level (Zajonc, 1968; Bornstein, 1989; Harmon-Jones & Allen, 2001), Verhulst et al. proposed that perceptions of competency in this context may be a rationalisation of preconscious perceptions of familiarity.

Most studies of familiarity and the mere-exposure effect happen within a laboratory setting. Even studies that have looked at voting behaviour, where it seems that data should be available at a population level, have mostly limited themselves to working in the laboratory. This may be due to the difficulty of measuring exactly how familiar candidates are to voters prior to elections, as well as the myriad uncontrollable extraneous variables that influence the way in which individuals vote. For example, those who are more likely to win elections receive more press coverage, making them more familiar to voters (Gaissmaier & Marewski, 2011). However, prior familiarity with candidates can be well estimated in the Eurovision Song Contest. The Eurovision is a yearly extravaganza in which European countries (and some geographically close countries with strong links to Europe) are represented by a musical act from that country. The contest is televised and takes place over the course of an evening,

*Department of Psychology, Sociology & Politics; Sheffield Hallam University; Collegiate Crescent; Sheffield; S10 2BP, UK. Email: d.verrier@shu.ac.uk.

during which time viewers can vote for the act which they thought the best. Votes within a country are collated after which each country distributes its points (1–8, 10, 12) to the various acts (countries cannot vote for their own act).

Since 2004, the Eurovision has used a two-stage voting system. From 2004 to 2007 there was a single semifinal: during the first stage (semifinal), voters were equally unfamiliar with all contestants. In the second stage (final), voters had already seen those acts that had to go through the semifinal, while they were unfamiliar with finalists who got to bypass the semifinal. Since 2008, there have been two semifinals in which all contestant countries (bar the host and the four main financial contributors) compete to determine who will appear in the final—half in semifinal 1, half in semifinal 2. Viewer figures consistently show that people are more likely to watch the semifinal in which their own country competes (e.g., in every year from 2007 to 2011, about twice as many Swedish people watched the semifinal in which Sweden appeared; Engström, 2011). This phenomenon means that voters will be more familiar with finalists who appeared in the same semifinal as their own countries.

Both formats (2004–7 and 2008–) allow estimates of familiarity of candidates/contestants, estimates that would be very hard to achieve in most studies of real-world voting. Abakoumkin (2011) looked at data from 2004–8 and found that those countries that appeared in a semifinal achieved higher marks than those that had not. Although he concluded that this was due to familiarity, it is likely that finalists that had to compete to qualify were of a higher standard than those that did not (as weaker entrants would have been weeded out). As a result, it is difficult to say with any certainty whether the familiarity effect is actually at work in this context.

Voting in the Eurovision has been the subject of much debate, and a number of studies have been conducted looking at the way in which countries tend to vote within blocs determined by cultural closeness (e.g., Gatherer, 2004; Fenn, Suleman, Efstathiou, & Johnson, 2006). Doosje and Haslam (2005) identified reciprocal voting patterns, particularly in countries that are more collectivist and economically weaker. In addition, Spierdijk and Vellekoop (2009) found that geographic proximity; religious, linguistic, and cultural congruence; and the presence of a substantial immigrant population from a contestant country can all influence the way in which countries distribute their points. Some commentators have argued that factors such as these, which go beyond the “quality” of the songs and performances, undermine the purity of the contest, though others have countered that it is natural for voters to prefer songs from countries with which they share cultural connections, including, presumably, an overlap in musical tastes (Ginsburgh & Noury, 2008). Other studies of the Eurovision have

found that expert judging panels are less affected by these kinds of factors than televoters (Haan, Dijkstra, & Dijkstra, 2005) and that acts that appear later in the final tend to receive more points (Bruine de Bruin, 2005).

The current study examines whether the mere-exposure effect also influences voting behaviour. Although this has been researched previously (Abakoumkin, 2011), an inability to account for the quality of competitors means that it is still an open question. Rather than simply comparing competitors that were in a semifinal with those that were not, this study looks only at participants who qualified via a semifinal. It is assumed that voters will be more familiar with those countries that appeared in the same semifinal as their own and that, consequently, they will be more likely to vote for them. Although data for this study are at the level of countries’ point allocations, given that these are based on the votes of individuals (approximately 600 million people watch the Eurovision every year; Murray, 2011), this study can also be considered to be a very highly powered study of the mere-exposure effect itself.

2 Method

2.1 Procedure

Data were the results from the last four years of the Eurovision Song Contest (at time of writing; 2008–2011). Since 2008, the semifinal has been split in two, with all countries (other than the main four sponsors and the previous year’s winner) having to compete in either the first or second semifinal. Ten slots in the main competition were available in each semifinal. As viewers are more likely to watch the semifinal in which their own country appears, this allows semifinal appearance to serve as a proxy for familiarity.

2.2 Data analysis

The data were the scores given in the Eurovision finals, across the four years, *by* each country that had previously appeared in a semifinal, *to* all other countries that had appeared in a semifinal. I ignored scores given to the five countries that did not have to go through the semifinal procedure. Further, only scores given by those who appeared in one of the two semifinals were considered, as voters from these countries were more likely to have watched one or the other semifinal. There was no viewer voting in Norway in 2009 due to technical problems; as a result, scores given by Norway that year were excluded from analysis. Twenty semifinalists took part in the main competition each year, resulting in a total sample of 79 cases (not including Norway in 2009) for this analysis.

Each voting country has a total of 58 points to distribute (1–8, 10, 12) across 24 contestants, which means that the maximum mean vote that contestants can receive from a voter will be 2.42 (58/24). However, given that some number of those votes won't be included in this analysis (because they were given to one or more of the five contestants that did not qualify via the semifinals), the actual mean will be somewhat less than that. Two variables were of interest: the semifinal in which *contestants* had previously appeared, and the semifinal in which *voters' countries* had previously appeared. Voters in the finals are more likely to have seen other contestants previously if they had appeared in their own country's semifinals. It is hypothesised that this familiarity will influence how countries distribute their votes.

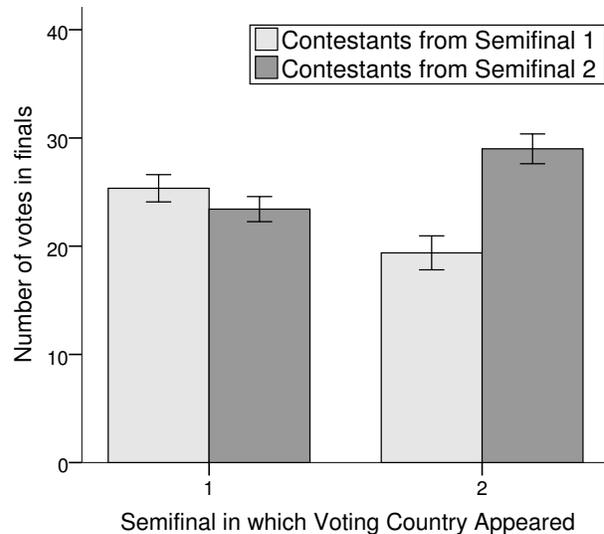
Countries are allocated to semifinals based on a combination of random and non-random methods. First, they are grouped into "pots" (of around six countries) based on the previous year's voting patterns. Countries in the same pot typically give each other higher votes (e.g., all the Scandinavian countries would be in the same pot). Then, the countries in each pot are randomly split in two: half are put into one semifinal and half are put into the other. In this way, the influence of proximity and diaspora voting is minimised and equalised between the two semi-finals.

3 Results

A 2×2 mixed ANOVA was conducted (which semifinal the case appeared in [between group] \times total score given to finalists from semifinal 1 or 2 [within group]). A two-way interaction was apparent ($F(1,77) = 10.59, p = .002, \eta_p^2 = .12$), wherein countries gave higher votes to participants who appeared in the same semifinal as themselves (see Figure 1). Two post hoc *t*-tests (with alpha set at .025) confirmed this interpretation: contestants that had appeared in semifinal 1 received more votes from countries that had appeared in semifinal 1 ($M = 25.35, SD = 7.97$) than from countries that had appeared in semifinal 2 ($M = 19.38, SD = 9.78$), $t(77) = 2.98, p = .004, d = 0.67$; likewise, contestants that had appeared in semifinal 2 received more votes from countries that had appeared in semifinal 2 ($M = 29.00, SD = 8.60$) than from countries that had appeared in semifinal 1 ($M = 23.42, SD = 7.31$), $t(77) = 3.10, p = .003, d = 0.70$. This difference of about six votes is on average worth approximately one ranking place in the lower half of ranks and approximately half a ranking place in upper half of ranks (where differences in votes between ranks become larger).

Jury (expert panel) voting was introduced in 2009 alongside televoting to determine how countries' votes are distributed (with equal weighting given to both sys-

Figure 1: Number of votes given by voters whose country appeared in semifinal 1 or 2 to contestants who appeared in one of the two semifinals. Error bars indicate standard error.



tems). In order to see whether the presence of a jury attenuated the influence of the exposure effect, a second ANOVA was conducted including the presence or otherwise of jury voting as a third independent variable. No three-way interaction was apparent, $F(1, 75) = 0.10, p = .749$, suggesting that this effect is not dependent on whether a jury contributes to the voting process.

Unrelated to the study's hypotheses, participants from the second semifinal ($M = 26.16, SD = 8.45$) did better than participants from the first ($M = 22.41, SD = 9.35$), $F(1,77) = 4.66, p = .034, \eta_p^2 = .06$.

Discussion

There was clear evidence that the mere-exposure effect is at work during the Eurovision Song Contest. Acts that viewers had seen previously in a semifinal received more points than acts that they had not previously seen. The results of this study accord with the analysis presented by Verhulst et al. (2010), which concluded that familiarity is a key factor in determining whether an individual will vote for a candidate. Although the mere-exposure effect is extremely reliable and has been identified on numerous occasions (e.g., Zajonc, 1968; Bornstein, 1989), this study is almost unique in terms of the number of participants from which the data are derived. While only a small proportion of viewers actually vote, a viewing audience of approximately 600 million (Murray, 2011) means that the points each country distributes are based on the votes of a very large number of people. Of course, even if

one counts only each participant country in each year, this still leads to a respectable sample size for the analysis.

Previous research by Abakoumkin (2011) has claimed that a familiarity effect is at work in the Eurovision Song Contest. However, this work was based on a simple comparison of finals performance of those that had and had not appeared in a semifinal. It is highly likely that the effect he observed was largely due to a real difference in quality between the two groups rather than familiarity. It is reasonable to assume that there is a distribution of song quality. If semifinal voting is largely based on quality, then the acts that make it to the finals will be from the top half of that distribution. On the other hand, the quality of those finalists that did not have to qualify via a semifinal will be more variable. This is a serious concern, and one which the present study addressed by looking only at acts that qualified via a semifinal.

Alongside the expected interaction effect in the second analysis, it was also observed that contestants who took part in the second semifinal did better than those who took part in the first. Since semifinal 1 occurs four days before the finals and semifinal 2 only two days before, this may be a manifestation of the recency effect, which is most famously observed in studies of memory. In a study of order of appearance in the Eurovision, Bruine de Bruin (2005) found that a later appearance is associated with a higher final score, presumably due to memories of later acts being fresher and more vivid. An appearance in the second semifinal could similarly lead to people's memories for those acts being stronger while watching the final. Indeed, such a memory effect would further strengthen the influence of familiarity for those acts that appeared more recently. Available viewership data do not suggest that a greater total number of people watch the second semifinal than the first (Eurovoix, 2012). However, a greater number would also implicate the familiarity effect, as more viewers would have been previously exposed to contestants from the second semifinal.

Although this study has a number of strengths, it is difficult to disentangle the effect of just one phenomenon (familiarity) from all of the other factors that have been shown to determine how viewers vote and, subsequently, how countries distribute their points. Apart from the quality of acts, geographic proximity; religious, linguistic, and cultural congruence; the presence of a substantial immigrant population from a contestant country, and, as noted above, the order of appearance all play a role. Another factor that could curtail the ability of these data to definitively support the familiarity hypothesis is the introduction in 2009 of an expert panel alongside televoting to determine how a country's points are distributed. However, since no interaction between semifinal congruence and the presence of a jury was observed, it seems that any effect of such an expert panel was minimal.

Finally, an important assumption of this study is that people are more likely to watch the semifinal in which their own country is competing. A non-exhaustive investigation of viewer figures for the semifinals in contestant countries showed that this has consistently been the case. For example, in Ireland in 2009, 0.44 million people watched their own semifinal, while only 0.21 watched the other; in Sweden in 2010, 1.85 million people watched their own semifinal, while 1.06 watched the other; and in the Netherlands in 2011, 2.01 million watched their own semifinal, while 1.02 watched the other. However, although there is good reason to assume that viewers are more familiar with those who took part in the semifinal in which their own country competed, it is impossible to say for certain. Although highly unlikely, it could be that people who vote in the finals are an entirely separate group from those who watch the semifinals.

Despite these limitations, the current study goes beyond previous work that attempted to demonstrate the familiarity effect, as the confounding effect of contestant quality was largely controlled for. Accordingly, the study provides substantial support for the position that prior exposure should be added to the list of factors that affect how successful a country will be in the Eurovision. Future studies attempting to model Eurovision performance should certainly include an estimated measure of familiarity. Relative to direct qualification (which occurs for a small number of countries), this means that having to qualify via a semifinal is a high variance route: although there is a risk of not qualifying at all, if a country does make the final then the familiarity effect makes it more likely that they will excel. This finding, alongside the variation on the recency effect that was observed, highlights the efficacy of "peripheral" routes of influence (Petty & Cacciopo, 1981) and further undermines the notion of the rational voter.

References

- Abakoumkin, G. (2011). Forming choice preferences the easy way: Order and familiarity effects in Elections1. *Journal of Applied Social Psychology, 41*, 2689–2707. <http://dx.doi.org/10.1111/j.1559-1816.2011.00845.x>
- Bornstein, R. F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968–1987. *Psychological Bulletin, 2*, 265–289. <http://dx.doi.org/10.1037//0033-2909.106.2.265>
- Bruine de Bruin, W. (2005). Save the last dance for me: Unwanted serial position effects in jury evaluations. *Acta Psychologica, 118*, 245–260. <http://dx.doi.org/10.1016/j.actpsy.2004.08.005>
- Choliz, M. (2010). Cognitive biases and decision making in gambling. *Psychological Reports, 107*, 15–24. <http://>

- [//dx.doi.org/10.2466/02.09.18.22.PR0.107.4.15-24](http://dx.doi.org/10.2466/02.09.18.22.PR0.107.4.15-24)
 Doosje, B., & Haslam, S. (2005). What have they done for us lately? The dynamics of reciprocity in intergroup contexts. *Journal of Applied Social Psychology, 35*, 508–535. <http://dx.doi.org/10.1111/j.1559-1816.2005.tb02133.x>
- Engström, T. (2011, May 18). Good viewing figures and chart success for this year's Eurovision participants in Sweden. Retrieved from <http://www.eurovisionary.com>.
- Eurovoix. (2012). Baku'12: 64 million watched the final. Retrieved from <http://eurovoix.com/baku12--64-million-watched-the-final/>.
- Fenn, D., Suleman, O., Efstathiou, J., & Johnson, N.F. (2006). How does Europe make its mind up? Connections, cliques and compatibility between countries in the Eurovision Song Contest. *Physica A, 360*, 576–598. <http://dx.doi.org/10.1016/j.physa.2005.06.051>
- Gatherer, D. (2004). Birth of a meme: The origin and evolution of collusive voting patterns in the Eurovision Song Contest. *Journal of Memetics—Evolutionary Models of Information Transmission, 9*(2), 1. Retrieved from http://jasss.soc.surrey.ac.uk/index_by_issue.html
- Gaissmaier, W., & Marewski, J. N. (2011). Forecasting elections with mere recognition from small, lousy samples: A comparison of collective recognition, wisdom of crowds, and representative polls. *Judgment and Decision Making, 6*, 73–88.
- Ginsburgh, V., & Noury, A. G. (2008). The Eurovision Song Contest. Is voting political or cultural? *European Journal of Political Economy, 24*, 41–52. <http://dx.doi.org/10.1016/j.ejpoleco.2007.05.004>
- Haan, M., Dijkstra, G., & Dijkstra, P. (2005). Expert judgment versus public opinion. Evidence from the Eurovision Song Contest. *Journal of Cultural Economics, 29*, 59–78. <http://dx.doi.org/10.1007/s10824-005-6830-0>
- Harmon-Jones, E., & Allen, J. J. B. (2001). The role of affect in the mere exposure effect: Evidence from psychophysiological and individual differences approaches. *Personality and Social Psychology Bulletin, 27*, 889–898. <http://dx.doi.org/10.1177/0146167201277011>
- Houston-Price, C., Burton, E., Hickinson, R., Inett, J., Moore, E., Salmon, K., & Shiba, P. (2009). Picture book exposure elicits positive visual preferences in toddlers. *Journal of Experimental Child Psychology, 104*, 89–104. <http://dx.doi.org/10.1016/j.jecp.2009.04.001>
- Murray, M. (2011). Eurovision Song Contest. In *The Encyclopedia of Television*. Retrieved from <http://www.museum.tv/eotvsection.php?entrycode=eurovisionso>
- Olivola, C. Y., & Todorov, A. (2010). Elected in 100 milliseconds: Appearance-based trait inferences and voting. *Journal of Nonverbal Behavior, 34*, 83–110. <http://dx.doi.org/10.1007/s10919-009-0082-1>
- Peskin, M., & Newell, F. (2004). Familiarity breeds attraction: Effects of exposure on the attractiveness of typical and distinctive faces. *Perception, 33*, 147–157. <http://dx.doi.org/10.1068/p5028>
- Petty, R. E., & Cacioppo, J. T. (1981). *Attitudes and persuasion: Classic and contemporary approaches*. Dubuque, IA: Wm. C. Brown.
- Serenko, A., & Bontis, N. (2011). What's familiar is excellent: The impact of exposure effect on perceived journal quality. *Journal of Informetrics, 5*, 219–223. <http://dx.doi.org/10.1016/j.joi.2010.07.005>
- Spierdijk, L., & Vellekoop, M. (2009). The structure of bias in peer voting systems: Lessons from the Eurovision Song Contest. *Empirical Economics, 36*, 403–425. <http://dx.doi.org/10.1007/s10919-009-0084-z>
- Verhulst, B., Lodge, M., & Lavine, H. (2010). The attractiveness halo: Why some candidates are perceived more favorably than others. *Journal of Nonverbal Behavior, 34*, 111–117. <http://dx.doi.org/10.1007/s10919-009-0084-z>
- Zajonc, R. B. (1968). Attitudinal effects of mere exposures. *Journal of Personality and Social Psychology, 9*, 1–27. <http://dx.doi.org/10.1037/h0025848>
- Zajonc, R. B. (2001). Mere exposure: A gateway to the subliminal. *Current Directions in Psychological Science, 10*, 224–228. <http://dx.doi.org/10.1111/1467-8721.00154>