Strategies for becoming a more desirable mate: Evidence from 14 countries

Abstract

The current research aimed to study the strategies that people employ in order to become more desirable as mates in different cultural settings. More specifically, using a closed-ended questionnaire on sample of 7,181 participants from 14 different countries, we identified 10 different strategies that people employ for becoming more appealing as mates. Participants indicated that they had more frequently used the "Enhance looks," followed by the "Show off abilities and talents," and the "Demonstrate similarity" strategies. On the other hand, they had less frequently used the "Keep undesirable things hidden," the "Show off and exaggerate wealth and abilities," and the "Drastic appearance changes" strategies. Female participants indicated that they had more extensive used the "Enhance looks" strategy than male participants, while male participants indicated that they had more extensive used the "Increase income and social status" and the "Show off and exaggerate wealth and abilities" strategies than female participants. The sex effects, as well as the extent of use, were generally consistent across the different cultures. The identified strategies were classified further into two main strategies, namely the "Develop and demonstrate desirable traits" and the "Deceive about undesirable traits," which was generally consistent across the different countries.

Statement of Relevance: Mating constitutes an important aspect of personal relationships. In turn, an important aspect of human mating is attracting an intimate partner. The current research examines the strategies that people use in order to become more appealing as mates across 14 different countries. Our findings could be useful in understanding mating interactions, and possibly, why there is considerable variation in mating success.

Keywords: attraction; self-promotion strategies; mating; mating strategies

Introduction

When it comes to mate choice, people do not choose their partners randomly, but are guided by well-defined preferences (Buss & Barnes, 1986; Buss & Schmitt, 2019; Thomas et al., 2020). Accordingly, mate-seekers have a battery of strategies that enable them to become more appealing as mates by addressing these preferences (Buss, 1988; Schmitt & Buss, 1996). Given the evolutionary importance of reproduction, attracting a mate constitutes a central aspect of the behavior of sexual reproducing species (Andersson, 1994). There has been extensive research on how individuals become appealing and attract opposite-sex mates in non-human species (e.g., Zahavi & Zahavi, 1994), but the research in humans is limited. As a consequence, there is a gap in our understanding of an important aspect of human mating behavior. The purpose of the current research is to contribute toward closing this gap in our knowledge by examining the strategies for becoming more appealing to prospective mates in a sample drawn from 14 different countries.

This endeavor is important first, for understanding a crucial aspect of human mating behavior; and second, because it would enable us to understand other related phenomena such as singlehood or some aspects of the economy such as the beauty industry. In particular, studies have found that a considerable proportion of adult individuals are involuntarily single, that is, they want to be in an intimate relationship but they face difficulties attracting an intimate partner (Apostolou & Wang, 2019). One cause of this phenomenon could be that several people fail to

use effectively strategies that make them appealing to prospective mates, remaining single as a consequence. On the other hand, many people use such strategies, which include enhancing looks (Apostolou et al., 2021), that in turn, result in the development of specific aspects of the economy such as the beauty industry. We will start developing our argument by discussing what people look for in prospective mates.

Strategies for appealing as a prospective mate

Intimate relationships can considerably increase people's survival and reproductive success (termed fitness), primarily by enabling them to have and raise children, as well as by having around partners who can provide them with support and assistance (Buss, 2016). Selection pressures drive people to form such relationships, with preferences for specific mate traits being universal (Fisher, 2017). Prospective mates vary in their potential fitness contributions, prompting selective behavior in mate-seekers. Mate preferences increase the appeal of traits linked to enhanced fitness (Buss & Schmitt, 2019). These preferences encompass resource provision (wealth, intelligence, etc.), fertility cues (youth, health), and good personality traits (kindness, reliability) (Buss & Barnes, 1986; Li et al., 2002; Thomas et al., 2020). Similarity in desirable traits is also favored (Buss & Barnes, 1986; Štěrbová & Valentova, 2012).

Human mating involves strategic behaviors aimed at achieving specific mating goals (Gangestad & Simpson, 2000). To enhance mating success, individuals adopt strategies aligned with mate preferences (Apostolou et al., 2021). People desire mates with good resource provision capacity, leading individuals to demonstrate wealth, such as purchasing expensive cars. Physical attractiveness is also favored, leading people to use makeup for enhancement or concealment (Mafra et al., 2020). Desirable character traits, like emotional stability, prompt mate-seekers to

engage in charitable work. Additionally, shared interests are valued, motivating individuals to align with potential mates' views and beliefs.

Mate-seekers benefit from developing and showcasing appealing qualities. However, exaggeration or deception can also be employed to appear more attractive (Haselton et al., 2005). Strategies like plastic surgery or embellishing achievements may be used to create a more favorable image. Moreover, men and women differ in their mate preferences, with women valuing resource acquisition capacity and men prioritizing looks (Buss, 1989; Buss et al., 2001; Li et al., 2011; Thomas et al., 2020; Walter et al., 2020). These differences would correspond to gender-specific strategies: Women would focus on enhancing looks, while men would emphasize resource acquisition capacity (Schmitt & Buss, 1996). The current literature supports these predictions.

Current literature

Cross-culturally, individuals seek to enhance their appearance through weight loss, exercise, and muscle gain (McCabe et al., 2009; Ricciardelli & McCabe, 2003; Shomaker & Furman, 2010). Women use cosmetics to improve their facial features (Mafra et al., 2020), while men strive for muscularity (Frederick et al., 2007; Gosse & Arnocky, 2012; Vartanian et al., 2012). Both genders opt for cosmetic procedures to enhance their attractiveness (Calogero et al., 2010), but women tend to invest more in this pursuit (Arnocky, 2016). Research extends beyond physical appearance, exploring strategies for becoming more appealing as mates. Buss (1988) identified 101 acts, grouped into 23 strategies for attracting partners. Schmitt and Buss (1996) expanded this to 130 acts and 31 self-promotion strategies. To demonstrate good character, strategies like "Act Honest," "Act Kind," "Act Sensitive," "Act Solicitous," and "Display

Surgency" were identified. Strategies to enhance appearance included "Enhance Physical Attractiveness." Demonstrating resource provision capacity involved strategies like "Act Intelligent," "Give Resources Immediately," and "Show Resource Potential." Bendixen and Kennair (2015) found that enhancing physical attractiveness was deemed more effective for men in a Norwegian sample.

Limitations of these studies include using relatively small samples of students, and identifying strategies on a conceptual basis, rather than by using dimension reduction techniques such as factor analysis. A more recent study attempted to increase our understanding of these strategies by addressing these issues. More specifically, in a sample of 326 Greek-speaking participants, using qualitative research methods Apostolou et al. (2021) identified 87 acts that people performed in order to become more attractive as mates. Subsequently, using quantitative research methods and exploratory factor analysis in a sample of 2,197 Greek-speaking participants, they classified these acts into 16 different strategies. They found that participants employed strategies to enhance their looks, including “Enhance looks,” “Drastic appearance changes,” and “Lose weight,” and strategies to demonstrate their resource provision capacity including “Show off abilities and talents,” and “Showing off and exaggerating wealth.” They also employed the “Develop similar interests” strategy to indicate that they were similar to someone they were interested in. Yet, no strategy emerged that aimed to demonstrate good character qualities. Moreover, it was also found that men indicated a higher willingness to use strategies that demonstrate resource acquisition capacity, while women were more willing to use strategies that aimed to improve their looks.

The present study

One limitation of the Apostolou et al. (2021) study was that it was based on a hypothetical scenario. That is, participants were asked to indicate which acts they would potentially perform, which may not necessarily match what they actually do to enhance their appeal as mates. A further limitation was that the study was confined to the Greek cultural context, so its findings may not apply to different cultural settings. The current research aimed to contribute to the existing literature by addressing these limitations, providing a more comprehensive understanding of the various strategies that people use in order to enhance their appeal as mates. In particular, we have attempted to examine the different strategies that people have actually used to become more appealing as mates, in a sample drawn from 14 different nations. We predict that people would employ strategies to enhance and demonstrate their resource acquisition capacity, their looks and their character qualities. People would also use strategies that aim to demonstrate that they are similar to someone they are interested in. In addition, we predict that women would be more likely to use strategies that aim to enhance and demonstrate their looks, while men would be more likely to use strategies that aim to enhance and demonstrate their resource acquisition capacity.

Furthermore, we aim to test the hypothesis that our predictions would be consistent across different cultural settings. In particular, good resource acquisition capacity, good reproductive capacity, good character traits, and similarity in an intimate partner would increase mate-seekers' fitness across different contexts. In accordance with this argument, traits associated with these capacities are consistently preferred across different cultures (Buss, 1988; Walter et al, 2020). It follows, that as mate preferences are consistent across different cultural settings, strategies for becoming more appealing as a mate would be also consistent across

different cultural settings. For instance, across different cultures, mate-seekers prefer good looks in a prospective mate (Buss, 1988); thus, we expect that people would attempt to enhance their looks to appeal as mates. Similarly, across different cultures, looks are valued more in a female than in a male intimate partner (Walter et al, 2020), so women would use strategies for enhancing their looks more frequently than men. Accordingly, we predict that across different cultures, women would be more likely to adopt strategies that enhance and demonstrate their looks than men, while men would be more likely to adopt strategies that enhance and demonstrate their resource acquisition capacity.

Methods

Participants

The data presented in the current research were part of a larger study on human mating. Analysis of the demographics in the study has been presented in [removed for the review process]. In total, 7,181 (4,616 women, 2,525 men, and 40 participants who did not indicate their sex) individuals took part from 14 different countries, specifically Austria, Brazil, China, Greece, Hungary, Italy, Japan, Peru, Poland, Russia, Spain, Turkey, the UK, and Ukraine. The Greek sample included Greek-speaking participants who were recruited both from Greece and from the Republic of Cyprus. The number of participants for each country, along with their mean age, are presented in Table 1. The study received ethics approval from the respective ethics committees in each country. Participants were required to be at least 18 years old at the time of the study. The data collection started at the beginning of 2020 and was concluded at the end of the same year.

For Japan and Poland, participants were given monetary compensation or credits that they could use to get products. Participation in the UK, Ukrainian and Russian samples was both on a volunteer and a compensation basis. For the remaining samples, compensation was on a volunteer basis. In order to recruit Japanese participants, a private recruitment agency was used (https://www.cross-m.co.jp/). This was the case for the Russian and the Ukrainian samples (anketolog.ru). Part of the UK sample was recruited using the Prolific platform. In addition, Polish participants were recruited from a Polish national survey panel (http://panelariadna.pl/). For the remaining samples, the link of the study was promoted on social media, and was forwarded to students and colleagues.

Materials

The instruments were translated through back-translation procedures into the primary language of each country in the sample. The survey was conducted online and was hosted on Google Forms, Microsoft Forms, Qualtrics or Sojump tools. The study had two parts. In the first part, participants were asked to "Please indicate to what extent you have done each of the following, in the past, in order to become more desirable as a mate" and subsequently, they were asked to rate 87 acts identified by Apostolou et al. (2021), in a five-point scale: 1- Not at all, 5- Very extensively. In the second part, demographic information was collected, including sex, age and relationship status.

Data analysis

To identify the strategies that people use to become more appealing as mates, we applied exploratory factor analysis using principal axis factoring for factor extraction, and the direct

oblimin as the rotation method. Moreover, to identify significant effects, we performed a series of MANCOVA tests on each extracted strategy using SPSS version 28. In particular, the items that loaded on a given factor were entered as the dependent variables, the sex and sample (14 categories, one for each country) were entered as the categorical independent variables, and the age as the continuous independent variable. To examine whether the factor structure identified for the pooled sample reflected the factor structure in the individual samples, we performed confirmatory factor analysis using the JASP 0.16.4 software. As our variables were measured using a Likert scale, we employed the Diagonally Weighted Least Squares (DWLS) estimation method (Li, 2016).

Results

Factor structure

The KMO was .98 indicating that our sample was very good for exploratory factor analysis to be performed. Similarly, Bartlett's test of sphericity was significant ($p < .001$) indicating that our data were suitable for factor analysis. Parallel analysis indicated the retention of 10 factors, while the Kaiser criterion indicated that 12 factors should be retained. In order not to miss any important factors, in our initial analysis we retained 12 factors with eigenvalues above one (i.e., the Kaiser criterion). In order to decide how many items to keep in each factor, we employed the .30 loading as a cut-off point. Several items had factor loadings that were below .30, so we removed them and performed the analysis again. This process was repeated until a solution was produced where all factor loading were equal to or above .30. Overall, we retained 68 out of the 87 original items. For this set of items, both parallel analysis and the

Kaiser criterion suggested a 10-factor solution. The 10 factors, or strategies, are presented in Table 2. We can see also that the Cronbach's alpha ranged from .79 to .91.

The first strategy to emerge was the "Demonstrate similarity," where participants attempted to look similar to someone they were interested in, by developing similar interests or by pretending that they were interested in the same things. In the "Enhance looks" strategy, participants attempted to improve their appearance by taking care of their skin, hair and clothing. In the "Increase income and social status" strategy, they attempted to increase their income by getting more education, advancing their careers, and getting a job with higher social status. Participants had also attempted "Drastic appearance changes," including having liposuction, a hair transplant, or plastic surgery. They also attempted to "Show off abilities and talents" by demonstrating their skills, knowledge, and talking about their achievements.

In the "Keep undesirable things hidden" strategy, they kept a psychological or a health problem or something bad from their past hidden. Moreover, in the "Do more physical exercise and sports" strategy, in order to improve their appeal as mates, participants did more physical exercise, including sports. In the "Show off and exaggerate wealth and abilities" strategy, participants exaggerated their financial situation, their capacities, and their achievements. In the "Enhance social media profile" strategy, participants were more active in social media, posting for instance flattering photos. Furthermore, in the "Lose weight" strategy, participants were dieting in order to lose weight, and they wore clothes that made them look thinner.

The means and standard deviations were estimated for each identified strategy, and these have been placed in hierarchical order in Table 3. At the top of the hierarchy was the "Enhance looks," followed by the "Show off abilities and talents" and the "Demonstrate similarity"

strategies. At the bottom of the hierarchy was the “Drastic appearance changes” and the “Show off and exaggerate wealth and abilities.”

Significant effects of sex, age, and sample

In Table 3, we can see that, except from the “Keep undesirable things hidden” strategy, there was a significant main effect of sex on all strategies. As indicated by the effect size, the largest difference was over the “Enhance looks,” followed by the “Demonstrate similarity,” and the “Lose weight” strategies. For the former and the latter strategy, women gave higher scores than men. For the “Demonstrate similarity” strategy, the overall means were similar, but women gave significantly higher scores (M = 3.42, SD = 1.32) for the “I was laughing at the jokes of someone I cared about” act than men (M = 3.05, SD = 1.32), while men gave significantly higher scores (M = 3.11, SD = 1.41) for the “I was buying gifts for someone I was interested in” act than in women (M = 2.98, SD = 1.46). Similarly, men gave significantly higher scores (M = 3.34, SD = 1.41) for the “I was picking up the tab when out with someone I was interested in” act than did women (M = 2.55, SD = 1.40). In addition, for the “Show off abilities and talents” act, the overall means were similar, but women gave higher scores (M = 3.33, SD = 1.30) for the “I emphasized my strengths” act than men (M = 3.06, SD = 1.33), while men gave higher scores (M = 2.48, SD = 1.28) for the “I was talking more about my achievements” act than did women (M = 2.39, SD = 1.29).

Apart from the “Lose weight” strategy, for the remaining cases, there was a significant main effect of age. As indicated by the effect size, in all instances the effect was small. The largest one was for the “Demonstrate similarity” strategy, with a negative coefficient, indicating that younger participants gave higher scores than older participants. Furthermore, the sample

variable was significant for all strategies. The effect sizes indicate that, in most of the cases, the effects were moderate. We have also performed the analysis separately for each country in the sample, and the results were summarized in the supplementary section.

Second order factor structure

To examine whether the identified strategies could be classified into even broader or main strategies for becoming appealing as a mate, we performed principal axis factoring on the 10 variables reflecting the mean scores of the items loading in each strategy. The analysis classified the results into two main strategies. As can be seen from Table 4, in the "Develop and demonstrate desirable traits" main strategy, sub-strategies which aimed to develop and to demonstrate desirable traits to prospective mates, such as the "Enhance looks" and the "Show off abilities and talents" loaded. On the other hand, in the "Deceive about undesirable traits" main strategy, sub-strategies that aimed to hide undesirable traits, such as "Drastic appearance changes," loaded. The mean score for the former main strategy was 2.79 (*SD* = 0.83) and for the latter 1.89 (*SD* = 0.75), indicating that participants more frequently employed strategies to demonstrate their desirable than to hide their undesirable traits.

Cross cultural differences and consistencies

Confirmatory factor analysis indicated that the two-level structure identified in the pooled sample was generally consistent across samples. In particular, as we can see from Table 4, except from Ukraine, the CFI indicated an acceptable fit for all countries in the sample. Moreover, apart from China, the RMSEA indicated an acceptable fit for all countries in the sample. However, these two indices may overestimate the goodness of fit when the DWLS estimation method is

used, with the SRMR being a more robust index (Shi & Maydeu-Olivares, 2020). The SRMR indicated an acceptable fit for all countries except for China, Ukraine, and Peru. Combining the results from all indices, we can conclude that the model fitted reasonably well in all countries except for China and Ukraine.

In addition, we calculated the ranks for each strategy across the different samples. Table 6 shows that, except from China where it came fifth, the "Enhance looks" strategy topped the ranks in all countries in the sample. Similarly, in all countries in the sample, the "Show off and exaggerate wealth and abilities" and the "Drastic appearance changes" were found at the lower end of the hierarchy. Furthermore, we correlated all the rankings with each other using Spearman's rho. The lowest correlation coefficient was .491, while most coefficients were above .750, indicating consistency across cultures.

Discussion

Using a large sample from 14 different countries, we have identified 10 different strategies that people employ for becoming more appealing as mates. Participants indicated that they had more extensively used the "Enhance looks," strategy, followed by the "Show off abilities and talents," and the "Demonstrate similarity" strategies. On the other hand, they indicated that they had less extensively used the "Keep undesirable things hidden," the "Show off and exaggerate wealth and abilities," and the "Drastic appearance changes" strategies. Female participants indicated more extensive use of the "Enhance looks" strategy than male participants, while male participants indicated more extensive use of the "Increase income and social status" and the "Show off and exaggerate wealth and abilities" strategies than female participants. Moreover, small age effects were found for all strategies. The observed sex and age

effects, as well as the hierarchy of use, were generally consistent across the different countries in the sample. The identified strategies were classified further into two main strategies, namely the "Develop and demonstrate desirable traits" and the "Deceive about undesirable traits." The identified two-level strategy structure was generally consistent across the different countries in the sample.

In accordance with previous findings (Apostolou et al., 2021), our results indicate that in their attempt to become more appealing as mates, people adopt two main strategies, namely they develop and demonstrate their good traits, and secondly, they conceal their undesirable ones. Our findings indicate further that people are much more likely to work on and demonstrate their strengths than to hide or deceive about their shortcomings. Of course, the two strategies are not independent, and people may combine them. Moreover, the actual difference in use between the two strategies may be smaller than it appears here, as people may be less willing to admit that they have used strategies to deceive about their shortcomings than to use strategies to demonstrate their strengths.

Consistent with our original prediction, people would work on their looks to become more attractive as mates, which is reflected in the "Enhance looks," the "Lose weight," and the "Drastic appearance changes" strategies. The "Do more physical exercise and sports" strategy may also aim to enable individuals to improve their looks. Similarly, in the "Enhance social media profile" strategy, people aim to enhance their digital looks. Except from China, the "Enhance looks" strategy was the most frequently used in all countries in our sample. Similarly, in previous research in the Greek cultural context, participants rated it as the strategy that they were most likely to use (Apostolou et al., 2021). In most cases, the "Lose weight" strategy was located in the middle, while the "Drastic appearance changes" was located at the bottom of the

hierarchy. One reason for the latter finding is that drastic appearance changes require procedures such as plastic surgery and liposuction, which involve risk and are costly, so not many people can afford them or are willing to take the risk. Moreover, the "Drastic appearance changes" strategy involves deceiving others about one's traits (e.g., age), which may deter people who want to be honest about who they are from using it. Even so, the mere existence of this strategy indicates that, at least some people, may go to great lengths to improve their looks.

In general, the existence of several different strategies for improving looks, with two of them being very frequently used across countries, indicates that working on their looks is the most common way for becoming more attractive as an intimate partner. This is not surprising given that looks summarize fitness-relevant information, including age, genetic quality, and health status (Davis & Arnocky, 2022), so they are highly valued in a prospective mate. Another reason is that, because looks are apparent, they are assessed first in a prospective mate, which means that if looks do not satisfy them, most probably prospective mates will not be bothered assessing other traits. In effect, for other strategies to work, people need to have a minimum level of good looks and also non-visual (e.g., olfactory) self-presentation (Valentova et al., 2022), which gives a higher importance to the strategies for improving them.

As originally predicted, people use strategies that aim to increase, demonstrate or exaggerate their resource generating capacity, including the "Show off abilities and talents," the "Increase income and social status," and the "Show off and exaggerate wealth and abilities." In most countries in the sample, the former two were widely used. Also consistent with our original prediction, the "Demonstrate similarity" strategy emerged, where people attempt to become or look more similar to prospective mates they were interested in. Across the different countries in our sample, this strategy was widely used, pointing towards the importance of similarity as a

selection criterion in the mating market (see Luo, 2017). In contrast to our prediction, no strategy emerged to indicate good character traits. A previous study also failed to find such strategy (Apostolou et al., 2021), while others did find strategies that demonstrate character qualities (Buss, 1988; Schmitt & Buss, 1996). Accordingly, more research is necessary to examine whether people employ strategies that aim to demonstrate their good character qualities.

Consistent with our original prediction, female participants indicated that they have used the "Enhance looks" strategy more extensively than male participants. This was the largest sex difference, and emerged consistently across the different countries in the sample. With respect to other related strategies, for the "Do more physical exercise and sports," men gave higher scores than women, while for the "Lose weight" strategy, women gave higher scores than men. This difference indicates that the two sexes aim to improve different aspects of their looks: Women to become slimmer and men to become more muscular. As originally predicted, male participants indicated that they had more extensively used the "Increase income and social status" and the "Show off and exaggerate wealth and abilities" strategies than female participants.

Significant but small effects of age were found for all strategies. The largest one was for the "Demonstrate similarity" strategy, with younger participants indicating that they had used it more extensively than older participants. However, we do not have a working hypothesis explaining this effect. The second largest effect was over the "Drastic appearance changes" strategy, where older indicated that they have used it more extensively than younger participants. One reason may be that the procedures involved in this strategy are costly, and younger people may not be able to afford them. Another reason is that some procedures, such as having a hair transplant, may be more relevant to older people.

Consistent with our original prediction, our results were generally consistent across the different countries in our sample. To begin with, the two-level factor structure made a good fit for most countries in the sample, suggesting that across the different cultural settings, people use similar strategies for becoming more appealing as mates. Moreover, there was inter-country consistency in the frequency of their use, especially at the top and bottom of the hierarchy. On the other hand, there was also some variation. In particular, for all strategies there was a significant effect of the sample, indicating a difference in the mean scores across cultures. Strategies emerge from evolved adaptations, which adjust to environmental conditions (Buss et al., 2001), so such variation is expected. The current study was designed to examine consistency rather than variation, and future research needs to identify the cultural variables that potentially predict the use of the identified strategies.

However, our study also found considerable variation in the adoption of the strategies used across different nations. A notable finding is that the "Increase income and social status" strategy had the largest variation across countries. For instance, it was at the top of the hierarchy in Asian countries (China, Japan), while it was found at the bottom of the hierarchy in Western countries such as Austria and the UK. One possible reason is that achievement, reflected in higher income and social status, is valued more in a prospective mate in Asian cultures than in Western cultures, which in turn is reflected in the strategies that people are willing to use in order to become more appealing as mates. In addition, this strategy was frequently used in Russia and Ukraine. One possible reason is that in these countries, a considerable proportion of the population is relatively poor, so people may be looking for a high-income mate in order to escape poverty, which in turn would make people more willing to use this strategy.

Moving on, although in all countries in our sample, enhancing looks was the most widely used strategy, there was one exception: China, where it was fifth. One possible reason is that, due to high pollution, people in China typically wear masks that cover most of their faces, turning this strategy less effective in becoming more appealing as mate. Moreover, sex differences in specific strategies were found in some countries but not in others. One likely explanation is that cultural factors affect what people value in a prospective mate, which would be reflected in the strategies that people use. For instance, it could be the case that achievement is valued equally in men and women in China, but more in men than in women in Greece, which could explain the absence of a sex difference in the former and the presence of one in the latter for the "Increase income and social status" strategy. However, we need to note that different sampling methods were used for each sample, so part of the cross-cultural variation may reflect variation in the sampling procedure. Future research needs to identify the specific cultural factors that are likely to influence the adoption of strategies that people use.

Future research needs also to examine these strategies in more countries and more diverse cultural, demographic, and ecological contexts. Moreover, future research needs to examine the effectiveness of the identified strategies, perhaps by examining how they are associated with success in mating. Alternatively, it could ask people to rate how helpful each of the identified strategies have been for them in finding mates. Recent research has found that a substantial proportion of people face difficulties in attracting intimate partners, and therefore are involuntarily single (Costello et al., 2022). One factor possibly explaining this phenomenon is that people may not use the identified strategies effectively or may not use them at all. Accordingly, future research needs to investigate how the identified strategies relate to singlehood. More research is also necessary to identify the factors that predict use of the

identified strategies. One such factor is likely to be the Dark Triad personality traits, with high scorers being more likely to adopt the “Deceive about undesirable traits” strategy than low scorers.

One limitation of the current research is that our sampling strategy aimed to obtain a relatively large and diverse sample from each country, but all the samples were non-probability samples. In particular, the samples from recruitment agencies and social media are likely to be different from the general population. For instance, people who have limited access to the internet or who do not like to use social media may be underrepresented. Therefore, our findings may not readily generalize to the general population (but see Coppock et al., 2018). Furthermore, although we had a diverse sample of societies, in order to have a broader understanding of the strategies that people use for becoming more attractive as mates, our study needs to be replicated in more cultural contexts. In addition, many other factors, such as personality, mate value, and availability of mates, are likely to predict the strategies people use. These factors were not measured in the current study, which should be the goal of future research. Moreover, we did not distinguish between long-term and short-term mating context. People tend to value traits differently in long-term and in short-term mates (Buss, 2016), so it could be the case that people employ different strategies for becoming appealing as casual and as long-term mates, a possibility that future research needs to investigate.

An important facet of human mating behavior is attracting an intimate partner, with people using various strategies to become more attractive as mates. In the current study, we found the use of two main strategies, one including strategies to demonstrate their desirable traits and the other strategies to hide or mislead about their undesirable characteristics. More

theoretical and empirical work is necessary in order to understand this complex and fascinating phenomenon.

CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest.

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Table 1
Number of participants and age across the 14 samples

Countries				*Mean Age (SD)*	
	N	Women	Men	Women	Men
Total	7,141*	4,616	2,525	31.4	35.9
				(15.4)	(15.4)
Austria	373	295	74	35.1	40.3
				(9.8)	(14.1)
Brazil	648	453	183	32.7	30.4
				(13.3)	(12.7)
China	537	278	259	26.5	26.6
				(3.3)	(3.6)
Greece	566	366	199	29.5	29.4
				(10.4)	(10.8)
Hungary	500	401	95	28.6	30.5
				(10.3)	(12.8)

Italy	468	323	141	29.3	35.1
				(10.5)	(10.5)
Japan	706	338	365	48.4	56.3
				(13.0)	(11.0)
Peru	640	356	284	21.4	22.1
				(5.0)	(5.1)
Poland	513	261	252	41.7	47.4
				(12.2)	(13.9)
Russia	402	285	116	39.2	42.4
				(10.3)	(9.8)
Spain	356	274	78	28.0	34.6
				(10.7)	(12.8)
Turkey	953	684	263	25.4	25.9
				(9.0)	(9.3)
UK	360	215	144	28.5	35.5
				(10.8)	(13.9)

Ukraine	159	87	72	37.4 (12.0)	44.2 (9.2)

*There were also 40 participants who did not indicate their sex.

Table 2

Results of exploratory factor analysis for the pooled sample

Factors Acts	Factor loadings	Cronbach's α
Demonstrate similarity		.87
I was showing interest in things that interested someone who I was attracted to	.656	
I was trying to find out what someone I am interested in liked, so that we could have common interests	.602	
I adopted hobbies and habits of someone I was interested in	.571	

I was pretending that I was interested in things that interested someone who interested me	.507
I got informed about the subject matter of the work of someone I was interested in, so that I could actively participate in discussions with him / her	.499
I was laughing at the jokes of someone I cared about	.465
I seemed to agree with the views of someone I was interested in	.448
I was buying gifts for someone I was interested in	.404
I was picking up the tab when out with someone I was interested in	.323
I changed the music I listen to	.310

Enhance looks		.89
I was taking care of my skin	.677	
I have taken care of my hair	.663	
I was taking care of my cleanliness	.650	
I was using perfumes	.610	
I was taking care of my feet / hands	.603	
I was trying to have a fresh breath	.596	
I was wearing clothes that flattered me	.574	
I smiled more	.404	
I improved my appearance	.388	
I bought new clothes	.369	
I had waxing / laser (hair removal)	.328	
Increase income and social status		.87
I was trying to increase my income	.623	
I tried to be financially independent	.580	

I tried to advance in my career	.563	
I tried to find a job with high social status	.489	
I improved my education (e.g., by getting a university degree)	.477	
I read more books	.379	
I was showing interest in art / music / literature	.370	
Drastic appearance changes		.91
I had liposuction	.788	
I would had a hair transplant	.748	
I had a plastic surgery	.670	
I bought a more expensive car / motorcycle	.529	
I got a tattoo	.509	
I was taking various supplements (e.g., anabolic steroids, diet pills) to improve my body	.454	
I got a piercing	.449	

I degraded other men / women in front of the person I am interested in	.432	
I would did psychotherapy to improve my character	.426	
I did things that were risky (e.g., bungee jumping, a dangerous sport, etc.)	.396	
I did volunteer work	.373	
I did not eat in front of someone I am interested in	.307	
I read books on flirting and relationships	.305	
I bought a more expensive cell phone	.302	
Show off abilities and talents		.88
I was showing off my abilities and skills	-.807	
I was showing off my talents	-.798	
I was showing off my knowledge	-.779	

I emphasized my strengths	-.486	
I was talking more about my achievements	-.435	
I was telling stories about things I had done	-.324	
Keep undesirable things hidden		.79
I was keeping a psychological problem hidden	.804	
I was keeping something bad from my past hidden	.681	
I was keeping a health problem hidden	.631	
I have hidden things about myself that others may not have liked	.486	
Do more physical exercise and sports		.80
I did more physical exercise	-.781	
I was doing more sports	-.774	
I acquired more hobbies	-.335	

Show off and exaggerate wealth and abilities		.89
I was presenting my financial situation better than the real one	-.621	
I was exaggerating my wealth	-.597	
I was exaggerating my abilities	-.506	
I was saying that I had achieved more than I really had	-.503	
I was trying to show off my wealth	-.502	
I was emphasizing my social status	-.380	
I was wearing expensive clothes	-.372	
Enhance social media profile		.82
I posted flattering photos of myself on social media	.806	
I was making more posts on social media	.684	

I was editing my photos on social media to look more handsome	.647	
		.79
Lose weight		
I was dieting	.775	
I lost weight	.674	
I wore clothes that made me look thinner	.522	

Table 3

Mean scores, sex, age and sample effects in

Factors	*Overall*	*Women*	*Men*	*Sex*		*Age*		*Sample*	
	Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks	3.39 (0.94)	3.59 (0.89)	3.03 (0.93)	<.001	.160	(-) <.001	.027	<.001	.052

Show off abilities and talents	2.98 (1.06)	2.99 (1.04)	2.96 (1.09)	<.001	.015	(-) <.001	.009	<.001	.078
Demonstrate similarity	2.81 (0.92)	2.81 (0.91)	2.82 (0.95)	<.001	.113	(-) <.001	.033	<.001	.060
Do more physical exercise and sports	2.75 (1.17)	2.70 (1.15)	2.84 (1.19)	<.001	.006	(-) <.001	.005	<.001	.075
Increase income and social status	2.67 (1.04)	2.60 (1.03)	2.80 (1.04)	<.001	.024	(+) <.001	.022	<.001	.071
Lose weight	2.58 (1.21)	2.72 (1.22)	2.34 (1.15)	<.001	.075	.064	.001	<.001	.048
Enhance social media profile	2.34 (1.23)	2.47 (1.24)	2.12 (1.18)	<.001	.019	(-) <.001	.028	<.001	.080

Keep undesirable things hidden	2.22 (1.02)	2.21 (1.01)	2.23 (1.02)	.847	.000	(-) <.001	.018	<.001	.042
Show off and exaggerate wealth and abilities	1.83 (0.87)	1.75 (0.82)	1.99 (0.93)	<.001	.012	(-) <.001	.006	<.001	.040
Drastic appearance changes	1.62 (0.73)	1.58 (0.68)	1.71 (0.82)	<.001	.049	(+) <.001	.031	<.001	.044

Note. The signs in parenthesis indicate the direction of the relationship.

Table 4

Second-order factor structure for the pooled sample

Domains Factors	*Factor loadings*
Develop and demonstrate desirable traits	
Enhance looks	.985
Show off abilities and talents	.696
Demonstrate similarity	.669
Do more physical exercise and sports	.618
Lose weight	.569
Increase income and social status	.520
Enhance social media profile	.486
Deceive about undesirable traits	
Drastic appearance changes	-.852
Keep undesirable things hidden	-.850

Drastic appearance changes	-.486

Table 5

Indices of fit from confirmatory factor analysis for each country in the sample

Countries	*SRMR*	*CFI*	*RMSEA*
Austria	0.076	0.938	0.046
Brazil	0.062	0.931	0.044
China	0.115	0.906	0.100
Greece	0.067	0.969	0.045
Italy	0.071	0.936	0.045
Hungary	0.083	0.744	0.052
Japan	0.082	0.964	0.052
Peru	0.098	0.968	0.082
Poland	0.087	0.970	0.062
Russia	0.080	0.951	0.051
Spain	0.072	0.985	0.026
Turkey	0.068	0.942	0.050
UK	0.072	0.948	0.043

Ukraine	0.120	0.831	0.083

Table 6

The hierarchy of the identified strategies across samples

Strategies															
	Poole d	Austria	Brazil	China	Greec e	Italy	Hungar y	Japan	Peru	Polan d	Russi a	Spain	Turkey	UK	Ukraine
Enhance looks	1	1s,a	1s,a	5s,a	1s,a	1s,a	1s,a	1s,a	1s	1s,a	1s,a	1s,a	1s,a	1s	1s,a
Show off abilities and talents	2	4s	2a	3a	2s,a	2s,a	6s	5a	2	2s,a	2	2a	2	2	5s
Demonstrate similarity	3	2s,a	3s,a	4s,a	3s,a	3s,a	4s,a	2s	6s	5s,a	6s	4s	3s,a	3s,a	6s

Do more physical exercise and sports	4	5	4s,a	2a	6s,a	4s	2s	4s	4s	3s,a	4	3	5s,a	5s	3
Increase income and social status	5	7s,a	6s,a	1a	4s,a	6s,a	3a	3s,a	3s,a	4s,a	3s	7a	4s,a	7s,a	2s
Lose weight	6	3s	7s,a	7s	5s,a	5s,a	5s,a	6s,a	5	6s,a	5s,a	6s	7s,a	4s	5s,a
Enhance social media profile	7	6a	5s,a	6	7s,a	8s,a	7s	10a	7	8a	7s,a	5a	6s,a	8s,a	7s
Keep undesirable things hidden	8	8s,a	8a	8a	8a	7a	8a	7a	8a	7a	8	8	8a	6a	8
Show off and	9	9	9s,a	10s,a	9s	9s,a	10s,a	8s	9	9s,a	9s	9s	9s,a	9	9s,a

wealth and abilities															
Drastic appearance changes	10	10s,a	10s,a	9s,a	10s,a	10s, a	9s,a	9s,a	10s, a	10s,a	10s,a	10s,a	10s,a	10s, a	10s,a

Note. The "s" denotes the presence of a significant main effect of sex, and the "a" the presence of a significant main effect of age (see supplementary material).

Austria

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.42 (0.89)	3.56 (0.80)	2.94 (1.01)	<.001	.230	(-) <.001	.110
Show off abilities and talents		2.52 (0.91)	2.55 (0.88)	2.44 (1.00)	.010	.049	.059	.035
Demonstrate similarity		2.71 (0.79)	2.73 (0.76)	2.73 (0.85)	<.001	.254	(-) .005	.072

Do more physical exercise and sports		2.47 (1.16)	2.48 (1.13)	2.50 (1.27)	.807	.003	.184	.014
Increase income and social status		1.98 (0.83)	1.96 (0.79)	2.11 (0.98)	.034	.044	(+) <.001	.075
Lose weight		2.53 (1.20)	2.67 (1.17)	2.02 (1.18)	<.001	.108	.233	.012
Enhance social media profile		2.10 (1.21)	2.20 (1.21)	1.73 (1.14)	.148	.016	(-) <.001	.067
Keep undesirable things hidden		1.84 (0.84)	1.91 (0.86)	1.59 (0.71)	<.001	.062	(-) <.001	.056
Show off and exaggerate wealth and abilities		1.52 (0.61)	1.50 (0.59)	1.65 (0.66)	.489	.019	.427	.021
Drastic appearance changes		1.27 (0.29)	1.27 (0.28)	1.29 (0.32)	<.001	.114	(+) <.001	.122

Brazil

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.81 (0.78)	3.93 (0.75)	3.54 (0.79)	<.001	.164	(-) <.001	.149
Show off abilities and talents		3.73 (0.82)	3.74 (0.83)	3.73 (0.80)	.852	.004	(-) <.001	.050
Demonstrate similarity		3.07 (0.85)	3.03 (0.85)	3.20 (0.83)	<.001	.066	(-) <.001	.143

Do more physical exercise and sports		2.96 (1.19)	2.87 (1.20)	3.24 (1.12)	<.001	.038	(-) <.001	.027
Increase income and social status		2.70 (1.01)	2.65 (1.00)	2.84 (1.01)	.007	.031	(+) <.001	.071
Lose weight		2.68 (1.36)	2.79 (1.41)	2.45 (1.22)	<.001	.079	(+) <.001	.038
Enhance social media profile		2.74 (1.32)	2.83 (1.34)	2.52 (1.28)	.022	.016	(-) <.001	.035
Keep undesirable things hidden		2.47 (1.10)	2.47 (1.11)	2.49 (1.06)	.273	.008	(-) .003	.026
Show off and exaggerate wealth and abilities		1.73 (0.76)	1.68 (0.74)	1.90 (0.78)	.017	.028	(-) .002	.037
Drastic appearance changes		1.48 (0.41)	1.49 (0.42)	1.48 (0.41)	.006	.050	(+) <.001	.012

China

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.75 (0.64)	3.87 (0.64)	3.63 (0.62)	<.001	.110	(+) <.001	.066
Show off abilities and talents		3.85 (0.76)	3.87 (0.80)	3.83 (0.72)	.922	.004	.053	.023
Demonstrate similarity		3.85 (0.65)	3.88 (0.69)	3.82 (0.59)	.050	.034	(+) <.001	.055
Do more physical exercise and sports		3.96 (0.84)	3.96 (0.89)	3.95 (0.79)	.265	.007	(+) <.001	.042
Increase income and social status		4.01 (0.67)	4.04 (0.71)	3.98 (0.63)	.128	.021	(+) .032	.028
Lose weight		3.43 (1.02)	3.53 (1.01)	3.32 (1.03)	.001	.037	.073	.013
Enhance social media profile		3.49 (1.03)	3.57 (1.07)	3.41 (0.99)	.093	.012	.674	.003
Keep undesirable things hidden		2.97 (1.13)	2.81 (1.23)	3.13 (0.99)	.014	.023	.123	.014

Show off and exaggerate wealth and abilities		2.79 (1.20)	2.75 (1.29)	2.84 (1.11)	.007	.036	(+) .058	.025
Drastic appearance changes		2.94 (1.07)	2.95 (1.13)	2.92 (1.00)	<.001	.175	.003	(+) .060

Greece

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.75 (0.83)	3.96 (0.77)	3.38 (0.81)	<.001	.353	(-) <.001	.069
Show off abilities and talents		2.99 (1.01)	2.95 (1.00)	3.06 (1.04)	<.001	.090	(-) .001	.041
Demonstrate similarity		2.85 (0.89)	2.82 (0.91)	2.92 (0.86)	<.001	.301	(-) <.001	.089
Do more physical exercise and sports		2.69 (1.21)	2.58 (1.16)	2.88 (1.28)	.040	.016	(-) .007	.023
Increase income and social status		2.76 (1.07)	2.67 (1.09)	2.91 (1.01)	<.001	.087	(+) <.001	.066
Lose weight		2.74 (1.29)	2.90 (1.25)	2.45 (1.32)	<.001	.126	(+) .033	.016
Enhance social media profile		2.46 (1.21)	2.60 (1.20)	2.19 (1.15)	.001	.029	(-) <.001	.053
Keep undesirable things hidden		2.38 (1.09)	2.38 (1.12)	2.37 (1.04)	.857	.003	(-) .002	.031

Show off and exaggerate wealth and abilities		1.82 (0.91)	1.74 (0.89)	1.97 (0.92)	.056	.026	.626	.010
Drastic appearance changes		1.63 (0.67)	1.59 (0.65)	1.72 (0.70)	<.001	.080	(+) <.001	.075

Italy

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.40 (0.90)	3.63 (0.86)	2.88 (0.76)	<.001	.392	(-) <.001	.092
Show off abilities and talents		3.20 (0.92)	3.18 (0.93)	3.27 (0.88)	<.001	.068	(-) <.001	.079
Demonstrate similarity		2.86 (0.76)	2.85 (0.78)	2.88 (0.71)	<.001	.173	(-) <.001	.111
Do more physical exercise and sports		2.50 (1.11)	2.41 (1.08)	2.74 (1.16)	.022	.021	.805	.002
Increase income and social status		2.08 (0.79)	1.98 (0.74)	2.31 (0.86)	<.001	.078	(+) <.001	.097
Lose weight		2.39 (1.17)	2.51 (1.18)	2.13 (1.11)	<.001	.146	(+) .019	.021
Enhance social media profile		1.69 (0.86)	1.81 (0.92)	1.42 (0.65)	<.001	.041	(-) <.001	.036
Keep undesirable things hidden		2.05 (0.90)	2.08 (0.94)	1.96 (0.82)	.901	.002	(-) <.001	.045

Show off and exaggerate wealth and abilities		1.48 (0.57)	1.42 (0.54)	1.62 (0.63)	.001	.050	(-) .001	.051
Drastic appearance changes		1.30 (0.32)	1.29 (0.33)	1.32 (0.29)	<.001	.100	(+) <.001	.096

Hungary

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.72 (0.79)	3.82 (0.77)	3.34 (0.75)	<.001	.190	(-) .005	.054
Show off abilities and talents		2.40 (0.86)	2.35 (0.83)	2.57 (0.93)	<.001	.051	.073	.023
Demonstrate similarity		2.61 (0.76)	2.60 (0.74)	2.64 (0.78)	<.001	.236	(-) <.001	.110
Do more physical exercise and sports		2.80 (1.07)	2.76 (1.06)	2.96 (1.11)	.041	.017	.068	.014
Increase income and social status		2.63 (0.95)	2.60 (0.95)	2.79 (0.95)	.285	.017	(+) <.001	.091
Lose weight		2.45 (1.20)	2.54 (1.21)	2.13 (1.13)	<.001	.077	(+) .046	.016
Enhance social media profile		2.09 (1.13)	2.17 (1.15)	1.77 (1.00)	.014	.021	.168	.010
Keep undesirable things hidden		1.86 (0.93)	1.88 (0.93)	1.71 (0.86)	.496	.007	(-) .016	.025

Show off and exaggerate wealth and abilities		1.29 (0.44)	1.25 (0.37)	1.47 (0.64)	.002	.044	(-) <.001	.051
Drastic appearance changes		1.31 (0.30)	1.31 (0.29)	1.32 (0.33)	.001	.070	(+) <.001	.087

Japan

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		2.39 (0.81)	2.68 (0.82)	2.13 (0.71)	<.001	.188	(-) <.001	.097
Show off abilities and talents		1.94 (0.80)	1.87 (0.73)	2.01 (0.86)	.022	.021	.739	.005
Demonstrate similarity		2.20 (0.82)	2.23 (0.82)	2.19 (0.82)	<.001	.200	.123	.022
Do more physical exercise and sports		1.94 (0.92)	1.89 (0.90)	2.00 (0.94)	.030	.013	.166	.007
Increase income and social status		2.17 (0.85)	2.05 (0.79)	2.30 (0.88)	<.001	.078	(+) <.001	.072
Lose weight		1.91 (0.94)	2.12 (1.02)	1.72 (0.81)	<.001	.039	(-) .006	.017
Enhance social media profile		1.32 (0.66)	1.33 (0.64)	1.31 (0.69)	.401	.004	(-) <.001	.039
Keep undesirable things hidden		1.90 (0.82)	1.92 (0.80)	1.87 (0.83)	.219	.008	(-) .038	.014

Show off and exaggerate wealth and abilities		1.59 (0.67)	1.54 (0.63)	1.63 (0.71)	.008	.027	.854	.005
Drastic appearance changes		1.34 (0.46)	1.35 (0.44)	1.33 (0.48)	<.001	.124	(-) <.001	.062

Peru

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		2.86 (1.02)	2.68 (0.82)	2.80 (1.02)	.057	.030	.173	.024
Show off abilities and talents		2.81 (1.08)	1.87 (0.73)	2.80 (1.08)	.602	.007	.611	.007
Demonstrate similarity		2.37 (0.98)	2.23 (0.82)	2.49 (0.99)	<.001	.054	.129	.024
Do more physical exercise and sports		2.70 (1.13)	1.89 (0.90)	2.81 (1.15)	<.001	.051	.128	.009
Increase income and social status		2.71 (1.04)	2.05 (0.79)	2.80 (1.07)	<.001	.045	(+) .002	.036
Lose weight		2.37 (1.03)	2.12 (1.03)	2.39 (1.00)	.530	.003	.437	.004
Enhance social media profile		2.29 (1.06)	1.33 (0.64)	2.25 (1.02)	.833	.001	.523	.004
Keep undesirable things hidden		2.20 (1.02)	1.93 (0.83)	2.25 (1.01)	.555	.005	(-) .009	.021

Show off and exaggerate wealth and abilities		2.01 (0.94)	1.54 (0.63)	2.11 (0.99)	.082	.020	.452	.011
Drastic appearance changes		1.82 (0.83)	1.35 (0.44)	1.92 (0.87)	<.001	.079	(+) .013	.044

Poland

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.05 (0.95)	3.23 (0.94)	2.85 (0.92)	<.001	.173	(-) <.001	.104
Show off abilities and talents		2.40 (0.99)	2.36 (0.98)	2.45 (1.01)	<.001	.045	(-) .010	.033
Demonstrate similarity		2.36 (0.92)	2.25 (0.89)	2.48 (0.94)	<.001	.212	(-) <.001	.065
Do more physical exercise and sports		2.39 (1.11)	2.29 (1.10)	2.49 (1.12)	.007	.023	(-) <.001	.033
Increase income and social status		2.38 (0.95)	2.31 (0.95)	2.45 (0.95)	<.001	.065	(+) .003	.041
Lose weight		2.24 (1.06)	2.32 (1.08)	2.16 (1.04)	<.001	.051	(-) .002	.030
Enhance social media profile		1.89 (1.05)	1.94 (1.06)	1.83 (1.04)	.276	.008	(-) <.001	.081
Keep undesirable things hidden		1.94 (0.94)	1.88 (0.92)	2.00 (0.95)	.086	.016	(-) <.001	.051

Show off and exaggerate wealth and abilities		1.84 (0.89)	1.74 (0.83)	1.95 (0.93)	.004	.041	(-) <.001	.051
Drastic appearance changes		1.60 (0.76)	1.51 (0.68)	1.69 (0.83)	<.001	.081	(-) <.001	.084

Russia

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.51 (0.94)	3.78 (0.84)	2.86 (0.84)	<.001	.457	(-) <.001	.126
Show off abilities and talents		3.01 (0.98)	3.02 (0.98)	2.98 (0.98)	.109	.026	.122	.025
Demonstrate similarity		2.61 (0.90)	2.59 (0.88)	2.65 (0.94)	<.001	.308	.136	.037
Do more physical exercise and sports		2.90 (1.16)	2.92 (1.18)	2.84 (1.12)	.153	.013	.341	.008
Increase income and social status		2.93 (0.96)	2.93 (0.99)	2.94 (0.87)	.016	.043	.584	.014
Lose weight		2.67 (1.12)	2.91 (1.12)	2.11 (0.88)	<.001	.187	(+) .056	.019
Enhance social media profile		2.19 (1.17)	2.33 (1.18)	1.85 (1.06)	<.001	.056	(-) .003	.034
Keep undesirable things hidden		2.14 (0.99)	2.17 (1.00)	2.07 (0.98)	.880	.003	.142	.017

Show off and exaggerate wealth and abilities		1.89 (0.81)	1.88 (0.82)	1.92 (0.81)	.001	.058	.131	.028
Drastic appearance changes		1.45 (0.53)	1.45 (0.52)	1.45 (0.56)	<.001	.103	(+) .005	.077

Spain

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.29 (0.96)	3.38 (0.95)	2.99 (0.95)	<.001	.185	(-) <.001	.154
Show off abilities and talents		3.25 (0.97)	3.25 (0.95)	3.22 (1.05)	.507	.015	(-) .030	.040
Demonstrate similarity		2.61 (0.80)	2.62 (0.80)	2.59 (0.81)	.003	.076	.197	.039
Do more physical exercise and sports		2.65 (1.15)	2.62 (1.15)	2.76 (1.18)	.610	.005	.603	.005
Increase income and social status		2.10 (0.88)	2.04 (0.84)	2.34 (0.98)	.064	.038	(+) .017	.049
Lose weight		2.35 (1.31)	2.38 (1.31)	2.25 (1.30)	<.001	.081	.420	.008
Enhance social media profile		2.51 (1.25)	2.63 (1.26)	2.13 (1.13)	.319	.010	(-) <.001	.122
Keep undesirable things hidden		2.01 (0.98)	2.00 (0.96)	2.03 (1.02)	.954	.002	.178	.018

Show off and exaggerate wealth and abilities		1.51 (0.61)	1.44 (0.53)	1.75 (0.83)	<.001	.081	.382	.022
Drastic appearance changes		1.32 (0.41)	1.29 (0.33)	1.42 (0.64)	<.001	.105	(+) <.001	.106

Turkey

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.76 (0.67)	3.86 (0.62)	3.51 (0.73)	<.001	.293	(-) <.001	.038
Show off abilities and talents		3.42 (0.76)	3.39 (0.72)	3.48 (0.86)	.077	.012	.318	.007
Demonstrate similarity		3.32 (0.64)	3.31 (0.61)	3.34 (0.71)	<.001	.050	(-) .003	.028
Do more physical exercise and sports		2.98 (1.01)	2.93 (0.97)	3.12 (1.09)	<.001	.027	(-) .003	.014
Increase income and social status		3.05 (0.81)	3.02 (0.77)	3.11 (0.91)	<.001	.089	(+) <.001	.076
Lose weight		2.91 (1.15)	3.03 (1.11)	2.60 (1.20)	<.001	.074	(-) .015	.011
Enhance social media profile		2.95 (1.14)	3.06 (1.10)	2.65 (1.19)	<.001	.028	(-) <.001	.030
Keep undesirable things hidden		2.35 (0.91)	2.34 (0.86)	2.35 (1.01)	.936	.001	(-) <.001	.022

Show off and exaggerate wealth and abilities		2.08 (0.77)	2.02 (0.69)	2.21 (0.94)	.006	.021	(-) .034	.016
Drastic appearance changes		1.77 (0.62)	1.74 (0.56)	1.81 (0.75)	<.001	.142	<.001	(-) .050

UK

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.37 (0.78)	3.59 (0.75)	3.05 (0.72)	<.001	.347	.154	.044
Show off abilities and talents		2.95 (0.99)	2.90 (0.97)	3.03 (1.01)	.211	.023	.564	.014
Demonstrate similarity		2.76 (0.81)	2.77 (0.81)	2.76 (0.80)	<.001	.124	(-) .039	.053
Do more physical exercise and sports		2.45 (1.00)	2.27 (0.95)	2.71 (1.01)	<.001	.054	.290	.011
Increase income and social status		2.34 (0.89)	2.20 (0.85)	2.54 (0.91)	<.001	.089	(+) .007	.054
Lose weight		2.69 (1.20)	2.92 (1.20)	2.35 (1.13)	<.001	.172	.151	.015
Enhance social media profile		2.26 (1.11)	2.58 (1.11)	1.80 (0.94)	<.001	.125	(-).003	.038
Keep undesirable things hidden		2.39 (1.03)	2.45 (1.04)	2.30 (1.02)	.542	.009	(-) <.001	.057

Show off and exaggerate wealth and abilities		1.72 (0.70)	1.65 (0.61)	1.84 (0.80)	.083	.035	.478	.018
Drastic appearance changes		1.40 (0.38)	1.42 (0.40)	1.37 (0.34)	<.001	.128	(+) .014	.078

Ukraine

Factors		*Overall*	*Women*	*Men*	*Sex*		*Age*	
		Mean (SD)	Mean (SD)	Mean (SD)	*p*-value	η_p^2	*p*-value	η_p^2
Enhance looks		3.46 (0.67)	3.76 (0.59)	3.11 (0.59)	<.001	.530	(-) .002	.178
Show off abilities and talents		3.12 (0.70)	3.19 (0.65)	3.04 (0.76)	.008	.108	(-) .017	.096
Demonstrate similarity		2.75 (0.73)	2.75 (0.64)	2.74 (0.83)	<.001	.294	.273	.278
Do more physical exercise and sports		3.18 (0.76)	3.23 (0.79)	3.12 (0.72)	.523	.014	.268	.025
Increase income and social status		3.21 (0.64)	3.11 (0.60)	3.32 (0.67)	.023	.101	.204	.062
Lose weight		2.89 (0.81)	3.29 (0.64)	2.40 (0.71)	<.001	.480	(+) .035	.054
Enhance social media profile		2.48 (1.01)	2.79 (1.01)	2.11 (0.87)	<.001	.142	.359	.021
Keep undesirable things hidden		2.41 (0.75)	2.50 (0.74)	2.30 (0.77)	.153	.043	.082	.052

Show off and exaggerate wealth and abilities		2.24 (0.59)	2.20 (0.46)	2.29 (0.72)	.036	.094	.038	.093
Drastic appearance changes		1.78 (0.45)	1.83 (0.41)	1.72 (0.48)	<.001	.314	(+) <.001	.242