Miss America Facial and Body Feature Changes Across Social and Economic Conditions

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Abstract

Facial and body characteristics of Miss America pageant winners over the past 70 years were identified and investigated to explore their relationships with U.S. social and economic factors. A hard times measure was created using annual economic and social statistics that were compiled to form one general measure. Facial feature and body measurement values of Miss America were correlated with the general hard times measure. Negative relationships between social and economic hard times and Miss America body mass index and weight were found. Other relationships are discussed. Results of this research contribute new insight into perceptions and trends of beauty and human facial and body feature preferences.

Introduction

- Past research has investigated ideals of beauty and how these ideals have changed across time. Mazur (1986) investigated body measurements (chest, waist, hips) of *Playboy* Playmates and Miss America contest winners across time and identified trends in body shapes. Singh (1993) reviewed these trends and reported that although there were fluctuations, there was little variation in the waist-to-hip ratio (WHR) in *Playboy* Playmates and Miss America winners across time. Pettijohn and Tesser (1999) found preferences for mature facial features in popular American actresses when social and economic conditions were threatening across time, although there was no systematic preference for actors (2003). Pettijohn & Jungeberg (in press) found facial and body feature preferences of *Playboy* Playmates of the Year were related to social and economic factors over time.

Environmental Security Hypothesis
(Pettijohn & Tesser, 1999)

Proposes that exposure to threatening environmental conditions will cause people to show a relatively greater preference for individuals with mature features, as compared to preferences under less-threatening conditions

Predictions

- Although we anticipated relationships consistent with the *Environmental Security Hypothesis,* we expected these outcomes to be attenuated because a small number of judges determine winners, not the general public. Standards used in judging Miss America may be different from what the public determines to be attractive.
- Specifically, we expected Miss America to possess more mature facial and body feature measures during threatening social and economic times.

Social and Economic Statistics Data Collection (1932-2001)

- Unemployment rate
- Change in disposable personal income
- Change in consumer price index
- Death rate, birth rate
- Marriage rate, divorce rate
- Suicide rate, homicide rate

Miss America Measurements Data Collection (1933-2002)

- Age, Facial Measures, Bust, Waist, Hips, Waist-to-Hip Ratio, Height, Weight, Body Mass Index

Miss America Facial Photographs Data Collection (1933-2002)
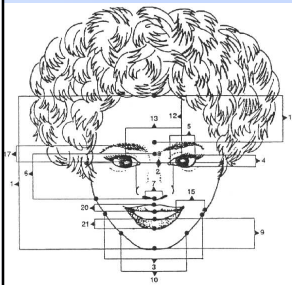

Marilyn Meseke 1938　　**Debra Dene Barnes 1968**　　**Leanza Cornett 1993**

Facial Feature Measurement

Facial feature measurements. (1) *Length of face*: distance from hairline to base of chin. (2) *Width of face at cheekbones*: distance between outer edges of cheekbones at most prominent point. (3) *Width of face at mouth*: distance between outer edges of cheeks at the level of the middle of the smile. (4) *Eye height*: distance from upper to lower edge of visible eye within eyelids at pupil center divided by length of face. (5) *Eye width*: distance from inner corner to outer corner of eye divided by width of face at cheekbones. (6) *Nose length*: measured distance from bridge at level of inner edge of upper eyelid to nose tip, at level of upper edge of nostril opening divided by length of face. (7) *Nose tip width*: width of protrusion at tip of nose divided by width of face at mouth. (8) *Nostril width*: width of nose at outer levels of nostrils at widest point divided by width of face at mouth. (9) *Chin length*: distance from upper edge of lower lip to base of chin divided by length of face. (10) *Chin width*: distance between edges of jaw measured at midpoint of chin length divided by length of face. (11) *Forehead height*: distance from eyebrow to hairline divided by length of face. (12) *Vertical eye placement*: vertical location of the eye measured from pupil center to hairline divided by length of face. (13) *Horizontal eye separation*: distance between pupil centers divided by width of face at cheekbones. (14) *Cheekbone prominence*: difference between the width of the face at the cheekbones and the width of the face at the mouth divided by length of face. (15) *Chin thinness*: measured width of cheek from inner corner of smile to outer edge of cheek divided by length of face. (16) *Chin area*: chin height ratio multiplied by chin width ratio. (17) *Eyebrow height*: measured from pupil center to lower edge of eyebrow divided by length of face. (18) *Brow thickness*: vertical thickness of eyebrow above pupil divided by length of face. (19) *Facial narrowness*: measured length of face divided by width of face at mouth. (20) *Upper lip width*: vertical distance at center divided by length of face. (21) *Lower lip width*: vertical distance at center divided by length of face. (22) *Eye area*: eye height ratio multiplied by eye width ratio. (23) *Nose area*: product of nose length and nose width at the tip divided by width of the face at the mouth.

Cunningham, M. R., Roberts, A. R., Barbee, A. P., Druen, P. B., & Wu, C. (1995). "Their ideas of beauty are, on the whole, the same as ours": Consistency and variability in the cross-cultural perception of female physical attractiveness. *Journal of Personality and Social Psychology, 68*, 261-279.

General Hard Times Measure and Miss America Facial Features Correlations

Feature	*r*
Eye Width	-.05
Eye Height	.094
Eye Area	.043
Chin Length	-.102
Chin Width	-.068
Chin Area	-.110

N = 68 years. None of these values were statistically significant.

General Hard Times Measure and Miss America Body Features Correlations

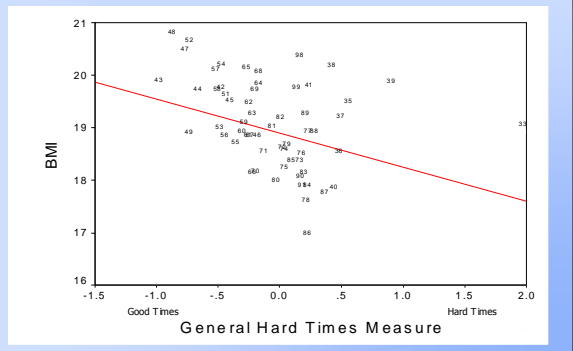| *Feature*	*r*	*df*
Age	.008	67
Waist	.194	51
Height	-.048	62
Weight	-.277*	60
Bust	-.024	51
Waist-to-hip Ratio	.186	51
Body Mass Index	-.361**	58

* = $p < .05$, ** = $p < .01$
Different *df* reported due to unavailability of data for some years
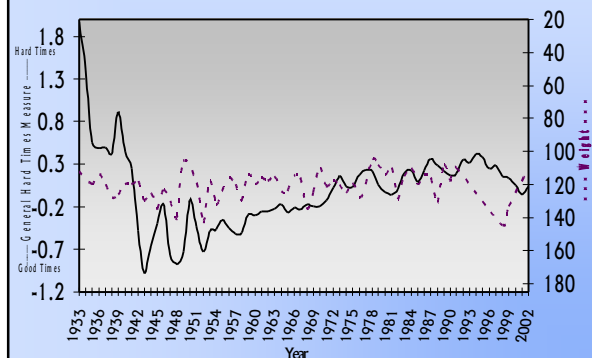
General Hard Times Measure and Miss America BMI Changes Across Time
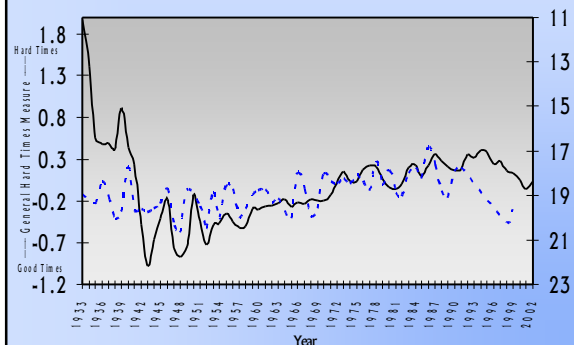
Miss America BMI and General Hard Times Measure Scatterplot (1933-2002)

General Hard Times Measure and Miss America Weight Changes Across Time

Discussion

- While a smaller BMI for pageant winners during economic hard times followed the trend of past research, the negative correlation of weight and economic security did not. The fact that Miss America winners weighed less in social and economic hard times could be attributed to a less curvaceous frame. Curves are correlated with economic security, so the slightly heavier, more curvaceous women would be chosen in good times, while the thinner, lighter body would have less figure and correlate with economic hard times.

Discussion

- Although not significant, positive relationships between General Hard Times and Miss America waist and waist-to-hip ratio were also found. These findings are in line with predictions and replicate findings from a *Playboy* Playmate of the Year sample. When times are difficult, women with larger waists and a less curvaceous figure were selected as Miss America.
- There were no relationships between social and economic conditions and Miss America facial features. Facial features did not appear to vary systematically with the judge's choice of Miss America across time.

Discussion

- Overall differences in facial and body preferences were expected due to the nature of the judging. Miss America is judged by a panel of judges and these judges change from year to year, as do the criteria they use. The individual competition portions have changed in value over the years, focusing less on attractiveness and more on accomplishments. Therefore, without a standardized assessment or consistent judge panel, it is difficult to compare the winners across time. These few judges select a winner, while past research subjects, actresses and Playboy Playmates of the Year, were judged on attractiveness based upon the public's popular vote, a much larger population. Therefore, the relationship between Miss America pageant winners and the Environmental Security Hypothesis may have been attenuated.

References

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