

# Facial Feature Assessment of Popular U.S. Country Music Singers Across Time and Social and Economic Conditions

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## Abstract

Facial features of the artists of the top Country *Billboard* song for each year from 1946-2010 were investigated across changes in U.S. socioeconomic conditions. When conditions were relatively poor, performers with more mature facial features of smaller eyes and larger chins were popular. Results extend previous findings with pop singers, movie actresses, and *Playboy* Playmates.

## Introduction

Recent investigations of pop music preferences have been linked to socioeconomic variables across time (Pettijohn & Sacco, 2009a; 2009b). Pettijohn & Tesser's (1999) Environmental Security Hypothesis (ESH) suggests that when social and economic times are threatening, individuals show a greater preference for mature characteristics, content, and themes because these components are more useful in social adaptation and maintenance. Past archival research on American actress facial features (Pettijohn & Tesser, 1999), *Playboy* Playmate facial and body features (Pettijohn & Jungeberg, 2004), as well as experimental studies (Pettijohn & Tesser, 2005; Swami & Tovee, 2012) have supported this theory. ESH can be used to help understand the reasons behind social preferences for music and musicians.

Consistent with the ESH, when social and economic conditions in the U.S. were threatening, longer pop songs with more meaningful content and romantic themes (Pettijohn & Sacco, 2009a; 2009b) and songs with less beats per minute and less familiar key signatures were popular (Pettijohn, Eastman, & Richard, 2012). In addition, the appearance and characteristics of pop musical performers varied with socioeconomic times such that when times were bad, pop artists with more mature characteristics, smaller eyes and larger chins, were more popular compared to good times (Pettijohn & Sacco, 2009a). Small eye size and large chin size are components of a mature face (see Zebrowitz, 1997), which is associated with the attributes of strength, dominance, competency, expertise, maturity, independence, status, and shrewdness; important characteristics in social and economic threatening times.

Country singers may have more mature faces than pop singers since themes of struggle and loss are often more common in this genre (Eastman, 2010). Eastman and Pettijohn (under review) recently examined how the content of country music (lyrics, keys, bpm, song length) has changed with social and economic times, but the appearance of the performers has not been studied.

## Current Study Hypotheses

When social and economic conditions are more threatening, country singers with smaller eyes and larger chins (mature features) are predicted to be more popular. When social and economic conditions are less threatening, country singers with larger eyes and smaller chins (baby-faced features) are predicted to be more popular.

## Discussion

The current study hypotheses were supported. We found a negative relationship between the GHTM and country artist eye width measurements and positive relationships between the GHTM and country artist chin width and chin area, as well as cheek thinness. These outcomes suggest country singers with more mature facial characteristics were more popular during more difficult social and economic times and country singers with more baby-faced characteristics were more popular in good social and economic conditions across time.

This pattern of results replicates previous archival investigations of popular American actresses (Pettijohn & Tesser, 1999), *Playboy* Playmates (Pettijohn & Jungeberg, 2004), and pop music artists (Pettijohn & Sacco, 2009a).

Although correlational, and based on a limited sample size, these results suggest that environmental security may influence perceptions and preferences for country performers with certain facial features, similar to pop artists. Future research may explore facial feature differences between country and pop singers as well as the connection between the appearance of the artist and the content of music they sing/create. These results have implications for marketing and media promotion.

Results of this research contribute new insight into media preferences and their reflection of the state of a culture in a musical genre beyond pop music.

## Selected References

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(2), 261-279.

Pettijohn, T. F. II, & Sacco, D. F., Jr. (2009). Tough times, meaningful music, mature performers: Popular *Billboard* songs and performer preferences across social and economic conditions in the USA. *Psychology of Music*, 37(2), 155-179.

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## Method: Data Collection

### Top Country Billboard Artists and Facial Measurements

The Country *Billboard* song of the year and artists (see Table 1 below) from 1946-2010 were first identified and photographs capturing complete, front, facial views of individual artists or group band members were located. Two judges independently made precise facialmetric assessments (see Cunningham et al., 1995). Averages were used for duets and groups (i.e., Lonestar).

### General Hard Times Measure

To test the hypotheses, U.S. social and economic statistics (unemployment rate, change in disposable personal income, change in consumer price index, death rate, birth rate, marriage rate, divorce rate, suicide rate, and homicide rate) for each year (1946-2010) were collected and standardized to create a General Hard Times Measure (GHTM). Higher values on the GHTM indicate more threatening social and economic conditions. The GHTM has been used in past studies.

Table 1. Country Billboard Song of the Year and Artists (1946-2010).

| Year | Song Title   | Artist                          |
|------|--|---------------------------------|
| 1946 | New Spanish Two Step                                       | Bob Willis                      |
| 1947 | Smoke! Smoke! Smoke! (That Cigarette)                      | Tex Williams                    |
| 1948 | Bouquet Of Roses   | Eddy Arnold                     |
| 1949 | Lovesick Blues   | Hank Williams                   |
| 1950 | I'm Moving On  | Hank Snow                       |
| 1951 | Cold, Cold Heart   | Hank Williams                   |
| 1952 | The Wild Side Of Life                                      | Hank Thompson                   |
| 1953 | Kaw-Liga   | Hank Williams                   |
| 1954 | I Don't Hurt Anymore                                       | Hank Snow                       |
| 1955 | In The Jailhouse Now                                       | Webb Pierce                     |
| 1956 | Crazy Arms   | Ray Price                       |
| 1957 | Gone   | Ferlin Husky                    |
| 1958 | Oh Lonesome Me   | Don Gibson                      |
| 1959 | The Battle Of New Orleans                                  | Johnny Horton                   |
| 1960 | Please Help Me, I'm Falling                                | Hank Locklin                    |
| 1961 | I Fall To Pieces   | Patsy Cline                     |
| 1962 | Wolverton Mountain   | Claude King                     |
| 1963 | Still  | Bill Anderson                   |
| 1964 | My Heart Skips A Beat                                      | Buck Owens                      |
| 1965 | What's He Doing In My World                                | Eddy Arnold                     |
| 1966 | Almost Persuaded   | David Houston                   |
| 1967 | All The Time   | Jack Greene                     |
| 1968 | Folsom Prison Blues  | Johnny Cash                     |
| 1969 | My Life (Throw It Away If I Want To)                       | Bill Anderson                   |
| 1970 | Hello Darlin'  | Conway Twitty                   |
| 1971 | Easy Loving  | Freddie Hart                    |
| 1972 | My Hang-Up Is You  | Freddie Hart                    |
| 1973 | You've Never Been This Far Before                          | Conway Twitty                   |
| 1974 | There Won't Be Anymore                                     | Charlie Rich                    |
| 1975 | Rhinestone Cowboy  | Glen Campbell                   |
| 1976 | Convoy   | C.W. McCall                     |
| 1977 | Luckenbach, Texas (Back to the Basics of Love)             | Waylon Jennings                 |
| 1978 | Mamas Don't Let Your Babies Grow Up To Be Cowboys          | Waylon Jennings & Willie Nelson |
| 1979 | I Just Fall In Love Again                                  | Anne Murray                     |
| 1980 | My Heart   | Ronnie Milsap                   |
| 1981 | Fire & Smoke   | Earl Thomas Conley              |
| 1982 | Always On My Mind  | Willie Nelson                   |
| 1983 | Jose Cuervo  | Shelly West                     |
| 1984 | To All The Girls I've Loved Before                         | Julio Iglesias & Willie Nelson  |
| 1985 | She Keeps The Home Fires Burning                           | Ronnie Milsap                   |
| 1986 | Never Be You   | Rosanne Cash                    |
| 1987 | Give Me Wings  | Michael Johnson                 |
| 1988 | Don't Close Your Eyes                                      | Keith Whitley                   |
| 1989 | Better Man   | Clint Black                     |
| 1990 | Nobody's Home  | Clint Black                     |
| 1991 | Don't Rock The Jukebox                                     | Alan Jackson                    |
| 1992 | I Saw The Light  | Wynonna Judd                    |
| 1993 | Chattahoochee  | Alan Jackson                    |
| 1994 | I Swear  | John Michael Montgomery         |
| 1995 | Sold (The Grundy Country Auction Incident)                 | John Michael Montgomery         |
| 1996 | My Maria   | Brooks & Dunn                   |
| 1997 | It's Your Love   | Tim McGraw & Faith Hill         |
| 1998 | Just To See You Smile                                      | Tim McGraw                      |
| 1999 | Amazed   | Lonestar                        |
| 2000 | How Do You Like Me Now??                                   | Toby Keith                      |
| 2001 | Ain't Nothing 'Bout You                                    | Brooks & Dunn                   |
| 2002 | The Good Stuff   | Kenny Chesney                   |
| 2003 | My Front Porch Looking In                                  | Lonestar                        |
| 2004 | Live Like You Were Dying                                   | Tim McGraw                      |
| 2005 | That's What I Love About Sunday                            | Craig Morgan                    |
| 2006 | If You're Going Through Hell (Before the Devil Even Knows) | Rodney Atkins                   |
| 2007 | Watching You   | Rodney Atkins                   |
| 2008 | Just Got Started Lovin' You                                | James Otto                      |
| 2009 | I Run to You   | Lady Antebellum                 |
| 2010 | Love Like Crazy  | Lee Brice                       |

## Results

Overall, in more difficult social and economic conditions, country singers had slightly smaller eye width, thinner cheeks, larger chin width, and larger chin area measurements (see Table 2, Figure 1, and Figure 2).

These relationship patterns held up when removing the few females artists (n=6), removing groups, lagging the statistics, and considering different time spans.

Table 2. Correlations between Country Artist Facial Feature Measurements and the GHTM.

|                | r     | p   |
|----------------|-------|-----|
| Eye Width      | -.173 | .08 |
| Eye Height     | -.039 | .38 |
| Eye Area       | -.073 | .28 |
| Cheek Thinness | .245  | .02 |
| Chin Width     | .202  | .05 |
| Chin Length    | .067  | .30 |
| Chin Area      | .216  | .04 |

Note. All tests are 1-tailed. N=65.

Figure 1. Country Artist Eye Width and GHTM Across Time.

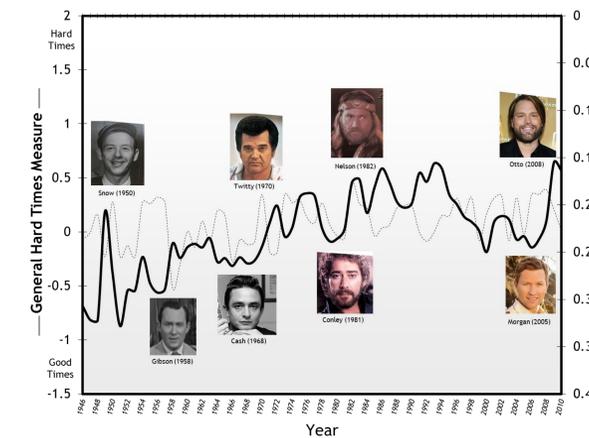


Figure 2. Country Artist Chin Area and GHTM Across Time.

