

RP Strauss  
BL Ramsey  
TC Edwards  
TD Topolski  
KA Kapp-Simon  
CR Thomas  
C Fenson  
DL Patrick

**Authors' affiliations:**

Ronald P. Strauss, Barry L. Ramsey, Carla Fenson, Department of Dental Ecology, University of North Carolina, Chapel Hill, NC, USA

Todd C. Edwards, Tari D. Topolski, Donald L. Patrick, Department of Health Services, University of Washington School of Public Health and Community Medicine, Seattle, WA, USA

Kathy A. Kapp-Simon, Department of Surgery, Northwestern University Feinberg School of Medicine, Westchester, IL, USA and Christopher R. Thomas, Department of Psychiatry and Behavioral Sciences, University of Texas Medical Branch Galveston, TX, USA

**Correspondence to:**

Ronald P. Strauss  
Department of Dental Ecology  
University of North Carolina at Chapel Hill  
CB #7450  
Chapel Hill  
NC 27599 7450, USA  
E-mail: ron\_strauss@unc.edu

\*The findings from this article were presented in-part by the first author at the annual meeting of the American Cleft Palate-Craniofacial Association, Myrtle Beach, South Carolina, April 2005 and in-part at the COAST Symposium, September 9, 2006.

**Dates:**

Accepted 30 January 2007

**To cite this article:**

Strauss RP, Ramsey BL, Edwards TC, Topolski TD, Kapp-Simon KA, Thomas CR, Fenson C, Patrick DL: Stigma experiences in youth with facial differences: a multi-site study of adolescents and their mothers *Orthod Craniofac Res* 10, 2007; 96–103

Copyright © 2007 The Authors.

Journal compilation © 2007 Blackwell Munksgaard

# Stigma experiences in youth with facial differences: a multi-site study of adolescents and their mothers\*

**Structured Abstract**

**Authors** – Strauss RP, Ramsey BL, Edwards TC, Topolski TD, Kapp-Simon KA, Thomas CR, Fenson C, Patrick DL

**Objectives** – To describe stigma experiences of adolescents with congenital and acquired facial differences.

**Design** – Used baseline cross-sectional stigma-related responses from a four site (Seattle WA, Galveston TX, Chicago IL and Chapel Hill NC) US study enrolling 185 English speaking, US participants ages 11–18 years old with facial differences (60% male; 80% congenital conditions). Closed-ended, self-administered questions drawn from the Youth Quality of Life Instrument – Facial Differences Module (YQOL-FD) determined perceptions of stigmatization. Mothers (n = 153) were independently asked seven matching questions.

**Results** – Frequencies report combined responses of 'sometimes,' 'fairly often,' and 'very often.' Mother's responses are in parentheses.

- 35% (47%) noticed people staring at their face in the past week.
- 28% (43%) talked with others about how their face looks in the past month.
- 29% (31%) heard others say something about their face in the past month.
- 32% (32%) told peers about their facial difference in the past month.
- 12% (12%) felt left out of doing things with peers because of how their face looks in the past month.
- 11% (8%) got into a fight because of how their face looks in the past month.
- 20% (18%) were teased about how their face looks in the past month.

**Conclusions** – Stigma experiences were frequently reported by youth with facial differences and were correlated with independent parental report. This level of stigma suggests that media and public health interventions may be warranted to reduce discrimination, prejudice and negative adolescent social experiences related to facial difference.

**Key words:** adolescents; appearance; craniofacial; parents; social; stigma

## Introduction

This paper examines stigma experience reported by adolescents with facial differences and their mothers. The expression of stigma experiences

in this study were specifically related to facial difference, and thus comparisons cannot, and are not, made to unaffected control or comparison groups. This study seeks to profile the prevalence of stigma experiences associated with facial difference among youth and to determine whether mothers share the perceptions of their affected child.

Adolescence is a life stage in which self-awareness is strongly affected by peer feedback and social interaction. Appearance influences adolescent social life and stigmatization; teasing or bullying may be deeply damaging at this stage (1–13). This is also a developmental period in which social and media norms – film, magazine, TV, and advertising, frame self and peer expectations.

The appearance of the face, head, and oral area are immediately observable by others (14–16). Facial differences are quickly perceived in social discourse. There is much research to indicate that facial attractiveness has an important effect on psychological development and social relationships (5, 17–26).

While youth who do not have an apparent facial difference may experience stigma, especially associated with teasing, facial difference elicits special vulnerability for stigmatization. Unusual facial appearance has been associated with negative life experiences (27). Research indicates that appearance and facial difference affect quality of life, social experience, school performance, dating, employment success, and occupational attainment (27–37). It has been noted that many adults with facial difference thrive and achieve a high quality of life in spite of their stigma experiences (38).

Persons who have birth conditions that result in altered appearance or speech disabilities often report that their social experiences and roles are impacted by their appearance (39–48). Being visibly different implies being perceived by others as less than complete, or as disabled, limited, or otherwise reduced. The bodily signs of being different, known as stigma, carry a moral evaluation, usually a negative one. Goffman's (27) classic work *Stigma* provided a theory of stigmatization useful in understanding the social responses to human difference and health conditions. Goffman described how first impressions on meeting strangers, are based on observations of attributes like facial appearance that are 'transformed into normative expectations' and then into firmly held roles and responsibilities. Thus,

individuals with a facial difference may suffer from stigmatization, either enacted or perceived.

Enacted stigma occurs when the individual directly experiences the damaging effects of stigma, such as discrimination, rejection, or physical abuse. It implies that others have treated an affected individual in a negative manner; the source of the negativity being from outside the person being stigmatized. Family members and persons working with those affected may also experience enacted stigma, sometimes termed courtesy stigma. The other form of stigmatization involves a process of self-discounting; perceived (or felt) stigma entails reduced self-perception. Perceived stigma often is the internalization of enacted stigma experiences. Examples may make this distinction apparent. A child who is teased about her face at school has experienced enacted stigma, whereas a child who feels unable to engage others in play all on his own, is experiencing perceived stigma. It is common that children who have negative enacted stigma experiences, will predictably internalize those and will manifest perceived stigma. Stigma may elicit shame and has the potential for eliciting severe social harm.

## Methods

The purpose of this exploratory study was to profile the enacted stigma experiences of adolescents with congenital and acquired facial differences and to compare adolescent perceptions of stigma experiences with maternal perceptions. Given the specific nature of the questions developed to ascertain stigma experiences relative to facial appearance, it is not possible to compare the findings of youth with facial difference to other, non-affected youth.

The study employed self-administered questionnaires comprised of pre-tested closed ended questions administered to a cross sectional convenience sample at four sites. The questions used were drawn from a larger study of quality of life among youth with facial difference and methods, validity and reliability characteristics are described in detail in other publications (2, 7, 12, 49, 50). The Seattle Quality of Life Group (Seaqol Group) applied state-of-the-art development and analytic techniques to create a Quality of Life outcome module specific to facial differences for use in observational research, clinical trials, other

intervention studies, and in clinical care (50). A large pool of perceptual items ( $n = 845$ ) were initially evaluated to create a measure of aspects of quality of life known to the adolescent respondent. Through investigator judgment, this pool was reduced to 125 items which were presented to adolescents and professional experts for further evaluation. Finally, 30 perceptual items were retained and classified into five domains: negative consequences, negative self-image, stigma, positive consequences, and coping. The current study uses seven stigma items from the YQOL Facial Differences (YQOL-FD) module. This module was constructed to augment the generic Youth Quality of Life Instrument (YQOL) developed by Patrick and colleagues (2, 7) for use with youth ages 11–18 years. Methodology, scale construction, validity, and reliability are presented by Patrick *et al.* (51). The individual stigma experience questions were not developed to create a stigma scale and are not reported as a scale score. Univariate analyses are used.

## Sample

This multi-site observational study was conducted by investigators at the University of Washington (Seattle), University of North Carolina (Chapel Hill), Northwestern University (Chicago), and the University of Texas Medical Branch at Galveston. The sites partnered with Shriner's Hospitals in Chicago and Galveston, Children's Hospital and Regional Medical Center in Seattle, the UNC Craniofacial Center at the University of North Carolina at Chapel Hill.

The recruitment goal was 185 youth and eligibility for participation in the study included having a visibly noticeable facial difference, the ability to speak and read English at the fifth grade level, and at least 2 years post-trauma for youth with acquired conditions. Youth were excluded if their primary caregiver indicated that they had a co-morbid mental or physical condition that had a greater impact on their life than their facial difference. All participants gave consent/assent to be in the study and all procedures were approved by the Institutional Review Board at each of the respective sites.

Participants were recruited through a treatment center (craniofacial or burn center) and clinicians identified potential participants who had an apparent facial difference and met the age requirement of the

study. Project staff approached potential participants and their parents to elicit consent. This sample should be considered a convenience/clinic sample; population sampling was not employed. Data were collected as part of a self-administered questionnaire.

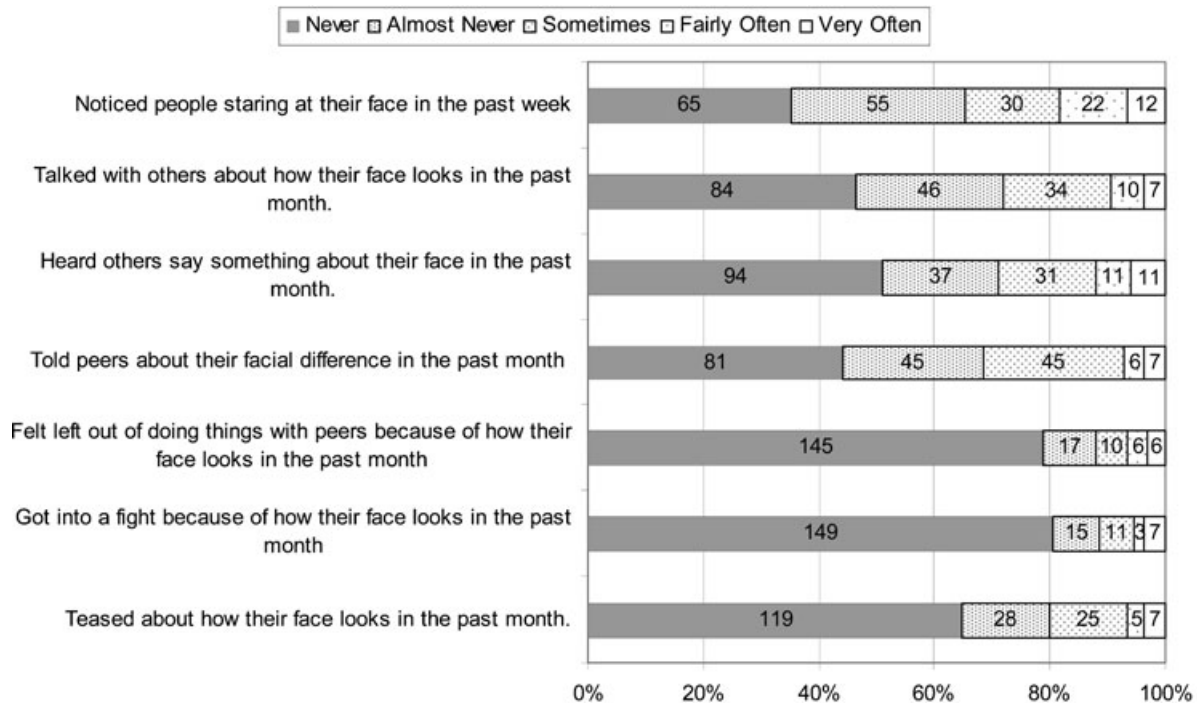
The sample ( $n = 185$ ) was 60% male, English speaking, and age 11–18 years. All had facial differences, however 80% had congenital conditions. The adolescents were purposely recruited to represent a broad range of craniofacial conditions including: acquired conditions (burns, other trauma); and congenital conditions including: birth marks, brachial arch disorders, isolated or syndromic craniosynostosis, cleft lip, cleft palate, or both. Diagnosis was provided by the referring physician or dentist. The main objective of this sampling approach was to articulate a diverse set of perspectives regarding adolescents with facial difference, rather than to obtain a representative sample *per se*. Mothers ( $n = 152$ ) were enrolled and independently were asked seven questions about their impressions of their child's stigma experiences (not necessarily directly observed). Maternal queries were modifications of the questions posed to their child.

## Results

Responses to the stigma experience items were on a 5-point scale ranging from 'very often' to 'not at all.' Fig. 1 displays the frequency distribution of the adolescent responses to the stigma experience items. Given the frequency distribution of responses on the 5-point scale, the investigatory team decided to combine 'sometimes, fairly often, and very often' as indicative of ever experiencing stigma on Tables 1 and 2. For example, 35% ( $n = 64$ ) of youth responded 'sometimes,' 'fairly often,' or 'very often' when asked 'Have you noticed people staring at your face in the past week?'

Among the study youth (in the past month), 28% talked with others about how their face looks, 29% heard others say something about their face; 32% told peers about their facial difference, and 12% felt left out of doing things with peers because of how their face looks. Furthermore in the past month, 11% got into a fight because of how their face looks, and 20% were teased about how their face looks.

Table 1 indicates that youth–mother agreement in the reporting of stigma experiences on an independent



#### YQOL-FD Wording of Stigma Queries:

Q1. During the past 7 days, how often did you notice other people staring at your face?

Q.2 During the past 4 weeks, how often did you talk with someone about how your face looks?

Q. 3 During the past 4 weeks, how often did you hear other people say something about how your face looks?

Q. 4 During the past 4 weeks, how often did you tell other people the same age as you about your facial difference?

Q. 5 During the past 4 weeks, how often were you left out from doing things that other people your age were doing because of how your face looks?

Q. 6 During the past 4 weeks, how often did you get into a fight with anyone because of how your face looks?

Q. 7 During the past 4 weeks, how often were you teased about how your face looks?

Fig. 1. Frequency distribution – adolescent responses.

basis was significant, though not necessarily high. For example there is a 0.36 correlation of mother and youth responses to the question regarding noticing people staring at your face in the past week, which resulted in a  $p$ -value  $< 0.01$ . Thus, there is significant agreement between youth and mother ratings on this question.

The highest agreement ( $p < 0.001$ ) between youths and mothers occurred in measuring teasing about how the face looks and in hearing others say something about the face. Moderate agreement ( $p < 0.01$ ) was noted in noticing people staring at the face in the past week and in how often the youth talked with others about how their face looks. In general, youths and mothers revealed a significant level of agreement about the youth's experience of stigma on all variables.

Table 2 displays differences in male–female, and congenital-acquired condition ratings of stigma experiences.  $p$ -values were calculated associated with a  $z$ -score for difference in proportions tests. The tests are indicative of whether there is significant difference between stigma experience item responses in the two sub-groups being compared.

On all stigma experience variables, females report more stigma than do males. In the past week, fewer males than females noticed people staring at their face. Females were more than twice as likely as males to talk with others about how their face looks in the past month. Similarly, in the past month more than twice as many females than males heard others say something about their face or felt left out of doing things with

**Table 1. Do youth and mother agree? – correlations between youth and mother responses on stigma experience items**

Question	Youth (185)	Mother (152)	Mother/ youth correlations	<i>p</i> -value	<i>r</i> <sup>2</sup> variation shared in common
Noticed people staring at their face in the past week	35%	47%	0.36	<0.01**	0.13
Talked with others about how their face looks in the past month.	28%	43%	0.22	<0.01**	0.05
Heard others say something about their face in the past month.	29%	31%	0.35	<0.001***	0.12
Told peers about their facial difference in the past month	32%	32%	0.17	<0.05*	0.03
Felt left out of doing things with peers because of how their face looks in the past month.	12%	12%	0.20	<0.05*	0.04
Got into fights because of how their face looks in the past month	11%	8%	0.16	<0.05*	0.03
Teased about how their face looks in the past month.	20%	18%	0.45	<0.001***	0.20

Percent responding 'sometimes, fairly often and very often'

*p* values associated with significance of agreement.

ns, Not significant.

\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.**Table 2. Differences in stigma experience between males and females and between youth with congenital and with acquired conditions**

Question	Gender (n = 184)			Type of Condition (n = 185)		
	Male (110)	Female (74)	<i>p</i> -value	Congenital (149)	Acquired (36)	<i>p</i> -value
Noticed people staring at their face in the past week	26%	49%	<0.01**	29%	60%	<0.001**
Talked with others about how their face looks in the past month	19%	42%	<0.001***	25%	42%	<0.05*
Heard others say something about their face in the past month	19%	43%	<0.001***	27%	37%	> 0.05 ns
Told peers about their facial difference in the past month	29%	35%	> 0.05 ns	30%	37%	> 0.05 ns
Felt left out of doing things with peers because of how their face looks in the past month	6%	20%	<0.01**	10%	20%	> 0.05 ns
Got into fights because of how their face looks in the past month	7%	18%	<0.05*	11%	11%	> 0.05 ns
Teased about how their face looks in the past month	15%	28%	<0.05*	20%	22%	> 0.05 ns

Percent responding 'sometimes, fairly often and very often.'

*p* values associated with z-score for difference in proportions test—measure significant difference.

ns, Not significant.

\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.

peers because of how their face looks. In the past month, 7% of males and 18% of females got into fights because of how their face looks and 15% of males and 28% of females were teased about how their face looks. In summary, males report less stigma experiences than females on seven out of eight indicators.

As shown in Table 2, a few significant differences were noted when persons with congenital and acquired facial differences were compared. Of the seven variables studied, five did not demonstrate significant differences between stigma experiences among those with congenital and acquired facial differences.

Twenty-nine percent of persons with congenital conditions and 60% of persons with acquired conditions noticed people staring at their face in the past week. This resulted in a significant difference (*p* < 0.001) between those with congenital and those with acquired conditions. Twenty-five percent of persons with congenital conditions and 42% of persons with acquired conditions reported talking with others about how their face looks in the past month (*p* < 0.05). The ability to demonstrate significant differences between congenital and acquired conditions may be related to the small sample size of acquired facial differences (n = 36).

## Discussion

This study, which is both limited and strengthened by being based on self-report, gives many clues as to how extensively adolescents with facial differences experience enacted stigma. It can be argued that stigma experiences tend to be under-reported and that the findings of this study represent an under-estimate of the occurrence of stigma. The hurtful nature of stigmatization and the social desirability of appearing positive may combine to produce a low level of self-reported stigma experience. It is striking then that enacted stigma experiences were reported by so many youth with facial differences and were often in agreement with independent parental report. The absence of a control or comparison group was determined by the specific nature of the stigma experience questions used which queried only about facial difference. Thus, no statements can be made about how much stigma affects non-facially different youth nor can youth with facial difference be demonstrated in this study to differ from unaffected youth.

The finding that mothers report very similar rates of stigma experiences as do youth, suggests agreement and validity to youth reports. It would seem likely that mothers and youths are exchanging information about stigma experiences, however this cannot be directly assessed with this data. Limitations to this study include the variation in the severity of facial differences within the sample. No attempt was made to adjust for the degree of severity, however this would be interesting to undertake in future studies. Additionally, future studies might examine the impact of stigma experiences on quality of life.

The finding that males were generally less likely than females to report stigma experiences raises questions about why this might occur. Do males receive fewer insults or have fewer comments or reactions to their appearance as compared with females? Do males just recall fewer incidents than females? There is some evidence to suggest the latter. In their meta-analysis examining the effects of facial attractiveness, Langlois *et al.* (20) found that children judged less attractive experienced more negative and fewer positive interactions than attractive children regardless of gender. Studies included in the meta-analysis were not self-reported; however, the findings indicated that gender did not play a role in how attractive or unattractive

children were treated. Thus while males may have just as many negative social experiences related to their appearance as females, males may be less likely to acknowledge stigma experiences than females. This question cannot be answered in this study, but gender differences have been noted in other self-reports of emotional experiences related to appearance and social acceptance (52). Wiechman *et al.* (53) found increased depression among burn survivors was associated to gender (female) and degree of facial disfigurement.

Although few differences were noted between those with acquired and congenital conditions, one might consider that their life experiences differ in many ways. Persons with congenital facial differences have had all their lives to adapt and cope with their difference and never knew themselves as unaffected. However, youths with acquired facial differences have had to adapt to a change from what was at one time normative appearance. The age of onset for a facial difference may be worth exploring as a factor in adaptation as the skills and abilities available to cope as well as the impact of disfigurement may vary with developmental stage.

The high degree of reported stigma experience among adolescents with facial differences makes it worthwhile to consider when appearance becomes important as a life determinant. Studies show that by early school age, children make judgments about physical attractiveness in peers which bear resemblance to adult perspectives (29). This is when being attractive becomes a social 'good' and when children begin to differentiate based upon appearance; it is when stigma becomes enacted by peers.

The message that people with facial differences receive is that when appearance changes, so do other personal attributes and aspects of social life, including stigma. Thus, they are routinely encouraged to erase facial difference, to correct, to operate, to conceal or to change – but not to accept or celebrate difference. The medical impetus to normalization is forceful and fulfills a mission which is to change, alter, sanitize and clean up difference. It is worth considering what society loses when we seek to hide or erase difference.

For clinicians some simple steps may help in responding to potential stigmatization among patients. First, the clinician should be alert and recognize stigma in both the clinical setting and the community and be aware of the impacts of long-term stigma. It is helpful

to give a family or patient an opportunity to talk about stigma experiences or to ask about teasing or bullying. It is important to identify the threshold when teasing becomes a damaging burden and to intervene with counseling or peer support. It is helpful to understand when patients want no further surgical or medical intervention and are ready to live with the face they currently have. Finally, clinicians can help reframe social values if they are willing to have a conversation with employers, schools, and insurers about enacted stigma and discrimination.

On a broad societal level, it is imperative to consider how public media could be used to re-build norms and expectations. How could new images of beauty or of success be promoted? Could facial differences be reframed as unique or interesting? Could advertising, film and theatre be a medium for creating norms of understanding and honoring difference? Can this be done without romanticizing those with a facial difference and without making them into super-heroes? Moving beyond stigma will promote positive, healthy and diverse contexts, within which acceptance and resilience are both enacted and felt by persons with facial differences. New research paradigms have emerged which focus on resilient responses, social policy, and quality of life in persons with facial difference (38, 44, 49, 54–61).

In this study, stigma experiences were found in as many as 35% of youth with a facial difference and youth reports were generally concordant with independent maternal reports. This level of stigma suggests that public health interventions may be warranted to reduce discrimination, prejudice, and negative adolescent social experiences related to facial differences.

**Acknowledgement:** This work was supported by grant RO1 DE13546 from the National Institute of Dental and Craniofacial Research.

## References

- Canady JW. Emotional effects of plastic surgery on the adolescent with a cleft. *Cleft Palate Craniofac J* 1995;32:120–4.
- Edwards TC, Huebner CE, Connell FA, Patrick DL. Adolescent quality of life, part I: Conceptual and measurement model. *J Adolesc* 2002;25:275–86.
- Heller A, Tidmarsh W, Pless IB. The psychosocial functioning of young adults born with cleft lip or palate: A follow-up study. *Clin Pediatr* 1981;20:459–65.
- Kapp-Simon KA, McGuire DE. Observed social interaction patterns in adolescents with and without craniofacial conditions. *Cleft Palate Craniofac J* 1997;34:380–4.
- Kapp-Simon KA, Simon DJ, Kristovich S. Self-perception, social skills, adjustment, and inhibition in young adolescents with craniofacial anomalies. *Cleft Palate Craniofac J* 1992;29:352–6.
- McQuaid D, Barton J, Campbell EA. Body image issues for children and adolescents with burns. *J Burn Care Rehabil* 2000;21:194–8.
- Patrick DL, Edwards TC, Topolski TD. Adolescent quality of life, part II: Initial validation of a new instrument. *J Adolesc* 2002;25:287–300.
- Pope AW, Ward J. Factors associated with peer social competence in preadolescents with craniofacial anomalies. *J Pediatr Psychol* 1997;22:455–69.
- Richman LC. Self-reported social, speech, and facial concerns and personality adjustment of adolescents with cleft lip and palate. *Cleft Palate J* 1983;20:108–12.
- Richman LC, Holmes CS, Eliason MJ. Adolescents with cleft lip and palate: self-perceptions of appearance and behavior related to personality adjustment. *Cleft Palate J* 1985;22:93–96.
- Strauss RP, Broder H, Helms RW. Perceptions of appearance and speech in adolescent patients with cleft lip and palate and by their parents. *Cleft Palate J* 1988;25:335–42.
- Topolski TD, Patrick DL, Edwards TC, Huebner CE, Connell FA, Mount KK. Quality of life and health-risk behaviors among adolescents. *J Adolesc Health* 2001;29:426–35.
- Verhulst FC, van der Ende J. Agreement between parents' reports and adolescents' self-reports of problem behavior. *J Child Psychol Psychiatry* 1992;33:1011–23.
- Harper DC. Children's attitudes to physical differences among youth from western and non-western cultures. *Cleft Palate Craniofac J* 1995;32:114–9.
- Okkerse JM, Beemer FA, Cordia-de Haan M, Heineman-de Boer JA, Mellenbergh GJ, Wolters WH. Facial attractiveness and facial impairment ratings in children with craniofacial malformations. *Cleft Palate Craniofac J* 2001;38:386–92.
- Reed J, Robathan M, Hockenhull A, Rostill H, Perrett D, Lees A. Children's attitudes toward interacting with peers with different craniofacial anomalies. *Cleft Palate Craniofac J* 1999;36:441–7.
- Broder HL. Psychological research of children with craniofacial anomalies: review, critique, and implications for the future. *Cleft Palate-Craniofac J* 1997;34:402–4.
- Eiserman W. Unique outcomes and positive contributions associated with facial difference: expanding research and practice. *Cleft Palate Craniofac J* 2001;38:236–44.
- Millard T, Richman LC. Different cleft conditions, facial appearance, and speech: Relationship to psychological variables. *Cleft Palate Craniofac J* 2001;38:68–75.
- Langlois JH, Kalakanis L, Rubenstein AJ, Larson A, Hallam M, Smoot M. Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological Bulletin* 2000;126:390–423.
- Partridge J. *Changing Faces: The Challenge of Facial Disfigurement*, 3rd edn. London: Changing faces; 1997.
- Patterson DR, Everett JJ, Bombardier CH, Questad KA, Lee VK, Marvin JA. Psychological effects of severe burn injuries. *Psychol Bull* 1993;113:362–78.
- Sarimski K. Social adjustment of children with a severe craniofacial anomaly (Apert syndrome). *Child Care Health Dev* 2001;27:583–90.

24. Thomas PT, Turner SR, Rumsey N, Dowell T, Sandy JR. Satisfaction with facial appearance among subjects affected by a cleft. *Cleft Palate Craniofac J* 1997;34:226–31.
25. Locker D, Jokovic A, Tompson B. Health-related quality of life of children aged 11 to 14 years with orofacial conditions. *Cleft Palate Craniofac J* 2005;42:260–6.
26. Kapp-Simon KA. Psychosocial effects of craniofacial conditions. In: Sarwer D, Pruzinsky T, Cash T, Goldwyn R, Persing J, Whitaker L, editors. *Medical, Psychological, and Sociocultural Perspectives on Plastic Surgery*. Philadelphia: Lippincott, Williams, & Wilkins; 2005, p 63–82.
27. Goffman E. *Stigma-Notes on the Management of Spoiled Identity*. New Jersey: Prentice-Hall, Inc.; 1963. pp. 2–3, 43–51.
28. Kapp-Simon K. Self-concept of primary-school-age children with cleft lip, cleft palate, or both. *Cleft Palate Journal* 1986;23:24–7.
29. Bull R, Rumsey N. *The Social Psychology of Facial Appearance*. New York: Springer-Verlag; 1988.
30. Blakeney P. School reintegration. In: Tarnowski KJ, editors. *Behavioral Aspects of Pediatric Burns*. New York: Plenum Press; 1994, p 217–242.
31. Broder HL, Richman LC, Matheson PB. Learning disability, school achievement, and grade retention among children with cleft: a two-center study. *Cleft Palate Craniofac J* 1998;35:127–31.
32. Kelton RW. Facing up to stigma: workplace and personal strategies. *Cleft Palate-Craniofac J* 2001;38:245–7.
33. Richman LC, Millard T. Brief report: cleft lip and palate: longitudinal behavior and relationships of cleft conditions to behavior and achievement. *J Pediatr Psychol* 1997;22:487–94.
34. Richman LC, Harper DC. School adjustment of children with observable disabilities. *J Abnorm Child Psychol* 1978;6:11–8.
35. Speltz ML, Morton K, Goodell EW, Clarren SK. Psychological functioning of children with craniofacial anomalies and their mothers: follow-up from late infancy to school entry. *Cleft Palate Craniofac J* 1993;30:482–9.
36. Tobiasen JM., Levy J, Carpenter MA, Hiebert JM. Type of facial cleft, associated congenital malformations, and parents' ratings of school and conduct problems. *Cleft Palate J* 1987;24:209–15.
37. Jokovic A, Locker D, Stephens M, Kenny D, Tompson B, Guyatt G. Validity and reliability of a questionnaire for measuring child oral-health-related quality of life. *Journal of Dental Research* 2002;81:459–63.
38. Strauss RP. 'Only skin deep': health, resilience, and craniofacial care. *Cleft Palate Craniofac J* 2001;38:226–30.
39. Berk NW, Cooper ME, Liu Y, Marazita ML. Social anxiety in Chinese adults with oral-facial clefts. *Cleft Palate-Craniofac J* 2001;38:126–33.
40. Endriga MC, Kapp-Simon KA. Psychological issues in craniofacial care: state of the art. *Cleft Palate Craniofac J* 1999;36:3–11.
41. Lansdown R, Rumsey N, Bradbury E, Carr T, Partridge J. *Visibly Different: Coping with Disfigurement*. Oxford, UK: Butterworth-Heinemann; 1997.
42. Leonard BJ, Boust JD, Abrahams G, Sielaff B. Self-concept of children with cleft lip and/or palate. *Cleft Palate Craniofac J* 1991;28:347–53.
43. Marcusson A, Akerlind I, Paulin G. Quality of life in adults with repaired complete cleft lip and palate. *Cleft Palate Craniofac J* 2001;38:379–85.
44. Broder HL. Using psychological assessment and therapeutic strategies to enhance well-being. *Cleft Palate Craniofac J* 2001;38:248–54.
45. Broder H, Strauss RP. Self-concept of early primary school age children with visible or invisible defects. *Cleft Palate Journal* 1989;26:114–7; discussion 117–118.
46. Pope AW, Snyder HT. Psychosocial adjustment in children and adolescents with a craniofacial anomaly: Age and sex patterns. *Cleft Palate Craniofac J* 2005;42:349–54.
47. Slifer KJ, Amari A, Diver T, Hilley L, Beck M, Kane A et al.. Social interaction patterns of children and adolescents with and without oral clefts during a videotaped analogue social encounter. *Cleft Palate Craniofac J* 2004;44:175–84.
48. Turner SR, Thomas PWN, Dowell T, Rumsey N, Sandy JR. Psychological outcomes amongst cleft patients and their families. *Br J Plast Surg* 1997;50:1–9.
49. Patrick DL, Huebner CE, Connell FA, Edwards TC. *The Youth Quality of Life Scale (YQOL)*. Seattle, WA: Center for Disability Policy and Research, University of Washington; 1997.
50. Edwards TC, Patrick DL, Topolski TD, Aspinall CL, Mouradian WE, Speltz ML. Approaches to craniofacial-specific quality of life assessment in adolescents. *Cleft Palate Craniofac J* 2005;42:19–24.
51. Patrick DL, Topolski TD, Edwards TC, Aspinall CL, Kapp-Simon KA, Rumsey NJ et al.. Measuring the Quality of Life of Youth with Facial Differences. *Cleft Palate-Craniofacial J*. 2006;in press.
52. Kapp K. Self-concept of the cleft lip and/or palate child. *Cleft Palate J* 1979;16:171–6.
53. Wiechman SA, Ptacek JT, Patterson DR, Gibran NS, Engrav LE, Heimbach DM. Rates, trends and severity of depression after burn injuries. *J Burn Care Rehabil* 2001;22:417–24.
54. Emmons RA, McCullough ME. Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *J Pers Soc Psychol* 2003;84:377–89.
55. Matthews MS. Beyond easy answers: The plastic surgeon and prenatal diagnosis. *Cleft Palate Craniofac J* 2002;39:179–82.
56. Meyerson MD. Resiliency and success in adults with Moebius syndrome. *Cleft Palate Craniofac J* 2001;38:231–5.
57. Patrick DL, Erickson P. *Health status and health policy*. New York: Oxford University Press; 1993.
58. Patrick DL. Rethinking prevention for people with disabilities. Part I: A conceptual model for promoting health. *American J Health Promot* 1997;11:257–60.
59. Patrick DL, Peach H (Eds). *Disablement in the Community: A Sociomedical Press Perspective*. Oxford, UK: Oxford University Press; 1989.
60. Simeoni MC, Sapin C, Antoniotti S, Auquier P. Health-related quality of life reported by French adolescents: a predictive approach of health status? *J Adolesc Health* 2001;28:288–94.
61. Topolski TD, Edwards TC, Patrick DL. Quality of life: how do adolescents with facial differences compare with other adolescents? *Cleft Palate-Craniofacial J* 2005;42:25–32.



Copyright of *Orthodontics & Craniofacial Research* is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.