Why Gender Stereotypes Are Bad for Adolescent Health

New Research Insights to Improve Programs and Care for Teens

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Presentation Overview

• Introduction
  – Sex vs. gender, gender expression
  – “Masculinity,” “femininity” historically labile

• Growing Up Today Study findings
  – Childhood gender expression & health
  – Possible pathways to explain findings

• Implications for adolescent health
Definitions: *Sex* vs. *Gender*

- **Sex:**
  - Biological differences that characterize females vs. males

- **Gender:**
  - Socially created differences that characterize girls vs. boys, women vs. men

-Doyal *BMJ* (2001)
Definitions:

**Gender Identity & Gender Minority**

- **Gender identity:**
  - Internal sense of self as woman, man, transgender, or another diverse gender identity
    - Egan & Perry *Dev Psychol* (2001)

- **Gender minority:**
  - Transgender or “gender queer” people whose sex assigned at birth differs from gender identity
    - U.S. Institute of Medicine (2011)
Definition: *Gender Expression*

"Gender expression denotes the manifestation of characteristics in one’s personality, appearance, and behavior that are culturally defined as masculine or feminine."

-U.S. Institute of Medicine (2011)
Gender Expression on a Spectrum

- Can be measured
  - May change in individuals over time, in different contexts

- “Masculine” & “feminine” historically labile
From Taboo to Ordinary...

Gladys Bentley
Jazz Singer, ca. 1937

Katherine Hepburn
Actress, ca. 1930s
...And From Ordinary to Taboo
In not too distant past in United States, boys in dresses...
...and pink were the norm...

Table 5.1. Color Preferences for Infants’ Clothing in Major U.S. Cities, 1927

<table>
<thead>
<tr>
<th>STORE</th>
<th>BOYS</th>
<th>GIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filene’s (Boston)</td>
<td>Pink</td>
<td>Blue</td>
</tr>
<tr>
<td>Best’s (Manhattan)</td>
<td>Pink</td>
<td>Blue</td>
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<tr>
<td>Macy’s (Manhattan)</td>
<td>Blue</td>
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<tr>
<td>Franklin Simon (Manhattan)</td>
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<tr>
<td>Wanamaker’s (Philadelphia)</td>
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<td>Halle’s (Cleveland)</td>
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<td>Marshall Field’s (Chicago)</td>
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<tr>
<td>Maison Blanche (New Orleans)</td>
<td>Pink</td>
<td>Blue</td>
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<tr>
<td>The White House (San Francisco)</td>
<td>Pink</td>
<td>Blue</td>
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<tr>
<td>Bullock’s (Los Angeles)</td>
<td>Blue</td>
<td>Pink</td>
</tr>
</tbody>
</table>

...but now, boy in *pink dress* seen as shocking, shameful

- *New York Times Magazine*
  August 2012
Research Questions

- What are consequences of stigma & shame associated with violating gender stereotypes?
Research Questions

• What are consequences of stigma & shame associated with violating gender stereotypes?

• What is the cost to adolescent health?
Gender Expression Research Team

Jerel Calzo, Brittany Charlton, Heather Corliss, Allegra Gordon, Sabra Katz-Wise, Grace Kennedy, Fei Li, Sari Reisner, Andrea Roberts, Margaret Rosario, Mihail Samnaliev, David Wypij, Najat Ziyadeh, and many others
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• Children of women in Nurses’ Health Study 2

• GUTS cohort includes:
  – 9039 girls, 7843 boys at baseline in 1996
  – Aged 9 to 14 years at enrollment; now young adults
  – 93% white race/ethnicity

• Ongoing cohort of 17,000 youth living across U.S.
Study Questionnaires

- Self-report questionnaires
  - Completed by mail, online
  - Data collection annual or biannual from 1996 to present
  - Focus today on health outcomes primarily at ~ ages 12-23 years
Study Questionnaires

• Surveys cover many health topics
  – Gender expression as child up to age 11 yrs
    • Also current gender expression in young adulthood
  – Sexual orientation
  – Many health indicators in adolescence
    • Also childhood victimization history
Childhood Gender Expression Measure

- Shortened version of Recalled Childhood Gender Identity/Gender Role Questionnaire (Zucker et al. 2006)

When I was a child (up to age 11 years):
- The **characters on TV** or in the movies I admired or imitated were:
- In **pretend play**, I took the role of:
- My **favorite games and toys** were:
- I **felt**:
  - Always girls or women/feminine
  - Usually girls or women
  - Girls or women and men or boys equally
  - Usually men or boys
  - Always men or boys/masculine
2000-2009

Dora the Explorer, Nickelodeon
2009-present

Dora the Explorer, Nickelodeon + Mattel
Childhood Gender Expression Score Used to Create Three Groups

Childhood Gender Expression Group:
- Conforming: Score < Median
- Moderately Nonconforming
- Top Decile Nonconforming
Childhood Gender Expression Score Used to Create Three Groups

Childhood Gender Expression Group:
- **Conforming**: Score < Median
- **Moderately Nonconforming**: Median ≤ Score < Top Decile
- **Top Decile Nonconforming**: Score ≥ Top Decile

Moderately Nonconforming: Median ≤ Score < Top Decile

Conforming: Score < Median
Childhood Gender Expression Score Used to Create Three Groups

Most Nonconforming: Score ≥ Top Decile

Moderately Nonconforming: Median ≤ Score < Top Decile

Conforming: Score < Median

Childhood Gender Expression Group:
- Conforming
- Moderately Nonconforming
- Top Decile Nonconforming
Current Gender Expression Measure

- “Socially assigned” gender expression
  - Self-report of how others perceive respondent in young adulthood (Wylie et al. 2010; Greytak et al., In prep)
  - Now included in CDC’s YRBS optional items

- Two questions
  - Assess appearance & mannerisms
  - 7 responses ranging from “very feminine” to “very masculine”
Self-Report, Repeated Measures of Health Outcomes

- Posttraumatic stress disorder (PTSD)
  - Assessed once at ages 18-23 years

- Depressive symptoms
  - High symptoms thru adolescence
Self-Report, Repeated Measures of Health Outcomes

- Cigarette use
  - Worst smoking trajectory thru adolescence

- Health-related quality of life (EQ-5D)
  - Example domain: Pain impairment
  - Assessed once in young adulthood
Self-Report, Repeated Measures of Health Outcomes

• Cigar use & chewing tobacco use
  – Any in past year thru adolescence

• Steroids/supplements to build muscle
  – Any in past year thru adolescence
Self-Report, Repeated Measures of Health Outcomes

- U.V. tanning bed use
  - Any in past year thru adolescence

- Physical inactivity
  - Less than 1 hr/week thru adolescence

- Laxative abuse for weight loss
  - Any in past year thru adolescence
Statistical Methods

• Multivariable regression
  – Generalized estimating equations accounted for repeated measures, clustering by family
  – Models controlled for confounding
  – Significance at $p<0.05$

• Primary predictor
  – Gender expression in childhood
    • Referent: Conforming group (score<$\text{median}$)

• Outcomes: Various health domains
Is Gender Nonconformity in Childhood Related to Adult Sexual Orientation?
Most Gender Nonconforming Children Describe Self as Heterosexual as Adults

Heterosexuals = 88% of conforming

Most Gender Nonconforming Children Describe Self as Heterosexual as Adults

Heterosexuals = 88% of conforming

Heterosexuals = 80% of moderately nonconforming

Roberts, Rosario, Corliss, Koenen, Austin *Pediatrics* (2012)
Most Gender Nonconforming Children Describe Self as Heterosexual as Adults

Roberts, Rosario, Corliss, Koenen, Austin *Pediatrics* (2012)
Is Gender Nonconformity in Childhood Associated With Health Outcomes?
Is Gender Nonconformity in Childhood Associated With Health Outcomes?

- PTSD?
- Depressive symptoms?
- Cigarette smoking?
- Pain impairment?
Elevated PTSD by Young Adulthood in Gender Nonconforming Children (n=9,489)

*P<0.001

Childhood Gender Expression Group:

- Conforming
- Moderate
- Top Decile

Roberts, Rosario, Corliss, Koenen, Austin  *Pediatrics* (2012)
Elevated Depressive Sx by Young Adulthood in Gender Nonconforming Children (n=9,355)

% With Probable Depression

Females

Males

Childhood Gender Expression Group:

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*P<0.001

Roberts, Rosario, Slopen, Calzo, Austin JAACAP (2013)
High Cigarette Use thru Adolescence in Gender Nonconforming Children (n=10,867)

% High Cigarette Use

*P<0.05
**P<0.001

Childhood Gender Expression Group:

- Conforming
- Moderate
- Top Decile

Roberts, Rosario, Calzo, Corliss, Frazier, Austin *J Adol Health* (2014)
Why Is Childhood Gender Nonconformity Linked With Adverse Outcomes?
Evidence for Stress Pathway?

Stressful Environment
Stigma, Intolerance of Gender Diversity

Childhood Gender Nonconformity

Adverse Outcomes
• PTSD
• Depression
• Cigarette Use
• Pain
Evidence for Stress Pathway?

Stressful Environment
Stigma, Intolerance of Gender Diversity

Stressors
Abuse, Bullying

Childhood Gender Nonconformity

Psychological, Physiological, Behavioral Stress Response

Adverse Outcomes
- PTSD
- Depression
- Cigarette Use
- Pain
Elevated Abuse by Age 11 Years in Gender Nonconforming Children (n=9,849)

* * P<0.05

Roberts, Rosario, Corliss, Koenen, Austin Pediatrics (2012)
Gender Nonconforming Children Bullied by Adults Outside Family (n=9,008)

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Roberts, Rosario, Slopen, Calzo, Austin *JAACAP* (2013)
Evidence for Stress Pathway?

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Support for Stress Pathway

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Adverse Outcomes
• PTSD
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• Pain
But Is Stress Pathway Whole Story?
But Is Stress Pathway Whole Story?

- What about effects of gender norms?
  - e.g., *Highly gendered* marketing of some health behaviors
Cigars, Chew, Hypermuscularity Marketed as “Masculine”
Tanning Beds Marketed as “Feminine”
Media Portrays Appearing “Feminine,” Thin as Priority Over Healthy Exercise

The Best Hairstyles for Your Workout!

Forget boring buns and messy ponys! Even if you’re planning to work up a serious sweat, you can still look as cute on the treadmill or playing sports as you do in class. The next time you hit the gym—or the field—try one of these easy, no-fuss hairstyles.
Cigar Smoking & Chew Tobacco Linked With **Conformity in Males** (n=3,425)

**Cigars**

- Conforming
- Moderate
- Top Decile

*P<0.05
**P<0.001

**Childhood Gender Expression Group:**

- Conforming
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Roberts, Rosario, Calzo, Corliss, Frazier, Austin *J Adol Health* (2014)
U.V. Tanning Bed Use Linked with Conformity in Females (n=6,010)

**P<0.001

Childhood Gender Expression Group:

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- Moderate
- Top Decile

Roberts, Rosario, Calzo, Corliss, Frazier, Austin *J Adol Health* (2014)
Physical Inactivity Also Linked with Conformity in Females (n=6,010)

*P<0.05

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Roberts, Rosario, Calzo, Corliss, Frazier, Austin J Adol Health (2014)
Support for Stress Pathway

Stressful Environment
Stigma, Intolerance of Gender Diversity

Stressors
Abuse, Bullying

Childhood Gender Nonconformity

Psychological, Physiological, Behavioral Stress Response

Adverse Outcomes
• PTSD
• Depression
• Cigarette Use
• Pain
Support for Socialization Pathway

- Childhood Gender CONformity
- Pressure to Be “Masculine”/“Feminine”
- Gender Socialization

Gendered Risks
- Cigars, Chew Tob, Steroids/Supps
- Tanning, Inactivity, Laxatives
Dual Pathway: Stress & Socialization

Stressful Environment
- Stigma, Intolerance of Gender Diversity

Childhood Gender Expression
- Nonconform
- Conform

Pressure to Be “Masculine”/“Feminine”

Gender Socialization

Stressors
- Abuse, Bullying

Psychological, Physiological, Behavioral Stress Response

Adverse Outcomes
- PTSD
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Gendered Risks
- Cigars, Chew Tob
- Steroids/Supps
- Tanning, Inactivity
- Laxatives
Summary of Key Findings
Gender Expression in Childhood

- Lesbian, gay, bisexual people more likely to be gender nonconforming in childhood
Gender Expression in Childhood

- Lesbian, gay, bisexual people more likely to be gender nonconforming in childhood
  - *But majority of gender nonconforming children are heterosexual in adulthood*
Stress Pathway

- Gender nonconforming children more likely to be abused, bullied
  - This abuse, bullying linked w/adverse health outcomes in adolescence, young adulthood
Gender nonconforming children more likely to be abused, bullied

- This abuse, bullying linked w/adverse health outcomes in adolescence, young adulthood
Stress Pathway

- Gender nonconforming children more likely to be abused, bullied
  - This abuse, bullying linked w/adverse health outcomes in adolescence, young adulthood
Gender Socialization Pathway

- However, some health behaviors heavily marketed as “masculine”/“feminine”
  - Gender conforming youth at elevated risk for other adverse health indicators
However, some health behaviors heavily marketed as “masculine”/“feminine”

Gender conforming youth at elevated risk for other adverse health indicators
Gender Socialization Pathway

• However, some health behaviors heavily marketed as “masculine”/“feminine”
  – Gender conforming youth at elevated risk for other adverse health indicators
Implications of Findings

- Evidence of dual pathway indicates:
  - Childhood gender nonconformity linked with some health risks, conformity with others
Implications of Findings

In other words...

...gender stereotypes, intolerance of gender diversity affect health of all youth across spectrum
What Can We Do?

- Within children’s hospitals and health programs for youth...
  - Are there ways that we may unwittingly reinforce narrow gender stereotypes?
What Can We Do?

- Within children’s hospitals and health programs for youth...
  - Are there ways that we may unwittingly reinforce narrow gender stereotypes?
  - What more can we do to show youth and families we value gender diversity?
What Can We Do?

- In research and program evaluations...
  - What are we assuming when we collect data on only binary sex or gender identity?
  - And what are we missing?
What Can We Do?

- In research and program evaluations...
  - How can we modify our studies to explore gender expression diversity?
    - Associations with exposures & outcomes?
    - Modifying effects on intervention programs?
What Can You Do?

- Think about the youth in your professional, civic, or even family life...
  
  What is one thing you can do for the youth in your life in the next month to create more space and respect for gender diversity across the whole spectrum?
Thank you