

## **UC Irvine**

### **UC Irvine Electronic Theses and Dissertations**

#### **Title**

The Social Complexities of Transgender Identity Disclosure on Social Media

#### **Permalink**

<https://escholarship.org/uc/item/19c235q0>

#### **Author**

Haimson, Oliver Lee

#### **Publication Date**

2018

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA,  
IRVINE

The Social Complexities of Transgender Identity Disclosure on Social Media

DISSERTATION

submitted in partial satisfaction of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

in Information and Computer Science

by

Oliver Lee Haimson

Dissertation Committee:  
Professor Gillian R. Hayes, Chair  
Professor Gloria Mark  
Associate Professor Andrea Forte  
Assistant Professor Bonnie Ruberg

2018



## DEDICATION

*To my family,*

*and to anyone who has been multiple while liminal.*

# TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b>	<b>iii</b>
<b>LIST OF FIGURES</b>	<b>vi</b>
<b>LIST OF TABLES</b>	<b>viii</b>
<b>ACKNOWLEDGMENTS</b>	<b>ix</b>
<b>CURRICULUM VITAE</b>	<b>xiii</b>
<b>ABSTRACT</b>	<b>xv</b>
<b>CHAPTER 1 Introduction</b>	<b>1</b>
Transgender	4
Identity disclosure	6
Social Media	8
Liminality	14
Findings and contribution	18
<b>CHAPTER 2 Related Work</b>	<b>20</b>
Identity and self-presentation	20
Identity and life transitions	24
Life transitions and disclosure on social media	27
Disclosure and support in online health communities	33
Gender transition as identity and life transition	38
Trans identities and experiences online	40
Transgender studies and HCI	46
Relationships between disclosure, health, and social support, in trans identity contexts and beyond	50
Research gap	55
<b>CHAPTER 3 Methods</b>	<b>57</b>
Research approach	57
Tumblr transition blogs data collection	58
Tumblr transition blogs data description	61
Tumblr transition blogs data analysis	62
Interviews data collection and participant description	72

Interviews data analysis	75
Limitations	76
Methods summary	78
<b>CHAPTER 4 Tumblr Transition Bloggers' Gender Transition Processes on Social Media</b>	<b>79</b>
Why people keep transition blogs	81
Perceptions of Tumblr as a space	93
How Tumblr transition blogs are different than Facebook	100
What the transition process is like	124
Trans identity disclosures are followed by increased emotional wellbeing.	131
Discussion	136
<b>CHAPTER 5 The Separation Stage: Disclosure to Family</b>	<b>139</b>
People often disclose to family members as one of their earliest transition activities.	141
Family disclosures are followed by decreased emotional wellbeing in the short term, but increased emotional wellbeing in the long term.	143
Support moderates the relationship between disclosure and emotional wellbeing, but only for non-family disclosures.	153
Discussion	157
<b>CHAPTER 6 The Transition Stage: Disclosure on Facebook</b>	<b>160</b>
Trans identity disclosure on Facebook is a pivotal transition moment.	163
Facebook disclosures with supportive responses are followed by increased emotional wellbeing.	167
Support from one's Facebook network	171
Discussion	178
<b>CHAPTER 7 The Incorporation Stage: What Happens Next</b>	<b>182</b>
For some, it gets better.	185
For others, it does not get better.	190
Complicating "better" or "worse:" Intersecting life transitions and identity facets	194
The incorporation stage involves moving away from trans as primary identity.	201
Trans identity is precarious even beyond the incorporation stage.	206
Discussion	208

<b>CHAPTER 8</b>	<b>Discussion: Social Media as Social Transition Machinery</b>	<b>212</b>
	Summary of results chapters	212
	Patterns in emotional wellbeing throughout gender transition over time	214
	Liminality, then and now	216
	Liminality and social media	219
	Pervasive liminality and non-binary gender identities	223
	Rites of passage and identity transformation	224
	Social media is social transition machinery for identity reconstruction as a rite of passage.	227
	Implications for design	231
	Conclusion	237
<b>APPENDIX A</b>	<b>Screenshots of Tumblr Interface</b>	<b>240</b>
<b>APPENDIX B</b>	<b>Methodological Detail</b>	<b>242</b>
	Topic modeling procedures and selection	242
	Dictionary-based approach to detecting trans identity disclosures	243
	Iterative approach to building training data set for machine learning model to detect trans identity disclosures	244
<b>APPENDIX C</b>	<b>Descriptive Statistics</b>	<b>245</b>
<b>GLOSSARY</b>	<b>of Trans-Related Terminology</b>	<b>247</b>
<b>REFERENCES</b>		<b>249</b>

## LIST OF FIGURES

<b>Figure</b>	<b>Page</b>
Figure 1.1. Example of trans identity disclosure post on Tumblr describing coming out to a friend.	6
Figure 1.2. Example of trans identity disclosure post on Tumblr describing coming out on Facebook.	7
Figure 1.3. Types of content users can post on Tumblr.	11
Figure 1.4. Tumblr interface for entering text content.	11
Figure 1.5. Van Gennepe's liminality framework.	15
Figure 3.1. Structure of regression models to examine relationships between trans identity disclosures, emotional wellbeing, and social support.	70
Figure 3.2 Example of emotional wellbeing over time plots used to choose interview participants.	73
Figure 3.3. Example of emotional wellbeing over time plots shown to interview participants.	74
Figure 4.1. Disclosure audience order on average.	128
Figure 4.2. Joselyn's Important Milestones.	130
Figure 4.3. Mapping trans identity disclosures to van Gennepe's stages of liminality.	137
Figure 5.1. Van Gennepe's liminality framework. This chapter focuses on the separation stage.	139
Figure 5.2. Graph showing how emotional wellbeing changes over time on average after trans identity disclosures.	147
Figure 5.3. Average negative and positive affect over time following trans identity disclosures.	150
Figure 6.1. Van Gennepe's liminality framework. This chapter focuses on the transition stage.	160



Figure 7.1. Van Gennep’s liminality framework. This chapter focuses on the incorporation stage.	182
Figure 8.1. Patterns in emotional wellbeing changes over time on average throughout the liminality stages.	215
Figure A.1. Types of user interactions (“notes”) associated with a post on Tumblr: likes, replies, and reblogs.	240
Figure A.2. Tumblr blog description free-form text entry.	241
Figure A.3. Tumblr interface for switching between two blogs maintained by the same user.	241

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
Table 3.1. Number of posts of each post type in dataset.	61
Table 4.1. Blogging motivations.	81
Table 4.2. Interviewees' perceptions of Tumblr as a space.	94
Table 4.3. Content types interviewees described posting on Tumblr and Facebook.	101
Table 4.4. Interviewees' described networks / audiences on Tumblr and Facebook (excluding outliers).	107
Table 4.5: Disclosure audience order on average.	129
Table 4.6. Description of models included in Table 4.7.	131
Table 4.7. Robust linear regression models showing average negative and positive emotional affect in time period following posts.	133
Table 5.1. Description of models included in Table 5.2.	143
Table 5.2. Robust linear regression models showing average negative and positive emotional affect in time period following posts.	145
Table 6.1. Description of models included in Table 6.2.	168
Table 6.2. Robust linear regression models showing average negative and positive emotional affect in time period following posts.	170
Table 8.1. Emotional wellbeing changes over time on average after trans identity disclosures.	214
Table C.1. Descriptive statistics of variables included in regression models.	245
Table C.2. Number of posts for each trans identity disclosure audience.	246
Table C.3. Number of posts per year.	246
Table C.4. Gender statistics.	246

## ACKNOWLEDGMENTS

First, thank you Gillian Hayes for your mentorship, unwavering support, and guidance throughout the years. I could not have asked for a better advisor. Thank you for giving me the freedom to take my research ideas and run with them, for always making it clear that this line of research is valuable, and for being there to listen to my ideas and help me figure out how to weave them into coherent papers.

Thank you to my committee members for your thoughtful feedback and support: Andrea Forte, who has often acted as a second advisor to me, has generously included me in her research group meetings over the years, and who helped me through the most anxious times of dissertation writing and job hunting. Gloria Mark, who has always simultaneously supported and challenged me, enabling me to grow so much as a researcher over the years. Bonnie Ruberg, who has brought new insight to my dissertation work and challenged me to articulate the stakes of my work.

I have also had the opportunity to work with or learn from many other brilliant faculty and industry researchers over the years, all of whom have shaped my research career in indelible ways and to whom I owe thanks. Thank you, Geof Bowker, Melissa Mazmanian, Tom Boellstorff, Paul Dourish, and Martha Feldman at UC Irvine, and Munmun De Choudhury and Amy Bruckman at Georgia Tech. Thank you to my intern mentors, Elizabeth Churchill at Google (formerly at eBay Research Labs), whom I credit for teaching me much of what I know about qualitative methods, John Tang at Microsoft Research, and Polo Chau and Bistra Dilkina at Georgia Tech. Thank you to the faculty I was able to learn from at the CHI 2017 and iConference 2017 doctoral consortia. I also wanted to give a special thanks to Sarita

Schoenebeck, who was the first person to tell me (an undergraduate student at the time) that yes, trans identity and social media is something that makes sense to study in HCI.

Thank you to the participants in the study, and to the bloggers whose data I analyzed in this research, for sharing your time and your data. I could not have done this work without you, and I acknowledge your generosity in allowing me, and the readers of this work, to learn from your experiences. Special thanks to: Denny (from the Tumblr blog *Becoming Womanhood*), Joselyn (from the Tumblr blog *Becoming Joselyn*), Cory Dostie, and Kevin Jenkins.

This work was made possible thanks to the research fellowships I received throughout my Ph.D.: The National Science Foundation Graduate Research Fellowship, the Faculty Mentor Program Fellowship, the Eugene Cota-Robles Fellowship, the Rob Kling Memorial Fellowship, and the James Harvey Scholar Award. I owe gratitude to these funding agencies for believing in my research vision and giving me the tangible resources to carry it out.

Thanks so much to my undergraduate research assistants who have worked on this project, in particular Katrina Vergara, who helped me compile the sample of Tumblr blogs and work with the Tumblr API to collect data, and Gustavo Figueroa, who helped with interview transcription and analysis. It has been such a pleasure to see you both grow as researchers over the years, and I cannot wait to see what you do next. Thanks also to the other undergraduate researchers I have had the honor of working with, including Carolyn Jung, Isley Gao, Gurveen Sekhon, Justin Park, Corrin Morgan, Aaron Noble, and Jerome Watts. Mentoring undergraduate researchers has been one of the best parts of my Ph.D. career.

Thank you to my academic siblings in the STAR group. Kate Ringland and LouAnne Boyd, it was an honor going through this dissertation journey with you, and I will always remember our membership, partnership, and friendship. Jed Brubaker, Lynn Dombrowski, and Sen Hirano,

thank you for your mentorship and friendship, for always being there with advice and to answer my questions about next steps in this academic process, and for giving me a vision of what successful post-Ph.D. life would be like. Mark Baldwin, you have been such a great friend and lab mate over the years /bitmoji @mark beach. Heather Faucett, Phoebe Chua, and Erick Custodio, it has been a pleasure being your academic sibling. Thanks also to LUCI Lab residents beyond the STAR group who have been a great source of support and friendship, especially Ellie Harmon, Courtney Loder, Sanna Ali, and Chris Wolf, and to my friends in the Social Computing group at Drexel University: Michael Dickard, Yuanyuan Feng, Tim Gorichanaz, and Nora McDonald.

Thanks to Adriana Avina, Suzie Barrows, Marty Beach, and the rest of the staff at the Department of Informatics and the School of Information and Computer Sciences for their help and support throughout the years, and to the UC Irvine Competitive Edge program for giving me the opportunity to get started on my Ph.D. research a little bit early.

One of the greatest parts of being an academic has been collaborations, and I am happy to call these co-authors friends as well as collaborators (in addition to many of the people listed above): Rena Bivens, Anna Lauren Hoffmann, Jessica Pater, Eugenia Ha Rim Rho, Anne Bowser, Michael Madaio, Wenwen Zhang, Xiang Cheng, Blake Hawkins, and John Schomberg. Thank you for allowing me to learn from and with you.

I have often said that I would not be where I am today without the i3 Inclusion Institute at University of Pittsburgh, a research program in which I initially participated as an undergraduate in 2011. This was my introduction to the field of information science, and was how I learned about the Informatics Ph.D. program at UC Irvine. Thanks to i3 for all the incredible work they do in increasing opportunities for underrepresented students in information science and in STEM

more broadly. In particular, thank you to Mike Depew for all of the support over the years, and to Courtney Loder, Corey Knobel, and Joe Sanchez for helping to set me on this path.

Thank you to my mentors and advisors at Carnegie Mellon who helped get me started in research and academics as an undergraduate: Alessandro Acquisti, Rosalind Chow, Christina Fong, Limor Golan, Carol Goldberg, and Kristina Straub.

Thanks to my parents – Lou Buckingham, David Haimson, Susan Rogers, and Robert Buckingham – for always encouraging me to follow my passions and interests, even though, like many of you, my career trajectory was not straightforward. I appreciate that you supported me in living out the “Haimson way” of finishing college much later than most. Thank you to my siblings, Corey Wray, Felix Haimson, and Erika Walsh-Wray, and my grandmother Ruth Porter, for your love and support.

It has been an incredible honor to work on this dissertation on the other side of a table from a brilliant academic – my wife, Nazanin Andalibi – who was also writing a dissertation. It has been so nice to know that someone else truly understands this journey, and to have someone with whom to talk over ideas, methods, and design implications. It has also been a relief at the end of the day to have someone else who also needs to relax and watch terrible TV shows because our brains are too tired to do anything else. Thank you, Naz, for being there for all of the dissertation stress, and for pressing play on the Rocky theme song YouTube video when I finally finished this thing.

And finally, thank you to my two ridiculous cats, Charlie and Cali, for cuddling and being mostly sweet, and for not stepping on the keyboard and clicking select-all-delete.

## CURRICULUM VITAE

### OLIVER L. HAIMSON

- 2012            B.S. in Economics  
                  Carnegie Mellon University
- 2017            M.S. in Information and Computer Science  
                  University of California, Irvine
- 2018            Ph.D. in Information and Computer Science  
                  University of California, Irvine

### PUBLICATIONS

The Tangible Desktop: A Multimodal Approach to Nonvisual Computing. Mark S. Baldwin, Gillian R. Hayes, Jennifer Mankoff, Oliver L. Haimson, Scott E. Hudson. *ACM Transactions on Accessible Computing (TACCESS)* 10(3), August 2017.

Changes in Social Media Affect, Disclosure, and Sociality for a Sample of Transgender Americans in 2016's Political Climate. Oliver L. Haimson, Gillian R. Hayes. *ICWSM Conference on Web and Social Media*, May 2017, p. 72-81.

Relationship Breakup Disclosures and Media Ideologies on Facebook. Oliver L. Haimson, Nazanin Andalibi, Munmun De Choudhury, Gillian R. Hayes. *New Media & Society*, Online First June 2017.

What Makes Live Events Engaging on Facebook Live, Persicope, and Snapchat. Oliver L. Haimson, John C. Tang. *ACM CHI Conference on Human Factors in Computing Systems*, May 2017, p. 48-60.

Online Experience of Socioeconomic Stigma: An Empirical Investigation of Class Confessions. Eugenia Rho, Oliver L. Haimson, Nazanin Andalibi, Melissa Mazmanian, Gillian R. Hayes. *ACM CHI Conference on Human Factors in Computing Systems*, May 2017, p. 3377-3389.

Baking Gender Into Social Media Design: How Platforms Shape Categories for Users and Advertisers. Rena Bivens, Oliver L. Haimson. *Social Media + Society* (special issue on Making Digital Cultures of Gender and Sexuality with Social Media), 2(4), October-December 2016.

Firebird: Predicting Fire Risk and Prioritizing Fire Inspections in Atlanta. Michael Madaio, Shang-Tse Chen, Oliver L. Haimson, Wenwen Zhang, Xiang Cheng, Matthew Hinds-Aldrich, Duen Horng (Polo) Chau, Bistra Dilikina. *ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, August 2016, p. 185-194.

Constructing and Enforcing “Authentic” Identity Online: Facebook, Real Names, and Non-Normative Identities. Oliver L. Haimson, Anna Lauren Hoffmann. *First Monday* (special issue on A Decade of Web 2.0: Reflections, Critical Perspectives, and Beyond), 21(6), June 2016.

Digital Footprints and Changing Networks During Online Identity Transitions. Oliver L. Haimson, Jed R. Brubaker, Lynn Dombrowski, Gillian R. Hayes. *ACM CHI Conference on Human Factors in Computing Systems*, May 2016, p. 2895-2907.

Understanding Social Media Disclosures of Sexual Abuse Through the Lenses of Support Seeking and Anonymity. Nazanin Andalibi, Oliver L. Haimson, Munmun De Choudhury, Andrea Forte. *ACM CHI Conference on Human Factors in Computing Systems*, May 2016, p. 3906-3918.

Supplementing Public Health Inspection via Social Media. John Schomberg, Oliver L. Haimson, Gillian R. Hayes, Hoda Anton-Culver. *PLoS ONE* 11(3), March 2016.

“Hunger Hurts but Starving Works:” Characterizing the Presentation of Eating Disorders Online. Jessica Pater, Oliver L. Haimson, Nazanin Andalibi, Elizabeth Mynatt. *ACM CSCW Conference on Computer-Supported Cooperative Work and Social Computing*, February 2016, p. 1185-1200.

Mobile Video Modeling for Employment Interviews for Individuals with Autism. Gillian R. Hayes, V. Erick Custodio, Oliver L. Haimson, Kathy Nguyen, Kathryn E. Ringland, Rachel Rose Ulgado, Aaron Waterhouse, Rachel Weiner. *Journal of Vocational Rehabilitation* 43(3), October 2015.

Evaluating a Collaborative iPad Game’s Impact on Social Relationships for Children with Autism Spectrum Disorder. LouAnne E. Boyd, Kathryn E. Ringland, Oliver L. Haimson, Helen Fernandez, Maria Bistarkey, Gillian R. Hayes. *ACM Transactions on Accessible Computing (TACCESS)* 7(1), June 2015.

Online Inspiration and Exploration for Identity Reinvention. Oliver L. Haimson, Anne E. Bowser, Edward F. Melcer, Elizabeth F. Churchill. *ACM CHI Conference on Human Factors in Computing Systems*, May 2015, p. 3809-3818.

On Vintage Values: The Experience of Secondhand Fashion Reacquisition. Anne E. Bowser, Oliver L. Haimson, Edward F. Melcer, Elizabeth F. Churchill. *ACM CHI Conference on Human Factors in Computing Systems*, May 2015, p. 897-906.

Disclosure, Stress, and Support During Gender Transition on Facebook. Oliver L. Haimson, Jed R. Brubaker, Lynn Dombrowski, Gillian R. Hayes. *ACM CSCW Conference on Computer-Supported Cooperative Work and Social Computing*, March 2015, p. 1176-1190.

DDF Seeks Same: Sexual Health-Related Language in Online Personal Ads For Men Who Have Sex With Men. Oliver L. Haimson, Jed R. Brubaker, Gillian R. Hayes. *ACM CHI Conference on Human Factors in Computing Systems*, April 2014, p. 1615-1624.



# ABSTRACT

The Social Complexities of Transgender Identity Disclosure on Social Media

by

Oliver Lee Haimson

Doctor of Philosophy in Information and Computer Science

University of California, Irvine, 2018

Professor Gillian R. Hayes, Chair

Major life transitions often require people to make complicated decisions about how to disclose information about that change to the people in their lives. Social media, and people's online self-presentations and social networks, add complexity to decisions about how to manage information disclosure and changing identities. This dissertation focuses on how people present and disclose changing identities on social media during life transitions, and how these changes impact emotional wellbeing. I use gender transition as a case study to understand the relationships between identity disclosure, emotional wellbeing, and social support in online contexts, and how people experience liminality on social media. I examined transgender people's transition experiences using data from transition blogs on Tumblr, a social media blogging site on which people document their gender transitions. I analyzed text data from these blogs using methods including sentiment analysis and statistical inference, followed by qualitative analysis of in-depth interviews with transgender bloggers. I contribute an empirical examination of how people's emotional wellbeing changes over time through the gender transition process. Transgender identity disclosures to family members are associated with decreased emotional wellbeing in the short term, followed by increased emotional wellbeing in the long term. Facebook disclosures, an

efficient means of mass disclosure, are associated with increased emotional wellbeing for those whose Facebook networks were supportive. However, over a longer time period post-transition, people's emotional wellbeing is impacted by other life events that take precedence, intersecting identity facets, and the ups and downs of life more broadly. To conceptualize these results, I apply ethnographer van Gennep's liminality framework to a social media context and contribute a new understanding of liminality by arguing that reconstructing one's online identity during life transitions is a rite of passage. During life transitions, people present multiple identities and do transition work simultaneously on different social media sites that together act as what I call social transition machinery. Social transition machinery describes the ways that, for people facing life transitions, multiple social media sites often remain separate, yet work together to facilitate life transitions.

# CHAPTER 1

## INTRODUCTION

When people face major life changes, they must make complicated decisions about how to disclose information about that change to the people around them. While such disclosures have never been simple, the pervasive and often public nature of social media adds many complexities to managing information disclosure. In this dissertation, I examine how people present and disclose changing identities on social media during life transitions, and how their emotional wellbeing changes over time. In particular, I focus on moments of disclosure, and how identity disclosures work on social media in networked environments. Everyone faces life transitions at multiple points throughout their lives, and many life transitions require disclosures of stigmatized identities (such as in the case of job loss, divorce, or gender transition). Yet social media sites often privilege static identities, which can cause challenges when people use systems that may not have been designed with them in mind. Understanding how people present and disclose changing identities on social media gives important insights into how to design technology to be more inclusive across people's complex lives.

In this research, I use gender transition as a case study to understand both how people manage disclosures of stigmatized life changes on social media, and the relationships between disclosure, emotional wellbeing, and social support in online contexts. Gender transition allows insight into these phenomena in a way that other major life changes do not, yet also enables an understanding of social media that can help people facing life transitions more broadly. Few other life transitions encompass such potentially drastic, numerous, and complex identity changes over time (e.g., name, gender, appearance). Transition into a gender and identity that

matches one's internal self can lead to positive emotional wellbeing, while at the same time, risks of discrimination, harassment, and disapproval can lead to negative emotional wellbeing. Importantly, not only is it important to study transgender experiences as a case study of life transitions more broadly; it is also important to specifically understand transgender people's complex experiences.

The world has been changing substantially in the past few years for transgender people. In June 2014, *Time Magazine* featured transgender actress Laverne Cox on its cover, with the headline "The Transgender Tipping Point" – a label marking a moment in which transgender people became more visible in the public eye (Steinmetz, 2014). However, it is important to consider transgender visibility in the context of the personal risks and challenges that people face around transgender identity disclosure. Social media is an important place where this plays out. For example, a 2016 *New York Times* article described Facebook as a "critical tool for visibility and equality" for transgender people (Manjoo, 2016). Yet the focus on transgender visibility as a movement sometimes overshadows the ways visibility plays out in people's personal lives. My work is focused on the more personal side of visibility, and people's personal experiences with identity disclosure on social media. I examine how opening up about one's transgender identity – being visible – impacts people's emotional wellbeing over time. Our society generally considers that, after coming out and transitioning, people will feel better over time – a narrative propagated in part by the "It Gets Better" movement (It Gets Better Project, n.d.). It Gets Better is a dominant cultural narrative popularized by the It Gets Better Project in 2010, a series of YouTube videos in which adult LGBTQ people told their stories as a way to give hope to young LGBT people (It Gets Better Project, n.d.). But how does this narrative hold up for transgender people? People generally talk about transgender experiences as though "it gets better" after

gender transition, but is this really the case? Is it helpful to posit gender transition in our society as a means to “get better”?

The central research questions of this dissertation are:

1. How do people present and disclose changing identities on social media during life transitions?
2. What are the relationships between disclosure of a major life transition, mental health, and social support over time, as expressed on social media?
3. How do people experience liminality on social media?

I investigate these questions, along with the complexities that arise when they are applied to people’s intersectional lives and unique experiences.

I examine emotional wellbeing over time empirically using sentiment analysis of Tumblr transition blogs. The dominant narrative of gender transition imagines an unambiguous, specific moment when one’s gender switches, a simplistic and false notion that denies possibilities of multiplicity and positions two “pure” binary, biological genders opposite to each other (Stone, 1987). However, in reality, transition is a process rather than a moment, often involves multiplicity, and is not always linear (Horak, 2014; Kralik, Visentin, & Van Loon, 2006). Throughout transition, disclosing one’s transgender identity to the people in one’s life marks critical, pivotal moments of change and progress. Thus, I demarcate gender transition using moments of transgender identity disclosure, rather than employing a simple before-vs.-after approach to understanding emotional wellbeing over time.

Recently, HCI research concerns have shifted from a focus on users, to a focus on the contexts in which technology is used (Rogers, 2012). Life transitions are an important contextual

dimension to how people use technology, and allow me to address important social, cultural, and technological questions about how to design for changing rather than static user identities.

In this Introduction chapter, I briefly discuss the meanings, history, and cultural context of transgender, identity disclosure, social media, Tumblr, blogs, and liminality. I then summarize the chapters that follow, and detail the dissertation's contribution.

## **Transgender**

I use Stryker's (2009) definition of transgender as a term that refers to "people who move away from the gender they were assigned at birth, people who cross over (trans-) the boundaries constructed by their culture to define and contain that gender." I use "trans" for the remainder of this dissertation to refer to the broad transgender population. Transgender people make up approximately 0.6% of the U.S. population (Flores, Herman, Gates, & Brown, 2016). A recent survey found that within the trans population, approximately 33% are trans women, 29% are trans men, 3% are crossdressers, and 35% are non-binary (James et al., 2016).

In using the term "trans" I include trans people who are non-binary: people whose genders are multiple, fluid, and/or something other than male or female (e.g., genderqueer, gender-fluid, agender). Not all non-binary people are trans, and in this work I include only non-binary people who also consider themselves trans because of this research's focus on transition. The non-binary trans people in my sample had transitioned, or were in the process of transitioning, from a binary gender to a non-binary gender.

Trans identity models have often highlighted the contradiction between two types of trans experiences (Diamond, Pardo, & Butterworth, 2011): trans can refer to crossing from one binary gender to another, and can also refer to transcending the gender binary (Ekins & King, 1999).

That is, many trans people live within dominant gender constructs (i.e., male and female) and in transitioning, substitute one side of the gender binary for the other (i.e., transition from male to female or from female to male) (Diamond et al., 2011), or what Ekins and King (1999) called “migration.” Many others instead resist gender constructs and aim to destabilize the gender binary, and thus transition from a binary gender to something other than male or female (Diamond et al., 2011). These are vastly different meanings of transition, and in this work I include people from both types of experiences, thus adding complexity to this research. Liminality also has a very different meaning for each of these trans experiences. For binary trans people, the “trans” refers to a temporary, uncomfortable liminal phase that people must live through in order to transition to their desired gender (Wilson, 2002). As such, it does not make sense to refer to post-transition binary trans people as an alternative gender or as other than male or female (Wilson, 2002). However, for non-binary trans people, liminality often persists as they live indefinitely outside of the gender binary.

Studying gender transition is important on its own accord, because it enables insight that will help make technology more inclusive for this marginalized population. But also, studying a complex and changing identity category allows understanding of how social technologies break down when something does not fit well into a particular category. For example, social media sites often work well when a person’s life and identity stay the same. Yet users may encounter tensions on social media when experiencing life or identity changes. Studying trans people’s liminal experiences on social media enables me to investigate these tensions.

## Identity disclosure

In this work, I focus on trans identity disclosures as pivotal transitional moments. By “trans identity disclosures,” I refer to Tumblr posts that describe trans identity disclosures in other contexts, such as in Figure 1.1 where a woman describes telling her best friend that she was trans. Trans identity disclosures also can refer to disclosures of one’s trans identity on a social media site, as in Figure 1.2 where a woman describes coming out as trans on Facebook. While I expected that some Tumblr posts would be trans identity disclosures themselves (i.e., disclosing one’s trans identity to their Tumblr network), this was not a common occurrence because most people started their Tumblr transition blogs with the intended purpose of being transition blogs (and is thus also related to this study’s inclusion criteria). Because transition bloggers had no initial audience who assumed they were cisgender, they did not need to come out as trans.

Because I focus on disclosures of major life events, or “coming out” experiences, what I mean by disclosure is different than much of the prior research on self-disclosure on social media. Previous work has considered self-disclosure on social using Jourard’s (1971) definition of the “act of revealing personal information to others,” and thus can refer to many kinds of

## Happiness this week

One of my happiest moments this week was in telling my best friend of 26 years that I am transgender. Once I told him, I said that I didn’t know what else to say because I felt like next was the part where I explain how I got to this point, but that felt weird to do. He said, you don’t owe me any explanations, you are important to me and I accept you completely without it. I cried, but they were happy tears.

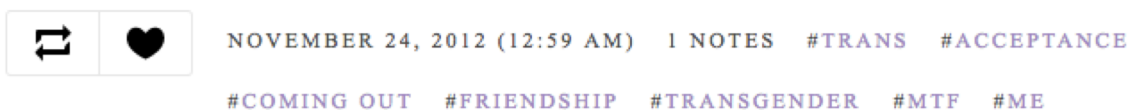


Figure 1.1. Example of trans identity disclosure post on Tumblr describing coming out to a friend.



Soooo I CAME OUT!!  
to everyone.. full time.. all the time =D  
i really cant believe it but its magnificent .. i think im glowing  
  
and i got such a POSITIVE response on facebook.. it was baffling  
and amazing  
  
#lgbtq #mtf #transgender #trans girl #femme #amab #gay #trans  
#lesbian #non binary #male to female #transisbeautiful #girlslikeus  
#girls like girls #trans lesbain #coming out #came out #empty closets  
#came out of the closet #im out #out #full time #transgender girl  
99 notes Nov 18th, 2016 ...  

**Figure 1.2. Example of trans identity disclosure post on Tumblr describing coming out on Facebook.**

content. For example, Wang et al. (2016) coded posts as having high levels of self-disclosure if they included aspects like feelings and emotions, information about personal accomplishments, things important to the person, relationships with others, thoughts about the past or future, etc. Ellison et al. (2011) operationalized self-disclosure on social media by asking participants about whether they were posted on Facebook when having a bad day, or when getting a good grade in class. Such disclosure measures are substantially more broad than in my work, which is concerned with descriptions of trans identity disclosures: a small subset of possible types of self-disclosure. Most of the Tumblr posts in my dataset included high levels of self-disclosure broadly, as bloggers discussed personal aspects of gender transition and other personal information.

Trans identity disclosure is similar in many ways to disclosure more broadly, and disclosures of other types of identity changes; yet it is unique in several important ways. Self-disclosure has been found to increase understanding, build trust, strengthen ties, and improve the discloser's

health (Joinson & Paine, 2007; Pennebaker, 1995). While I did not test each of these systematically, anecdotally these major findings about disclosure seem to hold up in the context of this study, despite my narrow conceptualization of self-disclosure. Yet coming out as trans means two different things, which Zimman (2009) characterized as “declaration” and “disclosure.” A declaration is an “initial claiming of a transgender identity” and reveals the hidden gender identity that the person will transition into (Zimman, 2009). This is a process that happens in a discrete period of time (gender transition) and eventually comes to an end (Zimman, 2009). Declaration involves the narrative process both of becoming a new gender and telling people about that change (Zimman, 2009). Disclosure, on the other hand, happens after a person has moved from one gender to another, and involves telling others about one’s transgender history (Zimman, 2009). Rather than revealing a fundamental truth about oneself, post-transition disclosure describes a past self that the person does not consider their actual gender (Zimman, 2009). In this work, I focus mainly on what Zimman (2009) calls declarations, yet I label them “trans identity disclosures.” In Chapter 7, I discuss post-transition trans identity disclosures, which Zimman (2009) calls disclosures.

## **Social Media**

Social media sites can be identity technologies: “technologies that allow us to display information about ourselves” (Briggs & Thomas, 2015). Yet different social media sites enable and support identity presentation and disclosure in different ways. In this work, I focus on Tumblr and Facebook. Tumblr is an important space that trans people use to build community and discuss the personal aspects of their gender transitions (Dame, 2016), which I had learned from participants in my previous studies of gender transition on Facebook (Haimson, Bowser,

Melcer, & Churchill, 2015; Haimson, Brubaker, Dombrowski, & Hayes, 2015). Tumblr is a site that allows pseudonyms and multiple accounts, while Facebook is an identified site that requires real names and prohibits multiple accounts. Most Tumblr bloggers (19 out of the 20 people I interviewed in this study) also use Facebook. It is important to study Facebook in tandem and in contrast with Tumblr not only because nearly all participants in this study reported using Facebook in addition to Tumblr, but also because the sites' features, the content people share on each, and people's networks on each, are vastly different. Understanding the similarities and differences between people's experiences on these two sites gives unique insight into identity, self-presentation, and disclosure online, as well as social media site design.

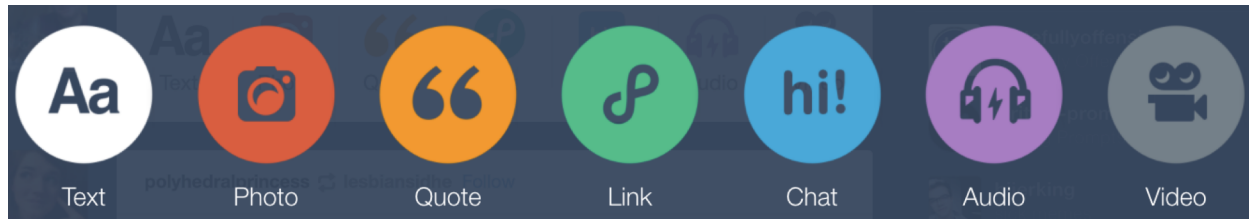
## Tumblr

Tumblr is a hybrid social media and blogging site which, though originally created for blogging, has a network structure similar to a social network site (Chang, Tang, Inagaki, & Liu, 2014). As of October 2017, there were roughly 373 million Tumblr blogs (Statista, 2017). People spend more time on Tumblr than other sites because of the multimedia nature of much blog content that users create and consume (C. Smith, 2013). Much of the content people share on Tumblr is "reblogs" (i.e., photos, gifs, text, or links shared from others' Tumblr pages) and content about their interests and hobbies (Xu, Compton, Lu, & Allen, 2014). However, in this work I focus instead on user-generated personal textual blog content. Tumblr imposes no character limit for posts, and thus many users post substantial textual content, which often describes personal situations and emotions (Bourlai & Herring, 2014). Tumblr data gives researchers access to populations often erased by more mainstream platforms (Attu & Terras, 2017). For these reasons, Tumblr blogs are an ideal research site for textual analysis. Yet there have been

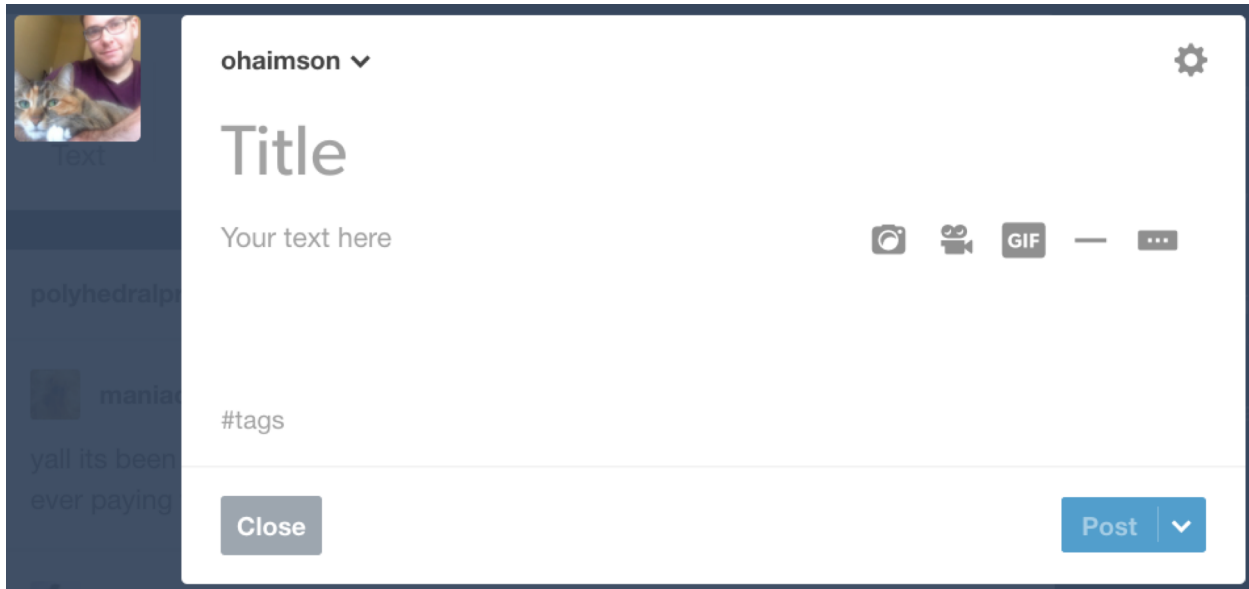
relatively few technological analyses of Tumblr, which Attu and Terras (2017) attribute to the difficulty of data collection. However, compared to other social media sites (e.g., Facebook, Instagram), Tumblr's API is relatively unrestrictive in accessing publicly-available user content.

Compared to Facebook (Greenwood, Perrin, & Duggan, 2016) and the general U.S. population, Tumblr users are more likely to be young (C. Smith, 2013; Statista, 2016; Street, NW, Washington, & Inquiries, 2015; Xu et al., 2014), urban, non-white, and of low socioeconomic status (Street et al., 2015). Depending on the source, somewhere between 26% (Statista, 2016) and 46% (C. Smith, 2013) of Tumblr users are younger than 24, and many of these young users value self-expression, which the platform affords (C. Smith, 2013). According to one source, young people in the U.S may even use Tumblr in higher numbers than Facebook (C. Smith, 2013).

Here, I briefly describe some of Tumblr's features as of December 2017. Tumblr enables users to post seven different types of original content (see Figure 1.3): text, photo, quote, link, chat, audio, and video. When a user clicks on the "Text" option, they are given an open screen (see Figure 1.4) where they can type text content along with a title and optional photo, video, or gif content. Users can add any number of tags, which function similarly to hashtags (e.g., on Twitter) and enable other users to find each other's posts given categories like, in the context of this study, #transgender, #transition, #mtf, and #ftm. Users can search for content on Tumblr's Explore page, which is a primary place for people to find and follow each other. Users can follow other users by clicking "Follow," but following is not mutual. Lists of friends or followers are by default not shown on user's pages. Users can message each other without following each other, unless they disable this default setting. Users interact with each other's posts in three ways, collectively called "notes" (see Figure A.1): likes, replies (i.e., comments), and reblogs,



**Figure 1.3. Types of content users can post on Tumblr.**



**Figure 1.4. Tumblr interface for entering text content.**

which can be annotated with text comments. Tumblr users do not fill out profiles with particular categories (e.g., age, gender, location) as on Facebook, but instead are given freedom to describe themselves however they choose in a freeform text box (see Figure A.2). Each user can have multiple blogs and can easily switch between them in the Tumblr interface (see Figure A.3).

## Blogs

A blog is “a frequently updated webpage, typically consisting of fairly brief posts presented and archived in reverse-chronological order” (Schiano, Nardi, Gumbrecht, & Swartz, 2004). In their early days, blogs were an emerging technology, following from online journals and handwritten diaries, that bridged the divide between relatively-static HTML document web-pages and

computer-mediated communication by changing the way we thought about the Internet (Herring, Scheidt, Bonus, & Wright, 2004). Blogs were typically considered more fluid, less formal, and less carefully constructed than webpages, and thus enabled people to present changing identities (Nardi, Schiano, Gumbrecht, & Swartz, 2004). Blogs existed before social media, and may have been an important precursor of social media. While traditionally blogs were not very interlinked or interconnected, with few links or interactive components (Herring et al., 2004), this changed when Tumblr and other social blogging sites combined blogging with social media (Rawson, 2014). Social media blogging platforms like Tumblr enable the individual nature of blogs along with the ability to interact and share links, yet blogs remain “individualistic, intimate forms of self-expression” (Herring et al., 2004).

People have many different motivations for blogging, including updating others about their activities, expressing opinions to influence others, seeking opinions and feedback, thinking by writing, and releasing emotional tension (Nardi, Schiano, & Gumbrecht, 2004). Sciano et al. (2004) identified several different types of blogs: diary or personal record, chronicle or newsletter, photo album or scrapbook, and a means of sharing status updates or progress reports. Most Tumblr transition blogs are a combination of all of these blog types. For many, blogs act as a stable place to document change (C. R. Miller & Shepherd, 2004), which is especially important for people during life transitions. While some bloggers attempt to reach a large audience, others reported caring little about audience size (Nardi, Schiano, & Gumbrecht, 2004). Most bloggers interviewed in previous studies were relatively unconcerned about privacy and tended to be open about sharing personal information (Nardi, Schiano, & Gumbrecht, 2004; Schiano et al., 2004).

In times of societal conflict, blogs serve different purposes, such as collectively describing the disruptive event (Mark et al., 2012), and helping people to transition to recovery after the disruption (Al-Ani, Mark, & Semaan, 2010). Blogs around a conflict event provide a collective account of the event, and blog content is often correlated with large-scale societal events such as wars (Mark et al., 2012), political uprisings (Al-Ani, Mark, Chung, & Jones, 2012), and political climate (Haimson & Hayes, 2017). As societal conflict or disruption increases, people tend to blog less about personal content, and more about political content (Al-Ani et al., 2012; Mark et al., 2012). In analyses of blogs written by Iraqi citizens experiencing conflict and war, Al-Ani et al. (2010) found that blogs enabled people to process disruptions in a collaborative environment by creating a safe online space to interact with others, enabling community formation, identity expression, and support from a global audience, and allowing dialogue with people outside physical boundaries. Blogs' interactive capabilities can empower people in times of crisis, and help them build resilience (Al-Ani et al., 2010). As such, blogs can change how people experience and recover from traumatic events (Al-Ani et al., 2010). These insights related to blog use during societal conflict are also relevant during times of personal life disruption, such as gender transition.

### Tumblr transition blogs

Transition blogs are a genre of Tumblr blog in which people document their gender transition. Commonly, these blogs include diary-like entries discussing social, medical, and legal aspects of transition: discussion of the coming out process and resulting acceptance, support, rejection, harassment, and/or discrimination, physical and mental changes, medical procedures such as hormone replacement therapy and gender reassignment surgeries, and name and document

changes. Transition blogs include text, photos and/or videos documenting changes over time. Transition blogs also often include personal day-to-day anecdotes not related to gender transition or trans identity. Though blogs resemble diaries in some ways, blogs are different because they are inherently social (Nardi, Schiano, & Gumbrecht, 2004); transition bloggers exist within a network of other bloggers, many of whom follow and interact with each other. Transition blogs are different from most other types of Tumblr blogs, which are often more about curation and reblogging others' content than documenting one's own personal experiences (Seko & Lewis, 2016; Xu et al., 2014).

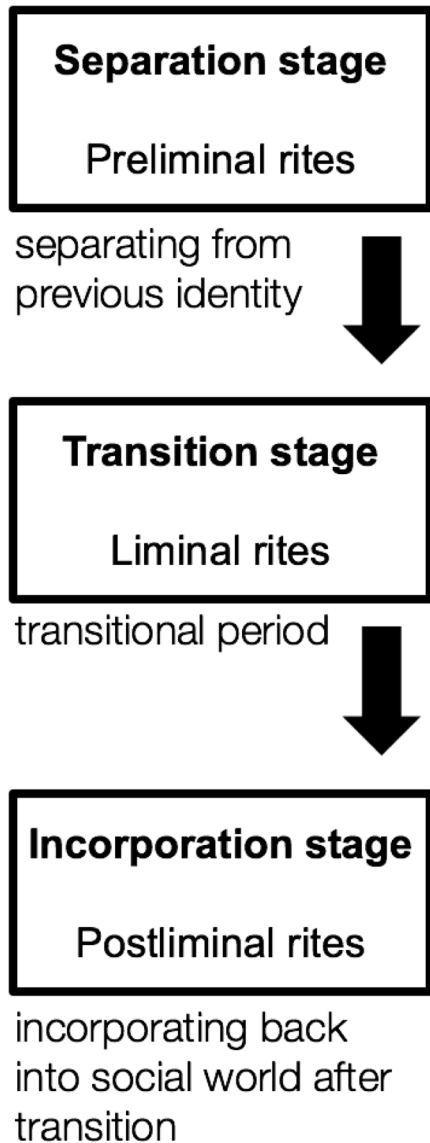
Tumblr is not the only platform trans people use to document their transitions; many use YouTube (Dame, 2013; Raun, 2015), and some participants in my study mentioned that people also increasingly use Instagram for this purpose. Tumblr is unique because many transition blogs contain substantial text content, unlike transitions as documented on YouTube and Instagram which include primarily visual content.

Trans-created personal digital media such as transition blogs are also important from an archival standpoint, as they “combine personal record keeping, social interaction, and historical preservation with an implicit goal of creating a resource for other trans people” (Rawson, 2014). Trans online communities value sharing personal experiences collectively on social media, and in doing so, create a collective historical record of trans experience, which Rawson (2014) argues is a type of historical activism.

## **Liminality**

In this work, I draw from ethnographer Arnold van Gennep's (1909) liminality framework (see Figure 1.5), along with Victor Turner's (1969, 1987) and William Bridges' (1980, 2004) works





**Figure 1.5. Van Gennepe's (1909) liminality framework.**

which have used this framework in different contexts throughout the 20th century. The word liminality means a sort of threshold that a person goes through during a life transition, and it is used to describe life changes as a series of stages that involve rites of passage (van Gennepe, 1909). Van Gennepe's (1909) framework, published as *The Rites of Passage*, identified the patterns that occur when people transition from one social category to another, events which are often marked by celebrations and rituals, which van Gennepe called "rites of passage." This liminality framework is particularly useful for framing the current study because it allows me to articulate that transition is a process, and to map the steps of that process to stages. In van Gennepe's (1909) liminality framework, life transitions begin with preliminal rites, in which a person separates from their previous identity – and in the cultures that Van Gennepe and Turner (1969) studied, people were often actually physically removed from their networks during

this stage. This is followed by liminal rites, the transitional period. The final stage is postliminal rites, in which the person is incorporated back into a social world after the transition. A life transition is a process, not a moment, and van Gennepe's (1909) liminality stages provide an important means of understanding transition processes.

Cultural anthropologist Victor Turner popularized van Gennep's liminality framework among academic audiences in the 1960's by applying it to his study of village life in Ndembu, Zambia in his book *The Ritual Process* (Turner, 1969). In this work, he theorized that a person in the liminal stage must be "a blank slate, on which is inscribed the knowledge and wisdom of the group, in those respects that pertain to the new status" (Turner, 1969). He described the concept of *communitas*: a group of people who experience a life transition together and form bonds in their communal lack of identity (Turner, 1969). Rather than being part of a societal structure, Turner (1969) conceptualized liminal people as being in the interstices of, edges of, and beneath society. Turner (1969) found that liminality was not only about the transition stages, but also people's reactions to the stages (Thomassen, 2009). These early accounts of liminal processes tended to treat life transitions as part of normative stages of life (e.g., moving from childhood to adulthood, marriage), and left less room for life changes that instead challenged social conventions or were accompanied by stigma, like many of the life transitions people encounter today.

In 1980, William Bridges (2004, first published in 1980) further popularized van Gennep's (1909) liminality framework for a general audience in his best-selling book *Transitions: Making Sense of Life's Changes*. In this work, Bridges (2004) applied van Gennep's (1909) liminality framework to major life changes salient in that cultural moment, such as shifts in people's relationships and careers. Change, Bridges (2004) argued, is situational, yet transition is psychological and requires one to reorient and redefine themselves to incorporate changes into one's life. Bridges (2004) built on van Gennep's (1909) and Turner's (1969) characterization of the liminal stage as a time in which people were identity-less and separate from their existing networks, but further, recommended that people *should* strive to be neutral and separate from

their networks during major life changes – a notion that I challenge in this dissertation. More recently, Thomassen (2009) argued that liminal experiences can occur when everything else around one stays the same, but this depends on the degree to which the life change disrupts one's existing life structure.

Van Gennep's (1909) and Turner's (1969) work were anthropological studies in small-scale, non-Western, non-technologically advanced societies. Yet they identified patterns that hold up across all societies (Thomassen, 2009). However, it makes sense that things would be different in some ways in our society in the present time, particularly given technological advancements like social media.

The liminality stages are not as well-defined and easily demarcated as it appears in van Gennep's (1909) framework (Kralik et al., 2006), particularly in digital media environments (Frissen, de Lange, de Mul, & Raessens, 2015). Rather, the liminality framework (van Gennep, 1909) is a way to understand the patterns that occur during life transitions. Stages can be blurred, as people often transition in different temporalities in different online platforms and in the physical world, maintain multiple accounts representing different facets of a changing identity, and embody different identities in material space and digital space. Gender transition in particular complicates liminality patterns because it often involves shifts forwards, backwards, and even sideways, rather than being a linear path (Horak, 2014), and people can have parallel genders and identities existing simultaneously (Stone, 1995).

While van Gennep (1909) highlighted the significance of negative rites of passage, that is, those life changes that are marked by taboo, he claimed that such socially taboo life transitions can only be viewed in contrast to more positive life events. As an example, divorce can be viewed as antithetic to marriage, while loss of a child can be viewed as antithetic to childbirth

(van Gennep, 1909). However, gender transition, which is rife with taboo yet a positive life transition for many, resists van Gennep's (1909) classification of life events as positive/negative, and has no clear oppositional event. Thus, I argue against van Gennep's (1909) notion that "a taboo is not autonomous, it exists only as a counterpart to a positive rite."

Because gender transition has no clear and overarching rites of passage<sup>1</sup>, in this dissertation I examine what rites of passage mean in a gender transition context. My work builds on van Gennep's (1909) liminality framework, and identifies how it works in social media contexts. I examine the separation, transition, and incorporation stages of gender transition, all of which are in some ways expressed on social media. Ultimately, I argue that reconstructing one's online identity during gender transition is a rite of passage in our society.

## **Findings and contribution**

This dissertation proceeds as follows. In Chapter 2, I describe previous research related to identity, life transitions, self-disclosure, support, and transgender studies in online and physical world contexts. Next, I detail the methods I used to conduct this research (Chapter 3). In the first of four results chapters, in Chapter 4 I characterize Tumblr transition blogs and people's experiences participating in what I found to be a supportive community of transition bloggers. In Chapters 4, 5, and 6, I identify relationships between trans identity disclosures, emotional wellbeing over time, and social support during gender transition as expressed on social media. After trans identity disclosures, emotional wellbeing increases on average (Chapter 4). However, disclosures to family members, which happen during the separation stage (an especially difficult

---

<sup>1</sup> Bolin (1988) argued that sex reassignment surgery is the primary "transsexual rite of passage," but I argue in this dissertation's Discussion chapter that this is no longer true.

transitional period), are instead followed by decreased emotional wellbeing in the short term, yet increased emotional wellbeing in the long term (Chapter 5). Trans identity disclosures on Facebook, which happen at the end of the transition stage, are followed by increased emotional wellbeing for those whose networks were supportive (Chapter 6). In Chapter 7, I examine the incorporation stage, and complicate the notion that gender transition necessarily impacts people's emotional wellbeing, given people's unique experiences, and intersecting identity facets and other life transitions. Finally, in Chapter 8, I provide a new understanding of what liminality means on social media by highlighting the ways social media enables people to embody multiple identities and exist in multiple networks simultaneously during life transitions, rather than remaining "neutral" during the transition stage. I articulate the important distinction between liminality and neutrality, and argue that characterizing those undergoing life transitions as "neutral" or "identity-less" is dangerous because it dehumanizes people during what is already a vulnerable time. I detail my argument that reconstructing one's online identity is a rite of passage in our society, and conceptualize these findings by introducing my *social transition machinery* lens. Social transition machinery describes the ways that, for people facing life transitions, multiple social media sites remain separate and serve different purposes, yet work together to facilitate life transitions. For example, in this study, Tumblr is social transition machinery for intense concentration and biographical work, while Facebook is social transition machinery for converting a transition into an event. This social transition machinery lens enables a new understanding of how people experience liminality on social media.

## CHAPTER 2 RELATED WORK

My research lies at the intersection of a broad range of literature, which I review in this chapter. I begin by discussing related work on identity and self-presentation, both online and in physical world contexts, and then turn to literature on identity in the context of life transitions. Next, I engage with research on life transitions and disclosure on social media, followed by work examining disclosure and support in online communities. I then discuss trans-specific research around gender transition as an identity and life transition and trans identities and experiences online, and make an argument for why and how to link transgender studies with HCI. Finally, I review existing literature on relationships between disclosure, health (both mental and physical), and social support. I identify a research gap in understanding the relationships between disclosure, emotional wellbeing, and social support as expressed on social media during gender transition, which I address in this dissertation.

### **Identity and self-presentation**

Identity is “the set of meanings that define who one is when one is an occupant of a particular role in society, a member of a particular group, or claims particular characteristics that identify him or her as a unique person” (P. J. Burke & Stets, 2009). Identities are socially constructed (Berger & Luckmann, 1966; Mead, 1934); one’s identity is the product of individual, social, and contextual situations (P. J. Burke & Stets, 2009). While some identity theorists like Burke and Stets (2009) focus more on the individual, internal, and stable aspects of identity, others like Goffman (1959) focus more on how identities play out in social and situational contexts (Owens, Robinson, & Smith-Lovin, 2010). Yet most agree that for each person, multiple versions of self,

or roles, emerge as people move through different social contexts (P. J. Burke & Stets, 2009; Gergen, 2000; Goffman, 1959; A. R. Stone, 1995). As poet Sami Ma'ari described the faceted nature of identity, quoted in Gergen (2000), “identities are highly complex, tension filled, contradictory, and inconsistent entities. Only the one who claims to have a simple, definite, and clear-cut identity has an identity problem.” Turkle (1995) echoed these sentiments, noting that “the healthy individual knows how to be many but to smooth out the moments of transition between states of self.”

Goffman (1959) described how people perform different versions of self depending on context to maintain an impression for others – a process called impression management. Such performances do not imply insincerity; being human means having multiple attributes and social groups that necessitate different performances of self; being a social person requires regularly putting on a performance and being good at it (Goffman, 1959). Goffman (1959) used a dramaturgical metaphor to theorize identity as a front region, where a performance is given to an audience, and a back region, where one can show a more casual self to like others. Impression management depends on keeping these two regions separate, to save social “face” (Goffman, 1959).

Yet impression management is made more complicated when a person has a concealable stigmatized identity (Goffman, 1963). People with such identities often divide the world into those people who do know about their stigmatized identity, and those who do not, thus actively shaping their social identity through disclosure management (Goffman, 1963). Yet they may face emotional distress in deciding whom to tell and not tell (Herman, 1993). Goffman (1963) argues that every person has some identity facets that are stigmatized, or moments of stigma. Yet

impression and disclosure management around some concealable stigmatized identities, such as trans identity, can cause more distress than others.

Impression management is increasingly difficult in online contexts. Online identity is “what a person selects to present from a variety of identity cues about who he or she is off-line” (Yun, 2006), and can vary substantially from site to site (S. Zhao, Grasmuck, & Martin, 2008). Context collapse – “The lack of spatial, social, and temporal boundaries that makes it difficult to maintain distinct social contexts” (boyd, 2008) – occurs on some social media sites, as people struggle to present themselves in a way that makes sense for all of the different social circles that make up their audience. Many researchers and theorists have examined the faceted nature of identity in online spaces (e.g., danah boyd, 2008; DiMicco & Millen, 2007; Farnham & Churchill, 2011; Stone, 1995; Turkle, 1999). Stone (1995) argued that there is no one to one relationship between physical bodies and identities. Instead, one physical body may have multiple online identities (Stone, 1995), similar to how people perform identity differently in different physical world contexts.

People’s self-presentation in different online spaces are a product of social performances and site norms and expectations (van Dijck, 2013; S. Zhao et al., 2008). Much of the early online identity experimentation was made possible by anonymity, in online spaces like multi-user dungeons, forums, and virtual worlds (Stone, 1995; Turkle, 1995). Increasingly, however, many online spaces are connected to users’ names and physical world identities. Van Dijck (2013) argued that “social media are not neutral stages of self-performance – they are the very tools for shaping identities.” As such, different sites shape users’ identities by supporting multiplicity or mandating singularity in different ways. Sites like Tumblr and Reddit allow for multiple accounts and anonymity, while Facebook explicitly does not allow multiple profiles or identities,



instead mandating one identity per account and enforcing “real name” policies (Haimson & Hoffmann, 2016).

One’s online identity does not necessarily share demographic or physical characteristics with one’s physical world self, given that many online spaces afford anonymity and pseudonymity, and contain separate networks from one’s physical world (Hu, Kumar, Huang, & Ratnavelu, 2017). Yet the ability to present as a different gender or race online does not make issues of gender or race inequality disappear (Kendall, 1998; Nakamura, 2002). Some of these inequalities translate to online spaces (Kendall, 1998), and the Internet often helps racist images and ideologies spread (Nakamura, 2002). Online spaces free of gender and race markers posit “whiteness as default,” and spaces that enable gender and race identity exploration also end up enabling “identity tourism,” in which people of non-marginalized races and genders can “log out” of their oppressions whenever they wish (Nakamura, 2002; Stone, 1995).

Yet online spaces can be important for people with concealable stigmatized identities to find others like them, which is often difficult in the physical world because it requires in-person sensitive disclosures (McKenna & Bargh, 1998). Online spaces enable people with stigmatized identity facets to self-disclose aspects of themselves that may otherwise remain hidden, receive support, and feel less alone (McKenna & Bargh, 1998). By this process, which McKenna and Bargh (1998) call “identity demarginalization,” the group identity found in online anonymous settings can actually transform people’s identities by making the stigmatized identity facet more acceptable.

## **Identity and life transitions**

Transition can be defined as “a process of convoluted passage during which people redefine their sense of self and redevelop self-agency in response to disruptive life events” (Kralik et al., 2006). A life transition is a life change that impacts a person’s life deeply over time and involves “reconstruction of a valued identity;” all transition includes change, but not all change is transition (Kralik et al., 2006). Schlossberg (1995) argued that “a transition is a transition only if it is so defined by the person experiencing it.” In sum, life transitions are personal, contextual, and alter people’s identities (Glacken, Kernohan, & Coates, 2001). People experience “universal and inevitable” predictable life transitions as they grow older (e.g., from youth to adulthood, from the work force to retirement) (Sheehy, 2006), but many also experience life transitions that are less common and more unpredictable, whether for themselves or for the people around them (e.g., gender transition, chronic illness diagnosis) (Glacken et al., 2001; Haimson, Brubaker, et al., 2015; Kralik et al., 2006). While some studies characterize transition as linear and with a distinct beginning and end, others argue that transition is not linear nor a series of steps, but instead can move forward, backward, and cyclically (Glacken et al., 2001; Horak, 2014; Kralik, 2002; Kralik et al., 2006). Common across transition experiences is dislocation, disorientation, disruption, and a need to find a new way of life that incorporates the changes one has experienced (Kralik et al., 2006). Many transitions involve distress as people experience disruption and adjust their lives to account for it, followed by reduced distress as they incorporate their new identity into their lives (Kralik, 2002), as I found on average in the case of gender transition in this dissertation’s empirical findings.

In some life transitions, such as chronic illness diagnosis, liminality persists and people cope by constructing complex and sometimes paradoxical personal narratives (Bruce et al., 2014).

Some are able to move into an incorporation stage where they reconcile their chronic illness with their lives, yet for some, a feeling of in-betweenness remains (Bruce et al., 2014) – what Sleight (2016) calls “prolonged liminality” – because the illness does not fit in with their life narrative. Transitions are “biographical disruptions” when they proscribe people from forming coherent life narratives (Bury, 1982; Sleight, 2016). People tend to deal with life transitions better when they have social support, are engaged with the transition, are well-informed, and after substantial time has passed, among other factors (Glacken et al., 2001).

Burke (1991) conceptualized life transitions as interruptions to identity processes, brought about by a disruptive life event. Burke (1991, 2006) argues that identities resist change and are relatively stable, but do change over time in response to disruptions or identity discrepancies. Identity is a process, rather than a trait, and people continuously adjust to remain congruent with their own identity standards (P. J. Burke, 1991). Burke (2006) draws from interpersonal congruency theory (Secord & Backman, 1961), which posits that people achieve identity congruency when three things match up: their own perception of a characteristic, their behavior based on that characteristic, and others’ views of the characteristic. When these are not in congruence, people experience substantial distress (P. J. Burke, 1991). When a discrepancy occurs between identity meaning and role performance, people change either their identity meaning, or their role performance, or both, to bring the two into congruence (P. J. Burke, 2006). If neither of these changes addresses the identity incongruence, then people engage in identity change as a way to balance their identity process, and to reduce the distress caused by identity incongruence (P. J. Burke, 1991). In this way, “distress plays a major role in identity changes” (P. J. Burke, 1991), and identity disruptions, such as gender transition, are necessary to reduce distress.

Ebaugh (1988) conceptualized life transitions as *role exit*: “the process of disengagement from a role that is central to one’s self-identity and the reestablishment of an identity in a new role that takes into account one’s ex-role.” Some examples of ex-roles are divorcees, ex-convicts, alumni, and transgender people. An ex-role is unique, because it means that one’s identity relates to a previous, rather than current, role (Ebaugh, 1988). For exes, life transitions involve unlearning expectations associated with a previous role, while simultaneously learning expectations of new role (Ebaugh, 1988). Socialization into a new role is accompanied by an identity shift into that new role, yet often involves tension between one’s past, present, and future identities because people are uncomfortable fulfilling expectations for multiple roles at once (Ebaugh, 1988). At the same time, other people in one’s life must also adapt and adjust to the person’s new role (Ebaugh, 1988). Ebaugh (1988) found that, regardless of the type of life transition, role exit involves a predictable pattern of stages: first doubts, seeking and weighing of role alternatives, turning points, and finally establishing an ex-role identity.

While van Gennep’s (1909) liminality framework is useful for understanding life transitions, van Gennep does not address how people move beyond life disruptions (Semaan, Britton, & Dosono, 2016). In the context of veterans returning to civilian life, Semaan et al. (2016) found that information communication technologies enable people to re-integrating into society by developing identity awareness and connecting to similar others to understand post-military life and receive support.

On social media, some people experience transitions in their own lives as bound up with movements from one social media platform to another (Robards, 2012). For example, Robards (2012) found that in 2007-2010, many characterized their move from MySpace to Facebook as a transition from youth to adulthood. In this case, what was actually a broader cultural shift from

MySpace to Facebook appeared to participants as a personal means of facilitating a life transition by changing social media platforms and networks (Robards, 2012).

Previous research has found that health professionals, such as counselors, nurses, and doctors, can better help their patients if they understand transition processes better (Bruce et al., 2014; Kralik et al., 2006), and I argue that the same is true of technology designers. To design technology that accounts for the myriad life transitions that people face, technology designers must understand transition. In this dissertation, I provide some of that vital knowledge. Because time is an important element of transition, longitudinal studies, such as this one, are especially necessary (Kralik et al., 2006).

### **Life transitions and disclosure on social media**

Self-disclosure is challenging, particularly when dealing with sensitive information. Life events that involve revealing oneself as a stigmatized identity, such as transgender, divorced, or an abuse survivor, are particularly challenging. Disclosure decisions involve weighing benefits, such as social support and psychological well-being, with the possibilities of rejection and discrimination (Chaudoir & Fisher, 2010). Managing social relations during transitions is difficult and causes tensions, as people explore new identity presentations through technology by experimenting with appearance and behavior while negotiating interactions and relationships with, and disclosure to, others (Haimson, Bowser, et al., 2015).

Social media allow people unique ways to express identity online during major life changes (Haimson, Brubaker, et al., 2015) and can be major sources of social support (M. Burke & Kraut, 2013) and helpful information for adapting to changes (Stutzman, 2011). Digital media makes others' life events more visible and salient to people (Hampton, Lu, & Shin, 2016). When people

disclose about stressful life events on Facebook, the disclosure, and the support they may receive as a result, can lessen the stressful life event's negative mental health effects (Zhang, 2017). Studies show that online social networks and support groups benefit a wide range of transitional communities, such as new parents (Evans, Donelle, & Hume-Loveland, 2012), those who have recently lost a job (M. Burke & Kraut, 2013), adults transitioning to old age (Norval, Arnott, Hine, & Hanson, 2011), and students entering college (Ellison, Steinfield, & Lampe, 2007; M. E. Smith, Nguyen, Lai, Leshed, & Baumer, 2012; F. D. Stutzman, 2011; Tamir, John, Srivastava, & Gross, 2007). In the absence of socialization that allows people to gain the skills necessary to smoothly navigate life transitions (George, 1993), some of these skills are learned via online social networks. For those navigating gender transition, social media is sometimes seen as a private or safe space to present one's identity without necessarily having to be "out" in other contexts, because it can provide a way to maintain boundaries between social groups (Cannon et al., 2017).

However, social media can also be potentially harmful spaces during life transitions. The public, open nature of social media sites can place users at risk of harassment, which can complicate and even impede life transitions online (Dimond, Fiesler, & Bruckman, 2011; Massimi, Dimond, & Le Dantec, 2012). Context collapse (boyd, 2008) often occurs when people present stigmatized identities on social media, and as a result people must actively manage identity performances and segment audiences (Duguay, 2014). Communication with one's Facebook network can cause added stress during life transitions when friends offer unhelpful advice, and passive consumption of news feed content can decrease social support (M. Burke & Kraut, 2013). Additionally, social media open up a whole new set of "digital possessions," such as photographs, messages, and even social media site profiles themselves, many of which must

be sorted through and changed during a life transition (Haimson, Brubaker, Dombrowski, & Hayes, 2016; Herron, Moncur, & van den Hoven, 2016; Sas & Whittaker, 2013). Examining the potentially negative aspects of using social media during life transitions enables an understanding of how to best support transition processes online, including ways to preserve privacy and allow for optimal network support.

In particular, social media complicate life transitions due to complexities around disclosure of transition-related information and self-presentation in a networked environment (Haimson, Brubaker, et al., 2015). Privacy and disclosure are dynamic processes which people wish to have control over, but sometimes do not (Joinson & Paine, 2007) given the networked nature of privacy on social media (Marwick & boyd, 2014). Self-disclosure on social media sites allows people to form relationships with others, but this often requires disclosing information to a wider audience than one would prefer (Ellison et al., 2011). Most people worry about the information that is available about them online, particularly health information, which is an important aspect of many life transitions (Rainie, 2016). Those who are especially invested in impression management and those with larger networks disclose less on social media (Wang et al., 2016). Particular types of life transitions lead to specific disclosure challenges; for example, military masculinity norms make self-disclosure difficult for veterans returning to civilian life, often leading to delayed disclosure (i.e., postponing disclosing one's transition-related struggles) (Semaan, Britton, & Dosono, 2017).

People disclose selectively, present different information to different audiences, and carefully curate self-presentation depending on their intended audience both in physical world contexts (Goffman, 1959, 1963) and on social media sites (boyd, 2004; boyd, 2008; DiMicco & Millen, 2007; Farnham & Churchill, 2011; Marwick, 2005; Marwick & boyd, 2010). Impression

management (Goffman, 1959) has always been an important topic in social media research (boyd & Ellison, 2007), but is particularly relevant when considering complex and multiple identities that emerge during major life changes. Maintaining multiple social media profiles is a common practice (Haimson, Brubaker, et al., 2015; Haimson et al., 2016), but is a burden and comes with the risk of unintended “leakage” between accounts (DiMicco & Millen, 2007). People disclose more frequently in conversations with strong ties on social media (Bak, Kim, & Oh, 2012), yet these disclosures may also be seen by others in one’s online social network or unintended audiences. Particularly for marginalized groups, having incompatible faceted identities may cause people to worry more about posting on a site like Facebook, thus leading them to use private platforms more often (Farnham & Churchill, 2011). However, even with a private platform like email, people maintain multiple accounts for use in different settings (Gross & Churchill, 2007). People use both mental strategies and account management behaviors on Facebook to “divide the platform into separate spaces” in order to manage disclosures among different groups of friends (Lampinen, Tamminen, & Oulasvirta, 2009; Vitak, 2012). Customizing privacy settings, for instance creating lists of friends, is a common account management technique for disclosure, and increases the amount of content shared on Facebook (Stutzman, Capra, & Thompson, 2011), allows people to get maximum support from their networks, and increases disclosure depth (Ellison et al., 2011). However, many Facebook users misinterpret privacy settings (Acquisti & Gross, 2006), have difficulty using them to target particular audiences, and do not use them even in situations when they would be helpful (Sleeper et al., 2013), which can lead to information being shared with unintended audiences (Marwick & boyd, 2010; Norval et al., 2011). Although people employ many strategies to manage disclosure on social media sites during life transitions, some of those behaviors are associated with



increased transition-related stress (Haimson, Brubaker, et al., 2015). Stress associated with life transitions (George, 1993; Stutzman, 2011) can carry over to, or even be exacerbated by, social media (Haimson, Brubaker, et al., 2015). By documenting the conditions under which the life transitions on social media are challenging, and how people receive support, social media sites can be designed to help reduce transition-related stress and promote network support.

People disclose more often in computer-mediated environments (Jiang, Bazarova, & Hancock, 2011; Joinson & Paine, 2007), and social media enable efficient means for self-disclosure to a wide audience (Andalibi & Forte, 2018; Haimson, Andalibi, De Choudhury, & Hayes, 2017). Yet even on social media, people rarely talk about stigmatized topics (Boudewyns, Himmelboim, Hansen, & Southwell, 2015). Positivity bias (Reinecke & Trepte, 2014) on Facebook restricts support that people are willing to provide on negative status updates; thus, people may not receive the support they need (Ziegele & Reinecke, 2017). Sites that enable anonymity see higher levels of self-disclosure (Andalibi, Haimson, De Choudhury, & Forte, 2016), but anonymity is only a single factor; contextual factors also substantially impact what people disclose on social media (Joinson & Paine, 2007). For some, participating in a social media environment requires disclosures that are more difficult, or more widespread, than they are comfortable with. Online, “active participation in the networked world requires disclosure of information simply to be a part of it” (Palen & Dourish, 2003). As an example, to use Facebook, one must disclose their name and profile picture to their network, and, upon first signing up, must choose a binary gender (Bivens & Haimson, 2016). Facebook does not treat name and gender as sensitive disclosures, and for many people, they are not. However, for people embarking on gender transition, this information is sensitive, because revealing one’s name or gender could disclose one’s trans identity to their network. To exist on social media platforms,

and to take advantage of those particular networked worlds, one must disclose information that may be disproportionately difficult for those facing stigmatized life transitions.

Life transitions' temporal aspects also make disclosure complex. Disclosure is rarely a one-time process, even for non-stigmatized information. Instead, one's identity must be disclosed time and time again throughout their lifetime, causing difficulties for many with concealable stigmatized identities (Goffman, 1963). Decisions about whether and how to disclose are complex, and disclosures may not always be possible. On Facebook, disclosure of a major life change is often considered a one-time process, and the site privileges such disclosures by enabling "life event" posts. These types of "one click" disclosures do happen, but more often people disclose changing identities incrementally, to different groups of people at different times. Examining life transitions over longer periods of time, as I do in this dissertation, is crucial to understanding iterative and faceted disclosures. On social media, faceted disclosures are possible, but bring about new complications, as I examine in this work. Nissenbaum's (2004) contextual integrity framework states that privacy expectations depend on data presentation and dissemination being appropriate to the specific context and norms in which the data is collected. Social media sites often violate contextual integrity by presenting content and making it accessible in ways that cause difficulties for those facing sensitive life transitions. People don't expect an audience for past data; Zhao et al. (2013) found that people consider the audience for their past data to be themselves. However, such an expectation is increasingly unrealistic as people engage in "backstalking" (looking at other user's social media content from the past) (Schoenebeck, Ellison, Blackwell, Bayer, & Falk, 2016). Social media increases the persistence, replicability, scalability, and searchability of user's data and actions, which increases the possibility of boundary violations (Lampinen, Lehtinen, Lehmuskallio, & Tamminen, 2011). We

manage information in the present, but it is viewed and interpreted by people in the past and in the future, and thus temporal self-presentations and disclosures are often in tension (Nissenbaum, 2004; Palen & Dourish, 2003). It is increasingly difficult to control personal information from the past and the future, and impossible to control others' interpretation of it.

How do people manage these complexities? Several different theories emerge from the literature on disclosure on social media sites. Self-censorship is the most prevalent means of managing self-presentation on social media (Sleeper et al., 2013). People may post for the “lowest common denominator” (Hogan, 2010), posting less risky content that will be appropriate for both their grandmother and their best friend. People may also segment their audiences to control self-presentation and disclosure, as described above. Different people employ different strategies, which are fluid and dependent on factors like context, audience, and platform. I will explore some of the complexities of how and why people share personal information and segment their networks in this dissertation.

### **Disclosure and support in online health communities**

Preece (2000) defined online communities as “a group of people with a common interest or a shared purpose whose interactions are governed by policies in the form of tacit assumptions, rituals, protocols, rules, and laws and who use computer systems to support and mediate social interaction and facilitate a sense of togetherness,” and Haythornthwaite (2007) stated that online communities form when connections and interactions between a group of people have added value above dyadic interactions. Some online communities are what Preece (1998) calls empathic communities: groups where members strongly convey empathy through online communication. Technological systems used for empathic online communities must support both

empathy and efficient information exchange (Preece, 1998). While many online communities are not focused on health, here I focus mainly on supportive online health communities because of their similarities to the community around Tumblr transition blogs. Online health communities and Tumblr transition blogs are places where people seek and provide support, gather information, and share information around specialized topics that may be outside the scope of their existing network of friends and family (I describe these similarities in more detail in Chapter 4). Massimi et al. (2014) described online health communities as “places that patients strategically and purposefully use to meet their needs in a shifting, ongoing trajectory of health.” People form online communities around a wide range of health contexts, including but not limited to those with knee injuries (Maloney-Krichmar & Preece, 2005), weight loss goals (Hwang et al., 2010), cancer (Wang, Kraut, & Levine, 2015, 2012), mental health challenges (Andalibi, Ozturk, & Forte, 2017), and those embarking on gender transition (Cipolletta, Votadoro, & Faccio, 2017).

People are motivated to join and remain in online communities to find information and resources that are often not available locally, communicate with others facing similar challenges, tell their stories, process and vent about their feelings, and receive and provide social support (particularly informational and emotional support) (Maloney-Krichmar & Preece, 2005; Newman, Lauterbach, Munson, Resnick, & Morris, 2011; Preece, 1998). Participation in online communities often helps people in their physical world lives because when people get support from others with similar experiences online, less strain is placed on family and friends (who may not be able to fully empathize) (Hayes et al., 2008; Maloney-Krichmar & Preece, 2005). People’s motivations for joining online support groups are not altogether different from motivations for joining physical world support groups, which have been found to increase empowerment,

agency, confidence, and control (Ussher, Kirsten, Butow, & Sandoval, 2006), benefits not mentioned in the literature on online health communities. Yet, as compared to in-person support groups, online support groups are easier and less time consuming, enable people to reach more similar others without geographical or financial constraints, and can be especially helpful for those with potentially embarrassing conditions or barriers to face-to face interactions (Cipolletta et al., 2017; Hwang et al., 2010; Neal et al., 2006; Preece, 1998). Many people value the anonymity and the non-judgmental nature found in some online communities (Hwang et al., 2010). People come to online communities when they need help, and they receive this help from similar others, and sometimes from professionals and moderators (Cipolletta et al., 2017). For trans people in particular, in addition to the motivations described above, online communities are places to reduce social isolation and experiment with trans identity (Cipolletta et al., 2017). Presenting one's physical appearance is often difficult during gender transition, thus making online self-presentation a more appealing option (Cipolletta et al., 2017).

People's needs in online health communities change over time, and online health community technologies must support these changes (Massimi et al., 2014; Preece, 1998). For example, in Preece and Maloney-Krichmar's study of those with knee injuries, people moved through three stages – from injury to diagnosis, from diagnosis to treatment, and from treatment to recovery – and people in each stage had different information and support needs (Maloney-Krichmar & Preece, 2005; Preece, 1998). People often come to an online community for one reason (e.g., to find information), but stay for another reason (e.g., to provide information) (Lampe, Wash, Velasquez, & Ozkaya, 2010). For more experienced community members, providing information to newcomers may be gratifying (Lampe et al., 2010), as it enables them to give back to others and make use of their own difficult experiences (Massimi et al., 2014) (as has also been found in

physical world contexts, such as patients hospitalized with the same condition (Birkelund & Larsen, 2013)). Thus, systems for online health communities should be designed to facilitate shifting roles, such as from newcomer to expert (Massimi et al., 2014). Yet systems should also make departure from the community easy, as membership turnover and reduction is expected as people's life circumstances change (Massimi et al., 2014).

Members of online health communities often face tensions between what and how to disclose when it comes to their personal health. Self-disclosure is common in online health communities, and often triggers reciprocal disclosure (Barak & Gluck-Ofri, 2007). Yet stigma around the community's condition of focus can influence information practices, and in particular, may increase tension between secrecy and information sharing that can help others (Lingel & boyd, 2013). For example, for those in the extreme body modification community, social media is often used to document subversive practices, build community, and connect people (Lingel & boyd, 2013). Yet at the same time, the community uses social media to enact barriers to keep outsiders away (Lingel & boyd, 2013). These barriers often keep unconnected newcomers away as well, which creates information poverty around resources (Lingel & boyd, 2013).

Despite disclosure tensions, online communities can be important places for people with health-related challenges to receive support (Galegher, Sproull, & Kiesler, 1998; Hwang et al., 2010). Self-disclosure often enables people to receive the type of support they desire; those seeking emotional support make their emotional needs known, while those seeking informational support ask questions (Wang et al., 2015). Those who do receive support tend to remain in an online community, as compared to those who do not (Wang et al., 2015, 2012). Support in online communities can be incredibly impactful: De Choudhury and Kiciman (2017) found that receiving esteem and network support in online forums can reduce suicidal ideation for some.

Supportive communities arise around hashtags on social media sites like Instagram, where people share sensitive self-disclosures around difficulties with mental health (Andalibi et al., 2017). Farnham et al. (2002) deployed an online community social support intervention, and found that while the intervention did not directly improve participants' life satisfaction, it did buffer against reductions in life satisfaction. Yet despite social support's benefits, social support is underutilized in most people's social networks; people want to help, but do not know how (Skeels, Unruh, Powell, & Pratt, 2010). If technology can address this underutilization and help networks provide support, then patients can better focus on treatment and recovery (Skeels et al., 2010).

Yet several challenges emerge around receiving health-related support on sites like Facebook (Newman et al., 2011). People have difficulty finding and accessing a supportive network, and encounter tensions between health goals and impression management (Newman et al., 2011). For many, Facebook is not ideal for communicating about health challenges, because the site lacks anonymity and a supportive community norm, defaults to broad sharing, and includes many weak ties with whom people are not comfortable sharing personal health information (Newman et al., 2011). Thus, it makes sense that on Facebook, those with smaller and denser networks tend to share more negative emotions as well as positive emotions (M. Burke & Develin, 2016). In response to posts with negative emotions, people receive more emotional and supportive comments and messages, in contrast to positive posts which tend to receive more likes and positive comments (M. Burke & Develin, 2016). More research is needed to understand how social media sites can enable and facilitate formation of supportive online health communities, and in this dissertation, I contribute to this line of inquiry by examining how people interact and support each other within a particular social media community focused on gender transition.

## **Gender transition as identity and life transition**

Although many major life changes involve substantial identity changes, gender transition is unique because numerous complex identity changes are coupled with risks of discrimination, harassment, and rejection (Factor & Rothblum, 2008; Grant et al., 2011; Hendricks & Testa, 2012; James et al., 2016). Gender transition often leads to severe marginalization as well as rejection and disapproval from friends, family members, and networks at work and school (Factor & Rothblum, 2008; Hendricks & Testa, 2012). All of these factors contribute to minority stress (distress particularly related to stigma and discrimination experienced due to one's minority identity) for trans people (Hendricks & Testa, 2012). At the same time, gender transition is one of the only life changes so drastic that a person often becomes literally unrecognizable to their friends, family, and online social networks. For example, during transition, a person's social media profile will often change in three substantial ways: name, gender, and physical appearance in photos. These changes can occur months or even years apart from each other. If such changes are made without announcement, or if the announcement of gender change is not displayed or noticed by some members of the trans person's online social network, a person who was once a "friend" now appears as a stranger. Thus, gender transition requires many complicated decisions around disclosure (Haimson, Brubaker, et al., 2015; Haimson et al., 2016). Facing discrimination, violence, and rejection, while at the same time managing complex disclosure decisions, may make a trans person feel uncomfortable and unfamiliar within their online social network, which can cause stress, frustration, and disengagement.

Importantly, trans identity depends on a person's relationship to their gender, not necessarily physical characteristics or changes – especially considering that many trans people do not have



the financial means or support systems in place to take steps to medically transition, and many others do not desire medical transition. Understanding and embodying one's trans identity is a gradual process with both individual and social aspects (Mullen & Moane, 2013). When developing trans identities, people balance desire for a lived gender that matches their internal gender with considerations of available resources, coping abilities, and potential consequences of transition (Levitt & Ippolito, 2014b).

Several models of trans identity development have attempted to characterize and identify patterns in the gender transition process. In contrast to the outdated and highly medicalized "transsexual model" that considered transsexualism a mental illness that could be cured by medical procedures such as sex reassignment surgery, the "transgender model," rising in the 1990's, conceptualized trans as a "natural form of human variability," and considered sex reassignment procedures only one of many choices for trans people (Denny, 2004). Devor (2004) proposed a 14-stage model of trans identity formation, and Bockting and Coleman (2013) identified a five-stage trans coming-out model, in which trans identity development depends on social interactions. Yet as the authors of these models themselves acknowledge, a formal linear model, with a set of steps in a particular order, cannot fully account for the complexities and starts and stops of gender transition, and the uniqueness of each person's transition journey. Diamond et al. (2011) argued that models of trans identity development must be more flexible and inclusive of non-linear, non-binary, and potentially multiple and shifting gender transitions to describe the diverse nature of trans experiences. Beemyn and Rankin (2011) suggested that considering transition as a series of milestones (rather than stage or step model) makes more sense, because each person differs in their transition goals, which milestones they will or will not pursue, and in what order their transition progresses.

Relationships between trans identity development and emotional wellbeing are understudied (Strain & Shuff, 2010). Trans people's emotional wellbeing may not be influenced by number of steps taken towards transition, but instead by a measure called transgender congruence: the "degree to which transgender individuals feel genuine, authentic, and comfortable with their gender identity and external appearance," which can be accomplished at different stages of transition for different people (Kozee, Tylka, & Bauerband, 2012). Placing change and transition at center of analysis of trans identity, rather than looking for particular outcomes, can help us understand trans people's wellbeing because it enables viewing people in context (Diamond et al., 2011). In this dissertation, I address the shortage of research on how transition progress relates to emotional wellbeing by examining how emotional wellbeing changes over time and in relation to trans identity disclosures.

### **Trans identities and experiences online**

Relationships between the body, the self, technology, and gender are far from simple. Gender, even though it is a social construction (Butler, 1999), is still based on relation to a physical body (Stone, 1995). Using an avatar different from one's physical world gender was in the 1990's, and remains today, common in online spaces like virtual worlds (Stone, 1995). Online spaces can be important means for people to explore identities that they may not yet be comfortable presenting in the physical world; what Bruckman (1993) called "identity workshops." Stone (1995) argued that in cyberspace, where identity performance, play, and disruption are possible and even encouraged, the "transgendered [sic] body is the natural body." Meanwhile, in physical space, the "transgendered [sic] body is the unnatural body" (Stone, 1995). In a sense, then, the transgender body is posited as a particular site of the war between biology and technology,

natural and unnatural (Stone, 1995). This is especially interesting when we consider that to Stone (1995), “natural” here means invisible or default. Trans identities embrace both the multiple, as in embodying multiple genders (whether in the same or in different temporalities), and the liminal, as in embracing transition and crossing the boundaries between genders. In 1995, the multiple and the liminal dominated online and technologically-mediated spaces, thus making virtual spaces feel natural for many transgender people. It appeared as though this would continue to be the case.

However, instead, many online spaces have begun to substantially “other” trans identities, returning the natural, the invisible or default, to the cisgender. This has been accomplished primarily through binary gender classification schemes (Male/Female) and enforcement of “one person per account” policies (e.g., on Facebook). Although gender classification schemes in some online arenas have expanded to include “Custom” or “Other,” doing so literally posits trans identities as other, in opposition to default or natural, as they were for Stone (1995). The multiple and the liminal, now, are not only unnatural in the physical world, but are unnatural in many online settings. On social media sites like Facebook that forbid pseudonymity and multiple accounts, gender transition is often difficult (Haimson, Brubaker, et al., 2015). Presenting oneself online using a post-transition gender, name, and appearance often requires mass trans identity disclosure (Haimson, Brubaker, et al., 2015). Such platforms are challenging to those who need to engage in experimentation and exploration to find their new gender identity (Haimson, Bowser, et al., 2015). Even after transitioning, digital footprints representing a past gender, name, and appearance may remain on one’s profile (Haimson et al., 2016). While much has been done to address some of these challenges around self-presentation, such as Facebook’s custom

gender options, there remain some problematic programmatic decisions. Bivens (2015) described how

*Facebook's software normalizes a binary logic that regulates the social life of users. The conditions for binary existence are easily produced while any meaningful non-binary existence is severed, even though the capacity to move beyond the binary has always been a programmatic possibility.*

In this way, Facebook's increased gender options are only at surface level, still coded as binary in the database, and may serve advertisers as much as users (Bivens, 2017).

Despite barriers to experimenting with identity in some online spaces, other online spaces can be important arenas for identity exploration. Because things like appearance, name and gender presentation are sometimes flexible attributes, digital spaces can be important places for identity exploration without some of the barriers present in the physical world (Haimson, Bowser, et al., 2015; Turkle, 1999). YouTube is a common site for trans identity exploration (Raun, 2010, 2015). Transition vlogs are a particular genre with a particular model of how to appear and how to document transition, and function as a combination of autobiography, diary, and means of social connection (Raun, 2010).

Many trans people turn to Tumblr, a site that allows pseudonyms and multiple accounts, and where one's network is not necessarily linked with one's pre-transition network, to experiment with and express trans identities. Tumblr's affordances enable "low-risk self-presentation where individuals can try identities out... to a wide, unpredictable swath of other users whose identities are also often temporary and not clearly tied to a real-world persona" (DeVito, Birnholtz, & Hancock, 2017), which is especially useful for those in transition. Gonzalez and Fritz (2017) argued that to best serve trans populations, site design should prioritize flexibility (e.g., in control

of information) and foreground intangibles (e.g., political values, support). Tumblr's reputation as a queer and gender fluid-friendly space (Vivienne, 2017) is notable. For many users, Tumblr is a queer space both in terms of queer theory (which challenges dominant gender categories and posits identity as socially constructed, fluid, and ambiguous rather than fixed or essential (Butler, 1999)) and in terms of being populated by queer/LGBT communities (Cho, 2015). Fink and Miller (2014) argued that Tumblr is a space where those belonging to trans and queer subcultures can represent their identities and cultures on their own terms, rather than relying on the mainstream media to represent them. Tumblr is also an important place for trans people to find and share information (Ahmed, 2018). Trans people have unique health needs, and thus different information seeking practices, than the general population, and even other LGBTQ people; thus health information seeking and sharing is a major focus of the trans community on Tumblr (Hawkins, 2017).

Many features and affordances contribute to Tumblr's prevalence of trans users and its reputation as a safe place for trans online communities. Users' ability to be pseudonymous, maintain multiple identities and blogs, and the site's unstructured, flexible profiles (on which people can choose which parts of themselves to display, and how) allow people to express non-normative identities (Oakley, 2016; Renninger, 2015). Harassment is de-incentivized on Tumblr because comments (called "replies" on Tumblr) are less visible than on other social media sites – somewhere in between public and private (Lottridge, Kim, Kaye, & Andalibi, n.d.) – making the site a relatively safe space for marginalized populations (Renninger, 2015). The site's Ask box is a way to build community around marginalized genders and lets people know they are not alone (Oakley, 2016). Tumblr's visual design enables identity complexity (Vivienne, 2017), and with its tagging system people can denote gender and find others with similar genders (Dame, 2016).

Finally, the site facilitates nonlinear, impermanent, and multiple trajectories of content reblogged across the site and personal narratives (Cho, 2015; Fink & Miller, 2014; Vivienne, 2017). These and other features lead to an openness in discussing stigmatized issues (Premack, 2016; Seko & Lewis, 2016), which likely influences the prevalence of transition blogs on Tumblr.

The Internet is a primary means for trans people to find information and resources, build community, and meet other trans people, particularly early in transition (Beemyn & Rankin, 2011; Beiriger & Jackson, 2007; Mullen & Moane, 2013; Prosser, 2014). Online, people can draw from the expertise of other trans people facing similar issues (Whittle, 1998), in a space where trans people, rather than medical professionals, are considered experts on being trans (Dame, 2013). In online spaces, trans people find support, understanding, and acceptance among a community of like others by sharing sensitive information that they may not be able to share in the physical world (Gauthier & Chaudoir, 2004). Cavalcante (2016) described the Internet as the “most significant technological transformation for transgender individuals and communities to date,” in contrast to previous generations of trans people who had scarce media resources and were media readers and viewers rather than participants. In a departure from the rest of the literature, Hill (2005) argued that, though the Internet increased opportunities to make connections with other trans people, the Internet is not substantially different than older technologies like books, movies, television, and radio in terms of enabling trans people to present identities and learn from other trans people’s experiences. Yet online spaces provide realistic trans representation and make resources and information available in ways other forms of media representation (e.g., television) often do not (McInroy & Craig, 2015). Information sharing is also important for trans people during transition, and online spaces enable people to share to particular audiences (Pohjanen & Kortelainen, 2015). Sharing personal, transition-

related information is not easily facilitated through mass media – nor would many trans people want audiences that large. Importantly, Prosser (2014) reminds us that digital lives are often more livable for trans people; when physical world support sources fail, online communities take their place.

People also face barriers to transition-related information seeking online. Those beginning transition often are not successful in information seeking because they do not know which words to use as search terms; rather, they have a sense that “something is wrong” without the vocabulary or concepts necessary to search for information (Pohjanen & Kortelainen, 2015). People also sometimes have difficulty matching their own experiences to information they find online (Pohjanen & Kortelainen, 2015). Sometimes, information needs are more related to the gender that they are transitioning into (e.g., man, woman) than specifically trans (Pohjanen & Kortelainen, 2015). Because people often have difficulty finding information online through search engines (Hansen, Derry, Resnick, & Richardson, 2003), online communities are especially important because they enable people can learn, ask questions, and get answers. The most important online information sources for people in transition are trans-specific personal networks and anonymous strangers who share one’s identity, because these people have detailed and reliable information about gender transition that is not available elsewhere (Haimson, Bowser, et al., 2015; Pohjanen & Kortelainen, 2015). Trans information needs depend on one’s life situation and stage in transition, and shift as one progresses in their transition (Pohjanen & Kortelainen, 2015).

The Internet also enables effective trans activism by reducing barriers to mobilization and providing activism tools and organizing strategies (Shapiro, 2004). Whittle (1998) argued that identity exploration online can lead to the ability to be “real” in the physical world, which can

lead directly to activism. Trans women of color use #GirlsLikeUs on Twitter to “curate an intersectional networked counterpublic that works to legitimize and support trans identities” and build a supportive network for advocacy (Jackson, Bailey, & Foucault Welles, 2017).

Additionally, trans people use protest campaigns on social media to discuss trans issues, challenge transphobic legislation (e.g., bathroom bills), provide positive representation of trans people, and combat stereotypes (Williams, 2016). Many people, in trans contexts and beyond, use tags on Tumblr to mobilize writing and curating content as social justice activism (Wargo, 2017). Trans people also harness Internet technologies to create archives like the Digital Transgender Archive (Rawson, 2014). These are spaces where trans people share experiences, recognize others’ experiences, and develop community knowledge (Rawson, 2014).

This review of existing research around trans identities and experiences in online spaces highlights the fact that there has been substantially more work published about the *opportunities* the Internet enables (e.g., access to information and support, arenas for identity exploration) than the *challenges* (e.g., difficulties with self-presentation and disclosure). In my work, I address this gap in the literature, and work toward understanding the *challenges* that are inherent in online spaces for trans people, which can help lead to more inclusive design for online spaces.

## **Transgender studies and HCI**

Transgender studies offer a critical interrogation of the ways gender is constructed, performed, embodied, enforced, and disrupted (Hines & Sanger, 2010; Stryker & Whittle, 2006). Valentine describes transgender studies as addressing “first, the capacity for new insights into embodied experience; second, the heterogeneity of theoretical positions, identification, [and] embodiment...; and third, the importance of transgender-identified scholars in producing these



insights” (Valentine, 2007). A transgender studies approach challenges classification systems to allow for participants’ complex identities (Meadow, 2016). HCI scholars have used and encouraged similar approaches; Bardzell argued that “by making visible the manifold ways that gender is constructed in everyday life, contemporary feminism seeks to generate opportunities for intervention, making it a natural ally to design” (Bardzell, 2010). Similarly, Rode (2011) argued that HCI researchers should examine how gender is performed and embodied in real-world, everyday settings. Schlessinger et al. (2017) introduced the concept of intersectional HCI as a framework to engage with complex identities, of which gender is one facet that interplays with others such as race, ethnicity, and class.

Issues of categorization and classification also bridge transgender studies and HCI. In queer theory, identities are considered unstable and multiple (Hines & Sanger, 2010). Trans people bring materiality to queer theory through lived experiences across and between categories (Stryker & Whittle, 2006). Transgender studies shows us how the material body and techniques used to craft identities are linked. This ties into category and classification theory in HCI in several ways. According to Bowker and Star (1999), while classifying things is normal and human nature, categorization has morals and ethics in that “arriving at categories and standards” involves “deciding what will be visible or invisible within the system.” Thus, classification decisions are not neutral, and instead reflect the politics of both the time period and the person making the decision (Bowker & Star, 1999). In categorizing gender, trans people become blank paper where people impose their idea of what a man or woman should be (Bowker & Star, 1999; Stone, 1995). Trans people, thus, often experience what Bowker and Star (1999) call torque: “the twisting that occurs when a formal classification system is mismatched with an individual’s biographical trajectory, memberships, or location.” Technological systems are a particular site of

torque for trans people because these systems often impose or assume categories that do not account for trans identities and histories. Everyone belongs to multiple communities and has multiple identities in ways that some classification systems simplify or ignore, yet multiple identities are more visible and difficult for some (Bowker & Star, 1999). As Spade (2008) argues, “the cases of those who challenge their classification, or who are difficult to classify, expose the underlying norms and assumptions of the classification system and reveal its fault lines.” This has clear relevance for HCI: studying trans users can reveal places where social technologies do not work as expected, which allows designers to make improvements that help both trans users and the user base more broadly. Trans identities challenge technological systems’ gender norms both categorically (by complicating the gender binary) and conceptually (by being ambiguous and fluid) (Hoffmann, 2017). When technology does not work as expected, which is often the case for marginalized groups of trans or queer users, moments of breakdown make it clear that the technologies were designed for particular users and not others; and this, in turn, makes those users think more about their identity while using the technology (Hardy & Lindtner, 2017). Systemic exclusion of trans people from information systems (what Hoffmann (2017) calls “data violence” in a continuation of Spade’s (2011) concept of administrative violence) can negatively impact trans people’s lives (Hoffmann, 2017).

Feminist HCI and transgender studies are natural allies, as they share a focus on gender embodiment and advocacy, and both are important lenses for technology research and design. In her 2010 agenda for feminist HCI, Bardzell (2010) suggested an important challenge in HCI that a feminist approach could address: “How do we simultaneously serve real-world computing needs *and* avoid perpetuating the marginalization of women and indeed any group in technology?” Feminist approaches within CSCW, HCI, and social computing are an ideal arena

for researching and theorizing identities, online self-presentation, and issues of classification and categorization within social technologies. Thus, it is only natural that HCI include research about and design in consideration of trans people, for whom issues of self-presentation and classification are especially salient. This dissertation is an instance of HCI research about and in the interest of transgender people.

Ahmed (2018) argues that HCI literature often either ignores trans people, or treats them theoretically rather than as people to be designed for. In response, and as a first step of merging transgender studies and HCI, she introduced the concept of *trans competent interaction design*, as a “starting point toward anti-oppressive design practices regarding gender” (Ahmed, 2018). Trans competent interaction design grounds design of technologies for trans people in trans people’s needs and experiences, such as health, wellness, and safety; recognizes that design decisions can disproportionately harm trans people; makes changes to minimize this harm; understands that users have unique identities that may change over time; and does not equate gender with anatomy (Ahmed, 2018). Future technology design should incorporate trans competent interaction design.

The design and norms inherent in social technologies like social media sites interpellate people’s online identities in many ways that they cannot control (Van House, 2011). Social media site design has a large influence on the types of self-presentations that are privileged on such sites; as Van House (2011) argues, social media sites “variously support – and valorize – certain activities and ways of categorizing oneself, and not others,” thus reducing agency for some users. Additionally, because people do not use social media sites only to represent already-established identities, but also to help construct identities (Haimson, Bowser, et al., 2015; Van House, 2011), it is particularly important to consider whom certain design choices privilege.

Social media site design often privileges users with static identities, and marginalize trans users and others with complex and changing identities (Haimson, Brubaker, et al., 2015; Haimson & Hoffmann, 2016). This relates directly to Bardzell’s important question of how technology can avoid marginalizing particular groups of users (Bardzell, 2010). Designing for a “normal,” standard user is no longer enough; feminist and Values in Design critiques have shown us that design is not neutral (Bardzell & Bardzell, 2011; Flanagan, Howe, & Nissenbaum, 2008). Trans-inclusive HCI research and design ensures that this approach considers the needs of trans people along with women and other marginalized populations. A merging of transgender studies and HCI, as I employ in this dissertation, allows new avenues to understand important self-presentation, classification, and identity issues.

### **Relationships between disclosure, health, and social support, in trans identity contexts and beyond**

Self-disclosure has been found to lead to improved mental and physical health (Pennebaker, 1995) and increased self-esteem (Rosario, Hunter, Maguen, Gwadz, & Smith, 2001), and is necessary to receive social support (Chaudoir & Fisher, 2010). Disclosure can help break the secrecy cycle, in which a person becomes preoccupied by and ruminates cyclically on a secret (Wegner & Lane, 1995), such as a hidden identity. Yet disclosure of stigmatized identities may also increase anxiety due to the unpredictable responses one may receive from others (Rosario et al., 2001), and disclosure’s positive benefits may be less salient for those who suffer most from psychological distress (Stiles, 1995).

The relationship between disclosure and mental health depends greatly on the reaction one receives to the disclosure – supportive reactions lead to greater disclosure benefits (Lepore,

Ragan, & Jones, 2000; Puckett, Woodward, Mereish, & Pantalone, 2014; Rodriguez & Kelly, 2006). In one study, those with more accepting and less judgmental confidants experienced greater physical health (Rodriguez & Kelly, 2006). As another example, those who faced parental rejection when coming out as a sexual minority suffered from greater psychological distress (Puckett et al., 2014).

Minority stress is a type of mental distress that results from stigma, prejudice, and other factors specifically related to a minority identity, and has frequently been theorized in a gay and lesbian context (Brooks, 1981; Meyer, 1995). Minority stressors such as stigma, internalized homophobia, discrimination, and violence lead to psychological distress, low self-esteem, and decreased emotional wellbeing for LGB people (D'augelli & Grossman, 2001; Kelleher, 2009; Meyer, 1995). Minority stress is related not only to mental health disparities, but also to physical health disparities for LGB people as compared to heterosexuals (Lick, Durso, & Johnson, 2013). Minority stress can be relieved by coping (Toomey, Ryan, Diaz, & Russell, 2017), resilience, group solidarity, and disclosure. Disclosing one's minority identity allows one to learn how to deal with minority stress (Meyer, 2003; Morris, Waldo, & Rothblum, 2001) as well as enabling potential support from one's confidant.

Disclosing one's status as a sexual minority is associated with less psychological distress (Morris et al., 2001). Yet some sexual minorities do not disclose their sexual orientation to reduce potential harm (D'augelli & Grossman, 2001) or as a coping strategy, but concealing one's identity can lead to increased stress (Meyer, 2003) and causes one to miss out on the benefits of disclosure and potential support. Social factors influence disclosure decisions (Cain, 1991); many gay people face a dilemma in choosing whether to be open about their gay identity (and risk harassment and losing friends, family, and jobs), or to conceal (and face distance in

relationships and psychological issues related to secrecy) (Cain, 1991; Corrigan & Matthews, 2003). Thus, many LGB people are neither overt nor covert, but instead are overt in some social situations and covert in others (Cain, 1991); yet, context collapse ( danah boyd, 2008) can occur if people from different social settings where a person is overt/covert overlap.

Hendricks and Testa (2012) adapted the Minority Stress Model to the trans context, and found that minority gender identity and expression are associated with many adverse experiences that can lead to victimization, rejection, and internalized transphobia. Discrimination, prejudice, rejection, and even violence are pervasive for trans people, and as such trans people face additional stressors and are uniquely vulnerable as compared to the general population (Clements-Nolle, Marx, & Katz, 2006; Hendricks & Testa, 2012; James et al., 2016; Lombardi, Wilchins, Priesing, & Malouf, 2002; Rood et al., 2016; Rood, Puckett, Pantalone, & Bradford, 2015). Trans people face significant mental and physical health disparities as compared to cisgender people; among other things, they are more likely to be depressed and in poor health (Streed, McCarthy, & Haas, 2017). Stigma is a stressor, but coping with stigma can also be stressful (C. T. Miller & Major, 2003). In this way, stigma impacts stress both directly and also indirectly, through discrimination and other minority stressors (C. T. Miller & Major, 2003). Additional factors, such as fears specific to being trans (e.g., fear of stigma and discrimination) and negative feelings about the trans community, lead to increased psychological distress (Sánchez & Vilain, 2009). The literature on minority stress's impacts on trans people provides evidence that high rates of mental health challenges among the trans population are not something inherent in trans people, but instead are a result of how society treats trans people (Durwood, McLaughlin, & Olson, 2017). Many trans people develop resilience in response to minority stress and its impacts, and use particular learned behaviors to cope with minority-stress

related adversities (Hendricks & Testa, 2012; Singh, Hays, & Watson, 2011). Regardless of the difficulties trans people face when they transition, it is crucially important that people who want to transition are allowed to transition. When young trans people are able to transition, they experience improvements in depression, anxiety, self-harm, and do not experience regrets (Endocrine Society, 2015).

Trans identity disclosure causes unique minority stressors for trans people. “Coming out” means something different for trans people than for LGB populations, and the meaning of trans identity disclosure changes over the course of one’s transition (Hendricks & Testa, 2012; Zimman, 2009). When trans youth come out to their parents, parents often react in a hostile manner; Grossman et al. (2005) found that 59% of trans youth initially had negative reactions from parents. Those trans people who are older, have been dressing as their identified gender for a longer period of time, and are more involved in trans communities are more likely to come out and begin the transition process (Maguen, Shipherd, Harris, & Welch, 2007). Unlike some other stigmatized identities, being trans is often concealable (C. T. Miller & Major, 2003). The concealability of one’s trans identity impacts how one copes with minority stress: visible stigmas can be more easily associated with prejudice, yet invisible stigmas lead people to doubt whether others know, and whether or not they were a victim of prejudice when potentially discriminatory situations occur (C. T. Miller & Major, 2003). Those who are invisibly trans are less likely to seek support because it requires disclosure, which can lead to additional stress (C. T. Miller & Major, 2003). Some trans people are visibly trans to others because of physical changes or incongruence between physical appearance and identity, and thus have little choice around disclosure (Beemyn & Rankin, 2011). Other trans people who appear cisgender are still out as trans to people in their lives, in attempts to raise visibility or desire to not hide their identity

(Beemyn & Rankin, 2011). Due to minority stress, many trans people only reveal their trans identity to close friends and family (Beemyn & Rankin, 2011). Coming out as trans can allow access to resources and support (Hendricks & Testa, 2012), but also may involve communicating sensitive information to people who do not understand trans identity and may be discriminatory (Levitt & Ippolito, 2014a). As such, many trans people experience constant risk/benefit evaluation, in which they must balance visibility with the discriminatory conditions that may accompany disclosure (Levitt & Ippolito, 2014a). Trans people also live with fear of involuntary disclosures, such as when identity documents may not match one's lived gender (Levitt & Ippolito, 2014a).

Previous work has examined the relationships between gender transition status and mental health, yet results are inconsistent. Some studies have found that the further one is in their transition, the *less* depression and anxiety they may face (Budge, Adelson, & Howard, 2013; Durwood et al., 2017; Kozeo et al., 2012; Strain & Shuff, 2010). Others have found that minority stressors such as discrimination and disclosure lead to *more* depression, anxiety (W. O. Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013), and even suicidal ideation (Rood et al., 2015). The inconclusiveness of prior results indicates that several effects are in play here: a transition into the gender and identity that matches one's internal self clearly has positive mental health effects. At the same time, as one becomes trans, they face the myriad discrimination and harassment that trans people face, which has negative mental health effects (Grant et al., 2011; James et al., 2016). More work is needed to understand the complicated interplay between gender transition and mental health, and how this occurs on social media.

Social support is widely found to have a moderating effect on the relationship between transition status and mental health. That is, social support from one's network can mitigate the



negative effects of stressors like discrimination and harassment (W. O. Bockting et al., 2013; Budge et al., 2013; Rotondi, Bauer, Scanlon, et al., 2012; Rotondi, Bauer, Travers, et al., 2012). Support is not additive, but rather depends on how different supportive factors and audiences interact (Mullen & Moane, 2013). When a person discloses their trans identity, conflict with the confidant may lead to depression, while affirmation from the confidant can lessen one's chance of depression (Nuttbrock et al., 2012). Most trans people have positive responses when coming out to friends, which helps with self-acceptance (Galupo, Krum, Hagen, Gonzalez, & Bauerband, 2014). Yet if a friend is not supportive, it can strain the friendship (Galupo et al., 2014). Those who have a connection to other trans people prior to transition (particularly when they first discovered they were trans) tend to experience greater psychological well-being (Testa, Jiminez, & Rankin, 2014). However, many trans people do not have trans people in their lives during this crucial phase; thus, online spaces like Tumblr can be important arenas for people to be aware of and engage with other trans people. Relationships between trans identity disclosure, emotional wellbeing, and social support have not yet been examined in a social media context.

Because social media is increasingly pervasive in people's lives (Perrin, 2015), it is important to consider the relationships between trans identity disclosure, mental health, and social support in this context. Understanding the factors at play can lead to design interventions that may improve mental health and social support for people during difficult life transitions.

### **Research gap**

In this work, I examine how trans identity disclosure, emotional wellbeing, and social support are associated during gender transition as expressed on social media. As such, I address Testa et al.'s (2014) assertion that future work should "examine if distress is more or less associated

with... identity development points, such as ‘coming out’ to others.” By addressing this research gap in a trans context on social media, I build on existing work in the areas I reviewed in this chapter – identity and self-presentation online, life transitions, trans identity development, and the relationships between disclosure, emotional wellbeing, and social support. Additionally, I link transgender studies with HCI, an important connection between fields with natural overlap. My work is the first so far to empirically study disclosure and emotional wellbeing as expressed on social media during gender transition, which will lead to important insights for design of more inclusive social technologies.

## CHAPTER 3 METHODS

### **Research approach**

In this work, I apply an explanatory sequential mixed methods approach. First, I use statistical modeling and computational linguistics to understand the relationships between trans identity disclosure, emotional wellbeing, and social support. Next, I use qualitative analysis of interviews and Tumblr transition blog content to add further understanding based on people's complex experiences, validate findings, and examine some of the data that does not fit statistical trends. This combination of methods provides a better understanding than either approach could provide alone (Creswell, 2014).

In this dissertation, I take both a post-positivist and a constructivist worldview. This mixture is necessary and important given my research topic. Quantitative and computational methods enable me to uncover relationships between variables, such as how emotional wellbeing changes after disclosures. At the same time, as seminal queer theory work has shown (Butler, 1999), identity and gender are complex, socially constructed, continually changing, and unique to each person in ways that cannot be captured using quantitative methods. Technology use is similarly complex. The approaches I combine are not necessarily discordant, and in fact can fit together well; philosopher Christine Korsgaard argued that “constructivism and realism are perfectly compatible. If constructivism is true, then normative concepts may ... be taken to refer to certain complex facts about the solutions to practical problems faced by self-conscious rational beings” (Korsgaard, 2003). As such, I employ both worldviews in my data collection, analysis, and presentation.

In what follows, I first detail my data collection and analysis methods for Tumblr transition blog data. This analysis included topic modeling, detecting disclosures using a machine learning classifier, computational linguistic techniques to measure emotional wellbeing over time, manual coding to measure social support, statistical analysis to understand relationships between these variables, and qualitative content analysis. Next, I describe my methods for interview data collection and qualitative analysis of interview data. Finally, I present this study's limitations. This research was approved by the University of California, Irvine Institutional Review Board.

### **Tumblr transition blogs data collection<sup>2</sup>**

Using Tumblr's API (Tumblr, 2016) and the PyTumblr API client (PyTumblr, 2016), I collected text data from 241 transition blogs starting with each blog's first post (some beginning as early as 2009 and some as late as 2016) and ending on January 4, 2017. My data collection approach appears to be in line with Tumblr's API License Agreement, which gives permission to "manipulate information and Content from the Tumblr Firehose for the purposes of non-public analysis and search" (Tumblr, 2014). I selected the blog sample by first searching on Tumblr using the tags "transition blog," "transition," "mtf transition," and "ftm transition," and then searching using relevant tags that emerged within this initial sample, such as "girlslikeus," "hrt blog" (hormone replacement therapy), "hrt transition," "my transition," "nonbinary transition," "personal," "tpoc" (trans person of color), and "transition timeline." I selected blogs that met the following criteria:

---

<sup>2</sup> I acknowledge Katrina Vergara, an undergraduate research assistant, for her help throughout the data collection process.

- 1) Included text content more than 10 words long (to enable meaningful text analysis, in which at least several words in the post are part of sentiment analysis lexicons yet each individual word's sentiment is not too large of a proportion of the post)
- 2) Focused on the person's gender transition or on personal content, rather than being a blog by a trans person about another topic (e.g., fashion, politics)
- 3) Bloggers appeared to be, or stated that they were, 18 or older

Using my Tumblr account, I then “followed” each blog currently in the sample. I examined all blogs listed in this account's list of “recommended blogs” to follow. The recommendation algorithm gave mostly accurate and relevant recommendations, and I added all recommended blogs that met my criteria to the sample. I continued this process for approximately one month before settling on a final sample of blogs. Different blogs were active and inactive during different time periods throughout 2009-2016.

Because of the sensitive, often de-identified, and public nature of the content, I used an opt-out approach to data collection. I messaged each blogger using Tumblr's messaging system, briefly described the study, and asked them to respond and specify if they wished to opt out of data collection. I attempted to message a total of 257 bloggers. 121 (47%) bloggers responded: 106 (41%) of the total initial sample explicitly gave permission to collect their data, 16 (6%) opted out, and three (1%) asked for more information but did not opt in or out. I answered all questions that bloggers asked about the study and data collection. I collected data from the 241 people who did not explicitly opt out of data collection. I removed one blog that did not include sufficient text content. This resulted in 240 blogs and 84,481 total posts.

Tumblr users can post content in nine ways: text, photo, quote, link, chat, audio, video, answering a question asked of that blogger by another user (“asks”), and as a “reblog” of another

user's post. I collected text content associated with these post types if it was more than ten words long: text content from text, chat, and quote posts, answers from asks, photo and video captions, text accompanying links and audio clips, and text annotating a reblog. We did not collect photos, images, or visual content of any kind.

### Reflections on ethical social media data collection

In this work, I intentionally took an ethical approach to collecting participants' social media data. Although all the Tumblr blog data I collected was technically public, I had an ethical responsibility to alert participants to the fact that their data was being used in a research study, and to give them the opportunity to opt out of data collection. The amount of contact a researcher has with authors of social media posts used in a research study should match the sensitivity, depth, and size of the data collected. That is, collecting the entirety of a person's Tumblr blog (relatively sensitive content posted over a period of months or years) is not the same as collecting a person's tweet about, for instance, the Oscars or the Olympics (relatively non-sensitive and brief content). The former, I decided, required a personal message and an explanation of the research study, its purpose, and potential benefits. Most bloggers who responded to my message were enthusiastic about the study and gave permission to use their data. However, several bloggers who chose to opt out were upset and reacted negatively – which highlights the importance of adopting an opt out approach, and letting these people opt out, rather than simply collecting data without bloggers' knowledge. The process of contacting 257 bloggers and answering each person's questions and concerns about the study, and responding to several upset people, was at times overwhelming and stressful as a researcher. Yet it was ultimately the right and ethical decision. I plan to use similar approaches in future research involving social media

data collection, and I urge other researchers to do the same, particularly for sensitive social media data that is technically public.

### **Tumblr transition blogs data description**

The full dataset included 84,481 posts, with average word count of 71.38 (median = 33, *SD* = 124.70). On average, each blogger posted 367 total text posts that met our data collection criteria (median = 76, *SD* = 814.46), had been blogging for almost two years (mean = 646 days, median = 530 days, *SD* = 515.19 days), and posted roughly three times per week (mean = 0.43 posts per day, *SD* = 0.67 posts per day).

Although I did not collect demographic data from bloggers, I found much of this information in their blog descriptions. Most bloggers (95%) prominently stated or implied their gender and many (42%) their age. When placing each blogger into the most prominent gender category that they displayed on their blog (with the caveat that some identified as more than one gender, e.g. trans woman *and* non-binary) bloggers in the dataset were 47% female-to-male/FTM/trans men, 46% male-to-female/MTF/trans women, and 7% non-binary. Like the Tumblr platform more broadly (C. Smith, 2013), the sample skewed young, with 63% of bloggers in the 18-24 age range, 30% 25-34, 7% 35-44, and <1% 45 or over. Because most bloggers (93%) did not specify

<b>Post type</b>	<b>Post count</b>
Text	22,432
Photo caption	18,634
Answer from ask	19,110
Comment on a reblogged post	13,034
Chat	4,307
Quote	3,847
Video caption	1,717
Link	1,197
Audio caption	203
<b>Total</b>	<b>84,481</b>

**Table 3.1. Number of posts of each post type in dataset.**

race or ethnicity information on their blogs, I do not report those demographics here. One limitation of this work is the inability to analyze relationships between race/ethnicity and affect over time.

Table 3.1 shows how many posts of each type were in the dataset. After manually reviewing content representing each of these post types, I found that text content from text posts and photo captions provided the most relevant data for this project: personal writing about one's transition in the present or recent past. While answers from asks also provided personal writing about one's transition, these were in response to other people's questions, and thus usually involved discussion of things that happened in the past. For example, a follower might ask, "What was it like to come out to your parents?", and a blogger would answer with a coming out story that happened months or years prior. Because in this project I am interested in understanding emotional wellbeing over time, writing about the present or the recent past is most useful; thus, I excluded answers from asks. This left a total of 41,066 posts for analysis: 22,432 text posts and 18,634 photo captions. The average word count was 83.95 (median = 35,  $SD = 150.40$ ).

## **Tumblr transition blogs data analysis**

### **Data immersion**

My first step was exploratory, and involved immersing myself in the data. I began by closely reading a diverse sample (i.e., bloggers with a range of different genders, races/ethnicities and ages) of 10 transition blogs in their entirety. I initially selected this sample randomly, but replaced some blogs with others written by bloggers with more diverse identity facets. Reading these blogs allowed me to better understand how disclosures, emotional wellbeing, and social support are expressed on Tumblr transition blogs. I had been following trans content on Tumblr



for several years prior to this study, but became more immersed in Tumblr transition blogs when I began this study. For two months in Fall 2016 I spent approximately one hour each day reading content posted on transition blogs and examining how transition bloggers and their audiences interacted with each other on Tumblr. This enabled me to understand what types of content people posted, how Tumblr's features and affordances work, and how the networks of trans bloggers interact. During this phase, I took frequent notes and wrote memos daily to capture my observations.

### Topic modeling over time<sup>3</sup>

I next applied topic modeling methods to the blog posts. Topic modeling is a way to computationally extract thematically coherent meaning from text without qualitatively analyzing the data (D. M. Blei & Lafferty, 2006; D. M. Blei, Ng, & Jordan, 2003). Topic modeling uses statistical methods to analyze large text corpora by assuming that words in the text come from a mixture of different topics, and then modeling those topics (D. Blei & Lafferty, 2006; D. M. Blei & Lafferty, 2006; D. M. Blei et al., 2003). Some researchers have applied topic modeling to particular types of blog content, such as blogs during the Egyptian revolution (Al-Ani et al., 2012) and blogs within autism communities (Nguyen, Duong, Phung, & Venkatesh, 2014).

I did not use topic models *directly* in any of the analysis in this dissertation. Instead, I used topic models for two purposes: 1) as an exploratory process, to identify themes in the dataset without having to read through tens of thousands of posts, and 2) so that I could use each

---

<sup>3</sup> I acknowledge Nazanin Andalibi and Gillian Hayes for their help in identifying themes in topic models.

generated topic's prevalence in posts as a feature in machine learning models to detect trans identity disclosures in the dataset.

I used a particular topic modeling technique called Latent Dirichlet allocation (LDA) (D. M. Blei et al., 2003), via the Gensim Python library (Rehurek & Sojka, 2010). Please see Appendix B for details on topic modeling procedures and selection, which I did with help from two other researchers. The eight themes that emerged as coherent to all three researchers were primarily related to disclosure, emotional wellbeing, and support. Thus, the topic model analysis revealed these themes' importance in the dataset, and validated that disclosure, emotional wellbeing, and support were important themes to examine using this dataset. Additionally, the keywords for each of the topic models enabled me to better understand what words people were using to discuss each of these topics on their transition blogs. Each of the 100 topic models were also used as features in my machine learning models to identify trans identity disclosures in the dataset, a process that I explain next.

#### A machine learning classifier to detect disclosures<sup>4</sup>

I built a machine learning classifier to detect trans identity disclosures on Tumblr. This is similar to the approach used by Balani and De Choudhury (2015), Ernala et al. (2017), and Wang et al. (2016), who used machine learning models to detect disclosure levels in mental health-related, schizophrenia-related, and general social media posts, respectively. My model detected a particular type of disclosure: trans identity disclosures. As described in Chapter 1, by "trans identity disclosures," I mean Tumblr posts describing trans identity disclosures in other contexts

---

<sup>4</sup> I acknowledge Nazanin Andalibi for her help in coding and establishing inter-rater reliability.

(e.g., “I came out to my brother today.”). I counted a post as a trans identity disclosure if it described a disclosure that seemed to have occurred within two weeks prior to the post describing it<sup>5</sup>.

I began by building a training set of positive and negative examples of trans identity disclosure posts in the dataset. Because of the relative scarcity of these posts, I first adopted a dictionary-based approach so that I could identify positive disclosure examples within the dataset (see Appendix B for details). The dictionary method was not an accurate way to identify trans identity disclosures, and resulted in far too many false positives to be useful, but it was a first step in creating a training set of positive and negative examples. I next used an iterative approach to build a sufficient set of training data, which included several rounds of manual coding and machine learning (see Appendix B for details).

The machine learning classifier included the following features: term frequency-inverse document frequency (tf-idf) of each unigram, bigram, and trigram with more than four instances in the dataset (Manning, Raghavan, & Schütze, 2008), prevalence of each topic model, prevalence of each LIWC lexical category (Pennebaker, Boyd, Jordan, & Blackburn, 2015), the compound sentiment measure from the Vader sentiment analysis tool (Hutto & Gilbert, 2014), type of post (text or photo caption), number of likes, replies, and reblogs that the post received, and the blogger’s gender and age.

I used the Python SciKitLearn library (Pedregosa et al., 2011) to build the machine learning classifier. I experimented with nine different machine learning algorithms: AdaBoost, Decision Tree, k-Nearest Neighbors, Logistic Regression, Naïve Bayes (Bernoulli, Multinomial, and

---

<sup>5</sup> Some bloggers posted multiple posts about one disclosure. Each of these were coded as a trans identity disclosure.

Gaussian), Random Forest, and Support Vector Classification. AdaBoost was most accurate, with accuracy of 0.80 and AUC (area under the curve) of 0.62 when applying 10-fold cross validation. When applied to the 20% of data held out as a test set, the classifier's accuracy was 0.79 and AUC was 0.71.

I then applied the classifier to the full dataset of 41,066 text and photo caption posts. Of these, the model classified 798 as positive (with prediction probability of 0.50 or greater). To be cautious, I manually coded all 1,633 posts with a prediction probability of 0.495 or greater. My manual coding identified a total of 362 posts describing recent trans identity disclosures. I can be confident that my disclosure coding does not include any false positives, because I manually coded all posts the algorithm classified as positive. Unfortunately, it is not possible to identify false negatives.

Most of the misclassification had to do with temporal dimensions. While the algorithm did well in detecting the difference between trans identity disclosures and other types of posts, the algorithm was not great at detecting the difference between a trans identity disclosure that happened recently (e.g., "I'm out at work as of yesterday"), and one that happened in the past (e.g., "I've been out at work for a year as of yesterday"). The algorithm also misclassified many posts that described other people's disclosures (e.g., "my friend told her boss she's trans").

For each trans identity disclosure post, I manually identified the disclosure audience(s). This resulted in a set of twenty disclosure audience types, detailed in Table C.2 in Appendix C. I coded the depth (i.e., the private, intimate nature of the disclosure (Chaudoir & Fisher, 2010)) of each disclosure using a 1-5 Likert scale from Not at all private/intimate to Extremely private/intimate. I measured each disclosure post's duration (i.e., how long a person spends discussing the disclosure (Chaudoir & Fisher, 2010)) using the word count of the portion of the

post spent discussing the disclosure. Finally, I coded each post as involuntary (yes, no, partially, or unknown) and for whether the audience was supportive in response to the disclosure (yes, no, partially, or unknown).

### Measuring emotional wellbeing over time

Computational linguistics and sentiment analysis can be powerful tools for extracting meaning from text, and allow researchers to find sentiment and themes in large bodies of text without qualitative analysis (Tausczik & Pennebaker, 2010). Those who experience more psychological distress may also be more likely to post depressive content on social media (Bazarova, Choi, Whitlock, Cosley, & Sosik, 2017); thus there is an established correlation between mental health and social media content. Researchers have used computational linguistic techniques such as sentiment analysis, and topic modeling to understand social phenomena such as depression (De Choudhury, Gamon, Counts, & Horvitz, 2013; Pennebaker, Mehl, & Niederhoffer, 2003), mental health more broadly (De Choudhury & De, 2014; De Choudhury, Kiciman, Dredze, Coppersmith, & Kumar, 2016), social movements (De Choudhury, Jhaver, Sugar, & Weber, 2016), and sexual abuse disclosures (Andalibi et al., 2016). Some have applied sentiment analysis to blog content to understand differences between variables like the blogger's age, mood, and connectivity to other bloggers (Nguyen, Phung, Adams, & Venkatesh, 2011). Computational linguistic methods have even been applied to transgender topics, finding that increased levels of testosterone are associated with using fewer words about social connections (Pennebaker, Groom, Loew, & Dabbs, 2004).

In this work, I apply computational linguistic and topic modeling techniques to transition blogs on Tumblr to understand how linguistic indicators of emotional wellbeing change after

transition disclosures. These methods allow me to extract meaning from a large sample of blogs over a substantial period of time. Determining how these measures change over time, and particularly prior to and following trans identity disclosures, enables me to understand the relationships between disclosure and emotional wellbeing as expressed on social media.

I used computational linguistics to determine proxies for emotional wellbeing in each blog post, and over time for each blog. I experimented primarily with five sentiment analysis measures. Three measures are from LIWC (Linguistic Inquiry Word Count), a set of lexicons that enables researchers to use computational analysis to understand people's feelings and affect via text (Pennebaker et al., 2015):

1. Positive emotion (e.g., love, nice, sweet)
2. Negative emotion (e.g., hurt, ugly, nasty)

An additional three measures are from VADER (Valence Aware Dictionary for sEntiment Reasoning), a sentiment analysis tool designed specifically for social media that accounts for slang and emoticons (Hutto & Gilbert, 2014):

3. Positive
4. Negative
5. Compound (a compound score accounting for positive, negative, and neutral words, normalized between -1 and 1)

I used the LIWC 2015 desktop software and the VADER Python library to assign each post values for each of the LIWC and VADER categories. I also assigned each post all of the available LIWC measures, to use as features in the machine learning model described in the previous section.

I tested each of the measures in several ways to determine which ones would be most useful for this work. I tested each as outcome variables in regression models, and found that LIWC's positive and negative emotion measures provided most consistent and interpretable results. I also visualized the measures over time using interview participants' Tumblr data, showed them simplified versions of the plots (see Figure 3.3), and asked them to reflect on the graphs and describe which may have been most accurate. Of the measures, participants described the LIWC positive emotion measure to be most representative. Taking these insights together, I conducted the statistical analysis in Chapters 3-6 using LIWC positive emotion and LIWC negative emotion as proxies for emotional wellbeing, to understand the relationships between disclosure, emotional wellbeing, and support.

### Measuring social support

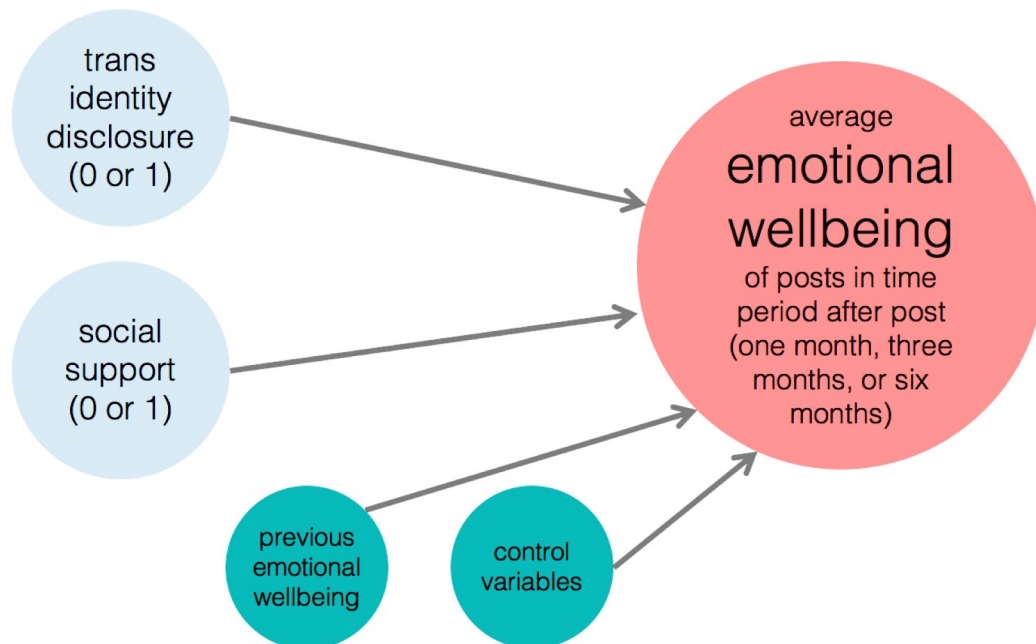
I measured social support in posts in two ways. First, for each post that described a trans identity disclosure, I coded that post for whether the audience was supportive in response to the disclosure (yes, no, partially, or unknown). I also experimented with using social interactions on Tumblr as a proxy for social support. Interactions on each blog post, including likes, comments, and re-blogs, may be a way to measure social support from one's Tumblr network. However, interaction measures for posts only indicate support from people in one's Tumblr network, which is different from support received in response to the trans identity disclosures that people described in Tumblr posts. Support in response to trans identity disclosures, which is the variable of interest in this work, could only be determined by manually coding each post for how the blogger described their disclosure audience's supportiveness. Several researchers have identified ways to measure social support using computation linguistic techniques. While I experimented

with the techniques and lexicons used by Burke and Develin (2016), De Choudhury & Kıcıman (2017), and Paul et al. (2016), ultimately, I found that those are most useful for measuring how much support a post *provides* (e.g., in comments in response to a post) – not the level of support in response to a disclosure *as described in a post*. Thus, manually coding measures of support in response to trans identity disclosures was the most appropriate and useful approach for measuring social support in this study.

Understanding relationships between trans identity disclosures, emotional wellbeing, and social support

As a result of the previous three steps, each post in the dataset had the following information:

- whether or not it described a recent trans identity disclosure (0 or 1)



**Figure 3.1. Structure of regression models to examine relationships between trans identity disclosures, emotional wellbeing, and social support.**



- variables measuring the post's positive and negative affect, as proxies for emotional wellbeing

Additionally, trans identity disclosure posts had a measure of:

- social support received in response to the disclosure

I built regression models to understand the relationships between these variables. While I leave the details for the results chapters, Figure 3.1 shows the structure of the models. Using posts as the unit of analysis, the models include average emotional wellbeing in the time period after the post (one month, three months, or six months) as the dependent variable, with disclosure and social support as independent variables. The models control for emotional wellbeing in the time period before the post, as well as other control variables such as blogger demographics and post word count. In some models, the results show that disclosure and support variables are significant predictors of emotional wellbeing, as I detail in the results chapters that follow.

Though these models are correlational and not causal because this is not a randomized experiment, the element of time eliminates the possibility that emotional wellbeing predicts disclosure rather than vice versa. Because I have controlled for potential confounding variables, it is likely that the effects are causal.

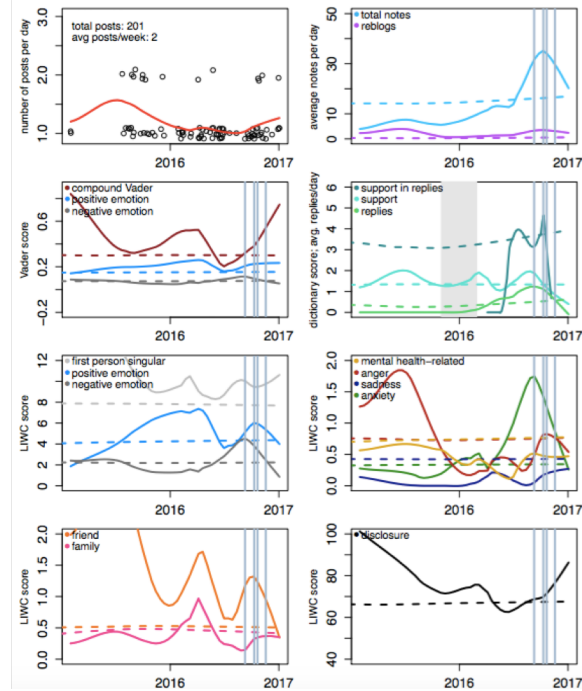
### Content analysis

I conducted qualitative content analysis (Hsieh & Shannon, 2005) on the 3,200 Tumblr posts that I manually coded as part of building the classifier (as described above). As I read through each post, I took note of content that was relevant to my research questions, namely the relationships between trans identity disclosure, emotional wellbeing, and social support, as well as other phenomena of interest that emerged from the data. I did not assign codes to every post, as many

of them were not related to disclosure or this study's research questions. I used a combination of conventional content analysis (allowing codes to emerge from the data) and directed content analysis (coding based on an existing theory or coding scheme) (Hsieh & Shannon, 2005). For the directed coding, I used the categories that emerged from my in-depth inductive analysis of the interview data (described below). The coding scheme that I developed from the interview analysis mapped well to the Tumblr posts.

### **Interviews data collection and participant description**

I interviewed 20 bloggers whose data I analyzed quantitatively. I used theoretical sampling (Strauss & Corbin, 1998) to determine which bloggers to interview. That is, I looked for a set of interview participants who exhibited variation in a category (Strauss & Corbin, 1998). In this case, the category of interest was emotional wellbeing changes after trans identity disclosures. As such, I interviewed people who had several different outcomes: those whose data showed emotional wellbeing improvements after trans identity disclosures, those whose data showed emotional wellbeing decreases after trans identity disclosures, those whose emotional wellbeing was relatively constant over time, and those whose emotional wellbeing was relatively volatile over time. I used two methods to identify bloggers in each of these categories. First, I visualized each blogger's emotional wellbeing over time (using several different sentiment analysis measures including LIWC positive emotion, LIWC negative emotion, and the VADER compound measure) along with trans identity disclosures, and visually examined the patterns (see Figure 3.2 for an example). Next, I conducted statistical tests to determine both those who fit in each of the categories, and those who were outliers. In determining people to interview, I



**Figure 3.2. Example of emotional wellbeing over time plots used to choose interview participants.**

also took into account variations in gender, race/ethnicity, and age, to ensure that I had a diverse sample demographically.

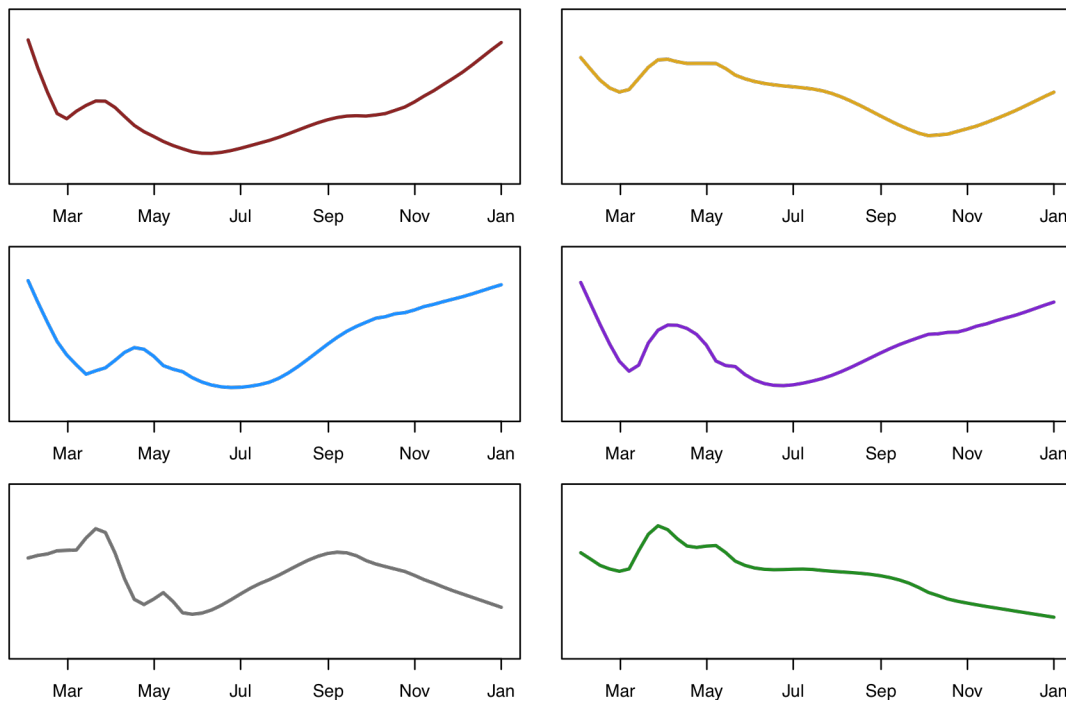
After determining a set of potential interview participants, I contacted each of them using Tumblr’s messaging system to request interviews, and scheduled interviews with those who agreed to be interviewed. Interviews were conducted via each participant’s preferred method of video chat or phone call, and lasted on average 60 minutes ( $SD = 13.8$  minutes, range: 40-88 minutes). Interviews were audio-recorded and transcribed for data analysis. Each participant received a \$25 Visa gift card as compensation for their time.

The sample of interview participants was 50% trans women, 35% trans men, and 15% non-binary trans people. 65% of participants were white, 15% black, 15% Asian, and 10% Hispanic/Latinx (percentages add up to greater than 100% because some participants were of multiple races/ethnicities). The average age was 26.65 ( $SD = 7.02$  years, range: 19-43 years old).

18 participants were American (though one was currently residing in Europe) and two were Canadian.

Interviews were semi-structured, to enable me to further delve into topics that were most salient to participants. I asked participants about trans identity disclosure broadly, social media use broadly, trans identity disclosure on social media, emotional wellbeing throughout transition, social support, relationships between disclosure, emotional wellbeing, and social support, and Tumblr use, perceptions, and motivations. I revised the interview questions protocol four times throughout the interview process as I learned more through data analysis. I analyzed interview data concurrently with data collection, and reached data saturation after approximately 15 interviews; yet I continued to conduct interviews in case additional themes emerged.

At the end of each interview, I asked participants to reflect on six graphs (see Figure 3.3 for an example) I had generated that visualized six different sentiment analysis measures of their



**Figure 3.3. Example of emotional wellbeing over time plots shown to interview participants.**

textual blog post data over time, and asked if any of the graphs seemed to more accurately represent how they were feeling over time. I intentionally did not include labels on these plots, because I wanted participants to tell me which ones seemed most accurate without knowing which particular measures they represented. I described to each participant that the plots showed six different ways of measuring emotional wellbeing over time, in which dips represent lower emotional wellbeing, while peaks represent higher emotional wellbeing. Visualizing people's behavior via assistive technologies is an important means to improve social interactions for some marginalized populations (Boyd, 2018), and in my study visualizing social media data was an important tool for enabling participants to reflect on their pasts.

Interviewing people allowed me to further answer my research questions by understanding people's motivations and emotions around disclosure and social media use during transition. Interviews enabled me to understand how transition-related interactions with particular people impacted their emotional wellbeing. Interviews also allowed insight into how participants considered and used Tumblr and Facebook, as well as the larger ecosystem of social media sites, the features and affordances of each, and how they segmented audiences and self-presentations across sites. Finally, interviews helped me to separate the positive and negative emotional wellbeing effects of disclosures, as well as to test some of my assumptions (e.g., that Tumblr interactions serve as a sort of social support).

### **Interviews data analysis**

I approached the dataset of transcribed interviews with an initial interest in disclosure, emotional wellbeing, and social support throughout the gender transition process as documented on Tumblr, but analyzed the data using an inductive open-coding approach (Strauss & Corbin,

1998) along with a directed coding approach (Hsieh & Shannon, 2005) to validate some of the study's quantitative findings. I coded all interview data using line-by-line analysis, allowing codes and themes to emerge from the data (Strauss & Corbin, 1998), as well as coding specifically for items related to the quantitative analysis, such as mental health over time throughout transition (e.g., codes in this category included "mental health improved throughout transition" and "mental health decreased throughout transition"). I conducted axial coding iteratively throughout the coding process to organize and refine codes and themes and understand how they connected to each other (Strauss & Corbin, 1998). I used frequent memoing as an analysis technique to make sense of the emerging codes and connections between codes and themes. Throughout the analysis process, I discussed emerging themes, and connections between codes and themes, with two other researchers. I then chose particular quotes that illustrated the major themes discussed in this dissertation, and incorporated them into the dissertation's written analysis.

## **Limitations**

A primary limitation of this work is that due to the recruitment criteria, all participants were avid Tumblr users. Thus, this dissertation's results likely do not generalize to trans people who do not use Tumblr, those who are more invested in other sites (e.g., Facebook, Twitter), those who document their transitions elsewhere, or those who do not document their transitions. Many of the people I interviewed talked about themselves as "open," an "open book," etc. This may be a result of the sample – it may be that people who write transition blogs are more open and willing to share personal information than other people.

Another bias to the interview sample is that those people who are most distressed may have been less likely to respond to my interview requests. Those who are depressed or even suicidal (which is prevalent among trans populations (James et al., 2016)) may not have the emotional bandwidth to respond to a message from a researcher on Tumblr, or to spend emotional energy on an interview. This may be one reason why most (though not all) of this study's interview participants reported being relatively happy, and described that their emotional wellbeing improved after transitioning. Emotional wellbeing did improve on average throughout transition in my quantitative analysis, yet was highly variable; interviewees tended to be more on the positive, rather than the negative, end of this variance. Those who were doing worst emotionally may not be in my interview sample, but my analysis of blog data did still capture their experiences. It is also likely that those who keep transition blogs are not representative of the trans population more broadly in terms of emotional wellbeing; those who do not document their transitions on Tumblr may be more, or less, emotionally distressed than Tumblr bloggers. Comparing trans populations who do and do not blog about their transitions is an interesting area for future work.

Next, though computational linguistic methods have been found to be robust in identifying sentiment and emotions (Bantum & Owen, 2009; Tausczik & Pennebaker, 2010), these methods are not without limitations. For instance, computational linguistic analysis ignores important language facets such as irony, sarcasm, and idioms (Tausczik & Pennebaker, 2010), and some tools do not account for slang and emoticons, which are common on social media (Hutto & Gilbert, 2014). Additionally, computational linguistic tools may over-emphasize emotions (Bantum & Owen, 2009). To compensate for these limitations, I experimented with multiple computational linguistic tools, including VADER, which was built specifically for social media

content (Hutto & Gilbert, 2014). I also validated my findings by interviewing a subset of people whose blog content I analyze computationally.

It is also important to consider that in transition blogs on Tumblr, the text corpus analyzed in this work, linguistic content may vary from other types of text that has been analyzed in previous work. Thus, I am cognizant of the nuances of this particular form of communication. As one example, because blogs are written in first-person singular, use of “I” may be more common than in other types of communication, and may not, on its own, signify depression (as has been found in previous work (Pennebaker et al., 2003)). However, when analyzing these blogs over time and in relation to other transition blogs, changes in linguistic content become meaningful.

### **Methods summary**

In this chapter I detailed my explanatory sequential mixed methods approach. First, to understand relationships between trans identity disclosure, emotional wellbeing, and social support, I collected Tumblr transition blog posts and analyzed this data using topic modeling, machine learning, computational linguistics, manual coding, statistical modeling, and qualitative content analysis. Next, I conducted in-depth interviews with a subset of people whose blog data I analyzed, and used qualitative methods inductive open coding, directed coding, and axial coding to determine codes and themes in this data. The interview analysis enabled me to both validate quantitative findings and further understand complexities of the transition process as expressed on social media. The unique combination of methods applied in this research enabled substantial insight into disclosure, emotional wellbeing, and social support during gender transition on social media, as I detail in the following chapters.



## CHAPTER 4

### TUMBLR TRANSITION BLOGGERS' GENDER TRANSITION PROCESSES ON SOCIAL MEDIA

In this chapter, I provide a characterization of Tumblr transition blogs, to allow an understanding of this dissertation's research site. I then describe the gender transition process and how people engage in trans identity disclosures as part of this process. Finally, I describe how trans identity disclosures relate to emotional wellbeing changes on average.

I begin by detailing why people keep transition blogs, including both self-related and other-related motivations. The most prevalent blogging motivations include blogging as a therapeutic outlet for expression, as a tool for self-documentation, and to help and inspire others. Many people use their blogs to provide representation of trans identity intersecting with another identity facet (e.g., trans person of color) for audiences of similar others. I highlight the complex interplay between Tumblr as a self-focused space and a supportive community.

I describe how participants perceived Tumblr as a space. Tumblr was an important space in most participants' lives, and they spent substantial time on the site. Participants considered Tumblr a place to be understood, as they were surrounded by like-minded people who shared their political beliefs and trans identity. This safe, comfortable space enabled people to share sensitive information. Tumblr was considered safe in large part because it was separate from the rest of people's lives, and considered somewhat anonymous. Importantly, though Tumblr is an inherently social medium, some participants considered it to be a solitary space, underscoring the ability to be simultaneously alone and in a community online.

Because Facebook is an important disclosure space for trans identity disclosures, and a site used by all but one of the interviewees in my study, I detail the differences and similarities

between participants' reports of the content they shared and their networks and audiences on Tumblr and Facebook. On Tumblr people shared emotional content, which sometimes included negative emotions, while on Facebook people shared everyday content, life updates, and professional or work-related content. People's networks on Tumblr tend to be strangers, often who were also trans, while Facebook networks often align with physical world connections. People who converge around Tumblr transition blogs form a supportive community of trans people who seek, offer, and provide support to each other.

I complicate the notion of public vs. private on social media, given that Tumblr is a technically public space where people share highly sensitive content and that people often view as anonymous, while Facebook is a technically private space for most, yet is a site where people engage in substantial impression management and share little sensitive content. I argue that the types of content people share, and the types of supportive communities that exist, depend more on the networks of people that surround a person on these sites, rather than technical privacy boundaries.

I assert that transition exists as a process rather than a moment (as also found in previous literature, e.g. (Bolin, 1988; Bridges, 2004; Levitt & Ippolito, 2014b; van Gennepe, 1909)), and describe how this process plays out, in part as a series of trans identity disclosures to different audiences. I quantify the order, on average, that people disclose their trans identity to different audiences, and find that people tend to disclose to friends towards the beginning of the transition process, followed by family members. Facebook disclosures happen at the end of the disclosure process, signaling a mass disclosure to a wide audience.

To understand how emotional wellbeing changes over time as people transition, I use trans identity disclosures as a way to demarcate transition stages, and determine statistically how

emotional wellbeing changes after such disclosures. Those whose confidants responded supportively to trans identity disclosures experienced less negative affect in the short term (i.e., the month post-disclosure). In the longer term (in the three months and six months post-disclosure), emotional wellbeing does improve after trans identity disclosures. Interestingly, support does not moderate the relationship between trans identity disclosures and emotional wellbeing in the long term – people see increased affect on average, *whether or not* their networks are supportive.

### **Why people keep transition blogs**

In this section, I characterize people’s motivations for keeping transition blogs. Motivations are both internal and external (see Table 4.1). Self-related motivations for blogging were most prevalent, and included using the blog as a therapeutic outlet for expression, to document one’s transition and track progress, and for identity exploration. The most common other-related blogging motivations involved helping or inspiring others, providing representation of trans identity intersecting with another identity facet (e.g., trans person of color), and finding community. A small minority of bloggers used their blogs as a way for friends and family to follow their transition, and to raise visibility about trans issues. I next detail each of these motivations and provide examples.

<b>Self-related</b>	<b>Other-related</b>
Therapeutic / outlet for expression	Help / inspire others
Self-documentation / personal record / track progress	Provide representation of trans plus another identity facet
Identity exploration	Find community
	For friends / family to follow transition
	Visibility

**Table 4.1. Blogging motivations.**

## Self-related motivations for blogging

Though blogging is often thought of as social (Nardi, Schiano, & Gumbrecht, 2004), the most prevalent motivations that people indicated for maintaining Tumblr transition blogs were self-related. Using transition blogs therapeutically or as an “outlet” was the most frequent reason interview participants mentioned for keeping blogs, echoing findings from Schiano et al. (2004). While in addition to writing participants also described posting photos and videos as therapeutic, in this work I focus on writing and text content. P15<sup>6</sup> said that his transition blog was,

***definitely a huge outlet for me**<sup>7</sup>. I'm the type of person that I do hold a lot of emotions in and I don't necessarily share a lot, but **when I do share it I know that I feel better about it**, so I will spend that personal time to post... my blogs, to kind of just **get those emotions out**, and to kind of just share what's going on through my head.*

As P15 described, and as was true for many others, keeping a transition blog enabled him to feel better over time by processing his emotions through writing. P4 described a similar experience with blogging:

*When things are in my head they tend to spiral, and if I can get them out of my head I can deal with them a lot more rationally than emotionally, so [blogging] helped me to do that as well to get that out and look at it objectively. Sometimes even I would type out something and **even the act of typing it out was therapeutic and I wouldn't feel the need to post it**... Sometimes there are posts where I'm feeling this way and it's so negative and it's so bad and then **I'll keep typing and I'll go through the process** but now that I'm*

---

<sup>6</sup> Interview participants are designated with P and the participant number (1-20). Bloggers are designated with B and the blogger number (1-241).

<sup>7</sup> All bolded text indicates emphasis added by me, not the interviewee.

*looking at this and I've gotten it out of my brain, I realize that blah blah blah that I got this and I can totally do it. Sometimes it helps me work out those things as well.*

Interestingly, like P4, many participants experienced positive benefits from writing blog content whether they ended up posting that content or not. P5 described a similar therapeutic benefit of writing, but not necessarily publishing, blog posts:

*I was still updating stuff, but I never posted it. I have like 60 drafts on my Tumblr that I just haven't gotten around to posting. I'm very much an expressive person. **I feel so much lighter and something about writing down thoughts or saying them out loud makes them real**; it's not just a thought process you have in your head. Definitely find value in writing something **even if nobody sees it**.*

This corroborates a large body of previous research espousing the positive psychological, and even physical, health benefits of writing about one's experiences in non-computer-mediated contexts, particularly to process negative emotions (Baikie, 2005; Lyubomirsky, Sousa, & Dickerhoof, 2006; Pennebaker, 1995; Pennebaker, Kiecolt-Glaser, & Glaser, 1988; Pennebaker & Seagal, 1999). The thinking processes involved in writing can help people cope with traumatic experiences (Pennebaker, Mayne, & Francis, 1997). In a social media context, Ernala et al. (2017) found that Twitter was an expressive writing platform for some to vent about emotions around a sensitive topic (schizophrenia diagnosis), and that disclosures were followed by positive therapeutic outcomes. My study further supports these results, uncovering the therapeutic nature of writing on social media throughout the course of a major life transition. Ernala et al. (2017) suggested that social media platforms could integrate journaling tools to further enable therapeutic emotional writing. Tumblr is a platform that already enables journaling, and as I find here, does enable people to receive positive benefits of venting.

While my qualitative analysis demonstrated that many people found blogging therapeutic and felt that it improved their emotional wellbeing, I did not find conclusive support for this quantitatively. I use word count as a proxy for therapeutic content, or “venting.” I originally included hand-coded measures for disclosure depth and duration in the models, but removed these from the models because they were highly correlated with word count<sup>8</sup>. Word count could be measured for all posts in the dataset, not only disclosure posts that were hand-coded; thus I used word count as a proxy for writing length and depth. The statistical models (see Table 4.7) show conflicting results around therapeutic benefits of blog writing. On one hand, Models 1-3 show that the more a person writes in a post, the less *negative* emotion on average exists in the posts in the time period after that post – as we would expect, if blogging has positive therapeutic benefits and that positive benefit translated to more positive future blog content. On the other hand, Models 4-6 show that the more a person writes in a post, the less *positive* emotion in the time period after that post. Taken together, these results indicate that those who post longer blog posts, tend to later post blog posts with less emotion overall. It may be that people process their emotions and then have less need to post emotional content afterwards. It may also be that word count is not an appropriate proxy for therapeutic blogging. More research is needed to understand underlying mechanisms in the relationship between post length and future wellbeing.

Using Tumblr as an outlet to express transition-related emotions and progress also took some of the burden off of bloggers’ close ties, such as partners, as confidants for this information. In P4’s case, the emotional processing she did on Tumblr, as described above, had positive impacts on her marriage:

---

<sup>8</sup> Wang et al. (2016) also found that disclosure was correlated with post length.

*I, like many trans people, was hyper-focused on my transition... and I think [having Tumblr as an outlet] also helps... my wife's sanity. **She got tired of hearing about it, so this was a place where I could do it...** If nothing else it even helped me there [in my relationship with my wife].*

In this sense, transition blogging can be self-focused but at the same time benefit others. While partners and friends may be supportive, most trans people do not have partners or existing close ties in their lives who can fully empathize with the trans experience. Similar results have been found in Maloney-Krichmar and Preece's (2005) study of an online community for people with knee injuries, and Hayes et al.'s (2008) study of cancer communities, indicating that supportive communities easing the burden of close ties is a phenomenon not limited to trans communities. Tumblr enables both an outlet and an audience who can provide support and empathy by nature of their shared experiences. Thus, using blogging as a therapeutic outlet helps the blogger, the blogger's close ties who may not be appropriate confidants, and the supportive community on Tumblr who wants to listen.

B34 summarized the therapeutic and self-focused yet social nature of Tumblr in a blog post celebrating reaching 100 followers:

***Thank you for following me and my thoughts. This is a place where I can express and share how I feel. It could be a happy or sad post, a joyous experience or an angry rant or I might feel good about myself and want to share that moment. Either way it makes me feel better and thanks for that.***<sup>9</sup>

---

<sup>9</sup> I paraphrased some blog posts to reduce traceability and to maintain bloggers' privacy, as is common practice in social computing research. Those blog post quotes that were not traceable via Google search are left as is. I revised blog post quotes for spelling, grammar, and readability as necessary. Any names included in blog post quotes are pseudonyms.

Tumblr is a place where people can share and process their experiences and emotions with an understanding and supportive audience. Yet, the audience is not the most important part. Writing enables self-understanding and emotion-processing in a self-focused yet networked environment. “*My only friend that knows me and understands me is Tumblr,*” B104 wrote on her blog, signaling simultaneously a supportive audience, and the lack of an audience. By invoking Tumblr as an individual friend, rather than a group of people, it comes into focus as a space for B104 to write and process emotions on a personal and solitary level. Yet, at the same time, she subtly describes Tumblr as a supportive community. One’s Tumblr audience exists as a complex interplay between self and others, between being alone and being part of a community.

Others used Tumblr as a tool for self-documentation, to keep a personal record and track transition progress. P18’s transition blog was

*A way for me to track my progress. That was originally what it was meant for, just because I knew that hormones were a slow and painful process when it came down to the change, and it was like, okay, hey, the best way I can do this is just **document it as I go.***

Similarly, P16 described his blog as a place to “*post updates about things going in my transition like with therapy, and getting my letter, and blood work, and all that shit, voice updates. I post all that stuff on there.*” These and other participants appreciated having a digital archive of their transition progress. Though they did not specifically mention an intended audience for these transition updates, the posts may be intended for a future self to reflect upon. Other bloggers tracked less physical or social transition progress, and instead blogged to document personal growth and change; as B23 put it, “*the only theme here is my experience and evolution as a human.*”



Documenting one's transition in a digital medium like Tumblr was importantly different than tracking the same type of content in a physical format. I asked participants the difference between blogging on Tumblr and keeping a physical diary, expecting that they would mention the social aspects of blogging in an interactive digital space. While some did answer as I expected, several others emphasized the ways a digital medium like Tumblr enabled easy access to content, as opposed to a physical form. P9 said,

*Honestly, I just wanted a place where I could put down my feelings and thoughts. It's the most journalistic thing I've ever been able to keep up with... **I've tried to do physical journals and diaries and I always lose them.** I just wanted a place where I could jot down my own thoughts in the process and whatnot, and I just liked doing the weekly photos just to watch very slow change happen, which is kind of cool.*

Digital journaling spaces like blogs are difficult to lose, enable people to access and add to their blog content online rather than digging for a physical object, and facilitate tracking transition progress more consistently. While the digital form may seem more permanent, one could also argue that online writing is less permanent, given that the web space is managed by a company who could be bought out at any time (and was, during the course of this dissertation), making Tumblr content precarious. One participant, P7, expressed concern about Tumblr's potential impermanence. She was in the process of building her own website and transferring her transition blog content there, "*just in case Tumblr ever went away, like certain sites like Vine just suddenly disappear.*" Online journaling allows people to keep track of their changes in a more convenient and accessible format than a physical journal, but which feels precarious for some.

Finally, some participants used Tumblr transition blogs for identity exploration. P6 described how Tumblr affording multiple accounts and pseudonyms makes identity exploration possible

without long-lasting consequences: “*You can create blogs and then delete them. **It does make it easier to explore** without it damaging your name or your personal network – **just create a new blog.**” Many trans people use the Internet and social media for identity exploration, as evidenced by a large body of previous research (Haimson, Bowser, et al., 2015; Turkle, 1999; Whittle, 1998). Yet on Tumblr, they tend to do this prior to starting transition blogs. Denny<sup>10</sup> described her pre-transition time on Tumblr as being*

*in this space where I was super, super obsessed with Tumblr, I was deep in there. I was like deep in really, really underrepresented communities and **I was just kind of doing a lot of self-research. I guess ‘me-search.’** I found this space of not so much existing in a concrete gender.*

Identity exploration on Tumblr, and elsewhere online, helps a person find the identity that they later blog about via their transition blog. Transition blogs are often used to document how one’s identity changes over time, which necessarily entails identity exploration. Yet once a person settles on a particular blog, with a name and url that they stick with over time<sup>11</sup>, that blog tends to be less about identity exploration and more about documenting how that particular identity becomes known and embodied, socially and physically.

### Other-related motivations for blogging

While less prevalent than self-related blogging motivations, some bloggers were also motivated by other-relation factors. These include desire to help or inspire others, often by providing an

---

<sup>10</sup> Denny was an interview participant who specifically asked that I refer to her by name, and give credit to her and her blog Decoding Womanhood: <http://decodingwomanhood.tumblr.com/>. I am thankful to Denny for sharing her experiences with me, and the excellent work she is doing via her blog to increase trans visibility.

<sup>11</sup> Bloggers can change their blog name and the associated url as often as they like, and this is a common practice.

example of a trans person with another identity facet (e.g., trans person of color); to find community; as a way for friends and family to follow one's transition; and to increase visibility.

Helping or inspiring others was the most prevalent other-related reason that people kept transition blogs. P12 stated that *“even though [the blog] was helpful to me, that was always my primary objective and motivation with my blog – to help others.”* Similarly, B72 (who is also P6) introduced their blog in an initial post stating,

*I'm nervous about being so open about things that I've typically kept private. But **I want to give back.** I want to show my love for queer and trans communities, which have been so generous with their stories and have therefore made it possible for me to imagine myself differently.*

Having received benefits from following others' transition experiences, P6 wanted to “give back” by sharing their own experiences, even though doing so required an openness that challenged their previous privacy boundaries. After sharing their experiences, bloggers' audiences often reached out to them, usually via private message on Tumblr, to tell the blogger how they had inspired and helped them, as P18 described:

*I've had people reaching out to me for the past eight or nine months now, being like, ‘Oh, you're such an inspiration. I never thought that a trans woman could go ahead and achieve so much in a year or change so much overall,’ because I've posted pre-transition photos along with my actual photos, and every time I've done that, there's always a huge outpouring of people who are like, ‘**You've inspired me to actually go ahead and do this and give it a shot.**’*

Almost all the interviewees in my study described themselves as consuming transition blog content before starting their own transition, then gradually moving from being an information

gatherer to a source of resources and inspiration to others. Similar phenomena, in which people go through stages and shift roles from newcomer to expert, have been found in Q&A systems (Ackerman & Palen, 1996) and online health communities (Massimi et al., 2014; Preece, 1998). Yet enabling people to be inspired by, and inspire others with, transition progress is a phenomenon that Tumblr blogs are uniquely well-suited for, given their archival nature combined with social interactive affordances.

Inspiring and helping others positively impacted bloggers' emotional wellbeing. B31 (who is also P7) wrote on her blog:

*Thanks to all of you so much for the 2000+ followers. I know that numbers shouldn't matter, but when I look at the list of my followers and it includes so many trans people, **it makes me feel so good that my experiences and my life might help other people** in some ways. All the difficult and lonely months have now become exciting and hopeful months. Tumblr has been my outlet both when I was at my lowest points and at my highest.*

This post demonstrates some of the self-related blogging motivations, such as using Tumblr as an outlet to process emotions, but also describes helping others as an important motivation that causes positive emotions. In this sense, self-related and other-related motivations for blogging are not at odds, and instead work together cyclically, often leading to increased emotional wellbeing. At the same time, other incentives may drive and complicate the act of helping others through blogging, such as receiving recognition for helping (in the form of followers and interactions) and self-presentation as a helpful person.

Trans youth were a primary audience for many transition blogs, and a group that bloggers mentioned especially wanting to help. Describing his Tumblr audience, P16 said, "*it's a lot of trans kids, and by kids I mean between 15 to 17, that age group. It warms my heart, because I get*

*to help them.*” Trans youth are a particularly vulnerable group that can especially benefit from a space like Tumblr, where older people document in detail the processes of gender transition, making it seem possible and providing important information about what each step of the process feels and looks like.

Representing intersectional trans identities was an important blogging motivation for many. Many interviewees described maintaining their blog particularly for an audience of others who shared their intersecting identity facets (e.g., trans person of color; trans person in a particular age group; religious trans person; non-binary person). P5, for example, said:

*My motivation for [blogging] was just **not seeing enough representation of non-binary people and people of color in general.** Most of the people who are well known on social media for them transitioning, are attractive and white. Which there is nothing inherently wrong with being attractive or white, but if that is the only thing you ever see... I kept looking for somebody of color to see how their scars will fade, because skin is completely different texture and everyone’s skin heals differently. So, **I couldn’t find like literally anything that was resembling of me in a queer sense or a color sense.***

After finding little representation of similar others (i.e., non-binary people of color), P5 started their blog to represent that particular intersection of identities for similar others who may be looking for accounts of transition experiences online. Similarly, because the Tumblr transition blog community skews young (46% of Tumblr users are under 24) (C. Smith, 2013), P12 started his blog in part to document the experience of an “older” trans person. As a Christian trans man of color, P15 described being motivated “*to use my personal experiences to help the community in which my personal experiences may not actually be out in that sphere.*” Because there were few other Christian transition bloggers, P15 frequently received messages from other Christian

trans people asking questions or seeking advice. P9 also described a desire to help similar others through his blog, particularly people who, like himself, may lack community because they live outside of major cities where LGBT people typically find communities.

Though bloggers often described their Tumblr networks as a supportive community, and described providing support for and receiving support from others on Tumblr, finding community and receiving support was not an especially common motivation for blogging. Only one interviewee described starting his blog to find community: *“because I was young, queer, didn’t really have any friends”* (P16). Others mentioned the networks that their blogs enabled them to build, such as Denny, who appreciated being able to *“connect with a lot of other trans women of color across the globe.”* Finding community appeared to be an added benefit of blogging for many, but not a primary motivation to blog.

While most Tumblr transition bloggers kept their transition blogs separate from their “real life” networks, one outlier (P8) specifically started her blog so that friends and family could follow along with her transition. *“They wanted to know what was going on in my transition, how it was going for me and everything else and they actually were like, encouraging me and suggesting making a blog kind of thing,”* she said. Several other participants had some friends or family who followed their transition blog, but P8 was the only interviewee who mentioned this as a motivation for blogging.

Finally, visibility was a blogging motivation for one participant. Denny described her motivations for blogging:

***To have a platform is definitely a goal... I find there’s a lot of potential danger in being silent. Making sure that I’m out but not like – I’m considering my safety, of course, but***

*making sure I don't follow that pattern of sweeping myself under the rug. Stopping that cycle. Making people a little uncomfortable.*

Given the increase in trans visibility in the media and popular culture in the past few years (Aizura, 2017), it is surprising that visibility was not a more prevalent blogging motivation. Yet, this makes sense given Aizura's (2017) argument that increased trans visibility and recognition have not accomplished trans social justice goals. Most transition blogs take steps towards achieving justice by making their own, and other trans people's, lives more livable. Visibility implies a large outside audience of non-trans people, whom one can educate about trans identity, history, and rights. Instead, bloggers in my study were more focused on the personal (e.g., therapeutic benefits of writing) and community-focused (e.g., helping underrepresented similar others) benefits of blogging. The intended audience was insular, and bloggers focused on helping other trans people, not helping outside audiences to better understand trans experiences.

### **Perceptions of Tumblr as a space**

Tumblr is an online space that is particularly meaningful for its users, and I describe here some of the commonalities in how people perceived Tumblr (also summarized in Table 4.2). Most interviewees considered Tumblr to be important in their lives. P14 described that they “*have really set my roots into Tumblr in terms of using it for both informational purposes, for entertainment purposes, or all sorts of things... it was just like where I spend a lot of my time. I just spend it on Tumblr.*” Even though on average bloggers in this study only posted substantial text content two or three times per week, they spent much more time on the site scrolling through content, reblogging content that others posted, posting photos, and interacting with others through notes and private messages.

---

Important in life  
 Lots of conflicting spaces  
 Place to be understood  
 Place to tell secrets  
 Place to learn  
 Aligns with political beliefs  
 Non-judgmental / open-minded  
 Safe / comfortable  
 Separate from the rest of life  
 Anonymous  
 Place to be alone  
 Queer space (in some ways)  
 More “real” than Facebook

---

**Table 4.2. Interviewees’ perceptions of Tumblr as a space.**

Tumblr is not just one space; it is many conflicting and complementary spaces. The community of people that converge around transition blogs tend to find each other through tags (e.g., “ftm,” “girlslikeus”) that they search for on Tumblr’s explore feature. Then after following some people, they find other blogs to follow based on whom those people reblog. Yet many other communities exist on Tumblr, some of which overlap with transition bloggers, and many of which do not. P19 described Tumblr’s lack of set boundaries between communities:

*How I’ve thought about it is that it’s kind of similar to Reddit in that there’s **a lot of spaces**. So, there’s definitely – queer people are fairly heavily represented on there, but at the same time, **there’s very different people existing at the same time in the same space**. Reddit has metaphorical walls where you have subreddits that you have an echo chamber, where there’s s/transgender and r/TheDonald, and those two subreddits – people from one usually don’t talk in the other one, so they have their own thing. **In Tumblr, those spaces are just formed more by whoever you follow, but there’s no hard set, so it’s easier for people to jump in between them.***



She went on to describe the trans/queer Tumblr community as “my side” of Tumblr, positing another side of Tumblr that existed, as she noted above, “at the same time in the same space.” Tumblr as a space is much larger than one community. However, when interviewees talked about Tumblr, they usually described their own “side” of Tumblr – their trans-related sub-world within the site as a larger space. This is not unique to Tumblr; whenever a person talks about their experience on any social media site, they are really only talking about that site in the context of their own network, behaviors, and interactions. Thus, in this work, when I discuss Tumblr, I am really describing a small subset of Tumblr as a whole. Yet, the same features, affordances, and the potential for connection exist across all “sides” of Tumblr.

Across the interview data, participants characterized Tumblr as a place to be understood and to tell secrets. P3 said,

*It was relieving to acknowledge how like... you know when you have a secret and you're not supposed to tell anyone and all you can do is look at people and you're like chanting, 'I'm a woman! Let me talk about this!' You know something somebody else doesn't know but you feel like they should know, and that's kind of how Tumblr helps me. I have this thing I wanted everyone to know, but **I couldn't tell anyone. But then, I found a place where I'm like, I can tell people here.** And people started telling me back and it just kept going and going, building and building and now I get a friend request or add or follow, whatever it is, every single day and it's just amazing to see where it started from me being a scaredy cat needing to bleed out, to let it out.*

As evidenced by P3's quote, through the process of telling secrets and disclosing personal information on Tumblr, people become part of a community of like others, who tell secrets back and forth. This is closely related to the therapeutic benefits of Tumblr blogging that I described

in the previous section. Here, I emphasize how people's perception of Tumblr, and their particular community on the site, was as a place where disclosing personal information was both possible and acceptable, and allowed them to feel understood by similar others.

People considered their Tumblr networks to be open-minded, non-judgmental, and aligning with their political beliefs. This created a space that participants perceived as open, safe, and comfortable. For P15, Tumblr is

*probably like **the most open and freeing place that I am**. Specifically [my transition blog], that one is where I feel like I can post anything. I can post pictures, trans-related, weight-loss related, whatever it may be, **that is my open place, that's my safe place**, and that's because no one, most people that I know don't have Tumblrs, or if they do, they generally don't find that one.*

For P15, the openness and safeness has less to do with who *is* in his Tumblr network, and more to do with who *is not*. I discuss later in this chapter the specific makeup of people's networks on Tumblr and on Facebook. In P15's quote, openness and ability to share personal content on Tumblr is made possible by the fact that people whom he knows, by which he means knows in the physical world, are not there. P3 expressed similar sentiments, stating that because none of her friends used Tumblr, she "***felt safe and comfortable** posting those original pictures of me doing midnight makeup and stuff like that. Posting my feelings and stuff like that and not having that fear that someone's going to find out.*" Particularly early in the transition process, when a person is first experimenting with their appearance, Tumblr can feel like a safe and open place to present oneself without fear of negative consequences from people they know. Similarly, many people considered Tumblr to be a place to learn: to gather information and resources about how

to transition and how to live as one's chosen gender. Such information gathering, which may entail asking "stupid" questions, requires a space that feels safe and comfortable.

Participants' perceptions of Tumblr as a safe space also stemmed from its anonymity. P13 said:

*Tumblr is – it's anonymous, in a way. You only have to be the person that you say you are. You only have to share the information that you want. You could just go on there and reblog stuff, not have a picture, not have anything in your details and stuff. Literally, just be that person, so I think it just makes it easier for you to kind of shed that skin and be able to just show who you really are.*

Tumblr is substantially different from many other social media sites because it allows people to be anonymous. While many people use this anonymity only partially – for example by sharing identifiable photos but with only a first name – anonymity is important in creating a safe space where people can present as their new gender, which in P13's case, allowed him to "show who you really are." Anonymity on Tumblr is less about being technically anonymous, and more about being separate from the rest of one's life and everyday network.

As much as Tumblr transition bloggers form a supportive community and interact with each other (as I will discuss further later in this chapter), Tumblr was also considered, for some, a place to be alone. P11 described Tumblr this way: "*My favorite place to be alone. It's like a place to be alone with your thoughts, but in a public way, in a way that feels supported by others.*" Tumblr is remarkably different from a site like Facebook in this sense; many participants described feeling an obligation on Facebook to be connected. On Tumblr, in part because many bloggers' "real life" connections are not there, people feel little obligation to follow each other or interact. P11 adamantly described not wanting any obligation to interact,

and appreciated that on Tumblr people follow her only because they want to, not because of any pressure resulting from “real life” associations. Yet participants who viewed Tumblr as a place to be alone still *also* considered it a supportive community. The lack of obligation to one’s network created a freeing sense of solitude along with the comfort that one’s network would support them if that support was needed.

Existing literature often posits Tumblr as a queer space (e.g., a space for communities of people with non-normative genders and sexualities, and a space that embraces ambiguity and resists categorization) (Cho, 2015; Fink & Miller, 2014; Vivienne, 2017), and I found that Tumblr is queer in some senses. The site allows for queer communities to form and connect in a way that many other sites do not. Tumblr is also a queer space in terms of queer theory, which challenges dominant categories and embraces fluidity and ambiguity (Butler, 1999). For instance, Tumblr’s lack of clear boundaries and categorization, and the way that communities emerge through tags, is decidedly queer. Tumblr may be queer in the sense that it is open, but this openness also causes difficulty for queer/trans people. Participants described feeling that the site was not really designed for queer people, and in particular cited trouble with content moderation. For example, content that they considered non-explicit was sometimes flagged as NSFW simply because it was tagged #ftm. At the same time as trans bloggers’ content was flagged as explicit, Tumblr has little support for allowing trans people to distance themselves from porn blogs that often follow them *en masse*. Blocking works, yet as P19 put it,

*having to block literally hundreds of porn blogs and people like chasers is – definitely one of the things that people that I follow talk the most about and are the most concerned about. So, while it can create that queer space, it’s... very open.*

In this sense, openness can take away from the safe and comfortable nature that many described feeling on Tumblr. Queerness is different from queer as a gender or sexual identity. So, while Tumblr's openness may be queer, this queerness may actually hinder queer and LGBT people's experiences on the site.

Finally, in comparison with identified social media sites like Facebook, participants considered Tumblr as a space to be more "real," in the sense that Tumblr required less impression management (Goffman, 1959). The word "real," it turns out, means vastly different things on Tumblr and Facebook. People described their Facebook networks as "real," meaning that that network includes people from one's physical world life; thus, Facebook requires the same self-presentation constraints that come with a "real life" network. On Tumblr, people described feeling that they can present a more "real" self, which has also been found in the context of Tumblr fandom blogs (Hillman, Procyk, & Neustaedter, 2014). P19, who had not yet started living full time as trans, described segmenting her social media personas between networks to whom she was and was not out to as trans:

*I feel like [Tumblr] is more representative of who I want to be, so I'd say it's reasonably representative of myself in some ways. It's interesting, because **Facebook – at this point, I would definitely say it isn't, and it's a lot more contrived**, versus Tumblr, where... everyone that follows me there... I know is supportive, so I don't really feel a desire to craft a persona. I just do whatever I feel like.*

While her Facebook profile was somewhat representative of her physical world persona, at least in terms of appearance, P19's Tumblr represented her future, post-transition self. Each of these could be considered "real" in some sense; yet Tumblr is the version of real that felt more representative to P19.

Through this characterization of participants' perceptions of Tumblr as a space, I highlight the meaning attributed to Tumblr and people's experiences there. These perceptions shape everything they do and share on the site. Because Facebook is not the focus of this study, I do not provide a similar characterization of how people viewed Facebook as a space; instead, I focus only on how participants described using Facebook in comparison to Tumblr. I did, however, ask participants to compare the types of content they shared on each of the sites, and their networks on each, which I detail next.

### **How Tumblr transition blogs are different than Facebook**

Some of the major themes that emerged in interview analysis were differences between Tumblr and Facebook in terms of types of content participants posted on each site and how their networks and audiences differed between the sites. Early in the interview process, I found that almost all participants reported using Tumblr and Facebook. Thus, I asked interviewees to compare their content and networks on the two sites. Understanding the differences between the two sites enables a broader understanding of how social media site features and affordances, along with the networks present on those sites, influence how people present their identities, and what and how people disclose.

#### **People share vastly different content on Tumblr and Facebook.**

People in my study shared vastly different types of content on Tumblr as compared to Facebook. Table 4.3 provides a characterization from my interview data. On Tumblr people shared personal, emotional content, which included both positive and negative emotions. Due to my inclusion criteria, all participants shared trans-related content on Tumblr, yet while people shared trans-related news articles on Facebook, most did not share personal transition updates on

	Tumblr	Facebook
<b>Content types</b>		
Cute content		
Emotional		
Honest		
Negative		
Racy		
Selfies		
Art		
Everyday		
Funny		
Personal		
Political		
Positive		
Related to interests		
Trans-related		
Family-related		
Life updates		
Opinions		
Pets		
Self-promotion		
Trans-related but vague		
Work-related		

**Table 4.3. Content types interviewees described posting on Tumblr and Facebook.**

Facebook. On Facebook, people shared opinions, everyday content, life updates, and professional or work-related content. Several content types spanned both sites, including everyday content, political content, art, funny things, and content related to people’s interests. While people described sharing personal content on both sites, I will describe in this section how “personal” means something different on Facebook as composed to Tumblr.

P3 described the differences between content she shared on Facebook vs. Tumblr:

*I don’t post a lot on Facebook; Facebook to me is more like personal... on my Tumblr I’m much more open, I post more selfies and pictures and how I feel. Kind of my deeper, darker secrets and emotions, you know. **If I’m feeling sad, I don’t go blast on Facebook, telling everyone I’m sad. On Tumblr, I’d be like ‘I’m not feeling so hot today.’** And*

*then the randoms you have and the mutuals and stuff will come and talk to you, they don't know you in person. And **it's easier to talk to people when you don't have to see them the next day**... I still spam Facebook with a lot of nonsense."*

This quote echoes some of the themes I described above about people's perceptions of Tumblr as an open space, and a more comfortable place to share secrets given one's audience usually does not include people they know in person. Yet P3 described specifically choosing to share negative emotions on Tumblr rather than Facebook, and the resulting support that she received from her audience of "randoms" and "mutuals."

Negative content is frequent, normal, and accepted on Tumblr (Premack, 2016). For instance, B139 wrote about depression frequently on her blog, including content like "*I'm really out of it and fucking depressed today and I don't really have anyone to tell. I feel really alone and I don't know what to do with myself.*" In this post, she places her Tumblr audience as separate from any existing support network in her life – she has no one to tell, but she tells Tumblr nonetheless, perhaps as a way of indirectly seeking support. B75 posted negative content on her blog in a different way. After sharing about an experience being harassed in the physical world, she wrote:

***I wanted to write a post showing how it's not actually always smiling and high-5's – instead some people can be terrible and intentionally try to hurt other people. **Because I was able to read other people's stories, it prepared me for situations like this – so I guess here's my story.** It won't be the last I know, but I am tough and hopefully I won't be weak. There's no excuse for hate and hopefully karma will get these people someday but 'til then, don't let it stop you from living your life and having fun, you only have one life so LIVE it but stay safe :)!***



In this example, B75 shared negative content in an attempt to help prepare other trans people for potential experiences with harassment. For P13, sharing negative content was a way to document the negative aspects of transition along with the positive.

*I was able to post pictures on there when I was having a down day, especially when you first start T. There's that period where you're like trying to find the dosage for you. Like I said, with my history of depression, it was just like super highs and lows, and so, when I was in those lows, **I had a few posts on there where I'm just like today's a shitty day, but this is a part of my story. This is a part of my transition, so to be able to put that out there, to be able to document it, to be able to show other people the sun ain't always going to be shining, but you're achieving your goal, so you kind of keep going.***

P13 and others shared negative content as a way to document their transitions realistically, in part so that others could get an accurate sense of transition's highs and lows. Support seeking, helping to prepare similar others for negative experiences, and providing others with an accurate sense of transition are three of the many reasons that people share negative content on Tumblr.

At the same time that people shared negative content on Tumblr, many also emphasized the importance of being positive and spreading positivity via their blogs. As much as positivity was important, presenting a genuine self-image was also of major importance to many participants, and this included posting negative content. Posting negative content enables people to work through difficult emotions and experiences; sometimes people can only get to the positive by working through the negative. Negativity and positivity, then, are not at separate ends of a spectrum, and instead exist in tandem in people's lives and in their blog posts.

Other types of content participants shared on Tumblr included everyday content (sharing mundane life details, such as about shopping, can be very meaningful in trans online spaces

(Cavalcante, 2016)), things that were artsy or cute, selfies, and racy or explicit content.

Interestingly, some people described sharing a lot of political content on Tumblr, while others were decidedly not political on Tumblr (and some posted political content on Facebook instead). Besides politics, the only category of content that people described not posting on Tumblr was family-related content, such as photos of one's kids. In this way, similar to previous research that found that an NSFW (not safe for work) blogging community used Tumblr as a place to show certain highly-personal identity facets yet omitted family-related or professional content (Tiidenberg, 2013), people compartmentalize their lives by choosing to share certain content on different sites.

On Facebook, people shared very different types of content. Previous literature has shown that people post little negative content on Facebook, even when they are feeling negatively (Bazarova et al., 2017; Reinecke & Trepte, 2014), and that negative content on Facebook may be considered inappropriate and a violation of site norms (Ziegele & Reinecke, 2017). Participants in my study followed this trend, and described posting negative content on Tumblr but not Facebook. P5 characterized the difference as a split between opinions and feelings, saying that *“I feel like if Facebook is where you go to voice your opinions, then Tumblr is where you go to express your emotions because that's what it feels like a lot of people do on there.”* People described sharing personal content on both sites, but what they meant by personal was different for Facebook and Tumblr. P12 described sharing “personal” content on Facebook as *“things about my dog and some few personal pictures, like I hike and take pictures of that, share that sort of thing.”* Yet he continued by saying, *“I'm not very active on Facebook in terms of sharing my feelings or that sort of thing.”* For P10, Facebook was for sharing *“personal life stuff, like things that I did throughout the day. Like, the other day I wrote a status that I was mad at my*

*bank because they deactivated my ATM card without sending a new one first. It's stuff like that."*

"Personal" content on Facebook, then, means descriptions or photos of things that a person does throughout their days, like hiking and dealing with their bank, and content about family and pets, but not emotional content. On Tumblr, "personal" content means sharing emotions and secrets.

When people faced difficult life events, they often retreated away from Facebook rather than posting negative or emotional content. For example, P5 said,

*I found out my grandmother was sick and it trailed on through April... She passed the week after my birthday and the relationship I was in ended that same week. **I was really low and then I just disappeared off of social media** after that to just kind of recuperate. **That's when I started going back on to Tumblr.***

A difficult event in their life caused P5 to remove themselves from Facebook and other social media sites, yet brought them back to Tumblr, a site where they described feeling they could post negative content. Yet their Facebook profile continued to represent them on Facebook even as they were less active on the site.

Though people described sharing trans-related content on both sites, what this meant differed between the sites. On Facebook, trans-related content often meant things like news articles, while on Tumblr, trans-related content involved one's personal transition. P12 explained,

*I do share some trans-related articles [on Facebook] because the majority of my people on Facebook know that I'm trans. **I'm comfortable having a trans presence on my Facebook, but I don't talk a lot about my own personal transition.** It'll sort of be like articles or talking about Trans Day of Visibility, for example.*

Others shared trans-related content on Facebook, but only to a limited audience, as in P8's case:

*The way I have it set up on Facebook is **if I want to make a trans-related post, I have a specific list of people who know that I'm trans.** It literally is those who know and only they can see that content. Only they can see that particular post.*

Because one's Facebook network often involves family members, some of whom are not supportive of one's transition or trans people in general, or others who may not know a person is trans, some people posted trans-related content on Facebook without disclosing their own trans identity. Others avoided posting trans content on Facebook because "*being trans is not everything I am*" (P1), while Tumblr provided a segmented space to discuss that facet of her identity.

Participants also used Facebook for life updates, and as a way to make "*big announcements type of things*" (P15) to a large group of people at once. These types of announcements were not necessary on Tumblr, because most people posted smaller transition updates frequently. Life updates on Facebook sometimes included trans identity disclosures, as P18 described: "*I made one post... that was like my coming-out post on there. And, otherwise, I really haven't made any posts since.*" Trans identity disclosures were not necessary for most people on Tumblr, because most started their Tumblr blogs as a way of documenting their transitions to an audience who had not known them prior. P16 was an outlier, as someone who did not use Facebook, started his Tumblr several years prior to transition, and made a trans identity disclosure post on Tumblr when he began transitioning.

Other types of content people posted on Facebook included posts about or photos with family and pets, posts related to one's interests, artwork, funny posts, and self-promotional or work-related posts. Some people used Facebook primarily to post political content, while others did

not post anything political on Facebook and even avoided the site because of its prevalence of political content.

Characterizing types of content people share on Tumblr and Facebook enables an understanding of the ways that different social media sites with different features and affordances impact content sharing decisions. The differences in people’s networks on Tumblr and Facebook also played a large part in what people decided to share and how they presented themselves on the sites, as I discuss next.

### Separations and intersections between Facebook and Tumblr networks

Much as the content people share is different on Tumblr and Facebook, people’s networks also differ. I alluded to these differences in the previous sections, because one’s audience influences what type of content one shares and how one perceives an online space. Here, I characterize these networks in detail (see Table 4.4).

	<b>Tumblr</b>	<b>Facebook</b>
<b>Network / audience</b>		
Like-minded people Porn blogs Strangers Young people		
Trans people Queer people People who did not know them pre-transition Close friends <sup>1</sup>		
“Real life” network Family Friends (non-close) People who knew them pre-transition Professional connections / co-workers		

<sup>1</sup>A few interviewees had pre-transition close friends in their Tumblr audience. A few others had close friends that they made on Tumblr in their Tumblr audience.

**Table 4.4. Interviewees’ described networks / audiences on Tumblr and Facebook (excluding outliers).**

Participants' audiences on Tumblr were made up primarily of like-minded strangers, most of whom were also trans, and few if any of whom had known the blogger prior to their transition. Two interview participants described having several close friends and family members as audience on their transition blogs, but this was rare. People often characterized their audiences on Tumblr as consisting of trans or queer people, many of whom were very young. Participants also acknowledged a second, unintended audience consisting of "porn blogs" who fetishized trans women's transition blogs, and whom many bloggers spent substantial time and effort blocking on a regular basis.

On Facebook, on the other hand, participants' networks consisted mainly of people whom they knew in the physical world, and whom many described as their "real life" network: friends, family, co-workers, and professional connections. This has also been found in by Hillman et al. (2014) in the context of Facebook in contrast to Tumblr, yet is not only for trans populations or Tumblr users; Facebook is broadly used as a site for connecting with people met in offline contexts (K. Hampton, Goulet, Rainie, & Purcell, 2011; Lampe, Ellison, & Steinfield, 2006). Some audience members on Facebook knew participants pre-transition and others did not; some participants described feeling hyper-aware of this division, often feeling more comfortable in the online presence of those newer connections whom had only known them in their current identity. Facebook networks, like Tumblr networks, also included some trans and queer people, but mostly these were connections first made in the physical world, rather than trans and queer strangers met online, as on Tumblr.

People's networks on Tumblr tend to have little overlap with their Facebook networks. "*They are completely separate for me. My Facebook and Tumblr are 100% different,*" said P1. P13's Tumblr and Facebook networks, similarly, are "*completely different people. I do have a few*

*friends who I follow on Tumblr and stuff like that, but for the most part, it's random people.*" For some bloggers, this network separation made Tumblr feel anonymous, which in turn allowed more openness. B75 described on her blog,

***Tumblr being fairly anonymous (mostly because it isn't linked to Facebook) is a really good tool for people everywhere to express themselves. If it wasn't for Tumblr I would never have known there is so many people in similar situations and would have lacked the encouragement I would have needed to be where I am today! Thanks Tumblr and users of Tumblr!!!***

The openness enabled by separation from one's Facebook network created the conditions necessary for many bloggers to disclose personal information and receive social support.

Some who did have overlap between their Facebook and Tumblr networks described this overlap as being uncomfortable, even if the people in common between the two sites were also trans. For example, P4 said:

*There is a little bit of overlap and initially it was difficult for me because a few of my Facebook friends also happened to have a Tumblr and... I started being suggested [in the suggested friends list] because they are looking at trans things... That was very weird because **it had felt, even though I was putting my face and my name out there it still felt pretty anonymous for a while and then a couple friends found it and they would comment on there. It was weird because I talked about things there that I wouldn't on my Facebook like confirmation surgery.***

Even though bloggers knew they were not completely anonymous on Tumblr, the separation from their Facebook network made Tumblr seem anonymous. For others, conflict occurred when audiences overlapped between the sites. For example, P8's father reacted negatively after reading

a Tumblr post where she discussed him in a negative light. When the boundary between different networks was compromised, as in P4's case when her Facebook friends found her on Tumblr, or when P8's father read her Tumblr blog, sharing intimate content became more difficult.

Other bloggers struggled with how much they wanted their identity to overlap between Tumblr and elsewhere online. B87, a programmer, wrote:

*I feel a bit conflicted about whether or not I should post here about the things that I'm programming. **I like the idea of having separate internet identities instead of tethering everything together.** I can't even begin to imagine why some people even go so far as to tie everything to their meat space name. Why would you want to be stuck carrying around your digital baggage and history with you forever? Facebook probably deserves a fair amount of blame for encouraging/training normal people to use real names online. Anyways my point is that **I don't want people that know me as a coder to have the chance to judge me by the stuff that I post here and vice versa.** But writing software is pretty much the only thing ever I do that could be passed off as being productive. **I rarely have much to talk about aside from programming so not writing about it makes this blog a bit pointless.***

B87 described some desire to combine separate topics that were both integral to her identity: programming and being trans. Yet she was conflicted about the *people* involved in each of those identities being combined into one audience. To handle this type of context collapse (Marwick & boyd, 2010), Tumblr bloggers often segment their content into several different blogs, based on topics – for example, many described having one transition blog and one blog related to Pokémon. Yet B87 felt her blog was “pointless” without incorporating her programmer identity into it; thus, segmentation would not be a solution.



P8 was an interesting outlier case who, as described in the “Other-related motivations” section above, started her Tumblr blog specifically for friends and family to follow her transition. Yet even with this openness, she maintained a separate blog related to gender reassignment surgery, which she did not allow her friends and family to follow. As her transition progressed, P8 became stealth on Facebook, and appreciated Tumblr for its anonymity:

*Tumblr, where you're more open, you're kind of more anonymous. Obviously, if someone were to really, really hunt down some information and dirt on me, they would turn up the blog, but like the random family and **friends there that don't know about me [being trans] on Facebook aren't just going to randomly stumble onto this blog on Tumblr unless it goes mega viral or something like that. But other people can stumble onto it.***

***Other random people who are looking for that support can kind of stumble onto it.***

While P8 was one of the participants with the most overlap between her Facebook and Tumblr networks, she was also one of the participants who controlled information boundaries most on both Facebook, such as by using lists to control audiences for trans-related content, and Tumblr, by segmenting more sensitive content into a different blog with a restricted audience. P8, though an outlier, gives important insight into how people manage boundaries on social media, and how social media sites can more appropriately enable boundary regulation.

While visibility was not a major goal for most interviewees, some did describe sometimes rethinking the separation between their Tumblr and Facebook accounts because this separation necessarily limits their audience and visibility. Denny, an outlier for whom visibility was a primary goal, maintained no boundaries between Tumblr and Facebook. “*Most of the time when I write something,*” she said, “*I usually share it on my Facebook, too. I just like to expand the audience as much as I could.*” Many trans people feel a tension between visibility and discretion.

Some, like Denny, overwhelmingly chose visibility. Most others in this study's sample vacillated towards discretion.

### Tumblr transition blogs as a supportive community

I found that the network of Tumblr transition bloggers met both Preece's (2000) and Haythornthwaite's (2007) definitions of online community: Tumblr transition bloggers have a shared interest and purpose, follow a set of common practices, and use an online technological system to mediate social interactions and facilitate a collective supportive space that goes beyond supportive pairwise interactions. Participants described Tumblr as a supportive community, while all but one did not describe Facebook in this way – a substantial distinction between participants' Tumblr networks and Facebook networks. Though ties are not viewable on Tumblr and thus a formal social network analysis would not be possible, many of the bloggers in my dataset mention each other in posts, interact with each others' posts, and sometimes have connections with each other beyond Tumblr (in other online spaces and even in the physical world). The Tumblr transition blog community does not have clear boundaries; like Galegher et al. (1998) found when studying early Internet support groups and Hillman et al. (2014) found in the context of Tumblr fandom communities, people do not “join” this community in any official way, and there are no clear membership procedures. Instead, people become part of the community by following and interacting with people and tags, and eventually posting their own content. Like other Tumblr communities (Hillman et al., 2014), community emerges around transition blogs because of shared experiences and a common interest in gender transition. Yet online communities' permeable borders sometimes make it difficult to maintain necessary boundaries between insiders and outsiders (Lingel & boyd, 2013). In this section, I focus on the

ways that Tumblr enables social support exchange by detailing how people receive, offer, and provide support in the Tumblr transition blogs community.

People often received support on Tumblr in response to posting about difficult emotions or experiences, after which their audience provided reassuring messages both via private messages and through interactions like replies and reblog comments. B18 posted about the overwhelming support she received:

*I wanted to say **thank you guys for the support, I can't express enough how much you guys help me when I'm stressed or anxious.** I know I close down shop when things get bad, and I may not have the emotional capacity to respond right away... But I read them all and they keep me grounded for sure. Also thank you to the people who have recently told me in some small way I've helped them find out their identities... That's gotten me through my crummy days... Have a good night everyone, I really appreciate all of you.*

After posting about a difficult experience, B18 received so many supportive messages on Tumblr that she was unable to quickly respond to them all, and this support helped her to feel better.

Importantly, her network reached out not only with support, but also to tell her that she helped them work through their own difficult emotions around their changing identities. This highlights the ways that support on Tumblr is rarely one-sided – instead, people exchange support back and forth by inspiring each other and lifting each other up when they are feeling down. B29 described similar sentiments:

*I want to say thank you to everyone who said nice things to me this afternoon. I can be right on the edge of disintegration, lost and hurt and alone, and **I know that, instead of finding a bus to walk in front of the way I used to, I can pull my phone out of my pocket, pour my feelings into text, and know that it will be received.** I know that the love*

*of my life will see it, I know my best friends will see it, **and I know that this community of badass supportive crazy women I have found myself in will see it and understand exactly what I'm going through.** I didn't even consider walking in front of a bus today. I'm getting better. Thank you.*

B29's community on Tumblr provided support to the extent that her suicidal ideations decreased.

Tumblr also enabled people to find support for their changing identities at the beginning of their transition processes, often before they started keeping a transition blog. Most transition blogs have many followers who are at earlier stages of transition and are inspired by others' transition progress. While all the people I interviewed and most of the transition blog data represented people further along in their transitions, many described having used Tumblr early in their transition to find support for their soon-to-be changing identities. For example, P19 said,

*I started looking into following other trans people... **In the beginning, I was really interested in following people's transgender stories,** and at that time, I was exploring the idea of going on hormones, so having that as a facility where people talked about their experiences on them, how things went, things you could expect – that was really a big motivator.*

Interestingly, this is a type of support that happens even without interaction – those whose blogs inspired P19 may not have ever been in contact with P19, or knew they inspired her and helped her at the beginning of transition, yet they supported her nonetheless.

Transition bloggers also actively offered and provided support to others. B137 posted on his blog,

*If you don't have anyone to listen to you or you're very excited about something and are afraid of annoying people just know that **my ask box (and chat) is always open and I will always listen to the best of my ability.***

These types of posts were common; B43 similarly posted,

*If the holiday season is getting you down or makes you feel lonely, **my DM [direct messages] are open today and I'm here to listen, talk, and be there in whatever way you need.** No matter what's bringing you down, remember I'm here for you, you are important, valid, and beautiful. Don't hesitate to DM me! God bless you.*

Transition bloggers understood many vulnerable trans people actively followed their blogs, and that those people may need help. Thus, they took an active role in offering and providing support by being responsive to their “ask box” (an optional “ask me anything” feature that any Tumblr user can put on their blog) or private messages. B43’s post acknowledged that the holidays are often a difficult time for trans people, given that many have unsupportive families, and thus put himself forward as a source of support for those who may be struggling.

Interestingly, even in a supportive and semi-anonymous online space, Tumblr bloggers often corresponded via private direct messages, or via “asks” that were displayed anonymously. I did not ask participants about these practices directly, mainly because the participants in this study were generally on the support-providing, rather than the support-seeking, end of the message exchange. It may be that people did not want their message content viewed by anyone other than the recipient, or that people did not want their ask content associated with their blog names. These practices signal that even in a supportive community of similar others, self-presentation concerns remain. Particularly those who are in distress and seeking support may value more private means of communication. Private messages may also be common because more Tumblr’s

more visible forms of communication (e.g., replies and reblog comments) did not easily facilitate back and forth conversation around sensitive topics.

The Tumblr transition blog community often provided support to bloggers, even without any interactions taking place. In my interview with P16, I asked him who supported him in his life, and where he went for support. Rather than responding by describing supportive people, he said, *“I write a lot. I paint a lot. **First and foremost I’ll just get on Tumblr, because that always makes you feel better. You can just disassociate and just scroll.**”* This non-social use of Tumblr, which P16 placed in the same category as outlets for expression like writing and painting, was a source of support. P16 was an outlier in many ways, one of which was his aversion to social interaction in the physical world, which sometimes also translated to Tumblr. Yet, his best friend was someone he had initially met on Tumblr before moving their friendship into the physical world, so he did use Tumblr in social as well as antisocial ways. Despite P16’s outlier characteristics, others may also find support on Tumblr simply by scrolling, particularly people early in transition who find support and inspiration by following transition blogs.

While most interviewees considered Tumblr a supportive community and did not receive or provide support around their transition on Facebook, P10 is an interesting outlier case. P10 found supportive communities on several Facebook groups for trans men, and he considered Facebook a more open space to share information than Tumblr. It is likely that many others also find supportive trans-related communities on Facebook, particularly given the prevalence of trans-focused Facebook groups. However, because my inclusion criteria required participants to be Tumblr transition bloggers, it is not surprising that the majority of them used Tumblr as their primary supportive online community. If I had recruited via Facebook groups, I may have found those to be supportive communities as well. However, Facebook’s requirement that people use

their “real life” identities imposes constraints on sharing (Haimson & Hoffmann, 2016; Reinecke & Trepte, 2014) and may also constrain support exchange (Andalibi & Forte, 2018). It is also important to note that Facebook overall is very different than Facebook groups; the latter imposes group membership boundaries that often prohibit content from being seen by one’s friends and family. Thus, it may be that Facebook groups have more in common with Tumblr communities than Facebook with Tumblr more broadly.

Despite the fact that Tumblr transition bloggers offered and provided support to their community members, they were not always able to help those they attempted to support. B153 (who is also P8) described a situation in which she tried to help a suicidal trans woman on Tumblr, but was not sure that her efforts had been successful. She then wrote,

*It’s one reason I formed this blog so I could share my transition experiences with the world and inspire others or otherwise give them hope. That said, **not being able to help someone like this bothers me deeply.** To my core, even. Especially with just how extreme she’s talking. To anyone out there who is contemplating ending your life: as someone who has been down that road before, as someone who’s helped many others through it, please don’t. Seek assistance, get help, and let yourself heal where and however you are able. Yes, you are worth it.*

While online communities can be important sources of support, transition bloggers are not trained mental health professionals and may not always know how to best support others, especially those who are suicidal. Advising people to get help likely felt insufficient to B153, particularly knowing that she had tried and ultimately was unsuccessful in helping a suicidal person in her Tumblr network. Online health communities are important places for community to support each other by talking about personal experiences with health issues, yet they provide a

different function than health professionals (Huh, 2015). In many cases, moderated online communities redirect participants to contact health care providers in addition to seeking support in the community (Cipolletta et al., 2017; Huh, 2015). Other trans online communities include professionals such as psychologists, doctors, and lawyers to provide advice and information to those in the community (Cipolletta et al., 2017). Yet Tumblr is unmoderated, and professionals are not active in the transition blogs community. An online community focused on an especially vulnerable population, many of whom face substantial mental health issues, necessarily encounters limitations to support provision. Future work should consider design implications targeted at difficult situations where support from an online community may not be enough.

When people express suicidal ideation on social media, this may be an extreme form of support seeking, rather than an actual intention to commit suicide. Responses to such posts are vastly different on Tumblr and Facebook, in a way that can be summed up in a powerful quote by P11:

*If you post on Facebook that you want to kill yourself, somebody's going to call the cops on you, and you're going to end up in the hospital, and you're going to hate being there, and it's going to suck, and you're going to be mad at whoever called the cops on you, even though you were saying something really serious. **Whereas Tumblr, if you say, 'I want to kill myself,' someone that you don't know who lives miles away sees this, and then messages you, and talks to you, and asks you how your day is. And I just feel that one of them is actually inherently more beneficial in terms of one's morale. I don't know, it's like knowing people are listening seems to be a lot more helpful. Does that make any sense? It's like, you'll get support for your issues in an emotional sense, on Tumblr whereas, Facebook, it's like, 'Solve the problem now. Fix it. Make it go away.'***



In situations where people need social support, rather than tangible assistance like police intervention, Tumblr's community of supportive transition bloggers, though strangers, can be life-saving in a way not always found from one's "real life" connections. Tumblr communities cannot provide tangible help or assistance, but are a space to find similar others and be listened to (Holpuch, 2016), which is often the type of support most needed in desperate situations.

In this section, I have outlined the ways that Tumblr transition blogs form a supportive community. I next discuss the unexpected distinctions between public and private that analysis of Tumblr transition blogs uncovers.

### Complicating public vs. private

My analysis of the differences between Tumblr and Facebook in perceptions, types of content shared, and networks points to an underlying theme relating to the surprising nature of "public" and "private" in these online spaces. Most transition blogs on Tumblr are technically *public*, in that anyone can view the content, whether or not they are the blogger's followers or friends. In a sense, many of these public posts are even identifiable, in that they often include first names and photos of the blogger's face. Yet despite being technically public, people view Tumblr as a safe place where they can post personal and sensitive content, such as emotions, details about medical transition, selfies, and even photos of genitals. In this sense, blogs can be simultaneously public and private (C. R. Miller & Shepherd, 2004). Tiidenberg (2013) found similar results in a community of NSFW (not safe for work) Tumblr bloggers, who perceived Tumblr as a place to share sensitive content discreetly, yet technically publicly. Yun (2006) defined perceived anonymity as a "perceived lack of identity information that would help communicators to recognize each other," that is comprised in part by "discursive anonymity," or whether online

content can be connected to the person posting it. My finding that Tumblr is perceived as somewhat anonymous despite being public are in line with Yun's (2006) argument that perceived anonymity is not bounded by technical anonymity.

Facebook, in contrast to Tumblr, was technically *private* for most participants in my study, in that their profile and content could be viewed only by people they had accepted as Facebook friends. Yet despite being private, on Facebook, participants described being much more reserved in the content types they posted. Facebook content tended to include everyday happenings (e.g., going on a hike), photos of friends and family members, and life updates. When people did post trans-related content, it was often in a political rather than a personal light. This interesting juxtaposition allows important insight into what public and private mean in online spaces.

Participants discussed the ways that Tumblr, though technically public, felt private. P4 noted how Tumblr's public yet anonymous nature enabled sensitive disclosures:

*I really needed an outlet for that, so that's why I created my Tumblr blog. I created a whole new email, I didn't want anyone to find it, I wasn't going to put any pictures on it. Tumblr was a place where I could completely be myself and be weak and have questionable opinions. And **this was the purpose of it – to ask questions and do all these things I couldn't do, or I felt that I couldn't do, on Facebook where people I knew were there. Tumblr was definitely my anonymous outlet at the time.***

B110 expressed similar sentiments, calling out the dissonance between Tumblr as anonymous yet public: *“Let me start off by saying this is something I never thought I would do. **Although anonymous and online, I still never thought I would put my true feelings out there for the***

*world to see regardless.*” This anonymity was freeing for some, and enabled genuine self-presentation. The anonymous nature of Tumblr felt secure for many, as P3 described:

*I used to write to myself when I was a kid. I had a diary, but I wouldn't put personal information in it because it was too easy for people to find. Someone could just find that... notebook... on your desk top. **On Tumblr, you're password secure... and there is no ties to my Tumblr page to anything else in my life.** You can't type my name in... and find anything on there... It just made it easier, **it felt more safe like having a lock around your notebook.***

The “lock” around Tumblr is not a physical or a technical lock. Though P3 described Tumblr as password secure, this password was necessary only for her to enter to post content – in our interview it was clear she was aware that her Tumblr content was technically public. In reality, that “lock” stems from the lack of ties to one’s physical world network, and the inability of one’s network to find one’s Tumblr blog using a search engine. The lock is privacy by obscurity, a concept describing content that is obscured to the extent that it is not easily located by particular unwanted audiences (C. R. Miller & Shepherd, 2004; Rifkin, 2013; Stutzman & Hartzog, 2012) – a long-standing security practice that pre-dates the Internet. Stutzman and Hartzog (2012) also described online privacy by obscurity as “segmenting by site,” a practice of using different social media sites to present oneself to and interact with different audiences. Yet with advancements in facial recognition and other algorithmic methods of matching user content across sites, privacy by obscurity may become precarious in the not-too-distant future.

Yet despite anonymity, privacy by obscurity, and bloggers’ perception of Tumblr as safe and comfortable, impression management still happens to some extent on Tumblr. P15, in what at first glance appears contradictory, stated that his Tumblr transition blog represents “*where my*

*heart is and who I am stripped to my core,”* and yet only posts content after he has thought through it fully and drafted it several times. P15 kept a separate Tumblr blog, private only to himself and his best friend, where he posted rough drafts of writing as a way to think through and iron out his posts before posting them on his transition blog. This drafting may be a type of impression management, or it may be that he can only get to his “core” through several drafts and rounds of thinking. Being stealth, P15’s conceptions of privacy are different than others. He thought a lot about privacy, disclosure, and openness, and seemed somewhat conscious of the impression management that took place on his transition blog and his Facebook profile. There are levels to his open-ness, and his private blog is a deeper level. Each Tumblr blogger applies certain levels of impression management to their Tumblr posts depending on the post’s content and imagined audience.

Overwhelmingly, interviewees described Tumblr as a place to post more genuine self-presentational content than on a site like Facebook. Facebook, though technically private, tends to be a space where people post curated content, as though for a public audience. P11 shared,

***Tumblr is kind of where I post my actual thoughts and feelings, and Facebook is where you post what you want people to see and think of you. I don’t know. I just feel I’m a lot more honest on Tumblr, and Facebook is a lot more superficial, and more promoting oneself than it is for communicating just for the sake of friendships, or otherwise.***

P7 attributed the curated nature of Facebook content to the network there: ***“I think Facebook, it’s because even your grandma uses Facebook. Posts are a little different, they’re mentally edited a little bit before people finally hit the post button on Facebook.”*** Because people’s physical world networks are on Facebook, Facebook often becomes more of a communication tool with those people rather than a medium for posting personal content, as described by P3:

*I'd say [my Facebook persona] would be more of an outline. I mean yes it's technically me, it's just more... (sigh) **I don't post my feelings on Facebook**, you know what I mean?*

***I use Facebook more as a tool to communicate with my friends and family.***

While Facebook was an effective tool for reaching friends and family, participants described feeling that these types of networks hindered posting emotions or sensitive content.

Some self-presentational concerns on Facebook involved professional or religious networks. P4 limited her Facebook posts because “*I'm a director, the director of customer relations so I also have employees on there and that was my public persona.*” For P15, Facebook content curation was partly impacted by his religious network:

*I feel like my Facebook profile is still at that place where **everything has to be very curated. Whether it be because of the religious aspect, or because... I don't know, I feel like I have to put up more of a front on Facebook... instead of just being very authentic about everything.***

The presence of professional or religious networks, in addition to friends and family, added to the public nature of Facebook, despite its technically private nature.

P19 struggled with self-presentational concerns as she struggled with deciding how to transition her Facebook profile. While the rest of the interview participants had already disclosed their trans identity to their networks, P19 was still in the middle of this process. She said,

*I'm trying to decide what I want to do with [my Facebook profile], because I feel if I completely restart it... that, I'd be able to craft a bit more. But at the same time, even then,... I have people that I'm friends with on Facebook that I would consider more like work colleagues as opposed to people that I would go drinking with... My parents follow me, and older adults, like my teachers that I friended at some point... **I'm conscious of***

*the fact that those people can see everything I'm doing on there. Accounts that are separate from those aspects of my life, I have more freedom. So, if I was to go through and make a new Facebook without those people, then I might have some more freedom. In some ways, [Facebook is] kind of like a LinkedIn account where there's a professional aspect of it versus more of an artsy, free-expression kind of thing. **This is a professional account describing who I am as a contact.***

The official, almost administrative nature of Facebook hindered self-expression for P19, and made it difficult for her to decide how to proceed with her Facebook account during and post-transition. She did not describe Facebook being technically private entering into her self-presentation decision process, yet her Facebook network was an important decision factor.

I argue that technical public and private boundaries mean less in practice than the networks and audiences who surround a person on different platforms. Self-presentation and content sharing decisions depend on the network who has access to that presentation and content. Many trans people are stealth on Facebook, yet openly trans on Tumblr. Tumblr's network of supportive strangers creates a safe space for sensitive sharing, even without technical privacy. Facebook, despite being technically private, is comprised of a network that makes sharing sensitive content uncomfortable.

### **What the transition process is like**

Gender transition, like most other life transitions, is not a moment; rather, it is a process. The dominant gender transition narrative tends to be that of a man disappearing briefly, going into surgery, and emerging as a woman (Stone, 1987); a narrative perpetuated recently by Caitlyn Jenner's rapid public transition. However, for most trans people, transition instead is a series of

disclosures and other milestones that occur one after another throughout a series of months and often years. Denny described several of the steps that were part of her transition:

*I had people start using she/her pronouns and that felt really nice. Then, I took the next step and I started seeing doctors and then I got some haircuts. Things kind of just fell into place. **It was kind of a gradual thing.** It's not like a lot of people where they were one [year old] and they were like, 'This is the wrong body!'*

Denny's characterization of her transition as gradual was a common theme among all participants in my study, and trans identity disclosures were an important part of this gradual progression into a new gender. As P17 put it,

*First, you have to come out to yourself. Then you have to come out to people close to you. Then you have to come out to the world and deal with society in general, and then you have to deal with all the bureaucracy of people who don't know you, never will, don't really care about you, but they're in charge of your paperwork.*

P17's disclosure process starting with self, followed by close friends and family, followed by broader society and bureaucratic gatekeepers (e.g., courts in charge of legal name changes, Department of Motor Vehicles), was a typical trajectory.

The transition process also involves discovering one's identity iteratively throughout, as B166 described on her blog:

*For me, coming out, has been so much more than telling everyone that I'm a woman, slapping on makeup, and a pretty dress. **For me, it has been about my journey to self-discovery.** It is when I gave myself permission to express my authentically realized persona. To find out who she is, who I am, as a woman. The coming out process, the transitioning process is all about building out your personage from the tattered pieces*

*left behind of a life spent in chains. Who knows what type of woman I would be had I transitioned earlier. I know that **I am the woman I am today because of the journey I had to take to get there.** Yet I still don't know who I am, who she is, and where I will be going in the future.*

Such “journeys to self-discovery” take time, and necessitate transition being a process that occurs over time, rather than a moment of change. Disclosing one’s trans identity to others, for many, is a way to discover self in social contexts.

Trans people easily reject the false narrative of transition as a quick switch facilitated by surgery, and instead experience and describe transition as the process that it is. However, another dominant cultural narrative remains strong in people’s accounts of their transitions. I will use B106’s blog post as an example:

*Six months ago, I sent the first email to my therapist. Six months ago, I put into motion what probably should have happened in the 90’s. It’s never too late to show the world who you really are. To be your true self. To find a feeling of inner peace. It hasn’t been easy, but it’s been worth it. **I feel like I’ve made so much progress in such a short amount of time, even despite the gatekeeping and some false starts. I’ve got so far to go.** I told my therapist yesterday, I’m cautiously optimistic about everything right now. I’m on a path to actually get rid of this facial hair, I’m working on my voice, GRS [gender reassignment surgery] is scheduled. Name is legally changed, I’m out full time. This is the awkward caterpillar phase of things. **It can only get better from here.** If you’re reading this, wondering if you can do this, don’t wait! Unless your situation is too dangerous to come out, there’s no time like the present.*



After describing some of the steps and milestones throughout her transition, as well as the non-linear nature that transition often takes (“some false starts”) (Horak, 2014), B106 tells her blog audience, “*It can only get better from here.*” B106’s quote hails the It Gets Better narrative, a dominant cultural narrative that arises throughout this dissertation and complicates this dissertation’s question of how emotional wellbeing changes over time throughout gender transition.

To understand how emotional wellbeing changes over time, I use trans identity disclosures to demarcate transition stages. Because transition is a process and not a moment, and is not always a linear process (Horak, 2014; Kralik et al., 2006), I cannot use a simple before-vs.-after approach to understand emotional wellbeing changes. As each person described their experience throughout the gender transition process, it became clear that moments of disclosure are pivotal moments in people’s lives. Coming out as trans to different people in one’s life (e.g., friends, family) and in different contexts (e.g., work, school) mark critical moments of change and progress along people’s transition paths.

Although every person discloses their trans identity to the people in their lives in different orders, I wanted to understand broadly and on average the order in which these disclosures took place. I used the Tumblr transition blog dataset and the disclosure posts I had manually coded with disclosure audience (see the Methods chapter for more details on this process) to quantify disclosure order. Using data from each person in the dataset who had posted about more than one trans identity disclosure on their blog, I assigned a weight to each disclosure audience according to the following pseudocode:

```
weights = [ ]
```

```
for (person in dataset who posted about >1 trans identity disclosure):
```

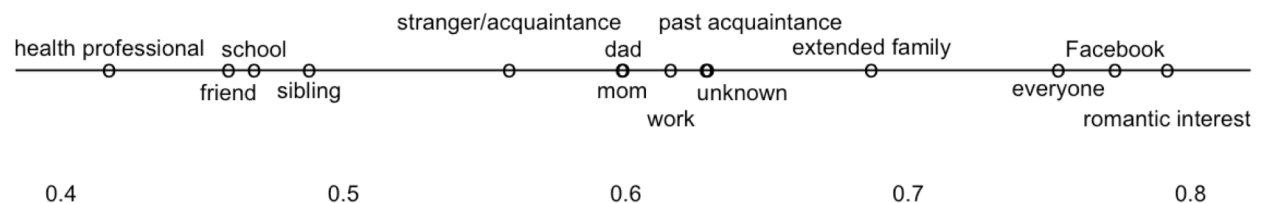
```

if (person disclosed to audience):
    w = (order of disclosure to audience) /
        (total number of trans identity disclosures from that person)
    append(weights, w)
weight = mean(weights)

```

For example, if a person had made three total disclosures: first they disclosed to their mother, second at school, and third on Facebook, then for that person the maternal disclosure would get a weight of 1/3, the school disclosure would receive a weight of 2/3, and the Facebook disclosure would receive a weight of 1. Then I averaged the weight each audience received over all the people who had posted about that disclosure audience. Thus, I gave each audience a weight less than one, where a lower number indicates a disclosure earlier in the transition process, and a higher number indicates a disclosure later in the transition process. These weights are reported in Table 4.5, and visualized in Figure 4.1.

The disclosure order pattern indicates that, on average, people come out to friends early in the process, family members towards the middle of the process, and that Facebook disclosures tend to come as a final step. Facebook disclosures happen shortly after disclosures to “everyone,” indicating that many people come out on Facebook only after informing everyone else in their life. Disclosures to romantic interests tend to happen later, even after Facebook disclosures; this is because romantic interests often did not know the person pre-transition, may not be in their



**Figure 4.1. Disclosure audience order on average. A higher weight indicates disclosure later in the transition process.**

<b>Audience</b>	<b>Weight</b>	<b>Standard deviation</b>	<b>N</b>
Health professional	0.417	0.225	11
Friend	0.459	0.257	57
School	0.468	0.238	18
Sibling	0.488	0.278	29
Stranger/acquaintance	0.559	0.300	65
Mom	0.599	0.273	35
Dad	0.599	0.298	28
Work	0.616	0.273	77
Past acquaintance	0.628	0.372	10
Unknown	0.629	0.290	15
Extended family	0.687	0.311	56
Everyone	0.753	0.313	13
Facebook	0.773	0.221	26
Romantic interest	0.792	0.182	8

Categories with too few instances to calculate meaningful statistics:  
partner, ex-partner, child, church, Instagram, Tumblr, Twitter

**Table 4.5: Disclosure audience order on average. A higher mean indicates disclosure later in the transition process.**

Facebook network, and because disclosure to a romantic interest may be necessary even post-transition. Disclosures to health professionals (e.g., doctors, counselors) are, on average, early disclosures; many of these are mental health professionals, to whom a person discloses first and who often helps people in formulating disclosure plans for friends, family, and other disclosure contexts. Disclosures to strangers and acquaintances happen throughout transition and beyond, indicated by these disclosures' high standard deviation (see Table 4.5), likely because these are unplanned disclosures that happen as a person runs into certain people throughout the course of their transitions and lives. Some important disclosures – disclosure to self and disclosure to one's spouse or romantic partner – do not appear in Table 4.5 or Figure 4.1, because for most people these disclosures happened before they started their transition blog, and are thus not represented in the dataset. These results are in line with Maguen et al.'s (2007) findings that people tend to disclose trans identity to spouses and friends towards the beginning of the disclosure process, followed by siblings and mothers.

Trans identity disclosures can come in any order, and depend on people’s lives and circumstances. Figure 4.2 shows Joselyn (from the Tumblr blog Becoming Joselyn<sup>12</sup>)’s “Important Milestones,” as posted on her transition blog and updated regularly as she progresses in her transition. Joselyn follows the general trend of coming out to friends early in the process,



**Figure 4.2. Joselyn’s Important Milestones. Used with permission from Joselyn’s Tumblr blog, Becoming Joselyn.**

---

<sup>12</sup> Joselyn asked that I refer to her by name, and give credit to her and her blog Becoming Joselyn: <http://becomingjoselyn.tumblr.com/>. I acknowledge Joselyn’s generosity in allowing me to include her transition timeline in this dissertation.

then family, and then finally Facebook. In her case, the Facebook disclosure took two steps – a disclosure announcement, followed by a name change later the same month – yet others disclose on Facebook in different ways, such as by creating a new account entirely and “friending” people from the new account (see (Haimson, Brubaker, et al., 2015; Haimson et al., 2016)). Yet in small ways Joselyn’s journey is unique. She came out to her girlfriend and close friends before disclosing to a health professional of any kind. She came out to co-workers sooner than most people did. Joselyn’s list of important milestones also allows insight into how trans identity disclosures are interspersed within other pivotal transition moments, such as beginning hormones (HRT), planning for surgery (SRS), anniversaries of starting hormones, and steps towards a legal name change. Joselyn’s timeline shows how transition is a process, made up of social, medical, and legal factors, rather than a moment that would indicate any clear sense of before and after.

**Trans identity disclosures are followed by increased emotional wellbeing.**

Next, I present results showing how people’s emotional wellbeing changed over time after trans identity disclosures. I built six robust linear regression models to understand how trans identity disclosures were associated with emotional wellbeing (see Tables 4.6 and 4.7). Because the data did not meet the assumptions required for linear regression, I used robust linear regression instead (UCLA Institute for Digital Research and Education, n.d.). The first three models in Table 4.7 use average *negative* emotion in the time period following a post as the dependent variable, while the second three models use average *positive* emotion in the time period

		Time period after post averaged for outcome variable		
		One month	Three months	Six months
Sentiment measured in outcome variable	Negative emotion	Model 1	Model 2	Model 3
	Positive emotion	Model 4	Model 5	Model 6

**Table 4.6. Description of models included in Table 4.7.**

following a post as the dependent variable. The time periods vary in the models: Models 1 and 4's dependent variables are an average of the poster's sentiment in the *month* after the post, Models 2 and 5's dependent variables are an average of the poster's sentiment in the *three months* after the post, and Models 3 and 6's dependent variables are an average of the poster's sentiment in the *six months* after the post. See Table 4.6 for clarity. The unit of analysis is a post.

The independent variable most important in these models is a binary measure of whether or not a post described a trans identity disclosure. The Methods chapter gives detail on how posts were analyzed and classified as describing trans identity disclosures or not. Support from one's disclosure audience is also an important independent variable in the models. The support variable is a binary indicator of whether or not the post described that the disclosure audience was supportive. The models also include binary indicators of whether the disclosure was involuntary, the number of likes, comments, and reblogs the post received on Tumblr (reported per 100 for likes, and per 10 for replies and reblogs, so that the coefficient sizes are meaningful), and the post's word count (reported per 100 words). I included gender and age control variables, and controlled for time using binary measures of whether a post occurred in each year, with the reference variable as the pre-2013 category. The models also controlled for the poster's average sentiment in the time period *before* the post (one month for Models 1 and 4, three months for Models 2 and 5, six months for Models 3 and 6). Descriptive statistics for all variables in the models are included in Appendix C.

To clean the data, after calculating the average emotional affect measures used as dependent variables, I removed all non-disclosure posts that occurred within one month of each disclosure post. This way, I could more effectively isolate the relationship between disclosure and

Variable	Avg. negative emotion in month after post		Avg. negative emotion in 3 months after post		Avg. negative emotion in 6 months after post		Avg. positive emotion in month after post		Avg. positive emotion in 3 months after post		Avg. positive emotion in 6 months after post	
	(Model 1)	(Model 2)	(Model 2)	(Model 3)	(Model 3)	(Model 4)	(Model 5)	(Model 5)	(Model 6)	(Model 6)	(Model 6)	
Variable	Coefficient (Standard error)											
Disclosure <sup>1</sup>	0.12 (0.08)	0.01 (0.06)	-0.03 (0.05)	0.03 (0.11)	<b>0.25** (0.08)</b>	<b>0.24*** (0.07)</b>						
Supportive response from disclosure audience <sup>1</sup>	<b>-0.22* (0.11)</b>	-0.11 (0.08)	-0.06 (0.07)	-0.12 (0.15)	-0.11 (0.10)	-0.04 (0.09)						
Involuntary disclosure <sup>1</sup>	-0.16 (0.16)	0.02 (0.11)	-0.05 (0.10)	-0.25 (0.22)	-0.37* (0.15)	-0.27* (0.14)						
MTF <sup>1</sup>	0.52*** (0.01)	0.39*** (0.01)	0.37*** (0.01)	0.14*** (0.02)	0.08*** (0.01)	-0.02 (0.01)						
Non-binary <sup>1</sup>	0.11** (0.04)	0.04 (0.03)	0.05* (0.02)	-0.29*** (0.05)	-0.14*** (0.04)	-0.20*** (0.03)						
FTM (ref.)	-	-	-	-	-	-						
Age	-0.04*** (0.00)	-0.03*** (0.00)	-0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)						
No. of likes <sup>2</sup>	-1.29*** (0.05)	-0.78*** (0.04)	-0.60*** (0.03)	1.54*** (0.07)	1.27*** (0.05)	1.39*** (0.04)						
No. of replies <sup>3</sup>	0.24*** (0.06)	0.28*** (0.04)	0.34*** (0.04)	-0.01 (0.08)	-0.02 (0.06)	-0.14*** (0.05)						
No. of reblogs <sup>3</sup>	0.11*** (0.01)	0.05*** (0.01)	0.03*** (0.01)	-0.03* (0.01)	-0.01 (0.01)	-0.03*** (0.01)						
Word count <sup>2</sup>	-0.02*** (0.00)	-0.02*** (0.00)	-0.01*** (0.00)	-0.03*** (0.01)	-0.02*** (0.00)	-0.02*** (0.00)						
2016 <sup>1</sup>	0.14*** (0.02)	0.11*** (0.02)	0.04* (0.01)	-0.04* (0.03)	-0.13*** (0.02)	-0.21*** (0.02)						
2015 <sup>1</sup>	0.08*** (0.02)	0.03 <sup>†</sup> (0.02)	-0.06** (0.01)	-0.05 <sup>†</sup> (0.03)	-0.09*** (0.02)	-0.14*** (0.02)						
2014 <sup>1</sup>	0.04 <sup>†</sup> (0.02)	-0.04* (0.02)	-0.12*** (0.02)	-0.20*** (0.03)	-0.11*** (0.02)	-0.12*** (0.02)						
2013 <sup>1</sup>	0.05 <sup>†</sup> (0.03)	-0.01 (0.02)	-0.06*** (0.02)	-0.39*** (0.04)	-0.26*** (0.03)	-0.32*** (0.02)						
pre-2013 (ref.)	-	-	-	-	-	-						
Avg. negative emotion in time period before post	0.45*** (0.00)	0.65*** (0.00)	0.71*** (0.00)	-	-	-						
Avg. positive emotion in time period before post	-	-	-	0.41*** (0.00)	0.58*** (0.00)	0.66*** (0.00)						
Intercept	1.77*** (0.03)	1.21*** (0.02)	1.05*** (0.02)	1.84*** (0.04)	1.27*** (0.03)	1.06*** (0.03)						
R <sup>2</sup>	0.34	0.54	0.62	0.27	0.45	0.51						

<sup>†</sup>p < .10; \* p < .05; \*\* p < .01; \*\*\* p < .001; <sup>1</sup>binary indicator; <sup>2</sup>per 100; <sup>3</sup>per 10

**Table 4.7. Robust linear regression models showing average negative and positive emotional affect in time period following posts.**

emotional affect. I also removed all posts where the blogger posted less than three substantial text posts (as determined in the Methods chapter) in the month following the post, so that the average affect measures in the time period following the post were meaningful. The regression models included 28,968 posts after data cleaning.

Model 1 shows that emotional wellbeing increased after trans identity disclosures with supportive responses. In Model 4, disclosures have no statistically significant effect on emotional wellbeing in the month after the post. In Models 1 and 4, there is no difference between negative or positive sentiment on average in the month following a trans identity disclosure, and a month following a post that did not describe a trans identity disclosure. However, there *is* a significant effect for the support variable in Model 1, indicating that support moderates the relationship between disclosure and emotional wellbeing<sup>13</sup>. In Model 1, those who disclosed their trans identity and received a supportive response from their disclosure audience had significantly lower negative emotion in the month following that post. This is in line with previous literature, which has shown that support moderates the relationship between disclosure and wellbeing (Nuttbrock et al., 2012). However, this effect has not been previously uncovered in a social media context, as I show here.

In the longer term, Models 5 and 6 indicate that in the three months and six months following a trans identity disclosure, on average people see significant increases in positive emotion. This is an important result that indicates that trans identity disclosures are associated with improved emotional wellbeing. It is notable that support does *not* moderate the relationship between disclosure and emotional wellbeing in these models. That is, people see emotional wellbeing increases in the three and six months post-disclosure *whether or not* their disclosure audience responds supportively. Taken in tandem with Model 1's results, we see that in the short term, only those with supportive disclosure responses see improved emotional wellbeing; but in the

---

<sup>13</sup> Typically, a moderating variable in a statistical model is in the form of an interaction term, such as disclosure \* support. However, in this dataset, I only coded the disclosure posts for response supportiveness. Thus, those posts without disclosures would have 0 for each of the response supportiveness dummy variables. So, multiplying disclosure \* support would be equivalent to support, as included in the regression models.



longer term, disclosure itself is associated with emotional wellbeing improvement, whether or not a person's disclosure audience is supportive.

Control variables also show significant effects in all models. Trans women express more negative and positive emotion than trans men, and non-binary people express more negative and less positive emotion than trans men. Older people in the dataset express less negative emotion and more positive emotion. Likes are associated with decreased negative affect and increased positive affect, while surprisingly, replies and reblogs are both associated with increased negative affect and decreased positive affect. People who post content with higher word count have less negative emotion, yet also less positive emotion, in the month following.

Average affect in the time period before the post is unsurprisingly an important predictor of affect after a post. Including these control variables improved the models significantly, and these variables were significantly associated with the outcome variables. Yet even when controlling for posters' prior affect, the significant relationships between disclosure and emotional wellbeing in Models 5 and 6, and the significant relationship between support and emotional wellbeing in Model 1, remain. This analysis provides empirical evidence that disclosing one's trans identity is associated with improved emotional wellbeing in the time period following that disclosure.

However, the models in this chapter are limited because they lump all types of trans identity disclosures together. This limits the insights we can gain, because different types of disclosures impact people's emotional wellbeing differently. We would expect that coming out to strangers or acquaintances, for instance, would not impact one's emotional wellbeing as much as coming out to one's family members. Additionally, a major final disclosure like Facebook, which as I described above often occurs after all other disclosures, is likely to impact one's emotional wellbeing in important ways. Thus, in the chapters that follow, I focus on particular types of

disclosures, to understand how disclosing to different audiences is associated with emotional wellbeing. Chapter 5 focuses on disclosures to family members, and Chapter 6 focuses on Facebook disclosures.

## **Discussion**

In this chapter, I characterized Tumblr transition blogs, compared people's content and networks on Tumblr as compared to Facebook, and described how gender transition is a process that includes a series of trans identity disclosures. I quantified the order that these transition disclosures occur on average, finding that people often disclose to friends, then family, and finally on Facebook as a final mass disclosure. I examined relationships between trans identity disclosures and emotional wellbeing, and found that overall, people's emotional wellbeing improved in the long term following disclosures.

One of the more surprising results in this chapter is Tumblr's duality as a self-focused space where people spent time alone, and as a supportive community. This is in line with Miller and Shepherd's (2004) finding that blogs are novel because bloggers can simultaneously "engage in self-expression in order to build community and... build community in order to cultivate the self." While Tumblr blogs' self-focused and community-focused characteristics may seem contradictory given that aloneness and self-reflection are not typically thought of as occurring in social environments, participants did not describe them as such. People described appreciating the feeling of being alone, and being free from social obligations, yet at the same time being surrounded by a community of similar others who would provide support if needed. In van Genep's liminality framework, he described how transitional periods sometimes involve autonomy. Tumblr, for many trans people, is a space for autonomy, where people separate

themselves in some ways from their existing networks and become part of a new community of other people who are also in transitional autonomous stages. Tumblr’s particular combination of features and network enables the site to serve as a digital space for transitional networked autonomy. However, rather than truly being separate from their pre-transition networks, people instead can exist simultaneously in different online spaces; social media, like virtual worlds, allow multiple virtual embodiments, and thus create possibilities for people to exist in multiple spaces and multiple social environments at once (Boellstorff, 2011). One’s Facebook profile continues to represent a version of self to one’s Facebook network, even while one spends time on Tumblr.

To guide the next few chapters’ analyses, I provide a mapping here of how different types of trans identity disclosures map onto van Gennep’s (1909) stages of liminality (see Figure 4.3). For Tumblr transition bloggers, the separation stage is associated primarily with disclosures to family

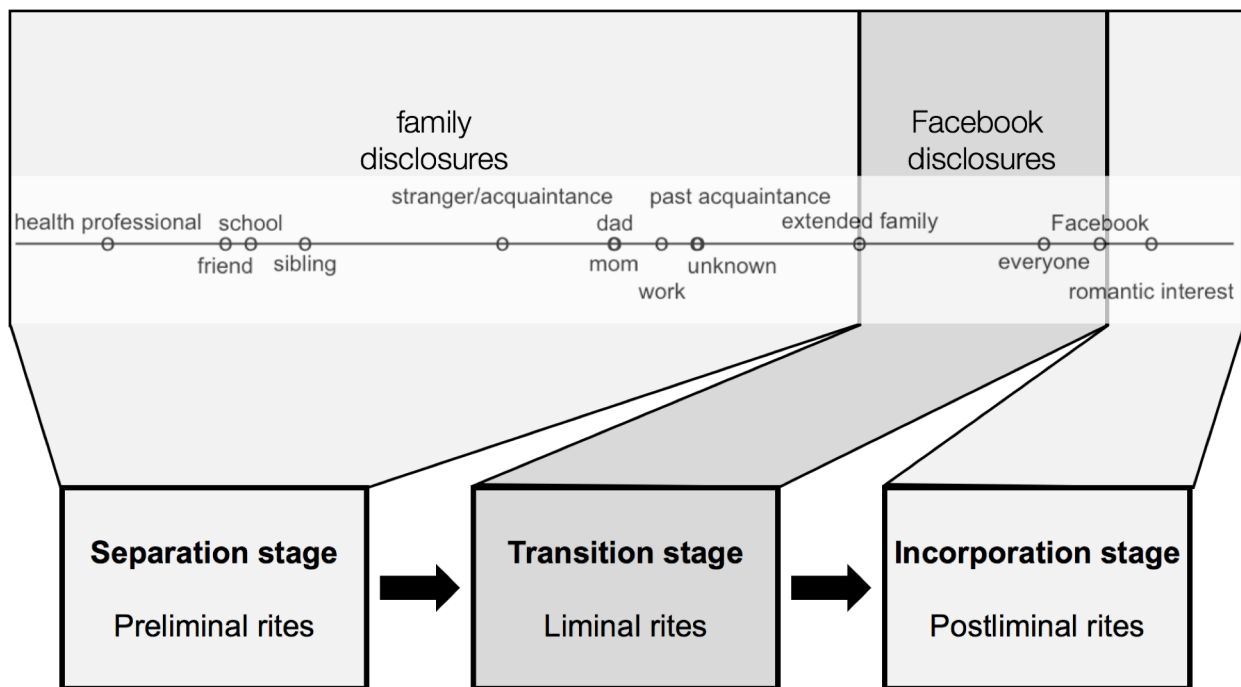


Figure 4.3. Mapping trans identity disclosures to van Gennep’s (1909) stages of liminality.

members. The transition stage corresponds to disclosures on Facebook, which happen at the very end of this stage. Finally, the incorporation stage relates to what happens after most disclosures are finished, as people reconcile their trans identities with the rest of their lives. In Chapters 5, 6, and 7, I detail how the three stages of van Gennep's (1909) liminality framework – the separation stage, the transition stage, and the incorporation stage – relate to transition disclosure events that I discussed in this chapter. By doing so, I illuminate how liminality occurs on social media during a life transition.

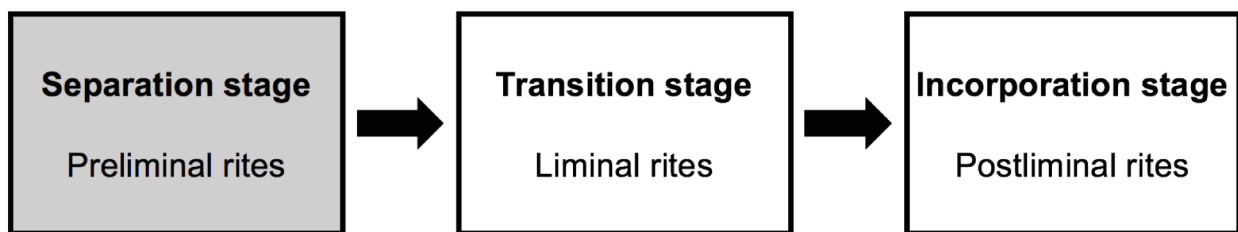
## CHAPTER 5 THE SEPARATION STAGE: DISCLOSURE TO FAMILY

*“Every transition begins with an ending...To become something else, you have to stop being what you are now; to start doing things a new way, you have to end the way you are doing them now; and to develop a new attitude or outlook, you have to let go of the old one you have now.*

*Even though it sounds backwards, endings always come first. The first task is to let go.” –*

Bridges, 2004

When a person begins a major life transition, they often must first separate from old connections to mentally and socially make room for who they will be; rites of passage are a way to achieve this (Bridges, 2004; van Gennep, 1909). Van Gennep’s separation stage involves separating from one’s previous identity and from the people that surrounded one in that identity (see Figure 5.1). As one example, van Gennep discussed the separation stage of getting married. In this stage, people moved away from the families they had grown up with, in preparation for transitioning to their new family as a married couple. Similarly, when people transition from one gender to another, they also often must begin by separating in some ways from family members as part of separating from their previous identity. While people may not necessarily want to separate from



**Figure 5.1. Van Gennep’s liminality framework. This chapter focuses on the separation stage.**

family members, it may be necessary when those family members hold on to a relationship with one's previous identity, rather than moving with them into the new identity.

For trans people, disclosure to family members is only one of many aspects that make up the separation stage. People come out to partners and close friends. They seek information and resources, and engage in identity exploration, often in online spaces (Haimson, Bowser, et al., 2015). They try on clothing related to their new gender and venture into, or consider venturing into, public spaces (Gagné, Tewksbury, & McGaughey, 1997). On Tumblr specifically, the separation stage often involves “lurking” – following others’ transition blogs to understand what the transition process is like, while posting little content themselves.

In this chapter, I focus on trans identity disclosures to family members, which is the primary disclosure audience that related to the separation stage, as detailed in Chapter 4. I found that family disclosures are significantly associated with emotional wellbeing over time, and I begin this chapter by discussing this relationship. Next, I examine the role that support, both from family members and others, plays in emotional wellbeing after disclosures. I conclude this chapter with a discussion of how people experience and communicate the separation stage of gender transition on social media.

People often disclose to family members as one of their earliest transition activities, as I described in Chapter 4. These disclosures are, on average, followed by *increased negative affect in the short term*. In the *long term*, however, family disclosures are followed by *increased positive emotion*. While there is no statistical relationship between *supportive responses from family members* and emotional wellbeing post-disclosure, I find that those with more *supportive reactions from non-family disclosure audiences* have increased emotional wellbeing on average post-disclosure.

## **People often disclose to family members as one of their earliest transition activities.**

When trans people begin their transitions, family members are some of the first people that they tell about their trans identity. While partners and close friends are often the *very* first people disclosed to (as detailed in Chapter 4), family often comes next. When I asked people to talk about their transition process, all mentioned disclosing to particular family members, such as parents, siblings, and children. While disclosing to each of these audiences has different meaning and elicits different responses for each person, I grouped these together into a broader “family” category to encompass the range of family disclosures that occur throughout the separation phase.

Disclosures to family members were primarily done as part of the separation stage, and *before* coming out on Facebook, a social media site on which one’s identity is generally linked to their physical world identity and network (K. Hampton et al., 2011). Coming out as trans on Facebook is a pivotal transition experience that marks the transition stage, as I describe in Chapter 6. Participants described feeling that they needed to disclose to family prior to their broad Facebook network out of respect and obligation to family members, as well as to prepare family members for the coming mass disclosure. P18 said:

*It was partly out of **respect**<sup>14</sup> for them. The issue that I saw on social media is that it’s very impersonal. And I figured, if there was one thing that I could do for our family, it was, ‘Oh, hey, this is what I feel.’ And with my family, it’s always been the fact that, you know, if you feel something, you’re supposed to sort of speak up. And it was something*

---

<sup>14</sup> All bolded text indicates emphasis added by me, not the interviewee.

*that I didn't do for the longest time, and it was also a little bit of guilt because of that. So, it was just **something that I felt like I should do**. I didn't put much thought into why I should do it. It was just like I feel like I should do this before I come out on Facebook.*

For P18, feelings of guilt and obligation, as well as family norms (“if you feel something, you’re supposed to sort of speak up”), led her to disclose her trans identity to family members before coming out on Facebook. People’s Facebook networks often include people from many different facets of their lives, and almost always include family members. By telling family members about their transition before Facebook disclosure, people’s family will not find out about their trans identity initially via Facebook (if the person makes a transition announcement), and can be added to the person’s new Facebook account (if the person chooses to create a new Facebook account for their new identity).

Coming out to family may also mark the beginning of, or occur during, an emotionally demanding and difficult time in people’s lives and transitions. Family disclosures open one up to responses from family members, who may or may not be supportive, and often shift the nature of people’s relationships with their family members. For some, transitioning means cutting ties with family members (Cannon et al., 2017). This time period also often corresponds with the beginning of physical changes and presenting oneself in the world in a new way, which can be difficult.

Because disclosures to family members pervade the separation stage of gender transition, it is important to understand how these moments of disclosure relate to one’s emotional wellbeing over time. Thus, I next present statistical results to describe how people’s emotional wellbeing changes after these types of trans identity disclosures.



**Family disclosures are followed by decreased emotional wellbeing in the short term, but increased emotional wellbeing in the long term.**

To understand how disclosures to family members are associated with emotional wellbeing, I built six robust linear regression models (see Tables 5.1 and 5.2). I used robust linear regression (UCLA Institute for Digital Research and Education, n.d.) because the data did not meet the assumptions necessary to use linear regression. The first three models use posters’ average *negative* emotion in a time period after a post as the outcome variable (one month in Model 1, three months in Model 2, six months in Model 3). The next three models use posters’ average *positive* emotion in a time period after a post as the outcome variable (one month in Model 4, three months in Model 5, six months in Model 6) (see Table 5.1 for clarity). The unit of analysis is a post, and the outcome variable is calculated as an average of that post’s author’s affect in the time period following the post.

The independent variable of interest is a binary indicator of whether a post described a disclosure to a family member. These disclosures involved either specific family members (e.g., parent, sibling, child, grandparent), or a mention of family more broadly (e.g., “I came out to my family today!”), and signify a family disclosure that occurred within the past two weeks (see Chapter 3 for details on how these disclosures were identified and coded). The models also include a binary indicator of whether a post described a disclosure to a non-family audience. Those posts coded as 0 for both of these variables were posts that did not mention recent trans identity disclosures.

		Time period after post averaged for outcome variable		
		One month	Three months	Six months
Sentiment measured in outcome variable	<b>Negative emotion</b>	Model 1	Model 2	Model 3
	<b>Positive emotion</b>	Model 4	Model 5	Model 6

**Table 5.1. Description of models included in Table 5.2.**

I included measures of support in the models using a binary variable indicating whether the post described that their family responded in a supportive manner (coded only for those posts that described disclosures to non-family audiences), a binary measure of whether the post described non-family disclosure audiences responding in a supportive manner (coded only for those posts that described disclosures to non-family audiences), and another binary measure of whether the disclosure was involuntary. Models also included number of interactions on Tumblr that each post received (likes, comments, and reblogs) as well as the post's word count. Effect sizes for these four variables are reported per 100 for words and likes, and per 10 words for replies and reblogs, because the change in affect related to a single increase in word count or interaction are minimal. Control variables included gender and age, and binary measures of each year to control for trend over time, with the pre-2013 category as the reference variable. Finally, I controlled for average negative or positive emotion in the time period *before* the post (one month for models 1 and 4, three months for models 2 and 5, six months for models 3 and 6).

Before building these regression models, I cleaned the data in several ways (in addition to the initial data cleaning described in Chapter 3). After calculating the average affect for each post's author in the time periods before and after each post, I removed all non-family-disclosure posts that occurred within one month of a post describing a trans identity disclosure to family (the variable of interest). This way, I could measure disclosure's relationship with emotional affect in the time period around that disclosure without other non-disclosure data points masking that effect. Next, I removed any posts where the blogger posted less than three substantial text posts (see Chapter 3 for details on how this was determined) in the month after the post, so that there were enough posts in the following month to calculate a meaningful average negative or positive affect. After data cleaning, the final regression models included 33,173 posts.

Model 1 shows a significant relationship between disclosure to family and affect in the month following, indicating that, on average, family disclosure posts are followed by *higher negative emotion in the month after the post* than posts that did not describe a family disclosure.

Variable	Avg. negative emotion in month after post		Avg. negative emotion in 3 months after post		Avg. negative emotion in 6 months after post		Avg. positive emotion in month after post		Avg. positive emotion in 3 months after post		Avg. positive emotion in 6 months after post	
	(Model 1)	(Model 2)	(Model 2)	(Model 3)	(Model 3)	(Model 4)	(Model 5)	(Model 5)	(Model 6)	(Model 6)	(Model 6)	
Disclosure to family member <sup>1</sup>	<b>0.36**</b> (0.12)	0.11 (0.09)	0.03 (0.08)	-0.22 (0.17)	0.13 (0.12)	<b>0.21*</b> (0.10)						
Supportive response from family <sup>1</sup>	-0.16 (0.18)	-0.09 (0.13)	-0.05 (0.12)	-0.13 (0.25)	-0.15 (0.18)	-0.14 (0.15)						
Disclosure to other audience <sup>1</sup>	0.08 (0.10)	0.02 (0.07)	0.02 (0.07)	0.16 (0.14)	<b>0.27**</b> (0.10)	<b>0.18*</b> (0.09)						
Supportive response from others <sup>1</sup>	<b>-0.31*</b> (0.15)	<b>-0.24*</b> (0.11)	-0.14 (0.10)	-0.29 (0.21)	-0.18 (0.14)	-0.01 (0.13)						
Involuntary disclosure <sup>1</sup>	-0.12 (0.17)	0.02 (0.13)	-0.10 (0.11)	-0.27 (0.24)	-0.33 (0.17)	-0.20 (0.15)						
MTF <sup>1</sup>	0.47*** (0.01)	0.35*** (0.01)	0.33*** (0.01)	0.18*** (0.02)	0.12*** (0.01)	0.02 <sup>†</sup> (0.01)						
Non-binary <sup>1</sup>	0.13** (0.04)	0.04 <sup>†</sup> (0.03)	0.04 <sup>†</sup> (0.02)	-0.28*** (0.05)	-0.13*** (0.03)	-0.20*** (0.03)						
FTM (ref.)	-	-	-	-	-	-						
Age	-0.03*** (0.00)	-0.03*** (0.00)	-0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)						
No. of likes <sup>2</sup>	-1.26*** (0.05)	-0.74*** (0.03)	-0.57*** (0.03)	1.46*** (0.07)	1.22*** (0.05)	1.33*** (0.04)						
No. of replies <sup>3</sup>	0.28*** (0.05)	0.31*** (0.04)	0.36*** (0.04)	-0.05 (0.08)	-0.09 <sup>†</sup> (0.05)	-0.24*** (0.05)						
No. of reblogs <sup>3</sup>	0.12*** (0.01)	0.06*** (0.01)	0.04*** (0.01)	-0.04*** (0.01)	-0.03*** (0.01)	-0.05*** (0.01)						
Word count <sup>2</sup>	-0.03*** (0.00)	-0.02*** (0.00)	-0.02*** (0.00)	-0.02*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)						
2016 <sup>1</sup>	0.14*** (0.02)	0.10*** (0.02)	0.03* (0.01)	-0.07* (0.03)	-0.13*** (0.02)	-0.22*** (0.02)						
2015 <sup>1</sup>	0.12*** (0.02)	0.05** (0.02)	-0.04** (0.01)	-0.10** (0.03)	-0.13*** (0.02)	-0.18*** (0.02)						
2014 <sup>1</sup>	0.04 <sup>†</sup> (0.02)	-0.03 (0.02)	-0.13*** (0.01)	-0.20*** (0.03)	-0.13*** (0.02)	-0.12*** (0.02)						
2013 <sup>1</sup>	0.04 (0.02)	-0.03 (0.02)	-0.08*** (0.02)	-0.39*** (0.04)	-0.28*** (0.02)	-0.34*** (0.02)						
pre-2013 (ref.)	-	-	-	-	-	-						
Avg. negative emotion in time period before post	0.47*** (0.00)	0.66*** (0.00)	0.72*** (0.00)	-	-	-						
Avg. positive emotion in time period before post	-	-	-	0.41*** (0.00)	0.59*** (0.00)	0.66*** (0.00)						
Intercept	1.72*** (0.03)	1.17*** (0.02)	1.01*** (0.02)	1.89*** (0.04)	1.28*** (0.03)	1.06*** (0.03)						
R <sup>2</sup>	0.34	0.54	0.61	0.27	0.45	0.51						

<sup>†</sup>p < .10; \* p < .05; \*\* p < .01; \*\*\* p < .001; <sup>1</sup>binary indicator; <sup>2</sup>per 100; <sup>3</sup>per 10

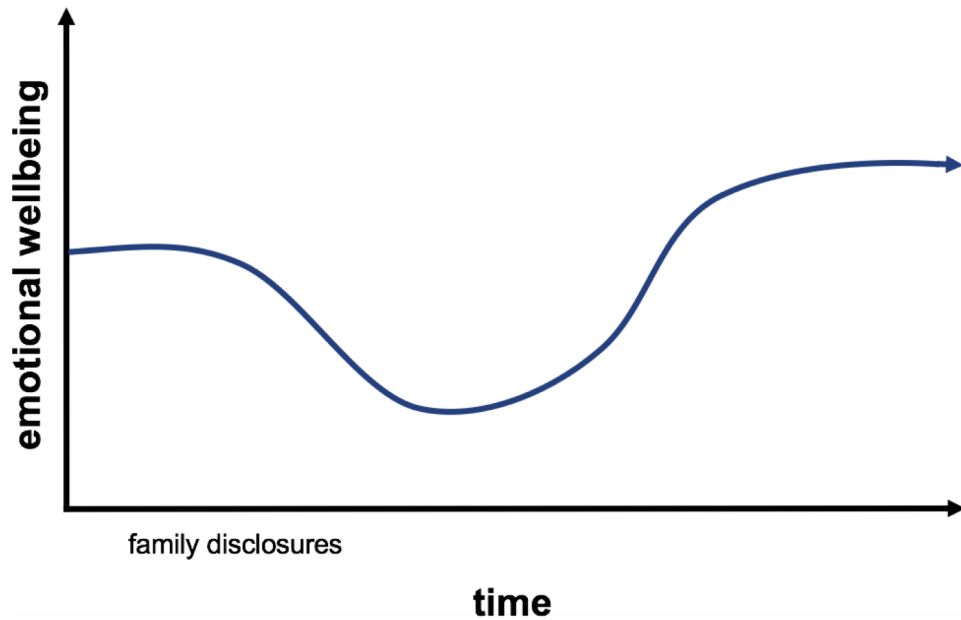
**Table 5.2. Robust linear regression models showing average negative and positive emotional affect in time period following posts.**

However, this relationship does not hold when instead examining the *three months* (Model 2) or *six months* (Model 3) following a post, indicating that the negative affect increase after family disclosures is a short term effect. Regarding positive emotion, there is no statistical relationship between family disclosures and *positive emotion* in the month or three months following (Models 4 and 5). However, in the *six month* time period after a family disclosure, *positive affect increases significantly*. Even after controlling for potential confounding variables in each of the models, I still find that disclosure to family members is a significant predictor of negative affect in the month after the post, and positive affect in the six months after a post.

Taken together, these results indicate that after disclosing their trans identity to family members, people's emotional wellbeing decreases in the short term, then increases in the long term<sup>15</sup>. Though this relationship is not possible to graph using data given the differences in people's disclosure trajectories (i.e., people disclose to family and non-family audience in different orders and with different time lags between disclosures), Figure 5.2 displays these results conceptually. Similar results have been found in the context of schizophrenia disclosures on Twitter (Ernala et al., 2017), and emotional writing (Baikie, 2005): in many cases, sensitive disclosures are followed by increased negative affect in the short term, and the positive benefits of disclosure take time to occur. My interview data indicate that the increase in negative emotion after family disclosures is sometimes in response to those family disclosures. However, the negative emotion increase likely also relates to the broader difficulties people face during the

---

<sup>15</sup> While what "short term" and "long term" mean varies substantially from person to person, to match my statistical models, I designate "short term" as one month and "long term" as three months or longer.



**Figure 5.2. Graph showing how emotional wellbeing changes over time on average after trans identity disclosures.**

separation stage of gender transition, as well as fear and anxiety about upcoming disclosures to other audiences, which often happen after family disclosures.

Affect after non-family disclosures show a different story than family disclosures; non-family disclosures are associated with *increased positive emotion* in the *three months* and *six months* following, similar to Chapter 4’s results regarding trans identity disclosures overall. Disclosures to non-family audiences do not impact negative affect in the short term or the long term. Non-family disclosures include a broad range of audiences (e.g., friends, co-workers, health professionals, online social networks), so it does not make sense to generalize these disclosures’ meanings in people’s lives and why they impact positive emotional wellbeing. It is likely that the increase in positive emotion following these disclosures indicates an overall increase in positive affect throughout the transition process, because non-family disclosures generally happen at a later stage in the transition process.

I next briefly discuss other effects present in the models. All models include gender, age, and time-based control variables, as well as interactions and word count. The poster's gender and age, and the post's year, word count, and interactions are all significantly associated with affect in the time after a post. Specifically, trans women's posts have more negative and positive affect than trans men's, non-binary people's posts have more negative affect and less positive affect than trans men's, and older people's posts have less negative affect and more positive affect. The time trend indicates that negative and positive affect were not constant over time, justifying their inclusion as control variables in the models. Likes are associated with decreased negative affect and increased positive affect, while replies are associated with increased negative affect, and reblogs are associated with increased negative affect and decreased positive affect in the time period following the post. Posts with more words are followed by less negative emotion, yet also less positive emotion.

Unsurprisingly, the biggest factor that predicts how a person feels one month (or three or six month period) is how they felt the month (or three or six months) prior. Adding prior affect as a control variable increased the  $R^2$  value substantially in all models, for example from 0.18 to 0.34 in Model 1 and from 0.14 to 0.51 in Model 6. The high  $R^2$  values in all models signal that I have accounted for much of the variance in affect after posts. Yet even when controlling for prior affect, posts that include disclosures to family members still contain significantly higher negative affect in the following month (Model 1), and significantly higher positive affect in the following six months (Model 6), than posts that do not.

These results indicate that when people disclose their trans identity to family members, these disclosures are often followed by increased negative emotion. This finding seems to run counter to the sense of relief that many people reported feeling after disclosing their trans identity to

family. However, interviews and blog posts provide context for why family disclosures often lead to negative affect increases. P15 described his difficult experience coming out to his mom:

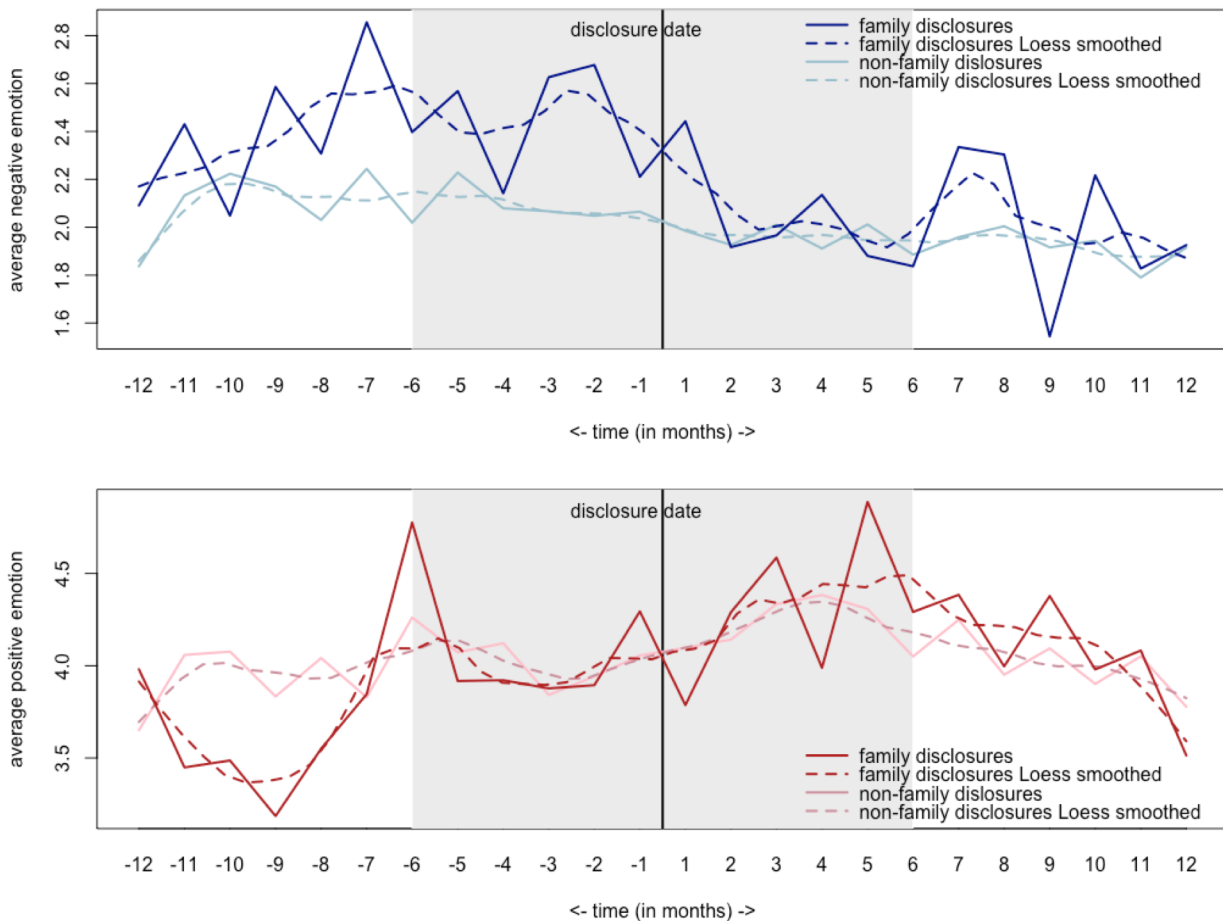
*My mom... said some things in which she basically said she was **disowning me**, and I was like 'Okay, fine.' It actually almost ended in me **attempting suicide**..., because for me that was a huge thing, my parents. And it took way more of a **toll on my mental health** than I thought it was going to take.*

Though P15 may have felt relief after disclosing to his mom that he was trans, her unsupportive reaction negatively impacted his mental health. However, as I describe in the next section, support does not moderate the relationship between family disclosures and emotional wellbeing – people’s emotional wellbeing decreased after family disclosures *whether or not* their families were supportive.

Other people had less extreme negative reactions from family than P15 did, such as P13, whose family did not take his transition seriously, and instead avoided dealing with it directly: “Family wise, ...people were just like I’m just going to **ignore that**.” But even though most participants were not disowned or outright rejected by their families, many described difficult situations in which family referred to them using their previous names and gendered pronouns. For example, B90 wrote on his Tumblr: “*Thanksgiving. I spent it with my white family. I never like going over there. **They never call me by my preferred name** so I wore a name tag on my forehead.*” Literally displaying one’s name on their forehead is a powerful statement, particularly in contrast to hiding one’s trans identity pre-disclosure. This exemplifies how though hiding one’s trans identity pre-disclosure may be difficult, disclosure often opened people up to new challenges. Participants expressed how being open about their trans identity with family, yet not having that identity acknowledged, supported, and respected, was especially difficult. In this

instance, B90’s family’s race and ethnicity also played a part in family reactions to his trans identity, highlighting the intersectional nature of gender and race.

The models in Table 5.2 show that increased negative affect is present only in the month after disclosure, and that in the long term, positive affect increases after family disclosures. As an example of a negative affect increase that was temporary, P15, who in the quote above described his family disowning him and a resulting suicide attempt, felt better over time as his family became more accepting: *“But I mean, fast forward to today, I actually have a really good relationship with both of my parents. Complete turnaround.”* Such “complete turnarounds” are



**Figure 5.3. Average negative (top) and positive (bottom) affect over time following trans identity disclosures. Vertical line at time = 0 represents the disclosure date.**



visible in Figure 5.3 in the large decrease in average negative affect in the second month after family disclosures, and the gradual decrease throughout the 12 months post-disclosures.

Figure 5.3 (top) shows average negative emotion in Tumblr posts before and after trans identity disclosures, showing how negative affect increases on average in the month after family disclosures, yet decreases on average over a longer time period. Each post is time-normalized so that the zero point indicates a day in which they posted about a trans identity disclosure to family. In this way, we can see the trend over time. Figure 5.3 visualizes similar results as Table 5.2, but gives more temporal context. The dark blue line represents the average negative affect in each month surrounding family disclosure posts, averaged over all family disclosure posts. The dark blue dashed blue line in Figure 5.3 represents a Loess-smoothed version of the solid dark blue line, fitted using R function `Loess.smooth` (degree = 1, span = 0.2). The grey rectangle represents the time periods addressed in the regression models in Table 5.2.

When viewed in temporal context, it becomes clear that the increased negative emotion after family disclosures is temporary. Negative affect (dark blue line) increases sharply in the month after a disclosure as compared to the month before, as I found in Model 1 (see Table 5.2). However, when looking at the smoothed trend over time (dark blue dashed line), we see that negative affect actually decreases over time in the long run. For comparison, the light blue lines show trend over time for non-family disclosures, and are time-normalized with the zero point indicating the day that they posted about a non-family disclosure. For those, there is a subtle decrease in negative affect after the disclosure, but this pattern is not statistically significant. Emotional affect around family disclosures appears more volatile than non-family disclosures, but this is in part because the average is calculated using fewer data points.

Figure 5.3 (bottom) visualizes average positive emotion in Tumblr posts before and after

disclosures. The dark red line represents average positive affect in each month surrounding family disclosures, and the dark red dashed line represents a Loess-smoothed version of the solid dark red line. The trend that positive affect increases over time in the six months post-disclosure is apparent in this figure, as also found in Model 6 (see Table 5.2). In the one month surrounding disclosures, Figure 5.3 (bottom), positive affect shows an opposite pattern as Figure 5.3 (top): positive affect decreases sharply in the month after family disclosures. However, this relationship is not statistically significant in Model 4. The visualizations differ from the models because the visualizations do not control for potential confounding variables, and because the models include non-disclosure posts for comparison. The pink lines show trend over time for non-family disclosures, and show positive affect increasing over time, a similar pattern to family disclosures.

While these results suggest a positive narrative in which people's emotional wellbeing improves over time and families become more accepting, it is important to note that some trans people never receive support from their families (Nyong'o, 2010), and still feel hurt from the rejection years later. B6 blogged about her unsupportive mother and the pain that her rejection caused:

*I rarely speak to my mum. ...She can't accept what I'm doing. But every 6 months or so I'll call her. Hoping she'll finally accept what I've become. The real me... Tonight though I think that she's finally shown me that she never will. All I heard was, 'You've lied to us. You could have told us when you were little (never in a million)... You should have to come to see me one last time. You can't come and see me like that.' I explained yet again, that it was this or suicide. That I had tried to be everything that everyone else wanted. Expected. And I couldn't go on any longer... I was ok and then before sleep tonight, bawling my eyes out. Rejected by someone who is meant to love you. Well I can't do it*

*anymore. You can only be hurt so many times and then you distance yourself because what else can you do? ...Some people may reject you. Some people you love dearly.*

Yet she ended the post on a positive note, stating that “*The fulfilment and happiness you get from being you, far outweighs the hurt, the rejection. Be yourself. Always. Everyone else is taken.*”

Though rejection from family may leave emotional wounds that do not fully heal, for many, the ability to live in their chosen identity can still bring happiness and fulfillment, as B6 stated.

Although the short-term increase in negative affect that I find after family disclosures may on the surface appear troubling, posting negative content on Tumblr is not necessarily worrying. As discussed in Chapter 4, Tumblr is an important online space where people feel comfortable posting negative content and receiving support. Though the increased negative affect in people’s Tumblr posts in the short term after family disclosures may indicate that people were actually feeling bad, it may also indicate that they used Tumblr as an outlet to vent about difficult experiences, and to receive support from the trans community on Tumblr.

### **Support moderates the relationship between disclosure and emotional wellbeing, but only for non-family disclosures.**

While I expected that emotional wellbeing after disclosing one’s trans identity to family members would vary depending on how supportive one’s family was in response to that disclosure, surprisingly, this is not the case in my statistical models (see Table 5.2). In these regression models, the coefficients for the supportive response from family variable<sup>16</sup> are not

---

<sup>16</sup> Typically, a moderating variable in a statistical model is in the form of an interaction term, such as disclosure \* support. However, in this dataset, I only coded the disclosure posts for response supportiveness. Thus, those posts without disclosures would have 0 for each of the response supportiveness dummy variables. So, multiplying disclosure \* support would be equivalent to support, as included in the regression models.

significant. Thus, there is no statistically significant moderating relationship between support from family members and positive or negative affect in the month, three months, or six months post-disclosure.

These results diverge from previous work, which has found that support from one's family moderates the relationship between disclosure and emotional wellbeing in physical world contexts (W. O. Bockting et al., 2013). However, this study is the first to measure support's moderating nature using social media data; previous studies have used self-reported data. One limitation of my approach is that I only measure support from family at the moment of disclosure as reported by bloggers. As described above with the example of P15, many people's families become more supportive over time. Thus, my support measure may not have a significant moderating effect because it may not accurately represent how supportive people's families really are.

Though support from family members was not a significant moderating variable, support from other disclosure audiences was significantly associated with decreased negative affect in Models 1 and 2 (see Table 5.2). This means that support from non-family people (friends, co-workers, etc.) impacted people's emotional wellbeing after trans identity disclosures. This finding supports previous work, which has found that during transition, people with more supportive networks tend to feel better (W. O. Bockting et al., 2013; Budge et al., 2013; Rotondi, Bauer, Scanlon, et al., 2012; Rotondi, Bauer, Travers, et al., 2012).

Aside from support or lack of support from the family members to whom the disclosure was made, I also considered that interactions on Tumblr may be a type of social support that moderates the relationship between disclosure and emotional wellbeing. Directed communication such as likes and comments are perceived by users as socially supportive (Carr, Wohn, & Hayes,

2016), are positively related to self-esteem (M. Burke, Kraut, & Marlow, 2011), and are significant predictors of social support when they come from strong ties (M. Burke & Kraut, 2013). Thus, interactions on each blog post, including likes, comments, and re-blogs, may indicate social support from one's Tumblr network. There was some evidence of Tumblr interactions being associated with increased emotional wellbeing, such as an experience that P4 described: "*I went home to my parents and they didn't realize how hard it would be to be misgendered the whole time... I ended up writing about it on Tumblr and the people that I felt like I had been supporting, came out to **support me**.*" My statistical models do show that the more likes people received on posts (disclosure or not), the higher their emotional wellbeing in the time period following. However, I did not find evidence of Tumblr interactions on *family disclosure posts in particular* impacting people's future emotional wellbeing. I expected that, if likes on a Tumblr post about family disclosure impacted future affect, then the interaction term between family disclosure and number of likes would be significantly associated with future emotional wellbeing. However, this interaction term was not significant when added to any of the models<sup>17</sup> (Model 3 had the lowest p-value for this term when it was added, with *coef* = -0.63, *s.e* = 0.64, *p* = 0.33). It may be that there is no effect; it may also be that likes on disclosure posts did impact people's emotional wellbeing, but just not enough to have a significant impact on their affect in a period of one or several months afterwards.

Surprisingly, replies and reblogs on a post were actually associated with increased negative emotion in the time period after that post, which is contrary to previous research that found that Tumblr replies facilitate social support (Lottridge et al., n.d.). When I asked interview

---

<sup>17</sup> The coefficient and standard error are multiplied by 100 to be consistent with the results in Table 5.2.

participants about the meaning they attributed to these interaction types, most people described replies and reblogs as supportive gestures. However, most trans women participants mentioned that their posts were sometimes replied to or reblogged by “porn blogs,” which may lead to their posts amassing many reblogs and being viewed by undesirable audiences. Some participants described this as highly distressing, given that their transition blogs were not meant to be pornographic. Reblogs’ association with increased negative affect may be an artifact of reblogs by porn blogs influencing negative affect. Replies and reblogs being associated with negative affect may also be because these gestures are used to convey support, and support is needed most by those who post more negative content; thus, those who post negative content may continue to post more negative content in the months following.

People’s Tumblr networks provide support in ways unique to the site and the transition blog community, yet this support’s impact on emotional wellbeing is difficult to measure. Private messages, to which I did not have access, are a primary place where people’s networks convey support. As P12 said, *“The likes are nice, but **I do appreciate the messages the most, especially those that thank me for sharing on my blog, and knowing that I’m making a difference in their life. I really appreciate that a lot.**”* Importantly, social support from one’s Tumblr network is unique from the primarily informational support that occurs from strangers on Reddit (Andalibi et al., 2016), and the emotional support from one’s “real life” network on Facebook (M. Burke & Develin, 2016). Tumblr support is often both a validation, and an acknowledgement that by sharing their experiences, they are helping other people who are following their transition. This can best be characterized as a combination of esteem support (“communicating respect and confidence in abilities”) and network support (“communicating belonging to a group of persons with similar interests and concerns”) (Cutrona & Suhr, 1992). Though I cannot measure these

types of social support's impact on emotional wellbeing statistically, in interviews participants mentioned that receiving support interactions from their Tumblr networks and providing support to others felt good.

Social media data such as Tumblr transition blog posts are a way to understand how emotional affect changes depending on the support that people described receiving in the posts (e.g., "I came out to my mom and she supports me!"), but not necessarily the support that is provided from one's network in response to the posts (e.g., support conveyed in private messages). Nonetheless, these results have important implications for the ways that people communicate and support each other around transition disclosures.

## **Discussion**

In this chapter, I presented results examining how people's emotional wellbeing changes after trans identity disclosures to family members, an important part of the separation stage of gender transition. After people disclose their trans identity to family members, their emotional affect tends to decrease in the short term; however, in a longer time period, people's emotional affect improves on average. While support from family members at the time of disclosure is not associated with increased emotional wellbeing, support from non-family members after disclosures positively impacts people's emotional wellbeing. In this section, I discuss these results' implications.

First, this research indicates that social media is an important data source for quickly and effectively understanding how people feel over time throughout gender transition, which may apply to life changes more broadly. I have used social media data to understand how people's emotional affect changes after trans identity disclosures, while other studies (W. O. Bockting et

al., 2013; Budge et al., 2013) have primarily measured trans people's emotional wellbeing throughout transition using traditional research methods such as surveys and interviews. Though previous work has applied similar methods to life transitions such as childbirth (De Choudhury, Counts, & Horvitz, 2013), childbirth involves transition stages that are easier to operationalize (e.g., prenatal, postnatal, particular trimesters) and a clear before and after. Gender transition, and many other life transitions, have less clearly-defined transition stages that vary tremendously from person to person. Though measuring emotional affect using computational linguistics methods has accuracy limitations (Bantum & Owen, 2009; Tausczik & Pennebaker, 2010), studies relying on self-reported data to understand emotional wellbeing during life transitions can also be faulty given people's difficulty recalling emotion in the past (Thomas & Diener, 1990) or even interpreting their current emotional state. Additionally, traditional research procedures (e.g., using interviews or surveys), particularly in longitudinal studies, are often costly and time-consuming. Studying human behavior at scale with social media data allows important insights into people's experiences relatively quickly and inexpensively.

Next, understanding statistical trends in emotional wellbeing after trans identity disclosures allows us to design technology to potentially provide support, or enable people's networks to provide support, to those who need it most using technological interventions on social media. Thus, this research allows me to provide design recommendations for social media features and technological interventions that could improve mental health for the trans population, and for those facing life transitions more broadly. I will detail these design implications in the Discussion chapter (Chapter 8). However, my results have also shown that people's networks, and trans communities on Tumblr, already do provide support after disclosures in ways that positively impact people's emotional wellbeing. Thus, feature changes and potential social media



interventions would need to fit within and expand upon existing support structures and practices. Helping people understand that the separation stage is often accompanied by decreased emotional wellbeing, particularly after family disclosures, may help them to prepare for this stage. My results, potentially coupled with social media feature changes or interventions, can help people more effectively support others or be supported on social media during life changes.

Finally, this work allows insight into how van Gennepe's (1909) framework applies in a social media context, and how emotional wellbeing changes throughout the stages of transition. The separation stage, as communicated on social media, for many involves short term increased negative affect, followed by increased positive affect. The length of each transition stage is different for each person (Kralik et al., 2006), so I cannot say that the one month period that I classify as short term, or the six month period that I classify as longer term, actually apply this way in people's lives. Additionally, because stages often overlap (Kralik et al., 2006), I do not suggest that there is a clear demarcation between the separation stage and the transition stage. However, my empirical results showing a temporary emotional wellbeing decrease followed by an increase in emotional wellbeing, add important detail about emotional wellbeing changes to van Gennepe's (1909) liminality framework. Increases in emotional wellbeing may correspond to the transition stage, as I detail in the next chapter.

## CHAPTER 6

### THE TRANSITION STAGE: DISCLOSURE ON FACEBOOK

In this chapter, I turn to understanding the transition stage of gender transition (see Figure 6.1). The transition stage, also called the liminal stage, is when major changes to one's identity and social position take place (van Gennep, 1909). While the separation stage involves separating from one's previous network and identity, and in the incorporation stage one incorporates their new identity into their network and society, the transition stage is an in-between time segment in which people come to a new understanding of who they are.

Van Gennep (1909) characterized the transition stage as neutral. He described this stage using an analogy of crossing over from one territory to another, in an ancient world in which deserts and forests separated territories. Such places were considered neutral, in that they did not belong to either country, and thus demarcate a neutral zone in which the crosser was neither in one territory nor the other: "he wavers between two worlds" (van Gennep, 1909). Similarly, van Gennep (1909) argued, rites of passage that delineate one life stage from another involve a neutral stage, in which a person belongs to neither one's past role nor the next. As an example, during the transition stage, a bride-to-be would be considered neither single nor married. Victor Turner (1969), in his 1960's anthropological research among cultures in Central Africa, extended van Gennep's conceptualization of liminality as neutral, and argued strongly that people in the

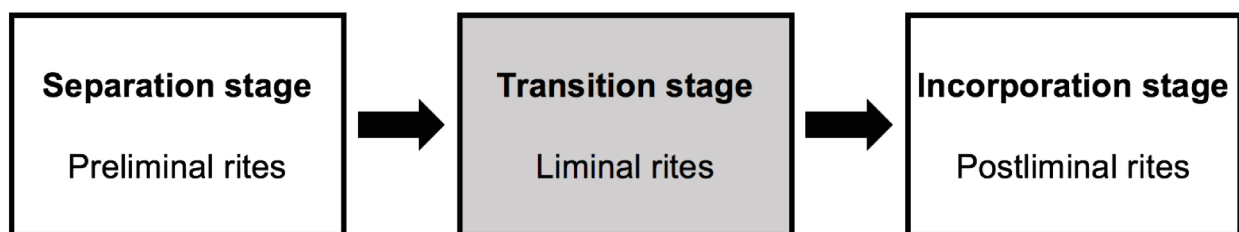


Figure 6.1. Van Gennep's liminality framework. This chapter focuses on the transition stage.

transition stage were “neither here nor there,” “betwixt and between,” in “a limbo of statuslessness,” and so far as “a blank slate, on which is inscribed the knowledge... that pertain to the new status.” William Bridges popularized the concept of transition periods as neutral zones in his 1980 best-selling book *Transitions* (Bridges, 2004). Liminal rites of passage, Bridges described, involve breaking from one’s “familiar social matrix” and going instead to a temporary neutral zone where inner changes occur. After these changes, people can then reincorporate themselves back into the social order. If the transition stage is truly neutral, as van Gennep (1909), Turner (1969), and Bridges (2004) suppose, then in a gender transition context, a person in the transition stage would be considered neither their birth gender nor their desired gender. However, as I will argue in this chapter’s discussion, the transition stage is far from neutral.

During the transition stage, van Gennep (1909) observed that many cultures involved liminal rites of passage in which people physically and socially departed from their previous social circles. For example, during liminal rites of puberty for Congo tribes, young men were separated from their families and social environment for months or even years, during which they lived in the forest and became part of “special restricted groups” (van Gennep, 1909). Turner (1969) observed similar rituals among the Ndembu people in Africa. In a modern Western context, during dialysis-dependent people’s liminal stage of beginning treatment, they are taken away from their home and social environment and placed in a medical facility for procedures (Martin-McDonald & Biernoff, 2002). While these examples are presented descriptively, Bridges’ (2004) book is more prescriptive, advising people to separate from their existing networks, at least for a short period of time, to process their inner changes.

However, in the present time (as opposed to van Genneep, originally published in 1909, Turner, originally published in 1969, and Bridges, originally published in 1980), separation from one's network occurs in different ways. Given the prevalence of social media, mobile devices, and "always on" expectations (Harmon, 2015), it may not even be possible to fully separate from one's network. Instead of physical departure, in the case of gender transition, I observed people participating in similar liminal rites that van Genneep described and Bridges called for, by spending time on a social media site (Tumblr) away from their primary social network (Facebook), and by eventually recrafting their online identity on the social media site inhabited by their familiar social network (Facebook).

Disclosing one's trans identity on Facebook is a primary transition activity that occurs during the transition stage and, I argue in this chapter, can be considered a liminal rite of passage. It is a ceremonial pattern, enacted by many people in similar ways, and clearly marks a person's transition from one social category to another.

Chapter 5 focused on emotional affect changes during the separation stage. This chapter builds on that analysis by focusing on how emotional wellbeing changes as people go through the transition stage. Because trans identity disclosure on Facebook is a key transition moment and a liminal rite of passage, and the primary disclosure moment associated with the transition stage (see Chapter 4), I analyzed how people's emotional wellbeing changed after coming out on Facebook. My findings indicate that, though Facebook disclosure did not significantly impact emotional wellbeing on average, those who received supportive responses from their Facebook networks experienced increased positive affect after the disclosure.

## **Trans identity disclosure on Facebook is a pivotal transition moment.**

Coming out as trans on Facebook is a pivotal moment for many in their transitions. *How* people come out on Facebook varies greatly – some make an announcement and keep their current account and friends list, some heavily edit their friends list before making an announcement, some change their Facebook name, gender marker, and/or appearance in profile photos but do not make an official announcement, and some move to a new account entirely (Haimson et al., 2016). However, regardless of the methods used to partition networks and disclose one’s trans identity, participants reported in interviews and on their blogs how coming out on Facebook was a defining moment in their transitions, and often a somewhat final point on their disclosure paths. Facebook disclosures meant coming out to a large audience of primarily “real life” connections, characterized by some participants as “everyone” in their lives. Interview participant P3 (who is also B5) described her experience coming out on Facebook:

*Well, Facebook, yes. That was obviously the big one, that was telling not my close friends that I knew would love me regardless, that was telling **everyone**<sup>18</sup> ... All these people knew at this point and that was huge. I changed my name on Facebook and everything, I just went for it. That was definitely a **monumental thing**. It really helped by getting that word out to **everyone**. I had come out in person to quite a few individuals, but to do it to **everyone at once** was definitely a relief. I had nothing to hide anymore, nothing to be ashamed of, ...nothing in the closet.*

P3/B5’s interview quote was similar to her Tumblr post in which she also characterized coming out on Facebook as a monumental disclosure to “everyone:” “*Soooo I CAME OUT!! To*

---

<sup>18</sup> All bolded text indicates emphasis added by me, not the interviewee.

*everyone.. full time... all the time =D I really can't believe it but it's magnificent... I think I'm glowing and I got such a POSITIVE response on Facebook... it was baffling and amazing"* (see Figure 1.2).

The Tumblr posts that people posted about their experiences coming out on Facebook give important context about their thoughts, deliberations, and processes around Facebook disclosure, and often also included the text of the Facebook post itself. Many people posted about their Facebook coming out post on Tumblr, both before and after posting it. Before the Facebook disclosure, many posted draft coming out announcements and asked for feedback (e.g., *"So this is my coming out post that I'm probably gonna post on my other FB page some time tomorrow. Any thoughts?"* – B153) or describe fears and anxieties around upcoming Facebook disclosures. Afterwards, many posted follow-up posts, often celebratory, describing or including the Facebook disclosure post, responses to it, and the poster's feelings about it. For example, B200 posted: *"So on New Year's Eve, I finally came out to the world!! (well Facebook xD). Here's what I posted: [Facebook disclosure post content]. And so far it's been all positive! I've been worried for nothing xD."* As these quotes indicate, Tumblr is a place where people reflect on their disclosure decisions and actions, and thus a rich research site for understanding disclosure on social media.

People chose Facebook as a platform for mass disclosure because it was an efficient and official way to disclose trans identity to one's network, similar to how some use Facebook to disclose relationship breakups (Haimson et al., 2017), pregnancy loss (Andalibi & Forte, 2018), and other life transitions. B92 described how making an announcement on Facebook was an efficient means of disclosure and allowed him to circumvent a series of individual conversations:

*I recently came out **officially** on Facebook and the support was overwhelming. I did this because it was the **easiest platform to finally spread the word**. I know others may not feel the need to do this, but in my case **it was a good way to not have to tell everyone individually**.*

Another blogger (B106) characterized coming out on Facebook as a “scorched earth approach.” “Sometimes I want to just want to come out on Facebook. Post the message, drop the mic, sign out. Come back in a week and see what’s left. Scorched earth approach.” While “scorched earth approach” sounds negative, it is an apt metaphor for coming out to one’s entire social network at once. Posting information on Facebook is an efficient means of reaching one’s network without having to disclose to each person individually (Andalibi & Forte, 2018), but it may feel untargeted and reckless for some. As B106 described, coming back a week later to see how her network responded, and who remained in her network, was an attractive disclosure approach that may allow her to spend less emotional energy on disclosure.

While in other life transitions people can choose whether or not to disclose to their Facebook networks, during the transition stage trans people often reach a point where they are no longer able to conceal their physical changes. B3 described on her Tumblr how she was approaching a point in which she may be “forced to come out to everybody:”

*So it’s getting a bit harder to hide things. Only a bit over 3 months in, but I’m seeing some progress for sure... I’m just fine if anyone starts questioning my changes, and if I am sort of **forced to come out to everybody**, I’m okay with that. At this pace, things should be pretty dang interesting even by February... at least with the breast growth. If, on the other hand, I get the courage to let people know sooner than later, I’m good with that too. Depends on how I feel.*

Because Facebook allows mass disclosure to one's network, it can be an important tool for people who, like B3, feel that physical changes may make disclosure inevitable, but at the same time feel fine about that.

Transition disclosure on Facebook, and online identity changes more broadly, can also help people feel that they are making progress in their transition and moving forward in their new identity. B27 described on Tumblr her experience changing over to new Facebook and LinkedIn profiles:

*So, I finally came out to the remaining people back home that I want to keep in touch with. (I was waiting a bit because I was giving family back home in our small town more time to process before it became common knowledge.) Some people friended my new Facebook profile and some didn't. However, no one had anything bad to say and I got a lot of heartwarming responses, so I'm calling it a win. I closed down my old Facebook and LinkedIn accounts, so I think **all on-line accounts of the old me are officially dead and gone. It feels really good to be moving forward in life completely as I am!***

Moving to new profiles on Facebook and LinkedIn was a pivotal transition moment for B27, after which she described feeling that her online identity was congruent with her new gender identity.

As described in Chapter 5, Facebook disclosures often occur *after* people tell close family members and the other important people in their lives, with whom they feel a one-to-one conversation is necessary. With these disclosures out of the way, Facebook disclosures are now possible, as P11 described:



*As soon as I came out to my dad, I was just – **I had told everyone.** I made a Facebook post that I started presenting more how I pictured myself in my head, at the time. And I was pretty much just out...*

In addition to coming after the separation stage in which family disclosures occur, Facebook disclosures also sometimes are prompted by present or upcoming physical changes. P13 stated that he came out on Facebook “*a few days before I was supposed to start T [testosterone hormone replacement therapy], and after I talked to my family, **of course.***” Similar to how B3 described feeling as though physical changes may force her to come out to everyone, many disclosed on Facebook in anticipation of physical changes that may make disclosure inevitable.

As this analysis shows, trans identity disclosures on Facebook are pivotal moments for many, and tend to mark the end of the transition stage of gender transition. While the unique nature of each person’s transition timeline makes it impossible to divide gender transitions into before and after time periods, Facebook disclosures mark a substantial change in which people go from out to some people in their networks, to being out to “everyone.” Thus, I use these pivotal moments to examine how emotional wellbeing changes on average after this pivotal transition moment.

**Facebook disclosures with supportive responses are followed by increased emotional wellbeing.**

I expected that emotional wellbeing would increase after trans identity disclosures on Facebook, because disclosure is generally thought to have a positive effect on emotional wellbeing (Pennebaker, 1995) and because I found that trans identity disclosures on Facebook are pivotal transition experiences. To test this, I built six robust linear regression models with average

		Time period after post averaged for outcome variable		
		One month	Three months	Six months
Sentiment measured in outcome variable	Negative emotion	Model 1	Model 2	Model 3
	Positive emotion	Model 4	Model 5	Model 6

**Table 6.1. Description of models included in Table 6.2.**

emotional affect following a post as the outcome variable, and a binary indicator of whether the post described a Facebook disclosure as the independent variable of interest (see Table 6.2). As in Chapters 4 and 5, the data did not meet the assumptions necessary to use standard linear regression models, so I again used robust linear regression (UCLA Institute for Digital Research and Education, n.d.). The models included several time periods after a post to calculate average emotional affect: Models 1 and 4 used one month, Models 2 and 5 used three months, and Models 3 and 6 used six months. The outcome variable in the first three models measured average *negative* emotion, and in the second three models average *positive* emotion. See Table 6.1 for clarity. These models also included binary indicators of whether a post described a non-Facebook trans identity disclosure. Posts that were coded 0 for both disclosure variables did not describe a trans identity disclosure of any kind.

I included variables indicating support from one’s disclosure audience: one support variable is a binary indicator of whether a Facebook disclosure post described that person’s Facebook audience as supportive, and another is a binary indicator of whether a non-Facebook disclosure post described that audience as supportive. For non-disclosure posts, support variables were coded as 0. Unlike the models in Chapter 5, these models did not include a variable for whether the disclosure was involuntary, because I did not encounter any involuntary Facebook disclosures in the dataset.

The models included Tumblr interaction variables indicating how many likes, comments, and reblogs the post received, and the post’s word count. Control variables include gender, age,

binary measures of each year to control for affect over time, and average positive or negative emotion in the time period before the post.

I used a similar data cleaning process to that used for the models in Chapters 4 and 5. After calculating the average affect variables, I removed all non-Facebook-disclosure posts that occurred within one month of a post describing a trans identity disclosure on Facebook. This allowed me to measure the Facebook disclosure's relationship with affect without other non-Facebook disclosure data points influencing the effect in that time period. To make sure that the outcome variable averages were meaningful, I next removed all posts where the blogger posted less than three substantial text posts in the month following. After all data cleaning, I was left with 35,346 total posts.

Surprisingly, none of the models show a direct significant relationship between Facebook disclosures and emotional wellbeing. The model shows significant effects only when accounting for support from one's Facebook network (as described further below). Despite Facebook disclosures being a pivotal moment in people's transitions, without accounting for support, there was no average statistical trend toward emotional wellbeing increasing or decreasing in either the short or long term. This is likely due to emotional wellbeing variations resulting from the support people received, or did not receive, from their networks. The lack of effect may also be due to the small sample size of Facebook disclosure posts: there were only 26 Facebook disclosure posts in the dataset (of 362 total trans identity disclosure posts), and only 19 remained after removing those with too few posts by that blogger in the time period afterwards. Though all interviewees who had Facebook accounts disclosed their trans identity on Facebook in some way, with the exception of P19 who had not yet made her transition public, not all of them described their Facebook disclosure on their Tumblr blog. Thus, some of the posts in my dataset

Variable	Avg. negative emotion in month after post (Model 1)		Avg. negative emotion in 3 months after post (Model 2)		Avg. negative emotion in 6 months after post (Model 3)		Avg. positive emotion in month after post (Model 4)		Avg. positive emotion in 3 months after post (Model 5)		Avg. positive emotion in 6 months after post (Model 6)	
	Coefficient (Standard error)											
Facebook disclosure <sup>1</sup>	-0.00	(0.27)	0.00	(0.19)	0.03	(0.17)	0.00	(0.37)	0.20	(0.26)	0.26	(0.23)
Supportive response on Facebook <sup>1</sup>	-0.47	(0.41)	0.05	(0.30)	-0.02	(0.26)	<b>1.52**</b>	<b>(0.57)</b>	<b>0.91*</b>	<b>(0.40)</b>	<b>0.71*</b>	<b>(0.36)</b>
Disclosure to other audience <sup>1</sup>	<b>0.15*</b>	<b>(0.07)</b>	0.07	(0.05)	0.00	(0.05)	-0.03	(0.10)	<b>0.16*</b>	<b>(0.07)</b>	<b>0.16*</b>	<b>(0.06)</b>
Supportive response from others <sup>1</sup>	-0.17	(0.11)	-0.12	(0.08)	-0.05	(0.07)	-0.17	(0.15)	-0.09	(0.11)	-0.01	(0.09)
MTF <sup>1</sup>	0.49***	(0.01)	0.36***	(0.01)	0.35***	(0.01)	0.14***	(0.01)	0.09***	(0.01)	-0.00	(0.01)
Non-binary <sup>1</sup>	0.15***	(0.03)	0.07**	(0.03)	0.07**	(0.02)	-0.24***	(0.05)	-0.13***	(0.03)	-0.19***	(0.03)
FTM (ref.)	-	-	-	-	-	-	-	-	-	-	-	-
Age	-0.04***	(0.00)	-0.03***	(0.00)	-0.02***	(0.00)	0.02***	(0.00)	0.01***	(0.00)	0.02***	(0.00)
No. of likes <sup>2</sup>	-1.23***	(0.05)	-0.73***	(0.03)	-0.57***	(0.03)	1.41***	(0.06)	1.15***	(0.04)	1.26***	(0.04)
No. of replies <sup>3</sup>	0.30***	(0.05)	0.27***	(0.04)	0.30***	(0.03)	-0.18*	(0.07)	-0.20***	(0.05)	-0.34***	(0.04)
No. of reblogs <sup>3</sup>	0.13***	(0.01)	0.07***	(0.01)	0.04***	(0.01)	-0.05***	(0.01)	-0.03***	(0.01)	-0.05***	(0.01)
Word count <sup>2</sup>	-0.03***	(0.00)	-0.02***	(0.00)	-0.02***	(0.00)	-0.02***	(0.00)	-0.01*	(0.00)	-0.01*	(0.00)
2016 <sup>1</sup>	0.12***	(0.02)	0.08***	(0.02)	0.01	(0.01)	-0.08**	(0.03)	-0.13***	(0.02)	-0.20***	(0.02)
2015 <sup>1</sup>	0.10***	(0.02)	0.03*	(0.02)	-0.05***	(0.01)	-0.06*	(0.03)	-0.08***	(0.02)	-0.11***	(0.02)
2014 <sup>1</sup>	0.01	(0.02)	-0.04**	(0.02)	-0.13***	(0.01)	-0.18***	(0.03)	-0.10***	(0.02)	-0.07***	(0.02)
2013 <sup>1</sup>	0.00	(0.02)	-0.05**	(0.02)	-0.09***	(0.02)	-0.37***	(0.03)	-0.27***	(0.02)	-0.32***	(0.02)
pre-2013 (ref.)	-	-	-	-	-	-	-	-	-	-	-	-
Avg. negative emotion in time period before post	0.45***	(0.00)	0.65***	(0.00)	0.70***	(0.00)	-	-	-	-	-	-
Avg. positive emotion in time period before post	-	-	-	-	-	-	0.41***	(0.00)	0.59***	(0.00)	0.66***	(0.00)
Intercept	1.81***	(0.03)	1.21***	(0.02)	1.06***	(0.02)	1.87***	(0.04)	1.27***	(0.03)	1.04***	(0.03)
R <sup>2</sup>	0.34		0.54		0.61		0.26		0.44		0.50	

†p < .10; \* p < .05; \*\* p < .01; \*\*\* p < .001; <sup>1</sup>binary indicator; <sup>2</sup>per 100; <sup>3</sup>per 10

**Table 6.2. Robust linear regression models showing average negative and positive emotional affect in time period following posts.**

that are coded as non-Facebook-disclosures actually occurred in close temporal proximity to Facebook disclosures, which makes the data noisy. Yet, such noise is to be expected in social media data, and is an important reason to interview people in tandem with social media data analysis.

The “Disclosure to other audience” variable in this chapter’s models includes many family disclosures; thus it is unsurprising that the trends that I observed in Chapter 5 carry over to these models. Disclosure to non-Facebook audiences is followed by increased negative emotion in the short term (one month; see Table 6.2 Model 1), and then increased positive emotion in the longer term (three and six months; see Table 6.2 Models 5 and 6). The other effects found in Chapter 5 hold here as well. Trans women’s posts have more negative and positive affect, and non-binary people’s posts have more negative affect and less positive affect, when compared with trans men’s posts. Older people’s posts include less negative affect and more positive affect. The time trend indicates that affect varied over time, and is a necessary control variable. Likes correspond to decreases in negative affect and increases in positive affect, while posts with more replies and reblogs predict increased negative affect and decreased positive affect. Word count is associated with both decreased negative and positive affect in future posts. As expected, the most predictive factor in all models is that blogger’s affect in the time period prior to a post.

Though I found no average statistical relationship between Facebook disclosures and emotional wellbeing in the time period following, many people’s emotional wellbeing did change substantially after coming out on Facebook. Because this change happened in different ways for different people, statistical effects are absent due to high variance. Interviews helped me to understand that the variation in how people feel after Facebook disclosures is likely due to differences in how people’s networks responded to their disclosures, as I examine next.

### **Support from one’s Facebook network**

In the statistical models reported in Table 6.2 (Models 4-6), receiving a supportive response from one’s Facebook network moderates the relationship between Facebook disclosures and

emotional wellbeing<sup>19</sup>. That is, those people who came out as trans on Facebook and reported receiving only supportive responses from their networks had increased positive emotion in the time period following their disclosure, while those who received unsupportive or only partially supportive responses from their networks had no change in emotional wellbeing following their disclosures. The effect is strongest in the month following the Facebook disclosure: LIWC positive affect measures refer to the proportion of words in a post that connote positive affect, and those with supportive responses to Facebook disclosures used on average 1.52 more positive affect words per 100 words than those who without positive responses. In the three months and six months following the disclosure, the coefficient and the significance level are lower than in the first month, signaling that the effects of having a supportive network lessen over time and as people progress in their transitions. These results support my previous work that found that disclosing one's trans identity on Facebook is stressful, but that support from one's Facebook network can mitigate some of this stress (Haimson, Brubaker, et al., 2015). However, while my previous work (Haimson, Brubaker, et al., 2015) relied on self-reported survey measures of stress and support during gender transition, the present study finds similar effects when examining emotional affect via longitudinal Tumblr data, and corroborates these findings with in-depth interview data.

In coding the Facebook disclosure posts for response from one's network, I coded each as either supportive, partially supportive, unsupportive, or unknown (if the poster did not specify their network's response). Of the 26 posts that described Facebook disclosures, 13 described

---

<sup>19</sup> Typically, a moderating variable in a statistical model is in the form of an interaction term, such as disclosure \* support. However, in this dataset, I only coded the disclosure posts for response supportiveness. Thus, those posts without disclosures would have 0 for each of the response supportiveness dummy variables. So, multiplying disclosure \* support would be equivalent to support, as included in the regression models.

only supportive responses, four described partially supportive responses, one described primarily unsupportive responses, and eight did not specify their network's response. I combined the latter three categories in the statistical models because their counts were too small to give meaningful results. Thus, the variable included in the models is a binary indicator of whether the person reported only positive responses from their Facebook network.

Participants described positive responses both in interviews and in their Tumblr posts. For instance, B151 wrote about her experience coming out as trans on Facebook:

*As far as I know, I have not lost any friends, family any other lovely people of loveliness. So far I have only gotten gotten a few confusions, a few questions, some clothes but, **most importantly, support**... I wrote my coming-out post sad, angry and on the verge of crying. After about 15 minutes of just looking at it I just said 'fuck it' and clicked on submit. It took about 5 minutes until I got a response. The longest 5 minutes of my life. Will people ignore me? Will people leave me or even write hate on my post? Will people try to find my apartment, smash my door in and kill me? The first response was something along 'you're the bravest person on here tonight.' And the following was in the same spirit. Then the likes started to flow in... Not one of my friends shared my status in an effort to make a political statement. Nor did anyone try to spread the news further than needed. The status was meant for my friends, and **my friends respected me**... I love all my friends. And **the support I got was more than anything I could ever expect**. Thank you.*

The supportive response that B151 described from her Facebook network transformed her sad and angry feelings into appreciation for her friends and their respect for her and her transition.

Feeling supported and respected by one's network understandably impacts people's emotional wellbeing.

P9 described a similar experience coming out to his network on Facebook. Living in a small town that he described as conservative, in which violent attacks against LGBT people had happened in the past, P9 was surprised by the response that he received to his coming out post on Facebook:

*Oh, it was very positive, actually, which I was really surprised about. But it was actually overwhelmingly positive. It's one of the only few Facebook posts I have where I've got so many likes and hearts and comments. It was really relieving, actually, to see that much positivity. I'm like: 'oh, good; I know good people.'*

However, P9 was quick to point out that some other LGBT people did not have the privilege of receiving support when coming out: *"I know not everybody is as lucky as I am so I really think it is more of a luck thing, due to the community a person grows up in."* One could actually consider P9 unlucky given that the community he grew up in was a site of violence against LGBT people. Yet, the people in his Facebook network, who consisted mainly of family, coworkers, and old friends, turned out to be "good people" who supported his transition.

Support occurs on Facebook not only for disclosure announcements, but also for other types of Facebook disclosures, such as switching to a different account. P2 described the unexpected supportive response from his network after he switched to a new account for his male identity:

*I had a side Facebook that was my male Facebook that was separate from my main one. Towards the end of my senior year I deleted my main one, and I was like 'alright I'm using this one now.' So, all the people I don't care about are gone with that one, you know, if you actually talked to me I'll put you on the new one. **People from my school***



*actually found the new one and they were actually surprisingly really pretty accepting of it. They're just like, 'okay man it's fine, whatever. You've been here for 4 years, we know you.' I think it was actually really cool too because, like I said this is a really relatively conservative school. A lot of my friends were surprisingly a lot more cool with it than I would have expected.*

As P2 described, even people whom he expected to discard as friends as he moved to his new identity and Facebook account found and added his new account. Interestingly, the approach of moving to a new account may remove some of the trans person's burden of trying to decide who will and will not be accepting, an emotional labor that many people encountered when editing their network (Haimson et al., 2016). By creating a new account and only adding close friends, P2 discarded those acquaintances who were unsupportive. However, he did not have to try to predict which acquaintances would be supportive: the onus was on those who were supportive to send a friend request to P2's new account.

Other people received a positive response after coming out on Facebook, but also faced difficulties expending substantial energy fielding questions and managing their network's responses. For example, B92 described that *"people do have A LOT of questions and it can be a really overwhelming time for sure. But I am happy to answer and share."* Many of the interview participants in my study characterized themselves as "open" and stated that they were happy to share and educate people. It may be that those trans people who choose to keep transition blogs are more open and willing to answer questions than the general trans population. Yet even these people, who describe themselves as open to answering questions, are sometimes exhausted by it. This indicates that a primary difficulty of mass disclosure on Facebook, and perhaps trans identity disclosure in general, is people's assumptions that the trans person must answer

questions, no matter how personal or invasive. This may be why many participants mentioned including extensive information in their coming out posts, such as “Trans 101” resources and answers to potential questions that would arise for those viewing the post. Questions from one’s network are not only asked online; B194 described the exhausting experience of people approaching her in person to ask questions about her transition:

*Except for a couple coworkers, everybody has surprisingly been super cool with it. Everybody has been telling me how pretty I am or, even better, how I look much happier as a woman. The first week after I came out was **very exhausting as everybody came to me with questions** – it was so **draining** answering the same questions time and time again.*

Yet, despite these draining interactions, B194 stated that she felt “**a thousand times better. It’s almost as though the universe around me was switched to high definition. I’m no longer stuck in this miserable fog bringing me down and being a distraction from my everyday life.**” As this example indicates, even some who, like B194, had some unsupportive reactions and were overwhelmed with questions, described feeling better after coming out as trans on Facebook.

Others discussed troubling reactions from people in their networks. While P7 had a mostly positive experience coming out on Facebook, she was impacted by her experience with unsupportive friends and family members:

*I took a screen shot of my friends list to see if anyone dropped me and the only one that dropped me was my brother. So, **that’s kind of sad**... A few of the guys I had gone to high school with from my town... **started quoting the Bible, saying ‘so what’s going on with your wife, your children.’** Right away going the route of **calling me selfish** and also just*

*trying to say they're worried about my soul **instead of doing anything supportive or anything at all to even try to understand.***

Experiences like this, in which people are harassed on Facebook, can have negative impacts on their wellbeing, even if, as in P7's case, the harassers are blocked immediately after they post offensive comments.

Similar to P2, P8 also started a new Facebook account, yet was less discriminating in whom she added to the account. This left her disappointed that some of the people she added did not accept her friend requests:

*I had two separate Facebook profiles: one for my dead name, and one for who I am now and everything. So, when **I re-added everybody to the new account, some people just didn't accept the request and that was it. So, there wasn't a big stink, there wasn't a big scene and I can live with that. I think it still sucks that I basically don't have contact with these friends anymore, but I'll take that over them coming out and savagely attacking me verbally or physically.***

For some, ignored friend requests<sup>20</sup> make visible the friends that one has lost as a result of transition. Even though some may find it cathartic to reduce their networks and remove people who are unsupportive, for others, it hurts to lose contact with old friends.

In addition to negative responses to the trans identity disclosure itself, disclosing one's trans identity opens up opportunities for people in one's Facebook network to knowingly use the wrong name or pronouns. P5 mentioned "*a select few people who **intentionally disregard the***

---

<sup>20</sup> It is possible that friends did not intentionally ignore a trans person's friend request, and instead did not recognize their new name – another complication of identity transition in social media environments.

*name that is clearly on my profile to call me by another name, no matter how many times I've said 'this is what I go by.'*” While being misgendered and called by the wrong name is difficult at any stage of transition, and is associated with psychological distress (McLemore, 2015), these actions being done intentionally after one's disclosure may hinder emotional wellbeing increases during transition. Others described removing people from their Facebook friends lists who did not respect their gender change, such as P1 who unfriended and blocked an old friend from her time in the military: “*They were just **questioning my gender**. I don't put up with it. I know my gender.*” Having to not only deal with an old friend questioning one's gender, but to then cut the connection with that old friend, is difficult. While not having to deal with misgendering anymore may have positive impacts, the stress and melancholy of ending old friendships likely contributes to negative emotions.

I have reported on the wide variety of experiences that people reported receiving from their networks after coming out as trans on Facebook. These descriptions of people's experiences contextualize the quantitative results, which show that those who have more supportive Facebook networks have, on average, increased positive affect in the time period following their Facebook disclosures. I conclude this chapter by discussing these results in the context of the transition stage of gender transition.

## **Discussion**

In this chapter, I presented my analysis of the relationships between trans identity disclosures on Facebook, emotional wellbeing, and social support. For those whose Facebook networks were supportive, trans identity disclosures on Facebook were associated with increased emotional wellbeing on average. That is, support from one's Facebook network moderates the relationship

between disclosure and emotional wellbeing, as measured using sentiment analysis on Tumblr transition blogs over time. The affect increases that some people experienced after Facebook disclosures may explain some of the emotional wellbeing increases that occur in the long term after family disclosures, as I described in Chapter 5.

This chapter further demonstrates how social media data is an effective, and relatively quick, means of understanding emotional wellbeing over time during a major life transition.

Understanding relationships between Facebook disclosures and emotional wellbeing trends over time can inform technological interventions to enable more effective support from one's network, particularly given my findings that on average, those who received supportive responses on Facebook see emotional wellbeing increases.

In this discussion section, I focus primarily on applying van Genneep's (1909) transition stage, and liminal rites of passage, to a social media context. Van Genneep (1909) described transitions using physical space metaphors, such as going through a door (a simultaneous exit and entrance), or crossing a street. Trans identity disclosure on Facebook can be theorized similarly. While some people post announcements disclosing their trans identity, and others shift over to new accounts, each of these liminal account management activities involves recrafting one's online identity. People change one or several of the following: name, appearance, gender marker, and network. They often spend the arduous and emotionally challenging effort to go through old photos and posts and remove them, or edit privacy settings. Others create new accounts that represent their current self-expression (Haimson et al., 2016). These sorts of online identity transformations are like walking through a door, or crossing a street; moving from one space to another. Though these spaces are not physical, they are often also accompanied by physical changes and movements (e.g., moving house, changing jobs, or frequenting new

establishments catering to one's new identity). Online identity changes, which go hand in hand with trans identity disclosures, are liminal rites of passage.

However, at the same time as Tumblr transition bloggers engaged in liminal online identity work on Facebook and their Facebook profiles remained active, during the transition stage they often spent relatively little time on Facebook (as I described in Chapter 4). They spent much of their social media time on Tumblr instead, processing their thoughts and interacting with networks separate from their Facebook networks. This is in line with van Gennepe's (1909) observations of liminal rites in which people change their identities away from their networks. During the transition stage Tumblr transition bloggers disclose their trans identity to their networks on Facebook, yet they engage in meaningful social interactions and self-presentation on Tumblr. On Tumblr they interact with new networks of similar others, who help them to understand their identities and process their changes, which they eventually present on Facebook. They then return to Tumblr to discuss their Facebook disclosures and identity changes, and their network's responses to these changes. Tumblr transition bloggers' use of the site for reflection makes Tumblr a valuable research site to understand both identity changes and emotional wellbeing changes after trans identity disclosures.

While many binary trans people (i.e., people who transition from male to female, or from female to male) exist temporarily in the transition stage while passing through, many non-binary trans people continually exist in the transition stage. When a person transitions from a binary gender to a non-binary gender, this often comes with a commitment to an indefinite liminal identity. Many with non-binary genders rely on gender fluidity as a central construct for how they exist and present themselves. While my sample includes 7% non-binary people, van Gennepe's (1909) liminality framework falls short in describing those for whom liminality is not a

stage, but an identity. I return to this in the Discussion chapter, to identify ways a liminality framework can be updated to include non-binary experiences.

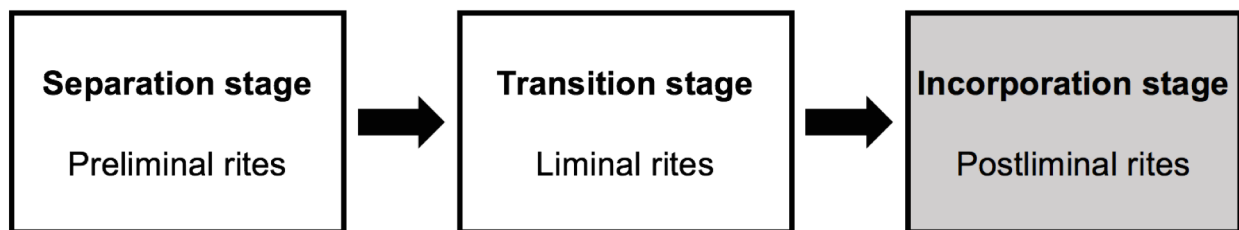
As discussed in this chapter's introduction, the major works on liminality throughout the 20<sup>th</sup> century – van Gennep (1909), Turner (1969), and Bridges (2004) – all theorized the transition stage as a “neutral zone.” A neutral zone in a gender transition context would imply that a person was neither man nor woman in the transition stage. However, in my interviews and in the blog posts I analyzed, I did not come across any instances in which people described their experience as neutral. Rather than feeling genderless, as neutral zone implies, people described their experiences presenting gender differently in different contexts depending on to whom they had and had not disclosed their trans identity. They described feeling feminine despite masculine characteristics, and vice versa, or the dysphoria that resulted when their body's gendered features betrayed their desired gender. Similarly, in a divorce context, it may be that people feel both married *and* divorced, rather than neither married nor divorced. Some non-binary trans people do consider themselves to be gender-neutral, but this describes a gender identity, not a neutral identity during a liminal stage. Thus, the transition stage, for gender transition and likely for other life changes, is not neutral. During the transition stage, people are more *both* than *neither*, and they cycle through different roles, and salience of those roles, depending on context.

## CHAPTER 7

### THE INCORPORATION STAGE: WHAT HAPPENS NEXT

In this chapter, I examine what happens after transition disclosures are “finished.” Though many people do not have a concrete notion of their transition as being finished or complete, there comes a time when disclosures become less common. At a certain point, a person has disclosed their trans identity to any relevant people in their life who knew them *before* transition (Zimman, 2009). Living day to day in their post-transition identity, one may not need to disclose their trans identity to new people who come into their lives *after* transition (yet they necessarily reveal their gender history to some of these people, whether involuntarily, obligatorily, both, or neither) (Zimman, 2009).

This chapter is organized as follows: I begin by describing the experiences of some trans people who indicated that their lives did improve post-transition, followed by some for whom it did not, highlighting ways the social media movement It Gets Better (described below) may have impacted peoples’ feelings toward their emotional wellbeing over time, and how they express their own narratives on social media. Next, I complicate the notion that gender transition necessarily impacts one’s emotional wellbeing, given that gender transitions intersect with many other life transitions and identity facets. I then discuss how people move away from trans as their primary identity and privilege other identity facets post-transition, and how they present these



**Figure 7.1. Van Gennep’s liminality framework. This chapter focuses on the incorporation stage.**



intersecting identities online. Finally, I examine trans identity's precariousness throughout the lifespan, and describe how trans identity disclosures may be inevitable even long after the incorporation stage. I then discuss these results in the context of the It Gets Better narrative and van Gennep's liminality framework. I argue that an intersectional approach to understanding trans people's emotional wellbeing – by taking into account multiple salient identity facets and life transitions – makes trans lives more livable by complicating the cultural imperative to feel better, and to present a unilaterally positive self-image online, post-transition.

The It Gets Better Project's "mission is to communicate to lesbian, gay, bisexual and transgender youth around the world that it gets better, and to create and inspire the changes needed to make it better for them" (It Gets Better Project, n.d.). Prominent gay author Dan Savage and his partner Terry Miller pioneered It Gets Better with a 2010 YouTube video in which they used their personal stories to signal to LGBT youth that life improves over time. In turn, many other LGBT people, famous and not, shared their positive life trajectories via YouTube, and these narratives were then spread across other social media sites, including Tumblr, Twitter, and Facebook. Though It Gets Better has undoubtedly had positive impacts on LGBT people's lives by framing LGBT lives in a positive light, it has also been critiqued by many, who argued that Savage's vision of "better" is narrow, and unrelatable to many, given his subject position as white, male, cisgender, and financially secure (Nyong'o, 2010; Puar, 2010). For others, such as those facing minority stress related to their race, ethnicity, gender, or class in addition to LGBT-related stressors, it does not always get better (James et al., 2016; Nyong'o, 2010). In fact, the cognitive strategy of imagining a better future, as an approach for coping with minority stress, may actually be associated with poorer emotional wellbeing (Toomey et al., 2017). Yet for trans people, the common narrative remains that a person should be happy and

content post-transition, after a period of challenging experiences due to stigma during transition (Mullen & Moane, 2013). It Gets Better has become a dominant cultural narrative blanketing LGBT people's experiences and how they present their identities and experiences on social media. I show in this chapter how its dominance may cause dissonance for trans people for whom It (does not) Get (unequivocally) Better. In this way, through analysis of people's experiences of gender transition as expressed on social media, my research questions this dominant narrative and offers a more complex and realistic vision of what it means to "get better" when it comes to issues of emotional wellbeing and trans identity.

As noted in the previous three chapters, emotional wellbeing tends to increase in the three and six month periods following trans identity disclosures. However, one of the important insights that emerges from my work is that, while I find upward trends in emotional wellbeing throughout gender transition, the trans experience does not always improve in a simplistic, linear fashion. People's lives are more complicated than can be captured by a statistical relationship between transition and emotional wellbeing, and in this chapter, I examine the ways that this complexity takes form. I argue that post-transition, people's emotional wellbeing is impacted not by their trans identity or disclosures of it, but by other life events and identity facets that take precedence, and the ups and downs of life more broadly. Even though trans people on average feel better after gender transition, they still encounter everyday challenges, just like everyone does. These challenging experiences are meaningful in contrast with the dominant media narrative It Gets Better's positioning of the gender transition as a process with a single, simple goal of feeling better. When applied to people's lives, however, this narrative sets up an expectation of happiness and wellbeing that is not realistic, given the difficulties and stressors of everyday life and the inevitability of multiple intersecting life changes. My analysis of social

media data and interviews shows that this narrative causes undue emotional harm for those trans people who are caught in a space between one's post-transition reality, which may involve stress, anxiety, and depression despite greater congruence between one's body and identity, and a dominant cultural expectation of happiness. Complicating the narrative that expects trans people's emotional wellbeing to simply improve as a result of transition enables trans people the freedom to live and exist in their post-transition identities, whether or not they feel better. In this chapter, I complicate the It Gets Better narrative by discussing complexities around trans identity and emotional wellbeing post-transition.

The incorporation stage, as Bridges (2004) describes it, is a new beginning. In van Gennep's (1909) description of the incorporation stage, after leaving one's existing network and physical setting during the separation stage, and remaining distant during the transition stage, a person returns to their network (or sometimes a new network) during the incorporation stage. Rites of passage in this stage, in van Gennep's time, included both formal ceremonies and things like shared meals and handshakes (van Gennep, 1909). After achieving "inner realignment and renewal of energy" in the "neutral zone," Bridges (2004) posited that one enters the incorporation stage as a blank slate on which they can project their new identity. Yet, similar to my argument presented in Chapter 6 that the transition stage is not neutral, the incorporation stage is not a shift from neutral to drive, to use a car metaphor. This chapter describes trans people's experiences throughout the incorporation stage and beyond.

### **For some, it gets better.**

The narrative of "getting better" was pervasive in both the interview data and the blog posts, signaling that this narrative impacted people's self-concept both as presented on social media,

and when talking about their lives and experiences. When I asked interview participants if their emotional wellbeing had changed over time after coming out as trans, 16 out of 20 stated that they felt better after coming out as trans. While I did not specifically ask about It Gets Better or whether participants “felt better,” remnants of this narrative came up often. It is not possible to know for sure to what extent participants’ mentions of getting or feeling “better” over time are related to or influenced by the It Gets Better campaign; getting better is certainly a dominant cultural imperative on its own. Either way, the obligation that transition bloggers felt to get “better” over time, both for themselves and as a positive example for trans youth, is important to investigate. It Gets Better’s massive influence on the LGBT community likely impacted people’s conception of what it means to be trans, and what it means to present trans identities in digital spaces.

Many participants described how mental health issues like anxiety and depression reduced as they transitioned. P4 described it this way:

*I had this background noise in my head, of anxiety, and depression, and dialogue, that I'd had so long I wasn't even really aware of it, it just became part of my existence... and [after beginning transition] that had gotten so much quieter... **even things that I didn't even know were wrong got better**<sup>21</sup>.*

People’s default mental state changed, often in ways that were unexpected because, as P4 described, they were not even aware of the ways that living in a discordant gender identity was negatively contributing to their mental health. P12 (who is also B37) wrote on his blog that transitioning made him feel more confident, happy, and able to enjoy life more, to the extent that

---

<sup>21</sup> All bolded text indicates emphasis added by me, not the interviewee.

he was barely recognizable to himself:

*My self-confidence has improved so much **I hardly recognize myself**. I'm loving all the things I used to enjoy at a much deeper level. I laugh so much more and **many of my friends have commented on how much happier and lighter I seem**.*

In our interview, he described feeling more relaxed post-transition, particularly as fewer people in his life were linked to his prior identity:

*Around six, seven months afterwards, I started feeling like, oh, yeah, I'm a lot more relaxed now, **especially as I had new friends that only knew me as [new name]**. The more people I had in my life like that, I would relax even more than before.*

Importantly, for P12/B37, the people that surrounded him had a substantial impact on his emotional wellbeing, whether it was old friends telling him he seemed happy, or building a new network of people who knew him only post-transition. P12's experience highlights ways that one's audience is often an important factor in both gender presentation and emotional wellbeing.

Some bloggers reported feeling better post-transition even in a family context, which as I found in Chapter 5, is often associated with decreased emotional wellbeing. B64 wrote on her Tumblr about feeling included as a woman in her family, which helped immensely with her mental health:

*With my father and family. Things feel so good, I mean I feel like I am **part of a family**. My depression has more or less disappeared. Even my gender dysphoria has tapered off quite a bit. I am treated authentically as a grown woman, which has been **great for my mental health**. I have not once felt suicidal.*

Her post implies a sense of belonging and acceptance from family, which, as previous literature has found, positively impacts mental wellbeing (Bockting et al., 2013).

As I found in Chapter 4, Tumblr is a place where people feel comfortable posting negative content, and do so frequently. Thus, when people do post positive content, and describe their experiences with improved emotional wellbeing after transitioning, these posts come across as genuine. The same may not be true on a site like Facebook, where “positivity bias” (Reinecke & Trepte, 2014) means that people post mostly positive content, whether or not they are truly feeling positive. On the other hand, because negativity is common and accepted on Tumblr, Tumblr posts that emote positivity do come across as genuine descriptions of people who feel better over time throughout transition.

In 2014, social media movement #RealLiveTransAdult emerged on Twitter in response to trans teenager Leelah Alcorn’s suicide, as a way for trans adults to signal to younger trans people that surviving to adulthood was possible (Clifton, 2014). Trans adults posted tweets often including their occupation, relationship status, and emotional wellbeing, giving faces to possible futures for trans youth by depicting trans people who had survived both adolescence and transition. Alcorn was a Tumblr blogger, and posted her suicide note on Tumblr. Thus, #RealLiveTransAdult caught on beyond Twitter among many trans Tumblr bloggers as a way to communicate with the most vulnerable members of their community, and epitomized some bloggers’ purpose for maintaining their transition blogs. In addition to posting a tweet stating “I’m a 43yo educ tech consultant, mother of 4, will be married soon to an amazing lady who is perfect for me. #RealLifeTransAdult,” B172 posted about #RealLiveTransAdult on her Tumblr:

*I like that this tag has caught on. **It’s really the purpose for what I write here** – my experience living authentically has been overwhelmingly positive, and that’s a story that needs telling... I firmly think **we need as many positive stories out there as we can get** and if I can help someone by doing a little typing, all the better :)*

Positivity is a commonality between RealLiveTransAdult and It Gets Better; yet the two movements differ in important ways, which I consider in this chapter's Discussion.

Yet getting better, or surviving to adulthood, does not involve straightforward and steady emotional wellbeing increases; instead, the path is volatile, though many describe it as a "net positive" experience. As P17 stated, "***transition is a volatile time, but I would say it was a net positive experience.***" B73 described volatility in emotional wellbeing after a family disclosure, writing on their Tumblr: "***It has been a year to the day that I came out to my parents. Not every day from then on was better but damn has it been in the long run.***" B206 went into detail on her Tumblr about some of the good and bad life events that contributed to her emotional wellbeing after transitioning:

*I wish I could say that everything has been better since I last posted. In terms of the good I have gotten over my depression (at least for the most part) and have learned many new and odd things about myself. I have started to talk to my close friend Doug again and develop closer relationships within the community... In terms of the tough things, however I have plenty of problems also that have also developed. I broke up with my girlfriend after we had stopped talking basically for months, but I still have feelings for her which is complex thing for me despite some anger as well... I am also dealing with the insurance company which is refusing to pay for my electrolysis, claiming it is cosmetic despite a surgeon's note stating it was required for my upcoming surgery. All in all though I will keep fighting and try to post more.*

As with any person in any time, as B206 progressed through transition, some things were good, and other things were difficult. Though she did not describe why she wished she "could say that everything has been better," it indicates that she, and other trans people, may sometimes feel

pressure to live up to the It Gets Better narrative, and to provide a positive example for younger trans people. Thus, it is difficult to say to what extent the people I interviewed who described emotional wellbeing increases described their personal experiences, and to what extent they filtered their own experiences into a dominant cultural narrative. That is, to some extent they may have said what they thought I, and the eventual audience for this research, wanted, or expected, to hear. In this sense, the Tumblr blogs may be a more accurate data source; yet these too involve an audience, and that audience is made up largely of young, impressionable trans people who may be struggling with mental health challenges. I stated above that positive content on Tumblr comes across as genuine because posting negative content is also common and accepted on the site. Yet, questions remain around the extent to which people post their emotions honestly, even if those emotions run counter to the It Gets Better narrative and may negatively impact the young trans people who read one's blog.

**For others, it does not get better.**

Though emotional wellbeing improved post-transition for many people, others struggled immensely, and had experiences that were primarily negative rather than positive. The quotes in this section are difficult to read, but are necessary to include to demonstrate the difficult feelings and experiences that many trans people encounter, even after transitioning. Importantly, those who express negative emotions and experiences on Tumblr challenge the expectation, as posited by It Gets Better and is the norm on Facebook (Reinecke & Trepte, 2014), that social media is a place to share positive content, and that negative social media content is only acceptable if it is in the context of a positive trajectory narrative. Yet even on a site like Tumblr, where posting negative content is common and acceptable, people's posts are tempered by the It Gets Better



narrative and the pervasive expectation to produce content that will provide a positive example for trans youth. The constant media inundation around positive transition narratives causes dissonance for those whose own experiences do not follow this narrative.

As an example, B64, who in the previous section had described how her depression and dysphoria decreased substantially, unfortunately faced more difficult emotions at many other times throughout her transition. “***They say life gets better,***” she wrote,

*but I can't see how it can or if it will. Am I wrong for wanting to go back a year ago a not have come out? I can't help but feel my life was far better not knowing what transgender was. Continuing to just wish to be a girl, retaining my friends and relationships. I can't help but wish I never came out. At the end of the day, I don't think coming out has caused any good in my life. I am dealing with so much stress and regret. My family is over 2,500 miles away, I have no friends, crazy people keep harassing me.*

Eight months later, her emotional wellbeing had not improved:

*I am beginning to mentally break down. I worry about every single thing and I swear I can see ghosts in my bedroom. Also I don't believe that I will ever become the woman I have always wanted to become. I'm not attractive enough and everyone thinks that I am ugly. I've missed a few doses of HRT recently. I just feel like it's not doing any good. **My life has gotten much worse since coming out.** Even though I can live as a woman, it comes at the expense of my family and my friends – it's just not worth it. I am actually considering detransitioning. I wonder if my life would get easier if I went back to being a man?*

The positive post I excerpted in the previous section occurred two months after this one, but unfortunately represented one happy moment, rather than an upward trajectory in emotional

wellbeing. For B64, transition involved worry, losing friends and family, self-hate, and regret. Yet when she writes “they say life gets better,” it implies she understands that her experience is an outlier to a dominant narrative. She questions her negative emotions (“am I wrong?”) in light of a cultural imperative to feel “better.”

As another example that complicates the It Gets Better narrative, B143 wrote about a suicide attempt on her transition blog:

*In the interest of creating an honest blog, **here's an honest post that I'm hoping will help people understand the pain and desperation girls like me feel.** I know I pass pretty well and get about without much hassle. Having spent so long hating myself and the way I look the small changes I have gotten of the hormones isn't enough I desperately want facial feminisation surgery even though I constantly get told I don't need it. It's a personal thing and it's not going to go away. The fact that I can't afford it, the fact that I feel it's the only way to gain some confidence and on top of so many other torments recently such as my brake up, family problems and falling out with my best friend led me to do something drastic. **I tried to end my own life.** This was last week. It wasn't the first time I've attempted it. It wasn't a cry for help nor was it a way to seek attention. My ex has not been back to the house in weeks. Every night I'm alone. So I took the contents of my medicine cabinet and a bottle of wine up to my bedroom and stuck on my music. I started to take the pills. I was sad. Sad that I wasn't strong enough. That I don't have it in me to fight any more. So this was my last option. I intended to see it through.*

For some, even though they are able to transition, they cannot escape some of the difficult emotions that come with life, trans or not: in B143's case, self-hate, loneliness, and sadness. She described a lack of financial means for transition-related medical expenses, a recent breakup,

family problems, and difficulties in a friendship; only one of these is directly related to her gender transition. This example demonstrates that no matter how much one's emotional wellbeing may increase when their appearance and social identity shifts into alignment with their internal gender identity, each person faces many difficult things in their life that gender transition cannot "solve." When placed in contrast to a media narrative that posits that transition should be accompanied by increases in emotional wellbeing, the realities of transition, and life more broadly, can feel discordant. Thus, B143 used Tumblr, a social media outlet known for being open to negative self-presentation along with the positive, to describe her difficult experiences with pain and attempted suicide.

Despite how one feels inside, during and after gender transition many people's emotional wellbeing improvements are hindered by feeling uncomfortable with their physical appearance, and facing harassment and safety threats in public spaces in the physical world. Thus, people find comfort in online spaces like Tumblr, where identity can be tied to a flexible online embodiment rather than an uncomfortable physical embodiment. On her blog, B15 recounted a conversation with her dad, who had confronted her for appearing unhappy, in comparison to family photos of her smiling pre-transition:

*I am the only trans woman you know, Dad. **Many of us become happier**, more positive people when we begin to transition... Before transitioning, **I did not have to deal with mean stares every time I walk through the mall**. Someday I will not care what other people think, but right now, **it's important to me to feel safe**. Right now, being safe means not going out to restaurants, bars, movies, etc. until I feel more comfortable in my own skin.*

By hailing “many of us,” B15 placed herself in direct comparison to a trans community full of people whose emotional wellbeing increases over time, or so the narrative goes. At the same time, she compared her current self, mid-transition and uncomfortable in her appearance, to a future self who will feel safer and more comfortable, which is in line with the pervasive It Gets Better media narrative. Importantly, B15 described the safety concerns that many trans women face in public spaces, and how “mean stares,” and an unwritten threat of violence, impact how she feels. These are new concerns and limitations, minority stressors (Hendricks & Testa, 2012) that her previous self, smiling in photos, would not have faced and may not have even considered. This complex interplay between past, present, and future selves places transition in precarious relation to emotional wellbeing, and sometimes requires a person to choose between safety and happiness. Like B64 and B143, B15 chose Tumblr as an online space to express herself as vulnerable and not “better,” thus explicating Tumblr as a place where people are still *aware of* and *impacted by* the dominant media narrative, yet choose to *complicate it* with honest expression of their own difficult experiences.

### **Complicating “better” or “worse:” Intersecting life transitions and identity facets**

The previous two sections included examples of people whose emotional wellbeing increased or decreased as they changed gender. However, it is unrealistic to expect that any trend could accurately describe how people feel over time, given that gender transition occurs alongside many other life events and circumstances. This comes into perspective when compared with other life transitions. P11 described the expectation that others place on trans people to be happy post-transition, using a comparison to marriage:

*Everyone expects you to be just like – it's like, 'You got to come out, and be alive out' and it's not like this is spoken, but it's almost like cis people think like, 'You're out and proud, that's enough.' ...You almost don't get to be unhappy and trans because, you're trans, and you're telling people about it, so shouldn't you just be so happy to just be living your life all the time, that like regular people problems aren't allowed to get you down as much as other people just because you should be so happy, and overwhelmed. It's like this unspoken, no one expects you to become more unstable afterwards just because they think you're supposed to be happy just all the time because you're out. Because, everyone has this narrative in their head of like, 'The suffering is over when you come out.' And it's pretty annoying because, it's kind of contradictory to how life is. It's like if you get married, you aren't just happy for the rest of your life. Like, 'Oh yeah, that guy's married, he doesn't get to be sad.' That's not how it works. And it's not like any other life event should dictate your existence in such a way.*

P11's point complicates the It Gets Better narrative. Gender transition is one of the only life transitions that is widely considered to be linked to increased emotional wellbeing. Other life transitions, such as marriage, moving, and job changes, are often considered steps forward, but are not given the same weight in terms of facilitating a steady, long term emotional wellbeing improvement. Perhaps because they are more common, people acknowledge that after marriage, one's life returns to a "new normal" (Massimi et al., 2012) in which suffering and unhappiness are still possible. Yet with gender transition, it is assumed that a person will be happy and well-adjusted afterwards; otherwise, why would they disrupt their lives so much in pursuit of this change? As P11 rightly pointed out, "that's not how it works." No life event can fully dictate one's emotional wellbeing over the long term. Thus, while in Chapters 4, 5, and 6 I did find

empirical evidence for improvements in emotional wellbeing over time as people transition, there was also a great amount of variance that my statistical models did not account for. This variance likely relates to the other life events and things that happen day to day in people's lives, that may be related or unrelated to their trans identity. Even if transition positively impacts people's emotional wellbeing, there is more affecting one's life than their trans identity; coming out does not solve all problems in one's life.

The expectation that gender transition will inevitably lead to improved emotional wellbeing can cause disappointment when other life events and identity facets take precedence in impacting how one feels. B46 described disappointment that transition did not resolve his problems with social anxiety and mental illness, and that he was not necessarily happier as he progressed in his transition:

*Honestly, I thought coming out at work/school would solve all my problems. I thought I'd be happier, more outgoing, less awkward but the fact is: I'm still bipolar and an introvert, I still have Aspergers and a stutter. It's disappointing. I flip back and forth between if I can financially and safely afford hormones, but would they really make me happier? Yes, my dysphoria probably wouldn't be crippling, but it would still probably be hard for me to make friends and I'd still stutter and whatever.*

Intersections between B46's trans identity and his health and personality facets add complexity to the transition process, and complicate any linear narrative in which transition necessarily leads to improved wellbeing. Yet, transitioning could still alleviate his gender dysphoria, and in that sense, make life more livable.

Most of the people I interviewed were either post-transition or were within the incorporation stage, and made clear the ways that their emotional wellbeing was influenced not only by their

trans identity, but by the rest of their lives. For example, P11 was impacted by receiving an autism diagnosis at the same time as she was transitioning to female: *“I’m the autism spectrum, and I didn’t get diagnosed until like seven months ago, but it’s really affected my life in a kind of adverse way.”* Others face everyday difficulties with finances, work situations, and friends, as B24 described:

*Roommate didn’t pay the Internet bill and stole my money - then I broke the screen on my phone - then a friend said I was disrespectful because I didn’t pay her back for bailing me out of jail, though I thought it was a favor - worked a nonstop 14 hour shift between two food service jobs - found out my roommate also went to the courthouse today to apply for a restraining against me and was denied - feeling really self conscious about my body, not happy with who I am - haven’t showered in easily a week - **feeling like the world is against me and I keep getting sucked up by the undertow, and I’m just treading water.***

These types of everyday life stressors can have major impacts on one’s emotional wellbeing, and in B24’s case made her feel helpless, as she expressed using the undertow metaphor.

Mental health issues like anxiety and depression may remain during and after transition, and may even be heightened for some. P10 stated that *“even though T has really helped a lot of the mental health stuff, it’s not a cure all for everything that ends up happening to your brain.”* P10 coped with his mental health difficulties by adopting and training support animals, a source of comfort for him. For others, increased anxiety is a result of transitioning in particular social environments. Denny described her anxiety increasing after coming out as trans:

***I have been dealing a lot with anxiety since I’ve come out. I go to [small college] and there’s only like 7,000 students. I still am a very involved student on campus. People***

*know my name and transitioning alongside that, I was kind of put under the microscope. It was always weird, even going out or just eating out with some friends, people know me and I know nothing about them. It's this really weird space of – the only comfort I have is my own room where I'm just with my friends.*

Though throughout our interview she also described emotional wellbeing benefits of transitioning, the particular social challenge of being an involved student at a small college heightened Denny's anxiety during transition. For other participants, similar anxieties occurred around other settings, such as church communities or friend groups.

Life transitions do not occur in a vacuum; for almost every participant in my study, several intersecting life changes happened at once. P7, for example, simultaneously experienced gender transition, divorce, moving, and consciously forming new friend groups. Breakups were the most common intersecting life change, as many people's relationships changed fundamentally as their gender changed. Describing her transition, P17 stated that she *“became a lot more anxious... I was having panic attacks several times a day every day at work. **It was just about my life falling apart, because it had started falling apart.**”* When I asked whether this was related to her transition, she said, *“The transition. Slowly but surely my relationship with my boyfriend deteriorated.”* For P17, it was not possible to separate her recounting of emotions around her transition and her relationship breakup, because these two life changes were intertwined, happened simultaneously, and both impacted her emotional wellbeing immensely.

Being trans is only one aspect of trans people's identities (Mullen & Moane, 2013). Interview participants discussed many other life transitions and identity facets that were salient during their gender transitions, all of which impacted their transition experiences and their emotional wellbeing. Participants experienced breakup and divorce, job loss, moving, death in the family,



parent's divorce, and shifting friend groups. Some identified as activists or educators, some were graduate or undergraduate students, and some strongly identified with their particular occupation (e.g., nurse). Participants' trans identities intersected with their identities as people of color; people on the autism spectrum; gay, lesbian, or bisexual; religious people; veterans; people of low socio-economic status; and residents of particular kinds of geographical areas, such as small towns. Some participants identified as non-binary in the past or the present, and some had partners who were also trans or transitioning. Many participants, particularly trans women, experienced minority stressors related to being trans, such as discrimination, harassment, and stigma (Hendricks & Testa, 2012). This list indicates the complex intersections of identities and life experiences that refute transition as a simple process that can be unequivocally associated with increases in emotional wellbeing, even though bringing one's body and social identity in congruence with one's felt gender is important and often necessary for survival.

***“Things are getting better,”*** P6 (who is also B72) said in our interview, ***“but other things are getting worse.”*** They described this sentiment in more detail in their blog:

*The bottom line is: **my life is not okay right now** because I'm working too much, my partner is working too much, and we're not making enough money to stay afloat. Me getting a full-time job would greatly improve the situation. Getting a job teaching at the college level is very hard... Add being a big ole queerbot to the mix, add being trans to the list, add not passing as cis anything to the list, add having seemingly incongruent pronouns, gender marker, name, and way of dress, and we've got some problems... **I have to trust that people won't discriminate.***

As a non-binary person, P6/B72 may exist indefinitely in the transition stage. While their gender makes sense to them, it may never match societal ideas of gender in a way normative enough to

allow them to achieve basic needs, such as employment and financial stability. Thus, while P6's transition may be going well and their gender may be in line with their felt identity ("things are getting better"), minority stressors and fear of discrimination mean that "other things are getting worse."

In addition to trans identity disclosures, many of people's intersecting identity facets also require disclosures, which can be difficult. B21 wrote on his blog about how disclosing about his social anxiety was more difficult even than coming out as trans:

*I've told people about my divorce. I've told people I'm gay. I've told people I'm trans, but **the most difficult thing for me to tell people about is social anxiety.** It's been something I've struggled with for my whole life. I've made a lot of progress, but at the same time I have lots more work to do... It's something about me that I hate most, and has been a constant battle for me.*

Managing and disclosing his social anxiety is important and difficult for B21, and continues to impact his emotional wellbeing post-transition. For other people, other identity facets may be most difficult to manage and disclose.

Further, disclosing stigmatized identities does not happen the same way among all cultures. Gay identity narratives, for instance, have been constructed around white experiences and often fail to account for the complexities of people of color's experiences (Sanchez, 2017; Villicana, Delucio, & Biernat, 2016). Explicit gay identity disclosure is common for white gay men, but for Latino gay men, tacit disclosures strategies are prevalent instead, and are associated with healthy gay identity (Villicana et al., 2016). While for white men, concealing their gay identity negatively impacted wellbeing, for Latino men this was not the case (Villicana et al., 2016). Similar complexities arise around intersectional identities for trans populations, and race and

ethnicity likely impact how or if people disclose trans identity and how emotional wellbeing changes throughout transition.

Because gender transitions rarely if ever occur in isolation, it is not possible to isolate the effects of gender transition on people's emotional wellbeing. Instead, it is critical to study people's gender transitions as one part of their life that exists alongside many other parts of their life, many of which require decisions about what to disclose and what not to disclose to which audiences, on social media and beyond.

### **The incorporation stage involves moving away from trans as primary identity.**

Many people in my sample discussed the ways that their relationship with their trans identity, and disclosure pressures around being trans, changed substantially as they moved through and beyond the incorporation stage. For many, trans identity disclosure no longer felt necessary or important, and instead brought up safety concerns. B219 discussed this in the context of National Coming Out Day, a yearly occasion when many LGBTQ people celebrate their LGBTQ identities via disclosure, often on social media:

*National Coming Out Day, and coming out in general, hits a particularly sore spot for me personally... **What do I have to come out about?!** Everyone knows I'm a guy; I have facial hair, and haven't been misgendered for months. Because of the nature of my journey, **I no longer have a need to come out; in fact, when I am outed my safety is compromised, and it is unbearably uncomfortable for me.** I have no desire to tell the entire world what is in between my legs. Coming out for me as a trans\* person was declaring a socially forbidden identity... followed by a completely different process: trying to pass, trying to hide an innate truth from the rest of the world. At first, I had to*

*come out to everyone I spoke to who called me a 'she' or a 'her.' **Slowly, day by day, I was forced to come out less and less.** I started hormones, and six months later, I am blessed to say that **I can finally be at peace NOT having to come out to anyone.** I'd even say that one day, I hope to be completely stealth. So, **no thank you, National Coming Out Day.** You are great for LGBTQ individuals, but please don't pretend that you are even thinking about the T.*

Here, B219 discussed the ways disclosure needs changed throughout the different stages of his transition, and this disclosure pattern was similar for others in my sample as well. In the separation stage, when he appeared as a cisgender woman, disclosing that he was trans was “declaring a socially forbidden identity.” During the transition stage, when he attempted to appear male but was often misgendered, coming out as trans was something he was “forced” to do to assert his male identity. Yet as he moved through the transition stage and the incorporation stage, trans identity disclosures became unnecessary, as people viewed him as male, in congruence with how he wanted to be viewed. In this stage, trans identity disclosure became a threat to safety, as it identified his gender as somewhat different than people’s perceptions of his gender. Interestingly, by becoming stealth and forgoing disclosure, B219 and other passing binary trans people face challenges more *different from* than *similar to* those in the trans population who either do not pass or are non-binary. In this way, as Davis argues in *Beyond Trans* (2017), some in the trans population are much more vulnerable than others, and those who remain vulnerable due to not meeting societal standards for gender presentation may have more in common with gender-non-conforming cisgender people than passing binary trans people.

During and after the incorporation stage, for many, being trans becomes less salient as an identity facet (Bockting & Coleman, 2013), even to the extent that some may “forget” that they

are trans. Szulc and Dhoest (2013) found that coming out is an important point of change for how LGB people use the Internet – that is, they use it far more for LGB-related purposes before and during the coming out process than after, as sexual identity becomes less salient as an identity facet – and disclosure may also be a point of change for how trans people use social media. B98 described such an instance on his Tumblr, and noted how the salience of his trans identity differed between physical world and social media contexts:

*I was eager to take my shot this afternoon but then I found out that I ran out of syringes and needles. This is not the first time this has happened, and actually this has been happening more often than not. **Clearly I've been forgetting that I'm trans and that I will need to inject testosterone for my whole life. This is ironic because I write posts about my trans experience regularly on social media but outside of Facebook and Tumblr, I forget I'm trans since it's no longer such a pressing issue.***

For many, being trans becomes less of a “pressing issue” post-liminally. Yet those who use social media as an outlet to raise visibility about trans issues and to provide information for others continue to discuss trans issues on sites like Tumblr and sometimes Facebook.

During the first two stages of transition, one's trans identity necessarily becomes a major focus of one's identity and daily life. Yet in the incorporation stage, people work to reunite with the other identity facets that may have been relegated to the sidelines as gender transition was prioritized. B45 described his process:

*I've been heavily concerned upon what my transition, the medical portion of it, was doing to me and **that was all I could focus on.** I started to re-find my identity is the testosterone and the fact that I'm transgender. **There is so much more to me than being trans. I am a cellist - classically trained, a fanboy, I am Christian, I am a lover, a nerd, a dork,***

*photographer, videographer and so much more. Yes, I am trans it is something that I really talk about here alone. But it is not everything. As a Christian, I should be finding my identity through Christ to begin with. So this is me saying that I'm going to stop worrying so much about my medical transition and **start refocusing on things more important to me.** People in my life love who I am as a person, as Caleb – not because I am transgender but because I am Caleb and **who that person is altogether.***

B45 described feeling conflicted when he discovered that he had ignored other important parts of his identity by focusing so heavily on his transition. The incorporation stage, for him and many others, involved bringing those other identity facets – Christian, cellist, photographer – back into focus in tandem with his new identity as Caleb.

Yet for some, when their trans identity becomes their life's focus, it becomes difficult to know what to focus on once their transition goals are met. Because gender transition involves many tangible steps, including social, medical, and legal milestones, people sometimes begin to relate to transition progress as they would a checklist. Yet as everyone who has completed a checklist knows, often with the sense of relief comes a sense of aimlessness. B49 reflected on her feelings upon nearing the end of her transition:

*The past few weeks I've been ruminating on something I've noticed about myself... **my mood tends to be affected by whether or not I think I'm progressing in my transition.** Like, real talk: I've been out and living as Rylee for over a year. I've been at my current company for nearly 2 months, and nobody there knew me before the Big Switch. That's pretty awesome. But nonetheless, **I'd been feeling a little bit... listless,** I suppose, almost like I was drifting. Like, what was I doing with my life, beyond the day to day work of a job and a family? But then, I bought a Groupon to restart laser hair removal for my face,*

*and made an appointment to have a GRS [gender reassignment surgery] consultation with Dr. Bowers, and suddenly I'm making progress again, and am feeling pretty great about that. **But then it occurred to me: this isn't sustainable. At some point, I'll be 'done,' for some definition of that word (for me, it's probably GRS). Then what do I do with myself?** As a Mormon, my life had a very definite purpose, and very clearly defined goals. At any given point, I could self-evaluate how I was doing on those things, and how I could do better. Leaving that worldview has been tough, because now, my goals aren't dictated to me by prophet or tradition, but instead have to come from within. For the past few years, coincidentally around the time we left the church, I was able to neatly plug my gender transition into that empty goals slot in my head, so I suppose I didn't feel this as acutely. **But as time goes on, I'm going to have less and less to do on that checklist, so I'd better get busy setting more long-range goals.** Because otherwise, what even was the point?*

Such a goal-driven approach can make the incorporation stage especially difficult as a person determines how to live in the world as their new identity, which requires finding non-transition-related goals and aspirations once one's transition goals near completion. For people whose life focus has been on a transition with tangible changes for several years, establishing new goals can be trying. P10 described a similar trajectory as B49, describing the contrast between the "highs" of transition progress and the stability of post-liminality:

*In November, I was like: 'oh, yay, I started T.' And I started getting all those first blah, blah, blah, like I have facial hair now, and hair on my body now, my voice is changing, and like all that new stuff that happens kind of early on, and **then it just kind of peters off and plateaus.** Because I remember I was like okay, I haven't noticed anything new...*

*After all that it's just been stable and everything, there has not been a whole lot of highs... It's like: okay, I'm kind of over all this new stuff and it's just my normal life now.*

Post-transition, each person must find their “new normal” – a “reconfigured lifestyle where previous social and technical infrastructures have been torn down and replaced with tenuous and emerging social groups and resources” (Massimi et al., 2012) – which can be a difficult process. After transition’s volatility, the “plateaus” described by P10 can feel jarring. Yet, as I discussed earlier, because life transitions do not occur in isolation, it is only a matter of time before people encounter new life changes that disrupt those plateaus.

### **Trans identity is precarious even beyond the incorporation stage.**

Despite the shift into a new normal and the prioritization of other, non-trans identity facets, one’s trans identity remains precarious even beyond transition. Bloggers described jarring experiences when their transition “completeness” was interrupted by involuntary trans identity disclosures, in both online and offline contexts.

On social media, the presence of family and friends who had known one pre-transition creates potential for those people to disclose one’s trans identity at any time. B153 described this on her Tumblr as “*that feel when you’re stealth and your dad almost does something to potentially out you over Facebook :|||*” While many trans people are open about their past identity, they still often wish to control how, when, and to whom their trans identity is disclosed. Yet the nature of social media and networks that remain after identity changes disallow people full control over disclosure of their own trans identity.



In other contexts, identity stability in bureaucratic environments can cause one's previous name or identity to resurface. B158 described a trip to the DMV in which he was forced to disclose his trans identity despite having transitioned years before:

*So, I made an appointment at the DMV to get my car and motorcycle registration updated. When I got up to the counter, I handed the person my paperwork. He typed in the information for my motorcycle into his computer. He looked up at me and told me that it's in a different name from what's on my driver's license. So I told him I changed my name. Then he goes, 'but this is a woman's name.' **I had to explain that I changed my name and gender (which is already in their system).** He scrolled around for a while and finally tells me after like 15 minutes of me standing there that I have to bring in my title and get the name changed on that before I can update my registration. **My name has been changed now for 3 years. I wonder if there will ever be a point where I don't have to deal with this** or get random mail with my old name.*

These examples indicate the ways that even post-liminally, trans people must engage with and anticipate their pre-transition identities resurfacing, often at inopportune or unpredictable times and settings. Beauchamp (2009) argued that state documents like birth certificates and drivers licenses make it impossible to fully conceal one's trans identity and history, and as a result, trans people are often subject to embarrassment, discrimination, and restricted rights at the hands of administrative systems that enact what Spade (2011) calls "administrative violence." Gender transition is not only a social, medical, and legal process; it is also a process of transitioning the data that sutures one's former name and identity their current name and identity, and unfortunately, much of this data is sticky (Haimson et al., 2016; Mackenzie, 2017).

Troublingly, even if one's transition is "complete," trans identity remains precarious all throughout life, whether on social media, in bureaucratic environments, with potential romantic partners to whom one feels obligated to disclose, and when running into people from one's pre-transition past. Fear of losing control of one's identity and life story may even permeate one's death; as B55 wrote, *"I'm terrified that even though my father is completely supportive of me transitioning, if I died, he may bury me under the wrong name."* The incorporation stage is temporary for most, and ends when a person combines their trans identity with other salient identity facets and reaches a new normal. Yet, trans identity disclosures still happen, often involuntarily, and one's previous identity may continue to haunt them even long after their transition.

## **Discussion**

In this chapter, I presented results detailing what happens after disclosure processes are more or less "complete," and people incorporate their trans identities into their networks and the rest of their lives. I showed that while some people have overwhelmingly positive trajectories post-transition, others do not. This is because one's trans identity, and gender transition, cannot be separated from the other life events and identity facets that intersect with them. Thus, in trans people's post-transition lives, emotional wellbeing is impacted not by their trans identity or transition status, but by the ups and downs of life, as experienced by all people, trans or not. Yet, I showed how for some, gender transition is never "complete." Additionally, even for binary trans people post-transition, their trans identity may be inadvertently and sometimes involuntarily disclosed in both online and offline contexts.

How people feel over time, and how well their personal narrative matches up with the dominant It Gets Better media narrative, impacts how people present themselves on social media. It Gets Better posits social media as a place to share positive life experiences, and to share negative content only if it is in the context of a positive trajectory. Many trans people latch on to this narrative, which makes a strong link between adults posting positive content on social media and the younger generation of trans people's wellbeing and survival. Yet complicated feelings and inadequacies may arise when people feel that they are not living up to the narrative, and thus not providing a "good example" for trans youth. In my study's Tumblr and interview data, there were many subtle references to the It Gets Better narrative and the ways that it caused difficult feelings, especially for those whose emotional wellbeing did not improve over time. This leads people to feel a sense of responsibility and an expectation to post positive content – which does not fit well with people's perception of Tumblr as a safe, comfortable space to be oneself and speak one's mind (Renninger, 2015). Tumblr is an online space where people can share negative content, and can complicate the It Gets Better narrative through genuine self-presentation. The powerful nature of social media is its ability for both virality of certain ideas, and critique of those same ideas; as Puar (2010) noted, "ultimately, the best part of the viral explosion of Savage's project [It Gets Better] is that so many have chimed in to explain how and why it doesn't just get better. The very technological platform of the phenomenon allows the project to be critiqued from within." While by "platform" Puar likely means YouTube, It Gets Better spread far beyond YouTube, and so do its critiques. On Tumblr, transition bloggers simultaneously internalize and critique It Gets Better with posts saying things like, "they say it gets better, but..."

The RealLiveTransAdult movement, another means of spreading positivity to young trans people, appears similar to It Gets Better – they are both driven by positivity and a goal to improve the lives of young LGBT people and to dissuade teens from suicide by sharing LGBT adults’ stories. Yet there is important distinction between these two movements that became visible in my analysis of transition blogs. The distinction lies in the difference between “Better” and “Live” or “Adult.” While It Gets Better simplifies LGBT experiences and ignores intersections with race/ethnicity, gender, class, and other identity facets that make an unambiguously “better” life trajectory unguaranteed, RealLiveTransAdult instead signals that youth *can and do survive to adulthood*, whether or not things get better. It Gets Better assumes that LGBT people’s lives improve as they grow up, which is not always true depending on life circumstances. RealLiveTransAdult instead provides concrete evidence to trans youth that trans people survive, and become adults, even when taking into account the challenges they may face not only as a trans person, but as a person with myriad intersecting identities, many of which may be stigmatized. In this way, subtly and cleverly in its succinctness, RealLiveTransAdult radically presents an intersectional version of It Gets Better; a way to spread positivity without the assumption that if a person does not necessarily feel better over time, then they must be doing something wrong. Other social media movements, such as #GirlsLikeUs on Twitter, have somewhat different focus, yet similarly promote an intersectional vision of trans survival and support trans identities via collective advocacy (Jackson et al., 2017).

Returning to van Genneep’s (1909) liminality framework, the incorporation stage is presented, particularly by Bridges (2004), as a process in which one projects their new identity on the blank slate that was created during the transition stage’s “neutral zone.” I argued in Chapter 6 that the transition stage is not neutral; that instead of being neither their previous identity nor their future

identity, people often embody multiple identities simultaneously, on social media and beyond, depending on context. Similarly, then, the incorporation stage is not a shift from neutral into an identity. Instead, the incorporation stage involves bringing one's new gender identity into a primary position: going "full time," as trans people call it. Then, after making one's new gender salient and lived, one's trans identity often becomes less salient over time as other identity facets take precedence. This is clear in the examples I described above, in which some people "forgot" they were trans, and others made an effort to live as a more holistic identity made up of many different facets, rather than centering their identity around their transness. I also showed how, for some, the incorporation stage involved determining new life goals to work towards, as one's transition goals were completed one by one. People's lived experiences indicate that rather than shifting from a "neutral zone" into a new identity, instead identities shift, and some facets become more salient than others over time.

In this chapter, I complicated the relationship between gender transition and emotional wellbeing over time by showing that how a person feels over time depends on many factors, and many different intersecting identity facets and life circumstances. Even though, as shown in Chapters 4, 5, and 6, on average people's emotional wellbeing improves throughout the gender transition process, there is substantial variance in this statistical relationship. This chapter helps to understand some of the potential reasons for this variance, and is an example of the ways that mixed methods can help understand complex phenomena in ways that may not be possible using any one method in isolation. In this way, I use intersecting methods to understand gender transition with an intersectional lens.

## CHAPTER 8

### DISCUSSION: SOCIAL MEDIA AS SOCIAL TRANSITION MACHINERY

In this dissertation, I present results from my analysis of transition blogs on Tumblr and interviews with bloggers to provide three main contributions:

- 1) An empirical examination of the relationships between trans identity disclosures, emotional wellbeing, and social support over time
- 2) An understanding of the unique aspects of people's transition experiences
- 3) An understanding of how people experience liminality on social media

In this final chapter, I begin by summarizing my results chapters and the patterns describing how emotional wellbeing changes over time. I then discuss my results in the context of the literature on liminality published in the past century, both pre-social media and in the context of social media. Next, I discuss rites of passage and argue that reconstructing one's online identity is a rite of passage in networked societies. I then introduce my *social transition machinery* lens and provide a new understanding of how liminality works and how people experience liminality on social media. I close with several implications for design, including an argument for the importance of social media site separation.

#### **Summary of results chapters**

In Chapter 4, I characterized Tumblr transition blogs and the network surrounding them as a supportive online community. Yet at the same time, bloggers considered Tumblr a place to spend time alone. People retreated to Tumblr and moved away from their Facebook profile and network, yet continued to use their Facebook profile to interact with their online social network and represent a version of self to that network. I quantified the order that trans identity

disclosures occur, and found that people generally disclose early to friends, followed by family. Facebook disclosures occur later in the transition process, and serve as a means of mass disclosure. Overall, after disclosures (without accounting for different types of disclosure audiences), people's emotional wellbeing improved in the long term following disclosures.

Chapters 5 and 6 add important detail about emotional wellbeing changes to van Genneep's liminality framework. In Chapter 5, I focused on the separation stage, which I characterized as corresponding with disclosures to family members. I found that after trans identity disclosures to family members, people's emotional wellbeing decreased in the short term, yet increased in the long term. Support from non-family members, but not from family members, is associated with greater emotional wellbeing. In Chapter 6, I examined the transition stage, which I associated with trans identity disclosures on Facebook. Trans identity disclosures on Facebook are not associated with emotional wellbeing changes overall, but those whose Facebook networks are supportive experience increases in emotional wellbeing in both the short term and the long term. This indicates that support moderates the relationship between disclosure and emotional wellbeing after Facebook disclosures. While the transition stage has been theorized by many as a "neutral" stage, I instead argue that people are not neutral, and instead experience and present gender differently in different contexts during this stage, in large part depending on to whom they had and had not disclosed. Tumblr networks provided a space for meaningful social interactions and self-presentation as one's "new" gender.

In Chapter 7, I described what happens in the incorporation stage and beyond, after one's transition is "complete." I complicated the relationships between transition status and emotional wellbeing, arguing that though on average people's emotional wellbeing increased after trans identity disclosures, people's affect also depends on many intersecting life circumstances and

identity facets. I described how the dominant It Gets Better media narrative impacted people’s self-presentation on social media, and posit that narratives that account for intersectional identities are ultimately more realistic in practice. Finally, I theorize the incorporation stage as, post-disclosure, shifting to presenting one’s new gender across most contexts, rather than shifting from a neutral zone into an identity.

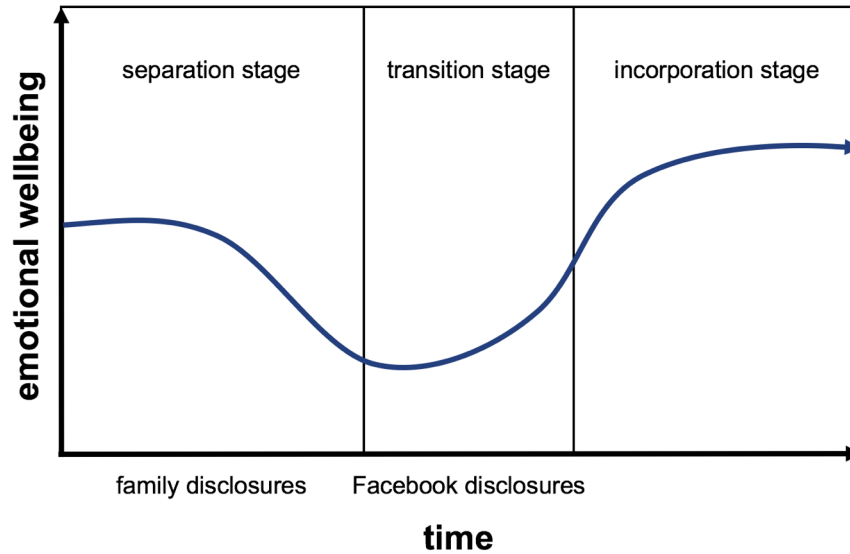
**Patterns in emotional wellbeing throughout gender transition over time**

A major contribution of this work is an understanding of the patterns in emotional wellbeing changes throughout the liminality stages during gender transition. Table 8.1 summarizes these empirical results, and Figure 8.1 displays a conceptual visualization of these patterns over time. During the separation stage, which involves disclosures to family members, emotional wellbeing decreases on average. It may be that this pattern is a result of the family disclosures themselves; but it is likely that, because family disclosures happen during the separation stage (which is a difficult time in general for those in transition, due to personal discomfort and minority stressors like discrimination and harassment), these emotional wellbeing changes instead signal a larger pattern of emotional wellbeing during transition. Next, during the transition stage, which involves trans identity disclosures on Facebook, emotional wellbeing increases. Finally, in the incorporation stage, people’s emotional wellbeing increases to a level on average higher than their pre-transition emotional wellbeing. The initial decreased emotional wellbeing shown in

	<b>short term</b>	<b>long term</b>
all disclosures (regardless of audience)	increase if supportive response	increase
family disclosures	decrease	increase
Facebook disclosures	increase if supportive response	increase if supportive response

**Table 8.1. Emotional wellbeing changes over time on average after trans identity disclosures.**





**Figure 8.1. Patterns in emotional wellbeing changes over time on average throughout the liminality stages.**

Figure 8.1 is likely a result of minority stressors like discrimination, harassment, and disapproval from others, and personal discomfort in the early stages of transition. The long term increased emotional wellbeing signals that as people’s bodies and social identities align with their internal gender, and as people in their lives may become more supportive over time, they tend to feel better. These two effects happen in tandem, but in the short term the difficulties and negative aspects of transition are more prominent, while in the long term, transition’s positive benefits prevail.

While it is important to understand average emotional wellbeing patterns over time during transition, it is also important to consider that averages are only that: averages. The data represent people’s lives, meaning that patterns are messy and involve high variance from person to person. Wellbeing trajectories are substantially different for those people whose emotional wellbeing tended to increase after disclosures, and those whose emotional wellbeing decreased after disclosures – two types of people who I included in my study’s interview sample.

Additionally, as I described in Chapter 7, average wellbeing over time patterns are complicated by the intersecting identity facets and other life transitions that people experience at the same time as their gender transitions. This makes it so that the steady long-term improvement in emotional wellbeing shown in Figure 8.1 is not representative of many people's experiences. Those who have other stigmatized identity facets, and who experience other distressing life changes along with gender transition, have very different emotional wellbeing trajectories over time.

Despite these complexities, understanding the patterns that occur on average during the liminality stages provides important context both for technology designers who wish to design inclusive technology for people facing life transitions, and for those facing life transitions themselves to be able to anticipate changes in affect and potentially put support structures in place to help navigate the difficult stages of transition. Additionally, these patterns can provide helpful information for future health interventions. For instance, average gender transition wellbeing trajectories could be an important source of information for mental health professionals, who are often some of the very first people to whom trans people disclose their trans identity. Armed with this information, mental health professionals could help their patients know what to expect, and make sure that they have sufficient support structures in place, as they embark on gender transition and trans identity disclosures to the people in their lives.

### **Liminality, then and now**

The major work on liminality throughout the 20<sup>th</sup> Century characterized the transition stage as neutral, or a state of betweenness. Following van Gennep (1909), Turner (1969, 1987) described the ways in which liminal people were stripped of identity to become a “blank slate” or a

“uniform condition,” on which one’s new identity could then be inscribed. Turner (1969), in a quote that has been cited abundantly in the life transitions literature, wrote that people in the liminal stage are “neither here nor there; they are betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial.”

In the context of gender transition, while most previous studies have characterized liminality as a neutral state, each gives hints that it is more complex than this. Bolin (1988) used Turner’s (1969) neutrality framing to describe transition as “a journey through liminality, where transsexuals are ‘betwixt and between,’ for they are no longer males and not yet complete women.” Yet even so, Bolin (1988) described many instances throughout the transition process in which trans women presented as women in certain social contexts, and as men in other social contexts – a practice that caused distress for participants. This signals a liminal state that is more *both* than *neither*, as I also find in this study. Wilson (2002) also described gender transition as a state of betweenness and limbo, yet at the same time discussed the identity multiplicity that occurs during the liminal stage. Participants in that study described feeling *neither* because gender categorization systems failed to account for their liminal state – not because of an internal sense of lacking identity (Wilson, 2002). More recently, in a survey of trans and non-binary people, Harrison et al. (2012) found that 20% described their current primary gender as “part time as one gender, part time as another,” signaling that gender fluidity and oscillation is relatively common. Similarly, Bauer et al. (2017) quoted an interview participant as saying, “*It’s hard to distinguish for me between feeling both male and female and feeling neither.*” Ambiguity is an important aspect of gender transition, and on a personal level, people cannot always distinguish between a gender identification that is back-and-forth, or one that is between. Turner (1987) briefly discussed the notion that those in the liminal stage may experience multiple

identities in addition to his primary conception of liminality as a neutral state of betweenness, and acknowledges that identity may be ambiguous and paradoxical during transitional stages. In my argument I do not mean to place any claims on how people self-identify, or imply that people's self-identification is with multiple genders rather than one or none. Instead, I address the ways people *present* different gender presentations to interact in different social contexts, many of which are facilitated by social media.

While I argue that the transition stage is not neutral, certain aspects of Turner's (1969) transition framing are useful to theorize Tumblr transition blog communities. Turner (1969) described the ways in which people who are together in the liminal stage form kinship, camaraderie, and social structure as a result of being equal in their neutrality. He used the term *communitas* to describe these groups of people who experienced transition together, and described them as not only liminal (i.e., in the crevices or "interstices" of societal structure), but also marginal (i.e., on the edges of society) and inferior (i.e., beneath the rest of society) (Turner, 1969).

While the *communitas* concept (Turner, 1969) cannot as a whole be applied to Tumblr transition bloggers, certain aspects do apply. Namely, Tumblr transition bloggers form a supportive community that embodies kinship and camaraderie and forms a social structure around the shared experience of gender transition. Yet transition bloggers are not neutral, liminal, marginal, and inferior in the ways that Turner (1969) characterized other *communitas*. Those embarking on gender transition form bonds based on shared experience and social support, not because of a shared neutrality. While transition bloggers are liminal, this liminality does not place them in the crevices of society (i.e., between two social roles) as Turner (1969) described, but rather sees them presenting differently in different social contexts (e.g., Tumblr

and Facebook). Trans people are marginalized in the sense that they are othered and treated as outsiders by many, but not in the sense that they exist on the edges of society; rather, they exist in the same social structures as everyone else, though sometimes in multiple forms simultaneously. And finally, though many people may consider trans people to be inferior, those in transition do not generally consider themselves inferior to the rest of society.

Turner (1987) also characterized liminal people as invisible to society, a notion that is interesting to consider in the context of Tumblr transition blogs. Visibility is not a major motivation for transition bloggers, and most transition blogs' audiences are other trans people, not the general (cisgender) public. Most transition blogs are intentionally visible to those who can give and receive support, yet invisible to everyone else. In this sense, people's presentation on transition blogs could be characterized as invisible to broader society. Yet this implies a cisgender lens, and the notion that one can only be visible if seen by dominant societal audiences. In a transitional stage in which being seen in public is often precarious and can even be dangerous, being visible and seen within a supportive online community of similar others, however small and marginal, can have major positive impact on one's wellbeing.

### **Liminality and social media**

A major contribution of this dissertation is a new understanding of how liminality happens and what liminality means on social media and in relation to online identity. Van Gennep's (1909), Turner's (1969, 1987), Bridges' (2004), and Bolin's (1988) conceptions of liminality as neutral may have been true for the cultures and time periods they studied, and may also be related to their anthropological disciplinary and research approaches. What is different in my study, other than the differences in time, discipline, and methodological approach, is the element of social

media. Social media means it can be difficult to escape one's social networks, but at the same time enables a unique way to present multiple identities at once. Liminality is inherently different when expressed on social media, because people can simultaneously be two, or more, identities at once, and can segment audiences and networks by using multiple platforms (in this case, Tumblr and Facebook) or account management strategies. Presenting different online selves does not necessarily mean that one identity is more "real" than another (S. Zhao et al., 2008); each are genuine in some respects, and performative in some respects. Throughout transition, different online identities' salience shifts, and some profiles may remain only as a stand-in self-presentation for those to whom one has not disclosed their trans identity (e.g., in the case of those who maintain a Facebook profile for their previous gender, for the benefit of extended family members to whom they choose not to disclose). Other profiles are used heavily. The important thing here is that, in whatever configuration, multiple online versions of self can present different identities simultaneously. Social media enables this simultaneous identity multiplicity in a way not possible in the physical world.

In networked societies, people do not often physically remove themselves from their existing networks during life transitions, and they do not fully remove themselves digitally either. Disconnection, as Harmon (2015) argued, is not only about removing oneself from technological devices (and in this case, the social media sites to which they provide access), but also involves shifting contexts and networks. People reconfigure social contexts and networks on social media during life transitions (e.g., by editing their networks or shifting to different accounts or sites), and exist as a hybrid of online identities that both enable disclosures, and change and shift after disclosures.

A small set of previous literature has examined liminality and rites of passage on social media, yet conceptualize it differently than I do here, largely due to different research questions and approaches. For instance, Papacharissi (2015) theorized online citizen journalism as a liminal space. I briefly discuss each of these works and how they relate to the present study before presenting my own argument for how liminality works on social media.

Ringland (2018) discussed the ways in which moments of sign-up for virtual worlds and social media sites are liminal spaces between physical and virtual worlds. Similarly, Herwig (2009) considered sign-up procedures on social media as a liminal stage where a person transitions from one social status to another via an interface, and discussed the ambiguities that people often feel when first attempting to understand how to use a social media site. Herwig (2009) also posited that people go back and forth from mainstream society to *communitas* when they log in and out of Twitter. Yet in contrast with the time when that paper was written, in the present, people rarely “log out” of social media sites, and thus exist simultaneously in mainstream society and in liminal communities.

In online forums (pre-social media sites like Facebook and Tumblr), Madge and O’Connor (2005) theorized liminal space as a simultaneous existence in online and physical space while between life stages. They found that new mothers used the Internet during this liminal phase in their lives to explore their new identities as mothers and to craft new selves (Madge & O’Connor, 2005). Yet in 2005, when that research was conducted, Madge and O’Connor (2005) found that women substantially decreased their Internet usage after this transitional stage was over. This is no longer true; as evidenced by transition bloggers’ experiences and by pervasive social media use over time in the population more broadly (Greenwood et al., 2016), people stay online throughout and beyond life transitions. Yet people do use online sources more for

information seeking, support seeking, and community building during life transitions, as I found in the case of Tumblr transition bloggers.

Robards (2012) found that transition from one social media site to another (e.g., MySpace to Facebook) was considered a rite of passage to adulthood for some. At that time, young people viewed MySpace as an online space separate from adults, and thus by transferring their online profiles to Facebook instead, they became part of the adult world (Robards, 2012). Such transitions left digital traces, and were highly visible rites of passage (Robards, 2012). Similarly, during gender transition, people make highly visible changes to their online identities, in the form of trans identity disclosures and profile changes on Facebook. Yet unlike the transition shift from MySpace to Facebook, in the case of Tumblr and Facebook people do not leave one site and go to another. They continue to exist simultaneously and present multiple versions of self on Tumblr and Facebook, even after reconstructing their Facebook identity to be in line with their new gender.

Finally, De Choudhury and Massimi (2015) found that people use social media during marriage engagement to project this liminal stage to their networks and make the transition visible. As in this study, they found that engagement prompted significant linguistic changes on social media (De Choudhury & Massimi, 2015). People increased posting in a “rush of excitement” to reach their audience and present their new social role. In this way, people used social media as part of the liminal ritual of exiting one’s single identity and entering a new social role as a coupled person (De Choudhury & Massimi, 2015). This serves as evidence that social media is an important means of rites of passage, as I argue in this work.



## **Pervasive liminality and non-binary gender identities**

In Chapter 6, I described how the liminality framework does not sufficiently account for non-binary identities. Non-binary trans people may exist in a permanent liminal stage because rather than transitioning from one binary gender to another, they transition to something outside of the gender binary, and as such remain illegible to much of society. This is related to the concept of pervasive liminality, in which people remain in a liminal stage for an extended period of time, and have “complex and paradoxical experiences that do not easily fit within familiar categories of experiences” (Bruce et al., 2014). Much of the literature on pervasive liminality has been in the context of chronic illness. For instance, Bruce et al. (2014) found that those diagnosed with cancer expressed many ambiguous feelings simultaneously. They described feeling that they both had cancer and did not, were both worried and not worried, wanted to know the diagnosis yet at the same time did not want to know, and desired both visibility and to not be visible as a cancer patient (Bruce et al., 2014).

In the case of cancer survivors who experienced prolonged liminality, Sleight (2016) found that after experiencing rites of passage, people could move on with their lives, yet include space for the illness experience in their life narrative (Sleight, 2016). Similar processes occur for some trans people, who post-liminally incorporate their trans history into their life narratives. Yet others, such as some non-binary people, do not seek to move on from their liminal identity. Similarly, Bruce et al. (2014) found that some with cancer diagnoses did not wish to resolve their liminality and move on, but rather attempted to reconcile opposing feelings and narratives. As one way of doing this, they often told people different versions of their cancer diagnosis story (Bruce et al., 2014). Presenting self differently in different contexts can be an important way to manage the complexities and ambiguities of prolonged liminality. Yet, presenting different

versions of self is often viewed as “inauthentic,” and frowned upon in our society and by Facebook’s current leadership (Haimson & Hoffmann, 2016). Social media sites, however, are important means to present oneself differently in different contexts, and thus are important tools for living with prolonged liminality.

I provide the caveat that cancer diagnosis and transition to a non-binary gender are vastly different life transitions, for many reasons not least of which is that the former is tragic and involuntary, while the latter is generally positive and can be embarked upon in a more voluntary manner. I do not intend to draw parallels between these other than that they both involve substantial change and pervasive liminality.

Van Gennep’s (1909) liminality framework assumes an incorporation stage, and requires updating to account for those who do not seek to re-incorporate into traditional social roles (e.g., man, woman) post-transition. Living with prolonged liminality can cause distress, but not always because of internal incongruence. Rather, as described in Chapter 7, distress results from others’ expectations and minority stressors (e.g., inability to find work due to a non-normative gender presentation). Updating the liminality framework to posit the incorporation stage as optional is a first step in societal change toward acceptance of those with non-binary genders and other pervasive liminal identities. As an important part of this, social media sites must be designed to be inclusive of liminal identities and multiple presentations of self.

### **Rites of passage and identity transformation**

Identity transformation on social media is a rite of passage in our society. Drawing from the liminality literature, I first describe what rites of passage are and what they mean. Rites of passage are transformative and confirmatory events that enable people to transition from one

identity, social status, or social role to another (Martin-McDonald & Biernoff, 2002; Turner, 1987). Rites of passage provide structure and meaning and are meant to dampen the stress and anxiety that accompany moving from one social role to another by giving the transition a cultural lens (van Gennep, 1909). Rites of passage help people to reconstruct their lives to fall in line with their new identity, and require one to “pass through a socially mediated series of culturally as well as personally meaningful experiences” (Martin-McDonald & Biernoff, 2002). Rituals can help people integrate their life transition, and their previous identity, into their life story, which in turn can improve wellbeing (Sleight, 2016). Biographical work is a way of coping with life disruptions or transitions by connecting past and present life narratives, and can be used along with rituals to move through liminality and bring one’s narrative in line with their experience (Sleight, 2016). Rites of passage are often expressed using symbols and ceremonies. They often happen as part of religions, but religious ceremonies are not the only ways for rites of passage to occur (Bolin, 1988; Sleight, 2016; Turner, 1969). Rites of passage can involve anything that is meaningful or symbolic to a person (Sleight, 2016), and can be technological (Bolin, 1988). Rites of passage may not have concrete, measurable outcomes, given that they are deeply personal and often abstract (Sleight, 2016). They have in common the ability to propel a person forward out of the liminal stage. Rites of passage are “lenses through which to magnify” transition experiences, and to focus on and make visible the liminality patterns (separation, transition, incorporation) (Bridges, 2004).

Gender transition is a specific type of transition with its own particular phases and rites of passage. In her 1988 ethnography of women transitioning from male to female, Bolin (1988) characterized “transsexual rites of passage” as sex reassignment surgery (SRS) combined with “successfully” presenting as female in all social settings, which together enabled incorporation

into society as a woman. For Bolin (1988) and the participants in her study, SRS was considered the primary pivotal rite of passage that signified a move into womanhood. Yet today, as my study demonstrates, rites of passage are much more varied and complex. Many trans people do not seek SRS, and many that do cannot afford it. Lack of SRS does not always place people in a pervasive liminal state, as would be implied by Bolin's (1988) conceptualization. Instead of SRS, I argue that online identity reconstruction is a modern pivotal transgender rite of passage.

Like liminality more broadly, rites of passage have also been commonly theorized as involving a temporary neutral state. Martin-McDonald and Beirnoff (2002) defined rites of passage as "ritualized and institutionalized events in which individuals are taken from one social status to another, moving across thresholds where, temporarily, they are neither the previous status or the new status, but rather in-between." Yet on social media, rites of passage are not necessarily neutral, given that people often maintain multiple accounts and can exist simultaneously as represented by several often-discordant profiles. The truly neutral stage of rites of passage corresponds not to the transition stage as a whole, but instead to the momentary in-betweenness one experiences when moving from physical to virtual when setting up a new virtual identity (as theorized by Ringland (2018)) or bringing an old profile in line with their current identity. Yet even then, while reconstructing one's Facebook profile for instance, though a person may be neutral in that interface momentarily, they simultaneously also exist on Tumblr and on a myriad other social media as one or several identities.

Previous literature has often examined rites of passage in small-scale, non-technologically-advanced societies that were relatively stable. Van Gennep (1909) did not expect rites of passage to generalize beyond these small stable societies, yet taken together the liminality literature published in the century after *Rites of Passage* was published, it is clear that van Gennep's

liminality framework describes a pattern and a sequence that applies to all types of life transitions in all societies (Thomassen, 2009; Turner, 1969). While each society and each life transition has complexities and differences in the particular rites of passage performed, the liminal pattern is universal (Thomassen, 2009).

In modern Western culture, life transitions are often distressing and disorienting because they do not involve standard rites of passage, and thus can feel meaningless (Bridges, 2004; Martin-McDonald & Biernoff, 2002). Many traditional societies had standard rituals, or rites of passage, that helped people let go of one life stage and move to another (Bridges, 2004). While modern networked societies have standard rituals for life transitions such as marriage and childbirth, we do not have standard recognized rituals for many other life transitions, such as divorce, career change, transition from college to the workforce, and, of course, gender transition. Drawing from van Gennep's (1909) work, Bridges (2004) argued that:

*without formal **transition machinery**, such as the old rites of passage, we not only lack the support that traditional people enjoyed but also the powerful concentration that the old rituals provided - a power that took an extended and diffuse time of transformation and converted it into an event.*

**Social media is social transition machinery for identity reconstruction as a rite of passage.**

I provide a new understanding of social media as what I call *social transition machinery*. This is informed by Donath's (2014) characterization of the computer as a social machine, which is a "communication medium and a setting for interactions, an electronic place to see and be seen" and by Bridges' (2004) statement that we lack transition machinery for many life transitions. I

argue that social media *is* this social transition machinery that enables rites of passage. Social media accomplishes this in two ways: it serves as a means of biographical work and intense concentration on transition (e.g., on Tumblr), and as a means to convert a transition into an event (e.g., on Facebook). Transition experiences are fundamentally different in networked societies in the present time, particularly due to several factors related to social media. I will detail my argument in the context of this study, which involves gender transition on Tumblr and Facebook, but these results are likely relevant to other life transitions and other social media platforms. I outline my argument in four steps:

1. During the liminal stage, social media enables people to embody *multiple* identities simultaneously rather than being *neutral*.
2. People do not fully remove themselves from their existing networks during transition; they remain connected through Facebook, yet retreat to Tumblr to do transition work.
3. Social media act as *social transition machinery* during life transitions:
  - a. Tumblr is social transition machinery for concentration and biographical work.
  - b. Facebook is social transition machinery for converting a transition into an event.
  - c. Social support occurs on each of these sites as part of the transition process, but in different ways.
4. Combined, these social transition machinery serve as means for those in transition to reconstruct their online identity as a rite of passage.

First, social media enables people to present as multiple identities simultaneously, and as such, transition is not a neutral stage. This is in contrast to previous conceptualizations of the

transition stage as “neutral” or as a time in which one is “neither” the previous identity nor the new identity. Instead, during transition, people present different versions of self to different networks in different social contexts, on social media sites and in the physical world. It is important to make the distinction between liminality and neutrality because characterizing a period of people’s lives as neutral or identity-less is dangerous and dehumanizing. Particularly when many people in transition are already part of marginalized groups or are facing stigma as part of their identity change, adding neutrality as an additional judgement label may be especially harmful. People in transition have just as much identity as anyone else – it is just that that identity is multiple, fragmented, and complex. Changing the cultural narrative of identity transition to account for multiplicity and complexity, rather than characterizing people as neutral, could make great strides in improving wellbeing for people going through difficult changes in their lives.

Next, transition no longer involves fully removing oneself from one’s existing network, as was common in the cultures described in van Gennep’s (1909) and Turner’s (1969) work, but instead involves fragmenting one’s online social participation between several different sites. In networked societies in the present time, people remain connected to their networks on one site, and use another site to do transition work. In this study, people used Facebook to remain connected to their existing networks, and used Tumblr for transition work. Yet for other transitional populations, other sites, or multiple profiles or social spaces on one site, may fill each of these roles.

Because networked societies lack formal rites of passage for many life transitions, for social media users, social media fills this gap by acting as social transition machinery for life

transitions. Different social media sites serve as different types of separate social transition machinery that are separate but work together to facilitate life transitions.

For transition bloggers, Tumblr is social transition machinery where people concentrate intensely on their transition and their identity and engage in biographical work, such as by journaling, gathering information, and exploring their identity. Bridges (2004) characterized the transition stage as a time period in which people should go to an unfamiliar place to think a lot, do little, and act as though they are performing a ritual, in order to focus on the transition process. He suggested, “If you are happy, be happy. If you are bored, be bored. If you are lonely or sad, be lonely or sad... Whatever you are feeling is you, and you’re there to be alone with that very person” (Bridges, 2004). Bridges’ (2004) suggestion corresponds with my finding that Tumblr is an important place during transition for people to express emotions (whether happy, lonely, sad) and to be alone. Yet Tumblr enables people to be alone in a networked environment and among a supportive community of similar others.

At the same time, for many in transition, Facebook acts as transition machinery in which a transition becomes an event. Changing one’s online identity on an identified site like Facebook involves a symbolic passage and a change of status from one identity category to another. This can occur in many ways, such as by editing one’s Facebook profile with a new name, gender marker, appearance, and sometimes network; by creating a new Facebook profile with these attributes; and by disclosing one’s trans identity to one’s Facebook network. Any combination of these behaviors that signals a gender change to one’s network serves as a means for converting a transition into an event, and thus a social and cultural rite of passage. Symbols in rites of passage often reference both one’s past and future status (Bolin, 1988). Changing one’s gender marker, name, and/or profile photo on Facebook is a symbolic aspect of gender transition rites of passage



that involves both one's past and future identity and a shift from the former to the latter. At the same time, changing one's online identity via Facebook profile attributes signals the change to one's network and converts the transition into an event.

Social support is an important part of social transition machinery that occurs on both of these sites, but in different ways. On Tumblr, transition bloggers form a supportive community of people going through a similar life change, and share advice, information, emotional support, and a sense of belonging. On Facebook, after a person converts their transition into an event, their existing (e.g., pre-transition or "real life") network rallies around that event to provide support in the form of likes, comments, and messages.

Reconstructing one's online identity is a rite of passage. My social transition machinery lens provides new insight into how life transitions are conceptualized, and what social media means during life transitions.

### **Implications for design**

Understanding social media's role during life transitions, and how emotional wellbeing changes after identity disclosures, provides implications for effectively designing technology that accounts for and supports people during times of transition. Social media technologies can enable people's networks to provide support, and potentially provide support themselves, to those who most need it during life transitions. Yet such interventions must be designed to work in the complex and changing contexts people use social media during transitions.

### **The importance of social media site separation**

Social media are a series of separate sites that together enable identity reconstruction as a rite of passage; yet at the same time, identity change requires network separation. However, social

media sites and services constantly urge users to connect across sites and networks that may be discordant. This brings up a difficult technological and social challenge. Transition bloggers' retreat to Tumblr during transition is in a sense an act of resistance to the urge for connectivity. Tumblr enables separation from existing networks and rejection of traditional tie-based social connections.

I discuss these results by drawing from Donath and boyd's 2004 article "Public Displays of Connection" (Donath & boyd, 2004). In the early days of social network sites (SNS<sup>22</sup>), Donath and boyd (2004) discussed how SNSs, by making people's connections visible, removed some of the privacy barriers that people use in the physical world to separate incompatible social contexts. In the physical world, people separated social contexts with time and space; yet on SNSs, one's entire network was brought together into one digital space (Donath & boyd, 2004), causing context collapse (boyd, 2008).

Donath and boyd (2004) suggested that people could segment their networks by using different SNSs as separate contexts, but that this would likely not be successful because one major benefit of SNSs is to have a set of diverse and heterogeneous connections and potential connections in one place. Instead, they proposed that a better solution would be to facet networks on one SNS by placing people into categories and posting content to selected groups of people (Donath & boyd, 2004). Interestingly, in the years since, this strategy has been implemented by a variety of platforms, most notably on Facebook in the form of friend lists and groups. Yet, despite the ability to facet networks using friends lists on Facebook, most users do not use this

---

<sup>22</sup> I make a distinction here between SNSs, on which people can "view and traverse their list of connections and those made by others within the system" (boyd & Ellison, 2007), and social media sites more broadly, where people's networks are not necessarily visible to others (e.g., Tumblr).

feature because it is cumbersome and confusing and due to a lack of trust that the privacy settings will work as intended (Acquisti & Gross, 2006; Haimson, Brubaker, et al., 2015; Sleeper et al., 2013).

Thus, instead of segmenting networks on one SNS, people often separate their networks by using different social media sites for different networks and purposes, as I have shown in this study. Such separations are not necessary for every context; if a person wants to post different content for their gym friends vs. their co-workers, Facebook lists may work fine. However, during major life transitions and in stigmatized contexts, people often find it necessary to impose boundary regulation by presenting a different identity and sharing different content on two different social media sites.

The sites where people go to present stigmatized or transitional content and identities are often sites where connections are *not* traversable. In this dissertation's case study, people expressed transitional identities on Tumblr, a site that does not show network connections by default<sup>23</sup>. People also use sites like Reddit, on which users do not have any sort of friend or follower network, to discuss stigmatized identities and experiences (Andalibi et al., 2016). Tumblr and Reddit, in addition to not showing visible connections, also enable people to create and use multiple accounts or profiles. In this way, Tumblr transition bloggers can have multiple blogs to segment their transition-related content and followers from, for example, their Pokémon obsession. Limiting networks can add value to those networks (Donath & boyd, 2004). Part of the value of the Tumblr transition blog community, and other transitional communities, is that

---

<sup>23</sup> Tumblr users can display their followers to others by augmenting the code for their blog, but the default is for connections to be invisible.

they provide a limited network that enables social transition machinery to work for a particular transitional context.

Given that the ability to present multiple identities on social media is a critical part of moving forward through life transitions, and that the ability to do so requires segmenting audiences, the idea of having *one* primary social media site on which to present oneself is antiquated, whether or not that site enables audience segmentation. Life transitions are not only a marginal state; every person experiences multiple life transitions throughout their lives, and sometimes several in tandem. Instead of a primary social media site that expects a static identity and a lifelong network, people require a series of separate pieces of social transition machinery that work together to facilitate life's transitions. Like cogs in a machine, these separate social media spaces work together but often do not intersect.

As technologists, we should resist uncritically espousing increased connection in online spaces and features that facilitate connection without accounting for context. While we certainly have the technological ability to link one's Facebook profile to one's Tumblr blog (e.g., through facial recognition or geographical or textual pattern matching), to do so would be both unethical and equivalent to throwing a wrench in the social transition machinery. Other attempts to connect people across sites, such as "people you may know" prompts, are useful in some contexts, such as if a person wishes to leverage personal connections to grow their professional network on LinkedIn. Yet an attempt to suggest connections to add to one's Tumblr network based on one's Facebook network would be deeply problematic, given the intentional separation that participants in this study described. Similarly, using Facebook or Google to log in to other sites across the Internet or mobile apps may inadvertently link sensitive or stigmatized identity facets to one's Facebook or Google profile and network. Connectivity can be powerful, and has

been a revolutionary benefit of the Internet. Yet separation can also be powerful in enabling people to make life changes and discuss stigmatized identity facets. Social technology designers should consider the implications of connectivity, and the particular contexts in which technologies are used, when deciding whether and how sites and apps should connect with people's existing online social networks.

### Increasing audience transparency for sensitive disclosure posts

A challenge that people in transition, post-transition, and living with concealable stigmatized identities (Goffman, 1963) face is that they often do not know who knows, and does not know, about certain aspects of their identity. For instance, post transition, many members of a trans person's social networks on a site like Facebook may not know that that person is trans. This creates an information imbalance, because others know sensitive information about a person, but the person does not know *which* others know this information. While trans people can use other social media sites separate from Facebook to discuss their trans identity, it may be useful to know whom in their "real life" network they could turn to for support or to talk about their trans identity or history.

Social media sites may be able to facilitate this information exchange via automated features. As an example, after making a transition announcement on Facebook, a person currently has no way of knowing who did or did not see that announcement. Some members of their network liked, reacted, posted comments, and/or sent private messages; others saw the post and did not respond in any way; and still others did not see the post at all. There is currently no mechanism for distinguishing between the latter two categories. A site like Facebook could enable users to privately flag a post as containing a sensitive self-disclosure, in which case they would have

future access to a list of who did and did not see the post. Tracked “backstalking” (Schoenebeck et al., 2016) could also be a source of information about whom has or has not seen photos or posts that reveal one’s previous identity.

Of course, such features would require refinement due to several limitations: they may infringe on the privacy of those in one’s network who have not consented to their post viewing being tracked; and, a social media site cannot distinguish between a post appearing on a person’s screen, and that person actually viewing or reading that post. Additionally, such methods would not account for people who learned the sensitive information in other ways, such as in-person or second-hand. Regardless, knowing even with partial accuracy who did or did not see one’s sensitive self-disclosure could provide an important means of support for trans people and others with concealable stigmatized identities. While these types of features would also be useful for non-sensitive social media posts, the privacy tradeoffs for post audiences indicate a need to apply these features selectively to a limited set of sensitive disclosure content.

### How algorithms influence online social networks changing over time

Networks change during life transitions, but Facebook networks tend to remain relatively static over time. Increasingly, the site has implemented algorithms that in some ways enable old friends to drift away over time. Users see less and less content from those with whom they do not interact regularly (Constine, 2016). However, when one makes a disclosure of a major life change, algorithms tend to pick up on these types of announcements and show them to one’s network more widely than other posts (Tufekci, 2014). Facebook users do not know what the algorithm does, nor whom will or will not see their posts about major life transitions. Greater transparency and control into algorithmic audience designations would help people to understand

their potential audience when they make a transition announcement. Some people may want every person in their Facebook network to see the post; others may want fewer people to see it. Yet not knowing or understanding who will see one's transition announcement can cause undue stress and anxiety for users during life transitions. As such, I argue for greater transparency in how algorithmic curation impacts networks and audiences. This is an important area for future work.

## **Conclusion**

Human-computer interaction is increasingly concerned with how people can express themselves easily and efficiently in computing systems (Bannon, 2011; Rogers, 2012). By studying trans people's experiences with disclosure and emotional wellbeing on social media, I have demonstrated how during life transitions that involve stigmatized identity facets, it is often difficult to present all aspects of one's identity to one's existing online social network. Thus, people fragment their identities among multiple social media sites, and multiple, separate networks, to facilitate transition. Multiplicity of online identities is a natural part of life transitions, and acknowledging identity during life transitions as multiple and complex rather than neutral may have positive impact on people's wellbeing during transition. Facebook, the dominant social network site in the U.S. (Greenwood et al., 2016), puts forth a vision of online interaction that involves having and presenting only one identity (Kirkpatrick, 2010). Yet by building a platform that uncritically espouses such values, Facebook does not account for the ways that people interact with technology in context. In context, people often use technologies quite differently from the ways designers intended (Suchman, 1987). Yet the contextual nature of interaction should not be seen as problematic, but rather as an essential resource for designers to

make sense of situated actions and design technologies to accommodate the unique aspects of people's experiences (Suchman, 1987). Because in many ways Facebook has not accounted for context, and because it is unreasonable to expect that one social media platform *could* meet all user needs, people have found other social media sites and online social spaces to use in tandem with Facebook that fit their needs during life transitions. Tumblr is one of these spaces.

Tumblr provides an important online space where people engage in intense concentration on their changing identities and perform transition work as part of a community of similar others. Tumblr is not perfect; yet, interestingly, Tumblr thrives among certain communities despite usability issues (Hillman et al., 2014) like a confusing interface and difficulty in finding desired content. Dedicated, engaged people who form simultaneously restrictive and inclusive communities (Hillman et al., 2014) make Tumblr an ideal space for people to do transition work. Social and personal motivations are often more important than usability for online community participation (Lampe et al., 2010). While I could provide a list of detailed usability recommendations for Tumblr, I did not hear from participants that any of these issues negatively impacted their experience on the site in particularly problematic ways. Instead, my contribution in this dissertation is understanding how people use different social media sites in the complicated contexts that arise during life transitions; the broader implications for how online identities, networks, and emotional wellbeing change over time; and what liminality means and how it works on social media.

This research's data source – longitudinal social media data – enabled a rich analysis of how people's emotional wellbeing changes over time as they embark on a major life change. This indicates that social media is an important data source for quickly and effectively understanding how people feel over time throughout life transitions, a method that could be applied to

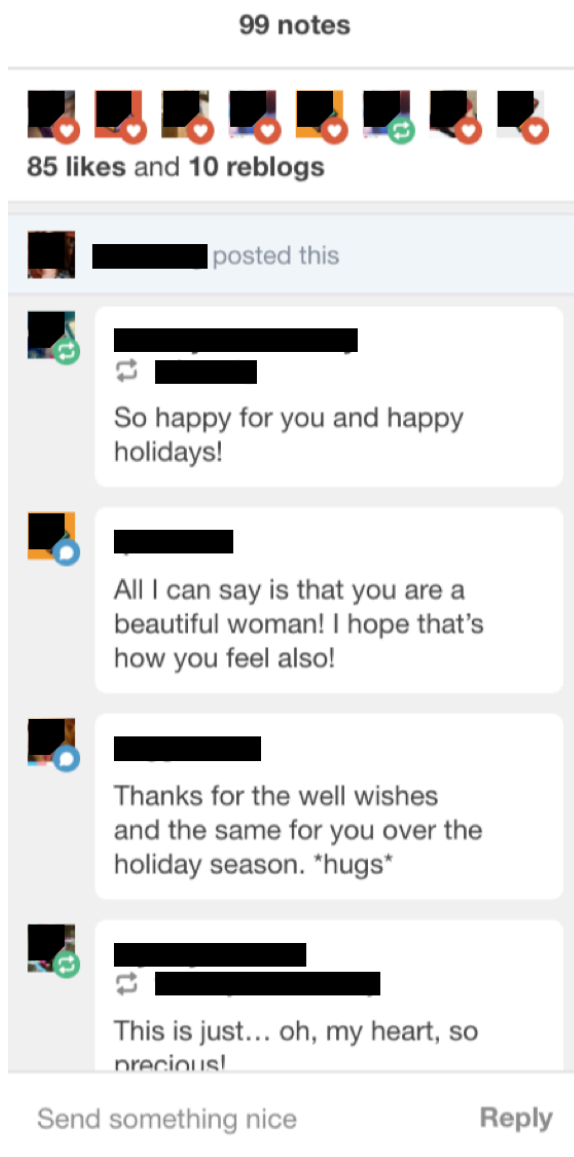


understand life changes more broadly and, in future work, multiple intersecting life transitions over time.

In line with Ahmed's (2018) trans competent interaction design, in this work I amplify trans experiences to understand how to design technology inclusive of both trans people and others facing life transitions. By focusing first on those on the margins (trans people), and understanding a period of their lives that is further marginal (gender transition), and by critically examining both what happens on average and how intersectional identity facets impact people's experiences, I provide deep analysis and understanding of trans people's experiences using social media during a liminal life stage. Yet this study also gives important insight into how to design technology for people who experience life transitions more broadly – which is every person, at multiple points throughout their lives. My social transition machinery lens provides new insight into how life transitions are conceptualized, and what social media means during life transitions.

## APPENDIX A SCREENSHOTS OF TUMBLR INTERFACE

Screenshots were taken in December 2017. Additional screenshots are included in Chapter 1.



**Figure A.1. Types of user interactions (“notes”) associated with a post on Tumblr: likes, replies, and reblogs.**

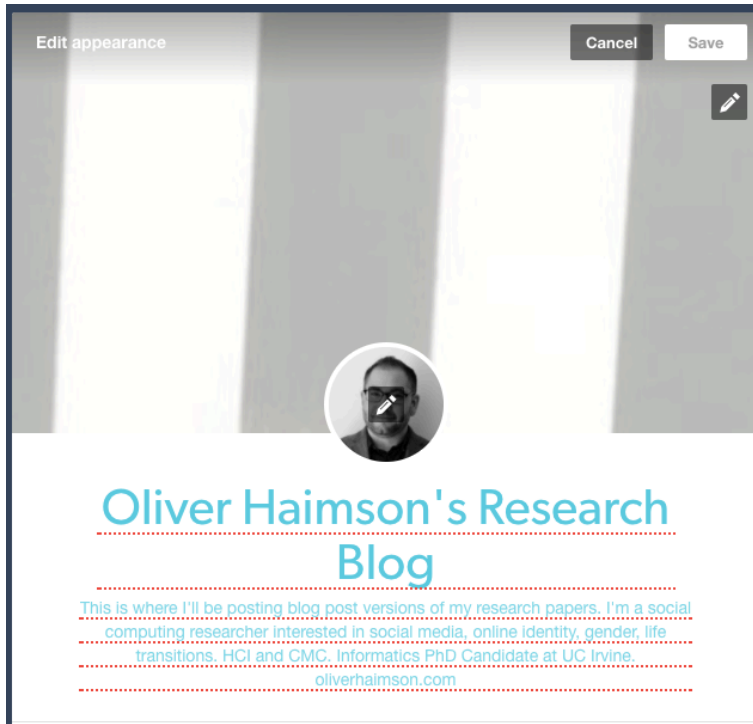


Figure A.2. Tumblr blog description free-form text entry.

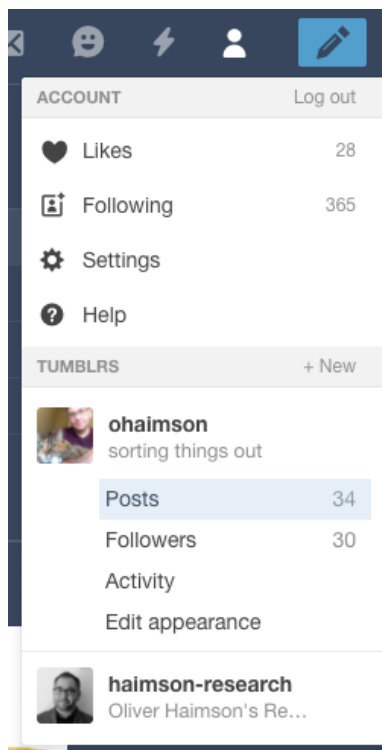


Figure A.3. Tumblr interface for switching between two blogs maintained by the same user.

## APPENDIX B METHODOLOGICAL DETAIL

### Topic modeling procedures and selection

I used a particular topic modeling technique called Latent Dirichlet allocation (LDA) (D. M. Blei et al., 2003), via the Gensim Python library (Rehurek & Sojka, 2010). I experimented with different numbers of topics to use (10, 20, 50, and 100), manually inspected the outputs, and found that 100 topics was appropriate to model the dataset. I then examined each of the 100 topics by looking at the top 20 keywords that the LDA models provided. On first inspection, I coded 24 of the models as somewhat thematically coherent and relevant to this study's interests, and assigned them initial category ideas. I then asked another researcher to examine these topics and code them for potential themes. Twelve topics were thematically congruent between the two researchers. Finally, a third researcher examined these results, and together we chose a final set of eight topic models representing themes that would be useful in understanding the data. These topic themes included disclosure (3 topic models), mental health challenges (3 topic models), support (2 topic models), health challenges (1 topic model), positive emotions (1 topic model), politics (1 topic model), and politics around trans bathroom use (1 topic model)<sup>24</sup>. This process was both deductive, as I approached the topic models looking for themes related to disclosure, emotional wellbeing, and support, and inductive, as I and the other researchers allowed other themes to emerge from the data. While independently myself and the other coder labeled some topics as related to other subjects (e.g., body image, gender identity, relation to others, community, clothing, sexual assault, time, future), the eight themes that emerged as coherent to

---

<sup>24</sup> Counts add up to greater than eight because some topic models had more than one theme (e.g., one involved both disclosure and support).

all three researchers were primarily related to disclosure, emotional wellbeing, and support. Thus, the topic model analysis revealed these themes' importance in the dataset, and validated that disclosure, emotional wellbeing, and support were important themes to examine using this dataset. Additionally, the keywords for each of the topic models enabled me to better understand what words people were using to discuss each of these topics on their transition blogs.

### **Dictionary-based approach to detecting trans identity disclosures**

I began by building a training set of positive and negative examples of trans identity disclosure posts in the dataset. Because of the relative scarcity of these posts, I first adopted a dictionary-based approach so that I could identify positive disclosure examples within the dataset. I randomly selected 300 posts from the dataset and coded them as either trans identity disclosures or not. For those that were trans identity disclosures, I noted the words in the post that specifically related to disclosure (e.g., “coming out,” “know,” “identity,” “told,” “news”). I had another researcher with expertise in disclosure on social media code 100 posts and identify disclosure-related words. I combined the disclosure-related words from both coders into a dictionary which included 100 words plus their various forms (e.g., “react\*” was used to search for posts that included “react,” “reaction,” “reacted,” “reacts,” etc.). I then assigned a score to each post in the dataset, measuring the proportion of words in that post that were in the disclosure dictionary – a method similar to how LIWC (Linguistic Inquiry Word Count, described in the next section) assigns scores to textual data (Pennebaker et al., 2015). The dictionary method was not an accurate way to identify trans identity disclosures, and resulted in far too many false positives to be useful, but it was a first step in creating a training set of positive and negative examples.

## **Iterative approach to building training data set for machine learning model to detect trans identity disclosures**

I used an iterative approach to build a sufficient set of training data, which included several rounds of manual coding and machine learning. First, I manually coded a sample of 1,200 randomly-selected posts out of the 5,000 posts with the highest proportion of words in the disclosure dictionary. To establish inter-rater reliability, I asked another researcher (an expert in disclosure on social media) to code 50 posts as either recent trans identity disclosures or not, and we reached acceptable inter-rater agreement at  $\kappa = 0.72$ . Of the 1,200 posts, I coded 131 as positive examples of trans identity disclosure. I then combined these 131 positive examples with 131 negative examples as a training set to build an initial machine learning classifier. I applied the initial classifier to the full dataset as a means of finding more relevant data to code, to increase the number of positive training examples. Using the output of the first classifier, I coded 2,000 posts to identify 99 additional positive examples of trans identity disclosures. I then used the 230 total positive examples, along with 1,000 negative examples, to build the final classifier.

**APPENDIX C**  
**DESCRIPTIVE STATISTICS**

<b>Variable</b>	<b>Mean</b>	<b>Median</b>	<b>Min</b>	<b>Max</b>	<b>Standard dev.</b>
Negative emotion	2.16	NA	0.00	46.15	3.30
Average negative emotion in month after post	2.15	NA	0.00	23.08	1.38
Average negative emotion in 3 months after post	2.15	NA	0.00	23.08	1.16
Average negative emotion in 6 months after post	2.14	NA	0.00	14.64	1.09
Average negative emotion in month before post	2.17	NA	0.00	20.00	1.39
Average negative emotion in 3 months before post	2.16	NA	0.00	23.08	1.15
Average negative emotion in 6 months before post	2.18	NA	0.00	16.67	1.07
Positive emotion	4.14	NA	0.00	54.55	4.33
Average positive emotion in month after post	4.15	NA	0.00	36.36	1.87
Average positive emotion in 3 months after post	4.15	NA	0.00	26.67	1.56
Average positive emotion in 6 months after post	4.14	NA	0.00	26.00	1.46
Average positive emotion in month before post	4.13	NA	0.00	26.67	1.50
Average positive emotion in 3 months before post	4.12	NA	0.00	26.67	1.50
Average positive emotion in 6 months before post	4.11	NA	0.00	23.08	1.37
Age	25.25	24	18	46	5.57
Likes	11.02	5	0	50	12.51
Replies	0.35	0	0	15	0.95
Reblogs	2.87	0	0	44	6.10
Word count	83.95	35	10	4323	150.40

**Table C.1. Descriptive statistics of variables included in regression models.**

<b>Disclosure audience</b>	<b>Post count</b>
Work	77
Stranger/acquaintance	65
Friend	57
Extended family	56
Mom	35
Sibling	29
Dad	28
Facebook	26
School	18
Unknown	15
Everyone	13
Health professional	11
Past acquaintance	10
Romantic interest	8
Child	4
Church	3
Partner	3
Ex-partner	2
Instagram	2
Twitter	2
Total	362 <sup>1</sup>

<sup>1</sup>Total is not a sum of the rows because many disclosure posts had multiple audiences

**Table C.2. Number of posts for each trans identity disclosure audience.**

<b>Year</b>	<b>Post count</b>
2016	14,594
2015	12,545
2014	7,249
2013	4,153
2012 or earlier	2,525

**Table C.3. Number of posts per year.**

	<b>FTM / trans man</b>		<b>MTF / trans woman</b>		<b>Non-binary</b>	
Number of bloggers in sample	115	47.9%	108	45.0%	17	7.1%
Number of posts in dataset	17,363	42.3%	22,697	55.3%	1,006	2.4%
Interviewees	7	35.0%	10	50.0%	3	15.0%

**Table C.4. Gender statistics.**



## GLOSSARY OF TRANS-RELATED TERMINOLOGY

This is by no means a full list of trans-related terminology, but is instead a quick reference for some of the terms used in participants' quotes throughout this dissertation. For a more complete glossary, please see [Julia Serano's trans, gender, sexuality, and activism glossary](#).

<b>binary</b>	“generally refers to the human tendency to describe people or phenomena in terms of two mutually-exclusive categories that supposedly exist in opposition to one another. Within transgender communities, the focus is typically on the gender binary” (Serano, 2016).
<b>chaser</b>	“a term sometimes used by marginalized/minority groups to describe members of the dominant/majority group who express sexual interest in them. It is typically used as a pejorative, in contrast to other labels (e.g., ‘admirer’) that have more positive or neutral connotations” (Serano, 2016). In a trans context, this term typically refers to cisgender men who are sexually and/or romantically interested in trans women.
<b>cis or cisgender</b>	“a word used to describe people who are not transgender... This word is a simple opposite, formed by using the prefix ‘cis’ (on the same side/not ‘across’) as opposed to ‘trans’ (across/beyond)” (TransWhat?, 2017).
<b>estrogen (E)</b>	a hormone replacement therapy medication often taken by trans women and sometimes by transfeminine non-binary people to alter their secondary sex characteristics to be more feminine
<b>full-time</b>	living full-time as one’s chosen gender.
<b>gender reassignment surgery (GRS)</b>	see sex reassignment surgery (SRS)
<b>hormone replacement therapy (HRT)</b>	a medication (estrogen or testosterone) often taken by trans people and sometimes by non-binary people to alter their secondary sex characteristics
<b>misgender</b>	to refer to a trans or non-binary person using gendered pronouns that are incongruent with their gender

<b>non-binary</b>	“typically refers to people or identities that fall outside of the gender binary. A few examples... include people who are agender, bigender, genderqueer, genderfluid, and two-spirit” (Serano, 2016).
<b>part-time</b>	living part-time as one’s chosen gender.
<b>passing</b>	when a trans person is perceived as their desired gender, or as cisgender, by others. This is “a concept that originated in discourses regarding race (e.g., people of color who ‘passed’ as white), but has since been applied to other instances where a member of a marginalized/minority group is perceived to be, or blends in as, a member of the dominant/majority group” (Serano, 2016). The word “pass” is “ technically a misnomer; trans people who ‘pass’ are not doing so as trickery or disguise, but rather revealing their actual genders” (TransWhat?, 2017).
<b>sex reassignment surgery (SRS)</b>	“one of numerous terms to describe transition-related surgeries that involve the transformation of one’s sex characteristics toward a more desired state. The term is most closely associated with surgeries that involve genital reconfiguration, as in many jurisdictions such procedures are required in order to have one’s legal sex officially reassigned (e.g., from male to female, or female to male). But the term may occasionally be used to refer to other trans-related surgeries” (Serano, 2016).
<b>stealth</b>	“a descriptor of people who, after beginning transition and living in their preferred genders, do not readily tell others about their upbringings or past lives within the birth-assigned gender” (TransWhat?, 2017) or their identity as a trans person
<b>testosterone (T)</b>	a hormone replacement therapy medication often taken by trans men and sometimes by transmasculine non-binary people to alter their secondary sex characteristics to be more masculine
<b>transgender (trans)</b>	“people who move away from the gender they were assigned at birth, people who cross over (trans-) the boundaries constructed by their culture to define and contain that gender” (Stryker, 2009)

## REFERENCES

- Ackerman, M. S., & Palen, L. (1996). The Zephyr Help Instance: Promoting Ongoing Activity in a CSCW System. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 268–275). New York, NY, USA: ACM. <https://doi.org/10.1145/238386.238528>
- Acquisti, A., & Gross, R. (2006). Imagined Communities: Awareness, Information Sharing, and Privacy on the Facebook. In G. Danezis & P. Golle (Eds.), *Privacy Enhancing Technologies* (pp. 36–58). Springer Berlin Heidelberg. Retrieved from [http://link.springer.com/chapter/10.1007/11957454\\_3](http://link.springer.com/chapter/10.1007/11957454_3)
- Ahmed, A. A. (2018). Trans Competent Interaction Design: A Qualitative Study on Voice, Identity, and Technology. *Interacting with Computers*, 30(1), 53–71. <https://doi.org/10.1093/iwc/iwx018>
- Aizura, A. (2017). Unrecognizable: On Trans Recognition in 2017. *South Atlantic Quarterly*, 116(3), 606–611. <https://doi.org/10.1215/00382876-3961721>
- Al-Ani, B., Mark, G., Chung, J., & Jones, J. (2012). The Egyptian blogosphere: a counter-narrative of the revolution. In *Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 17–26). ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=2145213>
- Al-Ani, B., Mark, G., & Semaan, B. (2010). Blogging in a region of conflict: supporting transition to recovery. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1069–1078). ACM.
- Andalibi, N., & Forte, A. (2018). Announcing Pregnancy Loss on Facebook: A Decision Framework for Stigmatized Disclosures on Identified Social Network Sites. In *under review for CHI 2018*.
- Andalibi, N., Haimson, O. L., De Choudhury, M., & Forte, A. (2016). Understanding Social Media Disclosures of Sexual Abuse Through the Lenses of Support Seeking and Anonymity. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 3906–3918). New York, NY, USA: ACM. <https://doi.org/10.1145/2858036.2858096>
- Andalibi, N., Ozturk, P., & Forte, A. (2017). Sensitive Self-disclosures, Responses, and Social Support on Instagram: The Case of #Depression. In *Proceedings of the 20th ACM Conference on Computer-Supported Cooperative Work & Social Computing*. New York, NY, USA: ACM.
- Attu, R., & Terras, M. (2017). What people study when they study Tumblr: classifying Tumblr-related academic research. *Journal of Documentation*, 73(3). <https://doi.org/10.1108/JD-08-2016-0101>
- Baikie, K. A. (2005). Emotional and physical health benefits of expressive writing. *Advances in Psychiatric Treatment*, 11(5), 338–346. <https://doi.org/10.1192/apt.11.5.338>

- Bak, J. Y., Kim, S., & Oh, A. (2012). Self-disclosure and Relationship Strength in Twitter Conversations. In *Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics: Short Papers - Volume 2* (pp. 60–64). Stroudsburg, PA, USA: Association for Computational Linguistics. Retrieved from <http://dl.acm.org/citation.cfm?id=2390665.2390681>
- Balani, S., & De Choudhury, M. (2015). Detecting and Characterizing Mental Health Related Self-Disclosure in Social Media (pp. 1373–1378). ACM Press. <https://doi.org/10.1145/2702613.2732733>
- Bannon, L. J. (2011). Re-framing HCI: From Human-computer Interaction to Human-centred Interaction Design. In *Proceedings of the 9th ACM SIGCHI Italian Chapter International Conference on Computer-Human Interaction: Facing Complexity* (pp. 17–18). New York, NY, USA: ACM. <https://doi.org/10.1145/2037296.2037304>
- Bantum, E. O., & Owen, J. E. (2009). Evaluating the validity of computerized content analysis programs for identification of emotional expression in cancer narratives. *Psychological Assessment, 21*(1), 79–88. <https://doi.org/10.1037/a0014643>
- Barak, A., & Gluck-Ofri, O. (2007). Degree and Reciprocity of Self-Disclosure in Online Forums. *CyberPsychology & Behavior, 10*(3), 407–417. <https://doi.org/10.1089/cpb.2006.9938>
- Bardzell, S. (2010). Feminist HCI: Taking Stock and Outlining an Agenda for Design. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1301–1310). New York, NY, USA: ACM. <https://doi.org/10.1145/1753326.1753521>
- Bardzell, S., & Bardzell, J. (2011). Towards a Feminist HCI Methodology: Social Science, Feminism, and HCI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 675–684). New York, NY, USA: ACM. <https://doi.org/10.1145/1978942.1979041>
- Bauer, G. R., Braimoh, J., Scheim, A. I., & Dharma, C. (2017). Transgender-inclusive measures of sex/gender for population surveys: Mixed-methods evaluation and recommendations. *PLOS ONE, 12*(5), e0178043. <https://doi.org/10.1371/journal.pone.0178043>
- Bazarova, N. N., Choi, Y. H., Whitlock, J., Cosley, D., & Sosik, V. (2017). Psychological Distress and Emotional Expression on Facebook. *Cyberpsychology, Behavior, and Social Networking, 20*(3), 157–163. <https://doi.org/10.1089/cyber.2016.0335>
- Beauchamp, T. (2009). Artful concealment and strategic visibility: Transgender bodies and US state surveillance after 9/11. *Surveillance & Society, 6*(4), 356–366.
- Beemyn, B. G., & Rankin, S. (2011). *The Lives of Transgender People*. Columbia University Press.
- Beiriger, A., & Jackson, R. M. (2007). An Assessment of the Information Needs of Transgender Communities in Portland, Oregon. *Public Library Quarterly, 26*(1–2), 45–60. [https://doi.org/10.1300/J118v26n01\\_03](https://doi.org/10.1300/J118v26n01_03)
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality*. Penguin Books. Retrieved from

[http://web.iaincirebon.ac.id/ebook/moon/%5BPeter\\_L.\\_Berger,\\_Thomas\\_Luckmann%5D\\_The\\_Social\\_Cons\(BookFi.org\).pdf](http://web.iaincirebon.ac.id/ebook/moon/%5BPeter_L._Berger,_Thomas_Luckmann%5D_The_Social_Cons(BookFi.org).pdf)

- Birkelund, R., & Larsen, L. S. (2013). Patient–patient interaction – caring and sharing. *Scandinavian Journal of Caring Sciences*, 27(3), 608–615. <https://doi.org/10.1111/j.1471-6712.2012.01072.x>
- Bivens, R. (2017). The gender binary will not be deprogrammed: Ten years of coding gender on Facebook. *New Media & Society*, 19(6), 880–898. <https://doi.org/10.1177/1461444815621527>
- Bivens, R., & Haimson, O. L. (2016). Baking Gender Into Social Media Design: How Platforms Shape Categories for Users and Advertisers. *Social Media + Society*, 2(4), 2056305116672486. <https://doi.org/10.1177/2056305116672486>
- Blei, D., & Lafferty, J. (2006). Correlated topic models. *Advances in Neural Information Processing Systems*, 18, 147.
- Blei, D. M., & Lafferty, J. D. (2006). Dynamic Topic Models. In *Proceedings of the 23rd International Conference on Machine Learning* (pp. 113–120). New York, NY, USA: ACM. <https://doi.org/10.1145/1143844.1143859>
- Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent dirichlet allocation. *Journal of Machine Learning Research*, 3(Jan), 993–1022.
- Bockting, W., & Coleman, E. (2013). Developmental Stages of the Transgender Coming-Out Process: Toward an Integrated Identity. In R. Ettner, S. Monstrey, & A. E. Eyler, *Principles of Transgender Medicine and Surgery*. Routledge.
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, 103(5), 943–951.
- Boellstorff, T. (2011). Placing the Virtual Body: Avatar, Chora, Cypherg. *A Companion to the Anthropology of the Human Body and Embodiment*. Retrieved from <http://www.socsci.uci.edu/~tboellst/bio/Body.pdf>
- Bolin, A. (1988). *In Search of Eve: Transsexual Rites of Passage*. Bergin & Garvey.
- Boudewyns, V., Himelboim, I., Hansen, D. L., & Southwell, B. G. (2015). Stigma’s Effect on Social Interaction and Social Media Activity. *Journal of Health Communication*, 20(11), 1337–1345. <https://doi.org/10.1080/10810730.2015.1018604>
- Bourlai, E., & Herring, S. C. (2014). Multimodal communication on tumblr: i have so many feels! In *Proceedings of the 2014 ACM conference on Web science* (pp. 171–175). ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=2615697>
- Bowker, G. C., & Star, S. L. (1999). *Sorting Things Out: Classification and Its Consequences*. MIT Press.
- boyd, danah. (2008). *Taken Out of Context: American Teen Sociality in Networked Publics*. University of California, Berkeley.

- boyd, D. M., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Boyd, L. E. (2018). *Designing and Evaluating Alternative Channels: Visualizing Nonverbal Communication through AR and VR Systems for People with Autism*. University of California, Irvine.
- boyd, danah m. (2004). Friendster and Publicly Articulated Social Networking. In *Conference on Human Factors and Computing Systems*. Vienna: ACM.
- Bridges, W. (2004). *Transitions: Making Sense Of Life's Changes*. Da Capo Press.
- Briggs, P., & Thomas, L. (2015). An Inclusive, Value Sensitive Design Perspective on Future Identity Technologies. *ACM Trans. Comput.-Hum. Interact.*, 22(5), 23:1–23:28. <https://doi.org/10.1145/2778972>
- Brooks, V. R. (1981). *Minority Stress and Lesbian Women*. Lexington, Mass: Lexington Books.
- Bruce, A., Sheilds, L., Molzahn, A., Beuthin, R., Schick-Makaroff, K., & Shermak, S. (2014). Stories of Liminality: Living With Life-Threatening Illness. *Journal of Holistic Nursing*, 32(1), 35–43. <https://doi.org/10.1177/0898010113498823>
- Bruckman, A. S. (1993). Gender Swapping on the Internet. In *Proceedings of INET '93*. Reston, VA.
- Budge, S. L., Adelson, J. L., & Howard, K. A. S. (2013). Anxiety and depression in transgender individuals: The roles of transition status, loss, social support, and coping. *Journal of Consulting and Clinical Psychology*, 81(3), 545–557. <https://doi.org/10.1037/a0031774>
- Burke, M., & Develin, M. (2016). Once More with Feeling: Supportive Responses to Social Sharing on Facebook (pp. 1460–1472). ACM Press. <https://doi.org/10.1145/2818048.2835199>
- Burke, M., & Kraut, R. (2013). Using Facebook After Losing a Job: Differential Benefits of Strong and Weak Ties. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work* (pp. 1419–1430). New York, NY, USA: ACM. <https://doi.org/10.1145/2441776.2441936>
- Burke, M., Kraut, R., & Marlow, C. (2011). Social capital on Facebook: Differentiating uses and users. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 571–580). ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=1979023>
- Burke, P. J. (1991). Identity Processes and Social Stress. *American Sociological Review*, 56(6), 836–849. <https://doi.org/10.2307/2096259>
- Burke, P. J. (2006). Identity Change. *Social Psychology Quarterly*, 69(1), 81–96.
- Burke, P. J., & Stets, J. E. (2009). *Identity Theory*. Oxford University Press.
- Bury, M. (1982). Chronic illness as biographical disruption. *Sociology of Health & Illness*, 4(2), 167–182.
- Butler, J. (1999). *Gender Trouble*. Taylor & Francis.

- Cain, R. (1991). Stigma Management and Gay Identity Development. *Social Work, 36*(1), 67–73.
- Cannon, Y., Speedlin, S., Avera, J., Robertson, D., Ingram, M., & Prado, A. (2017). Transition, Connection, Disconnection, and Social Media: Examining the Digital Lived Experiences of Transgender Individuals. *Journal of LGBT Issues in Counseling, 11*(2), 68–87.  
<https://doi.org/10.1080/15538605.2017.1310006>
- Carr, C. T., Wohn, D. Y., & Hayes, R. A. (2016). as social support: Relational closeness, automaticity, and interpreting social support from paralinguistic digital affordances in social media. *Computers in Human Behavior, 62*, 385–393.  
<https://doi.org/10.1016/j.chb.2016.03.087>
- Cavalcante, A. (2016). "I Did It All Online:” Transgender identity and the management of everyday life. *Critical Studies in Media Communication, 33*(1), 109–122.  
<https://doi.org/10.1080/15295036.2015.1129065>
- Chang, Y., Tang, L., Inagaki, Y., & Liu, Y. (2014). What is Tumblr: A Statistical Overview and Comparison. *SIGKDD Explor. Newsl., 16*(1), 21–29.  
<https://doi.org/10.1145/2674026.2674030>
- Chaudoir, S. R., & Fisher, J. D. (2010). The disclosure processes model: Understanding disclosure decision making and postdisclosure outcomes among people living with a concealable stigmatized identity. *Psychological Bulletin, 136*(2), 236–256.  
<https://doi.org/10.1037/a0018193>
- Cho, A. (2015). Queer Reverb: Tumblr, Affect, Time. In K. Hillis, S. Paasonen, & M. Petit, *Networked Affect*. MIT Press.
- Cipolletta, S., Votadoro, R., & Faccio, E. (2017). Online support for transgender people: an analysis of forums and social networks. *Health & Social Care in the Community, 25*(5), 1542–1551. <https://doi.org/10.1111/hsc.12448>
- Clements-Nolle, K., Marx, R., & Katz, M. (2006). Attempted Suicide Among Transgender Persons. *Journal of Homosexuality, 51*(3), 53–69. [https://doi.org/10.1300/J082v51n03\\_04](https://doi.org/10.1300/J082v51n03_04)
- Clifton, D. (2014, December 31). These Powerful #RealLiveTransAdult Tweets Are Showing Trans Youth They’re Not Alone. Retrieved August 17, 2017, from <https://mic.com/articles/107474/these-powerful-real-live-trans-adult-tweets-are-showing-trans-youth-they-re-not-alone>
- Constine, J. (2016, September 6). How Facebook News Feed Works. Retrieved December 10, 2017, from <http://social.techcrunch.com/2016/09/06/ultimate-guide-to-the-news-feed/>
- Corrigan, P., & Matthews, A. (2003). Stigma and disclosure: Implications for coming out of the closet. *Journal of Mental Health, 12*(3), 235–248.  
<https://doi.org/10.1080/0963823031000118221>
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed). Thousand Oaks: SAGE Publications.

- Cutrona, C. E., & Suhr, J. A. (1992). Controllability of Stressful Events and Satisfaction With Spouse Support Behaviors. *Communication Research, 19*(2), 154–174. <https://doi.org/10.1177/009365092019002002>
- Dame, A. (2013). “I’m your hero? Like me?”: The role of ‘expert’ in the trans male vlog. *Journal of Language and Sexuality, 2*(1), 40–69. <https://doi.org/10.1075/jls.2.1.02dam>
- Dame, A. (2016). Making a name for yourself: tagging as transgender ontological practice on Tumblr. *Critical Studies in Media Communication, 33*(1), 23–37. <https://doi.org/10.1080/15295036.2015.1130846>
- D’augelli, A. R., & Grossman, A. H. (2001). Disclosure of Sexual Orientation, Victimization, and Mental Health Among Lesbian, Gay, and Bisexual Older Adults. *Journal of Interpersonal Violence, 16*(10), 1008–1027. <https://doi.org/10.1177/088626001016010003>
- Davis, H. F. (2017). *Beyond Trans: Does Gender Matter?* NYU Press.
- De Choudhury, M., Counts, S., & Horvitz, E. (2013). Major life changes and behavioral markers in social media: case of childbirth. In *Proceedings of the 2013 conference on Computer supported cooperative work* (pp. 1431–1442). New York, NY, USA: ACM. <https://doi.org/10.1145/2441776.2441937>
- De Choudhury, M., & De, S. (2014). Mental health discourse on reddit: Self-disclosure, social support, and anonymity. *Proc. ICWSM, AAAI*. Retrieved from [http://www.munmund.net/pubs/icwsm\\_14\\_1.pdf](http://www.munmund.net/pubs/icwsm_14_1.pdf)
- De Choudhury, M., Gamon, M., Counts, S., & Horvitz, E. (2013). Predicting Depression via Social Media. In *Seventh International AAAI Conference on Weblogs and Social Media*. Retrieved from <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM13/paper/view/6124>
- De Choudhury, M., Jhaver, S., Sugar, B., & Weber, I. (2016). Social Media Participation in an Activist Movement for Racial Equality. In *ICWSM*.
- De Choudhury, M., Kiciman, E., Dredze, M., Coppersmith, G., & Kumar, M. (2016). Discovering Shifts to Suicidal Ideation from Mental Health Content in Social Media. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 2098–2110). New York, NY, USA: ACM. <https://doi.org/10.1145/2858036.2858207>
- De Choudhury, M., & Kiciman, E. (2017). The Language of Social Support in Social Media and its Effect on Suicidal Ideation Risk. In *Proceedings of ICWSM*. Retrieved from [https://www.microsoft.com/en-us/research/wp-content/uploads/2017/03/SocialSupport\\_ICWSM.pdf](https://www.microsoft.com/en-us/research/wp-content/uploads/2017/03/SocialSupport_ICWSM.pdf)
- De Choudhury, M., & Massimi, M. (2015). “She said yes!”—Liminality and Engagement Announcements on Twitter. Presented at the iConference. Retrieved from <http://www.news.gatech.edu/sites/default/files/GT-computing-research-twitter-engagement-2015.pdf>
- Denny, D. (2004). Changing Models of Transsexualism. *Journal of Gay & Lesbian Psychotherapy, 8*(1–2), 25–40. [https://doi.org/10.1300/J236v08n01\\_04](https://doi.org/10.1300/J236v08n01_04)



- DeVito, M. A., Birnholtz, J., & Hancock, J. T. (2017). Platforms, People, and Perception: Using Affordances to Understand Self-Presentation on Social Media. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 740–754). New York, NY, USA: ACM. <https://doi.org/10.1145/2998181.2998192>
- Devor, A. H. (2004). Witnessing and Mirroring: A Fourteen Stage Model of Transsexual Identity Formation. *Journal of Gay & Lesbian Psychotherapy*, 8(1–2), 41–67. [https://doi.org/10.1300/J236v08n01\\_05](https://doi.org/10.1300/J236v08n01_05)
- Diamond, L. M., Pardo, S. T., & Butterworth, M. R. (2011). Transgender Experience and Identity. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of Identity Theory and Research* (pp. 629–647). Springer New York. [https://doi.org/10.1007/978-1-4419-7988-9\\_26](https://doi.org/10.1007/978-1-4419-7988-9_26)
- DiMicco, J. M., & Millen, D. R. (2007). Identity Management: Multiple Presentations of Self in Facebook. In *Proceedings of the 2007 International ACM Conference on Supporting Group Work* (pp. 383–386). New York, NY, USA: ACM. <https://doi.org/10.1145/1316624.1316682>
- Dimond, J. P., Fiesler, C., & Bruckman, A. S. (2011). Domestic violence and information communication technologies. *Interacting with Computers*, 23(5), 413–421. <https://doi.org/10.1016/j.intcom.2011.04.006>
- Donath, J. (2014). *The Social Machine: Designs for Living Online*. The MIT Press.
- Donath, J., & boyd, danah. (2004). Public displays of connection. *BT Technology Journal*, 22(4), 71–82.
- Duguay, S. (2014). “He has a way gayer Facebook than I do”: Investigating sexual identity disclosure and context collapse on a social networking site. *New Media & Society*, 1461444814549930. <https://doi.org/10.1177/1461444814549930>
- Durwood, L., McLaughlin, K. A., & Olson, K. R. (2017). Mental Health and Self-Worth in Socially Transitioned Transgender Youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(2), 116–123.e2. <https://doi.org/10.1016/j.jaac.2016.10.016>
- Ebaugh, H. R. F. (1988). *Becoming an Ex: The Process of Role Exit*. University of Chicago Press.
- Ekins, R., & King, D. (1999). Towards a sociology of transgendered bodies. *The Sociological Review*, 47(3), 580–602. <https://doi.org/10.1111/1467-954X.00185>
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168. <https://doi.org/10.1111/j.1083-6101.2007.00367.x>
- Ellison, N. B., Vitak, J., Steinfield, C., Gray, R., & Lampe, C. (2011). Negotiating Privacy Concerns and Social Capital Needs in a Social Media Environment. In S. Trepte & L. Reinecke (Eds.), *Privacy Online* (pp. 19–32). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-21521-6\\_3](https://doi.org/10.1007/978-3-642-21521-6_3)

- Endocrine Society. (2015, March 7). San Diego clinic finds high need for treatment of transgender youth. Retrieved February 12, 2017, from [http://www.eurekalert.org/pub\\_releases/2015-03/tes-sdc030615.php](http://www.eurekalert.org/pub_releases/2015-03/tes-sdc030615.php)
- Ernala, S. K., Rizvi, A. F., Birnbaum, M. L., Kane, J. M., & De Choudhury, M. (2017). Linguistic Markers Indicating Therapeutic Outcomes of Social Media Disclosures of Schizophrenia. *Proc. ACM Hum.-Comput. Interact*, *1*(1). Retrieved from [http://www.munmund.net/pubs/PACM\\_HCI\\_CSCW18\\_SZ.pdf](http://www.munmund.net/pubs/PACM_HCI_CSCW18_SZ.pdf)
- Evans, M., Donelle, L., & Hume-Loveland, L. (2012). Social support and online postpartum depression discussion groups: A content analysis. *Patient Education and Counseling*, *87*(3), 405–410. <https://doi.org/10.1016/j.pec.2011.09.011>
- Factor, R. J., & Rothblum, E. D. (2008). A Study of Transgender Adults and Their Non-Transgender Siblings on Demographic Characteristics, Social Support, and Experiences of Violence. *Journal of LGBT Health Research*, *3*(3), 11–30. <https://doi.org/10.1080/15574090802092879>
- Farnham, S., Cheng, L., Stone, L., Zaner-Godsey, M., Hibbeln, C., Syrjala, K., ... Abrams, J. (2002). HutchWorld: clinical study of computer-mediated social support for cancer patients and their caregivers. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 375–382). ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=503444>
- Farnham, S. D., & Churchill, E. F. (2011). Faceted Identity, Faceted Lives: Social and Technical Issues with Being Yourself Online. In *Proceedings of the ACM 2011 Conference on Computer Supported Cooperative Work* (pp. 359–368). New York, NY, USA: ACM. <https://doi.org/10.1145/1958824.1958880>
- Fink, M., & Miller, Q. (2014). Trans Media Moments Tumblr, 2011–2013. *Television & New Media*, *15*(7), 611–626. <https://doi.org/10.1177/1527476413505002>
- Flanagan, M., Howe, D. C., & Nissenbaum, H. (2008). Embodying Values in Technology: Theory and Practice. In J. van den Hoven & J. Weckert, *Information Technology and Moral Philosophy*. Cambridge University Press.
- Flores, A. R., Herman, J. L., Gates, G. J., & Brown, T. N. T. (2016). *How Many Adults Identify as Transgender in the United States?* The Williams Institute. Retrieved from <http://williamsinstitute.law.ucla.edu/wp-content/uploads/How-Many-Adults-Identify-as-Transgender-in-the-United-States.pdf>
- Frissen, V., de Lange, S., de Mul, J., & Raessens, J. (2015). *Playful Identities: The Ludification of Digital Media Cultures*. Amsterdam: Amsterdam University Press.
- Gagné, P., Tewksbury, R., & McGaughey, D. (1997). Coming Out and Crossing Over: Identity Formation and Proclamation in a Transgender Community. *Gender & Society*, *11*(4), 478–508. <https://doi.org/10.1177/089124397011004006>
- Galegher, J., Sproull, L., & Kiesler, S. (1998). Legitimacy, Authority, and Community in Electronic Support Groups. *Written Communication*, *15*, 493–530.

- Galupo, M. P., Krum, T. E., Hagen, D. B., Gonzalez, K. A., & Bauerband, L. A. (2014). Disclosure of Transgender Identity and Status in the Context of Friendship. *Journal of LGBT Issues in Counseling*, 8(1), 25–42. <https://doi.org/10.1080/15538605.2014.853638>
- Gauthier, D. K., & Chaudoir, N. K. (2004). tranny boyz: cyber community support in negotiating sex and gender mobility among female to male transsexuals. *Deviant Behavior*, 25(4), 375–398. <https://doi.org/10.1080/01639620490441272>
- George, L. K. (1993). Sociological Perspectives on Life Transitions. *Annual Review of Sociology*, 19(1), 353–373. <https://doi.org/10.1146/annurev.so.19.080193.002033>
- Gergen, K. (2000). *The Saturated Self: Dilemmas Of Identity In Contemporary Life* (Reprint edition). New York: Basic Books.
- Glacken, M., Kernohan, G., & Coates, V. (2001). Diagnosed with hepatitis C: A descriptive exploratory study. *International Journal of Nursing Studies*, 38(1), 107–116.
- Goffman, E. (1959). *Presentation of Self in Everyday Life*. New York, NY: Doubleday Anchor Books.
- Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Simon and Schuster.
- Gonzales, A., & Fritz, N. (2017). Prioritizing Flexibility and Intangibles: Medical Crowdfunding for Stigmatized Individuals. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (pp. 2371–2375). ACM Press. <https://doi.org/10.1145/3025453.3025647>
- Grant, J. M., Mottet, L. A., Tanis, J. D., Harrison, J., Herman, J. L., & Kiesling, M. (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. National Center for Transgender Equality and National Gay and Lesbian Task Force.
- Greenwood, S., Perrin, A., & Duggan, M. (2016, November 11). Social Media Update 2016. Retrieved February 23, 2017, from <http://www.pewinternet.org/2016/11/11/social-media-update-2016/>
- Gross, B. M., & Churchill, E. F. (2007). Addressing Constraints: Multiple Usernames Task Spillage and Notions of Identity. In *CHI '07 Extended Abstracts on Human Factors in Computing Systems* (pp. 2393–2398). New York, NY, USA: ACM. <https://doi.org/10.1145/1240866.1241013>
- Grossman, A. H., D'Augelli, A. R., Howell, T. J., & Hubbard, S. (2005). Parent' Reactions to Transgender Youth' Gender Nonconforming Expression and Identity. *Journal of Gay & Lesbian Social Services*, 18(1), 3–16. [https://doi.org/10.1300/J041v18n01\\_02](https://doi.org/10.1300/J041v18n01_02)
- Haimson, O. L., Andalibi, N., De Choudhury, M., & Hayes, G. R. (2017). Relationship breakup disclosures and media ideologies on Facebook. *New Media & Society*. <https://doi.org/10.1177/1461444817711402>
- Haimson, O. L., Bowser, A. E., Melcer, E. F., & Churchill, E. F. (2015). Online Inspiration and Exploration for Identity Reinvention. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 3809–3818). New York, NY, USA: ACM. <https://doi.org/10.1145/2702123.2702270>

- Haimson, O. L., Brubaker, J. R., Dombrowski, L., & Hayes, G. R. (2015). Disclosure, Stress, and Support During Gender Transition on Facebook. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1176–1190). New York, NY, USA: ACM. <https://doi.org/10.1145/2675133.2675152>
- Haimson, O. L., Brubaker, J. R., Dombrowski, L., & Hayes, G. R. (2016). Digital Footprints and Changing Networks During Online Identity Transitions. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 2895–2907). New York, NY, USA: ACM. <https://doi.org/10.1145/2858036.2858136>
- Haimson, O. L., & Hayes, G. R. (2017). Changes in Social Media Affect, Disclosure, and Sociality for a Sample of Transgender Americans in 2016’s Political Climate. In *Proceedings of the Eleventh International Conference on Web and Social Media* (pp. 72–81). Retrieved from <https://www.aaai.org/ocs/index.php/ICWSM/ICWSM17/paper/viewFile/15557/14796>
- Haimson, O. L., & Hoffmann, A. L. (2016). Constructing and enforcing “authentic” identity online: Facebook, real names, and non-normative identities. *First Monday*, 21(6). <https://doi.org/10.5210/fm.v21i6.6791>
- Hampton, K., Goulet, L. S., Rainie, L., & Purcell, K. (2011, June 16). Social networking sites and our lives. Retrieved October 26, 2017, from <http://www.pewinternet.org/2011/06/16/social-networking-sites-and-our-lives/>
- Hampton, K. N., Lu, W., & Shin, I. (2016). Digital media and stress: the cost of caring 2.0. *Information, Communication & Society*, 19(9), 1267–1286. <https://doi.org/10.1080/1369118X.2016.1186714>
- Hansen, D. L., Derry, H. A., Resnick, P. J., & Richardson, C. R. (2003). Adolescents Searching for Health Information on the Internet: An Observational Study. *Journal of Medical Internet Research*, 5(4), e25. <https://doi.org/10.2196/jmir.5.4.e25>
- Hardy, J., & Lindtner, S. (2017). Constructing a Desiring User: Discourse, Rurality, and Design in Location-Based Social Networks. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 13–25). New York, NY, USA: ACM. <https://doi.org/10.1145/2998181.2998347>
- Harmon, M. E. (2015). *Computing as Context: Experiences of Dis/Connection Beyond the Moment of Non/Use*. University of California, Irvine. Retrieved from <http://escholarship.org/uc/item/1dx9060p.pdf>
- Harrison, J., Grant, J., & Herman, J. L. (2012). A gender not listed here: Genderqueers, gender rebels, and otherwise in the National Transgender Discrimination Survey. *LGBTQ Public Policy Journal at the Harvard Kennedy School*, 2(1). Retrieved from <http://escholarship.org/uc/item/2zj46213.pdf>
- Hawkins, B. (2017). Seeking Ways to Our Transgender Bodies, by Ourselves: Rationalizing a Transgender-Specific Health Information Behaviors. In *Proceedings of ASIS&T*.
- Hayes, G. R., Abowd, G. D., Davis, J. S., Blount, M. L., Ebling, M., & Mynatt, E. D. (2008). Opportunities for pervasive computing in chronic cancer care. In *International Conference on Pervasive Computing* (pp. 262–279). Springer.

- Haythornthwaite, C. (2007). Social networks and online community. In A. Joinson, *Oxford Handbook of Internet Psychology* (pp. 121–136). OUP Oxford.
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460–467. <http://dx.doi.org/10.1037/a0029597>
- Herman, N. J. (1993). Return to Sender: Reintegrative Stigma-Management Strategies of Ex-Psychiatric Patients. *Journal of Contemporary Ethnography*, 22(3), 295–330. <https://doi.org/10.1177/089124193022003002>
- Herring, S. C., Scheidt, L. A., Bonus, S., & Wright, E. (2004). Bridging the gap: A genre analysis of weblogs. In *System sciences, 2004. proceedings of the 37th annual Hawaii international conference on* (p. 11–pp). IEEE. Retrieved from [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=1265271](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1265271)
- Herron, D., Moncur, W., & van den Hoven, E. (2016). Digital Possessions After a Romantic Break Up. In *Proceedings of the 9th Nordic Conference on Human-Computer Interaction* (p. 36:1–36:10). New York, NY, USA: ACM. <https://doi.org/10.1145/2971485.2971539>
- Herwig, J. (2009). Liminality and communitas in social media: The case of Twitter. In *Internet: Critical. Internet Research* (Vol. 10, pp. 7–10). Retrieved from [http://www.academia.edu/download/31089557/herwig\\_ir10\\_liminalitycommunitastwitter\\_v5oct09.pdf](http://www.academia.edu/download/31089557/herwig_ir10_liminalitycommunitastwitter_v5oct09.pdf)
- Hill, D. B. (2005). Coming to terms: Using technology to know identity. *Sexuality and Culture*, 9(3), 24–52. <https://doi.org/10.1007/s12119-005-1013-x>
- Hillman, S., Procyk, J., & Neustaedter, C. (2014). “Alksjdf;Lksfd”: Tumblr and the Fandom User Experience. In *Proceedings of the 2014 Conference on Designing Interactive Systems* (pp. 775–784). New York, NY, USA: ACM. <https://doi.org/10.1145/2598510.2600887>
- Hines, S., & Sanger, T. (2010). *Transgender Identities: Towards a Social Analysis of Gender Diversity*. Routledge.
- Hoffmann, A. L. (2017). Data, Technology, and Gender: Thinking About (And From) Trans Lives. In J. C. Pitt & A. Shew, *Spaces for the Future: A Companion to Philosophy of Technology*. Routledge.
- Hogan, B. (2010). The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. *Bulletin of Science, Technology & Society*, 30(6), 377–386. <https://doi.org/10.1177/0270467610385893>
- Holpuch, A. (2016, May 19). “I just feel less alone”: how Tumblr became a source for mental health care. *The Guardian*. Retrieved from <https://www.theguardian.com/lifeandstyle/2016/may/19/tumblr-mental-health-information-community-disorders-healthcare>
- Horak, L. (2014). Trans on YouTube Intimacy, Visibility, Temporality. *TSQ: Transgender Studies Quarterly*, 1(4), 572–585. <https://doi.org/10.1215/23289252-2815255>

- Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research, 15*(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Hu, C., Kumar, S., Huang, J., & Ratnavelu, K. (2017). Disinhibition of negative true self for identity reconstructions in cyberspace: Advancing self-discrepancy theory for virtual setting. *PLOS ONE, 12*(4), e0175623. <https://doi.org/10.1371/journal.pone.0175623>
- Huh, J. (2015). Clinical Questions in Online Health Communities: The Case of “See Your Doctor” Threads. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1488–1499). New York, NY, USA: ACM. <https://doi.org/10.1145/2675133.2675259>
- Hutto, C. J., & Gilbert, E. (2014). Vader: A parsimonious rule-based model for sentiment analysis of social media text. In *Eighth International AAAI Conference on Weblogs and Social Media*. Retrieved from <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM14/paper/view/8109>
- Hwang, K. O., Ottenbacher, A. J., Green, A. P., Cannon-Diehl, M. R., Richardson, O., Bernstam, E. V., & Thomas, E. J. (2010). Social support in an Internet weight loss community. *International Journal of Medical Informatics, 79*(1), 5–13. <https://doi.org/10.1016/j.ijmedinf.2009.10.003>
- It Gets Better Project. (n.d.). What is the It Gets Better Project? Retrieved August 24, 2017, from <http://www.itgetsbetter.org/pages/about-it-gets-better-project/>
- Jackson, S. J., Bailey, M., & Foucault Welles, B. (2017). #GirlsLikeUs: Trans advocacy and community building online. *New Media & Society, 14*61444817709276. <https://doi.org/10.1177/1461444817709276>
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality. Retrieved from <http://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF>
- Jiang, L. C., Bazarova, N. N., & Hancock, J. T. (2011). From Perception to Behavior: Disclosure Reciprocity and the Intensification of Intimacy in Computer-Mediated Communication. *Communication Research, 0093650211405313*. <https://doi.org/10.1177/0093650211405313>
- Joinson, A. N., & Paine, C. B. (2007). Self-disclosure, privacy and the Internet. In A. N. Joinson, *The Oxford handbook of Internet psychology* (pp. 237–252). Retrieved from [http://books.google.com/books?hl=en&lr=&id=zyhkAfDb\\_i4C&oi=fnd&pg=PA237&dq=%22particular+by+focusing+on+disclosure%22+%22between+privacy,+self-disclosure+and%22+%22by+adopting+a+privacy+approach+to%22+%22so+that+it+become+s+shared%22+%22using+the+Internet+to+talk+about%22+&ots=obcZ2viAup&sig=ixxF73Fb0OqDusnH7HwzmojYQH8](http://books.google.com/books?hl=en&lr=&id=zyhkAfDb_i4C&oi=fnd&pg=PA237&dq=%22particular+by+focusing+on+disclosure%22+%22between+privacy,+self-disclosure+and%22+%22by+adopting+a+privacy+approach+to%22+%22so+that+it+become+s+shared%22+%22using+the+Internet+to+talk+about%22+&ots=obcZ2viAup&sig=ixxF73Fb0OqDusnH7HwzmojYQH8)
- Jourard, S. M. (1971). *Self-Disclosure: An Experimental Analysis of the Transparent Self*. New York: John Wiley & Sons Ltd.

- Kelleher, C. (2009). Minority stress and health: Implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Counselling Psychology Quarterly*, 22(4), 373–379. <https://doi.org/10.1080/09515070903334995>
- Kendall, L. (1998). Meaning and Identity in “Cyberspace”: The Performance of Gender, Class, and Race Online. *Symbolic Interaction*, 21(2), 129–153. <https://doi.org/10.1525/si.1998.21.2.129>
- Kirkpatrick, D. (2010). *The Facebook Effect: The Inside Story of the Company That Is Connecting the World*. Simon and Schuster.
- Korsgaard, C. M. (2003). Realism and constructivism in twentieth-century moral philosophy. *Journal of Philosophical Research*, 28(Supplement), 99–122.
- Kozee, H. B., Tylka, T. L., & Bauerband, L. A. (2012). Measuring Transgender Individuals’ Comfort With Gender Identity and Appearance Development and Validation of the Transgender Congruence Scale. *Psychology of Women Quarterly*, 36(2), 179–196. <https://doi.org/10.1177/0361684312442161>
- Kralik, D. (2002). The quest for ordinariness: transition experienced by midlife women living with chronic illness. *Journal of Advanced Nursing*, 39(2), 146–154. <https://doi.org/10.1046/j.1365-2648.2000.02254.x>
- Kralik, D., Visentin, K., & Van Loon, A. (2006). Transition: a literature review. *Journal of Advanced Nursing*, 55(3), 320–329. <https://doi.org/10.1111/j.1365-2648.2006.03899.x>
- Lampe, C., Ellison, N., & Steinfield, C. (2006). A face(book) in the crowd: social Searching vs. social browsing. In *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work* (pp. 167–170). New York, NY, USA: ACM. <https://doi.org/10.1145/1180875.1180901>
- Lampe, C., Wash, R., Velasquez, A., & Ozkaya, E. (2010). Motivations to participate in online communities. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 1927–1936). ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=1753616>
- Lampinen, A., Lehtinen, V., Lehmuskallio, A., & Tamminen, S. (2011). We’re in It Together: Interpersonal Management of Disclosure in Social Network Services. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 3217–3226). New York, NY, USA: ACM. <https://doi.org/10.1145/1978942.1979420>
- Lampinen, A., Tamminen, S., & Oulasvirta, A. (2009). All My People Right Here, Right Now: Management of Group Co-presence on a Social Networking Site. In *Proceedings of the ACM 2009 International Conference on Supporting Group Work* (pp. 281–290). New York, NY, USA: ACM. <https://doi.org/10.1145/1531674.1531717>
- Lepore, S. J., Ragan, J. D., & Jones, S. (2000). Talking facilitates cognitive–emotional processes of adaptation to an acute stressor. *Journal of Personality and Social Psychology*, 78(3), 499–508. <https://doi.org/10.1037/0022-3514.78.3.499>
- Levitt, H. M., & Ippolito, M. R. (2014a). Being Transgender Navigating Minority Stressors and Developing Authentic Self-Presentation. *Psychology of Women Quarterly*, 38(1), 46–64. <https://doi.org/10.1177/0361684313501644>

- Levitt, H. M., & Ippolito, M. R. (2014b). Being Transgender: The Experience of Transgender Identity Development. *Journal of Homosexuality*, 61(12), 1727–1758. <https://doi.org/10.1080/00918369.2014.951262>
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority Stress and Physical Health Among Sexual Minorities. *Perspectives on Psychological Science*, 8(5), 521–548. <https://doi.org/10.1177/1745691613497965>
- Lingel, J., & boyd, danah. (2013). “Keep it secret, keep it safe”: Information poverty, information norms, and stigma. *Journal of the American Society for Information Science and Technology*, 64(5), 981–991. <https://doi.org/10.1002/asi.22800>
- Lombardi, E. L., Wilchins, R. A., Priesing, D., & Malouf, D. (2002). Gender Violence: Transgender Experiences with Violence and Discrimination. *Journal of Homosexuality*, 42(1), 89–101. [https://doi.org/10.1300/J082v42n01\\_05](https://doi.org/10.1300/J082v42n01_05)
- Lottridge, D., Kim, J., Kaye, J. “Jofish,” & Andalibi, N. (n.d.). Frontstage, Backstage, Midstage: Identity Performance on Social Media. In *under review for CHI 2018*.
- Lyubomirsky, S., Sousa, L., & Dickerhoof, R. (2006). The costs and benefits of writing, talking, and thinking about life’s triumphs and defeats. *Journal of Personality and Social Psychology*, 90(4), 692–708. <https://doi.org/10.1037/0022-3514.90.4.692>
- Mackenzie, L. Z. (2017). The Afterlife of Data Identity, Surveillance, and Capitalism in Trans Credit Reporting. *TSQ: Transgender Studies Quarterly*, 4(1), 45–60. <https://doi.org/10.1215/23289252-3711529>
- Madge, C., & O’Connor, H. (2005). Mothers in the making? Exploring liminality in cyber/space. *Transactions of the Institute of British Geographers*, 30(1), 83–97. <https://doi.org/10.1111/j.1475-5661.2005.00153.x>
- Maguen, S., Shipherd, J. C., Harris, H. N., & Welch, L. P. (2007). Prevalence and Predictors of Disclosure of Transgender Identity. *International Journal of Sexual Health*, 19(1), 3–13. [https://doi.org/10.1300/J514v19n01\\_02](https://doi.org/10.1300/J514v19n01_02)
- Maloney-Krichmar, D., & Preece, J. (2005). A multilevel analysis of sociability, usability, and community dynamics in an online health community. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 12(2), 201–232.
- Manjoo, F. (2016, June 7). In the Fight for Transgender Equality, Winning Hearts and Minds Online. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/06/09/technology/in-the-fight-for-transgender-equality-winning-hearts-and-minds-online.html>
- Manning, C. D., Raghavan, P., & Schütze, H. (2008). *Introduction to Information Retrieval*. New York, NY, USA: Cambridge University Press.
- Mark, G., Bagdouri, M., Palen, L., Martin, J., Al-Ani, B., & Anderson, K. (2012). Blogs as a collective war diary. In *Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 37–46). ACM.



- Martin-McDonald, K., & Biernoff, D. (2002). Initiation into a dialysis dependent life: An examination of rites of passage. *Nephrology Nursing Journal*, 29(4), 347–353.
- Marwick, A. E. (2005). *I'm a Lot More Interesting than a Friendster Profile': Identity Presentation, Authenticity and Power in Social Networking Services* (SSRN Scholarly Paper No. ID 1884356). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1884356>
- Marwick, A. E., & boyd, danah. (2010). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114–133. <https://doi.org/10.1177/1461444810365313>
- Marwick, A. E., & boyd, danah. (2014). Networked privacy: How teenagers negotiate context in social media. *New Media & Society*, 16(7), 1051–1067. <https://doi.org/10.1177/1461444814543995>
- Massimi, M., Bender, J. L., Witteman, H. O., & Ahmed, O. H. (2014). Life transitions and online health communities: reflecting on adoption, use, and disengagement (pp. 1491–1501). ACM Press. <https://doi.org/10.1145/2531602.2531622>
- Massimi, M., Dimond, J. P., & Le Dantec, C. A. (2012). Finding a new normal: the role of technology in life disruptions. In *Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 719–728). New York, NY, USA: ACM. <https://doi.org/10.1145/2145204.2145314>
- McInroy, L. B., & Craig, S. L. (2015). Transgender Representation in Offline and Online Media: LGBTQ Youth Perspectives. *Journal of Human Behavior in the Social Environment*, 25(6), 606–617. <https://doi.org/10.1080/10911359.2014.995392>
- McKenna, K. Y. A., & Bargh, J. A. (1998). Coming out in the age of the Internet: Identity “demarginalization” through virtual group participation. *Journal of Personality and Social Psychology*, 75(3), 681–694. <https://doi.org/10.1037/0022-3514.75.3.681>
- McLemore, K. A. (2015). Experiences with Misgendering: Identity Misclassification of Transgender Spectrum Individuals. *Self and Identity*, 14(1), 51–74. <https://doi.org/10.1080/15298868.2014.950691>
- Mead, G. H. (1934). *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*. University of Chicago Press.
- Meadow, T. (2016). Toward Trans\* Epistemology: Imagining the Lives of Transgender People. *WSQ: Women's Studies Quarterly*, 44(3), 319–323.
- Meyer, I. H. (1995). Minority Stress and Mental Health in Gay Men. *Journal of Health and Social Behavior*, 36(1), 38–56. <https://doi.org/10.2307/2137286>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Miller, C. R., & Shepherd, D. (2004). Blogging as social action: A genre analysis of the weblog. *Into the Blogosphere: Rhetoric, Community, and Culture of Weblogs*, 18(1), 1–24.

- Miller, C. T., & Major, B. (2003). Coping with Stigma and Prejudice. In T. F. Heatherton, *The Social Psychology of Stigma*. Guilford Press.
- Morris, J. F., Waldo, C. R., & Rothblum, E. D. (2001). A Model of Predictors and Outcomes of Outness Among Lesbian and Bisexual Women. *American Journal of Orthopsychiatry*, 71(1), 61–71.
- Mullen, G., & Moane, G. (2013). A Qualitative Exploration of Transgender Identity Affirmation at the Personal, Interpersonal, and Sociocultural Levels. *International Journal of Transgenderism*, 14(3), 140–154. <https://doi.org/10.1080/15532739.2013.824847>
- Nakamura, L. (2002). *Cybertypes: Race, Ethnicity, and Identity on the Internet*. Routledge.
- Nardi, B. A., Schiano, D. J., & Gumbrecht, M. (2004). Blogging As Social Activity, or, Would You Let 900 Million People Read Your Diary? In *Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work* (pp. 222–231). New York, NY, USA: ACM. <https://doi.org/10.1145/1031607.1031643>
- Nardi, B. A., Schiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why We Blog. *Commun. ACM*, 47(12), 41–46. <https://doi.org/10.1145/1035134.1035163>
- Neal, L., Lindgaard, G., Oakley, K., Hansen, D., Kogan, S., Leimeister, J. M., & Selker, T. (2006). Online Health Communities. In *CHI '06 Extended Abstracts on Human Factors in Computing Systems*.
- Newman, M. W., Lauterbach, D., Munson, S. A., Resnick, P., & Morris, M. E. (2011). It's not that i don't have problems, i'm just not putting them on facebook: challenges and opportunities in using online social networks for health. In *Proceedings of the ACM 2011 conference on Computer supported cooperative work* (pp. 341–350). New York, NY, USA: ACM. <https://doi.org/10.1145/1958824.1958876>
- Nguyen, T., Duong, T., Phung, D., & Venkatesh, S. (2014). Affective, Linguistic and Topic Patterns in Online Autism Communities. In B. Benatallah, A. Bestavros, Y. Manolopoulos, A. Vakali, & Y. Zhang (Eds.), *Web Information Systems Engineering – WISE 2014* (pp. 474–488). Springer International Publishing. [https://doi.org/10.1007/978-3-319-11746-1\\_35](https://doi.org/10.1007/978-3-319-11746-1_35)
- Nguyen, T., Phung, D., Adams, B., & Venkatesh, S. (2011). Prediction of Age, Sentiment, and Connectivity from Social Media Text. In A. Bouguettaya, M. Hauswirth, & L. Liu (Eds.), *Web Information System Engineering – WISE 2011* (pp. 227–240). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-24434-6\\_17](https://doi.org/10.1007/978-3-642-24434-6_17)
- Nissenbaum, H. (2004). Privacy as Contextual Integrity. *Washington Law Review*, 79, 119.
- Norval, C., Arnott, J. L., Hine, N. A., & Hanson, V. L. (2011). Purposeful social media as support platform: Communication frameworks for older adults requiring care. In *2011 5th International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth)* (pp. 492–494).
- Nuttbrock, L., Bockting, W., Rosenblum, A., Mason, M., Macri, M., & Becker, J. (2012). Gender Identity Conflict/Affirmation and Major Depression Across the Life Course of Transgender Women. *International Journal of Transgenderism*, 13(3), 91–103. <https://doi.org/10.1080/15532739.2011.657979>

- Nyong'o, T. (2010, September 30). School Days. Retrieved August 24, 2017, from <https://bullybloggers.wordpress.com/2010/09/30/school-daze/>
- Oakley, A. (2016). Disturbing Hegemonic Discourse: Nonbinary Gender and Sexual Orientation Labeling on Tumblr. *Social Media + Society*, 2(3), 2056305116664217. <https://doi.org/10.1177/2056305116664217>
- Owens, T. J., Robinson, D. T., & Smith-Lovin, L. (2010). Three Faces of Identity. *Annual Review of Sociology*, 36(1), 477–499. <https://doi.org/10.1146/annurev.soc.34.040507.134725>
- Palen, L., & Dourish, P. (2003). Unpacking “privacy” for a networked world. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 129–136). New York, NY, USA: ACM. <https://doi.org/10.1145/642611.642635>
- Papacharissi, Z. (2015). Toward New Journalism(s). *Journalism Studies*, 16(1), 27–40. <https://doi.org/10.1080/1461670X.2014.890328>
- Paul, A., Agrawal, A., Liao, W., & Choudhary, A. (2016). AnonyMine: Mining anonymous social media posts using psycho-lingual and crowd-sourced dictionaries. In *Proceedings of KDD*.
- Pedregosa, F., Varoquaux, G., Gramfort, A., Michel, V., Thirion, B., Grisel, O., ... Dubourg, V. (2011). Scikit-learn: Machine learning in Python. *Journal of Machine Learning Research*, 12(Oct), 2825–2830.
- Pennebaker, J. W. (1995). *Emotion, Disclosure & Health*. American Psychological Association.
- Pennebaker, J. W., Boyd, R. L., Jordan, K., & Blackburn, K. (2015). *The development and psychometric properties of LIWC2015*. Austin, TX: University of Texas at Austin. Retrieved from <https://utexas-ir.tdl.org/handle/2152/31333>
- Pennebaker, J. W., Groom, C. J., Loew, D., & Dabbs, J. M. (2004). Testosterone as a Social Inhibitor: Two Case Studies of the Effect of Testosterone Treatment on Language. *Journal of Abnormal Psychology*, 113(1), 172–175. <https://doi.org/10.1037/0021-843X.113.1.172>
- Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, 56(2), 239–245. <https://doi.org/10.1037//0022-006X.56.2.239>
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology*, 72(4), 863–871. <https://doi.org/10.1037//0022-3514.72.4.863>
- Pennebaker, J. W., Mehl, M. R., & Niederhoffer, K. G. (2003). Psychological Aspects of Natural Language Use: Our Words, Our Selves. *Annual Review of Psychology*, 54(1), 547–577. <https://doi.org/10.1146/annurev.psych.54.101601.145041>
- Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology*, 55(10), 1243–1254.
- Perrin, A. (2015, October 8). Social Media Usage: 2005-2015. Retrieved July 31, 2016, from <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>

- Pohjanen, A. M., & Kortelainen, T. A. M. (2015). Transgender information behaviour. *Journal of Documentation*, 72(1), 172–190. <https://doi.org/10.1108/JD-04-2015-0043>
- Preece, J. (1998). Empathic Communities: Reaching out Across the Web. *Interactions*, 5(2), 32–43. <https://doi.org/10.1145/274430.274435>
- Preece, J. (2000). *Online Communities: Designing Usability and Supporting Sociability* (1 edition). New York: Wiley.
- Premack, R. (2016, October 24). Tumblr's Depression Connection. Retrieved November 3, 2016, from <https://theringer.com/tumblr-communities-depression-mental-illness-anxiety-c2ca927cd305#.11etdnit6>
- Prosser, J. (2014). *Digital Trans*. Retrieved from [http://www.youtube.com/watch?v=q7S4YgAEupY&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=q7S4YgAEupY&feature=youtube_gdata_player)
- Puar, J. (2010, November 16). In the wake of It Gets Better. *The Guardian*. Retrieved from <http://www.theguardian.com/commentisfree/cifamerica/2010/nov/16/wake-it-gets-better-campaign>
- Puckett, J. A., Woodward, E. N., Mereish, E. H., & Pantalone, D. W. (2014). Parental Rejection Following Sexual Orientation Disclosure: Impact on Internalized Homophobia, Social Support, and Mental Health. *LGBT Health*, 2(3), 265–269. <https://doi.org/10.1089/lgbt.2013.0024>
- PyTumblr. (n.d.). PyTumblr. Retrieved December 15, 2016, from <https://github.com/tumblr/pytumblr>
- Rainie, L. (2016, January 20). The state of privacy in America: What we learned. Retrieved May 6, 2016, from <http://www.pewresearch.org/fact-tank/2016/01/20/the-state-of-privacy-in-america/>
- Raun, T. (2010). Screen-Births: Exploring the Transformative Potential in Trans Video Blogs. *Graduate Journal of Social Science*, 7(2), 113–130.
- Raun, T. (2015). Video blogging as a vehicle of transformation: Exploring the intersection between trans identity and information technology. *International Journal of Cultural Studies*, 18(3), 365–378. <https://doi.org/10.1177/1367877913513696>
- Rawson, K.J. (2014). Transgender Worldmaking in Cyberspace: Historical Activism on the Internet. *QED: A Journal in GLBTQ Worldmaking*, 1(2), 38–60. <https://doi.org/10.14321/qed.1.2.0038>
- Rehman, R., & Sojka, P. (2010). Software Framework for Topic Modelling with Large Corpora. In *Proceedings of the LREC 2010 Workshop on New Challenges for NLP Frameworks* (pp. 45–50). Valletta, Malta. Retrieved from <http://is.muni.cz/publication/884893/en>
- Reinecke, L., & Trepte, S. (2014). Authenticity and well-being on social network sites: A two-wave longitudinal study on the effects of online authenticity and the positivity bias in SNS communication. *Computers in Human Behavior*, 30, 95–102. <https://doi.org/10.1016/j.chb.2013.07.030>

- Renninger, B. J. (2015). “Where I can be myself . . . where I can speak my mind” : Networked counterpublics in a polymedia environment. *New Media & Society*, 17(9), 1513–1529. <https://doi.org/10.1177/1461444814530095>
- Rifkin, A. (2013, February 18). Tumblr Is Not What You Think. Retrieved May 29, 2017, from <http://social.techcrunch.com/2013/02/18/tumblr-is-not-what-you-think/>
- Ringland, K. E. (2018). *Exploring Virtual Worlds as a Support for Social Play in Children with Disabilities*. University of California, Irvine.
- Robards, B. (2012). Leaving MySpace, joining Facebook: ‘Growing up’ on social network sites. *Continuum*, 26(3), 385–398. <https://doi.org/10.1080/10304312.2012.665836>
- Rode, J. A. (2011). A theoretical agenda for feminist HCI. *Interacting with Computers*, 23(5), 393–400. <https://doi.org/10.1016/j.intcom.2011.04.005>
- Rodriguez, R. R., & Kelly, A. E. (2006). Health Effects of Disclosing Secrets to Imagined Accepting Versus Nonaccepting Confidants. *Journal of Social and Clinical Psychology*, 25(9), 1023–1047. <https://doi.org/10.1521/jscp.2006.25.9.1023>
- Rogers, Y. (2012). HCI Theory: Classical, Modern, and Contemporary. *Synthesis Lectures on Human-Centered Informatics*, 5(2), 1–129. <https://doi.org/10.2200/S00418ED1V01Y201205HCI014>
- Rood, B. A., Puckett, J. A., Pantalone, D. W., & Bradford, J. B. (2015). Predictors of Suicidal Ideation in a Statewide Sample of Transgender Individuals. *LGBT Health*, 2(3), 270–275. <https://doi.org/10.1089/lgbt.2013.0048>
- Rood, B. A., Reisner, S. L., Surace, F. I., Puckett, J. A., Maroney, M. R., & Pantalone, D. W. (2016). Expecting Rejection: Understanding the Minority Stress Experiences of Transgender and Gender-Nonconforming Individuals. *Transgender Health*, 1(1), 151–164. <https://doi.org/10.1089/trgh.2016.0012>
- Rosario, M., Hunter, J., Maguen, S., Gwadz, M., & Smith, R. (2001). The Coming-Out Process and Its Adaptational and Health-Related Associations Among Gay, Lesbian, and Bisexual Youths: Stipulation and Exploration of a Model. *American Journal of Community Psychology*, 29(1), 133–160. <https://doi.org/10.1023/A:1005205630978>
- Rotondi, N. K., Bauer, G. R., Scanlon, K., Kaay, M., Travers, R., & Travers, A. (2012). Prevalence of and risk and protective factors for depression in female-to-male transgender Ontarians: Trans PULSE Project. *Canadian Journal of Community Mental Health*, 30(2), 135–155.
- Rotondi, N. K., Bauer, G. R., Travers, R., Travers, A., Scanlon, K., & Kaay, M. (2012). Depression in male-to-female transgender Ontarians: results from the Trans PULSE Project. *Canadian Journal of Community Mental Health*, 30(2), 113–133.
- Sanchez, A. A. (2017, July 7). The whiteness of “coming out”: culture and identity in the disclosure narrative. Retrieved July 7, 2017, from <http://archermagazine.com.au/2017/07/culture-coming-out/>

- Sánchez, F. J., & Vilain, E. (2009). Collective Self-Esteem as a Coping Resource for Male-to-Female Transsexuals. *Journal of Counseling Psychology*, 56(1), 202–209. <https://doi.org/10.1037/a0014573>
- Sas, C., & Whittaker, S. (2013). Design for forgetting: disposing of digital possessions after a breakup. In *Proceedings of the 2013 ACM annual conference on Human factors in computing systems* (pp. 1823–1832). New York, NY, USA: ACM. <https://doi.org/10.1145/2466110.2466241>
- Schiano, D. J., Nardi, B. A., Gumbrecht, M., & Swartz, L. (2004). Blogging by the Rest of Us. In *CHI '04 Extended Abstracts on Human Factors in Computing Systems* (pp. 1143–1146). New York, NY, USA: ACM. <https://doi.org/10.1145/985921.986009>
- Schlesinger, A., Edwards, W. K., & Grinter, R. E. (2017). Intersectional HCI: Engaging Identity through Gender, Race, and Class. *Proceedings of CHI*. Retrieved from <https://pdfs.semanticscholar.org/27b4/9a706d907c5d6858068ba97bbe873fcf687f.pdf>
- Schlossberg, N. K. (1995). *Counseling Adults in Transition: Linking Practice With Theory*. Springer Publishing Company.
- Schoenebeck, S., Ellison, N. B., Blackwell, L., Bayer, J. B., & Falk, E. B. (2016). Playful Backstalking and Serious Impression Management: How Young Adults Reflect on their Past Identities on Facebook. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing*.
- Secord, P. F., & Backman, C. W. (1961). Personality theory and the problem of stability change in individual behavior: An interpersonal approach. *Psychological Review*, 68(1), 21.
- Seko, Y., & Lewis, S. P. (2016). The self—harmed, visualized, and reblogged: Remaking of self-injury narratives on Tumblr. *New Media & Society*, 1461444816660783. <https://doi.org/10.1177/1461444816660783>
- Semaan, B., Britton, L. M., & Dosono, B. (2017). Military Masculinity and the Travails of Transitioning: Disclosure in Social Media. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 387–403). New York, NY, USA: ACM. <https://doi.org/10.1145/2998181.2998221>
- Semaan, B. C., Britton, L. M., & Dosono, B. (2016). Transition Resilience with ICTs: “Identity Awareness” in Veteran Re-Integration. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 2882–2894). New York, NY, USA: ACM. <https://doi.org/10.1145/2858036.2858109>
- Serano, J. (2016). Julia Serano’s trans, gender, sexuality, & activism glossary. Retrieved December 22, 2017, from <http://www.juliaserano.com/terminology.html>
- Shapiro, E. (2004). ‘Trans’ cending Barriers. *Journal of Gay & Lesbian Social Services*, 16(3–4), 165–179. [https://doi.org/10.1300/J041v16n03\\_11](https://doi.org/10.1300/J041v16n03_11)
- Sheehy, G. (2006). *Passages: Predictable Crises of Adult Life*. Ballantine Books.

- Singh, A. A., Hays, D. G., & Watson, L. S. (2011). Strength in the Face of Adversity: Resilience Strategies of Transgender Individuals - ProQuest. *Journal of Counseling and Development*, 89(1), 20–27.
- Skeels, M. M., Unruh, K. T., Powell, C., & Pratt, W. (2010). Catalyzing Social Support for Breast Cancer Patients. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 173–182). New York, NY, USA: ACM. <https://doi.org/10.1145/1753326.1753353>
- Sleeper, M., Balebako, R., Das, S., McConahy, A. L., Wiese, J., & Cranor, L. F. (2013). The Post That Wasn't: Exploring Self-censorship on Facebook. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work* (pp. 793–802). New York, NY, USA: ACM. <https://doi.org/10.1145/2441776.2441865>
- Sleight, A. G. (2016). Liminality and Ritual in Biographical Work: A Theoretical Framework for Cancer Survivorship. *International Journal of Transpersonal Studies*, 35(1), 52–61.
- Smith, C. (2013, December 13). Tumblr Offers Advertisers A Major Advantage: Young Users, Who Spend Tons Of Time On The Site. Retrieved July 31, 2016, from <http://www.businessinsider.com/tumblr-and-social-media-demographics-2013-12>
- Smith, M. E., Nguyen, D. T., Lai, C., Leshed, G., & Baumer, E. P. S. (2012). Going to College and Staying Connected: Communication Between College Freshmen and Their Parents. In *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work* (pp. 789–798). New York, NY, USA: ACM. <https://doi.org/10.1145/2145204.2145322>
- Spade, D. (2008). Documenting Gender. *The Williams Institute*. Retrieved from <http://escholarship.org/uc/item/995307dm>
- Spade, D. (2011). *Normal Life: Administrative Violence, Critical Trans Politics, and the Limits of Law*. South End Press.
- Statista. (2016). Distribution of Tumblr users in the United States as of December 2016, by age group. Retrieved August 1, 2017, from <https://www.statista.com/statistics/244209/age-distribution-of-tumblr-users-in-the-united-states/>
- Statista. (2017). Tumblr: total number of blogs 2017 | Statistic. Retrieved December 13, 2017, from <https://www.statista.com/statistics/256235/total-cumulative-number-of-tumblr-blogs/>
- Steinmetz, K. (2014, June). The Transgender Tipping Point. *TIME.Com*. Retrieved from <http://time.com/135480/transgender-tipping-point/>
- Stiles, W. B. (1995). Disclosure as a Speech Act: Is It Psychotherapeutic to Disclose? In J. W. Pennebaker, *Emotion, Disclosure & Health*. American Psychological Association.
- Stone, A. R. (1995). *The War of Desire and Technology at the Close of the Mechanical Age*. MIT Press.
- Stone, A. R. (Sandy). (1987). The Empire Strikes Back: A Posttranssexual Manifesto. Retrieved from <http://sandystone.com/empire-strikes-back.pdf>
- Strain, J. D., & Shuff, I. M. (2010). Psychological Well-Being and Level of Outness in a Population of Male-to-Female Transsexual Women Attending a National Transgender

- Conference. *International Journal of Transgenderism*, 12(4), 230–240.  
<https://doi.org/10.1080/15532739.2010.544231>
- Strauss, A., & Corbin, J. M. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. SAGE Publications.
- Streed, C. G., McCarthy, E. P., & Haas, J. S. (2017). Association Between Gender Minority Status and Self-Reported Physical and Mental Health in the United States. *JAMA Internal Medicine*. <https://doi.org/10.1001/jamainternmed.2017.1460>
- Street, 1615 L., NW, Washington, S. 800, & Inquiries, D. 20036 U. 419 4300 | M. 419 4349 | F. 419 4372 | M. (2015, August 17). Demographics of Tumblr. Retrieved August 1, 2017, from [http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/2015-08-19\\_social-media-update\\_05/](http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/2015-08-19_social-media-update_05/)
- Stryker, S. (2009). *Transgender History*. Seal Press.
- Stryker, S., & Whittle, S. (2006). *The Transgender Studies Reader*. Taylor & Francis.
- Stutzman, F. D. (2011). *Networked Information Behavior in Life Transition*. THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL. Retrieved from <http://gradworks.umi.com/34/56/3456300.html>
- Stutzman, Fred, Capra, R., & Thompson, J. (2011). Factors mediating disclosure in social network sites. *Computers in Human Behavior*, 27(1), 590–598.  
<https://doi.org/10.1016/j.chb.2010.10.017>
- Stutzman, Frederic, & Hartzog, W. (2012). Boundary Regulation in Social Media. In *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work* (pp. 769–778). New York, NY, USA: ACM. <https://doi.org/10.1145/2145204.2145320>
- Suchman, L. A. (1987). *Plans and Situated Actions: The Problem of Human-machine Communication*. Cambridge University Press.
- Szulc, Ł., & Dhoest, A. (2013). The internet and sexual identity formation: Comparing Internet use before and after coming out. *Communications*, 38(4), 347–365.  
<https://doi.org/10.1515/commun-2013-0021>
- Tamir, M., John, O. P., Srivastava, S., & Gross, J. J. (2007). Implicit theories of emotion: Affective and social outcomes across a major life transition. *Journal of Personality and Social Psychology*, 92(4), 731–744. <https://doi.org/10.1037/0022-3514.92.4.731>
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods. *Journal of Language and Social Psychology*, 29(1), 24–54. <https://doi.org/10.1177/0261927X09351676>
- Testa, R. J., Jiminez, C. L., & Rankin, S. (2014). Risk and Resilience During Transgender Identity Development: The Effects of Awareness and Engagement with Other Transgender People on Affect. *Journal of Gay & Lesbian Mental Health*, 18(1), 31–46.  
<https://doi.org/10.1080/19359705.2013.805177>
- Thomas, D. L., & Diener, E. (1990). Memory accuracy in the recall of emotions. *Journal of Personality and Social Psychology*, 59(2), 291.



- Thomassen, B. (2009). The uses and meanings of liminality. *International Political Anthropology*, 2(1), 5–27.
- Tiidenberg, K. (2013). How does online experience inform our sense of self? NSFW blogger identity narratives. In A.-A. Allaste, *'Back in the West' Changing Lifestyles in Transforming Societies*. Peter Lang. Retrieved from [https://www.academia.edu/2382462/How\\_does\\_online\\_experience\\_inform\\_our\\_sense\\_of\\_self\\_NSFw\\_blogger\\_identity\\_narratives](https://www.academia.edu/2382462/How_does_online_experience_inform_our_sense_of_self_NSFw_blogger_identity_narratives)
- Toomey, R. B., Ryan, C., Diaz, R. M., & Russell, S. T. (2017). Coping with Sexual Orientation-Related Minority Stress. *Journal of Homosexuality*, 0(ja), null. <https://doi.org/10.1080/00918369.2017.1321888>
- TransWhat? (2017). TransWhat? • Glossary of terms. Retrieved December 22, 2017, from <https://transwhat.org/glossary>
- Tufekci, Z. (2014, September 4). Why Twitter Should Not Algorithmically Curate the Timeline — The Message. Retrieved May 5, 2015, from <https://medium.com/message/the-algorithm-giveth-but-it-also-taketh-b7efad92bc1f>
- Tumblr. (2014, January 8). Application Developer and API License Agreement | Tumblr. Retrieved July 31, 2016, from [https://www.tumblr.com/docs/en/api\\_agreement](https://www.tumblr.com/docs/en/api_agreement)
- Tumblr. (n.d.). Tumblr API. Retrieved December 15, 2016, from <https://www.tumblr.com/docs/en/api/v2>
- Turkle, S. (1995). *Life on the Screen*. Simon and Schuster.
- Turkle, S. (1999). Cyberspace and Identity. *Contemporary Sociology*, 28(6), 643–648. <https://doi.org/10.2307/2655534>
- Turner, V. (1969). *The Ritual Process: Structure and Anti-Structure*. Transaction Publishers.
- Turner, V. (1987). Betwixt and Between: The Liminal Period in Rites of Passage. In L. C. Mahdi, S. Foster, & M. Little, *Betwixt & Between: Patterns of Masculine and Feminine Initiation*. Open Court Publishing.
- UCLA Institute for Digital Research and Education. (n.d.). Robust Regression | R Data Analysis Examples. Retrieved August 8, 2017, from <https://stats.idre.ucla.edu/r/dae/robust-regression/>
- Ussher, J., Kirsten, L., Butow, P., & Sandoval, M. (2006). What do cancer support groups provide which other supportive relationships do not? The experience of peer support groups for people with cancer. *Social Science & Medicine*, 62(10), 2565–2576. <https://doi.org/10.1016/j.socscimed.2005.10.034>
- Valentine, D. (2007). *Imagining Transgender: An Ethnography of a Category*. Duke University Press.
- van Dijck, J. (2013). 'You have one identity': performing the self on Facebook and LinkedIn. *Media, Culture & Society*, 35(2), 199–215. <https://doi.org/10.1177/0163443712468605>
- van Gennep, A. (1909). *The rites of passage* (17. pr). Chicago: University of Chicago Press.

- Van House, N. A. (2011). Feminist HCI meets facebook: Performativity and social networking sites. *Interacting with Computers*, 23(5), 422–429. <https://doi.org/10.1016/j.intcom.2011.03.003>
- Villicana, A. J., Delucio, K., & Biernat, M. (2016). “Coming out” among gay Latino and gay White men: implications of verbal disclosure for well-being. *Self and Identity*, 15(4), 468–487. <https://doi.org/10.1080/15298868.2016.1156568>
- Vitak, J. (2012). The Impact of Context Collapse and Privacy on Social Network Site Disclosures. *Journal of Broadcasting & Electronic Media*, 56(4), 451–470. <https://doi.org/10.1080/08838151.2012.732140>
- Vivienne, S. (2017). “I will not hate myself because you cannot accept me”: Problematizing empowerment and gender-diverse selfies. *Popular Communication*, 15(2), 126–140. <https://doi.org/10.1080/15405702.2016.1269906>
- Wang, Y.-C., Burke, M., & Kraut, R. (2016). Modeling Self-Disclosure in Social Networking Sites. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (pp. 74–85). New York, NY, USA: ACM. <https://doi.org/10.1145/2818048.2820010>
- Wang, Y.-C., Kraut, R. E., & Levine, J. M. (2015). Eliciting and Receiving Online Support: Using Computer-Aided Content Analysis to Examine the Dynamics of Online Social Support. *Journal of Medical Internet Research*, 17(4), e99. <https://doi.org/10.2196/jmir.3558>
- Wang, Y.-C., Kraut, R., & Levine, J. M. (2012). To stay or leave?: the relationship of emotional and informational support to commitment in online health support groups. In *Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work* (pp. 833–842). ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=2145329>
- Wargo, J. M. (2017). # donttagyourhate: Reading Collecting and Curating as Genres of Participation in LGBT Youth Activism on Tumblr. *Digital Culture & Education*, 9(1), 14–30.
- Wegner, D. M., & Lane, J. D. (1995). From Secrecy to Psychopathology. In J. W. Pennebaker, *Emotion, Disclosure & Health*. American Psychological Association.
- Whittle, S. (1998). The Trans-Cyberian Mail Way. *Social & Legal Studies*, 7(3), 389–408. <https://doi.org/10.1177/096466399800700304>
- Williams. (2016). “I Don’t Belong in Here!” A Social Media Analysis of Digital Protest, Transgender Rights, and International Restroom Legislation. In K. Langmia & T. C. M. Tyree, *Social Media: Culture and Identity*. Lexington Books.
- Wilson, M. (2002). ‘I am the Prince of Pain, for I am a Princess in the Brain’: Liminal Transgender Identities, Narratives and the Elimination of Ambiguities. *Sexualities*, 5(4), 425–448. <https://doi.org/10.1177/1363460702005004003>
- Xu, J., Compton, R., Lu, T.-C., & Allen, D. (2014). Rolling through tumblr: characterizing behavioral patterns of the microblogging platform. In *WebSci* (pp. 13–22). ACM Press. <https://doi.org/10.1145/2615569.2615694>

- Yun, H. (2006). *The Creation and Validation of a Perceived Anonymity Scale Based on the Social Information Processing Model and Its Nomological Network Test in an Online Social Support Community*. Michigan State University.
- Zhang, R. (2017). The stress-buffering effect of self-disclosure on Facebook: An examination of stressful life events, social support, and mental health among college students. *Computers in Human Behavior*, 75, 527–537. <https://doi.org/10.1016/j.chb.2017.05.043>
- Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior*, 24(5), 1816–1836. <https://doi.org/10.1016/j.chb.2008.02.012>
- Zhao, X., Salehi, N., Naranjit, S., Alwaalan, S., Voids, S., & Cosley, D. (2013). The Many Faces of Facebook: Experiencing Social Media As Performance, Exhibition, and Personal Archive. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1–10). New York, NY, USA: ACM. <https://doi.org/10.1145/2470654.2470656>
- Ziegele, M., & Reinecke, L. (2017). No Place for Negative Emotions? The Effects of Message Valence, Communication Channel, and Social Distance on Users' Willingness to Respond to SNS Status. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2017.06.016>
- Zimman, L. (2009). 'The other kind of coming out': Transgender people and the coming out narrative genre. *Gender and Language*, 3(1). <https://doi.org/10.1558/genl.v3i1.53>