

# Social Media's Role During Identity Changes Related to **Major Life Events**

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Major life events can cause great upheaval in one's life. Many people perceive their identities to change due to major life events. During identity shifts, impression management and self-presentation, online communities, and social media affordances can allow individuals to better facilitate their experiences. To examine how people perceive their identity to change during major events and how they use social media in the process, we interviewed 28 participants who recently experienced major life events. We found that many people perceived their identity to change through various avenues that they felt were important to their identity: mental processes, identity roles, and identity fulfillment. However, some people perceive their identity to be maintained rather than changed. During identity changes or maintenance, participants utilized impression management and self-presentation to curate their online presence. Participants also used online communities to build relationships with similar others or virtual friends and enable more connections via what we call the domino effect. Social media sites also provided the affordances of editability, visibility control, and spreadability, which can help ease life transition and identity change processes.

CCS Concepts: • Human-centered computing → Empirical studies in HCI; Empirical studies in collaborative and social computing.

Additional Key Words and Phrases: life transitions, identity, online networks, online communities, social media, social media affordances

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# INTRODUCTION

Major life events and transitions<sup>1</sup> are processes that greatly impact a person's life and involve reconstructing one's life in some form (identity, physical characteristics, etc.) [48]. For instance, when individuals relocate to a different city, the change in their spatial environment can affect their self-perceptions and self-evaluations [68]. When life events involve stigma, such as alcohol and other drug addiction [10, 65], gender transition [41], and pregnancy loss [2], the transition can be

<sup>1</sup>Hereafter referred to simply as "life events" or "life transitions" rather than "life events and transitions." Some life transitions involve multiple stages and take long periods of time to complete (e.g., divorce, gender transition), while others take place on one day yet also involve longer identity change processes (e.g., pregnancy, job loss). We use "life transitions" as an umbrella term to encompass life experiences involving both moments and processes of change.

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more difficult and can impact one's self-presentation and identity expression in both the physical world and online spaces such as social media sites. A transition's predictability, including when it will occur [8], how long it will last [8], and how much adjustment or readjustment is needed [43], can add additional stress, as some transitions can be anticipated while others cannot.

Major life events often result in identity changes or transitions [10, 41, 54, 67]. People experiencing identity change sometimes turn to social media to help facilitate the process. Social media allows people to present themselves the way they choose [23] and to find and share support and resources [50]. Navigating these online spaces requires careful consideration of impression management and self-presentation [44, 47] because curating content can allow people to better manage their online presence based on their life events. When experiencing identity change, people may also look to online communities that contain similar others – people who hold commonalities such as similar identity and interests [5] – to find support and build relationships.

Social media affordances can also play a role in facilitating identity change or maintenance. Social media affordances can be defined as "the mutuality of actor intentions and technology capabilities that provide the potential for a particular action" [27] such as editing social media content [70]. These affordances can provide control and agency over experiences of identity change or maintenance as they permit users to manage what content is shared or seen by others. Understanding affordances in relation to identity change or maintenance can be useful in making platforms better suited for users during major life transitions.

To better understand perceived changes in identity from major life events and how social media is used, we address the following research questions:

RQ1 : How do people perceive their identity to change from major life events?

RQ2: How do people use social media during identity change to facilitate their experiences?

To answer these research questions, we conducted 28 interviews with social media users from the U.S. and Canada who had recently experienced life transitions. We examined life transitions broadly (rather than focusing on one type of life event) to understand identity change experiences in a wide range of contexts. We asked participants about life events they recently experienced, if and how their identity changed as a result, and their online sharing behaviors related to identity change or maintenance.

This study contributes an empirical understanding of how transitions can impact a person's identity through various avenues and social media's role in facilitating identity transitions. Our qualitative analysis revealed that many people perceived their identity to change after major life events as they changed their mental processes (self-concept, mindset, and attitude) or identity roles, or by experiencing identity fulfillment. For some participants, identity was maintained rather than changed. In addition, we found that social media affordances such as editability, visibility control, and spreadability can ease life transition and identity change processes. Comparably, impression management and self-presentation online provide the means to control one's online presence during identity change or maintenance. Our study also contributes to prior work regarding how online community networks can be sites for exchanging information and support. Specifically, we provide a deeper understanding of how online communities containing similar others and virtual friends can create further branches of connections, which we call a "domino effect" – connections in a community that facilitate and cascade into new branches of connections. We close by discussing new directions for using an affordances lens to consider identity change or maintenance on social media platforms.

Type of Transitions Life Transitions Participants Experienced Health serious physical illness diagnosis, mental health struggles, serious injury, accident, or physical ailment, major surgery, pregnancy, pregnancy loss, recovery from addiction, began heavily using drugs or alcohol home purchase Financial lost home/became homeless, move to different town/city within same state, Relocation move within same town/city, move to a different state, move to a different country, family member moved into/out of household went to jail or prison, released from jail or prison, lawsuit or legal action Legal Relationships marriage, engagement, divorce, ended/began serious romantic relationship Family relationships new pet, gave birth/became a parent Death death of loved one, death of parent, death of extended family member, death of pet Career started first job, started a new job, involuntary job loss, voluntary job loss, change in responsibilities at work Education graduated college, started college, graduated high school Lifestyle change change in religious/spiritual beliefs or practices Identity came out as LGBTQ+, gender transition Societal pandemic

Table 1. Summary of major life transitions participants experienced

# 2 RELATED WORKS

# 2.1 Identity and identity change

For nearly a century, researchers have studied identity. What we consider to be our identity differs for each individual. Identities can be used to define who we are and allow us to differentiate ourselves from or identify ourselves with others. Stets and Burke described identity as a set of meanings individuals use to describe themselves [69]. Literature has also delineated how people are capable of holding more than one identity [17]. Sociologists and psychologists have described how multiple identities are placed in a hierarchical system in which individuals arrange their identities based on salience [18, 21]. Each identity we hold can have more importance over another at times, demonstrating a systemic structure of how we and others view ourselves. When a situation or event disrupts our lives, the salience of our identities can shift [10, 41, 54, 67]. In this work, identity refers to collective aspects (e.g., meanings, qualities, roles, personalities) that constitute and create an individual. This research aims to address how people may perceive their identity or identities to change during and after major life transitions, and the role of social media in identity transformations.

# 2.2 Identity change and life transitions

A major life transition or event is an experience that causes upheaval in an individual's life [48]. Identity change is one of many responses to such upheaval. Much existing literature focuses on how identity can change from singular life events such as overcoming alcohol [10], transitioning from high school to college or university [54], veteran reintegration into civilian life [67], and gender transition [41]. This paper examines the multiple ways people perceive their identities to change due to a variety of life events, rather than focusing on one type of life event. We utilize an extensive taxonomy of life events to categorize participants' experiences into 12 broad categories [43] (see Table 1).

- 2.2.1 Self-concept, mindset, and attitude. The concept of the self, or self-concept, is one of many ways people can view or describe their identity. Self-concept is a product developed through social interaction and is how a person views their individual self [37]. Comparably, mindsets are a collection of beliefs that shape an individual's thoughts [22] and attitudes are constructed judgements [66]. While unique in their definitions, we connect these terms to describe the mental processes that relate to the individual self. They each can be constructed and reconstructed in response to external or internal motivations [22, 37, 49, 66]. Our study describes how major life events can cause the construction or reconstruction of identity through the mental processes described above by shifting how one views oneself and the world around them.
- 2.2.2 Changing identity roles. Much research has examined how identity is changed or transformed through specific life events [10, 41, 54, 67], but little is known about how a person's identity role(s) contribute to the formation of new identities when a life event occurs. Identity roles are the labels we assign ourselves based on the roles we occupy in social structures [69] such as a "divorcé, retiree, recovered alcoholic, widow, alumnus" or with the prefix, "ex:" "ex-doctor, ex-executive, ex-nun, ex-convict, ex-cult member, ex-athlete" [29]. Biddle et al. centered their argument around self-referent identity labels that form through the collective belief that an identity applies to a person, and in turn, impacts behavior [11]. People can hold a number of identity roles, and life events can cause a restructuring of an identity hierarchy that consists of these roles [29]. Ebaugh described this process as "role exit" in which a person detaches from a role previously perceived as central to their self-identity and re-establishes an identity in a new role, taking into account their "ex-role" [29]. This paper extends existing literature about identity roles and how they shift by examining how people prioritize or highlight new identity roles in relation to major life transitions in online spaces.
- 2.2.3 Identity fulfillment. Identity fulfillment is another way in which people can perceive their identity to change. To our knowledge, little research has conceptualized and studied identity fulfillment. We define identity fulfillment as the gradual attainment of a new identity over a period of time. Arroll and Howard explored identity change and post-traumatic growth in individuals with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) [7]. They found that some individuals with the illness can undergo post-traumatic growth through "the departure from the old, pre-ME/CFS self, a period of existential equilibrium and finally growth" through a process of "the letting go, the building up," and more relevant to our study, "the gradual process of rebuilding," as stated by one of their participants. We build on this idea of a slow and measured process of identity change and describe how identity fulfillment can occur from a life event.
- 2.2.4 Identity maintenance. To our knowledge, few studies have examined the processes of maintaining an identity. Existing literature tends to use the term in discussing social and collective identity [72, 73] or in individual contexts such as athletic identity [74] and cultural identity [36]. These studies provide valuable insights about identity maintenance, such as specific behaviors to maintain identity (e.g., using aggressive behavior to maintain self-esteem in athletes) [74] and maintaining pre-existing connections and group involvement to maintain identity [36]. Reynolds and Prior studied the role of art-making in identity formation for individuals diagnosed with cancer. They found that art-making allowed individuals to go through the "process of re-establishing a familiar identity" that included "important aspects of their self-image" [61]. In this paper, we discuss how life events holistically enable individuals to maintain a pre-existing identity by embracing or re-establishing it.

# 2.3 Using social media for identity change

Social media can be used in many ways for identity or during identity change. Many people use social media to organize their identity or identities, which can lead to selective online self-presentation and identity management [12, 55]. Many factors can influence online self-presentation. For some, it is important to control how one's identity or identities are presented online for reasons such as having multiple incompatible faceted identities [34], privacy concerns [60], and wanting to be perceived a specific way [23]. Social media can also help people facilitate experiences related to both static and changing identities through joining online communities with similar others [3], searching for information, resources, and support [50], curating self-presentation and identities [39], and more. We highlight the importance of self-presentation and impression management online in terms of identity during major life transitions. We also describe the power of online communities to support and facilitate experiences of identity change or maintenance.

- 2.3.1 Online self-presentation and impression management. Self-presentation is referred to as "the process of controlling how one is perceived by other people" [51]. Similarly, impression management is how people present themselves in order to be perceived a specific way [38]. Self-presentation and impression management occur both in the physical world [38, 63] and online [23, 27, 28, 39, 44]. We use these terms to describe how individuals manage their online appearance to influence their online audiences' perception of, and to describe how individuals shape their identity online. Our work builds on previous research by examining online self-presentation and impression management related to identity change surrounding major life events.
- 2.3.2 Similar others and virtual friends in online communities during major life transitions. Identity can be a useful lens for social contexts in which individuals understand themselves based on their group memberships [72, 73]. Buckingham uses the term "identity" to describe social identity: our "identification with others whom we assume are similar to us (if not exactly the same)" [15]. Online communities allow people to find and connect with similar others, based on similar identities, interests, experiences, etc. Connecting with similar others online can lead to deeper relationships, such as becoming virtual friends or "previously unconnected individuals that one later connects and develops long-term personal relationships with through online interactions" [3, 6]. Similar others or virtual friends can provide people with resources and support [62, 77] when one experiences a major life transition, making the process potentially less stressful.

# 2.4 Social media affordances

Hailing from the field of psychology, affordances have been used and defined in various ways across different disciplines. Scholars from different disciplines have used affordances to examine the relationship between humans and technology. In the context of self-presentation on social media, DeVito et al. defined affordances as "the mutuality of actor intentions and technology capabilities that provide the potential for a particular action" [27]. We use DeVito et al.'s definition of affordances as it is rooted in the context of social network sites research and centers around the "higher-level characteristics" [32] across different platforms.

Scholarship in CSCW and HCI has paid specific analytic attention to how affordances impact social media use during major life transitions [14, 16, 41]. For example, Reddit's design features afford anonymity by allowing flexible movement between throwaway and pseudonymous accounts [4, 5]. Because of such affordances, people are more likely to talk about stigmatized life events like divorce, miscarriage and postpartum depression, and anonymous sites can provide supportive environments [1, 4]. However, affordances cannot be effective if users are not knowledgeable about the affordances [24, 59]. Perceived affordances can be useful if users are aware of these existing

features that can be used during difficult times. Additionally, social media affordances such as visibility, association and persistence can impose challenges during identity-based life transitions [42]. For instance, the persistence of digital footprints on social media such as photos, names, and past gender markers could hinder one's ability to move forward during gender transition [42]. While several studies on life transitions have used affordances to explain the relationship between specific technology and specific transitions [1, 42], few studies have used an affordances framework to examine how social media contributes to facilitating identity change, fulfillment, or maintenance in the context of major life transitions. In this paper, we analyze how social media affordances, specifically editability [70], visibility control [27], and spreadability [12] are used during identity change, fulfillment, or maintenance, and how they may provide users with a sense of control and autonomy.

#### 3 METHODS

We conducted 28 semi-structured interviews with people who experienced major life transitions within the past two years and shared their experiences on social media. This study was approved by our institution's Institutional Review Board (IRB).

#### 3.1 Recruitment

We recruited interview participants in two ways. First, we shared a screening survey through each researcher's social media such as Facebook, Twitter, Instagram, and Slack to reach a wide audience. The screening survey asked individuals to recall major life events that they experienced within the past two years, which audiences they shared them with, and which social media platforms they used regularly. To be eligible, participants had to be 18 years of age, have experienced a major life event or transition within the past two years that had a major impact on them, and have shared it on some media in some way. Due to the complexity of life transitions, we looked at life transitions more broadly and categorized them based on the Major Life Events Taxonomy [43]. Because we wanted to understand identity and identity change experiences in a variety of contexts, we looked at a wide range of major life events, rather than limiting our study to one type of life transition. We carefully reviewed each submission and selected 17 participants to interview through video chat. The second way in which we recruited participants was through User Interviews, a platform for recruiting participants for user research. We recruited an additional 11 participants through this platform with the same criteria as the first method. We did not notice substantial differences between participants recruited via the two methods. Each of the 28 total participants were compensated with a \$30 gift card after completing the interview through video chat.

# 3.2 Participant characteristics

The 28 participants' ages ranged from 18-73 (*mean* = 33.1). 46% were women, 50% were men, and 11% disclosed that they were transgender and/or non-binary. 50% were White, 18% were Asian, 14% were Black, 14% were Latino/a, 4% were Native American, and 4% were mixed. Participant demographics and identity change experiences are reported in Table 2.

# 3.3 Data collection

The 28 semi-structured interviews were conducted from February to May 2020. Semi-structured interviews allowed us to build rapport with participants while conversations evolved to topics that participants felt were most important to them. The interviews lasted an average of 59 minutes (range: 29-82 minutes). Two researchers conducted interviews through video chat, with one leading conversations and the other taking notes and asking follow-up questions. Before each interview, interviewers introduced themselves and the study's goals, ensured confidentiality, and asked for

ID	Age	Race	Gender	Identity change experiences
P1	65+	White	M	self-concept
P2	18-24	Asian	F	mindset and attitude
P3	18-24	Black	Non-binary	self-concept, identity role, identity fulfillment
P4	25-34	White	M, trans	identity role
P5	25-34	Asian	F	self-concept, mindset and attitude
P6	25-34	White	F	mindset and attitude
P7	18-24	White	M, trans, non-binary	self-concept, mindset and attitude
P8	25-34	White	F	mindset and attitude, identity role
P9	25-34	Mixed	F	mindset and attitude
P10	18-24	Latina, Asian	F	self-concept, mindset and attitude, identity fulfillment
P11	18-24	White	M	self-concept, mindset and attitude
P12	18-24	Latino	M	mindset and attitude, identity role
P13	25-34	White	M	identity maintenance
P14	25-34	Asian	M	self-concept
P15	25-34	Black	F	mindset and attitude, identity role
P16	18-24	Asian	F	identity fulfillment
P17	18-24	Latino	M	mindset and attitude
P18	25-34	White	M	self-concept
P19	65+	White	M	identity maintenance
P20	25-34	Latino	M	mindset and attitude
P21	55-64	Native American	F	mindset and attitude
P22	25-34	White	M	mindset and attitude
P23	35-44	Black	M	mindset and attitude
P24	45-54	White	M	identity maintenance
P25	45-54	White	F	identity maintenance
P26	25-34	White	F	mindset and attitude
P27	25-34	White	F	self-concept, mindset and attitude
P28	35-44	Black	F	self-concept, mindset and attitud

Table 2. Summary of participant demographics and identity change experiences

consent to audio record the conversation. Interviews began by discussing life transitions and social media use broadly to get participants thinking about life events they had experienced and their social media habits and behaviors. We acknowledge the complexity of what major life events are and mean to each person; therefore, we utilized The *Major Life Events Taxonomy* [43], a comprehensive instrument used to better examine and categorize major life events and transitions. Interviews then asked if and how participants felt their identity changed during their major life transitions, how they used social media during major life transitions, and potential identity change(s). Audio recordings were transcribed for data analysis.

# 3.4 Data analysis

We conducted iterative and thematic analysis using open coding [13] and memoing on the 28 interview transcripts to examine the ways people perceived their identities to change due to major life transitions. First, each research team member individually conducted line-by-line coding and analysis of the first five interviews to look for patterns and allow categories and codes to emerge. Three researchers actively communicated with one another to organize the codes using axial coding and generated themes that we report in the Results section. We did not use inter-rater reliability since we had collaboratively developed an extensive codebook in the process of analysis [57] (similar to other interview studies in life transition contexts [43, 54, 67]) and because the three coders collaborated closely during data analysis, with frequent discussions about how the codebook applied to the data. Instead, we used a standard qualitative analysis approach [64]. to develop a

codebook. After no new codes emerged from the interviews, the research team agreed that we reached a point of saturation. The research team met twice a week to discuss and refine codes and themes.

#### 4 RESULTS

Our results offer insight into the different ways participants perceived their identities to change or be maintained after experiencing a major life event. We acknowledge that life transitions are complex and subjective, and can be perceived differently by every individual. Therefore, we use the terms "positive" and "negative" when applicable to describe life transitions based on participants' perceptions of how events impacted their lives. These results also reveal how people use social media through online communities and social media affordances when experiencing identity change. Throughout this paper, we have adjusted details about participants' experiences to maintain their anonymity (e.g., by changing their location and/or occupation).

# 4.1 Identity change and maintenance during major life transitions

4.1.1 Mental processes: self-concept, mindset, and attitude. Many participants experienced an identity shift through a change in their self-concept, mindset, or attitude (n=22; some reported experiencing more than one identity change). We use the term mental processes to group and describe these different mental states. One way in which participants' mental processes changed was through their view of themselves, which we refer to as one's "self-concept". P3, a non-binary person who moved to a different state alone, said:

My sense of self... my identity as me... has... strengthened so much since moving here because I'm away from everyone that I... ever knew in New York where I went to undergrad and high school. So I would say just my sense of self, my sense of what I want and what I need, that has been strengthened.

For P3, their sense of self is how they conceptualize their identity. Relocation allowed their sense of self to be strengthened and, in turn, influenced a change in their identity. Additionally, P5, whose family experienced physical and financial hardships, described:

Because of the circumstance my parents are going through and the amount of money that I am expecting to need for myself for the rest of their lives and the rest of my life, I'm seeing myself as somebody who is a sustainable element in these environments...

While going through a major upheaval in both their individual life and their parents' lives, P5 began to view themselves differently as a more resilient and reliable individual who is able to manage their time and money more effectively. This demonstrates a change in P5's perspective on themselves, or self-concept. Similarly, P27 who underwent a major surgery said her major life event made her "more resilient" and begin to "think about things differently." From these responses, we can see that the way a person views themselves and the world around them is related to how they internalize their identity. Characteristics such as a strong sense of self, sustainability, and resilience are features these participants choose to highlight when thinking about how their identity changed due to their life event.

Many participants also reported changes in their outlook on life through changes in their mindset, which is a collection of beliefs that shape one's thoughts, [22] or attitude, which are constructed judgements [66]. Mindset or attitude were crucial to identity for some. P2, who moved to San Francisco and became a creative, experienced a mental identity shift:

I've really made that switch to being just a creative and not being so tied to the result of things and the status of where your thing is. But yeah, that was a big mental identity shift. I used to be the person that was like, "I want to be a producer on this, or this," And

then now I'm kind of like, "I'm a creative. I make for these reasons. This is the progress I live by and this is the story I want to tell."

P2 began focusing more on creating as her passion and less on creating to gain a specific result, demonstrating that her mindset shifted as she settled into her identity as a creative in a new location. Additionally, P17, who transitioned from high school to college, described how becoming a college student had set an example for his younger siblings and cousins:

I'm the oldest grandchild... I'm the first one that got into a four year university. Hopefully I'll be the first one to finish a four-year university. So that was definitely a really big [identity change] because not only are my siblings looking at me... but so are... my cousins... They're all kind of looking at me, and I'm setting that path, that example. So that was definitely a big [identity] change. I remember there being a moment where I realized that what I do in college and the way I performed in college is going to impact the way my sibling see life and see "Can we, as minorities that come from a really, really low income house, make it in the world, in the college where everybody has money and everybody is upper, middle class, or high?" Yeah, it was definitely a moment of realization for me.

P17 felt his identity shifted as his mentality changed after transitioning into college, a major life event that resonated due to his family and socioeconomic background. Overall, these quotes demonstrate how a specific mental state can change significantly when a person's life and identity are changing. When reflecting on their life events, a new mental state or perception of their self can emerge, which illustrates the importance of self-concept, mindset, and attitude towards one's own identity.

4.1.2 Identity roles are changed. When we asked participants to describe how their identity or identities changed when experiencing a major life event, some described how their roles changed, illustrating how roles play a large part in defining identity (n=5). P4, who received a physical health diagnosis, described:

I think my first... identity change was... my life became being a multiple sclerosis patient. If someone were to be like, "What are three words that describe you?" I would probably have included [being a multiple sclerosis patient] in there somehow, just because I was like, "Well, this is my day-to-day life. This is my kind of volunteer-on-the-weekend job." I was just constantly thinking about all things multiple sclerosis.

Becoming a multiple sclerosis patient became a notable part of P4's identity and is a defining label that they would use to describe themselves, demonstrating this identity role's salience to P4. Similarly, P8, who gave birth, mentions:

I think pregnancy perhaps more so [changed my identity] just because it's such a permanent thing... not the pregnancy itself, but the creation of a child. So I think that has changed my identity probably more just because now I'm a mom, and I wasn't before. So I think that's changed a lot of the way that I interact with the world...

For some people, labeling oneself differently contributed to their identity and identity change. Some defined themselves differently after experiencing a life event, but for others, the defining roles were not as explicitly related to a new identity role, such as becoming a mother or a multiple sclerosis patient. For example, P15, who moved to a new state, explained:

Moving kind of changed my identity. I'm here in Illinois now. Being from much warmer climates before this, I changed over my license plate to here. I'm not identifying anymore with the Southwest or with Arizona... I do sometimes call soda "pop," so I think sometimes the new Illinois identity will slip out, especially when I'm back at home.

P15 now defines herself as someone who lives in Illinois as she withdraws from her previous identity as someone who lived in the southwest. Overall, these participants' identity change experiences demonstrate how roles are ways that individuals identify themselves and are salient characteristics of identity. Individuals' roles through life events, and thus, redefining the roles they use to identify themselves.

4.1.3 Identity fulfillment. Rather than describing how they perceived their identity to change or not, a few participants described feeling that the life event they experienced fulfilled their existing identity instead (n=3). P10, who transitioned from high school to college, described how her identity was fulfilled:

Switching from high school to college, you think it's going to be this huge identity change, but it wasn't so much for me. It was more like I'm the same person, but I have more liberty to do things... at school compared to... at home... So I feel like it didn't change my identity so much as it did allow for a fulfillment of identity.

Although transitioning from high school to college had an effect on P10, it did not change her identity and instead fulfilled her identity. Similarly, P16, who graduated from college, expressed how her identity gradually changed through her transition into a college graduate, and how her experiences throughout college contributed to her identity:

I feel like it was just gradual going up to the transition. So again, going back to the graduation example, it's like all of the experiences I've had the past four years that made up my identity rather than just the milestone of graduating.

P10 and P16 both mention experiencing identity fulfillment from life events regarding changes in their education. This demonstrates that identity fulfillment may be more common for these types of life events (e.g., accomplishing a goal, changing or gaining a new title). Overall, life events can have a multitude of effects. Many participants found their identity shift to occur more immediately. However, identity change for many people can be gradual and iterative [18]. Rather than an abrupt identity change, some participants demonstrated how their identity was fulfilled via a gradual shift alongside the progression of life events.

4.1.4 Identity maintenance. Although a change in identity was common, some participants described feeling that their identity did not change at all in relation to the life event they experienced or that their life event instead reinforced their existing identity (n=4). We call this preservation or reinforcement of a pre-existing identity identity maintenance. For example, P13 felt that his decisions to get married and change careers gave him agency over his life events and that he "did things in order to maintain [his] identity, not the other way around." For P13, life events did not play a transformative role in changing his identity, but rather, allowed his identity to stay consistent. Similarly, P24, a father who came out as gay and changed religions, describes feeling that his identity did not change. He describes:

I don't think my identity changed very much. I think personality wise, I'm pretty much the same... I'm single now and not married, but I'm not dating anybody so that hasn't changed a lot... I don't consider myself Protestant anymore, so religiously that has changed. But otherwise, I'm still a father. I'm still a teacher. No longer a husband... I am gay, but I think I'm the same person I was before.

Although P24 experienced changes in his relationship status and religious affiliation, the changes did not impact his identity as a father and a teacher. In cases like these, it may be that a person's stronger and more fundamental identities matter more. That is, P24's "straight" identity prior to coming out as gay was not important to him in part because it was not who he really was,

whereas being a father and teacher were, and remained, fundamental to who he was. This further demonstrates the hierarchy of identities that people hold. Life events can change a person's hierarchy of identities, but they do not have to. Instead, for some, life events simply mark a change in a person's life while their identity is maintained throughout the process.

# 4.2 Using social media based on identity and identity change

4.2.1 Online impression management of identity or identities. Many participants carefully managed how they presented themselves on social media when experiencing a major life event. P15, who got married, did not share her identity as a married person on social media to prevent criticism and in consideration of others. P15 explained:

Even though I was shifting into that identity as a married person, I didn't want other people to see that and feel some type of way about it because... "This person is posting too much about this or that." Maybe they want to be married, or maybe they just don't like weddings. They had a divorce or something, so they don't want to see that content.

P15 chose to conceal her identity as a married individual online to prevent judgement from others and to prevent causing stress to others who had negative experiences with marriage. This impression management reflects the desire to be perceived a specific way, which may involve concealing some aspects of one's identity. Additionally, P10 described her experience as an engineering student and feeling pressured to present herself online in a positive way:

Especially people with bigger networks, there's more pressure to be a certain person and have a certain image to people, especially those you don't know... the engineering Instagram, engineering social media, you're presenting yourself to sponsors, and you're opening yourself up to criticism, and you're opening yourself up to encouragement, and you just don't know what's gonna happen. So, it's always best to present yourself in a pretty good light, because you just never know.

Being an engineering student after experiencing a change in education was a crucial part of P10's identity, and therefore, being perceived positively by others online was also important to her. Individuals can have a number of identities, or faceted identities, that they feel should each be managed differently online [34]. Social pressure and the perceptions of others often play a large role in how people present their identity or what identity people choose to present online. Overall, these quotes indicate that people are influenced by others, to some extent, in their online self-presentation.

4.2.2 Identity-based online communities during major life events. Online communities are significant for many as they provide resources and support [50]. Many online communities are identity-based; they involve members who identify similarly to one another [5]. P4, a transgender person who moved to a different state, joined groups such as the Boston Housing or Boston Queer Exchange for resources. P4 explained:

I definitely used those to see if I could find a roommate... I think that that aspect of the social media within Boston was really helpful for me to kind of know that. I think about Boston, I'm like, "Oh, yeah. Of course there are queer people here." But then seeing, "Wow, there are these huge groups of people who are really vocal and really willing to get together"... was really comforting for me.

For P4, identity-based online communities facilitated their relocation process by providing trans and queer resources, but also, knowing the communities existed offered comfort and reassurance that others in their new city shared their identity. Additionally, P27 described joining different groups over time:

On Facebook, I actually am in a few different groups for the issues I went through. I was in a rheumatoid arthritis support group when I first got the diagnosis, and was learning more about it... but then when I thought it was my gallbladder, I had joined a few different gallbladder support groups. I just read other people's posts and wanted to know a lot about their experience and our symptoms lined up.

P6, whose grandparents were placed in a memory care facility, also described a "tiered" Discord server with "levels of access to different channels." The main tier was open to a large audience that allowed everyone to talk about different life events. P6 described mentioning her life event in the main tier but talked in more detail in a smaller tier: "I'll maybe mention like, 'Oh, I went through this with this family member' or 'This is happening right now...' but... if I go into more detail, it'll be in the small one, which we call Family." P6's experience highlights the comfort some people have in online communities that allow them to share their life events. These experiences demonstrate how some people actively join online communities and are able to confide in other members within that online community. Such communities can be particularly useful during times of identity change and life events as they provide a space to share experiences and resources.

4.2.3 Domino effect: more virtual connections with similar others. Identity change prompted individuals to join online communities to help facilitate their life transitions among similar others. In these online communities, many described building their network and forming new relationships. More interestingly, participants also described how their new connections introduced them to more similar others or new online groups, thus creating another branch of connections. P4, who moved to a new state for graduate school, described:

I posted a little bit about me in that [online group], and then people were commenting saying, "Oh, you should look at this other group that also has University of Boston student housing," or, "I know someone who I can connect you with in private messenger." And so it was like a launch pad... like a big spider web...

P4 was able to make connections through the Facebook groups they joined, which provided resources during their major life event of relocation due to school but also allowed them to create new relationships. Additionally, P26 who experienced the death of her boyfriend, described finding someone in a Facebook group who had a similar experience:

I am in a girl group [for girls who've dealt with drug addiction] on Facebook that has like 30,000, same-age-kind-of-as-me girls... I just made a post asking for someone to edit my eulogy for my boyfriend. And then... I actually met this girl that, two weeks prior, her boyfriend died from the exact same thing.

These connections that individuals made through identity-based online groups opened opportunities for more connections. For P26, the Facebook group allowed her to connect with a specific individual from that group who had dealt with a similar situation, which provided P26 with consolation and social support. P26 also mentioned how the newly formed connection brought a sense of comfort: "It's like I'm talking to myself, so I instantly [felt] comfortable [with her]." These relationships created online with similar others illustrate the processes of forming virtual friendships [3, 6]. Online connections allowed individuals to meet more virtual friends or similar others, expanding their network and demonstrating a cascading, domino effect. For some, friendships that developed online led to meeting virtual friends in person. P4, who experienced a multiple sclerosis diagnosis and joined a multiple sclerosis online community, described:

Because I think initially, the multiple sclerosis community on Twitter was such a huge support for me when I had multiple sclerosis that I found so many close friends on Twitter

that I'd never met in real life. And then over time, we ended up getting together in person, like me flying to someone's wedding and someone else coming on a trip to meet in Utah.

Additionally, P6, who moved to a different state and changed careers, described how the bonds formed in an online podcasting cohort that she felt comfortable sharing her life transitions with, led to meeting her virtual friends in person:

There's my podcasting cohort and we know each other in real life because we're business partners. And then I have two other friends who I know for real and one I've known for like 10 years. But we all met initially in virtual space. We did not know each other before that.

These experiences demonstrate online communities' effectiveness and capabilities for building larger networks and stronger relationships. Online communities, in addition to helping people gain a sense of belonging and feel less alone [76], enable people to iteratively create connections with others who have experienced similar life events. The domino effect how people meet similar others in online communities who then facilitate more connections with similar others.

4.2.4 Social media affordances during major life transitions and identity change. People choose to share information related to their life events and identity change on specific platforms related to each platform's affordances. In this section, we describe the platform affordances editability [70], visibility control [27], and spreadability [12] as related to participants' experiences with life transitions and identity change.

*Editability.* Editability refers to being able to spend time carefully "crafting and recrafting a communicative act before it is viewed by others" [70, 75]. Granting users the ability to edit their social media presence or content could increase their sense of autonomy. P7, who socially transitioned as a transgender man by changing their name and pronouns, described their experience on Tumblr and learning more about being transgender:

Tumblr evolved that [understanding of being transgender], and it gave me a place to explore that identity because I didn't have a chance to explore it in person. So that's where I tested every single name I've been through before Chris. Because after a while being on Tumblr, you get these other users that you just interact with a lot. So it'd be like, "Hey, I'm changing my name to," Alex was a big one, Sam was a big one... But I was like, "I'm changing my name to this, this, this." Until I finally figured with Chris and then stuck with that.

Tumblr provided P7 with the affordance of editability [70] by allowing them to explore and edit different names on their Tumblr account as they transitioned into their new identity. Editability can be a salient affordance for people who want to disconnect from previous identities, and who need space to engage in identity exploration online [40].

Additionally, some participants changed their social media content to prioritize important life events. P17 actively edited his social media content based on events in his life:

I like to keep my main [Instagram] page at a like 40, 45 range [of total photos posted]. So, if I upload 10 pictures this year, I'll take down like four that I posted four or five years ago that really don't matter to my life anymore, or that weren't even that big at that time. If I made a post about getting ice cream... I'll take that down over the post that I made about getting into U of W.

For users like P7 and P17, editability plays a significant role in their identity change due to a life transition and how that process is presented on social media. Actively editing social media content can enable users to participate in identity exploration of alternative possible selves [46].

*Visibility control.* Visibility control is when a platform gives users "individual determination of what content linked to their persona is visible to others" [27]. Social media allowed participants

to control who viewed their content related to identity change and life transitions. P7's experience on Tumblr (described above) exemplified visibility control by enabling them to curate their self-presentation for particular networks: "On Tumblr, it's very anonymous. I'm Chris there. I posted about very minor stuff, just being trans openly there because nobody from real life knew me there." This demonstrates their ability to avoid connection to their previous identity and have control over what persona-linked content others can see. In addition, P22, whose close tie was diagnosed with a mental illness, experienced an identity shift as he became more open to talking to others about stigmatized situations. During this shift, P22 utilized message boards on the National Institute of Mental Health website to find information and support while staying anonymous, demonstrating visibility control:

I found some message boards and stuff through NIMH, and it's a way that I can stay anonymous and reach out to a different community and get information and support. That's where I'm not outwardly posting to my friends and community.

P8 also expressed that she would not want her "online presence linked back to [her] real identity for just general security and just in case [she] ever did post anything..." The affordance of visibility control allowed users like P7, P22, and P8 to express their life events and identity changes with less fear of being judged and with increased feelings of safety.

Spreadability. Spreadability is "the ease with which content can be shared" [12]. Participants used spreadability in a multitude of ways: some spread information about particular life events and experiences, while others spread information relevant to their life events such as resources that could be helpful to others. P17, who experienced the death of his mother, broadcast his experience on social media platforms such as Facebook, Snapchat, and Instagram, and described memories of his mother. P23 experienced multiple major life events that impacted his identity (death of his mother, serious injury, major surgery, and involuntary job loss) and shared them on Facebook, Twitter, and Instagram. For example, he shared the death of his mother and expressed his emotions on Instagram which is his "biggest way of expressing what [he's] going through." Additionally, on Facebook, P23 shared about his mother's funeral to avoid answering repetitive phone calls or texts, echoing results from Andalibi and Forte (2018) when announcing pregnancy loss to avoid "many painful one-to-one disclosures" [4]. As these examples demonstrate, platforms such as Facebook, Twitter, and Instagram enable users to share their experiences and make announcements to wide audiences during and after major life changes.

Platforms also afford users the opportunity to spread information and resources to others in their network [12]. For example, after dealing with rheumatoid arthritis, P27 shared information and resources on social media: "Now, whenever I see a really good article about rheumatoid arthritis or about how it affected someone, I'll share that article on social media, or... a webinar, a support group for people... I'll share that." P27 also described how it was difficult to put her own thoughts into words, and that it could be "easier to read somebody else's experience" and then share it. Platforms that afford spreadability can be beneficial for users seeking resources and support online and to express their experiences of life events and identity change.

# 5 DISCUSSION

In this paper, we contribute an understanding of some ways social media mediates the complex interplay between major life events and identity. There is an already well-established foundation for research regarding identity-based online communities and how they impact people [3, 6, 50, 62, 77]. This paper builds on this research by providing new insight about different types of identity change experiences (identity change, identity fulfillment, identity maintenance, shifts in self-concept, mindset, and attitude) and how they impact people's online community behavior and involvement.

Identity change can be a crucial component of a major life event. We describe three ways of viewing identity change: mental processes (self-concept, mindset, and attitude), identity roles, and identity fulfillment. Our findings also reveal that identity can be maintained rather than changed. Some participants found online communities helpful in the identity change process. We described how social media affordances can help facilitate life transition processes, especially if users decide to post about their transitions and identity changes. Next, we discuss how identity can change or be maintained due to a major life event, the significance of online communities, and potential design implications for social media affordances to support identity change or maintenance.

# 5.1 Understanding identity change and maintenance

Identity change can occur in many different ways after experiencing life events. Research typically focuses on one way, such as the process of role exit [29], or understanding a new identity through possible selves [54]. We described several different ways identity can change through mental processes, identity roles, and identity fulfillment, rather than focusing on one form of identity change. As participants in our study mentioned, specific identities or parts of their identity are more salient to them than others, creating a personal identity hierarchy—an organization of one's identities by importance [9, 45]. Previous literature has explored identity hierarchies and how they shift amid a singular life event [29]; however, our study more broadly looks at an extensive list of life transitions and how identity hierarchies change as a result of them. When major upheaval from a life event occurs, the salience of identities can shift, demonstrating an identity transition and a repositioning of an identity hierarchy. For example, P4, who became a multiple sclerosis patient, described feeling that the disease became a salient part of his identity because it became a major part of his life, and he used the disease to describe and identify himself in conversations. It is important to note that identity can transform through various ways due to major life events and can be a unique process to each individual.

The concept of a hierarchical system of identities [18, 21] applies to identity *maintenance* as well; in this case, the most salient identity an individual holds remains primary even after a major life disruption and, therefore, demonstrates that identity hierarchies do not always shift after major life events. Our results expand on previous research about identity change during and after life transitions [7, 20, 54, 58] by describing several possible outcomes: not everyone experiences an identity change due to life events; for some, identity is maintained. This complexity is important to understand so that social media sites and online communities can be designed to better support people's shifting identity hierarchies during and after life transitions, whether they experience identity change, fulfillment, or maintenance.

# 5.2 Online communities during identity change

An important finding from our study was the benefit of identity-based online communities regardless of which types of identity change individuals experienced. Identity-based online communities allowed participants to find similar others, resources, and support, and to build new relationships. This supports previous research such as MacLeod et al. who found that those with rare diseases are able to receive support from others who also have rare diseases after feeling isolated and receiving inadequate support from those who may not identify similarly [53]. Likewise, Levonian et al. found that online health communities containing similarly identifying individuals can build connections and can be beneficial for individuals seeking support [52]. We expand on prior research by describing what we call the "domino effect": connections in a community that facilitate and cascade into new branches of connections. The domino effect opens up several ideas for how social media sites and online communities may better support those experiencing life transitions. Since the domino effect occurs after initial branches of connectedness, online communities can potentially

facilitate further connections by building a system for individuals to meet new individuals within the same online community. Many existing platforms already offer features that can help structure support groups, such as Discord servers, subreddits, and Facebook groups, which allow users to create spaces for specific identities, topics, and more. However, social media sites can improve by asking users if they would like to meet people within the same online community to ease the stress of connecting with others. P26 mentioned being part of an online community filled with tens of thousands of other members. Finding individuals with similar experiences and identity can be challenging, especially among large online communities. Although P26 was able to connect with an individual with almost identical experiences in a large online community, as described in Results, the process can be made easier for others who may encounter difficulties creating connections. Social media sites can potentially address this issue through highlighting association affordances. For instance, social media sites could use algorithms to prioritize recommendations based on shared experience and identity. Such approaches could provide more avenues for building connections amongst similar others, and individuals like P26 could more easily find comfort and support from another person who experienced similar situations.

# 5.3 Using an affordances lens for identity change or maintenance

Experiencing identity change amid a major life event or transition can be difficult. Social media sites and social technologies can be designed to better support individuals during identity change through the affordances they provide. Rather than being an additional source of stress during life transitions (e.g., by prompting people to weigh difficult disclosure decisions [41]), social media platforms can be designed to better facilitate identity transitions by providing more flexibility and control over one's social media presence, and by helping users communicate about major life transitions and identity changes more comfortably – especially events that may feel difficult, scary, or unforeseeable. We return to the three affordances we focused on in our last Results section and describe some implications for social media site design.

First, editability can allow users to change their online content by deleting or changing it [70]. Editability allows users to change their online presence if they experience an identity change that they feel is salient to their online self, a significant process for participants such as P7 and P17, who edited their social media presence through their online names and online content such as photos. Even if users are experiencing identity maintenance after a life event, individuals undergo multiple major transitions throughout their lives [35]. Thus, editability will be important for all social media users at multiple points in their lives. Giving users more control of their content online can offer a feeling of agency and autonomy, especially over life events that can be difficult to undergo. Editability affords the ability to change and curate one's online presence and direct profile content to different audiences; these self-presentation and impression management options are especially relevant during identity change. For individuals like P7 and P17, actively editing their online presence during and after identity changes without limitations from the platforms gave them agency and control over their online presence and experiences. Increased editability for identity change could take the form of enabling users to edit profile content such as names and profile pictures based on specific audiences they choose so that they can more effectively separate content. While it can be helpful to allow users to edit profiles based on different audiences, the process of editing could not only potentially increase the cognitive load of profile management but also lead to context collapse [56, 71] Thus, platforms would need to be sensitive to specific contexts to help address these challenges.

Social media platforms can also improve through the affordance of visibility control [27]. Visibility control is especially important when sharing information about personal identity change and life events, especially those that are stigmatized or sensitive. Visibility control can allow users to

organize who sees specific content that they post and curate their social media presence for specific audiences, making it particularly relevant to online self-presentation and impression management. However, too much visibility can be burdensome for individuals who do not want to share their identity as explicitly [19, 41, 42]. Platforms can improve visibility control by obscuring some information by default, which previous literature has found can support selective self-presentations [19]. For example, social media platforms could ask users if they'd like their social media names or profile information hidden by default after initially creating an account or when changing profile information (e.g., profile name, profile picture, biographies). This can allow users to be more anonymous and feel safer when sharing information about life changes or identity transformations without worrying about their information being visible.

Spreadability is another significant affordance for people experiencing life transitions, as it allows users to share and reshare information [12]. We found that spreadability of information and personal posts can be helpful in expressing one's self during identity change and for spreading useful information and resources for others who may be experiencing similar situations. Spreadability, however, can be frustrating for those seeking more privacy. Social media platforms could improve spreadability by allowing users to share content across multiple platforms at once, while maintaining visibility control features mentioned above. This would help people like P22, who found anonymity helpful when sharing about life events online, and P17, who found it beneficial to share his life events across multiple platforms. Combining spreadability and visibility control features can benefit more users who desire anonymity while sharing life events across multiple audiences. Additionally, platforms could enable users to indicate that they are looking to give or receive support. Spreadability can allow users to express their experiences, create new connections, and receive/provide support, which can be especially important during major change. These connections can provide feedback, information, and support while users' lives and identities are changing. Furthermore, spreadability can open connections to similar others and virtual friends that could create additional connections via the domino effect.

Despite the positive aspects affordances could enable as mentioned above, it is important to acknowledge that social media affordances could also fail to support, and even be detrimental to, vulnerable individuals and groups experiencing identity change. For example, Haimson and colleagues found that normative social media site design that supports persistence of networks and promotes engagement with the past could hinder one's ability to move forward, and creates additional labor for people with complicated relationships to their pasts (e.g., in the context of gender transition) [42]. In a cross-platform study of stigmatized communities online, Yeshua-Katz and Hård af Segerstad highlighted the paradox of asocial media affordances [78]; they found that low anonymity and high visibility can marginalize individuals with stigmatized conditions, despite prior research which showed benefits of social media such as increasing access to social capital and social support [26, 31]. Thus, designers should be conscious of the tensions and even potential drawbacks certain social media affordances may promote.

Every platform is different and includes multiple affordances that can help some users while hindering others. There is no simple approach to balancing the benefits and disadvantages of affordances, but a first step is considering how affordances may impact people experiencing identity transitions when designing or redesigning social media platforms. The affordances approach acknowledges the "dynamic link between subjects and objects within sociotechnical systems" [25]; even if the object stays the same, the affordances could shift over time users' different facets of identity and different needs. Thus, studying identity change or maintenance through the lens of affordances can be valuable as it can help social computing researchers better prepare for such challenges and come up with ways to make systems flexible enough that affordances can change in accordance with the user's perceived affordances [59].

Additionally, prior research has shown that identity transition work often spans multiple online spaces and social technologies [39]. In the context of gender transition, Haimson developed the concept of "social transition machinery" to describe how "different social media sites and networks remain separate, yet work together, to enable people to carry out different types of transition work and draw from different types of support networks" [39]. In this case, the affordances framework pairs well with identity transition studies as it can help researchers focus on different types of "communicative practices that various features afford" [33] rather than on one technology. Our Results section has demonstrated that in the face of major life events, people choose to selectively share information about their identity change by using different sociotechnical affordances on a variety of social media platforms. These affordances can be improved by providing users with more flexibility and control over their online profiles, audiences, and experiences.

Affordances, however, cannot be effective if users do not know they exist. Building on previous research [24, 59], "perceived" affordances can be more beneficial because they are visible and users may be more knowledgeable of them. Participants like P7, P17, and P22 mentioned specific platforms and how they allowed participants to navigate their identity change in specific ways through affordances offered by the platform. For example, as we described in our Results, during their gender transition, P7 took advantage of Tumblr's affordance of editability by continually changing their name until they reached one that they felt suited them best. Platforms should consider how they can make affordances that will be useful during life transitions more visible and perceivable when a user is experiencing a life transition. For instance, when a social media user is experiencing a divorce, a site may highlight particular editability and visibility control affordances to allow the user to change (or obscure) their relationship status by revising content.

Overall, the affordances approach helps complicate the dichotomous "social versus technical" approach to technology use. By identifying human agency, such as participants' ability to use visibility control and collectively share information, designers could augment and empower people who undergo identity transitions. Thus, using the affordance approach offers researchers studying identity transitions the opportunity to synthesize and think about higher order processes [30].

#### 6 LIMITATIONS AND FUTURE WORK

This paper provides new insights on identity and social media; yet, we acknowledge potential limitations. First, in our sampling methods, we recruited 17 participants via posts originating with the research team's social media networks, which may have limited our sample's diversity. However, our social media recruitment posts were shared far beyond our personal networks, and we used a second recruitment method (the User Interviews service), which partly mitigates this concern. Additionally, our results and conclusions are limited because we only recruited people who reside in North America, experienced a major life event only within the past two years, and shared their experiences on social media sites. Quotes included in this paper were not member-checked by participants. However, member-checking can be implemented in future work to increase rigor and ensure participants' experiences are reflected accurately. We acknowledge that major life events and social media behavior may differ in other cultures and regions. We also acknowledge that people may have experienced life events that occurred more than two years ago and/or that they did not share on social media but that may still provide valuable insights on identity change and social media use. Moreover, participants in our study did not disclose negative aspects of affordances (e.g., social media affordances that fail to support or are detrimental to identity change). To address this limitation, we included some examples from prior work, and we note that negative aspects of affordances in relation to identity change are understudied. Although participants in our study only mentioned specific kinds of visibility control, editability, and spreadability, this work lays the groundwork for examining social media affordances' roles in identity change. Future research can

pay special analytical attention to potentially negative implications of social media affordances and find ways to mitigate tensions through context-sensitive design.

Future work regarding identity change or maintenance can explore ways in which life events can influence a person's identity and how social media can benefit or hinder people during these experiences. There may be unexplored avenues of identity change or maintenance regarding life events and unexplored means of identity facilitation online, such as connections between individuals with multiple shared identities and how people may view identities that are considered "negative" or stigmatized, and instances when the same life event is positive for some people but negative for others. It may also be worth further exploring identity hierarchies, how they are related to identity transitions, and how shifting identity hierarchies can influence attitudes toward life transitions people experience. It is important to consider potential avenues that may have not emerged from our results and could be beneficial to identity transformation and social computing research. Additionally, social media and other social technologies have benefits and disadvantages, and understanding both sides is essential to designing better systems to users during times of change. In this paper, we covered three social media affordances: editability, visibility control and spreadability. However, others not covered in this paper may benefit or harm users experiencing identity change or maintenance.

# 7 CONCLUSION

This study examined how people perceived their identity to change or be maintained due to major life events. Our observations suggest that identity can change through one's mental processes or identity roles. However, identity can also be fulfilled or maintained. We also investigated how social media played a role in facilitating identity change or maintenance. We found that individuals may partake in impression management and self-presentation online when experiencing shifts in their identity. We also found that online communities can facilitate experiences of identity change or maintenance by providing support and building connections, allowing us to conceptualize the domino effect. Lastly, we provide novel insights regarding social media affordances and how they can aid identity change or maintenance experiences online.

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#### REFERENCES

- [1] Tawfiq Ammari, Sarita Schoenebeck, and Daniel Romero. 2019. Self-declared throwaway accounts on Reddit: How platform affordances and shared norms enable parenting disclosure and support. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019), 1–30.
- [2] Nazanin Andalibi. 2019. What happens after disclosing stigmatized experiences on identified social media: Individual, dyadic, and social/network outcomes. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. 1–15.
- [3] Nazanin Andalibi and Madison K Flood. 2021. Considerations in Designing Digital Peer Support for Mental Health: Interview Study Among Users of a Digital Support System (Buddy Project). JMIR Mental Health 8, 1 (2021), e21819.
- [4] Nazanin Andalibi and Andrea Forte. 2018. Announcing pregnancy loss on Facebook: A decision-making framework for stigmatized disclosures on identified social network sites. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. 1–14.
- [5] Nazanin Andalibi, Oliver L Haimson, Munmun De Choudhury, and Andrea Forte. 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. 3906–3918.
- [6] Authors anonymized for review. 2021. Title anonymized for review. under review (2021).

- [7] Megan A Arroll and Alex Howard. 2013. 'The letting go, the building up,[and] the gradual process of rebuilding': Identity change and post-traumatic growth in myalgic encephalomyelitis/chronic fatigue syndrome. *Psychology & health* 28, 3 (2013), 302–318.
- [8] Blake Ashforth. 2000. Role transitions in organizational life: An identity-based perspective. Routledge.
- [9] Richard D Ashmore, Kay Deaux, and Tracy McLaughlin-Volpe. 2004. An organizing framework for collective identity: articulation and significance of multidimensionality. *Psychological bulletin* 130, 1 (2004), 80.
- [10] David Best, Melinda Beckwith, Catherine Haslam, S Alexander Haslam, Jolanda Jetten, Emily Mawson, and Dan I Lubman. 2016. Overcoming alcohol and other drug addiction as a process of social identity transition: The social identity model of recovery (SIMOR). Addiction Research & Theory 24, 2 (2016), 111–123.
- [11] Bruce J Biddle, Barbara J Bank, Don S Anderson, Ragnar Hauge, Daphne M Keats, John A Keats, Marjorie M Marlin, and Simone Valantin. 1985. Social influence, self-referent identity labels, and behavior. *Sociological Quarterly* 26, 2 (1985), 159–185.
- [12] Danah Boyd. 2014. It's complicated: The social lives of networked teens. Yale University Press.
- [13] Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative research in psychology* 3, 2 (2006), 77–101.
- [14] Jed R Brubaker, Gillian R Hayes, and Paul Dourish. 2013. Beyond the grave: Facebook as a site for the expansion of death and mourning. *The Information Society* 29, 3 (2013), 152–163.
- [15] David Buckingham. 2008. Introducing identity. MacArthur Foundation Digital Media and Learning Initiative.
- [16] Moira Burke and Robert Kraut. 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. 1419–1430.
- [17] Peter J Burke. 2003. Relationships among multiple identities. In Advances in identity theory and research. Springer, 195–214.
- [18] Peter J Burke and Jan E Stets. 2009. Identity theory. Oxford University Press.
- [19] Matthew Carrasco and Andruid Kerne. 2018. Queer visibility: Supporting LGBT+ selective visibility on social media. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. 1–12.
- [20] Clare Cassidy and Karen Trew. 2001. Assessing identity change: A longitudinal study of the transition from school to college. *Group Processes & Intergroup Relations* 4, 1 (2001), 49–60.
- [21] Manuel Castells. 2011. The power of identity. Vol. 14. John Wiley & Sons.
- [22] Alia Crum and Barry Zuckerman. 2017. Changing mindsets to enhance treatment effectiveness. Jama 317, 20 (2017), 2063–2064.
- [23] Brittany I Davidson and Adam N Joinson. 2021. Shape Shifting Across Social Media. Social Media+ Society 7, 1 (2021), 2056305121990632.
- $[24] \ \ Jenny\ L\ Davis.\ 2020.\ \ How\ artifacts\ afford:\ The\ power\ and\ politics\ of\ everyday\ things.\ MIT\ Press.$
- [25] Jenny L Davis and James B Chouinard. 2016. Theorizing affordances: From request to refuse. *Bulletin of Science, Technology & Society* 36, 4 (2016), 241–248.
- [26] David C DeAndrea, Nicole B Ellison, Robert LaRose, Charles Steinfield, and Andrew Fiore. 2012. Serious social media: On the use of social media for improving students' adjustment to college. The Internet and higher education 15, 1 (2012), 15–23.
- [27] Michael Ann DeVito, Jeremy Birnholtz, and Jeffery T Hancock. 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. 740–754.
- [28] Michael Ann DeVito, Ashley Marie Walker, and Jeremy Birnholtz. 2018. 'Too Gay for Facebook' Presenting LGBTQ+ Identity Throughout the Personal Social Media Ecosystem. *Proceedings of the ACM on Human-Computer Interaction* 2, CSCW (2018), 1–23.
- [29] Helen Rose Ebaugh and Helen Rose Fuchs Ebaugh. 1988. Becoming an ex: The process of role exit. University of Chicago Press
- [30] Nicole B Ellison, Jennifer L Gibbs, and Matthew S Weber. 2015. The use of enterprise social network sites for knowledge sharing in distributed organizations: The role of organizational affordances. American Behavioral Scientist 59, 1 (2015), 103–123.
- [31] Nicole B Ellison, Charles Steinfield, and Cliff Lampe. 2007. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of computer-mediated communication 12, 4 (2007), 1143–1168.
- [32] Nicole B. Ellison and Jessica Vitak. 2015. Social Network Site Affordances and Their Relationship to Social Capital Processes. John Wiley Sons, Ltd, Chapter 9, 203–227. https://doi.org/10.1002/9781118426456.ch9 arXiv:https://onlinelibrary.wiley.com/doi/pdf/10.1002/9781118426456.ch9
- [33] Sandra K Evans, Katy E Pearce, Jessica Vitak, and Jeffrey W Treem. 2017. Explicating affordances: A conceptual framework for understanding affordances in communication research. *Journal of Computer-Mediated Communication* 22, 1 (2017), 35–52.

- [34] Shelly D Farnham and Elizabeth F Churchill. 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*. 359–368.
- [35] Bruce Feiler. 2020. Life is in the transitions: Mastering change at any age. Penguin.
- [36] Sophie Gaudet and Richard Clément. 2005. Identity Maintenance and Loss: Concurrent Processes Among the Fransaskois. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement 37, 2 (2005), 110.
- [37] Viktor Gecas. 1982. The self-concept. Annual review of sociology 8, 1 (1982), 1-33.
- [38] Erving Goffman. 1956. The presentation of self in everyday life. Edinburgh: University of Edinburgh. *Social Sciences Research Centre* 5 (1956).
- [39] Oliver Haimson. 2018. Social media as social transition machinery. Proceedings of the ACM on Human-Computer Interaction 2, CSCW (2018), 1–21.
- [40] Oliver L Haimson, Anne E Bowser, Edward F Melcer, and Elizabeth F Churchill. 2015. Online inspiration and exploration for identity reinvention. In Proceedings of the 33rd annual ACM conference on human factors in computing systems. 3809–3818.
- [41] Oliver L Haimson, Jed R Brubaker, Lynn Dombrowski, and Gillian R Hayes. 2015. Disclosure, stress, and support during gender transition on Facebook. In *Proceedings of the 18th ACM conference on computer supported cooperative work & social computing.* 1176–1190.
- [42] Oliver L Haimson, Jed R Brubaker, Lynn Dombrowski, and Gillian R Hayes. 2016. Digital footprints and changing networks during online identity transitions. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. 2895–2907.
- [43] Oliver L Haimson, Albert J Carter, Shanley Corvite, Brookelyn Wheeler, Lingbo Wang, Tianxiao Liu, and Alexxus Lige. 2021. The major life events taxonomy: Social readjustment, social media information sharing, and online network separation during times of life transition. *Journal of the Association for Information Science and Technology* (2021).
- [44] Bernie Hogan. 2010. The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society* 30, 6 (2010), 377–386.
- [45] Michael A. Hogg, Deborah J. Terry, and Katherine M. White. 1995. A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory. Social Psychology Quarterly 58, 4 (1995), 255–269. http://www.jstor.org/ stable/2787127
- [46] Herminia Ibarra. 2007. Identity transitions: Possible selves, liminality and the dynamics of voluntary career change. Fontainebleau, France: INSEAD Working Paper 31 (2007).
- [47] Christina A Jackson and Andrew F Luchner. 2018. Self-presentation mediates the relationship between self-criticism and emotional response to Instagram feedback. *Personality and Individual Differences* 133 (2018), 1–6.
- [48] Debbie Kralik, Kate Visentin, and Antonia Van Loon. 2006. Transition: a literature review. *Journal of advanced nursing* 55, 3 (2006), 320–329.
- [49] Ziva Kunda and Rasyid Sanitioso. 1989. Motivated changes in the self-concept. Journal of Experimental Social Psychology 25, 3 (1989), 272–285.
- [50] Christopher A Le Dantec and W Keith Edwards. 2008. Designs on dignity: perceptions of technology among the homeless. In *Proceedings of the SIGCHI conference on human factors in computing systems*. 627–636.
- [51] Mark R Leary and Robin M Kowalski. 1995. The self-presentation model of social phobia. *Social phobia: Diagnosis, assessment, and treatment* (1995), 94–112.
- [52] Zachary Levonian, Marco Dow, Drew Erikson, Sourojit Ghosh, Hannah Miller Hillberg, Saumik Narayanan, Loren Terveen, and Svetlana Yarosh. 2021. Patterns of Patient and Caregiver Mutual Support Connections in an Online Health Community. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW3 (2021), 1–46.
- [53] Haley MacLeod, Grace Bastin, Leslie S Liu, Katie Siek, and Kay Connelly. 2017. "Be Grateful You Don't Have a Real Disease" Understanding Rare Disease Relationships. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems. 1660–1673.
- [54] Claudia Manzi, Vivian L Vignoles, and Camillo Regalia. 2010. Accommodating a new identity: Possible selves, identity change and well-being across two life-transitions. *European Journal of Social Psychology* 40, 6 (2010), 970–984.
- [55] Alice E Marwick. 2013. Online identity. A companion to new media dynamics (2013), 355-364.
- [56] Alice E Marwick and Danah Boyd. 2011. I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. New media & society 13, 1 (2011), 114–133.
- [57] Nora McDonald, Sarita Schoenebeck, and Andrea Forte. 2019. Reliability and Inter-Rater Reliability in Qualitative Research: Norms and Guidelines for CSCW and HCI Practice. Proc. ACM Hum.-Comput. Interact. 3, CSCW, Article 72 (Nov. 2019), 23 pages. https://doi.org/10.1145/3359174
- [58] Tsubasa Morioka, Nicole B Ellison, and Michael Brown. 2016. Identity work on social media sites: Disadvantaged students' college transition processes. In *Proceedings of the 19th ACM conference on computer-supported cooperative work & social computing.* 848–859.
- [59] Don Norman. 2013. The design of everyday things: Revised and expanded edition. Basic books.

- [60] Dilisha Patel, Ann Blandford, Mark Warner, Jill Shawe, and Judith Stephenson. 2019. "I feel like only half a man" Online Forums as a Resource for Finding a" New Normal" for Men Experiencing Fertility Issues. Proceedings of the ACM on Human-Computer Interaction 3, CSCW (2019), 1–20.
- [61] Frances Reynolds and Sarah Prior. 2006. The role of art-making in identity maintenance: case studies of people living with cancer. European Journal of Cancer Care 15, 4 (2006), 333–341.
- [62] Sabirat Rubya and Svetlana Yarosh. 2017. Video-mediated peer support in an online community for recovery from substance use disorders. In Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing. 1454–1469.
- [63] Lynne M Sallot. 2002. What the public thinks about public relations: An impression management experiment. *Journalism & Mass Communication Quarterly* 79, 1 (2002), 150–171.
- [64] Margarete Sandelowski. 1995. Qualitative analysis: What it is and how to begin. Research in nursing & health 18, 4 (1995), 371–375.
- [65] Zachary Schmitt and Svetlana Yarosh. 2018. Participatory design of technologies to support recovery from substance use disorders. *Proceedings of the ACM on Human-Computer Interaction* 2, CSCW (2018), 1–27.
- [66] Norbert Schwarz. 2007. Attitude construction: Evaluation in context. Social cognition 25, 5 (2007), 638-656.
- [67] Bryan C Semaan, Lauren M Britton, and Bryan Dosono. 2016. Transition Resilience with ICTs: 'Identity Awareness' in Veteran Re-Integration. In Proceedings of the 2016 CHI Conference on human factors in computing systems. 2882–2894.
- [68] Gerda M Speller, Evanthia Lyons, and Clare Twigger-Ross. 2002. A community in transition: The relationship between spatial change and identity processes. *Social psychological review* 4, 2 (2002), 39–58.
- [69] Jan E Stets and Peter J Burke. 2014. Self-esteem and identities. Sociological Perspectives 57, 4 (2014), 409-433.
- [70] Jeffrey W Treem and Paul M Leonardi. 2013. Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association* 36, 1 (2013), 143–189.
- [71] Anthony Henry Triggs, Kristian Møller, and Christina Neumayer. 2021. Context collapse and anonymity among queer Reddit users. *new media & society* 23, 1 (2021), 5–21.
- [72] Marlene E Turner and Anthony R Pratkanis. 1998. A social identity maintenance model of groupthink. *Organizational behavior and human decision processes* 73, 2-3 (1998), 210–235.
- [73] Marlene E Turner, Anthony R Pratkanis, Preston Probasco, and Craig Leve. 1992. Threat, cohesion, and group effectiveness: Testing a social identity maintenance perspective on groupthink. *Journal of Personality and Social* Psychology 63, 5 (1992), 781.
- [74] Amanda J Visek, Jack C Watson, Jennifer R Hurst, Jonathan P Maxwell, and Brandonn S Harris. 2010. Athletic identity and aggressiveness: A cross-cultural analysis of the athletic identity maintenance model. *International Journal of Sport* and Exercise Psychology 8, 2 (2010), 99–116.
- [75] Joseph B Walther. 1993. Impression development in computer-mediated interaction. Western Journal of Communication (includes Communication Reports) 57, 4 (1993), 381–398.
- [76] Jennifer L Welbourne, Anita L Blanchard, and Marla D Boughton. 2009. Supportive communication, sense of virtual community and health outcomes in online infertility groups. In Proceedings of the fourth international conference on Communities and technologies. 31–40.
- [77] Debra Winter and Chuck Huff. 1996. Adapting the Internet: Comments from a women-only electronic forum. *The American Sociologist* 27, 1 (1996), 30–54.
- [78] Daphna Yeshua-Katz and Ylva Hård af Segerstad. 2020. Catch 22: The Paradox of Social Media Affordances and Stigmatized Online Support Groups. Social Media+ Society 6, 4 (2020), 2056305120984476.

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