

# Family as a source of support under stress: Benefits of greater breadth of family inclusion

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#### **ABSTRACT**

Family has profound meaning and represents the most important ingroup for most people, yet, we know very little about how lay perceptions of family affect well-being. In the current work, we examined how lay theories about breadth of family inclusion (i.e., including a broader variety of entities in one's definition of family) were related to family experiences and to well-being. In Study 1, we found that lay theories about family as including a wider variety of entities (i.e., greater breadth of inclusion) predicted more positive family evaluations, more positive qualities, and greater family importance. In Study 2, we found that greater breadth of family inclusion was associated with greater resilience in the face of stress. Finally, in Study 3 we used an experimental manipulation of breadth of family inclusion, establishing that broader views of family produced greater social needs fulfillment. Implications for the role of ingroup memberships and identities in promoting well-being are discussed.

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Family; ingroups; social support; well-being; lay theories

You are born into your family and your family is born into you. No returns. No exchanges. – Elizabeth Berg

The bond that links your true family is not one of blood, but of respect and joy in each other's life. – Richard Bach

Call it a clan, call it a network, call it a tribe, call it a family: Whatever you call it, whoever you are, you need one. – Jane Howard

Family is an ingroup by definition, and arguably, one of the most important groups to which people belong. As illustrated by the preceding quotes, although people may differ in how they conceptualize family, most agree that family is a central entity in their lives, central to their identities, and an indispensible group membership. Indeed, among college students and older ( $M_{\rm age} = 37$ ) community sample individuals, more than 60% of people list family as the most important group in their lives (McConnell, Buchanan, Lloyd, & Skulborstad, 2016). Serving as an important source of both social and emotional support, family not only has great personal significance, but it has profound societal meaning. The importance of family

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is reflected in structures (e.g., marriage, parenting, health care benefits, legal rights) that confer it a privileged status in society. Moreover, family provides people with their first ingroup membership and serves as a central identity throughout their lives. Indeed, the metaphor of "family" is powerful when applied to people who are related by blood or who are selected by choice (Lakoff & Johnson, 1980), and family-related identities are one of the most frequently listed aspects of people's self-concepts (McConnell, 2011).

Although most people agree that family is their most central ingroup, there is less agreement about how to define family. For example, while some describe family as an invariant entity (e.g., focusing on consanguinity), others' definitions show greater flexibility, extending family membership to a wide array of entities (e.g., friends, pets, neighbors). Does this breadth relate to perceptions of one's family (e.g., its positivity, qualities associated with it)? Are there physical and psychological benefits associated with such perceived breadth? Can broader definitions of family help people manage stress better than more narrowly-construed lay theories of family? The current work addressed these questions by exploring the connections between lay theories of breadth of family inclusion and a variety of important outcomes (e.g., family experiences, physical and psychological well-being).

Examining lay conceptions of family is important because family is a socially constructed ingroup. Rather than having a classic definition, an individual's conceptualization of family is often built upon personal experience and socialization (Weigel, 2008), and how family is defined has many important implications. For example, political definitions of family inform public policy and determine what relationships merit official recognition and governmental support (e.g., health and legal benefits, tax credits, same-sex marriage). At the individual level, deviating from culturally-prescribed notions of family can lead to negative outcomes and stigmatization (Ferree, 1990). Although important on a number of levels (e.g., societal, interpersonal), we know little about people's lay theories of family and their implications.

One thing that is clear is that the nature of family is dynamic and changing. For example, analyses of United States Census Bureau data indicate that family sizes are declining while cohabitation and single-parent households are increasing (Lofquist, Lugaila, O'Connell, & Feliz, 2012). Also, there are increases in remarriages, childless unions, and multigenerational households in the United States (Segrin & Flora, 2005). In less than two decades, the number of states permitting same-sex marriage increased from 0 to 32 (National Conference of State Legislatures, 2014) and same-sex marriage was further extended by the US Supreme Court (Obergefell et al. v. Hodges et al., 2015). Similar trends have been observed outside of the United States. In Europe, for example, single-parent households are on the rise, multigenerational families are increasing, and two parent families are becoming less common (Organization for Economic Co-operation and Development, 2010, 2011; Popenoe, 2008). Moreover, in places such as Kenya, India, Columbia, and Peru, more than half of children live with adults beyond their parents, reflecting the importance of broad kinship ties (Lippman, Wilcox, & Ryberg, 2014). And similar to changes in the United States, legal gay marriage has spread from The Netherlands in 2000 to 20 countries worldwide, including Brazil, Canada, France, New Zealand, and South Africa (Pew Research, 2014). All in all, these changes reveal that the face of family is no longer that of the classic, husband-and-wife nuclear family.

# **Definitions and lay theories of family**

Even in academic circles, there are differences in how scholars define family, with most adopting one of three perspectives: structural definitions (e.g., traditional or socio-legal definitions), functional perspectives (e.g., purposes that families serve), or transactional views (e.g., shared collective identities and emotions; for overviews, Baxter et al., 2009; Koerner & Fitzpatrick, 2004; Melton & Wilcox, 1989). Some researchers combine these perspectives, acknowledging that although some conceptualizations of families rely on blood relations and legal ties (i.e., structural definitions), others emphasize emotional and communication practices (i.e., transactional views). Because of the lack of consensus in defining "family," it is important to examine laypeople's views of family (Baxter et al., 2009).

Interestingly, there is considerable variability in the definitions of family held by people. While some individuals consider family to be only those who are immediately related to them by blood or marriage, others bestow the term "family" on meaningful entities such as close friends, godparents, and even pets. For example, the majority of U.S. dog and cat owners consider their pets to be family (McConnell, Lloyd, & Buchanan, in press) and people, on average, report the same level of inclusion of other in self for their pets as they do for their siblings (McConnell, Brown, Shoda, Stayton, & Martin, 2011). Thus, reminiscent of how people experience meaningful relationships with fictional entities found in research on parasocial relationships (e.g., Derrick, Gabriel, & Hugenberg, 2009; Gabriel & Young, 2011), many individuals find it easy and compelling to extend "family" not only beyond blood relations, but even beyond their own species.

Past work has suggested that individual and group differences in defining family exist. For example, many researchers have examined how family definitions change developmentally (Anyan & Pryor, 2002; Fu, Goodwin, Sporakowki, & Hinkle, 1987; Rigg & Pryor, 2007; Wedemeyer, Bickhard, & Cooper, 1989), with children shifting from more concrete qualities in defining family (e.g., co-residence, family roles) to focusing on more abstract attributes as they grow older (e.g., affective and legal ties; Newman, Roberts, & Syré, 1993). Some studies suggest that first-hand experiences matter, finding that compared to children from intact homes, children from separated or divorced households define family more broadly (Brannen, Heptinstall, & Bhopal, 1999), focusing more on affect (Wedemeyer et al., 1989) and less on co-residence (Powell, Wiltcher, Wedemeyer, & Claypool, 1981). However, other studies find no differences in construals of family between children from intact and divorced homes (e.g., Horm-Wingerd, Groves, and Nekovei 1992; Newman et al., 1993).

Studies of adults (primarily college students) have found that although common themes often emerge in how people think about family, variability exists. For example, Baxter et al. (2009) had participants consider scenarios about 23 potential family units and rate the extent to which they considered each collection of individuals (e.g., two men and a child, a grandparent and grandson living together) to be a family. They found that factors such as the presence of children, intactness, co-residence of individuals, heterosexuality (in the absence of children), and blood relations increased perceptions of family, yet there remained considerable variability in the extent to which family was ascribed to these different collections of people. Additionally, the literature on family of choice networks suggests that for many members of the LGBT community, bestowing the term family to individuals of one's own choosing may be linked with positive outcomes (e.g., Etengoff & Daiute, 2015; Oswald, 2002). Thus, even if people's own families shun them because they are a member of a sexual minority group, these individuals can identify with different individuals to maintain and establish a "new family," further underscoring its importance to people's sense of belonging.

Other studies have focused on the prototypic qualities that people associate with family, finding that people often identify connectedness attributes such as love, trust, respect, support, and honesty as the most central qualities of family (Weigel, 2008). Finally, cultural differences may exist in the models of family that people adopt. In China, for instance, the prototypic family consists of a single child, two parents, and sometimes grandparents with only a small minority of households consisting of single parent, cohabitating adults, or step families (Tsui, 1989). On the other hand, in Ecuador, extended families including grandparents, aunts, uncles, and cousins are nearly as prevalent as traditional nuclear families (Carrillo, Ripoll-Núñez, & Schvaneveldt, 2012), which is in contrast to the definitions of family typically found in the United States.

Overall, although some research has examined how people may define family differently, there is little work examining the implications of holding such views. Although some work has explored how viewing ingroups as being "family like" promotes pro-group behavior (e.g., Swann, Jetten, Gómez, Whitehouse, & Bastian, 2012; Swann et al., 2014), the current work focuses specifically on people's lay perceptions of family and the range of entities they include when defining this central ingroup. Previous research indicates that people vary in how they conceptualize family, but we do not know, for example, how these definitions relate to family experiences (e.g., attitudes, emotions) and how such views may affect psychological or physical well-being. Even though some people endorse a more limited, traditional view of family (i.e., people immediately related by blood or by marriage), for many people their construal of family is broader and more flexible. It is possible that people may benefit from perceiving a more diverse collection of entities as included in the definition of such an important group that can provide meaningful social support. This breadth of family inclusion may serve people positively in general (i.e., defining this group as a broader collection of entities who can provide very significant social support), and it may be especially important for people responding to challenging life experiences. For instance, a relatively narrow view of family (e.g., marriage and blood relations) will constrain the potential sources of family for people later in life who experience inevitable losses. In contrast, a broader view of family that includes a greater diversity of entities (e.g., friends, pets) means that family is less constrained as a source of support but instead is composed of a diverse pool of types of entities that can grow as needed and be less susceptible to sudden or irrevocable change (e.g., death, divorce).

# Social support, stress, and well-being

Considering the impact of family as an important social resource complements literatures on social connection, positive experiences, well-being, and health outcomes. People's group memberships provide them with many positive consequences, including enhancing selfworth (e.g., Tajfel & Turner, 1986), providing social resources to help people cope (Correll & Park, 2005), and contributing attributes that are included in one's self-concept (e.g., Smith, Coats, & Walling, 1999). In general, broader social support networks correlate with less stress, greater emotional and physical well-being, health and longevity, and more positive attitudes toward life and society (e.g., Acock & Hurlbert, 1993; Agneessens, Waege, & Lievens, 2006; Antonucci, Fuhrer, & Dartigues, 1997; D'Abbs, 1982; House, Landis, & Umberson, 1988; Lin & Ensel, 1989; Sarason & Sarason, 1985; Thoits, 1982, 1985; Umberson, Chen, House, Hopkins, & Slaten, 1996).

Further, research consistently shows that both quality and quantity of social relationships predict well-being (Pinquart & Sörensen, 2000), self-esteem (Denissen, Penke, Schmitt, & van Aken, 2008), and health outcomes including cardiovascular disease, high blood pressure, cancer, and mortality (Ertel, Glymour, & Berkman, 2009; Everson-Rose & Lewis, 2005; House et al., 1988). It is also well established that feelings of loneliness, above and beyond literal measures of social connection such as objective social isolation, are key predictors of negative health outcomes such as hypertension (Cacioppo, Hawkley, Crawford, et al., 2002; Hawkley, Masi, Berry, & Cacioppo, 2006), impaired sleep (Cacioppo, Hawkley, Berntson, et al., 2002; Pressman et al., 2005), reduced immune system functioning (Cacioppo, Hawkley, & Bernston, 2002), and degraded physical health (Caspi, Harrington, Moffitt, Milne, & Poulton, 2006; Cornwell & Waite, 2009). Additionally, loneliness has been associated with many negative psychological outcomes such as greater incidence of psychopathology (e.g., Bloom, White, & Asher, 1979), psychiatric suicidal ideation and behavior (e.g., Goldsmith, Pellmar, Kleinman, & Bunney, 2002), and depression (e.g., Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006; Russell, Cutrona, Rose, & Yurko, 1984).

Additionally, the stress-diathesis framework anticipates that individual difference factors (i.e., lay perceptions of breadth of family inclusion) interact with life events (i.e., perceived stress) to predict health and well-being (e.g., Coyne & Downey, 1991). Stress-diathesis approaches can explain differences in how individuals respond and adapt to stressful life circumstances. In particular, they anticipate that when psychological resources are limited (e.g., people facing challenging circumstances), individuals with vulnerabilities experience relatively poorer well-being outcomes while those with more beneficial qualities experience greater resilience. The stress-diathesis account has been supported in many domains, including research finding that social support serves a prophylactic function for how negative life events impact well-being (Falcón, Todorova, & Tucker, 2009). Additionally, the quality of interpersonal relationships has been found to be a significant moderator of how negative stressful events reduce well-being (Burns & Machin, 2013; Dirkzwager, Bramsen, & van der Ploeg, 2003; Haden, Scarpa, Jones, & Ollendick, 2007; McConnell, Strain, Brown, & Rydell, 2009).

Although size of one's social support network is a common measure used in the literature (e.g., Sarason, Levine, Basham, & Sarason, 1983), researchers have begun exploring the number of relationship types or diversity of types of individuals available for support, developing more complex measures to consider additional factors such as the amount, types, and sources of support (e.g., Agneessens et al., 2006). For example, research on the elderly has shown that individuals with social support networks classified as diverse (based on factors such as network size and frequency of contact) exhibit greater well-being than those whose networks were restricted (Fiori, Smith, & Antonucci, 2007). Although the literature on social networks continues to inform researchers about how the function and quantity of social contacts influence important life outcomes, the current research builds on this past work by exploring how lay theories about how an important ingroup such as family can influence one's health and well-being.

Researchers have also focused on how family relationships may influence individual functioning and well-being. For example, quality of family relationships has been linked to well-being (e.g., Denissen et al., 2008; Fingerman, Hay, & Birditt, 2004; Fiori et al., 2007; Pinguart & Sörensen, 2000; Wrzus, Wagner, & Neyer, 2012). Broadly, these studies demonstrate positive implications for close family relationships and negative outcomes for problematic family relations on psychological well-being and the experience of affect (e.g., Antonucci, 2001; Fingerman, 2001). Further, the influence of family on important health and well-being outcomes can also be linked to specific life period or events. For example, research suggests



that the early years of parenthood tend to be associated with decreased happiness, wellbeing, and martial satisfaction (e.g., Dew & Wilcox, 2011; Gorchoff, John, & Helson, 2008; Lyubomirsky & Boehm, 2010). Additionally, loss of significant others through death or divorce can have lasting impacts on happiness (Holmes & Rahe, 1967; Lucas, Clark, Georgellis, & Diener, 2003). The majority of this work, however, has focused on specific one-to-one relationships in one's family such as mother-daughter relationships (e.g., Fingerman, 2001) or relationships with similarly aged siblings and cousins (e.g., Wrzus et al., 2012). The current work, in contrast, explores how lay perceptions about the diversity of one's family as an entire group have important implications for ingroup members' well-being.

## The current work

We set out to better understand how people's perceptions of family breadth influence important outcomes, ranging from positive family-specific experiences to general mental and physical well-being. As a starting point, we examined people's general perceptions of who is included in their personal definition of family and explored whether those with greater breadth of inclusion reported having more positive family experiences in general (Study 1). Upon finding a relation between greater breadth of family inclusion and more positive family experiences, we tested the prediction that viewing families as being composed of a relatively broader collection of entities would predict better well-being (e.g., self-esteem, depressed affect, stress-related illnesses) in the face of stress (Study 2). Finally, we experimentally manipulated people's perceptions of family breadth to observe its causal role in affecting well-being (Study 3).

Although there are a variety of ways to examine the extent to which people view families as flexible and diverse, we focused on breadth of inclusion in the current work for several reasons. In comparison to classic definitions of family that are more structural in nature (e.g., nuclear families), the growth of non-traditional families suggests that conceptualizations of family extend beyond consanguinity for many people and thus people may include a broader array of entities in their definition of family (e.g., friends, pets). For example, the majority of pet owners view their pets as family members (McConnell et al., in press), and pet owners are happier and healthier when they view their pets as greater sources of social needs fulfillment (McConnell et al., 2011). This work also demonstrated that the social support gained from this non-traditional type of family member complemented, rather than replaced or offset, other sources of social support. The additive nature of social support in this work across a variety of entity types (e.g., one's family, friends, and pets) in predicting greater well-being in past work led us to focus on the range of entity types people include in their view of family.

In the current work, we examined the perceptions of college students (Study 1) and of community sample participants with more diverse life experiences (Studies 2 and 3) because older participants would be more likely to have a wider range of family change experiences (e.g., death, divorce, empty nest, marriage, childbirth) than undergraduate student populations. Further, we anticipated greater variability in well-being outcomes with a community sample, increasing the likelihood that relations between perceptions of family and well-being would obtain.

# Study 1: Does family breadth predict better family experiences?

First, we were interested in whether those with broader views of family membership would also have more positive family experiences. Ingroups are often a source of positivity (Brewer, 2001) and because families are important ingroups that provide considerable support (McConnell et al., 2016), we anticipated that people who reported having a greater diversity of entities included in their lay beliefs about family membership would benefit from having a larger array of entities compose this central group. We sampled undergraduate students, assessing their perceptions of breadth of family inclusion and a number of assessments of their experiences with family, including reports of family positivity, family importance, and prototypic qualities associated with families (Weigel, 2008). We asked participants to consider a list of entities, ranging from the traditional (e.g., biological parents, siblings) to the less traditional (e.g., neighbors, pets), and to report the extent to which they could view each entity type as a source of family according to their personal definition of the group. We anticipated that as participants reported greater family breadth (i.e., a broader range of entities as a greater source of family), that more positive family experiences would be observed (i.e., their families would be viewed more positively, as more important, and as revealing more desirable qualities commonly associated with families). If supported, subsequent studies could explore whether greater family breadth leads to greater resilience and well-being (e.g., greater self-esteem, fewer stress-related illnesses, reduced depressed affect) beyond mere positivity.

## Method

To explore family breadth and its relation to family experiences, 260 undergraduates at a Midwestern university (163 women, 92 men, and 5 who did not report gender) participated (mean age 18.85 years, SD = .90). These data were collected as part of a mass survey conducted at the beginning of the semester (thus, we had no control over sample size and no stop rule for data collection), and the items in this study were embedded in a larger collection of measures involving other laboratories and research projects. The survey was completed online by students during the first week of the semester for research participation credit in their courses.

We assessed participants' views of family breadth by asking them to rate the extent to which they perceived each of 18 different types of entities as a potential source of "family" (using their own idiosyncratic definition of the group). These entities included those from a traditional nuclear family (e.g., biological parents, siblings, their own children), extended family (e.g., in-laws, aunts and uncles), step-relations (e.g., step-parents, step-siblings), non-consanguine others (e.g., neighbors, close friends), and pets (e.g., dogs, cats). Because we were interested in their lay beliefs about family breadth, we asked them to evaluate each entity, regardless of whether it existed in their lives (e.g., practically none of these college students had children even though they might view them as very important in their definition of family), as a potential source of family on a scale ranging from 1 (not all) to 9 (very much). Breadth of family inclusion scores were calculated from participants' mean response to the 18 targets, with larger scores reflecting lay beliefs that family can be composed of a broader array of entities.1

In addition to lay beliefs about family breadth, we assessed three aspects of family experiences: family evaluations, family importance, and family qualities. First, participants reported their attitudes toward their family by responding to a feeling thermometer (ranging from 0 to 100°, where larger values indicated greater warmth and liking) and to three additional items on scales ranging from 1 (not at all) to 9 (tremendously) for how positive, how negative, and how likable their families were. A family evaluation score was computed based on a factor score derived from a principal components factor analysis of these items (a single factor solution was observed, with the first eigenvalue of 3.84 and all subsequent  $\lambda$ s < .65). We also assessed family importance by asking participants to indicate the extent to which their family was important to them (M = 8.48; SD = 1.11) using the same scale that ranged from 1 (not at all) to 9 (tremendously). Finally, we examined prototypic family qualities documented in past research (Weigel, 2008) by asking participants (on the same 9-point scales) to report the extent to which their family exhibits love, trust, respect, honesty, and support (with one question asking about how much their family supports them, and a second question asking about how much they support their family). The mean response to these six items was computed to reflect the presence of more positive prototypic family qualities  $(\alpha = .92; M = 8.00 \text{ SD} = 1.16).$ 

### Results

We conducted correlational analyses to explore the relation between family breadth and family experiences, and these findings are reported in Table 1. Of greatest importance, participants who included a larger variety of entities in their lay definition of family reported having significantly more positive family evaluations, viewing their family as being significantly more important, and reported significantly more positive family qualities found to be strongly associated with families in past research (i.e., love, trust, respect, honesty, and support). Not surprisingly, people with more positive evaluations of their family also viewed their families as significantly more important and having significantly more positive prototypic family qualities, and more important families were perceived as having significantly more positive prototypic family qualities as well.

## Discussion

This study provides initial evidence that lay perceptions of family breadth are associated with better family experiences. Specifically, as people's lay beliefs about family were composed of a broader array of entities, they reported more positive evaluations of their own family, reported that their family was more important to them, and reported that their family was characterized by greater trust, love, respect, honesty, and support. Because greater

Table 1. Zero-order correlations among breadth and family perception measures in Study 1.

	Correlations							
	Breadth	Evaluations	Importance	Qualities				
Family breadth	_							
Family evaluations	.22***	_						
Family importance	.22***	.75**	_					
Family qualities	.18**	.77**	.83**	_				

Note: N = 260. \*\*p < .01; \*\*\*p < .001.

perceptions of family breadth predicted more positive family experiences, might these lay beliefs also promote greater well-being in the face of stress? In Study 2, we explored this question with a more diverse sample population. Later in Study 3, we employed a manipulation of family breadth to assess its causal role in producing greater well-being.

# Study 2: Do beliefs about greater family breadth promote well-being and coping with stress?

In this study, we were interested in exploring a stress-diathesis prediction. Because the stress-diathesis perspective has shown that social support serves a protective function under times of greater stress (e.g., Coyne & Downey, 1991; Falcón et al., 2009) and because our operationalization of breadth of family inclusion reflects perceptions of family as including a broader array of social support entities, we anticipated that people with lay beliefs of family characterized by greater breadth should exhibit greater well-being in the face of stressful life experiences. That is, the benefits of perceiving a diverse collection of entities as included in this important ingroup might be especially realized when support needs are at their greatest.

In addition to examining this primary hypothesis, we also explored whether other perceptions of family (i.e., evaluations and stability) might moderate this focal stress-diathesis prediction. For example, ingroups can promote positive experiences in general (Brewer, 2001), and they serve as social resources when they have more positive value (Correll & Park, 2005). Thus, a broader array of entities in one's definition of family might be much more advantageous when people's experiences with family are relatively more positive. And similarly, although a view of family as consisting of a larger, more diverse collection of entities may be valuable, having experiences with family as being relatively unstable might mean that people believe they cannot rely on this ingroup consistently for support. Just as one benefits (e.g., greater self-esteem, greater life satisfaction, less negative affect) from having greater clarity and stability for the self (e.g., Baumgardner, 1990; Campbell et al., 1996; DeNeve & Cooper, 1998; Wilson, 1967), we considered the possibility that people whose experiences with family are more stable might mean that holding perceptions of families as broader could predict greater well-being when experiencing stressful circumstances.

Finally, we also assessed the total number of family members that each participant included in their personal definition of family. By examining the breadth of entities included in one's definition of the group family while partialling out one's family size, we were able to examine the unique contributions of lay beliefs about family breadth of inclusion on well-being. Our focus on breadth of family inclusion anticipates that the benefits of a greater range of entities included in one's lay beliefs about family should persist even after controlling for family size (i.e., it is the diversity of potential entities in one's lay definition of family, not merely sheer size of one's own family, that should promote well-being).

## Method

To explore the impact of perceptions of family on well-being among individuals with relatively more life experiences, family diversity, and well-being variability, we obtained our sample online using Amazon's Mechanical Turk (mTurk). Specifically, we collected data from 103 mTurk workers who were each paid \$0.75 for their participation. Five of these individuals failed a reading check item (Oppenheimer, Meyvis, & Davidenko, 2009), leaving a sample of



98 participants (60 women; mean age = 35.27, SD = 12.51).<sup>2</sup> The majority if participants reported being from the United States, with1 participant each from China, Cuba, England, India, and the Philippines. Because we were interested in a wide array of family and life experiences, the mTurk population was attractive given the relatively diverse composition of individuals who frequent the site (Buhrmester, Kwang, & Gosling, 2011). Indeed, whereas our college population in Study 1 was approximately 19 years of age, the participants in our current sample had, on average, 16 additional years of adult experiences (and some, considerably more). The current sample was also relatively diverse in relationship status: 41% married, 35% single, 12% cohabitating, 9% divorced, 2% remarried, and 1% widowed. Further, participants exhibited a range of education attainment: 4% high school, 43% some college, 40% 4-year college, 12% graduate or professional degree. Participants completed the measures described below online.

# Well-being measures

Participants completed several common measures of well-being used in past work (e.g., Linville, 1987; McConnell et al., 2005, 2011; Woolfolk, Novalany, Gara, Allen, & Polino, 1995). First, they responded to four statements to report their subjective happiness (Lyubomirsky & Lepper, 1999). For example, they indicated how happy they felt *at this very moment*, using a scale ranging from 1 (*not at all happy*) to 7 (*extremely happy*). The mean of the responses was computed (one item was reverse scored) with larger scores indicating relatively greater happiness ( $\alpha = .90$ ).

Next, participants completed the 17-item basic needs scale (Zadro, Williams, & Richardson, 2004) to assess their sense of belonging, meaningful existence, control, and self-esteem, with participants rating their agreement on a series of statements (e.g., "I feel liked," "I feel powerful") using a scale ranging from 1 (not at all true) to 9 (completely true) based on how they felt at the moment. Consistent with past work (e.g., Bernstein, Sacco, Young, Hugenberg, & Cook, 2010; McConnell et al., 2011), we observed that the measure revealed one factor corresponding to social needs fulfillment. Specifically, a principal components factor analysis of the 17 items was conducted, and scree plots supported a one-factor solution. When comparing the eigenvalues between the first and second factors, the drop was pronounced (eigenvalues of 11.42 and 1.30, respectively). We therefore combined the 17 items (reverse scoring items when appropriate) into a single index of basic needs fulfillment, with larger scores reflecting relatively greater basic needs fulfillment ( $\alpha$  = .97).

Participants then completed a commonly used measure of self-esteem (Rosenberg, 1965), rating their agreement with 10 statements (e.g., "All in all, I am inclined to feel like a failure") on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The mean of the responses (some reverse scored) was computed, with larger scores indicating greater self-esteem ( $\alpha = .91$ ).

To measure depressed affect, participants next completed the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). For this inventory, participants rated their endorsement of 20 statements referring to affect-related symptoms occurring during the previous two weeks (e.g., "I felt that everything I did was an effort") on a scale ranging from 1 (*rarely or none of the time*) to 4 (*most or all of the time*). The mean of participants' responses was computed such that larger scores represented more depressed affect ( $\alpha$  = .92).

We then assessed stress-related physical illnesses and symptoms (Cohen & Hoberman, 1983) by asking participants to indicate whether they had experienced a variety of 33

symptoms within the past two weeks (e.g., dizziness, headache) associated with stress. We computed an index of physical symptoms by computing the sum of the total number of symptoms participants reported experiencing ( $\alpha = .86$ ).

36. Because all of the well-being measures were correlated as expected (rs ranging from to .82) and to simplify our focus on overall well-being as an outcome measure, we factor analyzed the aforementioned measures of well-being. When indices of subjective happiness, basic needs, self-esteem, depressed affect, and physical symptoms were included in a principal components factor analysis, a one-factor solution emerged (eigenvalue = 4.08, all other λs < 1). Accordingly and in line with other published work (e.g., McConnell et al., 2009), an overall factor score was computed for each participant and standardized, which we will refer to as overall well-being ( $\alpha = .95$ ), such that larger scores indicated relatively greater well-being (i.e., greater happiness, greater social needs fulfillment, greater self-esteem, less depressed affect, and fewer physical symptoms). Although we present analyses for the overall well-being factor score only, analyses for individual submeasures yielded similar patterns of results.

# Family views measures

Participants next completed the same measure of breadth of family inclusion used in Study 1 (assessing the same 18 entities) as well as additional measures of experiences with positive and stable families to consider the potential moderating role of these variables on the primary stress-diathesis prediction. Specifically, participants indicated experiences with positive families by rating their own family group on the dimensions of positivity, negativity, and liking on scales ranging from 1 (not at all) to 9 (extremely). The mean response to these items (reversed scored for one item) was computed to create an index of positive family experiences ( $\alpha$  = .89). Using the same 9-point response scale, we assessed perceptions of stable family experiences with two items (i.e., "My family can be characterized as stable over time," "Who is included in my family does not change much"), computing the mean of the responses to the items, with larger numbers representing experiences with more stable families ( $\alpha = .64$ ). Next, we measured the quantity of entities that the participant considered to be members of their family (M = 22.45; SD = 35.20). By measuring family size in this way, we were able to consider participants' lay beliefs about family breadth (i.e., diversity of entity types included in their construal of family) on well-being under stress independent of sheer family size.

### Perceived stress

Finally, to assess our stress-diathesis prediction, we measured participants' perceived stress with two items. First, participants responded to the statement, "I consider myself" on a scale ranging from 1 (not a very stressed person) to 7 (a very stressed person). Next, they responded to the statement, "Compared to most of my peers, I consider myself \_\_\_\_\_" on a scale from 1 (less stressed) to 7 (more stressed). We computed the mean of these two items, with larger scores indicating greater perceived stress ( $\alpha = .92$ ).

### Results

# Descriptive statistics and zero-order correlations

Table 2 presents descriptive statistics and zero-order correlations among the variables. Overall well-being was significantly greater when people reported less perceived stress and had more positive experiences with family. In addition, participants whose experiences with

Table 2. Descriptive statistics and zero-order correlations in Study 2.

	Descrip	tives		C			
	М	SD	Well-being	Breadth	Stress	Pos exp.	Stable exp.
Overall well-being	0.00	1.00	_				
Family breadth	7.10	1.34	.12	_			
Perceived stress	3.83	1.76	71***	02	_		
Positive family experiences	6.46	1.51	.21*	.11	08	_	
Stable family experiences	6.59	1.71	.14	.07	01	.90***	-

Note: N = 98. \*p < .05; \*\*\*p < .001.

families were more positive were also associated with experiences with families that were more stable. Thus, poorer overall well-being was related to greater perceived stress (a necessary precondition for the stress-diathesis prediction), and it was related to one potential moderator of the focal stress-diathesis prediction (i.e., positive experiences with family).

# The buffering effect of family breadth on well-being

The primary focus of the current study was to assess the influence of lay beliefs about family breadth on well-being when under stress. Thus, we conducted a multiple regression analysis in which participants' overall well-being scores were simultaneously regressed on participants' breadth of family inclusion scores, perceived stress scores, and their interaction (product term). Consistent with the stress-diathesis prediction, we found a unique effect of stress on well-being,  $\beta = -1.42$ , t(95) = -3.91, p < .001, where participants who experienced greater stress reported poorer well-being. More important, this effect was qualified by the predicted interaction with beliefs about breadth of family inclusion,  $\beta = .77$ , t(95) = 1.99, p < .05.<sup>3</sup> As illustrated in Figure 1, although breadth of family inclusion was relatively unrelated to well-being when stress was lower, including a broader array of entities in one's personal definition of family (i.e., greater breadth of inclusion) was associated with relatively better well-being under greater perceived stress.

# Other potential qualifiers of the buffering effect of family breadth

Although our primary hypothesis focused on how greater beliefs about breadth of family inclusion would be adaptive in the face of stress (i.e., a buffering effect of family breadth), we also explored whether other factors might qualify this buffering effect, such as experiences with more stable or more positive families. Although greater flexibility in one's construal of family could at times be coupled with family instability (although the zero-order correlation between breadth of inclusion and stable family experiences was non-significant, see Table 2), it is still possible that experiences with more family instability could impair the ability for broader family inclusion to be beneficial. Thus, we examined whether experiences with more stable families might qualify the interaction of family breadth and stress on well-being. Thus, we conducted a multiple regression analysis in which overall well-being scores were simultaneously regressed on participants' perceived levels of stress, breadth of family inclusion scores, experiences with stable families, and all possible two-way and threeway interactions. Analyses revealed a unique effect of stress,  $\beta = -.73$ , t(91) = -10.65, p < .001, and the perceived stress by breadth of family inclusion two-way interaction,  $\beta = .15$ , t(91) = 2.00, p < .05. However, these effects were qualified by the marginal three-way interaction,  $\beta = .16$ , t(91) = 1.90, p = .06. As illustrated in Figure 2, although those with greater

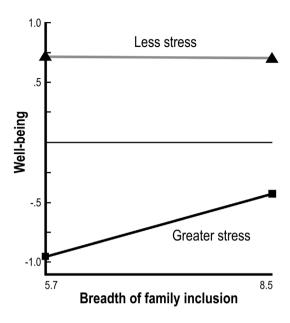


Figure 1. Interaction between lay beliefs about breadth of family inclusion and stress (both depicted at  $\pm 1$  SD) on overall well-being (Study 2).

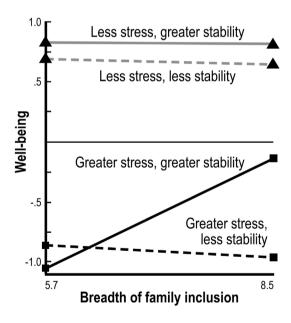


Figure 2. Interaction between lay beliefs about breadth of family inclusion, family stability, and stress (depicted at  $\pm$ 1 SD) on overall well-being (Study 2).

perceived stress reported poorer well-being, this relation tended to be weaker among those who reported relatively greater breadth of inclusion *and* relatively greater experiences with family stability. This suggests that experiencing relatively more stable families coupled with

greater breadth of inclusion in one's definition of family may be especially beneficial for people facing greater perceived stress.

We also examined whether experiences with more positive families might moderate the stress buffering effect of family breadth (i.e., the family breadth by stress interaction). For example, having perceptions of fewer entity types in one's lay definition of family coupled with more negative family experiences could predict poorer well-being. Thus, a multiple regression analysis was conducted where overall well-being scores were simultaneously regressed on participants' perceived levels of stress, breadth of family inclusion scores, positive family experiences, and all possible two-way and three-way interactions. Although the three-way interaction was not significant (p > .20), we observed unique relations of positive family experiences  $\beta = .15$ , t(91) = 2.11, p < .04, and of perceived stress,  $\beta = .70$ , t(91) = -10. 05, p < .001, and we observed a marginal perceived stress by breadth interaction,  $\beta = .15$ , t(91) = 1.94, p < .06. Thus, participants experienced greater well-being when having more positive family experiences and as their level of perceived stress was relatively lower, with both of these effects consistent with the zero-order correlations reported in Table 2. However, the buffering effect of lay beliefs of greater family breadth on well-being was unmoderated by family evaluations (i.e., there was no evidence of the three-way interaction).

## **Discussion**

Study 2 examined a more diverse population than Study 1, and it explored the stress buffering effect of lay beliefs about breadth of family inclusion on well-being (i.e., subjective happiness, social needs fulfillment, self-esteem, depressed affect, and stress-related illnesses). Overall, participants reported poorer well-being when they experienced greater stress in their lives and when they had more negative family experiences. Because of the relation between greater stress and poorer well-being, we were able to test the focal stress-diathesis prediction that the detrimental effects of stress on well-being might be reduced for those whose personal construals of family breadth were greater. Consistent with this hypothesis, we observed that the relation between greater stress and poorer well-being was attenuated as lay beliefs about breadth of family inclusion increased. Thus, perceiving a greater variety of entities as being potential sources of family seems to provide resources that can help one manage stress, and this effect maintained even when controlling for the number of entities in one's family (i.e., breadth of family inclusion was not simply a proxy for family size).

In addition to finding support for this focal hypothesis, we also explored whether two other moderating factors might qualify this interaction: experiences with more stable and more positive families. Although we did not find evidence of moderation involving positive family experiences, we did see evidence consistent with moderation involving experiences with family stability, borne out by the marginal interaction between perceived stress, family breadth, and stable family experiences on well-being. This outcome suggests that the benefits of broader lay conceptions of family under stress tended to be realized more by those whose experiences of families were relatively more stable.

Overall, this is the first known evidence demonstrating that family breadth may serve as a resource for people and have implications for important well-being outcomes. Whereas Study 1 demonstrated that holding broader lay theories of family inclusion was related to more positive family experiences, Study 2 demonstrated that these family lay theories predict who enjoys greater well-being in the face of stress. Although the converging evidence for the benefits of greater perceptions of family inclusion across two different subject populations is compelling, Studies 1 and 2 were correlational. To establish the causal role of perceptions of breadth of family inclusion on well-being, an experimental manipulation of family breadth would be necessary.

# Study 3: Do manipulated perceptions of family breadth affect well-being?

Rather than relying on pre-existing differences in perceptions of breadth of family inclusion, we experimentally manipulated them in Study 3. To our knowledge, this is the first attempt to manipulate lay beliefs about family, and in particular, we were interested in whether an experimental manipulation that systematically shifts perceptions of family breadth would have measurable consequences for a common well-being measure used to gauge basic social needs fulfillment (Zadro et al., 2004). Although such a manipulation would presumably be relatively temporary in nature, this demonstration would establish a causal connection between beliefs about breadth of family inclusion and well-being.

#### Method

We collected data from 69 mTurk workers. Four of them failed a reading check item, leaving a sample 65 participants (38 women; mean age = 34.35, SD = 13.93). The vast majority of participants were from the United States, with one participant each from Albania, Columbia, and Israel. As in Study 2, participants displayed variability in relationship status: 39% married, 42% single, 7% cohabitating, and 12% divorced. They were each paid \$0.45 for their participation.

We first assessed participants' well-being at the beginning of the study by having them complete the four-item subjective happiness scale used in Study 2 (Lyubomirsky & Lepper, 1999;  $\alpha = .93$ ). Assessing well-being before our manipulation of breadth of family inclusion served to control for individual differences in participants' well-being at the beginning of the study. Next, based on random assignment to conditions, we manipulated perceptions of family breadth by having participants write about their experiences with family (or hypothetical experiences with family) that were consistent with depictions of family as being relatively high or low in breadth of inclusion (to be described). Finally, we assessed participants' well-being after this experimental manipulation by having participants complete the same 17-item basic needs measure (Zadro et al., 2004) used in Study 2 ( $\alpha$  = .96).<sup>5</sup>

# Manipulation of perceptions of breadth of family inclusion

We manipulated perceptions of family breadth using a writing activity. Specifically, participants were told that in order to help generate study stimuli for future research studies, they were to write about "family" based on prompts supplied to them. They were told to write realistic passages from a first person perspective (purportedly, this was essential for the success of future studies) about experiences of family that reflected the prompts provided, regardless of their personal agreement with those prompts. Regardless of experimental condition, participants wrote about the same three relatively peripheral entities who could conceivably be viewed as family: cousins, neighbors, and friends.

Participants in the high family breadth condition wrote about how or why each of the three peripheral entities (i.e., cousins, neighbors, friends) could be considered important and central family members. They wrote three responses in total, one for each entity. For example, participants wrote responses such as, "Friends are important because they are the family you choose. My friends are people with whom I can really talk about things" and "My neighbors are an important part of my family because our neighborhood depends on us getting along."

On the other hand, participants assigned to the low family breadth condition were asked to write about how or why each of these peripheral entities could not be considered important as family. For example, participants assigned to the low family breadth condition wrote responses such as, "Friends are not central or important family members due to the fact that we are not blood related and I cant (sic.) trust friends like I would my blood relatives" and

I believe that cousins are not that important part of the family because they are not that close. They don't live in my house, they don't know my everyday problems, so that makes them not as important as other family members.6

We reasoned that writing first-person narratives about families in such a way would temporarily shift participants' views of family breadth without eliciting reactance, in line with other subtle induction techniques (e.g., Fazio, Sherman, & Herr, 1982; Salancik & Conway, 1975).

#### Results

To examine how manipulated family breadth influences well-being, we conducted an ANOVA to test the prediction that participants in the high breadth of inclusion condition would reveal greater basic needs fulfillment than those in the low breadth condition. Indeed, this prediction was borne out, as basic needs fulfillment was significantly greater in the high breadth condition (M = 7.13, SD = 1.92, 95% CI [6.55, 7.71]) than in the low breadth condition  $(M = 5.80, SD = 1.93, 95\% CI [5.17, 6.43]), F(1,63) = 9.61, p < .01, \eta_p^2 = .13$ . Although controlling for the baseline well-being measure (i.e., subjective happiness) was not necessary to observe a reliable difference between conditions, we still conducted the planned ANCOVA to evaluate whether the manipulation of family breadth affected basic needs fulfillment while covarying out the subjective happiness measure collected at the beginning of the experiment. Consistent with the previous analysis, the effect of the family breadth manipulation was observed on basic needs fulfillment with subjective happiness included as a covariate,  $F(1,62) = 9.78, p < .01, \eta_p^2 = .14.7$ 

## **Discussion**

The first two studies showed that broader inclusion of entities in one's lay theory of family was related to more positive outcomes, and the current study experimentally tested whether these beliefs would alter one's well-being. Indeed, we observed that people who were induced to endorse greater views of breadth in definitions of family membership experienced greater well-being, providing causal evidence for the role of breadth of family inclusion. Although this experimental manipulation produced reliable differences in well-being, it did not produce meaningful changes in mood, indicating that the observed effects on well-being were not due to a more generalized affect effect. These findings, along with the previous findings derived from pre-existing individual differences in people's lay beliefs about breadth of family inclusion, provide converging evidence that seeing family as an ingroup composed of a broader array of entity types has meaningful benefits.

# **General discussion**

Family is one of our most important ingroups, and although people may differ in how they construe it, most agree that family is an integral part of their sense of self and serves as a significant social resource. Accordingly, we reasoned that viewing family as an ingroup composed of a greater diversity of entities should promote desirable outcomes, ranging from more positive family qualities to greater well-being to better responses in the face of stress. Across these three studies, we measured or manipulated people's lay theories with respect to breadth of family inclusion to examine these issues.

Overall, we found that having broader definitions of family inclusion were related to many desirable outcomes. For example, Study 1 demonstrated that construing family as being composed of a broader array of entities was related to more positive family attitudes, seeing family as more important, and reporting that families possess more appealing qualities associated with prototypic families (i.e., trust, love, respect, honesty, and support). Outcomes such as these, in turn, should serve to make families defined more broadly a valuable resource during times of stress, and this stress-diathesis prediction was tested in Study 2. Specifically, it was found that although stress reduced well-being (i.e., subjective happiness, self-esteem, social needs fulfillment, depressed affect, stress-related illnesses), the relation between greater stress and poorer well-being was diminished for people whose construals of family membership were broader. Finally, Study 3 used an experimental manipulation of breadth of family inclusion and provided causal evidence for the role of broader construals of families in producing greater well-being. Thus, the current work relied on both pre-existing individual differences (Studies 1-2) and experimentally manipulated (Study 3) lay beliefs about family membership, and it explored these important questions with sample populations of college students and of older adults.

In addition to these primary findings, we also observed evidence that other perceptions of family may play an important role in promoting well-being. For example, in Study 2 we found that the stress buffering effect of perceptions of family involving greater breath of inclusion on well-being tended to be stronger for people whose experiences with family are more stable, suggesting that greater family stability may enhance the ability of perceptions of broader family inclusions to support people under stress. Although we did not observe a parallel moderator effect for experiences of family positivity, we did observe unique direct effects such that greater breadth of family inclusion and more positive family experiences each independently predicted better well-being.

In sum, breadth of family inclusion related to several desirable outcomes. Specifically, we found that greater breadth of inclusion in defining family was related to positive perceptions of family, greater well-being under stress, and it may play a role in how those who experience more stable families reveal greater resilience. Study 1 examined a college sample, whereas Studies 2 and 3 relied on more diverse community samples. We studied a variety of outcome measures, including reports of family properties in Study 1, basic needs fulfillment in Study 3, and a collection of commonly-used measures of mental and physical well-being (i.e., subjective happiness, self-esteem, social needs fulfillment, depressed affect, and stressrelated illnesses) in Study 2. Finally, the current work used both correlational methods (Studies 1 and 2) and experimental manipulations (Study 3) to examine these questions.

Having significant meaning for the self and for society more broadly, family is for most people their most important ingroup (McConnell et al., 2016) and a commonly identified

aspect of people's self-concepts (McConnell, 2011), and accordingly, it should serve as an important source of positivity (Brewer, 2001) and social support (Correll & Park, 2005). Yet, we know very little about how lay perceptions of family affect well-being. In the current work, we focused on breadth of family inclusion as one such factor, reasoning that a greater diversity of entities in one's lay perception of family should provide people with more social resource options. Because social support is directly tied to positive experiences, mental and physical health, and resilience under stress (e.g., Ertel et al., 2009; House et al., 1988), we predicted that the benefits of this central ingroup should be stronger as its potential membership pool is perceived to be broader and more diverse. One implication of this work is that people may benefit more as lay definitions of family membership grow broader and more diverse throughout the world (e.g., Lofquist et al., 2012; Organization for Economic Co-operation and Development, 2010, 2011; Popenoe, 2008; Segrin & Flora, 2005).

In addition to helping us understand how and when family may serve as an effective social resource, the current work has broader implications for our knowledge of ingroups as positive, social resources (Brewer, 2001; Correll & Park, 2005). In the current work, we focused exclusively on lay beliefs about families because of their common role as the most important ingroup for people (McConnell et al., 2016). The importance of family is echoed in other research such as the bioecological model of human development (e.g., Bronfenbrenner, 2005). In this lifespan view of development, family is considered an extremely powerful influence on individuals. Thus, the significance of family has been cited in many fields and is a key factor in influential models of human development. However, it is an open question as to whether the functions that families serve in promoting happiness and well-being may also be provided by other social ingroups such as friends and coworkers who are not viewed as family. For example, people who consider broader inclusion with respect to their definition of friends may enjoy greater happiness and social support, and this is an area for future research. On the other hand, it may be the case that the relations between family breadth and well-being are more likely for families rather than other ingroups because of the powerful, unique status of family in society and its importance to people for reasons ranging from its role in inclusive fitness (e.g., Daly, Salmon, & Wilson, 1997; Lieberman, Tooby, & Cosmides, 2007) to ease of identity fusion (e.g., Swann et al., 2012, 2014). Clearly, future work should explore these potential relations with other ingroups to better understand the extent to which the consequences observed in the current work involving family may extend to groups that are incorporated in the self or are part of one's social identities.

More broadly, the current work sheds light on factors that promote well-being, especially under stress. In addition to lay beliefs about breadth of family inclusion, we found that positive well-being outcomes persisted independent of family size, which is consistent with the finding that perceptions of psychological support serve as important predictors of health and well-being beyond literal measures of social connection (e.g., Cacioppo & Patrick, 2008; Caspi et al., 2006; Cornwell & Waite, 2009). Thus, as in many other areas of research (e.g., Dweck, 1999; Haslam & Whelan, 2008; McConnell, 2001; Yzerbyt, Schadron, Leyens, & Rocher, 1994), lay beliefs may have important implications for our social interactions, and in the current work, we demonstrate that lay beliefs about the nature of family have meaningful consequences for happiness, health, and well-being.

Although this research was the first to examine lay perceptions of family, focusing on breadth of family inclusion and its relation to well-being under stress, there are other important questions that await future research. First, as with any initial research effort, one cannot fully evaluate every possible potential factor that might play a role in the relation between lay beliefs about family and well-being. Although our manipulation of breadth of family inclusion in Study 3 provided supporting evidence that family breadth plays a causal role in the observed effects, it is reasonable that other factors also matter. Indeed, Study 2 considered two possibilities: family stability and family positivity. Although we saw evidence that family stability may play an important role in the stress-diathesis framework, we did not, see a parallel finding involving family positivity. It is interesting to consider the possibility that families need not be repositories of unconditional positive regard to serve as valuable ingroup resources. For example, many people would contend that their families can be very supportive while simultaneously being very challenging, ambivalent groups (e.g., Fingerman, 1998; Fingerman et al., 2004). We are not suggesting that positive families do not provide many benefits for people (e.g., Bartholomew & Horowitz, 1991; Fredrickson, 2001), and indeed the current work found modest direct benefits for people having relatively more positive families, but it may be the case that family positivity is not an essential ingredient for the stress buffering effects of broader families.

In addition to considering the possible role of family stability and positivity, individual differences may play a role in how perceptions of family influence well-being, such as personality traits or more general cognitive styles. For example, it is possible that people with greater breadth of family inclusion are more open to experience or are greater in extraversion, and thus, openness or extraversion might underlie the observed relations with well-being. Consistent with this reasoning, there is considerable evidence that openness to experience and extraversion relate to positive experiences and overall well-being (e.g., Adams, Cartwright, Ostrove, & Stewart, 1998; Halamandaris & Power, 1997; McConnell et al., 2011; Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001). In addition, with respect to the current data, it is also possible that general cognitive flexibility (rather than flexibility related to lay beliefs about family per se) could underlie the breadth of family inclusion effects observed in the current work. Although these are all reasonable possibilities, auxiliary data collected from a separate mass survey of undergraduate students (N = 347) at a Midwestern university indicated that neither openness to experience (r = .01, ns), nor extraversion (r = -.08, ns; Gosling, Rentfrow, ns; Gosling,& Swann, 2003), nor cognitive flexibility (r = .05, ns; Martin & Rubin, 1995) were related to breadth of family inclusion. In fact, the only five factor model of personality dimension to predict family breadth was greater conscientiousness, r = .15, p < .01, and this relation was quite modest in size. Moreover, replicating Study 1, these participants revealed that greater breadth of family inclusion predicted more positive family qualities (r = .19, p < .001) and greater family importance (r = .18, p < .01), indicating that meaningful variability did exist in these auxiliary data. We certainly assume that the processes underlying the value of breadth of family inclusion are multifaceted, and the current work provides some evidence for its importance in mental and physical well-being.

In addition to the previously outlined individual differences, breadth's relation to psychological flexibility may be a worthwhile relationship to explore. Psychological flexibility involves processes such as mindfulness and acceptance and is thought to be positively associated with empathy, perspective taking, better mental health (e.g., Hayes, Strosahl, & Wilson, 2011). Given that both psychological flexibility and family breadth are associated with resilience and well-being, exploring psychological flexibility and any increases in empathy, or perspective taking associated with greater breadth of inclusion for family could provide important and novel insight.

Although beyond the scope of this initial investigation, it would certainly be interesting and important to explore how individual difference characteristics predict breadth of inclusion for family. For example, cultural differences are likely to be important in defining family breadth, especially when observing cultural differences in the extent to which households are composed of people who are not directly related to each other (e.g., Lippman et al., 2014). Because our samples only had a very small number of participants from outside the United States, we were unable to consider the impact of cultural background on perceptions

of breadth and how those views might relate to health and well-being. Future individual difference research could shed important light on how perceptions of family breadth func-

tion differently across cultures, ethnicities, or sexual orientation identities.

One question that will require future exploration is to identify the developmental factors that contribute to developing breadth of family inclusion. In addition to studying factors involving early life experiences that may shape later lay theories about family, we also believe that important developmental work should examine the role of families with older adults as well. For example, elderly individuals have been found to report higher levels of depressive symptoms than younger populations (Mirowsky & Ross, 1992), and it is possible that the challenges and losses associated with aging involving family (e.g., deaths, life transitions) may be important in explaining related well-being differences. Indeed, to the extent that family roles compose a significant proportion of people's self-concepts (e.g., McConnell, 2011), losses in family that come with old age may be especially problematic for the elderly (e.g., deaths, restrictions in mobility or social capacity), who themselves may be facing challenging life circumstances (Study 2). Thus, examining whether greater breadth of family inclusion is especially beneficial for older people (e.g., those facing health challenges, loss of kin) would be valuable.

Finally, it may be important to further explore the utility of *flexible* lay beliefs about family in domains other than well-being. Although individuals with more flexible construals of family may experience many benefits (e.g., positive experiences, enhanced well-being), those with less flexible views of family may exhibit advantages in other ways. For example, having a definition of family as being a relatively small group composed of only immediate blood relatives may allow for more certainty and less ambiguity about family membership and related issues. Although well-being is an important outcome, exploring other functional aspects of human behavior (e.g., perceptions of control, uncertainty, and predictability) would also be important.

The current findings highlight the importance of lay theories about families and how breadth of inclusion has benefits, ranging from positive family experiences to greater well-being in the face of stress. This research contributes to the growing literature on when the benefits of ingroup resources may greatest. In this work, we focused on family as an ingroup because of its centrality to the identity and self-concept of most people. Although the current work focuses on family breadth of inclusion, we recognize that other factors are likely to be important in predicting well-being and how family serves as a social resource for people. In adopting this perspective, we have demonstrated broad consequences for evaluations and well-being from the lay beliefs that people hold about the nature of family. As the quotes at the beginning of our paper can attest, family appears to be an essential part of human life even if its instantiation can vary so significantly among people. The current work appreciates and leverages these individual differences in how people construe this important

ingroup, and it demonstrates that such lay beliefs have powerful implications for people's happiness, health, and resilience.

#### **Notes**

- 1. Specifically, participants evaluated the following entities: biological mother, biological father, grandparents, grandchildren, spouse, own children, brothers, sisters, step-parents, step-siblings, aunts and uncles, in-laws, cousins, neighbors, religious community members, friends, dogs, and cats. Although we initially considered the possibility of nuanced differences among different types of entities (e.g., nuclear family vs. extended family), participant responses for the 18 entities revealed very strong overall reliability ( $\alpha = .88$ ), and thus we examined breadth of family inclusion across all entities.
- 2. Computed post hoc power analyses indicated achieved power exceeded .80.
- 3. All key findings remained significant when controlling for family quantity (i.e., the number of entities people reported as being in their family), reflecting that the effect of breadth was driven by seeing a greater range of entities as potential sources of family and not just merely reflecting people who have experiences with larger families.
- 4. Computed post hoc power analyses indicated achieved power exceeded .80.
- 5. The Zadro et al. (2004) basic needs measure has been shown in pilot testing to predict other measures of well-being such as Diener and Biswas-Diener's Flourishing Scale (2009), r(91) = .86, p < .001, and it has been shown to predict other measures of well-being such as subjective happiness, depressed affect, self-esteem, and stress-related illnesses in the current work (Study 2) and elsewhere (e.g., McConnell et al., 2011).
- 6. Pilot testing (N = 73) was conducted to examine whether the breadth of family inclusion manipulation might produce differences in mood (which in turn, could have unintended information processing consequences). In this study, there were no differences in affect as measured by the PANAS (Watson, Clark, & Tellegen, 1988), F(1,72) < 1, ns.
- 7. As expected, there was no significant difference between experimental conditions on the happiness covariate, F(1,63) = 1.38, ns,  $\eta_n^2 = .02$ .

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## **Disclosure statement**

No potential conflict of interest was reported by the authors.

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