Is Coming Out Always a "Good Thing"? Exploring the Relations of Autonomy Support, Outness, and Wellness for Lesbian, Gay, and Bisexual Individuals

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Abstract
Prior research suggests that, on average, disclosing sexual identity (being "out") yields wellness benefits for lesbian, gay, and bisexual (LGB) individuals. LGB individuals vary, however, both in how much they disclose their sexual orientation in different social contexts and in the experiences that follow from disclosure. The present research examines this within-person variation in disclosure and its consequences as a function of the autonomy supportive versus controlling character of social contexts. LGB individuals rated experiences of autonomy support and control in the contexts of family, friends, coworkers, school, and religious community, as well how "out" they were, and their context-specific self-esteem, depression, and anger. Findings from multilevel modeling revealed that LGB individuals were more likely to disclose in autonomy supportive contexts. Additionally, whereas disclosure was associated with more positive well-being in autonomy supportive contexts, in controlling contexts it was not. Practical and research implications are discussed.

Disclosing a lesbian, gay, and bisexual (LGB) identity to others, or "coming out," has been shown in past research to be associated with mental health benefits (e.g., Ragins, 2004). Yet, in a world that can be unaccepting of nonheterosexual orientations, coming out also involves risk. LGB individuals may anticipate stigmatization, negative judgments, or rejection feelings that deter them from self-disclosing their sexual identity. Recent legislation like Don't Ask Don't Tell provides a clear example of this risk: those who came out as LGB in the military were discharged from service. Indeed, some research suggests that coming out can result in other negative consequences such as costs to well-being (D'Augelli, 2006). It is thus the case that many LGB individuals are selective, varying from context to context in how much they disclose their sexual identity to others. In the present article, we explore this within-person variability in disclosure using a self-determination theory framework (SDT; Deci & Ryan, 1985, 2000; Ryan & Deci, 2000).

SDT (Ryan & Deci, 2000) is a theory of personality and motivation that concerns how social contexts impact motivation and well-being. According to SDT, social contexts vary in their levels of *autonomy support*, defined as interpersonal acceptance and support for authentic self-expression (Lynch, La Guardia, & Ryan, 2009; Ryan, La Guardia, Solky-Butzel, Chirkov, & Kim, 2005). In environments high in autonomy support, people feel accepted for who they are, are free to act and express themselves, and are more open to rely on others. In contrast, in *controlling* environments, people feel pressured to appear, behave, or perform a certain way (Deci & Ryan, 1985), and they exhibit less openness and more defensiveness (Hodgins et al., 2010). It is thus likely that autonomy supportive environments reduce perceived risks for coming out, whereas in environments perceived as controlling individuals may be less likely to express a potentially stigmatized part of themselves that could incur censure. In addition, we argue that the autonomy supportiveness of an environment influences the well-being experienced in that environment as a result of disclosure. Specifically, we expect that LGB individuals who disclose in environments low in autonomy support will not experience the typical boost to wellness from coming out reported in the literature.

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Coming Out and its Effects

Coming out is generally understood as an important part of identity development of LGB individuals, allowing them to develop an authentic and stable sense of self (Ragins, 2004), cultivate a positive sexual minority identity (Wells & Kline, 1987), and mitigate the negative psychological effects of identity management (e.g., Cain, 1991). Disclosure more generally yields an array of mental and physical health benefits (see Pennebaker & Chung, in press, for a review). Yet, many individuals decide to conceal their LGB identity for various societal and personal reasons. Indeed, there appears to be a paradoxical relation between concealment and wellness: Concealing is a strategy that individuals often use to avoid stigmatization or negative regard, yet concealment may relate to higher stress over time (Miller & Major, 2000).

Concealment is an especially common coping strategy among LGB adolescents (Hetrick & Martin, 1987; Safren & Pantalone, 2006), but studies suggest that concealment is also common in adulthood. Concealment of an LGB identity can come with costs such as lower relationship satisfaction in same-sex couples (Mohr & Fassinger, 2006), faster HIV infection progression (physical costs; Cole, Kemeny, Taylor, & Visscher, 1996), fewer job promotions and more negative job attitudes (functioning costs; Ragins, Singh, & Cornwell, 2007), as well as distress and suicidality (mental health costs; Morris, Waldo, & Rothblum, 2001). Experimental work has also found that heterosexual and homosexual individuals asked to conceal their sexual orientation perform significantly worse on cognitive and physical tasks when compared to those who were not asked to conceal (Critcher & Ferguson, 2011).

Though research generally reports a positive relation between disclosure and indicators of mental health (or conversely, a negative one between concealment and health), some studies have identified negative outcomes in some contexts. For example, D'Augelli, Hershberger, and Pilkington (1998) found more suicidality and verbal and physical abuse in LGB youth who had come out to their family than in those who had not. Cole (2006), studying coping and immunological responses of gay men, found that under certain circumstances concealment could mitigate some of the negative effects of stress, especially in inhibited individuals who are more sensitive to environmental threat. Moreover, despite the generally positive direction of the correlations between coming out and wellness, the associations are generally weak (e.g., $r = .19$, Balsam & Mohr, 2007), suggesting that disclosure benefits might be subject to moderation by both personality and social–contextual variables.

It therefore seems likely that there is a dynamic relation between coming out and wellness that is reflected not just at a between-person level, but also within individuals as they move from social context to social context. In this study, our focus was in both selectivity effects, in which one selectively discloses as a function of perceived autonomy support, and how well-being varies as a function of disclosing in autonomy supportive or controlling contexts. Because of this focus on variability rather than simple main effects, we applied a multilevel methodology that could illuminate within-person variations in both disclosure and wellness.

Selective Disclosure Across Social Contexts

Mischel and Shoda (1995) have argued that although behavior may show some stability over time, it tends to vary according to the situation. Like behavior more generally, disclosing a sexual minority identity varies within individuals (Cole, 2006; Sandfort, Bos, & Vet, 2006). Studying LGB youth, D'Augelli (2006) reported that only 23% were completely out to everyone in their life, indicating selective disclosure. A study of LGB individuals over age 60 similarly found that only 38% came out to 75% or more of people who knew them (D'Augelli & Grossman, 2001). Thus, individuals across the life span vary in how much they come out to different people.

In addition, coming out is not all or none. LGB individuals often must decide just how "out" to be with different people. Although it is often seen as a dichotomous variable (e.g., Morris et al., 2001), researchers are increasingly studying disclosure of sexual orientation in terms of *outness level* (Balsam & Mohr, 2007), a continuous variable with implicit and nondirect disclosure characterizing the middle of the continuum (e.g., Mohr & Fassinger, 2000; Savin-Williams, 1989).

To our knowledge, there is sparse research looking at the impact of social contexts on coming out (e.g., Griffith & Hebl, 2002), and none at a within person level. We are interested in the variables that impact one's level of disclosure, and also whether being selective (i.e., evidencing more variability at a within-person level) has costs to the LGB individual. In the current study, we focus on the main domains in which LGB individuals might disclose their sexual orientation: friends, family, work, school, and religious community, assess the impact of within-person variability in disclosure overall, and the effects of context on the relations between disclosure and well-being.

An SDT Framework for the Coming Out Process

To understand how social contexts can support or inhibit disclosure, we employ a SDT approach. A specific focus of SDT is the extent to which social environments are experienced as controlling or autonomy supportive. The concept of autonomy within SDT refers to the degree that an individual experiences volition, choice, and personal endorsement in his or her behavior (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006). Acting in autonomous ways is associated with a number of positive outcomes, such as better mental health (Miquelon & Vallerand, 2008; Ryan, Bernstein, & Brown, 2010), greater cognitive flexibility (Grolnick & Ryan, 1987), more creativity (Amabile, 1983), and greater satisfaction at work (Baard, Deci, & Ryan, 2004) and in relationships (La Guardia & Ryan, 2007).

Furthermore, autonomy is a content nonspecific concept (Chirkov, Ryan, Kim, & Kaplan, 2003; Ryan, 1995). When people feel support for autonomy they are feeling support for being who they are—for being able to authentically express all aspects of themselves and to pursue their values and interests. Conversely, in low autonomy or controlling social contexts people feel pressure toward a specified outcome—they are pressured to be how others want them to be. Pressure can take the form of either direct external control or control through expectations and contingent regard (Roth, Assor, Niemiec, Ryan, & Deci, 2009).

Previous research suggests that depending on the autonomy support provided in a given setting, people are more willing to express and present different aspects of their personality as a function of autonomy support (Lynch et al., 2009; Uysal, Lin, & Knee, 2010). Since autonomy support is characterized by accepting others as they are, we expect that autonomy support will influence LGB identity disclosure and the extent to which disclosure relates to experiencing well-being in different relationship contexts.

Present Research

We examined the relations between autonomy support, "outness," and well-being across varied relationships in people's lives—namely, friends, family, school peers, coworkers, and religious community. To support our fundamental argument about selective disclosure, we expected a nonsignificant relation between variability in disclosure across social contexts on overall levels of anger, self-esteem, and depression (as these are important outcomes impacted by the coming out experience). We hypothesized that LGB individuals would disclose to a greater extent in environments perceived as more autonomy supportive. In line with prior research, we also hypothesized that individuals who disclose more would, on average, have less anger and depression and greater self-esteem. However, we predicted that autonomy support would moderate these relations, such that disclosure within contexts high in autonomy support would relate to greater well-being, whereas disclosing in contexts low in autonomy support would not. We hypothesized this null relation between disclosure and well-being in low autonomy support contexts because in line with most research, we believed that coming out is a "good thing" (it relates to greater well-being), but because controlling contexts consistently predict negative outcomes (e.g., Roth et al., 2009), we expected the effects to cancel each other out when disclosing in controlling contexts.

Method

Participants and Procedure

Participants were recruited online via LGB discussion boards, community and social networking websites, and e-mails sent to University LGB center listservs. Of the 161 participants taking the online survey (age: $M = 29.9$, range = 18–65; gender: 61.5% female), 32.2% identified as gay, 34.8% as lesbian, and 31.7% as

bisexual. Seventy-six percent were Caucasian, 3.1% Black, 6.2% Asian, and 10.6% Hispanic. The survey was anonymous to encourage participation by LGB-identified persons who may not have come out. The survey asked participants to complete measures of the same predictor and outcome variables across five possible social contexts in their lives: friends, family, coworkers, school, and religious community. Number of participants differed across variables due to context relevance and missing data (see Table 1 for specific *n*s). Specifically, 42% of participants completed measures for all five contexts, 64% completed measures across at least four contexts, and 95% completed measures for at least three contexts. School and religious community represented the contexts in which the fewest number of participants were engaged. Of participants who started the survey, 91% completed the entire protocol. Completers did not differ from those who did not complete the survey on age, gender, sexual orientation, or outness.

Measures

Outness Inventory (OI). This scale (Mohr & Fassinger, 2000) assesses the extent to which individuals are out to various individuals (e.g., mother, work supervisors). Five items (reflecting the five contexts) were adapted for our current targets (friends, family, coworkers, school peers, and religious community). Participants were asked to rate the extent to which they have disclosed their sexual orientation to a target using a 7-point scale ranging from 1 (*[target] definitely does not know about your sexual orientation status*) to 7 (*[target] definitely knows about your sexual orientation status, and it is openly talked about*). One indicator of this scale's validity is its high correlations with identification with the LGB community (Balsam & Mohr, 2007).

Autonomy Support Questionnaire (ASQ). The ASQ (Deci et al., 2006) assesses the degree to which an individual perceives autonomy support versus pressure and control from others. This scale was modified for the present study to assess autonomy support in the five contexts of interest by specifying the target. Participants responded to the items on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale including "I feel my [target] provides me with choices and options" and "My [target] listens to my thoughts and ideas." The 10 items were averaged to create a score of the perceived autonomy supportiveness of a target. Deci et al. (2006) show that this scale has good internal consistency ($\alpha = .93$). In the present study, the internal consistencies for all five targets were high (αs ranging from .96 to .98).

Psychological well-being. Nine items assessing depression, self-esteem, and anger reflected well-being within each context (e.g., "When I am with my family . . . "), resulting in up to five context-specific well-being scores. Ratings targeted feelings over the last month using a 7-point Likert-type scale ranging from *not at all true* to *very true*. Depressive feelings were assessed by averaging ratings of three items (*sad*, *depressed*, and *lonely*). A similar procedure was used to create

Table 1. Means and Standard Deviations of Major Study Variables in Each Domain Across Participants and Split by Sexual Orientation

	Overall Sample		Sexual Orientation Type		
	Mean	SD	Gay Men	Lesbians	Bisexuals
Autonomy support					
Friends$_{(n = 159)}$	5.92[a]	1.07	5.76	6.16	5.83
Family$_{(n = 161)}$	4.69[b]	1.77	4.61	4.91	4.53
Coworkers$_{(n = 135)}$	4.62[b]	1.49	4.40	5.17	4.19
Peers$_{(n = 102)}$	4.31[b]	1.68	3.94	4.89	4.21
Religious community$_{(n = 85)}$	3.13[c]	1.93	2.57	3.84	3.08
Outness					
Friends$_{(n = 151)}$	6.09[a]	1.63	6.06	6.64	5.71
Family$_{(n = 156)}$	4.81[b]	2.21	5.02	5.59	3.71
Coworkers$_{(n = 132)}$	4.45[b]	2.38	4.49	5.54	2.91
Peers$_{(n = 98)}$	4.22[b]	2.28	4.30	5.41	3.20
Religious community$_{(n = 71)}$	3.08[c]	2.36	3.00	4.41	1.96
Anger					
Friends$_{(n = 132)}$	1.79[b]	1.07	1.99	1.64	1.75
Family$_{(n = 147)}$	2.87[a]	1.67	3.10	2.55	2.99
Coworkers$_{(n = 106)}$	2.44[a]	1.48	2.56	2.39	2.33
Peers$_{(n = 72)}$	2.41[a]	1.48	2.83	2.34	2.10
Religious community$_{(n = 57)}$	2.64[a]	1.84	3.20	2.93	1.72
Depression					
Friends$_{(n = 132)}$	2.15[c]	1.27	2.16	2.10	2.20
Family$_{(n = 146)}$	2.99[a]	1.73	3.23	2.68	3.09
Coworkers$_{(n = 106)}$	2.48[bc]	1.52	2.70	2.40	2.28
Peers$_{(n = 73)}$	2.87[ab]	1.80	3.33	2.60	2.66
Religious community$_{(n = 57)}$	2.67[abc]	1.67	3.20	2.77	1.98
Self-esteem					
Friends$_{(n = 132)}$	5.53[a]	1.31	5.43	5.67	5.46
Family$_{(n = 146)}$	5.02[bc]	1.59	4.99	5.24	4.78
Coworkers$_{(n = 106)}$	5.30[ab]	1.51	5.02	5.53	5.35
Peers$_{(n = 73)}$	4.68[c]	1.68	4.25	4.92	4.86
Religious community$_{(n = 57)}$	4.88[bc]	1.58	4.62	5.25	4.80

All scales range from 1 to 7. *n*s differ across variables due to missing data and context relevance.
SD = standard deviation.
All alphabetic superscripts after means refer to significant differences (*p* < .05) as identified by Tukey's post hoc pairwise analyses of overall sample means. Means with a common letter in their superscript were not significantly different from one another.

self-esteem (*lacking in self confidence*, and *dissatisfied with myself*, both reverse coded, and *positive about myself*) and anger (*mad or irritated*, *angry*, *hostility*) subscales. Across targets, all subscales demonstrated a range of adequate to good internal consistency: depressive feelings (αs = .86–.93), self-esteem (αs = .63–.85), and anger (αs = .85–.94).

Results

Preliminary Findings

Preliminary analyses using analysis of variance (ANOVA) examined for gender and sexual orientation differences on ratings of outness and well-being outcomes (see Table 1). Men reported more anger, $F(1, 521) = 3.71$, $p = .05$, though gender did not relate to outness, $F(1, 602) = .10$, $p > .15$, self-esteem, $F(1, 521) = 2.24$, $p = .14$, or depressive feelings, $F(1, 521) = 2.57$, $p = .11$. Sexual orientation differences were present for all variables of interest, $Fs(2, 499–725) = 3.57–45.00$, $ps < .05$. Results suggested that gay men had lower well-being across measures, lesbians experienced the most autonomy

support, and lesbians were most out (bisexual participants were least out). No gender or sexual orientation by context moderations were present ($ps > .15$).

Next, for descriptive purposes, we compared contexts in terms of differences in outness, autonomy support, and well-being. ANOVA showed that contexts differed in how out LGB persons were, $F(4, 603) = 27.42$, $p < .001$. Tukey's post hoc analyses (see Table 1) showed that individuals disclosed most to friends ($ps < .001$) and least to their religious communities ($ps < .01$) compared to all other contexts. Contexts differed in their proportion of individuals reporting low outness (endorsing 4 or less on the OI): friends (13%), family (36%), coworkers (45%), school (50%), and religious community (69%). Additional ANOVAs showed that context related to anger, $F(4, 552) = 9.82$, $p < .01$, self-esteem, $F(4, 552) = 5.02$, $p < .01$, and depression, $F(4, 552) = 6.19$, $p < .001$. Post hoc comparisons showed that participants were significantly less angry when with friends than in all other contexts, experienced greater self-esteem with friends than family or school peers, and with coworkers relative to school peers. Participants were

also less depressed when with friends compared to family and school peers, and with coworkers as compared to family (for all well-being post hoc comparisons), ps = .001–.04. Anger, depression, and self-esteem were moderately to highly correlated within contexts (rs ranging from .51 to .87).

For descriptive purposes, we were also interested in whether there was any relation between variability in outness and well-being outcomes (i.e., whether individuals experience greater well-being when they are more consistent in how out they are to others). Previous research on variability suggests the importance of controlling for mean levels of the variable in question (Lynch et al., 2009). Variability in outness (controlling for mean levels) was not significantly related to well-being, $t(110) = .86, p > .15$.

Multilevel Models

To test our main hypotheses, we used hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992) to accommodate the nested structure of our data: modeling the interdependence of context-level reports collected from the same participant (Level 1) as well as variation between participants (Level 2; Raudenbush & Bryk, 2002). HLM is also better equipped to handle missing data than ordinary least squares (OLS) regression analyses (Little & Rubin, 1987; Snijders, 1996), allowing us to include individuals who provide data on all contexts, as well as individuals who provide data on fewer contexts in analyses.[1]

We first conducted unconditional models to assess intraclass correlation (ICC; ICC analyses confirm that sufficient variance is present within-persons to continue with HLM analyses), followed by a second model to test the effects of Level 1 variables: autonomy support and outness within each of the five contexts of interest on well-being outcomes; and Level 2 variables: age and sexual orientation. Level 1 variables were centered on individual rather than sample means as recommended by Bryk and Raudenbush (1992). The resulting full model used the following equation at Level 1:

$$OV = \pi_0 + \pi_1(\text{outness}) + \pi_2(\text{autonomy support}) \\ + \pi_3(\text{outness} \times \text{autonomy support}) + e.$$

Thus, the model will allow outness and autonomy support within each context (as well as their interaction) to predict well-being as the dependent variable within those same contexts.

At Level 2, one equation was modeled for each context-level slope:

$$\pi_0 = \beta_{00} + \beta_{01}(\text{age}) + \beta_{02}(\text{lesbian}) + \beta_{03}(\text{bisexual}) + r_0,$$

$$\pi_1 = \beta_{10} + r_1,$$

$$\pi_2 = \beta_{20} + r_2,$$

$$\pi_3 = \beta_{30},$$

where β_{00} reflects the context-level intercept for an average person; β_{01} refers to the effect of age on well-being, β_{02} and
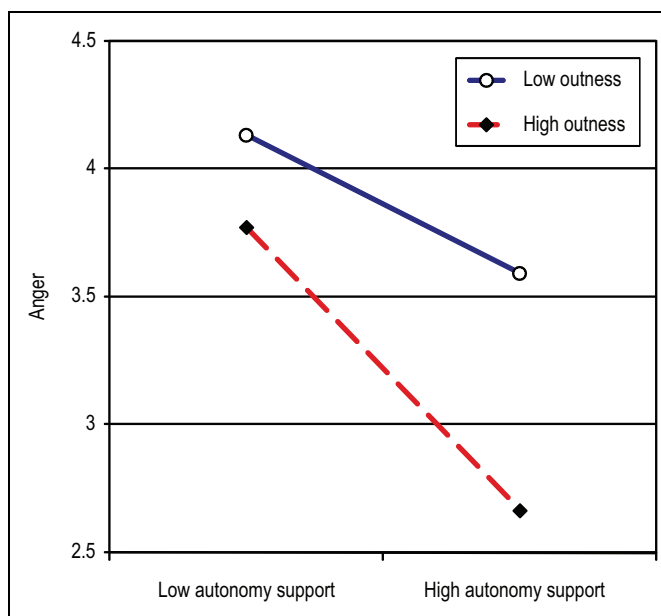

Figure 1. Predicted values of context-specific anger for the interaction of autonomy support and outness, calculated at values 1 *SD* above and below the mean. Patterns are similar for depression and self-esteem.

β_{03} refer to the dummy codes used to test the effect of sexual orientation on well-being, and r_0 is error at Level 2. Autonomy support and outness (but not their interaction) were modeled as randomly varying at Level 2, allowing their relations to well-being variables to vary between persons. We tested interactions for autonomy support and outness by age and sexual orientation and found no significant relations; we thus excluded them from all future analyses as Level 2 moderators.[2]

Preliminary models. Results of unconditional models demonstrated sufficient variation within persons (43–68%) to continue with HLM analyses. A preliminary model predicted level of outness from autonomy support, age, and sexual orientation within each context. Bisexuals disclosed least and lesbians disclosed most, ts(152) = −3.07 to 2.77, ps < .01; but age did not predict outness, $p > .15$. Consistent with our hypothesis, contexts supporting autonomy were associated with more outness; $B = .69, t(155) = 11.74, p < .001, r = .67$.

Anger. A main effect of outness was present, $B = −.14, t(144) = −2.85, p < .01, r = .23$, indicating that across contexts, more outness related to less anger. Moreover, autonomy support interacted with outness to predict anger, $B = −.03, t(465) = −5.29, p < .001, r = .24$ (see Figure 1). Simple effects split by level of autonomy support showed that when disclosing in contexts low in autonomy, individuals did not report less anger; $B = .04, t(207) = 0.51, p > .15$, whereas in contexts supporting autonomy those who disclosed more experienced less anger; $B = −.12, t(257) = −2.70, p < .01, r = 17$. Also at Level 2, younger participants reported more anger, $B = −.02, t(141) = −2.14, p = .03$, and gay men reported more anger than bisexuals, $B = −.62, t(141) = −2.85, p < .01$.

Symptoms of depression. Individuals who disclosed more reported lower depression, $B = -.16$, $t(143) = -3.23$, $p > .01$, $r = .26$, an effect qualified by an Outness × Autonomy interaction, $B = -.04$, $t(465) = -6.10$, $p < .001$, $r = .27$. For those in controlling contexts, outness did not relate to depression; $B = -.01$, $t(207) = -0.22$, $p > .15$, whereas in contexts supporting autonomy, disclosure was associated with lower depression; $B = -.11$, $t(257) = -2.50$, $p = .01$, $r = .15$. At Level 2, neither age nor sexual orientation related to depression.

Self-esteem. Outness was related to higher self-esteem, $B = .16$, $t(143) = 3.78$, $p < .001$, $r = .30$, and autonomy support moderated this effect, $B = .04$, $t(465) = 6.43$, $p < .001$, $r = .29$. Simple effects suggested that when in contexts low in autonomy, LGB individuals who disclosed more did not report higher self-esteem, $B = -.02$, $t(207) = -0.29$, $p > .15$; whereas in contexts high in autonomy support, more outness was associated with higher self-esteem, $B = .09$, $t(257) = 2.05$, $p = .04$, $r = .13$. Age marginally related to self-esteem ($p = .06$), but sexual orientation did not ($p > .15$). Patterns for both self-esteem and symptoms of depression (presented above) were similar to those found for anger (depicted in Figure 1).

Discussion

This research focused on LGB identity disclosure in differing social contexts. We had several aims: We sought to examine, as past studies have done, the overall relations of disclosure to wellness, as well as the effects of within-person variability in disclosure, which had not been previously examined. More centrally we tested the hypothesis that LGB individuals would disclose more in life contexts they perceive to be more autonomy supportive. We also wanted to examine in a more refined way the relation between disclosure and wellness, a relation that is typically positive but modest. We hypothesized that this relation would be moderated by autonomy support, such that the more controlling the life context, the less disclosure would be positively related to well-being.

Within-person analyses showed that individuals indeed varied considerably from context to context in disclosure. This variability, however, was in itself unrelated to wellness outcomes, suggesting that selectivity in disclosure may be neither detrimental nor necessarily helpful in aggregate. Most importantly from the perspective of our thesis, variability in disclosure was systematic: Individuals were more likely to disclose in autonomy supportive contexts, regardless of gender, age, or sexual orientation. This is important in understanding the dynamics of coming out. Perceiving a social context as controlling in nature may be a barrier to disclosure for LGB individuals and a risk factor for concealment.

Also consistent with our SDT-derived hypotheses, autonomy support significantly moderated the relation between disclosure and reports of anger, depression, and self-esteem. In contexts high in autonomy support, disclosure was related to less anger, less depression, and higher self-esteem, whereas contexts low in autonomy support did not show these relations.

These findings thus supported the potential value of coming out, but somewhat conditionally, as individuals who disclosed more tended to experience greater wellness only in a need-supportive atmosphere. That is, the data showed that disclosing in controlling social contexts was not associated with these positive emotional outcomes that often are anticipated as benefits of coming out.

There are a number of limitations to the current research findings. We recruited from organizations serving the LGB community. As a result, it is likely that the sample is more comfortable with their sexuality than the LGB community as a whole, and we likely undersampled those who are more concealed in their sexual identities. Had we sampled more people who tend to conceal, it is possible that we would have found a larger effect between less disclosure and greater wellness in contexts low in autonomy support: In low autonomy supportive contexts, those who conceal may actually feel safer and therefore experience greater wellness than those who come out. Alternatively, as these data would suggest, the benefits of disclosure may cancel out the costs of disclosing in a controlling context. To test these accounts, future research should focus on recruiting LGB individuals who tend to conceal. Another important limitation of this research is its cross-sectional, multilevel design. More autonomy support is associated with more disclosure, and more disclosure with greater wellness, but it does not speak to the question of causality within the model. It is, for example, plausible to propose an alternative model in line with self-perception theory (Bem, 1972), that people who disclose more in a certain context may perceive this environment as more autonomy supportive or report greater wellness, simply because it might be consistent with their expectations about coming out. To address the issue of causality, future research employing longitudinal designs might follow LGB individuals as they enter new contexts and make decisions regarding disclosure.

Despite these limitations, this research does begin to address some important gaps in the literature. Because disclosure varies across relationships and domains, we provided a domain-specific assessment of disclosure, autonomy support, and well-being. This within-person method, along with the inclusion of moderators in the analyses, yielded larger effect sizes between coming out and well-being than typically demonstrated in other studies, and provided a more detailed picture of the relationship between autonomy support and coming out, and between coming out and well-being than that provided by between-person methods. This research also suggests that coming out is a selective process that at times may represent an attempt to cope with stigma through differential concealment or disclosure (see also Balsam & Mohr, 2007).

This research has implications for practitioners providing treatment to LGB individuals because it suggests that people experience greater wellness when they come out in certain contexts, but certainly not all contexts. This research also has implications for workplaces. Providing autonomy support is beneficial for all employees (Baard et al., 2004), but may be especially important for LGB employees' wellness and

productivity. Future research should look at disclosing in workplaces that foster self-expression versus controlling work environments and compare wellness and productivity of employees of different sexual orientations. More generally the findings may speak to factors that can facilitate greater openness and wellness in individuals who face stigma, as well as to the costs of controlling social contexts and the self-concealment they often foster.

Declaration of Conflicting Interests

Funding

Notes

1. HLM flexibly allows for missing data at Level 1, including respondents into all effects for which they provided data.
2. To determine whether the moderation being examined varied across the specific contexts, we ran secondary analyses with interaction terms testing for differences in our model's effects. Overall, these analyses yielded largely nonsignificant results. Focusing on the Outness × Autonomy support effects, only 1 of the 12 interactions tested was significant (suggesting that the moderation was stronger with family when predicting anger; $B = -.07$, $t(453) = -3.16$, $p < .01$). Additionally, to ensure effects were not carried by specific contexts (i.e., family, as it revealed a stronger interaction effect), analyses were conducted with four different combinations of contexts: the three contexts with the most data (family, friends, coworkers); the four contexts with the most data (family, friends, coworkers, and school); the two sparsest contexts (school and religious community) and the four sparsest contexts (friends, coworkers, school, and religious community). The same pattern of results emerged when tested in any of these combinations of contexts: for the Outness × Autonomy support interaction, $Bs = -.05$ to .05, $ts(105–421) = -5.52$ to 5.87, $ps = .001–.02$. All analyses conducted with and without including the family context yielded a similar pattern of results. Thus, secondary analyses suggested that the reported effects are largely independent of context.

References

Amabile, T. M. (1983). *The social psychology of creativity*. New York, NY: Springer-Verlag.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*, 2045-2068. doi:10.1111/j.1559-1816.2004.tb02690.x.

Balsam, K. F., & Mohr, J. J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, *54*, 306-319. doi: 10.1037/0022-0167.54.3.306.

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 1-62). New York, NY: Academic Press.

Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models*. Newbury Park, CA: Sage.

Cain, R. (1991). Stigma management and gay identity development. *Social Work*, *36*, 67-73.

Chirkov, V. I., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, *84*, 97-110. doi: 10.1037/0022-3514.84.1.97.

Cole, S. W. (2006). Social threat, personal identity, and physical health in closeted gay men. In A. Omoto & H. S. Kurtzman (Eds.), *Sexual orientation and mental health: Examining identity and development in lesbian, gay, and bisexual people* (pp. 245-267). Washington, DC: American Psychological Association.

Cole, S. W., Kemeny, M. E., Taylor, S. E., & Visscher, B. R. (1996). Elevated physical health risk among gay men who conceal their homosexual identity. *Health Psychology*, *15*, 243-251. doi: 10.1037/0278-6133.15.4.243.

Critcher, C. R., & Ferguson, M. J. (2011, January). *Concealment and ego depletion: Does "Don't Ask, Don't Tell" hinder performance?* Paper presented at the meeting of the society for personality and social psychology, San Antonio, TX.

D'Augelli, A. R. (2006). Developmental and contextual factors and mental health among lesbian, gay, and bisexual youths. In A. E. Omoto & H. M. Kurtzman (Eds.), *Sexual orientation and mental health: Examining identity and development in lesbian, gay, and bisexual people* (pp. 37-53). Washington, DC: APA Books.

D'Augelli, A. R., & Grossman, A. H. (2001). Disclosure of sexual orientation, victimization, and mental health among lesbian, gay, and bisexual older adults. *Journal of Interpersonal Violence*, *16*, 1008-1027. doi: 10.1177/088626001016010003.

D'Augelli, A. R., Hershberger, S. L., & Pilkington, N. W. (1998). Lesbian, gay, and bisexual youth and their families: Disclosure of sexual orientation and its consequences. *American Journal of Orthopsychiatry*, *68*, 361-371. doi: 10.1037/h0080345.

Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin*, *32*, 313-327. doi: 10.1177/0146167205282148.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227-268. doi: 10.1207/S15327965PLI1104_01.

Griffith, K. H., & Hebl, M. R. (2002). The disclosure dilemma for gay men and lesbians: "Coming out" at work. *Journal of Applied Psychology*, *87*, 1191-1199. doi: 10.1037/0021-9010.87.6.1191.

Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, *52*, 890-898. doi: 10.1037/0022-3514.52.5.890.

Hetrick, E. S., & Martin, A. D. (1987). Developmental issues and their resolution for gay and lesbian adolescents. *Journal of Homosexuality*, *14*, 25-43. doi: 10.1300/J082v14n01_03.

Hodgins, H. S., Weisbust, K. S., Weinstein, N., Shiffman, S., Miller, A., Coombs, G., & Adair, K. C. (2010). The cost of self-protection: Threat response and performance as a function of autonomous and controlled motivations. *Personality and Social Psychology Bulletin, 36,* 1101-1114. doi: 10.1177/0146167210375618.

La Guardia, J. G., & Ryan, R. M. (2007). Why identities fluctuate: Variability in traits as a function of situational variations in autonomy support. *Journal of Personality*, *75*, 1205-1228. doi: 10.1111/j.1467-6494.2007.00473.x.

Little, R. J. A., & Rubin, D. B. (1987). *Statistical analysis with missing data*. New York, NY: John Wiley.

Lynch, M. F., La Guardia, J. G., & Ryan, R. M. (2009). On being yourself in different cultures: Ideal and actual self-concept, autonomy support, and well-being in China, Russia, and the United States. *The Journal of Positive Psychology*, *4*, 290-304. doi: 10.1080/17439760902933765.

Miller, C., & Major, B. (2000). Coping with stigma and prejudice. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 153-183). New York, NY: Guilford.

Miquelon, P., & Vallerand, R. J. (2008). Goal motives, well-being, and physical health: An integrative model. *Canadian Psychology*, *49*, 241-249.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246-268. doi: 10.1037/0033-295X.102.2.246.

Mohr, J. J., & Fassinger, R. E. (2000). Measuring dimensions of lesbian and gay male experience. *Measurement and Evaluation in Counseling and Development*, *33*, 66-90.

Mohr, J. J., & Fassinger, R. E. (2006). Sexual orientation identity and romantic relationship quality in same-sex couples. *Personality and Social Psychology Bulletin*, *32*, 1085-1099. doi: 10.1177/0146167206288281.

Morris, J. F., Waldo, C. R., & Rothblum, E. D. (2001). A model of predictors and outcomes of outness among lesbian and bisexual women. *American Journal of Orthopsychiatry*, *71*, 61-71. doi: 10.1037/0002-9432.71.1.61.

Pennebaker, J. W., & Chung, C. K. (2011). Expressive writing, emotional upheavals, and health. In H. Friedman (Ed.), *Oxford handbook of health psychology.* New York, NY: Oxford University Press.

Ragins, B. R. (2004). Sexual orientation in the work place. *Research in Personnel and Human Relations*, *23*, 35-120. doi: 10.1016/S0742-7301(04)23002-X.

Ragins, B. R., Singh, R., & Cornwell, J. M. (2007). Making the invisible visible: Fear and disclosure of sexual orientation at work. *Journal of Applied Psychology*, *92*, 1103-1118. doi: 10.1037/0021-9010.92.4.1103.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.

Roth, G., Assor, A., Niemiec, C. P., Ryan, R. M., & Deci, E. L. (2009). The emotional and academic consequences of parental conditional regard: Comparing conditional positive regard, conditional negative regard, and autonomy support as parenting practices. *Developmental Psychology*, *45*, 1119-1142. doi: 10.1037/a0015272.

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, *63*, 397-427. doi: 10.1111/j.1467-6494.1995.tb00501.x.

Ryan, R. M., Bernstein, J. H., & Brown, K. W. (2010). Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms. *Journal of Social and Clinical Psychology*, *29*, 95-122. doi: 10.1521/jscp.2010.29.1.95.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*, 68-78. doi: 10.1037/0003-066X.55.1.68.

Ryan, R. M., La Guardia, J. G., Solky-Butzel, J., Chirkov, V. I., & Kim, Y. (2005). On the interpersonal regulation of emotions: Emotional reliance across gender, relationships, and culture. *Personal Relationships*, *12*, 146-163. doi: 10.1111/j.1350-4126.2005.00106.x.

Safren, S. A., & Pantalone, D. (2006). Social anxiety and barriers to resilience in lesbian, gay, and bisexual adolescents. In A. M. Omoto & H. Kurtzman (Eds.), *Sexual orientation and mental health: Examining identity and development in lesbian, gay, and bisexual people* (pp. 55-71). Washington, DC: American Psychological Association.

Sandfort, T., Bos, H., & Vet, X. (2006). Lesbians and gay men at work: Consequences of being out. In A. Omoto & H. Kurtzman (Eds.), *Sexual orientation and mental health: Examining identity and development in lesbian, gay, and bisexual people* (pp. 225-244). Washington, DC: American Psychological Association.

Savin-Williams, R. C. (1989). Coming out to parents and self-esteem among gay and lesbian youths. *Journal of Homosexuality*, *18*, 1-35. doi: 10.1300/J082v18n01_01.

Snijders, T. A. B. (1996). Stochastic actor-oriented models for network change. *Journal of Mathematical Sociology*, *21*, 149-172.

Uysal, A., Lin, H. L., & Knee, C. R. (2010). The role of need satisfaction in self-concealment and well-being. *Personality and Social Psychology Bulletin*, *6*, 187-199. doi: 10.1177/0146167209354518.

Wells, J. W., & Kline, W. B. (1987). Self-disclosure of homosexual orientation. *Journal of Social Psychology*, *127*, 191-197. doi: 10.1080/00224545.1987.9713679.

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