

Aspects of Autonomy Support and Satisfaction for Disadvantaged Groups

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Chapter 5 was adapted from a published manuscript with co-authors Dr. Netta Weinstein and Dr. Nicole Legate. First author Maya Al-Khouja confirms she is the writer of the manuscript, with co-authors credited with assisting in the research design and proof-reading of the manuscript.

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Abstract

Autonomy involves a sense that one's behaviour is authentic, volitional and aligned with inner beliefs. Though extant literature describes the importance of both autonomy satisfaction and autonomy support from others with whom one interacts, little work has been conducted to understand what specific qualities comprise autonomy satisfaction and its support. In other words, we know little of how and why autonomy matters for individuals' well-being. In two empirical chapters, I describe an understudied aspect of autonomy satisfaction: whether self-expression is congruent (autonomy satisfying) or incongruent (autonomy-thwarting) with the self. Therefore, in a first empirical chapter (Chapter 3), I investigated two types of self-expression: authentic self-expression (that supports autonomy) and inauthentic self-expression (that may undermine autonomy). I developed a new scale to assess these constructs and show they are distinct from, but closely linked with, the internal experience of feeling authentic and that they foster feelings of agency. In Chapter 4, I further examined what happens when people think of in-group others' undermined self-expression. Specifically, I tested whether vicariously undermining autonomous self-expression can elicit a reactive response to reassert one's own autonomy through self-expression. In two final empirical chapters, I studied autonomy support from close others within samples of individuals who identify as lesbian, gay, or bisexual (LGB; with transgender and related communities, LGBT+). Disadvantaged individuals, such as those who are LGBT+, are known to have worse well-being than the general population and may benefit more from autonomy support. Therefore, understanding autonomy support for this minority group is an important step in rectifying health disparities. Chapter 5 uses a large pre-existing dataset to analyse the importance of specific components of autonomy support within close relationships in an LGB sample, whilst Chapter 6 further explored the components of autonomy support and their relation to well-being in LGBT+ individuals.

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Abbreviations

AIES	Authentic and Inauthentic Expression Scale
AES	Authentic Expression Scale
ANOVA	An analysis of variance
BPNS	Basic Psychological Needs Satisfaction Scale
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
GHQ	General Health Questionnaire
IES	Inauthentic Expression Scale
LGB	Lesbian, Gay, Bisexual
LGBT+	Lesbian, Gay, Bisexual, Transgender, and related communities
RMT	Relationships Motivation Theory
SDT	Self-Determination Theory
SIT	Social Identity Theory
UKHLS	Understanding Society: the UK Household Longitudinal Study
UPR	Unconditional Positive Regard

Previous Publications

The following chapter was adapted from a published manuscript:

Chapter 5 - Long-Term Mental Health Correlates of Autonomy-supportive Relationships in an LGB Sample

Al-Khouja, M., Weinstein, N., & Legate, N. (2019). Long-term mental health correlates of social supportive relationships in a lesbian, gay, and bisexual sample. *Psychology & Sexuality*, 1-13.

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Chapter 1

Introduction to the Importance of Autonomy Support

Autonomy involves congruency with oneself (i.e., one's values, interests, and most deeply held identities) and is essential to well-being (Ryan & Deci, 2017). In the present thesis I expand the available evidence regarding the benefits of autonomy motivation (self-regulated behaviour), satisfaction (feeling a sense that one is sufficiently self-regulating and self-congruent), and support (experiencing interpersonal contexts that allow one to self-regulate and feel self-congruent) through four empirical chapters that fill important gaps relating to autonomy and autonomy support. Chapter 1 presents background on the underlying theory used for autonomy, as well as what aspects of autonomy are especially important within close relationships. It is divided into three main sections, each which describe the following topics:

1.1 A brief background on the overarching theory being used throughout these studies, Self-Determination Theory, and specifically the importance of autonomy being supported.

1.2 An overview of how autonomy can be supported within the context of close relationships.

1.3 A review of what components autonomy support is made up of and what these components mean.

Finally, Section 1.4 recaps these issues in a brief chapter summary.

1.1 Self-Determination Theory

Self-Determination Theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000, 2017) is a theory of motivation which posits that three basic, universal psychological needs - autonomy, competence, and relatedness - need to be met for optimal human functioning and well-being. The three basic psychological needs have been shown to have clear, measurable effects on individuals' psychological interest, development, and wellness.

Thwarting any of the three basic psychological needs has been shown to lead to observable decreases in individual well-being, regardless of culture (e.g., Bartholomew, Ntoumanis, Ryan, Bosch, & Thorgeresen-Ntoumani, 2011). The satisfaction of these needs has been shown to lead to numerous positive outcomes. For example, support of the basic psychological needs increases the internalisation of values, goals, or belief systems (Ryan & Patrick, 2009), which is important in decreasing negative attitudes towards people of different races (Al-Khouja, Graham, Weinstein, & Zheng, 2020; Legault, Green-Demers, & Eadie, 2009). Further, satisfaction of these needs supports greater intrinsic motivation (Ryan & Deci, 2017), which involves engagement in a task or activity for the internal satisfaction or enjoyment of the task, for example because it is entertaining, interesting, or curiosity inducing, meaning the task is not being done because of pressures or rewards external to the self (Deci & Ryan, 2010). Intrinsic motivation is, in turn, important for promoting positive outcomes in a multitude of contexts. For example, when striving to accomplish a goal, the likelihood of its completion is more likely when the goal is intrinsically motivated (e.g., Koestner, Otis, Powers, Pelletier & Gagnon, 2008). Being intrinsically motivated to do something is consistently shown to lead to better performance of the task, while external forces, whether positive or negative, undermine this effect (Cerasoli, Nicklin & Ford, 2014). Ultimately, the fulfilment of these universal needs and these positive benefits leads to enhanced mental and physical health (Ryan & Deci, 2017).

Outside of investigating these psychological needs together, the separate needs also have specific definitions, as well as disparate antecedents and outcomes, driving areas of research in which researchers examine each need, in its own right, as they benefit the research question(s) being asked. The first basic psychological need posited by SDT is the need for *competence*. This need is defined within SDT as the need to operate effectively, especially within circumstances important to one's life (Ryan & Deci, 2017). Competence is satisfied through striving for better mastery of skills, with various behaviours meeting this need, including leisure activities (e.g., playing a video game) or

professional activities. The need for competence can also be thwarted, for example, if the challenges prove too difficult and felt mastery cannot be achieved, or if the environment is otherwise discouraging to the person (Ryan & Deci, 2017). Feelings of incompetence threaten one's feelings of agency and undermine their true abilities, lowering self-esteem (Deci & Ryan, 1985). Competence need satisfaction occurs through the subjective experience of the individual: the external environment does not directly determine felt competence, but rather the experience of it is crucial for competence need satisfaction (Deci & Ryan, 1985).

The second psychological need posited by SDT is the need for *relatedness*. Relatedness concerns feeling connected to others socially (Ryan & Deci, 2017). The need for relatedness can be met when one feels that others respect, care for, and respond to them (Ryan & Deci, 2017). Conversely, one must also avoid rejection, insignificance, and disconnectedness. Relatedness is found to be met not only from a feeling of belonging, but also from feelings of significantly contributing to others (Deci & Ryan, 2014). For the need of relatedness to be met, admiration from others is not enough. One needs to personally feel that they are significant and unconditionally accepted by others for true relatedness (Assor, Roth, & Deci, 2004).

The final psychological need, the need for *autonomy*, is the most complex and debated of SDT's three psychological needs. Within SDT, autonomy is defined as the need to feel volitional and congruent in one's actions and experiences (Friedman, 2003). Autonomy is closely related to concepts of choice, volition, and will, and autonomy occurs when one acts in accordance with their personal beliefs or interests, instead of acting due to external forces such as to be compliant (Ryan & Deci, 2004). Autonomy need satisfaction is satisfied in large part when individuals behave through autonomous motivation for action.

Autonomous motivation is usually measured as lying on a spectrum, from truly autonomous actions to entirely externally controlled ones. Most actions lie

somewhere in between these two extremes. Truly autonomous actions are actions that are not regulated by any external forces, and therefore only some actions are truly autonomous. When people undertake their actions autonomously, those actions result in more positive outcomes. For example, autonomous motivation for action is related to a more stable sense of self, which results in stable high self-esteem (Deci & Ryan, 1995). A large body of research has consistently shown that feeling autonomous and endorsing one's actions is essential to the full functioning and mental health of the individual, as well as necessary for the optimal functioning of organizations and cultures (e.g., Deci & Ryan, 2000; Ryan, Deci, Grolnick, & La Guardia, 2006).

Although autonomy is the need to be self-regulated, it does not necessarily imply a need for independence; one can feel autonomous even when they are dependent or interdependent on another person (Ryan & Lynch, 1989). For example, imagine receiving treatment for a serious illness. In such a case, individuals often volitionally and self-congruently enter into a dependency with physicians, who both parties agree should be the decision-makers about which interventions are needed and what treatments the patient needs to undergo. In this way, autonomy relies on self-endorsing one's behaviours and acting in ways consistent with one's true interests and values, rather than on independence of action, per se. Acting in ways that are incongruent with one's interests and values causes conflict which can lead to negative outcomes such as worse mental health or well-being (e.g., Paul & Moser, 2006).

Autonomy, competence, and relatedness each make unique predictive contributions to various thriving and well-being outcomes (e.g., La Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). In accordance with these being fundamental needs, when any of these needs are undermined individuals seek to regain homeostasis of the thwarted need. Thus, individuals will be even more motivated to seek out opportunities that might provide the satisfaction of the need (Ryan & Deci, 2017). For example, a person who lacks relatedness may seek company, a person lacking in competence may

attempt to improve their skills, and a person who lacks autonomy might try to seek out greater freedom (Sheldon & Gunz, 2009). These needs acting as motivators highlights the centrality of the psychological needs – individuals experience them as indispensable and seek them out when they are absent.

1.1.1 A Focus on Autonomy

Autonomy is central to understanding motivations and well-being of people. Not only is it a basic psychological need, but autonomy has also been shown to affect whether the other two needs are effective. The needs of competence and relatedness cannot be truly met and internalised without the vehicle of autonomy (Ryan & Deci, 2017). That is, a sense of competency can only be internalised when the individual has initiated and willingly undertaken action. This means the competence need is satisfied when the autonomy need is simultaneously satisfied. Similarly, relatedness need satisfaction must involve autonomous connections between people. One must feel that others willingly care for them, and they in turn must also willingly care for the other. Research within SDT has repeatedly found that people feel most related to those who support their autonomy (Ryan & Deci, 2006). Thus, to be effective, competence and relatedness depend on autonomy-supportive contexts.

Furthermore, both competence and relatedness need satisfactions tend to receive much empirical attention, both within and outside of the SDT literature, while autonomy need satisfaction is often forgotten in models predicting wellness, despite extensive evidence of its importance. For example, previous studies have found that self-efficacy and a sense of belonging lead to greater well-being (e.g., Raymond & Sheppard, 2018), but, according to what is known about SDT, the quality of both these needs depend also on autonomy-supportive environments, a variable which usually is not considered in such studies.

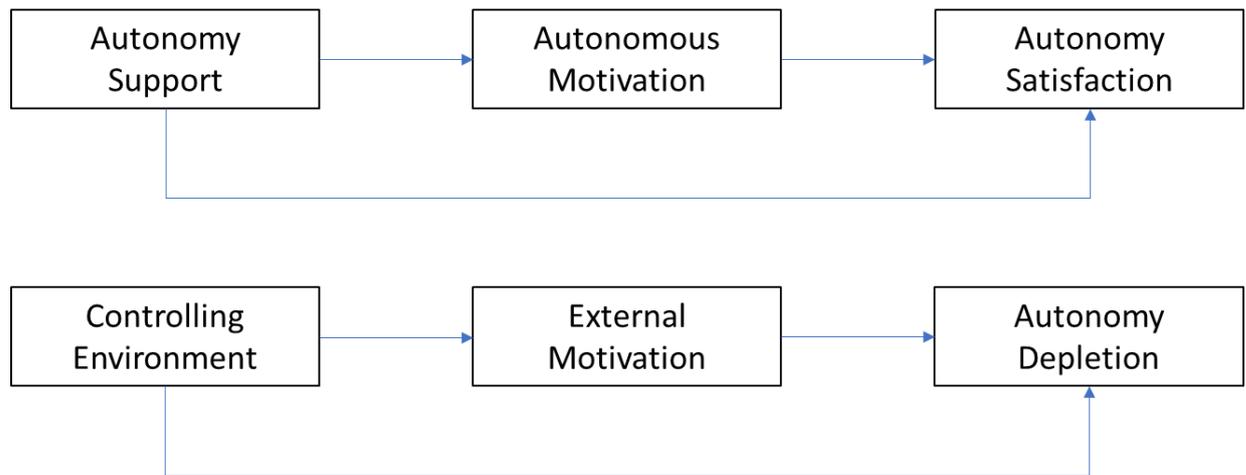
1.1.1.1 Autonomy can be Supported or Thwarted

It may be that satisfying the need of autonomy is especially important when it comes to positive social interactions and relationships. The importance of autonomy within relationships is studied within a relatively new model:

Relationships Motivation Theory (RMT; Deci & Ryan, 2014). RMT is a mini theory developed within the framework of SDT which posits that the need for relatedness causes people to actively pursue quality, autonomy supportive relationships. Only quality relationships can fully satisfy this need for relatedness, and these relationships consist of both partners providing and supporting each other's autonomy. Conversely, controlling relationships, or those that are low in autonomy support, thwart not only the person's autonomy, but also their need for relatedness. When quality relationships exist, numerous positive outcomes have been recorded such as more trust and mental wellness, with a mutuality of autonomy support yielding the most positive outcomes (Deci & Ryan, 2014).

People often feel they cannot be autonomous in their actions, and this is particularly true when their autonomy need is not supported by others. Within SDT it has been shown that perceived autonomy support from others is central to well-being. This is in part because it allows individuals to express themselves honestly and fully and to 'be themselves' with those people who support their autonomy (Lynch, La Guardia, & Ryan, 2009; Ryan & Deci, 2017). Conversely, the autonomy need can also be thwarted by others. Social controls, evaluative pressures, and punishments can constrain behaviour, whether the person realises this control or not (Ryan & Deci, 2006). These external forces diminish the person's autonomy, and even positive forces such as the use of rewards can diminish autonomy (see Figure 1; Deci, Koestner, & Ryan, 1999). This is because the person places priority on the reward, effectively losing sight of their values and needs, with studies showing less reported autonomy, less happiness, and lower quality of relationships in such instances (Kasser, 2002). Thus, with my program of studies focusing on how people are supported socially, a topic which has consistently been shown to be a good predictor of mental health (e.g., Chu, Saucier, & Hafner, 2010; Kessler & McLeod, 1985), I focus on autonomy support as a framework for quality social interactions.

Figure 1 - Theoretical Model of Autonomy Satisfaction and Depletion



1.2 Autonomy Support within Close Relationships

Autonomy support has been shown to be important in many relationship settings (Deci & Ryan, 2014). Research into autonomy-supportive relationships can be divided into two overarching contexts: environments which involve an authority figure and environments where the people are interacting on an equal plane.

Autonomy support in situations which involve an authority figure (a vertical relationship) is well-researched and includes settings such as teacher-student, doctor-patient, and parent-child (e.g., Roth, Assor, Niemiec, Ryan, & Deci, 2009). Conversely, interactions that involve two people who are more or less equal (a horizontal relationship) involves understanding the antecedents and outcomes of support from close friends or romantic partners, where there is an inherent interactive mutuality (Deci & Ryan, 2014). Interestingly, research on autonomy support within both types of contexts seems to produce similar results.

Regardless of the context and persons involved, autonomy can be supported (or thwarted) depending on whether the person is supportive (vs. controlling) or accepting (vs. rejecting), with positive benefits of having these supportive interactions. For example, support for autonomy has been consistently shown to facilitate attachment, intimacy, and the outcomes associated with them (Ryan & Deci, 2006). While all studies tend to replicate that autonomy support is positive for *both* the receiver of the support and the one providing the support (e.g., Deci, La Guardia, Moller, Scheiner, & Ryan, 2006), the difference in the research of

these contexts tends to be the outcomes measured. For example, engagement and learning outcomes are important to measure within a classroom setting, whereas greater felt trust would be something essential for a healthy romantic relationship (Deci & Ryan, 2014; Ryan & La Guardia, 1999). A few studies that directly compared the effects of autonomy support in vertical and horizontal relationships have found that each relationship uniquely contributes to individuals' psychological functioning (Hagger et al., 2009; Ratelle, Simard, & Guay, 2013), with all sources of autonomy support found to be important.

Critically, certain aspects of autonomy support may be more important than others depending on the context. However, this has yet to be examined. Autonomy support within close relationships as a category is essential to understand, as they are the relationships in which the interactions and connections are valued to the individual. This includes relationships such as family members, friends, and romantic partners. Previous research on close relationships as a category has found that when people feel they can turn to someone (whether it is close friends, romantic partners, or family members) during very moving emotional times, they are psychologically healthier, with better mental health and well-being (Ryan, La Guardia, Solky-Butzel, Chirkov, & Kim, 2005). Previous research tends to delve into the benefits of autonomy support within any one specific relationship, with a vast majority of research examining parent-child relationships (Roth et al., 2009). I describe this work below.

1.2.1 Family Relationships

Research on autonomy support within families tends to focus on parent-child relationships. Parent-child relationships are considered one of the most important in the developmental psychology of children and adolescents, but the quality of this relationship has lasting effects throughout adulthood (e.g., Roth, 2008). The extent to which a parent is autonomy-supportive in general has also been shown to effect how the child regulates negative emotions (Roth et al., 2009) and the child's mental health in general (Chirkov & Ryan, 2001). Notably, a meta-analysis of 36 studies revealed that parental autonomy support consistently related to

greater academic achievement, well-being, and competence in children. Further, it was shown that these positive outcomes were strongest when both parents were autonomy-supportive, although still present but weaker if only one parent was autonomy-supportive (Vasquez, Pataill, Fong, Corrigan, & Pine, 2016).

Another important way to provide autonomy support to children and satisfy their need for autonomy is to provide unconditional, versus conditional, positive regard. Parents can grant various levels of conditional or unconditional positive regard to their children in different domains and circumstances (Roth et al., 2009). In line with SDT, children need to fulfil their need for relatedness, which means they are motivated to act in ways that will ensure that they are loved and respected by others. Yet parents may make their affection, or positive regard, conditional upon their children meeting their expectations or sharing their views (Deci & Ryan, 1995). For example, a parent might imply that they will only approve of, like, or favour their child if they perform a certain behaviour or act in a certain way. Importantly, when parents adopt this approach, they do not allow the child to be who they are, or behave in ways that are congruent with, or give expression to, the self, thereby undermining the child's autonomy need satisfaction. Conditional regard has been shown to have many negative outcomes. For example, children of parents who enact conditional regard feel controlled (less autonomous); with resulting lower self-esteem, greater shame following failures, and greater feelings of rejection by and resentment toward their parents (Assor et al., 2004).

Conversely, parents can show their children unconditional positive regard (UPR), or the perception that the parent accepts the child's experiences and actions and does not invalidate them, even when the parent personally does not approve of the child's behaviour (Roth, Kanat-Maymon, & Assor, 2016). Although less researched than conditional regard, UPR has been shown to be essential to create a growth-promoting climate in children (Iberg, 2001). Having conditional or unconditional positive regard within a parent-child relationship has been shown to effect individuals throughout their life. For example, a study in college students

found that conditional and UPR influenced one's tendency toward prosocial behaviour, with conditional parenting relating to young adults having more selfish tendencies (Roth, 2008). It is important to note that UPR is an essential aspect of feeling accepted (which will be discussed more later in the thesis) which is also key for other close relationships outside of the parent-child realm.

Although less researched, autonomy-supportive sibling relationships would ideally be like quality friend and peer relationships, with mutuality of support at the forefront. Existing research on sibling relationships suggests that this might not be the case: differences in power exist between siblings, with older siblings being able to be perceived as more domineering or nurturing (Buhrmester & Furman, 1990). Similar to parental support, controlling adolescent sibling relationships (low in autonomy support) have been shown to lead to negative outcomes such as anxiety and depressive symptoms (Campione-Barr, Lindell, Greer, & Rose, 2014). Similarly, one study that compared autonomy support within sibling relationships to parent and teacher autonomy support, found that autonomy support from each relationship was uniquely and robustly important for the child's well-being (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). When discussing family support as a category, parental support is most likely the relationship that comes to mind for adolescents and young adults, but it is important to also consider the impact of siblings as well (van der Kaap-Deeder et al., 2017).

1.2.2 Friend Relationships

Autonomy support from horizontal close other relationships, such as from friends or romantic partners, is characterised by consent and mutuality (Deci & Ryan, 2014). This mutuality was highlighted in one study which sampled best-friend pairs and multi-level analyses (Deci et al., 2006). Results showed that, within the best-friend pairs, the amount of autonomy support each individual provided to their partner was significantly related. This finding highlights the reciprocity of support in this type of relationship: support provided by one individual tends to be mirrored by the other individual. This study also identified positive outcomes of autonomy-supportive friendships, at both the relational and individual levels of

well-being (Deci et al., 2006). That said, some peer relationships are characterised by one or both partners failing to provide support and/or engaging with the other partner for reasons external to that individual, for example, befriending a person for their wealth instead of who they are as a person (Deci & Ryan, 2014). When an individual perceives this type of externally motivated relationship, many negative outcomes have been recorded, such as lowered trust in the person and less interest in relating to the person (Wild, Enzle, Nix, & Deci, 1997). This branch of research finds that people only feel positively related to others when the others are willingly giving and caring (Weinstein & Ryan, 2010).

1.2.3 Partner Relationships

Individuals who have autonomy-supportive romantic partners also show better mental health (Patrick, Knee, Canavello, & Lonsbary 2007). Diary data of relationship partners who completed daily surveys found that feelings of autonomy in a relationship was associated with greater relationship satisfaction, relationship stability, and well-being for both partners (Knee, Lonsbary, Canevello, & Patrick, 2005). Likewise, autonomy support in intimate relationships has been shown to predict more openness, agreeableness, conscientiousness, and extraversion as well as less neuroticism relative to one's own baseline for these traits. This finding was replicated across different cultures (Russian, U.S., and Chinese samples), showing promise for being a universal effect of autonomy-supportive partner relationships (Lynch, La Guardia, & Ryan, 2005; 2009). Conversely, another type of support common in romantic relationships, directive support, can lead to negative outcomes. Directive support, which includes providing guidance, advice, or emphasizing the actions that the other person should take on, was found in one study to negatively relate to relationship satisfaction, suggesting that it can impair satisfaction in partner relationships (Carbonneau, Martos, Sallay, Rochette, & Koestner, 2019). This same study further found that partner autonomy support was positively associated with relationship satisfaction; this finding was true for both perceived autonomy support from the partner and reported support provided to the partner. Romantic relationships characterised by autonomy (vs. directive) support allow greater opportunities for self-initiation and choice, which has consistently shown to lead

to greater personal and relational benefits (e.g., Gorin, Powers, Koestner, Wing, & Raynor, 2014; Koestner, Powers, Carbonneau, Milyavskaya, & Chua, 2012).

1.3 Components of Autonomy Support

Taking together previous research on close relationships, autonomy support is very important to the strength and viability of these relationships. But what components of autonomy support are particularly important in this context? Autonomy support is made of up many qualities, including taking the input or ideas of another person, feeling your perspective is being taken, feeling choiceful, being empathised with, minimization of controlling words, and providing rationale for behaviours, to name just a few (Ryan & Deci, 2017). In other words, despite a multitude of studies testing the outcomes of autonomy support in close relationships, *these studies largely examine an autonomy support composite that includes different components measured together*. Perhaps the best exception is provided through the literature on conditional regard (Roth et al., 2009), which measures it as a component of interest in its own right. In the context of close relationships, no previous studies have categorised these specific qualities of autonomy support, nor have studies examined whether certain aspects may be more important than others depending on the context. It may be that examining specific components of autonomy support within different contexts will provide a deeper understanding of the actions and underlying mechanisms that make autonomy support beneficial. Through further research into autonomy support, I found that many of these qualities fall under broader components in terms of how they are expressed. I will now examine these components more closely, with a focus on how they are useful in the context of close relationships. These components are support for self-expression, acceptance of the person, and taking the person's perspective.

1.3.1 Support of Self-Expression

The first component of autonomy support identified is support for *self-expression*. Self-expression reflects the experience that one can freely share important feelings, thoughts, and actions with certain close others. This self-expression is usually relationship specific and dependent on previous reactions to meaningful

expressions in the past (Tobin, 1995). For example, if someone expresses an important thought with a friend, who then rejects the thought or otherwise provides a negative experience to such discourse, that person may no longer express freely to that person. If, instead, these important thoughts are embraced and encouraged, then that person will feel support for their self-expressions. This felt ability to freely express oneself is a quality of social support shown to be important for mental health outcomes such as lowered social anxiety and greater self-awareness (Itzchakov, DeMarree, Kluger, & Turjeman-Levi, 2018). In addition, self-expression is shown to be a way for individuals to connect and form meaningful relationships (Bargh, McKenna, & Fitzsimons, 2002).

1.3.1.1 Authentic and Inauthentic Expression

SDT theorists argue that perhaps the best way to support self-expression is through the support for authentic self-expression (Weinstein, 2014), though this has not been directly tested. Authentic self-expression reflects an expression of the “true self”, or “authentic self”, which is defined as qualities that an individual possesses but does not normally express to others in everyday life (Bargh et al., 2002; McKenna, Green, & Gleason, 2002). Feeling authentic has been shown to have many positive outcomes, such as enhancing mental health and well-being (Sedikides, Slabu, Lenton, & Thomaes, 2017) and creating stronger positive affect and weaker negative affect (Thomaes, Sedikides, Van den Bos, Hutteman, & Reijntjes, 2017). Authenticity has been widely researched as an internal, state-level construct, but less-so as an external, interpersonal behaviour or expression. Feeling authentic may lead to more authentic self-expressions, which would most likely occur in environments and relationships which are autonomy supportive. Additional research is needed to further examine authentic self-expressions and parse out the relationship between feeling authentic and authentic expressions.

Feeling authentic in relation to, and acting in accordance with, oneself is closely related to the theory of self-concept consistency. Self-concept consistency refers to the uniformity with which people view aspects of themselves (e.g., traits, motives, goals) across differing contexts (e.g., Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). In a simplified example, if someone views themselves as introverted

at work but extraverted in other contexts, it may be due to having low self-concept consistency. Previous research finds a number of factors impact individuals' self-concept consistency, including the context, culture, and type of relationship the interaction occurs (e.g., Donahue, Robins, Roberts, & John, 1993; English & Chen, 2007; Chen, Boucher, & Tapias, 2006). Studies examining self-concept consistency have found that people who demonstrated inconsistency in their personality traits across different roles, or contexts, had lowered well-being (Donahue, Robins, Roberts, & John, 1993). One series of studies also found that satisfaction within a particular role was found to be positively associated with the degree of similarity between personality traits within that role compared to "myself in general" (Roberts & Donahue, 1994). Indeed, although it has been found to be beneficial, people do not, or cannot, always act in accordance with their true self, which has been shown to effect intrapersonal (internal feels of) authenticity (Kraus, Chen, & Keltner, 2011). The personality traits which are associated with the true self have been shown to be dynamic, with changes to personality that go against the true self being shown to effect people negatively (Ryan, 1993; Sheldon et al., 1997).

There are certain contexts in which one may feel they cannot express themselves authentically. As a result, self-silencing, self-censorship, or inauthentic expressions may occur. Self-silencing occurs when an individual suppresses their personal voice and opinions to maintain a relationship, usually during a potential conflict or argument (Jack, 1991). This inhibition of self-expression ultimately leads to an individual's "loss of self" within the relationship, which is associated with negative outcomes, such as depression; this has been evidenced cross-culturally (Jack & Ali, 2010). The concept of self-silencing was developed from data taken from clinically depressed women's personal experiences within romantic relationships. Thus, self-silencing has mostly been researched within the context of women self-silencing in relationships, with this negative effect often not appearing in male samples (Thompson, 1995). On the other hand, self-censorship is similar in theory but is a more general term used to define one's chosen silence in the face of controversial discourse (Hayes, Glynn, & Shanahan, 2005). Whether self-silencing or self-censoring, the literature is clear that hostile

or non-supportive environments cause this lack of expression (Hayes, 2007; Jack 1991).

Unlike self-silencing or self-censorship, inauthentic self-expression occurs when one still actively expresses to others, but in a manner that is not true to themselves (Leary, 2003). Inauthentically expressing can feel unnatural to the individual and is usually used to avoid relational fallout (Leary, 2003; Tesser, 2002). Inauthentic expression can result in negative psychological consequences since the individual feels that they must express themselves inauthentically to preserve the interpersonal relationship. Expressing oneself inauthentically may also mean that the individual perceives that they would not be valued for who they are authentically (Leary, 2003). The resulting stress and lack of fulfilment that occurs when one must force themselves to express artificially leads to psychological distress, for example greater anxiety (Cheng, 2004) or depression (Erickson & Wharton, 1997). Similar to the problem with previous research on authenticity and authentic expressions, research is required to better understand its role within interpersonal relationships and whether it also involves a dispositional component.

1.3.2 Perceived Acceptance

Another component of autonomy support important for close relationships is *acceptance*. The perception of acceptance is defined as a relationship-specific appraisal that one cares for and values individuals for who they are, without condition of needing to act differently to how they would typically act (Brock, Sarason, Sanghvi, & Gurung, 1998). Individuals who perceive acceptance from close others believe that their actions will not result in the loss of love or support, whereas those who do not perceive acceptance might anticipate rejecting reactions from others (Brock et al., 1998). Acceptance from close others has been shown to be important for one's self-esteem, with evidence that those who link success with acceptance and failure with rejection (low perceived acceptance) have lower self-esteem (Baldwin & Sinclair, 1996). On the other hand, those with high perceived acceptance are shown to have feelings of unconditional positive self-regard (e.g., Rogers, 1959).

As mentioned within the context of parent-child support, a specific type of acceptance recognised in the literature is unconditional positive regard (UPR), which forms from a complete acceptance of an individual not to change (Wilkins, 2000). Previous studies have noted the importance of perceived UPR from close others, with conditional regard shown to lead to negative well-being outcomes such as lowered self-esteem and poorer relationship quality (e.g., Assor et al., 2004; Kanat-Maymon, Roth, Assor, & Reizer, 2012). Although mostly studied within parent-child relationships, UPR has been shown to be essential for other types of relationships (e.g., Macbeath & Jardine, 1998). Notably, UPR is commonly used in the context of therapist-client relationships and is widely recognised as necessary to facilitate self-acceptance and growth of the client which allows for positive changes to their thoughts or behaviours (Wilkins, 2000). To date, the vast majority of relevant research focuses on vertical relationships, with the authority figure accepting the subject (e.g., parent-child, coach-athlete), but it may be that acceptance is just as important within horizontal, mutual relationships but this has yet to be examined. Such information would help to disentangle aspects of support needed for quality relationships, which support well-being.

1.3.3 Perceived Perspective-Taking

A final component of autonomy support identified in the literature is perspective-taking. Perspective-taking occurs when a person (the perspective-taker) takes on another person's (the target's) point of view. Taking on somebody else's' perspective, as opposed to remaining within one's own perspective or being objective, has been found to evoke empathy, compassion, and more altruistic motivations and tendencies (e.g., Batson, Early, & Salvarani, 1997; Galinsky & Moskowitz, 2000). In this way, perspective-takers see the world through another set of eyes, leading to a better understanding of the target's point of view and the groups that the target belongs to (Hodges, Clark, & Myers, 2011). Perspective-taking is similar to empathy, but whereas empathy is usually defined as a private experience, perceived perspective-taking as a component of autonomy support is interpersonal, and from interactions within the relationship one can perceive whether the close other is understanding their perspective or not (Bryant, 1987).

While a vast majority of research on perspective-taking focuses on the perspective-taker, I also find that perspective-taking also benefits the target who, as a result, feels understood, which may result in better mental health (Payton et al., 2000). This mutually beneficial effect of perspective-taking is highlighted in one study which found that in a negotiation between two participants, secretly instructing one participant to take the perspective of the other led to greater joint gains and mutually beneficial solutions. Additionally, the target who felt understood also showed greater satisfaction with how they were treated in the negotiation (Galinsky, Maddux, Gilin, & White, 2008).

Furthermore, a large body of research indicates that feeling understood within close relationships has several important relationship-enhancing effects (e.g., Goldstein, Vezich, & Shapiro, 2014; Leith & Baumeister, 1998; Vaish, Carpenter, & Tomasello, 2009). For example, research within the domain of romantic relationships shows that when perspective-taking accurately reflects the partner's feelings, relationship satisfaction increases (Franzoi, Davis, & Young, 1985). Along the same line, Long and Andrews (1990) found that spouses' marital adjustment was predicted by both self-reports of how often spouses took the perspective of their partner, as well as how often their partner perceived that their partner took their perspective. Likewise, a study on mother and adult daughter relationships also found accurate perspective-taking of the others' feelings positively affected relationship satisfaction (Martini, Grusec, & Bernardini, 2001).

1.4 Summary

In sum, SDT posits three basic psychological needs which need to be met for healthy functioning: autonomy, competence, and relatedness. Of these needs, my focus is on autonomy, the experience that one is acting in accordance with one's personal beliefs or interests. I focus on autonomy in part because theoretical and empirical work has pointed to the fundamental importance of autonomy support for all three psychological needs to be realised. Second, I focus on autonomy support because it has been shown to be important within the context of healthy social relationships, an area of focus in the studies reported in this thesis. An individual's autonomy can be supported by important close others

through allowing an individual to 'be themselves' without judgement or other negative consequence (Ryan & Deci, 2017). Close others that are important to examine include family, friends, and partner relationships. Throughout these relationships, autonomy support has been found to be essential for positive mental health and well-being outcomes (e.g., Deci & Ryan, 2014; Patrick et al., 2007; Vasquez et al., 2016). Autonomy support is usually measured as a single construct (e.g., Mageau, 2015), but there are various components of autonomy support, and it may be that certain components may be more beneficial than others within particular contexts or relationships. This has yet to be examined in the literature and one of the goals of the current thesis is to examine the components of autonomy support within the context of close relationships. These components, which include support for self-expression, acceptance, and perspective-taking have been identified as key qualities of autonomy. Furthermore, many gaps in the literature have been found regarding the role of self-expression as a component of autonomy support. Therefore, another goal of the current thesis is to research these concepts further, including how they relate to each other, autonomy satisfaction, and well-being.

Chapter 2

Disadvantaged Identities and Autonomy Support

Chapter 1 introduced the overarching theory and importance of autonomy support, especially within the context of close relationships. Chapter 2 further develops the rationale for studying these topics within disadvantaged identities specifically. The plights of women and individuals with a minority sexual orientation are discussed, as well as the implications for studying aspects of autonomy support in these populations. The issues discussed are separated into the following sections:

2.1 An overview of women as a disadvantaged group, including sexism and inequalities faced, and how oppression can be directly or indirectly experienced.

2.2 A background on minority sexualities and genders, the inequalities faced, and the resulting health disparities.

And Section 2.3 recaps these issues with a chapter summary.

2.1 Women: Sexism and Well-Being

Although women make up half of the population, they face unique inequalities and power imbalances, making them a disadvantaged group (e.g., Hacker, 1951; Lewis, 2018). It is well-documented that women experience restricted freedoms more often than men in terms of economic independence and social roles and norms, such as being less able or unencouraged to express themselves (Nussbaum & Glover, 1995) and substantial constraints that affect their health and well-being (Moss, 2002; Sacker, Firth, Fitzpatrick, Lynch, & Bartley, 2000). Sexism, the unequal treatment resulting from stereotypes, prejudice, and discrimination faced by women, has been shown to have a plethora of negative effects. Inequalities negatively affect women's cognitive performance (Dardenne, Dumont, & Bollier, 2007), self-perceptions of their bodies (Shepherd et al., 2011), and well-being (Barreto, Ellemers, Cihangir, & Stroebe, 2009), to name a few.

Sexism can be understood as a form of oppression, defined as the unequal power relations between individuals, genders, classes, communities, and nations (Lorber, 1994). This disproportionate distribution of power leads to conditions of inequality, exploitation, marginalisation, and social injustices (Apfelbaum, 1999; Prillentrinsky & Gonick, 1996). For women in Westernised societies, such as the United Kingdom, a large consequence of these inequalities includes barred access to the same economic opportunities that men have (Card, Cardoso, & Kline, 2015; Chevalier, 2007; Petersen & Morgan, 1995). These economic inequalities have been shown to jeopardise women's well-being, with implications for lowered life expectancy and greater risk of detrimental mental health outcomes such as depression (Belle & Doucet, 2003; Kawachi, Kennedy, Gupta, & Prothrow-Stith, 1999).

The extant body of work has primarily focused on how women accept, or internalise, unfair or oppressive social norms. Internalisation is the process in which social norms and values established by the society are adopted as one's own (Ryan & Connell 1989). Women may endorse sexism whether it is benevolent (positive sexism) or hostile (negative sexism). The internalisation and accepting of benevolent sexism is not surprising: this type of sexism could be seen as beneficial to women (e.g., Benokraitis & Feagin 1995). For example, women may value the offer of receiving men's protection in a dangerous situation; and they may be flattered by being put on a "pedestal" (e.g., Becker, 2010). Although benevolent sexism seems positive, there are backlash effects: women are seen as weak (they need protection) and women are required by society to be impossibly perfect, or else face criticism (the pedestal is easy to fall from; Becker, 2010). Surprisingly, women also internalise hostile sexism, or misogynistic, negative beliefs about women (e.g., Becker, 2010; Dehlin & Galliher, 2019). This internalisation has been linked to many negative effects, for example, lowered relationship quality and heightened psychological distress (Dehlin & Galliher, 2019; Szymanski, Gupta, Carr, & Stewart, 2009).

Although research has assessed how women may internalise sexism, studies have yet to show how women externally react in the face of oppression, outside of collective action research. This may be because individual resisting behaviours

are difficult to measure. Previous research has theorised that an individual's behaviours against oppression, on behalf of their group, may be more covert and individualised to the person's capabilities and beliefs (Rosales & Langhout, 2020). Given these difficulties, one goal of the thesis is to start trying to fill this gap in literature. To begin with this branch of research, researchers must recognise that the oppression women face can be directly or indirectly experienced, with the distinction between these types of oppression are discussed below.

2.1.1 Direct versus Indirect Oppression and Autonomy

As discussed in the previous chapter, perceived autonomy support and autonomy satisfaction involve the sense of volition and authenticity that is felt when people are free to establish their own values and goals and thus act within their own identity (e.g., Ryan & Deci, 2017). Conversely, when an individual feels that others are trying to control or pressure them to act in a certain way, their felt autonomy is undermined (Chen et al., 2015). Research into perceived autonomy support has noted that social contexts affect the autonomy of the individuals within them, through cultural, political, and economic systems (Ryan & Deci, 2017). In one example of this, a group member may personally value and desire to practice their culture openly, yet are not permitted to do so by the rules set by other groups. Past research has found that autonomy satisfaction and well-being can be negatively affected by social contexts if the individuals are being forced (e.g., through laws) to conform to social norms or required to engage in cultural customs and practices (e.g., Chirkov et al., 2003; Downie, Koestner, El Geledi, & Cree, 2004). In this way, oppression which does not allow for the agency needed for feeling autonomy supported, causes a decrease in autonomy satisfaction of affected group members and lowered well-being.

Restrictive contexts on groups even affect in-group members who are not being directly restricted. There is evidence that in-group members internalise restrictions that are placed on their in-group by other groups, as if the restrictions are also placed on themselves personally (indirect oppression). As one example, recent work has demonstrated that when the autonomy satisfaction of an

individual's group is undermined (i.e., their collective autonomy), individuals within that group feel a lowered sense well-being, as if their own autonomy was undermined (Kachanoff, Taylor, Caouette, Khullar, & Wohl, 2019). In other words, one's own sense of autonomy satisfaction can be indirectly undermined merely through a shared group identity. Along the same branch of research, Kachanoff and colleagues found that a perceived reduction in collective autonomy motivates collective action (Kachanoff, Kteily, Khullar, Park, & Taylor, 2020). Building from this research, in Chapter 4, I test the extent that observations of oppression (indirect oppression of their in-group) cause women to react/resist behaviourally against this oppression.

2.2 Lesbian, Gay, and Bisexual Individuals: Heterosexism

As discussed above, women experience sexism, a form of societal oppression which negatively affects their opportunities and well-being. In the same way, those with minority sexualities, such as those who identify as Lesbian, gay, and bisexual (LGB), experience heterosexism. Heterosexism is a form of oppression that takes the form of prejudice and discrimination toward those who have a minority sexuality (Herek, 1996). Like sexism, heterosexism is pervasive within most cultures, with the unequal treatment and rights differing in degree between societies (Chard, Finneran, Sullivan, & Stephenson, 2015). Within Westernised societies, such as the United Kingdom, heterosexism is institutionalised and further present within societal customs, for example through heteronormative narratives: narratives which define heterosexuality as "normal" and preferred, with other sexualities thus labelled as "abnormal" or undesirable (Jackson, 2006). Heteronormativity is still present in most contexts and settings, such as within schools (e.g., Ferfolja, 2007), sports (e.g., Symons, Sbaraglia, Hillier, & Mitchell, 2010), and workplaces (e.g., Resnick & Galupo, 2019). Heteronormative environments lead to heterosexism (and vice versa), whether heterosexism is expressed overtly, such as through discrimination, or subtly, via negative feelings toward LGB individuals (e.g., disgust; Kiebel, McFadden, & Herbstrith, 2017; Tilcsik, 2011).

A key difference between sexism and heterosexism is that, unlike gender, which is often (but not always) portrayed physically, sexuality is a concealable stigmatised identity. Those with a concealed identity can keep their identity hidden from others and may choose to because the hidden identity carries social devaluation (the stigma; Goffman, 1963). Regardless of what the stigmatised identity is, research has shown that individuals with a concealable stigma face considerable stressors and psychological challenges, both from the stigma and “-ism” itself (whether directly or indirectly affected by the resulting oppression, as talked about earlier in the chapter), as well as from the act of actively hiding the identity (e.g., Pachankis, 2007; Quinn & Chaudoir, 2009). Secret-keeping in general has been shown to have negative consequences for well-being, but hiding an identity, especially if that identity is central to one’s self-concept, carries substantial stressors (Quinn & Chaudoir, 2009). An example of these stressors would be the negative anticipation of the identity being discovered, a constant threat which may be exasperated in certain contexts (e.g., contexts where they have previously witnessed disparagement of their stigmatised group; Wahl, 1999). In this way, individuals possessing a stigmatised identity must attempt to minimize the internal turmoil (e.g., internalisation of the oppression; mental health issues) and external backlash (e.g., stigma; interpersonal negativity) that they may experience.

For LGB individuals specifically, research has shown that concealment is an especially common coping strategy (e.g., Safren & Pantalone, 2006). Although concealment of one’s sexuality is used to avoid negative consequences (e.g., stigma), concealment of an LGB identity can come with costs such as lowered relationship satisfaction in same-sex couples (Mohr & Fassinger, 2006) and greater psychological distress and suicidality (Morris, Waldo, & Rothblum, 2001). Further, research has found that when individuals were asked to hide their sexual orientation, they performed significantly worse on cognitive and physical tasks compared to those who were not asked to conceal their orientation. Interestingly, this result was found for heterosexual individuals (Critcher & Ferguson, 2014). This study demonstrates how the act of concealing alone leads to negative consequences, regardless of whether the identity is stigmatised or not. While

concealment combined with the additional threat of stigma leads to even worse consequences (e.g., Quinn & Chaudoir, 2009), literature on LGB disclosure generally reports that when one discloses their sexuality, or “comes out,” to others, doing so is associated with mental health benefits (e.g., Ragins, 2004). But some nuances to the findings that disclosure leads to positive outcomes, and concealment leads to negative outcomes, have also been found in recent literature. One such study, using an SDT framework, found that the benefits of LGB identity disclosure were moderated by how autonomy-supportive the environment of disclosure was (Legate, Ryan, & Weinstein, 2012). In other words, if the individual was disclosing their LGB identity in a controlling social context, they were found not to benefit from the disclosure.

2.2.1 Minority Stress and Well-Being

Understanding factors that promote the mental health of LGB individuals is important given the health disparities faced by this population. Meta-analytic data show that sexual minorities face disparities across a variety of mental health concerns (King et al., 2008). Specifically, LGB samples have been shown to have at least a 1.5-times higher risk of mental illness including depression and anxiety, with lifetime risk of suicide attempts at twice the rates of heterosexuals. These mental health disparities are further evidenced in more recent research within LGB populations (e.g., Bostwick, Boyd, Hughes, & McCabe, 2010; Chakraborty, McManus, Brugha, Bebbington, & King, 2011; Cochran & Mays, 2009; Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013).

LGB health disparities may be due to *minority stress* – a theory which posits that those who are minorities are prone to chronic stress resulting from stigmatisation surrounding their minority identity (Meyer, 2003). This stress that sexual minorities face is related to discrimination, prejudice, and stigma, for example, through discrimination at work, physical and verbal assault, and threats of violence (e.g., D'Augelli, Grossman, & Starks 2006; Herek, 2009). Importantly, outside of this constant threat of oppression, this stress can also be felt from close relationships where others either know about the individual's sexuality and are unaccepting, or do not know and do not provide an environment in which one

feels they can come out (e.g., controlling environments; Legate et al., 2012). In line with this view, research on LGB health and relationships shows that a potent source of minority stress is a lack of relational support. For example, perceiving rejection from caregivers has been linked to increased depression, suicide attempts, drug use and sexual risk-taking behaviours in LGB adolescents (e.g., Rosario, Schrimshaw, & Hunter, 2009; Ryan, Russell, Huebner, Diaz, & Sanchez, 2010). Moreover, adolescents whose parents rejected their sexual orientation report depression, and engage in more drug use, suicide attempts, and risky sexual behaviours later on as adults, suggesting a long-term impact (Ryan, Huebner, Diaz, & Sanchez, 2009). As this type of stress is relational, it is critical to understand the extent to which supportive and accepting relationships can promote the mental health of individuals subject to them (Green & Mitchell, 2008). Along this line, social support from important others, more broadly, has been linked to better mental health outcomes among sexual minorities, such as lower depression, anxiety, and substance use (Kwon, 2010; Lehavot & Simoni, 2011).

2.2.2 Autonomy Support Components and LGB

As discussed in Chapter 1, autonomy need satisfaction has facets that, when supported, lead to numerous positive outcomes. For stigmatised individuals, such as those who identify as LGB, supporting their autonomy may be especially important. As observed previously, minority stressors are relational in nature, meaning they originate from how others treat the stigmatised individual. Because of this, quality autonomy-supportive relationships may be especially important for those who are LGB and other stigmatised individuals.

Autonomy support for LGB individuals from close others is important in large part because support encourages coming out (Ryan, Legate, & Weinstein, 2015), which is in turn important for health and well-being (Legate et al., 2012). Previous research has found that LGB individuals are more likely to come out to others who are autonomy-supportive (Legate, Ryan, & Weinstein, 2012; Ryan et al., 2015), and that this has benefits for mental health (Beals, Peplau, & Gable, 2009; Hu, Wang, & Wu, 2013). A growing body of work has also revealed that

autonomy support from family and friends is linked with higher LGB mental health, both in cross-sectional research (Ryan et al., 2015; Ryan, Legate, Weinstein, & Rahman, 2017; Weinstein, Legate, Ryan, Sedikides, & Cozzolino, 2017) as well as at the level of daily interactions (Legate, Ryan, & Rogge, 2017).

In Chapter 1, I discussed how each autonomy support component (self-expression, acceptance, and perspective-taking; each of which encompasses numerous qualities of autonomy) relates to positive outcomes within the context of close-other relationships. It may be that these components take on slightly different definitions and contribute to close relationships differently for those who are stigmatised. Thus, in this section I briefly review these autonomy support components again but in relation to stigmatised identities and LGB individuals.

2.2.2.1 Stigma and Self-Expression

Previous research has shown that a defining experience among stigmatised individuals involves balancing the need to act in socially desirable ways with the need to be authentic (true to themselves) in social interactions (Jones & King, 2013). As discussed in Chapter 1, self-expression encompasses the sharing of true thoughts and feelings, with support for self-expression either endorsed by close others or otherwise hindered. Support for self-expression may be especially important for individuals who hold a hidden stigmatised identity, as the associated stigma gives reason to inhibit authentic self-expression (Derlaga & Berg, 1987; Greene, Derlaga, & Matthews, 2006). In this way, self-expression of the true self most likely differs from everyday expression for stigmatised individuals (Sabat et al., 2020).

Variable self-expression has been shown to be a reality for LGB individuals who have varying degrees of “outness” and may therefore truly express themselves with those they are completely out with, but conceal or inauthentically express themselves with those they are not out with (Riggle, Rostosky, Black, & Rosenkrantz, 2017). Research finds that higher levels of outness are linked with positive outcomes. For example, higher levels of outness were associated with

higher self-esteem and less depression (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012). Likewise, as described earlier in this chapter, research has established the negative consequences of concealment and the positive benefits of being out, especially when coming out in autonomy-supportive environments (Legate et al., 2012; Riggle et al., 2017). It is also known that LGB individuals are more likely to come out to others who are autonomy-supportive (Legate et al., 2012), therefore the positive benefits of outness and self-expression would most likely occur with autonomy-supportive close others, especially if self-expression is specifically supported. Support for self-expression has yet to be examined within specific close relationships for impact into stigmatised individuals' well-being and one goal of the present research is to examine the impact of self-expression across relationships.

Furthermore, feeling authentic has consistently been shown to positively impact well-being in the LGB population (e.g., Riggle et al., 2017). In this context, authenticity involves being at peace with one's sexual identity, which also relates to the ability to honestly express their identity to others (Riggle, Whitman, Olson, Rostosky, & Strong, 2008). Similarly, having a consistent self-concept for stigmatised individuals, such as LGB, is difficult if the individual is concealing their identity in certain contexts. Previous research has found that, for LGB individuals, having an inconsistent self-concept relates to an increase in internalised stigma, and this can also relate to greater depression (Feinstein, Davila, & Yoneda, 2012). It may be that acting inauthentically leads to less feelings of internal authenticity (or less self-concept consistency). It is important to note that, as stated in the previous chapter, the link between authentic interpersonal expressions, internal feelings of authenticity, and how they relate to well-being, has yet to be examined and is one goal of the thesis to establish. This link may be especially useful in determining the mechanism in which authenticity and self-expression improve well-being, which may be particularly useful for stigmatised individuals.

2.2.2.2 Stigma and Acceptance

On a societal level, perceived acceptance of the stigmatised identity is known to be important for the stigmatised individual's well-being; this makes sense as it would signal that there is less stigma associated with the identity, and therefore less reason to conceal (Bry, Mustanski, Garofalo, & Burns, 2017). For example, one study, which examined pre-existing data from 34 countries, found that greater country-wide acceptance of LGB individuals related to lowered LGB suicide rates in that population (Stuke, Heinz, & Bermpohl, 2020). Societal acceptance is important for stigmatised individuals as it relates to the social, political, and economic climate that they live in. While societal acceptance has clear implications for mental and physical well-being, it is also true that perceived acceptance within close relationships is of great importance.

Most research into perceived acceptance for LGB individuals focuses on the parent-child relationship, as this relationship has the greatest implications for adolescent LGB individuals as they discover and disclose their LGB identity (Ryan et al., 2010). When parents of LGB young adults accept their children there is a significant improvement in resilience, psychological functioning, health, and wellness of the LGB individual (Ryan et al., 2010). Unfortunately, due to the stigmatisation of a minority sexualities, LGB individuals have a greater likelihood of parental rejection (Ryan et al., 2010) which has been shown to increase anxiety, depression, as well as other types of psychological distress (e.g., Kaysen et al., 2014). In this way, acceptance from parents is necessary for healthy development of LGB youth and young adults (Ryan et al., 2009), with research showing that parental acceptance has a greater impact than that of friends (Shilo & Savaya, 2011). Furthermore, research has suggested that parental response to disclosure (accepting or rejecting) has long term effects into adulthood. One such study found that when children perceived their parents to be rejecting, they later developed a fear of rejection, which lead to insecurity of the stability in future romantic relationships (Rohner, 2008). However, when children perceived parents to be accepting, they in turn become accepting in their relationships and had more secure attachments. This study shows that parental acceptance is

particularly crucial for adolescents and young adults' health and well-being, with potential long-term effects on their romantic relationships. It may be that while family support is an anchor for younger individuals, perceived acceptance from romantic partners may become more important for well-being for older adults, but this has yet to be examined.

2.2.2.3 Stigma and Perspective-Taking

Perspective-taking has consistently been shown to be important for reducing stigma. For example, one study found that perspective-taking mediated the effect of social acceptance on a stigmatised individual, whether a single-mother (lower stigma) or someone with a history of substance use (higher stigma) was portrayed. When participants understood the thoughts and emotions of these individuals, they related more to that person, reducing out-group perceptions (Chung & Slater, 2013). Like this study, most of the perspective-taking and stigma literature focuses on how taking another's perspective can correct negative attitudes or biases toward others (e.g., Shih, Wang, Trahan, & Stotzer, 2009). The potential benefits of having one's perspective taken is less well researched; indeed few studies test perceived perspective-taking in the context of stigma. One paper did find that perceiving one's perspective has been successfully taken results in many of the same positive outcomes as taking the perspective of another individual (Goldstein et al., 2014). In six studies a story-sharing format was used, with participants instructed to take the person's perspective (vs. control conditions). When the person's perspective was understood to be successfully taken, results consistently showed positive outcomes for both the perceiver and the one being perceived. These outcomes included liking the person (relationship-enhancing), greater empathy, and greater prosocial behaviour toward the person. In sum, not only does taking another's perspective encourage positive outcomes, but also feeling understood by others. The benefits of feeling that one's perspective has been taken has yet to be researched in an LGB sample and is therefore one of the goals of the thesis.

2.3 Summary

In this chapter I identified two disadvantaged groups which may receive less autonomy support and experience less autonomy need satisfaction: women and LGB individuals. Women's oppression takes the form of sexism, prejudice and discrimination which varies in severity across cultures, but is still prevalent in Western societies. This oppression can be directly or indirectly experienced, with research showing that in either case autonomy satisfaction is negatively affected and with worse well-being outcomes occurring as a result. Research into women's oppression focuses on how women internalise oppression, which may lead to women endorsing oppressive norms (as opposed to fighting against them). Less research has been done on how women externally react to oppression, a process which may be beneficial to help restore thwarted autonomy, which will be examined in the current thesis.

For LGB individuals, oppression takes the form of heterosexism, which varies in severity across societies and is actively present in Western cultures. Minority orientation is a hidden stigma that individuals may choose to keep hidden or come out with. Research has shown that concealing an integral identity, like one's orientation, leads to worse well-being. LGB individuals have also been shown to be more likely to come out in autonomy-supportive environments, with positive outcomes for doing so. The stress LGB individuals experience, a result of the heterosexism and stigma present in society, has been shown to lead to worse mental and physical well-being. As a result, LGB individuals have worse well-being outcomes overall when compared to heterosexual populations (resulting health disparities). From this research on relational stress, I posited that autonomy support from close others may be the key in decreasing these LGB health disparities. The focus on close others is due to the importance of coming out in supportive environments, as described above.

As reviewed in Chapter 1, there is little research into the specific components of autonomy support and their benefits. I further expanded the assessment of these components by examining how each component of autonomy support relates to

the well-being of stigmatised individuals, and LGB individuals more specifically where research was available. From this, I observed how self-expression and the related concepts of authenticity and authentic expression may be necessary for psychological well-being, but these concepts have yet to be explored. No research has deconstructed the constructs of intrapersonal and interpersonal authenticity (i.e., how authentic one feels versus how authentic one behaves) and how these relate to well-being. Indeed, there has yet to be a measure of authentic expression to be used to examine this relationship. One goal of the thesis is to create a measure of authentic and inauthentic expressions and investigate their relationship to intrapersonal authenticity, autonomy, and well-being. Additionally, perceived acceptance and perceived perspective-taking are both also shown to be essential for quality autonomy support for stigmatised individuals. To date, no research has incorporated these different aspects of autonomy support within LGB samples. There may be important aspects of autonomy support not yet considered, and some types of autonomy support may be more important for well-being than others. Thus, another goal of this thesis is to research aspects of autonomy support within LGB samples and determine which may be especially needed to improve minority well-being. To do this, a scale to measure LGB autonomy support must be developed, instead of using scales which have been developed by and for heteronormative samples. With such a scale, aspects of autonomy support and how they relate to well-being can be examined in this population.

Table 1 - Aims of the Studies in this Thesis

Chapter title	Gaps in current literature	Purpose of study
<p>Chapter 3 Self-Expression can be Authentic or Inauthentic, with Differential Outcomes for Well-Being: Development of the Authentic and Inauthentic Expression Scale (AIES)</p>	<ul style="list-style-type: none"> • Little research on concepts of intrapersonal versus interpersonal authenticity • No measure exists for authentic/inauthentic expressions 	<ul style="list-style-type: none"> • To develop and validate a measure of authentic/inauthentic self-expression • To use this measure to examine the relationship between feeling authentic and expressing authentically, and how each relates to well-being
<p>Chapter 4 Women’s Self-Expression as a Tool of Reactance Against Oppression</p>	<ul style="list-style-type: none"> • Past literature has yet to examine the external behaviours/reactions of women who are in the presence of oppression 	<ul style="list-style-type: none"> • To investigate whether an increase in self-expression would occur in women who witness the censoring of other women • To further examine if this observed effect is a form of reactance
<p>Chapter 5 Long-Term Mental Health Correlates of Autonomy-supportive Relationships in an LGB Sample</p>	<ul style="list-style-type: none"> • Research into the benefits of autonomy has yet to examine the specific components that make up quality autonomy support • Certain autonomy support components, and supportive relationships, may be especially important for LGB individual’s well-being and may have long-term effects 	<ul style="list-style-type: none"> • Using a large pre-existing dataset, assess the importance of two qualities of autonomy support (self-expression and perspective-taking) in close relationships • Further assess whether the impact of these autonomy-support components and supportive relationships has a long-term impact
<p>Chapter 6 “They Didn’t Treat Me Any Differently”: A Mixed Methods Study on Autonomy Support Components in an LGBT+ Sample</p>	<ul style="list-style-type: none"> • Further research is needed into the components of autonomy support in LGB close relationship contexts 	<ul style="list-style-type: none"> • To develop and test a measure of autonomy support for LGBT+ individuals specifically • Using this measure, to expand on the findings from Chapter 5: further examine autonomy support components and their significance within close relationships

Chapter 3

Self-Expression can be Authentic or Inauthentic, with Differential Outcomes for Well-Being: Development of the Authentic and Inauthentic Expression Scale (AIES)

Self-expression is an aspect of autonomy that may or may not be supported by others. Authentically expressing oneself may be especially important for well-being, but opportunities for daily authentic expression could be limited. As a result, one may decide to inauthentically express themselves instead. In a series of studies, I examine the relationship between intrapersonal authenticity (feeling authentic), interpersonal authenticity (authentic/inauthentic external expressions), autonomy satisfaction, and well-being. A new scale to measure authentic and inauthentic expressions is created and tested empirically, and implications of authentic expression and autonomy satisfaction are discussed.

3.1 An introduction to four studies which explore feelings of authenticity and authentic and inauthentic expressions.

3.2 Describes Study 1 in depth, the initial item selection study for a new scale of authentic and inauthentic self-expression.

3.3 Describes Study 2 in depth, where the finalised scale is tested through a confirmatory factor analysis.

3.4 Describes Study 3 in depth, which examines the scale's concurrent validity.

3.5 Describes Study 4 in depth, a diary study which tests the scale and potential outcomes over a period of seven days.

Lastly, Section 3.6 recaps the findings of the four studies with a discussion of implications and limitations regarding self-expression, authenticity, and autonomy.

3.1 Introduction to Studies 1-4

Individuals share their thoughts and feelings daily and across numerous social contexts (Itzchakov et al., 2018). When people self-express, they allow others a glimpse into their personalities, preferences, personal styles of interacting, and ways of thinking. Doing so may require trusting others with information about oneself with potential for judgment. It can aid or prevent relationship development, which consequently makes expressing oneself to others risky. Yet, self-expression is understood as an important way for individuals to form meaningful relationships (Graham et al., 2008) and for healthy psychological development (or for health and well-being; Clark & Finkel, 2004). As discussed in Chapter 1, the benefits of self-expression may only accrue when the expression is authentic (e.g., Weinstein, 2014). Some individuals may not be willing or able to take the risk of allowing others to see their true – authentic – self. They may still express thoughts and ideas, but in ways that are ingenuine and aimed at pleasing or satisfying others. Others may express themselves authentically regardless of the social situation or consequences. In this first series of studies, I explore this distinction to link two somewhat disparate literatures: a first concerning authenticity, typically an intrapersonal experience (e.g., Sedikides et al., 2017), and a second concerning expression, typically an interpersonal experience (Tobin, 1995).

As considered in Chapter 1, past research has distinguished authentic self-expression from other forms of self-expression that are less authentic. The “true self”, or authentic self, is expressed when an individual behaves in ways consistent with their inner self (McKenna et al., 2002). This distinction recognises that authentic expression may be both risky and meaningful; yet such authentic self-expression does not have to be unusual – it can be a daily, even consistent, occurrence within interpersonal interactions. This type of authentic expression is best understood in terms of how closely to the self one’s thoughts, feelings, and values are expressed. This focus on self-congruence is derived from the literature on authentic experience, which highlights the importance of self-congruence in authenticity (e.g., Kraus et al., 2011), but does not differentiate the feeling of

being the 'real me' – an internal experience, and the expression of the 'real me' – an interpersonal experience and outward behaviour. This outward behaviour should be closely linked to the internal process and operate through a positive feedback loop whereby an individual expresses themselves more authentically when they feel more authentic internally. Previous research on authenticity focused on internal feelings of being authentic or inauthentic, rather than external expressions. This is reflected in one of the most widely used measures of authenticity (Wood, Linley, Maltby, Baliousis, & Joseph, 2008). Another widely used measure of authenticity is the Kernis-Goldman Authenticity Inventory (Kernis & Goldman, 2006), which, although it focuses on internal processes, also includes a behavioural scale dimension. These behavioural authenticity items measure one's general tendency to behave in accordance with one's beliefs (e.g., "I find that my behaviour typically expresses my values"). Expressing inauthentically, however, involves behaviours that are not natural, or necessarily how one would want to express, to avoid relational fallout (Leary, 2003; Tesser, 2002). This inauthentic expression may result in negative psychological consequences since these individuals feel they must express themselves inauthentically to preserve the relationship. Expressing oneself inauthentically may also mean that the individual perceives that they would not be valued for who they are if were they to express their true self (Leary, 2003). The resulting stress and lack of fulfilment that occurs when one expresses inauthentically leads to psychological distress, for example in terms of more anxiety (Cheng, 2004) or depression (Erickson & Wharton, 1997).

Furthermore, following from SDT, authentic, but not inauthentic, expression should promote basic psychological need satisfaction for autonomy, relatedness, and competence. Of the three psychological needs, the link between autonomy need satisfaction and authentic expression has the most evidence in the literature. For example, a primary way to support autonomy is to encourage opportunities for self-expression. Feeling able to express oneself honestly and fully is an important way that individuals can feel they are being themselves (Lynch et al., 2009; Ryan & Deci, 2017). Support for self-expression is not only a way of supporting autonomy, but also important to social support more generally,

as self-expression may in part be determined by the reactions of others to meaningful self-expressions in the past (Tobin, 1995). Therefore, authentic expression may also support relatedness, since verbal expressions are fundamentally a relational experience that can foster closeness in the best circumstances (e.g., Brunell, Pilkington, & Webster, 2007). Previous research in SDT has found that the need for relatedness leads people to actively pursue quality, autonomy-supportive relationships (Deci & Ryan, 2014). Only these types of quality relationships can fully satisfy the need for relatedness, and these relationships consist of both partners providing and supporting each other's autonomy (such as through allowing for authentic self-expression; Deci & Ryan, 2014). Finally, I also test the idea that authentic expression promotes competence need satisfaction. Indeed, the ability to express oneself accurately may be associated with self-efficacy, as previous studies have found that autonomy satisfaction leads to greater self-efficacy (e.g., Van Mierlo, Rutte, Vermunt, Kompier, & Doorewaard, 2006). Research has also shown that the need for competence can only be satisfied when the person themselves has initiated and willingly undertaken the actions. This means that the competence need may be satisfied incidentally when the autonomy need is satisfied (e.g., Ryan & Deci, 2006; Ryan & Deci, 2017).

3.1.1 Current Studies and Hypotheses

Like other behaviours, authentic and inauthentic self-expression may differ across contexts (state-dependent) or may be characterised as a more stable dispositional tendency (individual-level; e.g., Cook, Schmiede, Starr, Carrington, & Bradley-Springer, 2017). As a dispositional tendency, individuals may select to express themselves authentically or inauthentically across contexts. As a state, it may indeed be that certain contexts account for substantial variability in whether expression is more authentic or inauthentic. Variability at both state and dispositional levels has been observed in the study of intrapersonal authenticity (e.g., Lenton, Bruder, Slabu, & Sedikides, 2013; Kernis & Goldman, 2006). The distinction is important because substantial variability at the dispositional level suggests that future avenues of research may be well-justified in investigating developmental pathways that give way to authentic or inauthentic expression,

whereas substantial variability at the contextual level suggests influence by others with whom one is interacting motivate authentic expression in the moment. Studies 1 and 2 focus on scale development to measure authentic versus inauthentic expression. Exploratory and confirmatory factor analyses were used to test this scale. In Study 3, concurrent validity of the scale was tested through regression analyses. I hypothesised I would find authentic expression to relate to higher well-being and need satisfaction, while inauthentic would relate to worse well-being and need satisfaction. In Study 4, a diary study design was utilised to further understand how *interpersonal* expressions of the self (authentic/inauthentic expression) relates to *intrapersonal* feelings of authenticity at the daily level (context-specific) and across seven days (dispositional). No a priori hypothesis are made about how these constructs may relate, but this will be tested through mediation analyses. Study 4 also tests the extent to which authentic expression is contextual or dispositional.

3.2 Study 1

3.2.1 Participants and Procedure

Participants were 402 adults (53% identified as women) recruited online through Prolific Academic to take part in a four-minute survey “regarding expression frequency”. Most participants identified as White (83%) and were from the United States (99.5%). The ages of participants were between 18 and 65 years old ($M = 37.51$ years, $SD = 12.75$). The survey consisted of 60 self-expression items developed after reviewing prior scales and the literature on authenticity and self-expression/self-censorship (e.g., Hayes et al., 2005; Kernis & Goldman, 2006; Wood et al., 2008). Thirty items each were developed to reflect authentic and inauthentic expression, respectively (see Appendix A). Items were presented in a random order with the following prompt: “Below is a collection of statements about your general experiences. Please indicate how true each statement is of your experiences overall. Remember that there are no right or wrong answers. Please answer according to what really reflects your experience rather than what you think your experience should be.” Responses were given on a Likert-type scale ranging from 1 (*Hardly ever true of me*) to 6 (*Almost always true of me*).

Additionally, two attention-check items were included within the survey items (e.g., “Please select 4 for this question as an attention check”).

3.2.2 Results

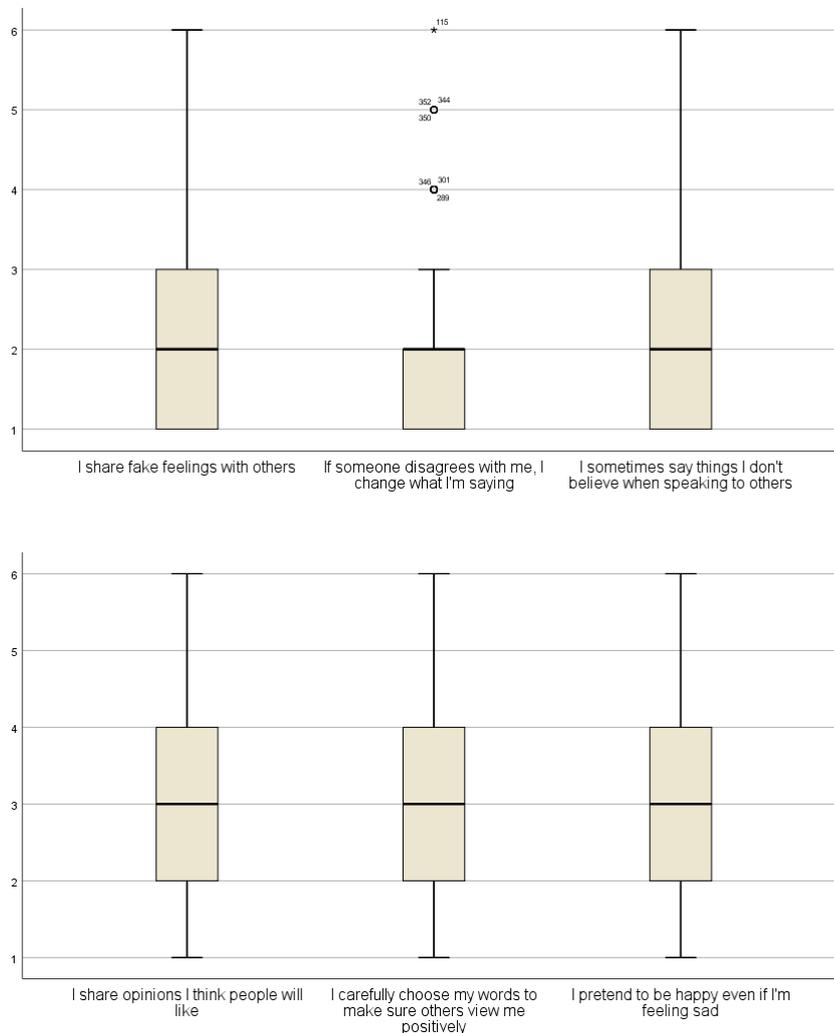
Four participants failed the attention-check items and were removed from analyses, leaving a total of 398 participants. Items were first tested for an appropriate amount of variability (Clark & Watson, 1995). The 60 initial items were subjected to descriptive analyses, and items that were skewed (skew $>\pm 1$) were excluded from the item pool. A total of 9 items were skewed above or below 1, all of which were part of the inauthentic expression factor. See Figure 2 for example distributions of those items that were removed for skew or retained for further consideration. After removing these skewed items, a total of 51 items remained.

Exploratory factor analyses (EFA) were then conducted with the remaining 51 items, using best practices of participant to item ratio of at least 5:1 (Gorsuch, 1988). In the present study the ratio was close to around 8:1. Promax-rotation was used to account for dependence between the two subscales, authentic and inauthentic expression (Costello & Osborne, 2005). From this EFA, I selected items that consistently loaded onto their respective subscale and used strict criteria to identify appropriate items. To avoid cross-loading, only items that loaded at .70 or above onto one factor (Kline, 1994), and did not load at .40 or above on a second factor, were retained. Thirty items were removed for loading below the .70 threshold (e.g., the item “I can express myself even if someone disagrees with me” loaded .51 for inauthentic expression). None of the items that loaded at .70 or above for their factor loaded at .40 or above on the other factor. Twenty-one items met my strict criteria: 10 items representing authentic expression and 11 inauthentic expression items.

I then ran a second EFA using the remaining 21 items and found that these items retained a two-factor structure. All items, except one, loaded above .70 and did not cross-load above .40 (see Table 1). This item - I pretend to be happy even if

I'm feeling sad - loaded at .54. Of the final 20 items, 10 authentic expression items achieved a higher eigenvalue than the 10 inauthentic expression items: Authentic expression (eigenvalue = 9.35, accounted for 44.54% of the variance in the items) and inauthentic expression (eigenvalue = 4.18, 19.92% of the variance). An internal reliability analysis showed exceptionally good reliabilities for both authentic ($\alpha = .96$) and inauthentic expression subscales ($\alpha = .92$). A correlation was also run between the two factors and revealed a medium (Cohen, 1992) and statistically significant negative correlation $r(397) = -.39, p < .001$, indicating these subscales tap two related, yet distinct constructs.

Figure 2 - Study 1 Example Item Distributions



Note. The top three items provide examples of rejected items with poor distributions, whereas the three bottom items offer examples of retained items with adequate distributions.

3.2.3 Conclusions

In Study 1 I reduced an initial 60-item pool of items that reflect both authentic and inauthentic expression to 20 items with scores that were normally distributed, and which best reflected authentic and inauthentic expression. Exploratory factor analysis revealed that these 20 items loaded onto their respective factors highly and did not cross-load. The two resulting subscales showed good internal reliability and were moderately negatively correlated with one another.

Table 2 - Study 1 Exploratory Factor Analysis Kept Items

Construct/Items	Factor 1	Factor 2	α
Authentic Expression			.96
I express my real thoughts and feeling to others	.90	.06	
I express my true self to others	.90	-.12	
I share my true feelings with others	.90	.09	
I express my real thoughts and feelings	.86	-.08	
I share the things I think and feel	.86	.06	
I express my true self when I'm with others	.85	-.12	
I express myself to others around me	.85	-.11	
I think it's important to express my real thoughts and feelings to others	.84	.10	
I can be who I am with others	.77	-.11	
The things I say to others reflect exactly who I am	.74	-.08	
Inauthentic Expression			.92
I say the things I think people want to hear	-.08	.82	
I try to express the emotions people want to see	-.04	.80	
I like to think of myself as a people pleaser, even if it's not really 'me'	.02	.79	
Others' views of me changes how I express myself	-.02	.78	
I express myself a certain way so that others will like me	.01	.78	
What others think of what I say is more important than what I think	.07	.77	
I carefully choose my words to make sure others view me positively	.11	.75	
If I think others won't agree with what I say, I say what they want to hear	-.12	.74	
I try to express the 'right' emotions to other people	.02	.73	
I share opinions I think people will like	.16	.73	
I pretend to be happy even if I'm feeling sad	-.15	.54	

3.3 Study 2

Though numerous behaviours can represent forms of expression, verbal expression conveyed through speech reflects in-the-moment intentional decisions about how to communicate thoughts and feelings (Lindquist, Barrett, Bliss-Moreau, & Russell, 2006). Studies that have put their focus on verbal forms of self-expression have shown that this type of self-expression is important for mental health outcomes such as lowered social anxiety and greater self-awareness (Itzchakov et al., 2018). A goal of Study 2 was to select a final set of items to closely represent the authentic and inauthentic expression, and to conduct a confirmatory factor analysis (Fokkema & Greiff, 2017) to test the internal coherence of the measure once again. Shifting from Study 1 to Study 2, I retained items that referred to intentional, verbal behaviour. This change was made to further narrow the scope of the scale and increase conceptual clarity of the work; highlighting this prominent way by which people express themselves (e.g., Rime, Corsini, & Herbette, 2002), so that the scale is useful in future tests of interpersonal exchanges and conversations, for example in clinical contexts (e.g., Pawelczyk, 2011).

Bearing in mind the shift to verbal self-expression, I also examined the relation of these two factors to the similar, yet distinct construct of self-censorship. Self-censorship consists of inhibited expression, or lack of expression, in certain situations or contexts (Hayes et al., 2005). Conceptually, self-censorship should differ from inauthentic expression, as inauthentic expressions still involve actively expressing, but in an inauthentic manner. While inauthentic expression may include passive self-censorship, self-censorship does not cover all forms of inauthenticity. Thus, a measure of self-censorship was added to this study as a measure of discriminant validity. This ensures that inauthentic self-expression was not effectively a form of self-censorship, but rather was still more closely tied to the broader underlying construct of expressing oneself.

3.3.1 Participants and Procedure

Four-hundred and three participants (53.6% identified as women) were recruited online using Prolific Academic to take part in a four-minute survey “regarding expression frequency”. Participants from the previous study could not participate in this study. Participants mostly identified as White (73.2%) and were from the United States (99.3%). Participants’ ages ranged between 18 and 65 years old ($M = 34.26$, $SD = 12.21$). The survey consisted of the 20 authentic/inauthentic expression items retained from Study 1, presented to participants with the same prompt and scale anchors. Additionally, the 8-item Willingness to Self-Censor Scale (Hayes et al., 2005) was included to assess the discriminant validity of inauthentic and authentic self-expression from this conceptually related construct. The Willingness to Self-Censor scale assesses thoughts, feelings, and past behaviour related to self-censorship (e.g., “It is difficult for me to express my opinion if I think others won’t agree with what I say”) on a five-point scale from ‘*Strongly disagree*’ to ‘*Strongly agree*’. The two attention-check items from Study 1 were also used to identify and remove inattentive participants.

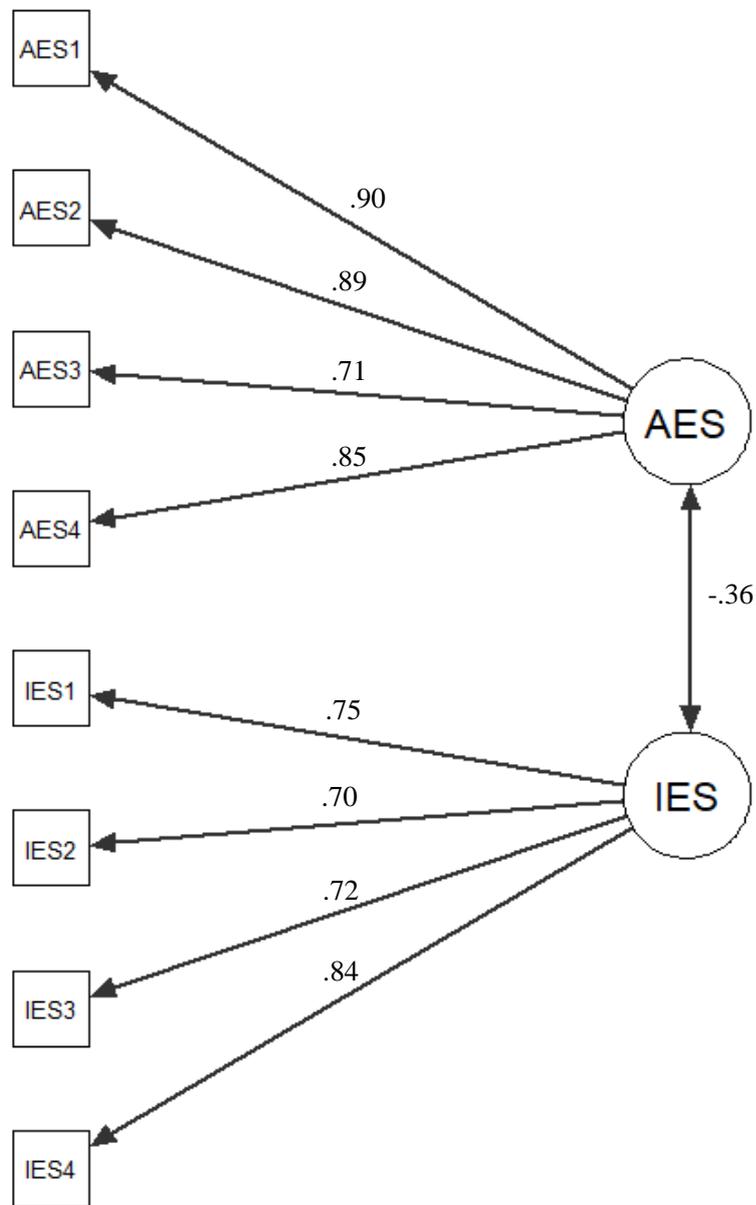
3.3.2 Results

Four participants failed the attention check items and were removed from analysis (final $n = 399$). The remaining participants provided data for all 20 items, but in line with the focus on verbal self-expression, 12 items were removed that were conceptually distant and overly redundant in the specific words that they used to operationalize the constructs (Appendix B notes the 12 items which were dropped). These decisions meant a move towards a stronger conceptualization of outward authentic and inauthentic behaviour in the form of verbalizations. For example, the item “I can be who I am with others” was removed since it did not represent verbal communications and could be taken as more of an internal form of authenticity. An 8-item scale was developed through this process, consisting of four authentic and four inauthentic expression items. Authentic Expression items consisted of “I share the things I think and feel”, “I express my real thoughts and feelings to others”, “I share my true feelings with others”, and “The things I say to others reflect exactly who I am”. Inauthentic Expression items consisted of “I share opinions I think people will like”, “I carefully choose my words to make sure

others view me positively”, “I say the things I think people want to hear”, and “If I think others won’t agree with what I say, I say what they want to hear”.

With these eight items, a confirmatory factor analysis (CFA) was performed to test the proposed two-factor model. The CFA was run using the program Jamovi, a statistical program built on R (The Jamovi Project, 2020). Standardized factor loadings ranged from .71–.90 for authentic expression and from .70–.84 for inauthentic expression, all $ps < .001$ (see Figure 3). Model fit was assessed for the proposed scale model using common fit statistics and recommended cut-offs taken from Hooper et al. (2008). The Comparative Fit Index (CFI) of .96 was well above the .90 minimum, and the Standardized Root Mean Square Residual (SRMR) of .06, was well below the .08 maximum. The Tucker Lewis Index (TLI) was .94, meaning the model improves the fit by 94% relative to the null, just shy of the usual 95% cut-off. Additionally, the Root Mean-Square Error of Approximation (RMSEA) was found to be .09, 90% CI [.08, .11], slightly higher than the usual .08 threshold and indicating mediocre fit, but this measure has been shown to be sensitive to sample size and degrees of freedom ($df = 19$; Kenny et al., 2015). Together, these results suggest that the model reasonably fits the data, especially on indicators that are not sensitive to sample size. This provides support for the two-factor structure of the scale. A one-factor structure was also tested but was found to have worse factor loadings and fit (see Appendix C).

Figure 3 - Study 2 Confirmatory Factor Analysis



Note. Factor loadings and covariances are standardized estimates.

Lastly, I tested the discriminant validity of the inauthentic and authentic expression factors, comparing each to the conceptually related construct of self-censorship. Correlating both the authentic expression items and inauthentic expression subscales with the Willingness to Self-Censor Scale showed that each shared 30% of the variance with self-censorship. These correlations were

not substantial enough to suggest the three constructs are isomorphic with one another (Cohen, 1992). Furthermore, all items from the Self-Censor Scale were found to load onto a third factor when items were placed in a factor analysis with the 8-item scale (items loaded at or above .69; with no cross-loading higher than .16).

3.3.3 Conclusions

Study 2 identified a final set of items that assessed, coherently and independently, both authentic and inauthentic forms of verbal self-expression. Confirmatory factor analysis provided strong support for the two-factor structure of the scale. A potentially conceptually relevant construct - self-censorship - was included in this study to ensure my scale measured the extent to which verbal expressions that are conveyed are authentic and inauthentic, and not whether verbal expressions are altogether concealed (i.e., censored). To clarify, I identified independent variance distinguishing the *amount* of self-expression (i.e., self-censorship) and the *type* of self-expression (i.e., authentic). Results also showed that items from my expression scale loaded on two independent factors, with self-censorship items on a third factor.

3.4 Study 3

Following item selection and CFA in Study 2, I retained eight items of the newly developed Authentic and Inauthentic Expression Scale (AIES), which consisted of two subscales: An Authentic Expression Scale (AES) and an Inauthentic Expression Scale (IES). In Study 3, I tested the AIES' concurrent validity using regression analyses; expecting the AES to predict psychological need satisfaction and enhanced well-being, as well as greater well-being and the IES to negatively predict need satisfaction and worse well-being.

3.4.1 Participants and Procedure

One-hundred eighty-two first year university students in the United Kingdom took part in this study as part of a larger survey which consisted of multiple studies. Surveys were completed online in an in-person lab setting ensuring full attention was given to the study. Students mostly identified as women (80.5%) and White

(76.9%). The 8-item AIES was taken by participants with the same prompt and scale anchors as the previous studies (AES, $\alpha = .86$; IES, $\alpha = .79$). Need satisfaction was measured using the 9-item Basic Psychological Needs Satisfaction Scale (BPNS; Deci & Ryan, 2000; Gagné, 2003). The BPNS measures the satisfaction of the three basic psychological needs in the past month. Items were asked with a 7-point scale ranging from 'Not at all true' to 'Very true'. Three items represented each need: autonomy (e.g., "I felt free to be who I am"; $\alpha = .60$), competence (e.g., "I felt like a competent person"; $\alpha = .76$), and relatedness (e.g., "I felt loved and cared about"; $\alpha = .75$). Each subscale had one reverse-scored item, with higher scores exemplifying greater need satisfaction. All BPNS items together created a total need satisfaction reliability of $\alpha = .85$. Participants then completed the 20-item Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), which presented participants with 10 positive emotions (e.g., "Proud"), and 10 negative emotions (e.g., "Ashamed") experienced in the past month. Participants responded to each emotion on a 9-point scale from 'Not at all' to 'Extremely'. Positive and negative emotions were computed into separate composites, with higher scores representing more positive ($\alpha = .85$) or more negative ($\alpha = .84$) emotions experienced. Finally, participants completed the widely used 10-item Rosenberg Self-Esteem scale (Rosenberg, 1965), which measured their general self-esteem in the past month (e.g., "I took a positive attitude toward myself") on a 4-point scale from 'Strongly disagree' to 'Strongly agree'. Four of the ten items were reverse scored so that higher scores represented higher self-esteem ($\alpha = .87$). Although the order of the scales were uniform across participants, scale items were randomized within their scales.

3.4.2 Results

Regression analyses were used to test the correlates of the two AIES subscales (entered simultaneously) on need satisfaction and well-being (see also Pearson correlations underlining these findings in Table 3). Authentic expression was found to significantly predict all outcome variables: positively for autonomy satisfaction ($B = .43$, $t(181) = 6.56$, $p < .001$, 95% CI [.32, .60]), competence satisfaction ($B = .31$, $t(181) = 4.37$, $p < .001$, 95% CI [.21, .56]), relatedness

satisfaction ($B = .42$, $t(181) = 6.12$, $p < .001$, 95% CI [.41, .79]), positive affect ($B = .31$, $t(181) = 4.31$, $p < .001$, 95% CI [.19, .52]), and self-esteem ($B = .35$, $t(181) = 4.98$, $p < .001$, 95% CI [.11, .25]), and negatively predicted negative affect ($B = -.20$, $t(181) = -2.79$, $p = .006$, 95% CI [-.50, -.09]). Inauthentic expression predicted greater negative affect ($B = .19$, $t(181) = 2.57$, $p = .011$, 95% CI [.07, .50]) and less autonomy satisfaction ($B = -.18$, $t(181) = -2.44$, $p = .016$, 95% CI [-.33, -.04]). The IES did not relate to competence satisfaction ($B = -.04$, $t(181) = -.54$, $p = .593$, 95% CI [-.24, .14]), relatedness ($B = -.11$, $t(181) = -1.55$, $p = .123$, 95% CI [-.37, .04]), positive affect ($B = -.07$, $t(181) = -.81$, $p = .422$, 95% CI [.42, -.25]), or self-esteem ($B = -.05$, $t(181) = -.65$, $p = .515$, 95% CI [-.10, .05]).

Table 3 - Study 3 Correlations

Constructs	1	2	3	4	5	6	7	8
1. AES	-							
2. IES	-.16*	-						
3. Autonomy	.46**	-.23**	-					
4. Competence	.32**	-.09	.56**	-				
5. Relatedness	.43**	-.17*	.62**	.56**	-			
6. Positive Affect	.32**	-.11	.41**	.46**	.42**	-		
7. Negative Affect	-.23**	.22**	-.48**	-.55**	-.42**	-.22**	-	
8. Self-Esteem	.36**	-.10	.57**	.71**	.57**	.47**	-.59**	-

Note. * $p < .05$, ** $p < .01$

3.4.3 Conclusions

In Study 3 I tested the concurrent ability of the AIES' two subscales. As expected, authentic expression related to more positive outcomes (need satisfaction, positive affect, and self-esteem) and less negative affect. Inauthentic expression was associated with autonomy need satisfaction and negative affect, but not to the other outcomes as anticipated. This suggests that authentic expression consistently relates to well-being and need satisfaction, while inauthentic expression might be more nuanced.

3.5 Study 4

In a final study, I tested the AIES further, using a diary study design. With this study I examined the stability of the construct in individuals: I explored whether authentic and self-authentic is best understood as a dispositional measure stable in individuals across time, or a situationally specific measure that varies across domains and interpersonal experiences. Further, I examined whether the internal process of authenticity (intrapersonal authenticity) or the interpersonal process of authentic expressions (AIES) explains the effect on well-being using multilevel modelling. Thus, I ran models of intrapersonal authenticity mediating the effect between authentic and inauthentic expression on well-being and need satisfaction outcomes. I also tested the model of intrapersonal authenticity driving the effect on the outcome variables, with authentic and inauthentic expression mediating.

3.5.1 Participants and Procedure

One-hundred and six university students (86.6% identified as women) signed up to participate in the diary study. Power analysis was not conducted for this study, but we followed recent recommendations to recruit as many participants as resources allowed (Lakens, 2021); in this case we recruited as many participants as would sign up to participate. Participants were aged 18-39 ($M = 19.17$, $SD = 2.57$), 84.9% were British. Diary data were collected for seven consecutive days using participant's email address to both distribute the survey as well as link the participant's datapoints. Surveys were sent out at the end of the day so that

scales could measure experiences for the current day. After data collection was completed, each participant was assigned a number ID and all personal data were deleted from the datasets.

Measures from Study 3 were used in this diary study, this time prompting responses about individuals' experiences for the day. Participants responded to the 8-item AIES (AES, $\alpha = .90$; IES, $\alpha = .87$), as well as the Rosenberg Self-Esteem scale ($\alpha = .93$), and the BPNS (autonomy, $\alpha = .73$; competence, $\alpha = .86$; relatedness $\alpha = .82$; total need satisfaction, $\alpha = .91$). To reduce participant burden, new scales were used to assess positive and negative affect, and a brief measure was added to assess intrapersonal authenticity. Affect was measured with a 9-item mood scale previously used in diary study contexts (Emmons, 1991; Reis, et al., 2000). Four adjectives represented positive emotions (e.g., "Joyful") and 5 represented negative emotions (e.g., "Frustrated"). Responses were given on a 7-point scale ranging from '*Not at all*' to '*Extremely*' in terms of the extent to which participants had experienced each emotion during that day (positive, $\alpha = .96$; negative $\alpha = .86$). State-level intrapersonal authenticity was measured using a 3-item scale previously used within a diary study design (Fleeson & Wilt, 2010). These items were asked in terms of how participants felt that day on a 7-point scale from '*Does not describe me at all*' to '*Describes me very well*'. Items included: "I wore a number of social masks" (reverse-scored), "I was in touch with my true self" and "I felt like I was really being me" ($\alpha = .87$). The order of scales remained the same across participants, but scale items were randomized within their scales.

3.5.2 Results

In multilevel structural equation modelling (SEM), variance is divided into within-person and between-person elements, allowing us to see how much variance is explained at the daily level (Level 1) as well as at the mean level across the diary period (Level 2). Multilevel models are useful for diary studies due to their accommodation of nested data and handling of missing data (e.g., Bolger & Shrout, 2007; Bryk & Raudenbush, 1992). In the present study, data were missing due to participants not taking the survey all 7 days—for the 106

participants, there was an average of 5.76 diary entries. Forty-three participants (40.6%) responded to questions on all seven days, with 66 reporting on 6 days (31.1%), 13 participants responding for 5 days (12.3%), and 17 participants (16%) responded on 4 or fewer days

3.5.2.1 Direct Effects

Hierarchical linear modelling (HLM) software (HLM 8; Raudenbush, Bryk, & Congdon, 2019) was first used to analyse direct effects of AIES and intrapersonal authenticity on the well-being and need satisfaction outcomes. With HLM analyses, the interdependence of daily data is accounted for, as well as individual differences, while simultaneously measuring daily relations (Raudenbush et al., 2019). Direct effects of AIES and intrapersonal authenticity on the need satisfaction and well-being outcomes were analysed separately, controlling for the outcome variable from the previous day, as well as average levels of the three predictors at Level 2. Results of these analyses are presented in Table 4. At Levels 1 (the daily level) and 2 (across all days) both the AES and intrapersonal authenticity positively related to all positive outcomes, but negatively related to negative affect. The AES was also positively related to intrapersonal authenticity at both levels. Conversely, the IES was more nuanced in what it predicted. At both levels, the IES negatively related to intrapersonal authenticity and autonomy satisfaction and positively related to negative affect. At Level 1, the IES was negatively related to competence satisfaction and self-esteem, but these effects were not present at Level 2. Additionally, at Level 2, the IES was positively related to positive affect, but at Level 1 this effect did not exist. The IES did not relate to relatedness satisfaction at either level.

Table 4 - Study 4 Direct effects of AIES and Intrapersonal Authenticity on outcome variables at Levels 1 and 2

Outcome	AES				IES				Authenticity			
	Level 1: Daily level		Level 2: Across 7 days		Level 1: Daily level		Level 2: Across 7 days		Level 1: Daily level		Level 2: Across 7 days	
	<i>B(t)</i>	<i>p</i>	<i>B(t)</i>	<i>p</i>	<i>B(t)</i>	<i>p</i>	<i>B(t)</i>	<i>p</i>	<i>B(t)</i>	<i>p</i>	<i>B(t)</i>	<i>p</i>
Authenticity	.68(10.77)	.001	1.05(16.41)	.001	-.36(-4.36)	.001	-.16(-2.01)	.048	-	-	-	-
Autonomy	.42(8.00)	.001	.74(10.96)	.001	-.30(-4.64)	.001	-.22(-2.95)	.004	.50(12.01)	.001	.69(14.67)	.001
Competence	.45(8.23)	.001	.93(7.32)	.001	-.21(-2.64)	.009	.05(.40)	.693	.46(8.17)	.001	.83(11.17)	.001
Relatedness	.67(11.35)	.001	.98(9.50)	.001	-.10(-1.19)	.236	-.03(-.23)	.820	.59(8.11)	.001	.82(12.24)	.001
Positive Affect	.62(7.92)	.001	1.13(10.95)	.001	-.12(-1.37)	.170	.27(2.68)	.009	.66(8.10)	.001	.86(11.65)	.001
Negative Affect	-.26(-3.42)	.001	-.48(-5.07)	.001	.26(3.19)	.002	.22(2.23)	.028	-.37(-5.05)	.001	-.54(-9.21)	.001
Self-Esteem	.16(6.35)	.001	.48(8.30)	.001	-.08(-2.41)	.016	.02(.43)	.671	.18(7.14)	.001	.43(12.54)	.001

Note. Authenticity analyses were conducted separately from AES and IES. Previous day's outcome was controlled for in all analyses as well as average levels of the three predictors at Level 2. Values are final estimations of fixed effects with robust standard errors.

3.5.2.2 Multilevel Mediation

Mplus software (Version 7.4; Muthén & Muthén, 1998-2014) was used to test multilevel mediation path models. Using multilevel mediation modelling, I examined whether intrapersonal authenticity mediated the effect between the AES and IES and the affected need satisfaction and well-being outcomes. As with the direct effects, previous day's outcome was controlled for in each analysis.

Autonomy Satisfaction. Level 1 indirect analyses revealed that the positive effect of the AES and the negative effect of the IES on autonomy were both mediated by intrapersonal authenticity ($B = .16$, $SE = .06$, $p = .007$, 95% CI = [0.06, 0.25]) and ($B = -.11$, $SE = .05$, $p = .053$, 95% CI = [-0.20, -0.02]), respectively. Conversely, Level 2 analyses did not show mediation effects for either (AES: $B = .12$, $SE = .11$, $p = .273$, 95% CI = [-0.06, 0.29]; IES: $B = -.23$, $SE = .18$, $p = .205$, 95% CI = [-0.53, 0.07]).

Competence Satisfaction. At Level 1, the positive effect of the AES on competence was shown to be mediated by intrapersonal authenticity ($B = .08$, $SE = .02$, $p < .000$, 95% CI = [0.05, 0.12]), and the same was shown for the negative effect of the IES ($B = -.06$, $SE = .02$, $p = .001$, 95% CI = [-0.09, -0.03]). At level 2, intrapersonal authenticity did not explain the effect of the AES on competence ($B = .16$, $SE = .06$, $p = .007$, 95% CI = [0.06, 0.25]).

Relatedness Satisfaction. The effect between AES and relatedness was found to be mediated by intrapersonal authenticity ($B = .29$, $SE = .05$, $p < .001$, 95% CI = [0.20, 0.38]), but this effect was not present at Level 2 ($B = .39$, $SE = .39$, $p = .322$, 95% CI = [-0.26, 1.04]).

Positive Affect. At Level 1, the effect of the AES on positive affect was not mediated by internal authenticity ($B = -.02$, $SE = .04$, $p = .534$, 95% CI = [-0.08,

0.04]), and the same was true for the IES ($B = .02$, $SE = .03$, $p = .551$, 95% CI = [-0.03, 0.06]). Similarly, at Level 2, neither the AES ($B = .24$, $SE = .24$, $p = .309$, 95% CI = [-0.15, 0.63]) nor the IES ($B = -.36$, $SE = .39$, $p = .348$, 95% CI = [-0.99, 0.27]) were mediated by intrapersonal authenticity.

Negative Affect. The effect of the AES on negative affect was found to be mediated by intrapersonal authenticity at Level 1 ($B = .22$, $SE = .06$, $p < .001$, 95% CI = [0.11, 0.32]), as well as for the IES ($B = -.16$, $SE = .04$, $p < .001$, 95% CI = [-0.23, -0.09]). At Level 2, the mediation was not present for the AES ($B = .25$, $SE = .14$, $p = .086$, 95% CI = [0.01, 0.48]), but still is present for the IES ($B = -.39$, $SE = .19$, $p = .038$, 95% CI = [-0.70, -0.08]).

Self-esteem. At Level 1 the effect of the AES on self-esteem was found to be mediated by intrapersonal authenticity at Level 1 ($B = .14$, $SE = .05$, $p = .002$, 95% CI = [0.07, 0.22]), as well as for the IES ($B = -.12$, $SE = .04$, $p < .001$, 95% CI = [-0.18, -0.06]). At Level 2, the mediation was no longer supported for the AES ($B = .33$, $SE = 2.77$, $p = .905$, 95% CI = [-4.22, 4.88]).

I also tested if the AES and IES were mediating the effect between intrapersonal authenticity and the well-being and need satisfaction outcomes, but this model was found to be less successful (see Appendix D).

3.5.3 Conclusions

The newly developed and validated AIES scale was used in a diary study to further test its ability to predict well-being both at the daily level (Level 1; daily/contextual) and across the seven days (Level 2; across seven days/dispositional). Intrapersonal authenticity was also tested separately for links with well-being at both levels. Results revealed that both the AES and intrapersonal authenticity positively related to all psychological need and well-being outcomes (greater positive affect and self-esteem, and less negative affect) at both levels. The AES also related to more intrapersonal authenticity at both levels. For the IES, less intrapersonal authenticity and autonomy satisfaction, as

well as greater negative affect, were predicted at both levels, with less consistent links with the other outcome measures at Levels 1 and 2. Furthermore, a multilevel mediation model was used to test whether the effects of the AIES is mediated by intrapersonal authenticity. Results generally supported this model at Level 1, the situational level, but not at Level 2, the dispositional level.

Put simply, these results support that both interpersonal and intrapersonal authenticity are important for well-being both contextually and over a period of time (across seven days). Furthermore, the mediation model reveals that daily authentic expression supports well-being through the internal experiences that one feels authentic. Notably, I also found that intrapersonal authenticity was not mediated by authentic expression in predicting well-being. From this, I can conclude that at the daily level, expressing oneself authentically promotes internal authenticity, and not vice versa. These results are the first step in piecing together how interpersonal and intrapersonal authenticity relate and work together to promote well-being.

3.6 Discussion of Studies 1-4

Although research identifies that self-expression is generally beneficial (e.g., Bargh et al., 2002), it is not always so (Legate et al., 2012), and the authenticity literature is well-suited to explain those occasions when self-expression is and is not associated with well-being benefits. In this series of four studies, I developed a scale and tested whether interpersonal authentic expressions link to higher intrapersonal experiences that one is being one's true self, and downstream outcomes for psychological need satisfaction and well-being. First, a scale was created and validated to empirically test interpersonal authenticity alongside intrapersonal authenticity. Sixty items were generated to measure authentic and inauthentic expression and their factor structure assessed with an EFA in Study 1. Twenty items remained and were further tested in Study 2, with another EFA supporting this scale. To conceptually strengthen this scale, items which were thought to be too repetitive or not indicating verbal expressions specifically were further removed, with eight items remaining. These eight items were tested, and CFA supported the two-factor structure. I also tested and found that my

expression scale did not correlate highly to self-censorship, nor did items cross load. From this process emerged the AIES, which was then tested in two additional studies to determine its concurrent validity. In Study 3, the authentic expression scale (AES) was found to relate to greater psychological needs and well-being (greater positive affect, and self-esteem and less negative affect). On the other hand, the inauthentic expression scale (IES) was only found to relate to less autonomy satisfaction and more negative affect. This suggests that while authentic expressions are all around positive (by encouraging greater well-being and need satisfaction), inauthentic expression is not entirely harmful, but may still undermine autonomy and create greater negative affect. In Study 4, I employed a diary study design to test the AIES at two levels: Level 1 the daily level (test of AIES at the context level) and Level 2 across the seven days (test of AIES at the dispositional level). A measure of intrapersonal authenticity was also added in Study 4 to test it both as an independent variable separate from the AIES, and as an outcome. Direct effects of the AIES on the outcomes revealed similar results to that of Study 3: the AES positively related to intrapersonal authenticity, psychological needs, and all well-being outcomes (except negatively related to negative affect) at both levels, while the IES related to less autonomy satisfaction and greater negative affect at both levels. Furthermore, in this study I found that intrapersonal authenticity mediated the effects of daily expression on outcomes: daily, but not dispositional, authentic expression promoted well-being through promoting internal experiences that one is authentic. Importantly, I saw little evidence of mediation in the opposite direction: intrapersonal authenticity was not mediated by authentic expression in predicting well-being. Thus, at the daily level, interpersonal experiences characterized by expressing oneself authentically promoted internal authenticity, and not vice versa.

Studies 3 and 4 consistently found that authentic expression is beneficial across the psychological needs and well-being outcomes assessed, while inauthentic expression only consistently related to less autonomy and higher negative affect. This supports the claim that acting authentically is psychologically adaptive, leading to greater well-being (Tesser, 2002). Inauthentic expression increasing negative affect is also supported by previous literature which finds that acting in

ways contradictory from our true selves causes emotional distress (e.g., Leary, 2003). This may be because a person who feels that they are free to express themselves authentically is not responding to a fear that their expression will negatively affect their interpersonal relationship. These results are further supported by previous research within SDT which consistently shows that acting autonomously (such as authentically self-expressing) leads to greater well-being, whereas acting inauthentically may undermine autonomy satisfaction, leading to worse outcomes (e.g., Ryan & Ryan, 2019).

Relations with psychological need satisfaction were noteworthy. The AES positively related to autonomy, relatedness, and competence satisfaction in Study 3. This result was replicated in Study 4, where the AES related to the three psychological needs at both the daily level and averaged across the seven days, with a mediation effect of intrapersonal authenticity also found at the daily level. This supports my hypothesis that authentic expressions lead to psychological need satisfaction: the autonomous behavior of self-expression allows individuals to express themselves honestly and feel internally authentic (e.g., Lynch et al., 2009). Authentic expression also related to relatedness satisfaction, in line with past research which found that autonomy satisfaction within close relationships is essential for partners to also experience relatedness satisfaction (Deci & Ryan, 2014). Competence satisfaction was also related to authentic expression, which supports previous assertions that competence is more likely to be satisfied when autonomy is simultaneously satisfied (e.g., Ryan & Deci, 2006). The IES, on the other hand, was associated with lower autonomy satisfaction in Study 3, an association replicated at both the daily and dispositional level in Study 4, an effect mediated by intrapersonal authenticity at the daily level. Presumably, on days in which individuals expressed themselves inauthentically, their felt authenticity was reduced, leading to less autonomy satisfaction. Research has long established a strong link between authenticity and autonomy satisfaction (e.g., Heppner et al., 2008), but this is the first study to show that inauthentic expressions, through less intrapersonal authenticity, undermines autonomy satisfaction.

Interestingly, in both Studies 3 and 4, the IES had no effect on relatedness satisfaction. It seems that, although inauthentically expressing oneself undermines autonomy, it may have no effect on how related one feels to close others. Whereas internal experiences of inauthenticity have been consistently shown to relate to poorer outcomes (e.g., Erickson & Wharton, 1997), it could be that in interpersonal interactions, it is not always harmful to inauthentically express oneself. It may be that inauthenticity, in some ways, can allow people to maintain relations with others while at the same time undermining relational quality- thus leading to non-significance on average. This is confirmed by previous research in the domain of coming out with a concealed stigma, where the confidant's reaction as accepting or rejecting has been shown to matter more than the act of disclosing itself (Chaudoir & Fisher, 2010; D'Augelli, 2002). Likewise, other work has shown that being selective in social interactions in who one discloses to predicts better mental and physical health (Legate et al., 2017). Taken together, whereas authenticity in social interactions is adaptive, perhaps inauthenticity can also be adaptive depending on how non-accepting the interaction partner is.

Some limitations need to be considered. The samples used across studies varied in their age composition but were limited in their gender and racial/ethnic diversity. It is important to validate the scale in diverse samples to ensure its utility is generalizable across the lifespan. Studies were also correlational in nature. Study 4 controlled for lagged effects of the outcome variable and therefore started to show directionality, but experimental studies would be beneficial as a next step to provide evidence that authenticity yields benefits for well-being while inauthenticity yields costs. Longitudinal designs could also be used to examine factors that may encourage authentic and/or inauthentic expression at the dispositional level, such as autonomy support from parents. Finally, this study developed and validated a self-report scale to measure authenticity of self-expression; future studies could consider utilizing self-report alongside behavioral observations that one is expressing authentically or inauthentically. Using self-report could result in socially desirable responding; participants may respond differently to questionnaires to represent themselves

positively (e.g., Van de Mortel, 2008). There is the potential that some participants in studies 3 and 4 did not report their inauthentic tendencies, thinking it would reflect poorly on them. A social desirability scale could be included in future studies to use as a control variable for this. Even considering these limitations, these four studies are informative in their own right in shedding light on the relationship between interpersonal and intrapersonal authenticity, need satisfaction, and general well-being.

Chapter 4

Women's Self-Expression as a Tool of Reactance Against Oppression

Continuing research into self-expression, I selected to examine whether one would reactively self-express when exposed to the censoring of other women (a form of indirect oppression). Specifically, I was interested in the external effects of oppression on individuals. As discussed in Chapter 1, individuals are motivated to actively pursue autonomy satisfaction when they are thwarted of it. In this series of studies, I explored whether an oppressed group, in this case women, would self-express more when perceiving the lowered autonomy of in-group others. After observing the oppression of other women, I investigate whether participants will actively seek to restore their own need of autonomy through greater self-expression. This effect is also examined through a possible reactance lens: those who feel reactant to the oppression may self-express more.

4.1 An introduction to three studies which explore women's self-expression in the face of in-group oppression.

4.2 Describes Study 5 in depth, with measures testing autonomy depletion and increased self-expression, the results and conclusions are discussed.

4.3 Describes Study 6 in depth, with a behavioural indicator of self-expression introduced. The methods, results and conclusions are discussed.

4.4 Describes Study 7 in depth, with a measure of reactance introduced as a possible explanatory mechanism, results and conclusions discussed.

And Section 4.5 recaps the findings of the three studies with a thoughtful discussion of implications and limitations regarding self-expression and reactance effects.

4.1 Introduction to Studies 5-7

When faced with oppression, people may react in different ways. While some internalize the oppression leading to negative outcomes, others react to oppression by externalizing, or fighting it, with righteous anger, as shown in other

forms of oppression and stigma (Corrigan & Watson, 2002). Research has also shown the ability to freely express oneself may be a healthier response to oppression than internalizing (Itzchakov, DeMarree, Kluger, & Turjeman-Levi, 2018). Data relating to gender oppression and sexism, including qualitative reports (McMahill, 2001) and a larger body of anecdotal evidence (Sakr, 2004), suggest that women can respond to sexism by expressing themselves *more*; in other words, women faced with sexism may be especially motivated to self-express.

Although the brunt of empirical work has reflected on the ways in which women internalize social norms and inequalities, cases of women actively seeking *self-expression* in restricted or oppressive settings are increasing. For example, self-expression can take private forms including dress and the expression of one's opinions in private, safe places (Mack, 1995; Miller, 1997). More recently, with the development of new technologies, women in westernised societies have also been shown to express themselves publicly when given the opportunity, for example expressing their personal identity on social media, with studies suggesting women express themselves more than men in this way (e.g., Dhir, Pallesen, Torsheim, & Andreassen, 2016; Manago, Graham, Greenfield, & Salimkhan, 2008). In contexts where oppression is normative, women are more likely to censure themselves (Jack & Dill, 1992). Such censoring is exacerbated by social contexts in which women anticipate negative consequences for self-expression (Swim, Eyssell, Murdoch, & Ferguson, 2010). Much like the social inequalities themselves, self-censorship has implications for well-being, and has been linked to higher rates of depression (Bell & Adams, 2016; Jack & Dill, 1992; Sechrist, Swim, & Stangor, 2004; Thompson, 1995).

In these more restricted societies, women will still seek ways to express themselves even when given limited opportunities to do so, for example by structuring independent leisure activities (e.g., recreation) which require autonomy, including their own time and space, which offers opportunities for self-expression (Freysinger & Flannery, 1992; Shaw, 2001). These efforts to express oneself may be directly related to the felt oppression; for example, the possibility for oppression to foster expression can help to explain how movements such as

'Me Too' gain traction, which has inspired greater self-expression among women to speak out about the injustices they face (Hosterman, Johnson, Stouffer, & Herring, 2018). However, intriguingly, women may similarly express in domains unrelated to the oppression because they more generally feel the need to respond to the dissatisfactory feeling of having been oppressed, expressing in safer venues, yet still compensating for otherwise restrictive conditions. Furthermore, for women, merely the knowledge of oppression of other women may inspire a desire to fight oppression, as theorists have described women embracing their own self-expression as a rebellious or passionate desire to defy oppressive cultural norms (Bartlett, 2004; hooks, 2000). Further, although the motive to self-express is documented in societies with relatively restrictive norms, in societies relatively low in women's oppression, women's reactions to oppression might be more evident as they experience less direct threat (Inglehart, Norris, & Welzel, 2002; Wyatt, Katz, Levinsohn, & Al-Haj, 1996).

The observations that women express in restrictive contexts are supported by theorizing through the motivational lens of SDT and by reactance theory (Brehm & Brehm, 2013), which, like SDT, states that when there is a threat to or loss of a freedom (e.g., through oppression), individuals are motivated to restore that freedom (e.g., by exercising their self-expression more). Evidence informed by both SDT and reactance theory has suggested that in the face of controlling, oppressive forces, individuals feel a certain tense rebelliousness which motivates desires to reassert freedoms. Behaviourally, the focus has been on identifying manifestations of this in terms of antisocial, unhelpful, or counterproductive actions, including how reactance may cause negative emotions or conflicts within interpersonal relationships (e.g., Dillard & Shen, 2005; Fogarty, 1997; Grandpre, Alvaro, Burgon, Miller, & Hall, 2003; Van Petegem, Soenens, Vansteenkiste, & Beyers, 2015; Vansteenkiste, Soenens, Van Petegem, & Duriez, 2014).

Importantly, previous research shows such reactance can occur even if the freedom under threat is not directly related to the person. The restriction of a meaningful other's freedom can elicit reactance from an individual, just as the individual would react to personal restrictions to their freedom (Moore & Fitzsimons, 2007). Thus, individuals do not need to experience oppression

themselves, but rather must observe it in a way that is meaningful and personally connected to them, even if it is vicarious. Literature regarding collective autonomy further supports this assertion, with the observation that individuals within the stigmatised group feel a lowered sense well-being, as if their own autonomy were undermined (Kachanoff et al., 2019). This effect has also been shown to result in behaviour change, with evidence that perceived reduction in collective autonomy motivates reactionary collective action (Kachanoff et al., 2020). With this in mind, I anticipated reactance on behalf of oppressed others is more likely to occur for those within the same in-group – in this case women perceiving other women to have their freedoms restricted.

4.1.1 Current Studies and Hypotheses

The current studies expanded the previous research in four meaningful ways. First, although the majority of empirical research has focused on women's tendency to *internalize* oppression to their own detriment, observations that women choose to *self-express* in response to oppressive contexts have not received careful empirical attention. In particular, as far as I know, no studies have examined self-expression in its own right, as a means of solving the particular problem initially responsible for oppressing the self-expression (e.g., expression as a driving force of prosocial behaviour; Grant & Gino, 2010). By focusing on self-expression more generally and not directly related to the source of the oppression, I begin to disentangle energy or liking for a particular cause (e.g., Me Too) versus the act of self-expressing in its own right. This is important because it is impossible to estimate the full potential for positive downstream consequences following individuals' exposure to others' self-oppression without isolating the generalizability of these reactions. Furthermore, self-expression, in and of itself, shows robust links with health (Pennebaker & Chung, 2011).

Second, whereas findings from SDT and reactance theory have focused on the harmful effects of reactance, there is reason to believe that motives to reassert freedoms in the form of greater self-expression may be a more adaptive form of reactance.

Third, although most extant research has focused on *direct* oppression to the individual, recent work suggests that individuals can be affected by indirect oppression through their social group identity (e.g., Kachanoff et al., 2018).

Finally, few experimental studies have examined issues related to self-expression. It is important to build a causal model of how individuals respond to oppression within their social groups, and experimental manipulations are key to disentangling these dynamics. Thus, I conducted three experiments to test my overarching hypothesis that women exposed to the oppression of another woman (as opposed to the oppression of individuals from other groups) will show greater self-expression in response. In the third experiment I also test whether this effect can be explained by feelings of reactance, or a desire to do the opposite of demands or expectations.

4.2 Study 5

4.2.1 Participants and Procedure

One-hundred and fifty-two participants took part in a lab study. I aimed to achieve 1- β err prob of .95 for two-tailed correlations (a conservative test, given the directional hypothesis proposed) to identify an effect size of 0.3 at 90% confidence. Power calculations indicated that a minimum $N = 144$ was required. Participants were female first- and second-year female psychology undergraduates from Cardiff University, aged 18-24 years.

Participants were randomly assigned to read one of three articles and were told that the experiment examined how people remember facts about articles they read (ensuring they read the assigned article carefully). Based on condition, experimental stimuli were designed to portray sexism in one of two ways: women oppressed through restricted self-expression or through restricted economic opportunity, while a control condition portrayed oppression of journalists. Stimuli were created by combining actual articles surrounding events taking place in Egypt (Soueif, 2011; Committee to Protect Journalists, 2016). The article for the self-expression oppression condition described the oppression of women in Egypt through their censoring by the government ($n = 50$), including the story of a

woman who was arrested for peacefully protesting. The economic oppression article described oppression of women in Egypt through a lack of economic opportunities ($n = 50$). The reporter oppression article (outgroup control) described similar censorship in Egypt by the government, but towards reporters instead of women ($n = 52$). All articles were identical in terms of presentation, and similar in both word count and emotive language (see Appendix E).

After reading the assigned article, participants responded to five questions about the article's content and a ten-item emotion scale (adapted from the Differential Emotion scale, Izard, Dougherty, Bloxom, & Kotsch, 1974) where participants indicated the degree to which they felt a list of ten words accurately described the person in the article, on a 5-point scale from '*Not at all*' to '*Completely*.' Five of these words referenced emotions (e.g., "sad", "angry"), and the other five, those of interest in the present study, reflected the subjective experience of losing autonomy. Four of these autonomy-thwarting words were used for my manipulation check: "trapped", "controlled", "suppressed", and "undermined" ($\alpha = .81$, "subservient" was taken out for low reliability). Values were reversed scored meaning lower values reflect lower perceived autonomy and higher scores meaning greater perceived autonomy. Participants also completed the eight-item Willingness to Self-Censor scale (Hayes et al., 2005) before and after the manipulation (α s at both times = .85). This scale, when reversed, measures the desire to self-express and was adapted for assessing participant's experiences "in this moment." Example items include "if someone was wrong right now, I wouldn't let them know", and "I would express my opinion around others who would disagree with me" paired with a 5-point scale from '*Strongly Disagree*' to '*Strongly Agree*.' Most items (6/8) were reverse scored so that higher scores on the scale reflected a greater desire to self-express. The order of the scales remained the same across participants, but individual scale items were randomized within their scales.

4.2.2 Results

A manipulation check was used to determine whether the two sexism articles were effective at lowering perceived autonomy. An analysis of variance (ANOVA)

identified a significant main effect on perceived autonomy ($F(2, 151) = 16.46, p < .001$). Specifically, participants in the self-expression oppression condition reported the protagonist as having the lowest autonomy ($M = 1.56, SD = 0.73$), with the reporter's oppression condition having the next lowest ($M = 1.78, SD = 0.84$) and economic oppression condition as having the most autonomy ($M = 2.42, SD = 0.75$). A post hoc LSD test found that participants in the self-expression oppression condition reported significantly lower autonomy than participants in the economic oppression condition ($t = -5.52, p < .001$), but no difference was found between the self-expression oppression and reporter oppression conditions ($t = -1.42, p = .16$). Economic oppression was shown to have significantly more autonomy than the reporter oppression condition ($t = 4.16, p < .001$).

Self-expression was measured pre- and post-manipulation, and as such a standardised residual of the variance at Time 2, controlling for the variance in Time 1, was used to predict post-self-expression from condition. Results showed an increase in the desire to self-express from pre- to post-manipulation based on condition ($F(2, 151) = 3.35, p = .04$). Main effects for Study 5 (and future studies in the chapter) are summarised in Table 5. A post-hoc LSD test revealed participants in the self-expression oppression condition had a significantly higher desire to self-express compared to participants in the reporter oppression condition ($t = 2.39, p = .02$). Likewise, those in the economic oppression condition also showed a significantly increased desire to self-express than those in the reporter oppression condition ($t = 2.07, p = .04$). No significant difference was found between self-expression oppression and economic oppression conditions ($t = 0.46, p = .64$).

Table 5 - Studies 5-7 Main Effects Compared to Controls

Self-Expression	<i>T</i>	η_p^2	95% CI [LL, UL]
Study 5			
Expression oppression	2.39*	.054	[.08, .87]
Econ oppression	2.07*	.041	[.02, .74]
Study 6			
Women's Censorship	2.34*	.045	[.02, .26]
Men's Censorship	0.33	.001	[-.12, .16]
Study 7			
Women's Censorship	4.39**	.106	[1.61, 1.92]
Reactance	<i>T</i>	η_p^2	95% CI [LL, UL]
Study 7			
Women's Censorship	2.81**	.052	[.08, .43]

Note. * $p < .05$, ** $p < .01$

4.2.3 Conclusions

Study 5 explored two types of women's oppression: restriction of self-expression and restriction of economic opportunities. Two women's oppression conditions were tested against an outgroup control condition (reporter oppression) to see whether they would elicit in women a greater desire to self-express. The findings supported this hypothesis: I found an increased desire to self-express when participants were exposed to conditions that illustrated both women's self-expression oppression and women's economic oppression, as compared to the control condition. Although I tested two types of oppression: economic and self-expression, this study showed increased self-expression regardless of the type of oppression experienced, so long as it is related to the individual's in-group.

4.3 Study 6

To conceptually replicate and expand on Study 5 findings, which rely on self-report, Study 6 instead measured a behavioural indicator for self-expression: the amount of text written on a timely and consequential, but unrelated topic: Brexit. By focusing on an unrelated topic (though one which is important to many of the participants), I was able to isolate the desire to self-express from direct

investment in the topic (e.g., gender inequality). Using this behavioural indicator of self-expression, I aimed to test whether perceiving another women's oppression causes women to not only have an increased desire for self-expression, but act in a manner in which they express themselves more. Additionally, Study 6 employed an oppression manipulation that was arguably cleaner (viewing images), in that it reduced the chance that the specific written content within my first set of stimuli drove the effect identified in the previous study. Further, in Study 6 I compared women's censorship with men's censorship and included a third condition wherein women were not censored. This allowed us to understand whether effects were driven by censorship [of any individual], versus in-group censorship driven also by women's systematic oppression (e.g., Nussbaum & Glover, 1995).

4.3.1 Study 6a Pilot Study

Before running Study 6, a pilot study was conducted to test whether the behavioural indicator of self-expression, word count, was indeed reflective of self-expression. One-hundred and twenty women aged 20-30 years were recruited through Prolific Academic to participate. Participants were asked to openly write about their "views, thoughts, or feelings on Brexit and its outcomes" and were told to write "as few or as many words as you like" using a provided textbox. The number of words written was tested as a behavioural indicator for self-expression ($M = 58.61$, $SD = 46.42$). Participants were then given the self-expression desire scale used in Study 5, adapted to reflect Brexit-specific self-expression (e.g., "if someone was wrong about Brexit right now, I wouldn't let them know"). Lastly, participants answered the question "How much do you feel you expressed yourself when you wrote about Brexit previously?" on a 5-point scale from 'Not very strongly' to 'Very strongly'.

The number of words written was first checked for a normal distribution and was found to be non-normally distributed with skewness of 1.37 ($SE = 0.22$) and kurtosis of 1.88. The number of words written about Brexit was therefore log transformed before being analysed. Results indicated that word count linked to scores on the self-expression desire scale ($r = .20$, $p = .029$) and to the perceived

self-expression item ($r = .34, p < .001$). These results indicated that the number of words written about Brexit, an unrelated topic which parses out self-expression from investment in the topic, could be used as a proxy for self-reported self-expression.

4.3.2 Participants and Procedure

One-hundred seventy-seven female first- and second-year psychology undergraduates at Cardiff University aged 18-24 years took part in the study. I aimed to achieve 1- β err prob of .95 for two-tailed correlations to identify an effect size of 0.3 at 90% confidence. Power calculations indicated that a minimum $N = 144$ was required. Participants were recruited who had lived in the UK for a minimum of 10 years, to increase the likelihood of them having stronger views about Brexit. Individuals who participated in Study 5 could not sign up for this study.

Participants were told this study evaluated how people understand others' emotions given incomplete information about facial expressions, and as such they would be viewing images of faces that are partially covered. Experimental materials were taken and adapted from a UN Women campaign "The Autocomplete Truth" (UN Women, 2013), which depicted women with neutral expressions, and mouths covered by a Google 'autocomplete' search bar. This bar contained autocomplete text that expressed attitudes oppressive of women's freedoms in terms of both self-expression and economic opportunities, such as 'women shouldn't vote', 'women shouldn't drive', or 'women should stay at home'. Two such images of women were used in the women's censorship condition ($n = 58$). The women's neutral condition consisted of the same two images but with blank search bars (control; $n = 60$). In the men's censorship condition, similar portrait photographs of men were edited so that their mouths were covered by the same google autocomplete box, which had been altered to refer to men rather than women (e.g., 'men should stay at home'; $n = 59$). See Appendix F for all experimental images used. After viewing one of the three conditions, participants were given the same 10-item emotion scale used in Study 5, four of which were autonomy-thwarting items used to verify that participants

saw the conditions as differentially oppressive ($\alpha = .82$). Participants rated the photos in terms of how much they fit four autonomy-thwarting related words. Participants then answered questions on Brexit. They were first told to reflect and openly write about their “views, thoughts, or feelings on Brexit and its outcomes.” Participants were given a textbox and told to write “as few or as many words as you like.” The number of words written was used as my indicator for self-expression behaviour ($M = 42.46$, $SD = 32.19$). After this, participants were also asked how strongly they felt about the Brexit vote (from 1 ‘*Not very strongly*’ to 5 ‘*Very strongly*’) and their position on Brexit (‘*Leave*’, ‘*Remain*’, or ‘*Undecided*’). To control for error, as people are invested in Brexit to different degrees, strength of position was selected a priori as a control variable. Word count was non-normally distributed with skewness of 1.98 ($SE = 0.18$) and kurtosis of 6.18. The number of words written about Brexit was therefore log transformed and compared between the three conditions.

4.3.3 Results

A manipulation check was used to find whether the photos successfully made women’s oppression salient. An analysis of variance (ANOVA) showed a significant main effect of condition across the three groups, ($F(2, 176) = 26.15$, $p < .001$). Participants rated the women’s censorship condition as having the lowest autonomy ($M = 2.43$, $SD = 1.02$), and the women’s neutral as the most perceived autonomy ($M = 3.61$, $SD = .83$). The men’s censorship condition was rated in between the two other conditions ($M = 2.99$, $SD = .81$). A post-hoc LSD test showed a significant difference between women’s censorship and women’s neutral conditions ($t = -7.23$, $p < .001$) as well as between women’s censorship and men’s censorship conditions ($t = -3.42$, $p < .001$). Further, a significant difference was found between the women’s neutral condition and men’s censorship ($t = 3.81$, $p < .001$).

A main effect was tested for condition. This analysis controlled for the strength of feelings toward Brexit, given that it is likely individuals self-express more when feeling strongly about the position under discussion (Eaton & Visser, 2008). The analysis revealed that condition had a significant main effect on the log-

transformed number of words written when controlling for strength of feelings toward Brexit ($F(2, 176) = 5.43, p = .001$). It is important to note that this effect is still significant, but weaker when not controlling for strength of feelings toward Brexit ($F(2, 176) = 3.68, p = .027$) most likely due to the high variability in how invested people are in the topic, which contributes substantial error to the model. Therefore, we continued to control for the strength of feelings toward Brexit throughout these analyses.

Those in the women's censorship condition wrote the most words (log-transformed) on average ($M = 1.61, SD = .29$) as compared to those in the women's neutral and men's censorship conditions ($M = 1.46, SD = .37; M = 1.44, SD = .41$, respectively). An LSD post-hoc revealed this difference between the women's censorship condition and the other two conditions to be significant (women's neutral; $t = 2.34, p = .02$, men's censorship; $t = 2.54, p = .01$). No difference was found between women's neutral and men's censorship conditions ($t = 0.33, p = .74$).

4.3.4 Conclusions

By measuring the number of words participants wrote about Brexit, a topic that is important to many people within the UK (Clarke, Goodwin, & Whiteley, 2017), the results of Study 6 further support that highlighting women's oppression, in this case through images of women being censored with oppressive messages, yields greater self-expression behaviours. With these three conditions I was able to tease apart the construct of gender from censoring: the conditions consisted of both women and men being censored, with the women's censorship yielding the most self-expression. Study 5 used self-report, while Study 6 used a behavioural indicator of self-expression, and both studies consistently found that women responded to another woman's oppression with a greater desire to self-express. Although these studies largely found support for the hypothesised effect, they did not explore *why* this reaction may have occurred. This is addressed in Study 7.

4.4 Study 7

In Study 7, I attempted to better understand the process underlying the effects in Studies 5 and 6. To this end, Study 7 utilised the same methods as in Study 6 to replicate the effect of oppression salience on self-expression, but expanded it with an additional consideration of reactance, which was expected would indirectly link salience of other women's oppression to one's own self-expression.

4.4.1 Participants and Procedure

One-hundred fifty-one female participants aged 18-73 years ($M = 34.19$ years, $SD = 10.39$) were recruited to participate through Prolific Academic. As in previous studies, I aimed to achieve $1-\beta$ err prob of .95 for two-tailed correlations to identify an effect size of 0.3 at 90% confidence and accepted additional completions of the survey. Participants were required to have voted "remain" for Brexit to ensure they were from the UK and keep consistency across Brexit-related views, since psychology students generally identified as remain in Study 6 (83.6%).

Two of the picture manipulations used in Study 6 were used in this study: women's censorship ($N = 80$) and women's neutral ($N = 71$). I decided to only use one oppression condition and a neutral condition to maximize power. After viewing one of the two images, participants completed the 10-item emotion scale (four autonomy-thwarting items; $\alpha = .93$), a 3-item reactance scale (see below for details), and the outcome measures relating to Brexit from Study 6 and described above. As before, strength of position was selected a priori as a control variable for analyses. The number of words written about Brexit ($M = 46.89$, $SD = 42.11$) was non-normally distributed with skewness of 2.39 ($SE = 0.19$) and kurtosis of 9.92, and as such the number of words written was log transformed for analyses as had been done in Study 6. To measure reactance, participants were given three-items measuring reactance felt in this moment, similar to items from the Hong Psychological Reactance Scale (Hong & Faedda, 1996; $\alpha = .72$). Items included general feelings of reactance in this moment: "I want to be independent", "I would be frustrated if I could not make my own decisions" and "I would resist the attempts by others trying to influence me". Selected items reflected the broad

construct of reactance under study reduced in consideration of length of the experiment. Participants responded on a 5-point scale from ‘*Strongly disagree*’ to ‘*Strongly agree*’.

4.4.2 Results

The same four autonomy-thwarting words were used to check that participants perceived oppression in the manipulation. An analysis of variance (ANOVA) revealed a main effect such that participants rated the women’s censorship condition ($M = 2.71$, $SD = 1.19$) as having more perceived loss of autonomy than women’s neutral ($M = 3.80$, $SD = 1.04$), with this difference being significant ($F(1, 150) = 35.53$, $p < .001$).

As was the case in Study 6, an ANCOVA identified a significant main effect of condition on log-transformed word count, when controlling for strength of feelings toward Brexit ($F(1, 150) = 8.79$, $p < .001$). Participants in the women’s censorship condition ($M = 1.53$, $SD = .40$) wrote more words than participants in the women’s neutral condition ($M = 1.50$, $SD = .39$). Unlike in Study 2, without controlling for strength of feelings toward Brexit, this significant effect gets wiped out ($F(1, 150) = 0.23$, $p = .633$). As was done in Study 2, strength of feelings toward Brexit are controlled for the remaining analyses.

The women’s censorship condition showed more reactance than the women’s neutral condition ($F(1, 150) = 6.84$, $p = .001$). Further, greater feelings of reactance were related to a higher word count ($r = .17$, $p = .032$). An indirect effect analysis was conducted using PROCESS (Hayes, 2017) to explore whether condition would be linked to self-expression behaviour (i.e., words written) through reactance, given an effect of condition on reactance was in evidence (reported above). The analysis obtained bias-corrected bootstrapped estimates with 95% confidence intervals and using 5,000 iterations. In line with my hypothesis, results showed that reactance explained the effect of condition predicting number of words written, that was reported in earlier analyses ($b = -.03$, $SE = .02$, 95% CI [-.08, -.004]).

4.4.3 Conclusions

Study 7 identified a mechanism that I anticipated would explain the effects found in Studies 5 and 6: feelings of reactance partially explained why women wrote more after women's oppression was made salient. Findings directly and conceptually replicated previous ones with a direct effect of condition found on self-expression behaviour (words written about Brexit), with women's oppression being made salient leading to greater self-expression. Further, observing another woman's oppression increased feelings of reactance, which in turn related to greater self-expression in the form of longer written statements about one's views on Brexit.

4.5 Discussion of Studies 5-7

Through three studies I investigated the expectation that women would have a greater desire to self-express when faced with the oppression of other women. Self-reported desire for self-expression was considered in Study 5, while behavioural self-expression – writing about one's views on an unrelated topic, a method used to separate self-expression from investment in the topic itself – was measured in Studies 6 and 7. All three studies showed greater self-expression when women were exposed to the oppression of other women, as compared to control conditions, regardless of whether the manipulation was in the form of a news article (Study 5) or a picture ad campaign (Studies 6 and 7). Study 7 revealed this effect was mediated by reactance, or a desire to defy restrictions; in this case such reactance led to a constructive end, namely the desire to self-express.

These findings are consistent with SDT which posits that when autonomy need satisfaction is thwarted, individuals pursue homeostasis of the thwarted need (Ryan & Deci, 2017). The need to regain the thwarted need may occur even if the freedom under threat is not directly related to the person: a meaningful other's restricted freedom has been shown to elicit reactance from an individual (Moore & Fitzsimons, 2007). These studies also complement writings in feminist literature on sexism, which characterize women's desire to correct wrong doings by defying oppressive cultural norms and passionately self-expressing (Bartlett, 2004;

hooks, 2000). These findings are also consistent with research showing reactance can occur if a close other's freedom is under threat (Moore & Fitzsimons, 2007), and likewise if the autonomy of the individual's group is undermined (Kachanoff et al., 2018). These results may also help explain how recent movements, such as the 'Me Too' movement, inspire women to speak out about their own experiences and speak against injustice against women. When women read stories of other women being oppressed or silenced, among other factors (e.g., changing social norms; perceived safety; changes in self-esteem; Schmitt, Branscombe, & Postmes, 2003), these stories may have produced feelings of reactance, motivating a desire for self-expression in the form of sharing personal stories.

Although Studies 6 and 7 tested oppression as a combination of economic (through opportunities for socioeconomic advances) and self-expression (through opportunities for speech) oppression simultaneously, findings from Study 5 which separately examined both forms of oppression showed increased self-expression even when perceiving economic oppression of women alone. Findings from this study should be considered since economic oppression of women is an occurrence worldwide, even within countries otherwise seen as modern or progressive (Burn, 2005; Gilman, 2018). Economic oppression in this sense can be observed in multiple ways: whether comparing the wages women versus men earn within the same line of work (Alksnis, Desmarais, & Curtis, 2008), the disadvantages and repercussions of motherhood in certain fields (Amuedo-Dorantes & Kimmel, 2005), or women being shut out of fields which are traditionally male-dominated and higher paying (Beede et al., 2011).

4.5.1 Implications and Limitations

It is important to note that I do not consider these observed effects of increased self-expression as an "upside" to or a benefit of the oppression of women. Rather, increased self-expression in this case seems to be functioning as a positive coping mechanism. When an individual finds that they, or their in-group, are being oppressed, a negative emotional state ensues (stress resulting from oppression) that the individual seeks to alleviate (Phillips, Adams, & Salter,

2015). The way in which one copes with these negative emotions varies based on context and trait-level factors, and previous studies have defined these different mechanisms of coping with oppression (e.g., Phillips et al., 2015). Stated simply, these coping mechanisms involve changing one's emotions regarding the oppression, facing the oppression head-on, or coping through engaging in community support. I can further categorize coping as either internalising the oppression (such as through one's emotional states) or externalizing it through changing behaviours (such as with collective action; Corrigan & Watson, 2002). The current results seem to be consistent with an externalised coping reaction in that women are expressing themselves to a greater extent than they do when they are not exposed to women being oppressed. Along the same strand, it may be that participants in my studies experienced greater resulting negative mood from the manipulations which helped lead to the increase in self-expression, to alleviate these negative emotions. However, to understand whether this is indeed a coping response, future research would need to test for changes in mood and physiological reactivity after self-expressing in response to oppression being made salient. In this way, it may be that the observed effect of reactance in Study 7 can be thought of as resistance to the oppression. Resistance, or acting in ways which undermine power, as an external coping mechanism has been found to help offset the negative consequences of in-group disadvantage (Leach & Livingstone, 2015). Furthermore, resistance may not always take the form of marches or other forms of protest which could lead to punishment; indeed, it has been hypothesised that resistance can undermine power on an individual, more covert level. For example, one might quit a job which has policies they do not agree with or may otherwise disrupt the hierarchy which takes advantage of marginalised groups (Rosales & Langhout, 2020). This type of "everyday" resistance has yet to be studied empirically within the fields of psychology due to issues with measuring such forms of resistance (Rosales & Langhout, 2020), but my study could be a first step to testing more subtle forms of resistance.

The positive psychological effects of self-expression have been documented in previous studies. For example, one intervention gave people the opportunity to express their emotions about how they are coping with breast cancer and evidenced consequent positive psychological and physical outcomes (e.g., less

distress and fewer symptoms; Stanton et al., 2002). Likewise, negative effects on cognitive functioning and well-being have been found when people are forced to suppress their emotional expression (e.g., Kalokerinos, Geenaway, & Denson, 2015; Richards & Gross, 2000). The effect of an increased desire to self-express might therefore be important for increasing positive psychological outcomes when oppression of women is made salient, and future studies should examine changes in women's mental and physical health outcomes when they are able to express themselves freely versus when they respond with more internalizing types of reactions to sexism.

The self-expression oppression conditions across the three studies showed forms of women being urged to self-silence (Jack & Dill, 1992), which is worsened in contexts where negative consequences follow for speaking one's voice (Swim et al., 2010). The finding that women desired to self-express when these tensions were made salient might reflect felt threat to the well-being participants faced with other women's oppression. This effect of self-expression may be sensitive to variations in individual differences, and moderators were not considered in the present studies. However, future research could examine potential moderators for the effects identified such as context-dependent factors or personality attributes. For example, social media provides women with increased opportunities for self-expression than they would have in everyday interactions (Manago et al., 2008) and as such women may be more likely to self-express through social media versus in face-to-face interactions.

The finding in Study 5 that women's self-expression and economic oppression conditions both increased the desire to self-express is noteworthy. While the reporter's self-expression oppression condition had lowered perceived autonomy, the desire for participants to self-express did not increase. This is presumably because the observed effect of increased self-expression only occurs when the in-group is involved (i.e., because both these conditions involved women specifically). This finding was replicated in Study 6, where I found outgroup oppression (men's censorship) did not promote increased self-expression. Further, the reactance effect identified in Study 7 was specific to having an in-group's oppression (in this case, other women) made salient. Such a finding was

anticipated because previous studies have suggested that when a social group's collective autonomy is undermined, individuals who identify with that group are directly affected, with lowered individual autonomy satisfaction and well-being (Kachanoff et al., 2019). According to this literature of collective autonomy, the observed effects may be due to a vicarious decrease in the participant's own autonomy, which should be further examined more directly in future studies. Similar effects may appear in other disadvantaged or marginalised groups, for example, we may observe increased desire for self-expression in racial minority and sexual and gender minority groups who are reflecting on oppression of someone in their in-group. In these cases, discrimination may take the form of hostility, or as self-expression and economic oppression as was studied here (Carter & Forsyth, 2010; Woodford, Han, Craig, Lim, & Matney, 2014), and it is worthwhile to consider whether both types of experiences elicit different outcomes and desires for self-expression.

Several limitations of these studies bear mention. Firstly, these studies deceived participants about the true purpose of the study but did not probe participants for suspicion. It could be that participants were able to guess the true purpose of these studies. Furthermore, these findings reflect a broadly Western perspective on self-expression. Self-expression has been shown to carry greater significance among people from Western cultures, to establish and affirm who they are, whereas this form of self-expression carries an insignificant role in East Asian cultures (Kim & Sherman, 2007). European Americans have also been shown to more frequently benefit from talking about their thoughts and feelings for social support when compared with Asian Americans (Kim, Sherman, Ko, & Taylor, 2006).

In addition, the samples were fairly limited in terms of the background of women. Participants were taken from the United Kingdom, a country known to be fairly gender-equal and developed, and largely comprised of young adult students. From these studies it is not possible to determine the specific conditions under which women are particularly likely to self-express when seeing injustice to other women. It is critical that future research examine this among women in non-industrialised countries with less gender equality to understand whether effects

generalize. Likewise, within westernised countries socioeconomic status should also be examined as a factor, as it is linked with perceptions of discrimination and sexism (Krieger, Rowley, Herman, Avery, & Phillips, 1993). Along the same strand, in Study 7 participants were required to have voted 'remain' for the Brexit vote to ensure they were from the UK and to maintain consistency with Study 6, where most participants voted remain. This lowers the variability in the sample of women's political ideology and Brexit-related views which could have potentially affected the results. For example, the effect of increased self-expression and reactance may be enhanced when gender identity or feminist identity is strong (Burn, Aboud, & Moyles, 2000) and this should be tested in future studies.

Though the present studies should be extended for a better understanding of women's desire to self-express under oppressive conditions around the globe, across three studies I found a consistent effect of increased self-expression in women when exposed to the oppression of other women. The final study revealed reactance to be the mechanism driving this increase. These studies reveal a potential benefit of psychological reactance, contrary to most studies examining it (e.g., Legate, Weinstein, Przybylski, 2019). This productive side to reactance can be seen as a force that drives people to act against oppression, which may help to explain movements like "Me Too," the Women's March, and other forms of women's empowerment across the globe.

Chapter 5

Long-Term Mental Health Correlates of Autonomy-supportive Relationships in an LGB Sample

The previous chapter showed that observing the thwarted autonomy of in-group members led to greater self-expression. Most occurrences of autonomy depletion are a direct result from the lack of autonomy support from close others. Using LGB individuals, members of another oppressed group, in this case a group that is linked with greater vulnerability to mental health disparities, I seek to explore aspects of autonomy support which might contribute to their mental health over time. Using a pre-existing dataset, this study is a first step into exploring how different components of autonomy support may be more beneficial to certain groups and may have well-being implications over a period of two years.

5.1 An introduction to Study 8 examining a relatively large LGB sample taken from pre-existing data collected from households in the UK.

5.2 An overview of the methods undertaken for this study.

5.3 The results are presented with regard to the questions I sought to answer.

And 5.4 provides a detailed discussion of conclusions, implications and limitations.

5.1 Introduction

Autonomy support provided to LGB individuals from close relationships – family, friends, and partners – has been shown to link to better mental health outcomes (Graham & Barnow, 2013; Legate et al., 2012; Sheets & Mohr, 2009). The specific contributions of autonomy support may differ across different age groups, whereas family support in LGB adolescents has been related to future mental health outcomes (McConnell, Birkett, & Mustanski, 2016), but family support in LGB older adults may be less important for their well-being than friend and partner support (Grossman, D'Augelli, & Hershberger, 2000). Specifically, for older LGB individuals, loneliness was lower with those living with a domestic partner, with their physical and mental health also being rated more positively

than those who lived alone (Grossman et al., 2000). As well as making independent contributions to mental health, it may be that the combined support from parents, friends, and romantic partner relationships is the most beneficial to mental health (e.g., Ratelle et al., 2013), but to date there is limited understanding of the independent and combined effects of support from different close relationships to mental health.

No previous research has examined the longitudinal associations of autonomy-supportive relationships on LGB mental health, the relative influence of specific close relationships, or which components of autonomy and socially supportive relationships are most important over time. In this study I look at two qualities of autonomy support: perspective-taking and support for self-expression, along with a quality of social support in general: feeling as though you can rely on the person. Reliance, defined as the feeling one can count on others to provide consistent emotional and instrumental support, has been used in previous literature as an indicator of social support (Ognibene & Collins, 1998). In healthy relationships, individuals feel they can rely on others for emotional support, with implications for mental health (Lynch, 2013; Ryan et al., 2005). In further work, reliance has been argued to underlie trusting relationships (Jiang, Henneberg, & Naudé, 2011; Rempel, Holmes, & Zanna, 1985), and is key to how trusting relationships foster mental health (Lewicki & Bunkerm 1995). In fact, the feeling that one can rely on others signifies healthy attachment in close relationships (Cassidy & Shaver, 2002). To my knowledge, only one study has examined reliance specifically in the LGB population, which found that gay men with AIDS tended to rely more on friends than family for their AIDS-related care (Johnson, Stall, & Smith, 1995). I was thus interested to understand the extent reliance on family, friends, and one's partner would link to mental health in LGB persons, or whether reliance within certain relationships may be especially important.

In this study I analysed data collected over two years to investigate the qualities of autonomy and social support from friends, family, and partners that predict mental health over time. I used the nationally representative *Understanding Society: the UK Household Longitudinal Study (UKHLS)* dataset, with data from adults 16 and older from households across the UK; I specifically considered

individuals who identified as LGB. I hypothesised that for LGB participants, higher support from family, friends, and romantic partners would predict general mental health up to two years later; as well as being associated with *increases* in support across two years when controlling for baseline levels. I further explored which qualities of autonomy support (perspective-taking or self-expression) or general social support (reliance) are most important for this population but had no a priori hypotheses concerning the qualities or relationships that would be most important. Finally, I considered whether relationships would show additive or substituting effects such that support within one relation buffered or, alternatively, supplemented support (or the lack of it) within others.

5.2 Method

Beginning in 2009, the *Understanding Society: the UK Household Longitudinal Study* (UKHLS) dataset collected data annually for six years from adults aged 16 years and older from almost 40,000 households across the UK. My interest was in participants who self-identified as lesbian/gay or bisexual at wave three (2011; when sexual orientation was measured), and who responded to waves two (2010; when social support within close relationships was measured) and four (2012; the last year most of the participants who responded in wave two reported their mental health). This yielded 882 LGB individuals for the final sample. Access to the full dataset, participant sampling methods, data collection procedures, and response rates at each wave are freely available at <https://www.understandingsociety.ac.uk> (University of Essex, 2009-2015; Buck & McFall, 2011; Lynn, 2009). The data were comprised of participants who reported being lesbian/gay or bisexual in wave three, the first year in which sexual orientation was assessed. Sexual orientation was asked of all adults who consented to complete the self-reported survey provided in 2011. Within the subset of 882 LGB participants, 448 were male (50.8%) and 434 were female (49.2%); of these, 476 (54%) reported being 'gay/lesbian' and 406 (46%) reported being 'bisexual'. At wave three, the mean age of my sample was 38 years and ages ranged from 16 years to 86 years. Of the 582 participants who responded with their ethnicity, 55.1% reported having a British or 'any other

white' background, with the next largest ethnic groups being Pakistani (2.6%), and African (2.2%).

5.2.1 Materials

Participants reported perceived support received from each of three relationship types – family, friends, and partner. Items for each relationship type evaluated two aspects of autonomy support within these close relationships: “Understands the way I feel” (i.e., perspective-taking) and “Can talk about my worries with” (i.e., self-expression). Additionally, one item of social support was also included, “Can rely on” (i.e., reliance), for each of the relationship types as well. These three items for each relationship type were answered on a scale ranging from (1) “*a lot*” to (4) “*not at all*.” Items were reverse scored so that higher scores reflect more support from family, friends, and partners for ease of interpretation. The three items showed good reliability across relationships: partner/spouse ($\alpha = .84$), family ($\alpha = .84$), and friends ($\alpha = .84$), suggesting that these different dimensions of support have internal consistency, along with each reflecting a different quality of support, which is informative in its own right.

To measure well-being the General Health Questionnaire 12-item (GHQ-12) was used. The GHQ measures experiences reflecting general mental health (GHQ; Goldberg, 1972; Hankins, 2008; Ye, 2009). Respondents rate the frequency they had experienced symptoms of mental health and the absence of it (e.g., were able to concentrate, lost sleep, made effective decisions). The GHQ provides a reliable measure of general mental health that correlates highly with other measures of mental health (MHI-5; Hoeymans, Garssen, Westert, & Verhaak, 2004; McCabe, Thomas, Brazier, & Coleman, 1996), and has been shown to measure both positive and negative aspects of mental health in balance (Hu, Stewart-Brown, Twigg, & Weich, 2007). For each question, four response categories were presented to produce a total score with a range of 0–36 (Goldberg & Williams, 2006), where lower values were indicative of better general mental health. Within the UKHLS dataset I examined the GHQ-12, administered at baseline (2010) and two years later (2012) ($\alpha = .93$).

5.3 Results

5.3.1 Preliminary Analyses

Social support was measured at baseline (namely, wave two of the UKHLS study assessed in 2010) and general mental health was measured at baseline and two years later (at wave four in 2012). Correlations for LGB participants between age, sex, sexual orientation (gay/lesbian vs. bisexual), reported social support (family, friends, and partner), and general mental health at baseline and two years later are depicted in Table 6. Perceived social support from family members correlated positively with social support from friends ($r(608) = .28, p < .001$), and with support from partners ($r(324) = .20, p < .001$). When correlating support from friends and support from partners, the link was smaller but still significant ($r(324) = .12, p = .035$). Sexual orientation (gay/lesbian coded 0, bisexual coded 1) was not linked with perceived social support from friends or family, but being bisexual was negatively correlated with partner support ($r(335) = -.164, p = .002$). General mental health at both baseline and 2 years correlated highly with all three social support relationships.

Table 6 - Study 8 correlations between sex, age, sexual orientation, and social support in each relationship for LGB individuals

	<i>Mean</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Female	1.49	0.50	-							
2. Age	38.34	15.72	-.10**	-						
3. Bisexual	2.46	0.49	.15***	-.11***	-					
4. Support Friends	3.18	0.72	.07	-.09*	-.07	-				
5. Support Family	2.93	0.84	.05	-.03	.01	.28***	-			
6. Support Partner	3.52	0.66	.11*	.01	-.16**	.12*	.20***	-		
7. GHQ Baseline	2.03	0.53	-.00	.01	.03	-.15***	-.17***	-.33***	-	
8. GHQ 2 Years	2.08	0.59	.03	-.07	.09*	-.16***	-.19***	-.20***	.50***	-

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$

Preliminary regression analyses regressed general mental health onto social support received within each of three relationships for LGB individuals, separately, for baseline and two years later in an initial set of models. Analyses regarding social support across relationships were conducted separately because the sample size for those who reported on romantic partners was much smaller ($n = 337$ vs. $n = 644$ for friends and $n = 628$ for family), presumably because only a subset of participants had romantic partners. Findings, controlling for age, orientation, and gender, are presented in Table 7. These initial models showed social support from each of the three relationships associated significantly to GHQ at both waves, suggesting that supportive close relationships were important for mental health both immediately and over the long-term.

Table 7 - Study 8 Regressions at 2 time points for LGB individuals

	<i>Baseline</i>			<i>2 Years</i>		
	<i>B [CI]</i>	<i>t(n)</i>	<i>r</i>	<i>B [CI]</i>	<i>t(n)</i>	<i>r</i>
GHQ						
Support Friends	-0.08 [-.12, -.04]	-3.82***	-.15	-0.09 [-.14, -.04]	-3.73***	-.16
Support Family	-0.09 [-.13, -.05]	-4.31***	-.17	-.11 [-.16, -.06]	-4.46***	-.19
Support Partner	-.15 [-.20, -.10]	-5.91***	-.31	-.09 [-.16, -.03]	-3.07**	-.02

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$

Note. Sex, sexual orientation, and age are controlled for. Each support relationship was analysed separately.

5.3.2 Primary Models

The first question I sought to answer was whether social support changes the mental health of LGB individuals across time. In a primary regression model, I simultaneously defined all three relationships predicting general mental health two years later to understand their independent contributions, while controlling for

baseline levels of mental health by defining it as a covariate in the model. This analysis thus examined unique contributions of relationship specific social support to changes in mental health over time in my LGB subsample. Findings showed that social support from family members related to mental health two years later, even when controlling for age, sexual orientation, baseline levels of GHQ and support from other relationships ($\beta = -.17, p = .003$). Friend and partner support did not show this effect when controlling for baseline GHQ and the other relationships ($\beta = -.10, p = .084$; $\beta = -.00, p = .964$, respectively). In other words, family social support was the only relationship that independently linked to increases in general mental health across a period of two years. In this model, age and orientation covariates were found to be significant in predicting GHQ two years later. Age related to better mental health ($\beta = -.134, p = .012$), whereas bisexual participants demonstrated poorer mental health than gay and lesbian ones ($\beta = .160, p = .003$)

To further understand the nature of the link between social support and mental health, I explored the three qualities of social support as independent predictors. Given that family was the only relationship that uniquely linked to better mental health across two years, I examined how much each of the qualities of family social support related to changes in mental health two years later, controlling for baseline mental health. This regression analysis showed self-expression was the only factor to significantly relate to increases in mental health over the two-year period ($\beta = -.13, p = .035$). The effect of self-expression did not differ as a function of age, gender, or sexual orientation ($ps > .861$). Neither reliance nor perspective-taking linked to changes in mental health ($\beta = .03, p = .643$; $\beta = -.01, p = .784$), nor did they interact with age, gender, or sexual orientation ($ps > .480$), in this conservative model.

Lastly, I investigated whether social support from each of the three close relationships (family, friends, partner) has additive benefits, or, alternatively, that in the absence of one source of social support, another would compensate for long-term mental health. When controlling for baseline mental health in my regression model, two-way interactions between family and friends ($\beta = -.01, p = .086$), family and partner ($\beta = -.02, p = .680$), and partner and friends ($\beta = .01, p =$

.842), and a three-way interaction between all three relationships ($\beta = -.03$, $p = .569$), showed no significant evidence in favour of additive or substitute effects.

5.4 Discussion

This work adds to the existing literature on the mental health benefits of social support for individuals who identify as LGB. I hypothesised that social support in close relationships (family, friends, and partner) would relate to increases in mental health in LGB individuals over a two-year period. Results partially supported this hypothesis, and highlighted which component (namely, support for self-expression) and which relationship (namely, with family) related to long-term mental health most robustly. By doing so, the current study advanced a broader understanding that social support may be beneficial for LGB individuals, seeking a more nuanced understanding of its impact over the long term. When social support experienced within close relationships was modelled separately, all three relationships – those with family, friends, and partners – related to better mental health over time. Yet when *competing* for shared variance in a simultaneous model, only social support from family emerged as a significant predictor of mental health over time. Thus, it may be that social support from family is most critical for LGB individuals, though this should be interpreted with caution as only individuals reporting on family, friends, and a romantic partner (in other words, approximately half of the sample) were included in this conservative analysis. Nonetheless, these results speak to the importance of social support provided by families for LGB individuals across the lifespan. This finding is in line with, and informs, previous research suggesting that family relationships are especially important for well-being in LGB samples (Ryan et al., 2010). One reason for this may be the family's critical role in shaping early development (e.g., Ryan et al., 2009; Shilo & Savaya, 2011), particularly in terms of developing a positive LGB identity. It is also consistent with previous research on autonomy support in family relationships within the general population, showing that parents' autonomy support predicts higher levels of self-esteem and lower anxiety in adolescents and young adults (Chirkov & Ryan, 2001; Goldfried & Goldfried, 2001). The present results illustrated family support as an important source of general mental health for those who identify as LGB, and importantly, that the mental health

benefits of being supported by family are sustained throughout adulthood, a finding which suggests the importance of family-based interventions for improving the well-being of sexual minorities even in adulthood.

I further considered three specific qualities of family social support to identify the aspects of support that are particularly important for this LGB sample. When the three qualities of social support were tested simultaneously, self-expression proved to be the most meaningful predictor of mental health two years later. This finding elaborates on previous assertions that self-expression is important for relationship building and may therefore promote mental health and well-being (Derlega & Berg, 1987; Greene, Derlega, & Matthews, 2006). Additionally, a body of research suggests the need for disclosure and being “out” is important for LGB individuals’ mental health (e.g., Schrimshaw, Siegel, Downing, & Parsons, 2013; Legate et al., 2012). The present results aligned with these two insights by identifying that self-expression is important for LGB individuals; further, this study connected self-expression to better mental health over the long term.

5.4.1 Implications and Limitations

Future research should extend this study to understanding social support and mental health in other contexts, for example the workplace, where LGB individuals may be less likely to be “out” (Ragins, Singh, & Cornwell, 2007). Previous research on support within professional relationships has shown to have short term benefits to well-being (e.g., Baard, Deci, & Ryan, 2004; Chirkov & Ryan, 2001). These professional relationships (e.g., teacher-student, manager-employee, or doctor-patient) contribute to mental health, but this effect has not been tested over time. The results of this study demonstrate the potential for long-term benefits of supportive relationships, which may also apply to those in professional settings. The findings may also further help inform why clinical interventions that use modes of self-expression (e.g., music and art therapy), help patients process emotions and facilitate higher self-esteem, better coping skills, and enhance physical well-being (e.g. Robb, 1996; Stephenson, 2006). Interventions that encourage social support, including support for self-expression, in LGB individuals would provide causal evidence for the present model and an

impactful resource for this population. In support of this, exploratory interventions to encourage individuals to seek out socially supportive contexts show benefits to mental health in other vulnerable populations (Weinstein, Khabbaz, & Legate, 2016). In addition, although my focus was on the contributions of supportive relationships to mental health two years later, future research should consider if physical health is also impacted over time.

Some limitations of this study merit consideration. First, a limitation of this study is the use of correlational data, which limits confidence in making causal conclusions despite some mitigation through controlling for baseline mental health. Although controls for, and moderation by, age, gender, and sexual orientation were tested, future research may examine other lifestyle and demographic factors which may impact the results. It is also worth bearing in mind that the measures of the aspects of social support was limited, as each aspect was tested using a single item. In this study, self-expression was operationalised in terms of expressing one's worries, which presumably took place in the context of attentive interactions, which is a limited view of self-expression. Future work should further investigate these aspects of social support using a more detailed measure to gain a wider view of what is important for well-being. Further, family support, which was shown to be the most robust type of support, was not defined to participants and therefore was open to interpretation. While for young adults' family most likely represents parents and/or siblings, for older adults in this population, they may have a "chosen family", or describe their significant other as their family (Hull & Ortyl, 2019). More research needs to delve into what specific family relationships are especially important in this population.

Despite these limitations, the present findings corroborate and enhance previous research on social support and well-being, which gives reason to believe further longitudinal research in this area is warranted to determine long-term links between support and LGB well-being. Thus, the present study is the first to highlight that social support in the form of opportunities for self-expression, which is received within close relationships and particularly families, might be important to the mental health of LGB individuals over the long-term.

Chapter 6

“They Didn’t Treat Me Any Differently”: A Mixed Methods Study on Autonomy Support Components in an LGBT+ Sample

While Study 8 serves as an important step in parsing out autonomy support components that predict LGB mental health, this study extends this line of research. The present study employed qualitative and quantitative techniques to explore the specific components of perceived autonomy support within lesbian, gay, bisexual, transgender and related communities (LGBT+) samples. From the components of autonomy support which are discovered, a scale is developed to measure autonomy support more accurately for this population.

6.1 An introduction to this series of mixed-methods studies.

6.2 An overview of qualitative Study 9, including methods and themes developed.

6.3 An overview of quantitative Study 10, including scale development methods and results.

6.4 An overview of quantitative Study 11, including testing of the scale and well-being.

Lastly, 6.5 provides a detailed discussion of conclusions, implications and limitations regarding important autonomy support components, scale development, and how the scale relates to well-being.

6.1 Introduction to Studies 9-11

Receiving relational support from close relationships is a keystone of mental health, and there may be an even stronger relation between support and wellness evidenced in gay and bisexual individuals (Weinstein et al., 2017). Previous research shows that specific qualities of support – that is, the specific ways in which support is expressed or communicated – may make distinct contributions to mental health (Ryan et al., 2005). As seen in the previous study, autonomy support is important for the mental health of individuals who hold a stigmatised identity. A large body of literature outside of SDT points to the importance of perceiving acceptance – a critical aspect of autonomy support –

from close others for lesbian, gay, bisexual, and transgender (and related communities; LGBT+) health and well-being (D'Augelli, 2002; Ryan et al., 2009; 2010). When support and acceptance from family is absent, a source of resilience for LGBT+ is the support and acceptance they receive from the LGBT+ community. Gaining a better understanding of what constitutes meaningful support is particularly important as LGBT+ individuals show elevated levels of mental health problems as compared to the general population, as discussed earlier in terms of health disparities (Meyer, 2003; Rosario et al., 2009).

However, to date, research has yet to address what it means to be autonomy-supportive in the context of this population. Instead, previous research (Legate et al., 2012) has relied on broad and non-specific measures of autonomy support taken from the general population and used with LGBT+ samples. The one exception is the study outlined in Chapter 5. While this study pointed to the importance of identifying specific qualities of autonomy support in the LGB population, it relied on a pre-existing dataset, limiting my ability to test a range of qualities of autonomy support that might be important in this population. Another related study (Ryan et al., 2015) examined supportive versus unsupportive reactions to people's coming out experiences, comprising a range of different qualities of support such as 'thanking me for sharing,' 'sees things from my perspective' and 'accepts me' among other aspects. However, while predictive of mental health outcomes (depression and self-esteem), these various supportive aspects were factor analysed and aggregated, leaving open the question of which aspects are most meaningful and important for LGBT+ health and well-being.

6.1.1 Current Studies and Hypotheses

The current study aims to address the defining qualities of autonomy support that are most beneficial for those with stigmatised sexual orientations or genders. I see this endeavour as foundational for recommendations and interventions that aim to reduce health disparities faced by LGBT+ individuals. In the present study, I employed a mixed-methods approach (Johnson, Onwuegbuzie, & Turner, 2007), using both qualitative and quantitative methods and sampling LGBT+

individuals, to create and test an autonomy support scale specifically tailored to the experiences of LGBT+ individuals, as generated by them. In Study 9, I gathered narrative responses describing qualities of support from close others and coded for components of autonomy support. From these results, in Study 10, I developed a scale measuring the specific qualities of autonomy support and tested whether they represent a meaningful form of support within an experimental design. To further understand the downstream consequences of receiving these autonomy-supportive qualities in close relationships, in Study 11 I again tested whether these qualities reflect support, while also evaluating the extent to which specific component of autonomy support relates to well-being. Because these studies were exploratory, I did not have specific directional hypotheses, but rather expectations that the qualities of support developed from Study 9 would relate highly to well-being in LGBT+ individuals.

6.2 Study 9

6.2.1 Participants and Procedure

Seventy-five self-identifying LGBT+ participants aged 18-60 years ($M = 28.51$ years) were recruited using the online platform Prolific Academic. Women made up over half the sample (56%), with men (33.3%), transgender (5.3%), and gender neutral (5.3%) individuals making up the rest. Participants were mostly bisexual (54.7%), with gay men (14.7%) and lesbian women (9.3%) making up the next largest orientations. Participants were mostly white (85.3%), with mixed ethnicities (10.7%) as the next largest ethnic group. Participants were instructed to think about a time when they felt the most supported in their LGBT+ identity by someone close to them and write about this experience for at least 30 seconds. It was also requested for participants to identify the specific qualities of the interaction that made them feel supported; “this may include characteristics, components, facets or feelings - anything that helped you feel supported in your identity.” Instructions were developed from previous qualitative studies using similar approaches (Fehr & Russell, 1991; Lipetz, Kluger, & Bodie, 2018). Responses were initially coded independently by two trained researchers to form qualities of autonomy support based on SDT. A codebook of key terms and definitions was created from the agreed upon qualities (see results for the terms

and definitions), and responses were recoded independently by the same researchers to check if these components were represented in the data accurately. If these recodings did not match they were not included in the results. Multiple qualities could be represented from the same open-ended response as many participants wrote about multiple aspects of support.

6.2.2 Results

Five major qualities of social support emerged from open-ended responses; reliance, relatedness, and three qualities that were representative of autonomy support, the focus for these studies. The three qualities that reflected autonomy support from others are: acceptance ($N = 38$), self-expression ($N = 26$), and perspective-taking ($N = 17$).

Acceptance. Acceptance was represented the most from participants as an important component of social support, which had to do with feeling their identity was validated and “normal”. Acceptance was thus defined from instances that showed respect and normalcy (e.g., of how they identify) and knowing affections did not change toward them.

Easy acceptance, nothing in their behavior was changed (pt. 5)

Everything was dealt with as "normal" instead of being someone odd and out of the norm (pt. 9)

He made it clear that the news didn't change my relationship at all (pt. 20)

She was completely supportive and didn't treat me any differently... it didn't make my relationship any different and I appreciated that (pt. 53)

Self-Expression. The next most common topic to come out of responses was self-expression, which was defined in this context as being able to be authentic and express themselves (e.g., sharing important feelings, thoughts, and actions with others).

They acknowledged me, listened to me (pt. 42)

He's always supported me by being there to talk to, listening to me complain about experiences or talk about why I felt the way I did (pt. 56)

We were both able to speak my minds, I gave each other the space to speak (pt. 64)

She made me feel supported and not at all judged and like I could say anything because she listened (pt. 68)

Perspective-taking. Perspective-taking was defined as perceiving the other person as understanding or trying to understand their feelings, thoughts and actions; feeling their point of view was being heard.

She was really interested in it... it's nice when they want to know more (pt. 10)

He acknowledged that he did not know the feeling itself, but that he understood that it was something that I felt and that that was entirely fine (pt. 16)

People who want to hear more about it in order to understand more (pt. 33)

I feel safe to talk about these identities with them not just because he's nonjudgmental, but because he shows interest in them, acknowledging that they're an important part of me (pt. 51)

6.2.3 Conclusions

Open-ended responses coded by two independent reviewers revealed three autonomy support components that clearly emerged when LGBT+ individuals were asked about experiences of receiving high quality support. Acceptance, self-expression, and perspective-taking were all defined from participant's descriptive responses. Support that represents acceptance was defined as the individual feeling that their sexual identity was thought of as normal, with the person's behaviour and relationship to them being left unchanged. Support that encouraged self-expression included feeling listened to and being able to share important thoughts and feelings. And finally, support which included perspective-taking was found through taking an interest and understanding the individual's feelings. With these three components, quality support of autonomy can be better measured and understood for this population.

6.3 Study 10

In Study 10, responses from Study 9 were adapted into scale items to be validated experimentally, with the aim of creating a scale of autonomy support that was founded in the responses provided by the participants of Study 9. Items for this scale were constructed to measure the three qualities of autonomy support identified in Study 9, and furthermore relied on the phrasing provided by participants in the first study. To help validate the scale as reflecting relational support, participants were randomly assigned to think of supportive or non-supportive exchanges and reported the extent to which items reflected those experiences.

6.3.1 Participants and Procedure

One-hundred forty-eight self-identifying LGBT+ participants aged 18-51 years ($M = 26.38$ years) and recruited through Prolific Academic completed measures. Participants from Study 9 could not sign up for this study. Participants included women (51.7%), men (39.8%), and gender neutral (3.4%) individuals. Approximately half were bisexual (56.8%; gay men 13.6%; lesbian women 16.1%), and most were white (86.4%; mixed ethnicity 6.8%; Asian 3.4%). From the responses coded in Study 9, a 9-item Autonomy Support Components for LGBT+ individuals (ASC-LGBT+) scale was developed, three items for each autonomy support component: acceptance, self-expression, and perspective-taking. Items reflected recurring instances of each autonomy support component reported in the qualitative data from Study 9. These scale items were presented to participants as an outcome of an experimental manipulation of support. This design both tested the scale for its internal reliability, and to test the construct validity of the scale. Participants were randomised to one of two conditions. The supportive condition ($N = 75$) asked participants to take 30 seconds to think about a “particularly supportive experience regarding their LGBT+ identity”. The comparison condition ($N = 72$) consisted of the same prompt but asks participants to think of a “particularly unsupportive experience regarding their LGBT+ identity”. In both conditions, participants were provided with a textbox to write as much or as little as they wanted about this experience.

Following the manipulation, a manipulation check was presented to participants with the question “Thinking back to this experience, how supported did you feel?” on a 10-point scale from ‘*Not supported at all*’ to ‘*Very supported.*’ Following this, the 9-item ASC-LGBT+ was then presented to participants, with the prompt asking them the degree each statement was true for the experience they wrote about before. Responses ranged on a 7-point scale from 1 -‘*Strongly disagree*’ to 7-‘*Strongly agree.*’

6.3.2 Results

Participants who answered all nine items of the scale with the same response were first removed from analysis ($n = 31$), due to worries of the halo effect (thinking back to the positive or negative experience) conflating the variability between the scale components that needed to be distinguished (e.g., Cook, Marsh, & Hicks, 2003). This left a total of 117 participants: 61 in the support condition and 56 in the comparison condition. Sensitivity analysis showed that this was sufficient sample size to detect an effect of $d = .50$ between two conditions at .80 power for testing an effect with a .05 threshold. A manipulation check was used to test whether the experimental design accurately produced supportive and unsupportive experiences from participants. An analysis of variance (ANOVA) revealed that this manipulation check was significant between conditions ($F(1, 116) = 222.44, p < .001$), such that the supportive condition ($M = 8.38, SD = 1.52$) reported higher support than the comparison condition ($M = 2.95, SD = 2.36$).

Exploratory factor analysis was conducted on the 9-item scale to examine whether loadings would match the three autonomy support components they were meant to represent. Additionally, a reliability analysis was conducted for each subscale. Results from the EFA and reliability analyses are reported in Table 8. Each of the three items used for each subscale loaded highly together on separate factors, and reliability was high between items. To test whether each of these three components represent social support, mean totals were calculated for each component: acceptance ($M = 4.73, SD = 2.07$), self-expression ($M = 4.69, SD = 1.98$), and perspective-taking ($M = 4.58, SD = 1.91$). Separate

univariate ANOVAs were then used to compare each of these support components to the supportive and comparison conditions. A significant difference was found between the two conditions for acceptance ($F(1, 116) = 90.42, p < .001$), self-expression ($F(1, 116) = 95.09, p < .001$), and perspective-taking ($F(1, 116) = 109.92, p < .001$), such that all three components represented higher social support.

Table 8 - Studies 10 and 11 Exploratory Factor and Reliability Analyses

Construct/Items	Study 10				Study 11			
	Factor 1	Factor 2	Factor 3	α	Factor 1	Factor 2	Factor 3	α
<i>Acceptance Items</i>				.92				.94
They didn't treat me differently because of my LGBT+ identity	.96	-.10	.09		.20	-.11	.86	
They communicated that my LGBT+ identity doesn't affect how they feel about me	.83	.28	-.14		-.10	.15	.90	
They expressed that I'm perfectly fine how I am	.49	.20	.32		.18	.18	.64	
<i>Self-expression Items</i>				.92				.94
They encouraged me to make my own choices	-.08	.28	.76		.76	.11	.11	
They encouraged me to behave in ways meaningful to me	.06	.32	.89		.89	.07	.02	
I could completely be myself	.45	-.04	.56		.82	.08	.06	
<i>Perspective-taking Items</i>				.93				.94
They tried to understand my point of view	.13	.68	.18		.12	.68	.21	
They were interested in what I said	.12	.89	-.04		.12	.88	-.04	
They sought to learn how I really thought and felt	-.10	.70	.36		.03	.88	.07	

6.3.3 Conclusions

In Study 10, the ASC-LGBT+ was developed relying on insights gained from qualitative data collected in Study 9. Further, this scale was tested within an experimental design to determine scale reliability and validity: whether scale items accurately measured support as anticipated. Results from Study 10 showed that each of the components of the scale successfully differentiated supportive from non-supportive experiences.

6.4 Study 11

In Study 11 I further validated the 9-item ASC-LGBT+ by replicating the experimental design of Study 10 in a new sample. Furthermore, in Study 11 I tested the extent to which these different aspects of support predict well-being during those experiences they wrote about. This test was important for validating the scale since previous research has shown autonomy support, and support more broadly, have the potential to impact well-being in LGBT+ populations (e.g., Legate et al., 2012).

6.4.1 Participants and Procedure

Two-hundred seventy-five self-identifying LGBT+ participants aged 18-63 years ($M = 28.25$ years) took measures online through Prolific Academic. Participants from Studies 9 and 10 could not sign up for this study. Participants were mostly women (62.2%; men 28.7%; gender neutral 2.9%), bisexual (50.9%; gay men 16%; lesbian women 15.3%), and white (84.7%; mixed ethnicity 9.5%; Black 2.2%). Participants were randomised to the same experimental conditions as described in Study 10: namely, to either the support or comparison condition.

Following the manipulation, participants were given the same manipulation check given in Study 10 as well as the 9-item ASC-LGBT+. In addition to this, participants completed the widely used 10-item Rosenberg Self-Esteem scale (Rosenberg, 1965), which measured their self-esteem during the experience they described (e.g., "I took a positive attitude toward myself") on a 4-point scale from '*Strongly disagree*' to '*Strongly agree*'. Four of the ten items were reverse scored

so that higher scores represented higher self-esteem ($\alpha = .84$). Following this, participants also completed the 24-item Differential Emotion scale (Izard et al., 1974), which presented participants with 12 positive emotions (e.g., “Proud”), and 12 negative emotions (e.g., “Ashamed”) experienced during the interaction. Participants responded to each emotion on a 7-point scale from ‘*Not at all*’ to ‘*Extremely*’. Positive and negative emotions were computed into separate composites, so higher scores represented more positive ($\alpha = .98$) or more negative ($\alpha = .96$) emotions experienced. While this scale order was consistent across participants, individual scale items were randomized within their scales. I found high overall internal reliability across the three composites of well-being ($\alpha = .86$), self-esteem, positive emotions, and negative emotions (reversed), so these were averaged for one measure with higher scores reflecting higher well-being. Thus, my well-being composite was created by taking the mean of self-esteem items ($M = 2.79$, $SD = .72$) and the means of both positive ($M = 4.14$, $SD = 1.75$) and negative emotions (reverse-scored; $M = 2.91$, $SD = 1.62$) from the Differential Emotion scale.

6.4.2 Results

Similar to Study 10, participants who showed lack of differentiation by providing the same response for all items were removed from analysis ($n = 49$), leaving a total of 226 participants: 130 in the supportive condition and 96 in the comparison condition. A manipulation check was used to test whether the experimental design yielded supportive and unsupportive experiences from participants in line with their condition. An analysis of variance (ANOVA) revealed that this manipulation check was significant between conditions ($F(1, 225) = 1412$, $p < .001$) with those in the supportive condition ($M = 9.00$, $SD = 1.20$) recalling more support than those in the comparison condition ($M = 2.06$, $SD = 1.58$).

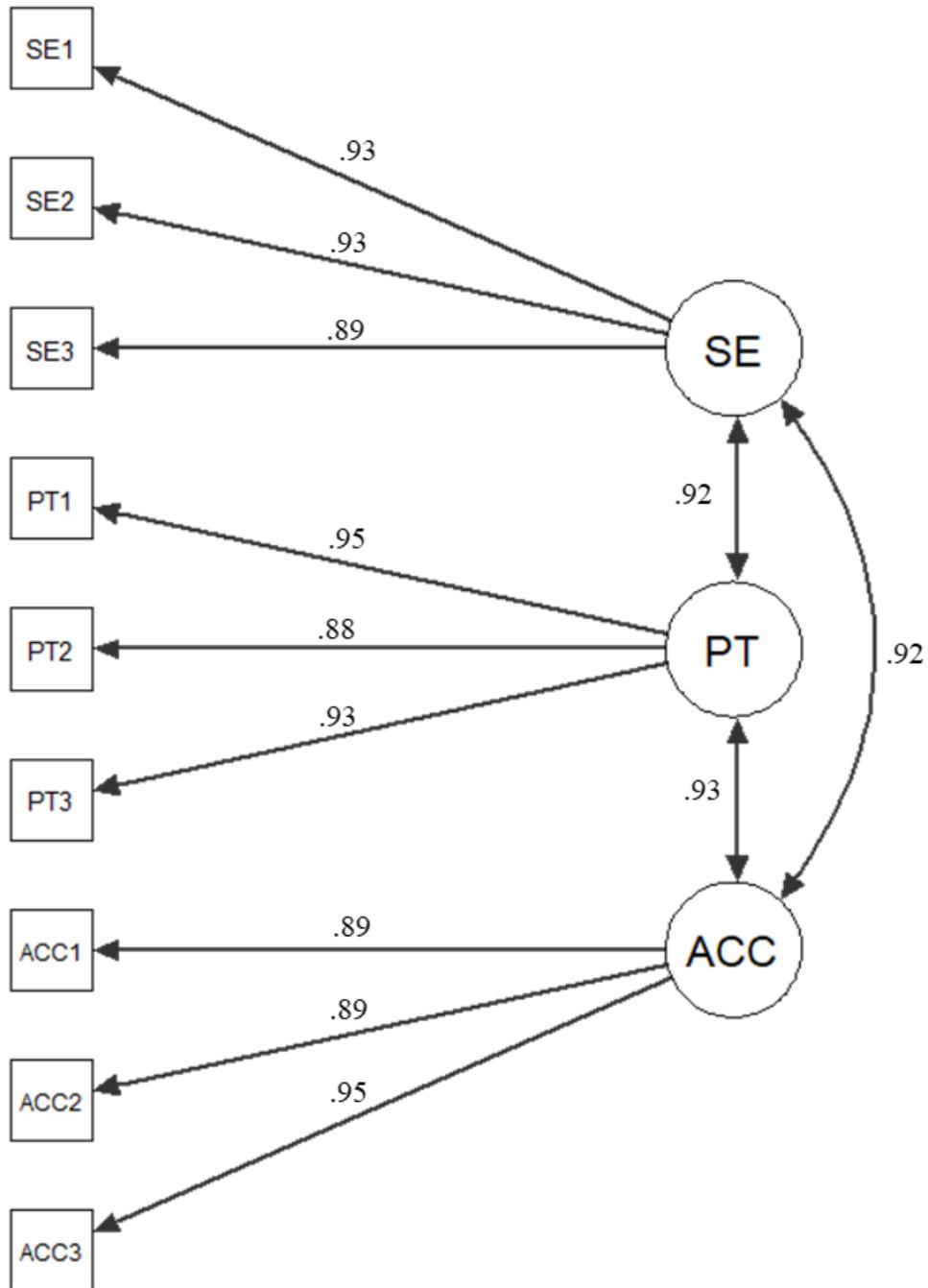
Once again, an exploratory factor analysis was conducted on the 9-item scale to test the extent that items load in line with the autonomy support component they were meant to represent and was complemented by a reliability analysis. Results from the EFA and reliability analyses can be seen in Table 8. Each of the three

items used for each subscale loaded highly together on separate factors, and reliability was high across items within each subscale.

Following the exploratory factor analysis, I performed a confirmatory factor analysis (CFA) on the nine items. With a confirmatory factor analysis, I sought to test a three-factor model which would support the theoretical scale structure (three distinct types of autonomy support). The CFA was run using the program Jamovi, a statistical program built on R (The Jamovi Project, 2020).

Standardized factor loadings ranged from .89 – .93 for self-expression, from .88 – .95 for perspective-taking, and from .89 -.95 for acceptance; all $ps < .001$. Model fit was assessed for my proposed scale model using the most common fit statistics and recommended cutoffs taken from Hooper et al., 2008. The Comparative Fit Index (CFI) was 1.00, well above the .90 minimum, and the Standardized Root Mean Square Residual (SRMR) was .01, below the .08 maximum. The Tucker Lewis Index (TLI) was .99, above the .95 minimum. Additionally, the Root Mean-Square Error of Approximation (RMSEA) was .05, 90% CI [.00, .08], below the .08 maximum. All fit indices indicate a good model fit for a three-factor structure (see Figure 4).

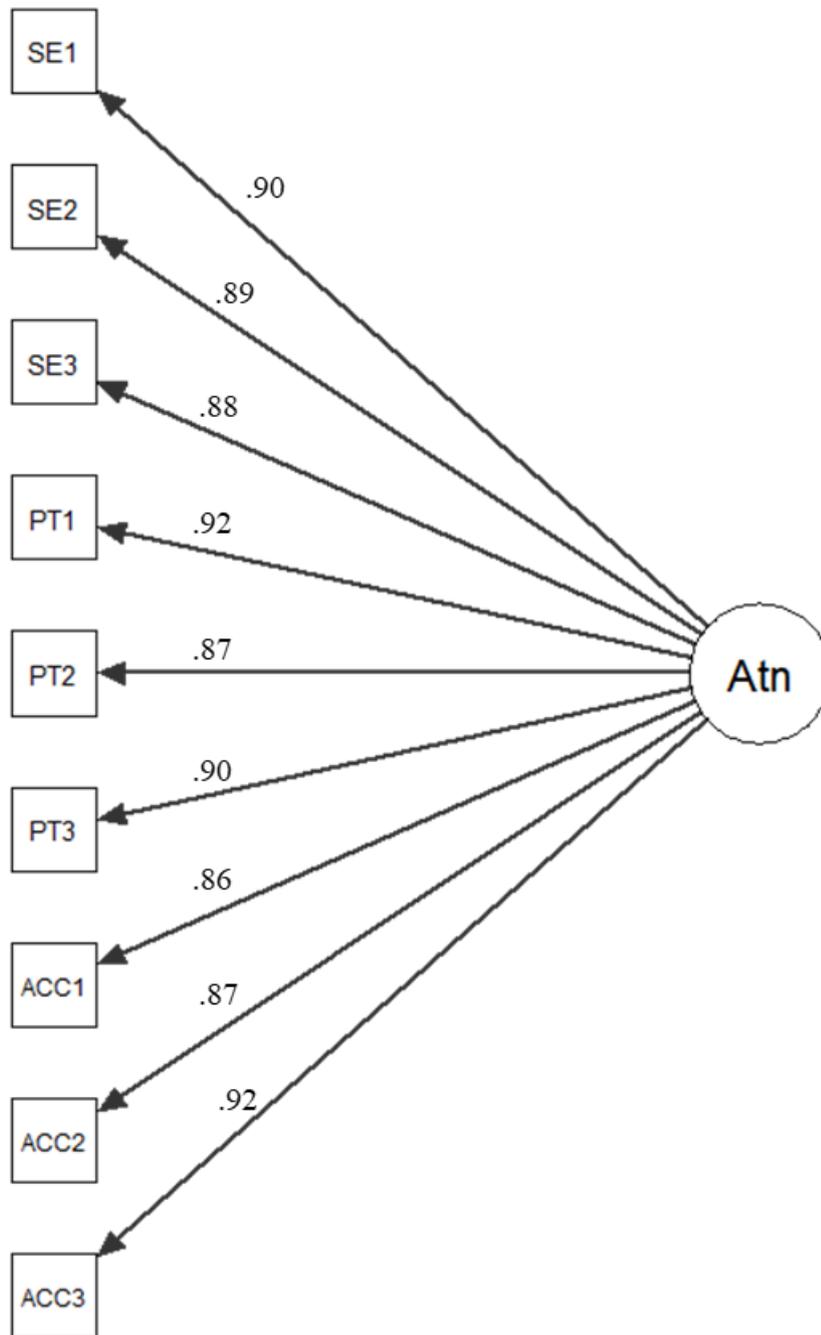
Figure 4 - Study 3 Confirmatory Factor Analysis, Three Factors: Self-expression, Perspective-taking, and Acceptance



Note. Factor loadings and covariances are standardized estimates.

I also tested all items on a single factor, to see whether they all encompassed autonomy support as a single measure. Standardized loadings ranged from .86 - .92. $ps < .001$. The Comparative Fit Index (CFI) was .95, again above the .90 minimum, and the Standardized Root Mean Square Residual (SRMR) was .02, below the .08 maximum. Conversely, the Tucker Lewis Index (TLI) of .93 was slightly below the .95 minimum. Additionally, the Root Mean-Square Error of Approximation (RMSEA) was found to be .15, 90% CI [.13, .17], above the .08 threshold. As a result of its superior model fit, the three-factor scale structure was retained, and they were treated as separate facets in analyses (see Figure 5).

Figure 5 - Study 3 Confirmatory Factor Analysis, One Factor: Autonomy

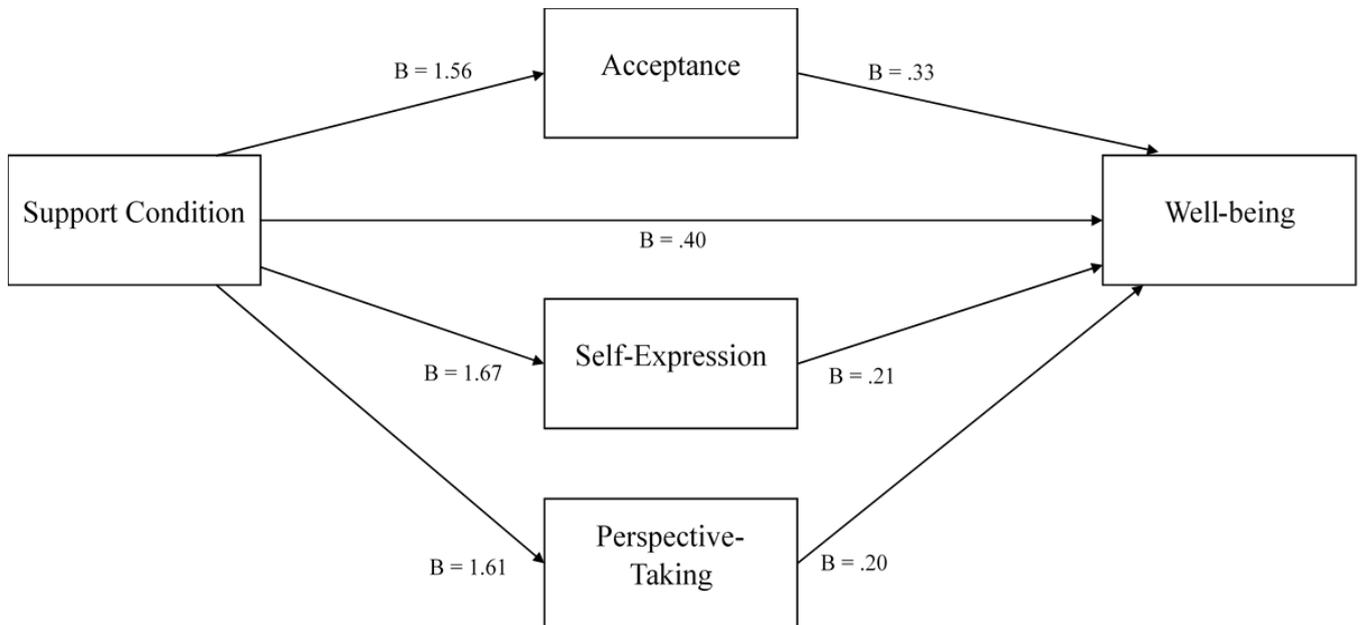


Note. Factor loadings and covariances are standardized estimates.

The main effect of condition on the well-being composite ($M = 4.01$, $SD = 1.26$) was tested to determine whether well-being was greater in the supportive versus the comparison condition. Results of a Univariate ANOVA showed well-being to be higher ($F(1, 225) = 347.27$, $p < .001$) in the supportive condition ($M = 4.85$, $SD = 0.67$) as compared to the comparison condition ($M = 2.87$, $SD = 0.93$). To further test whether each of the three autonomy support components represented social support, mean totals were calculated for each component: acceptance ($M = 4.78$, $SD = 2.25$), self-expression ($M = 4.56$, $SD = 2.14$), and perspective-taking ($M = 4.60$, $SD = 2.07$). Univariate ANOVAs then tested the main effect of condition on each of the three components. A significant difference between conditions was found for acceptance ($F(1, 225) = 472.28$, $p < .001$), self-expression ($F(1, 225) = 492.13$, $p < .001$), and perspective-taking ($F(1, 225) = 450.21$, $p < .001$). All three components represented support as one might expect.

An indirect effect analysis was conducted using PROCESS (Hayes, 2017) to test the autonomy support components as three simultaneous mediators of the effect between condition and well-being. The analysis obtained bias-corrected bootstrapped estimates with 95% confidence intervals and using 5,000 iterations. An indirect effect was found for each of the three autonomy support components: acceptance ($b = .65$, $SE = .17$, 95% CI [.30, .99]), self-expression ($b = .44$, $SE = .15$, 95% CI [.05, .84]), and perspective-taking ($b = .40$, $SE = .18$, 95% CI [.05, .76]), suggesting that all three aspects are important aspects of support predicting well-being (see Figure 6).

Figure 6 - Study 3 Mediation Model



Note. All paths were found to be significant ($ps < .01$)

6.4.3 Conclusions

Study 11 found the ASC-LGBT+ three factor model was confirmed using a CFA. Study 11 further found the ASC-LGBT+ mapped onto support, replicating the results from Study 10, and once again validating the measure. Moreover, in Study 11 I found, as anticipated, that the support condition yielded higher well-being than no support. Importantly, all three autonomy support components of the ASC-LGBT+ were simultaneous mediators linking the effect of recalling support on well-being.

6.5 Discussion of Studies 9-11

In three studies an Autonomy Support Components Scale was developed and tested empirically within LGBT+ samples. In Study 9 qualitative data from LGBT individuals on what constituted support was collected and interpreted through an SDT lens by two trained researchers. Findings of this study indicated three autonomy support components to be important for quality social support for LGBT+ individuals. In Study 10, I used these components, informed by

descriptions from participants in Study 9, to create a 9-item scale. This scale was tested within an experimental design to confirm that all three components of the scale are measures of support. Findings from Study 10 found that each of the three subscales reflected support as predicted. In Study 11 I replicated the finding that each of the subscales represented meaningful components of support. Further, measures of well-being were added in Study 11 to further validate the three aspects of support. I found the supportive condition to produce higher well-being, and furthermore the three autonomy-supportive components were simultaneous mediators of the effect of support increasing well-being. Acceptance, self-expression, and perspective-taking components of autonomy support all helped to explain why support benefits well-being in this population.

This series of studies helps to identify and define the components of autonomy support that benefit those with stigmatised sexual orientations or genders, an understanding of great importance for developing effective interventions to reduce the health disparities faced by this population (e.g., King et al., 2008). Only one previous study to date has looked at specific components of support in an LGB sample and found that self-expression was particularly important for well-being both immediately and over time (Chapter 5). However, in this previous work, support was operationalised through available measures meant for broad experiences and in the general population; as such, it could not openly or comprehensively explore the meaning of support in LGBT+ samples. The current findings therefore inform and strengthen this body of literature. The findings also inform previous research that identifies the importance of autonomy support on well-being for LGB populations (e.g., Legate et al., 2012). This previous work also relied on global measures of autonomy support developed for the general population and do not distinguish specific components of autonomy support. The differentiation of components in this case is especially valuable when evaluating quality social relationships and their effects on LGBT+ well-being outcomes. Specific aspects of autonomy support may make distinct contributions to well-being, such as the finding of self-expression from family members being found to be particularly important for well-being over time in LGB participants (Chapter 5).

6.5.1 Implications and Limitations

With these components making up the Autonomy Support Components Scale for LGBT+ individuals, this scale can be used in future studies that seek to measure specific aspects of autonomy support in this population. Furthermore, isolating the specific components of autonomy support in this population is also essential to use for education and intervention purposes. For example, many schools and workplaces pour money into programs and policies to improve the social climate for LGBT+ individuals, and research that isolates key autonomy support factors important for well-being could tell them how to best support them (e.g., Badgett, Durso, Mallory, & Kastanis, 2013; Black, Fedewa, & Gonzalez, 2012).

Some limitations need to be considered. First, the sample was limited in that it was overwhelmingly white and cisgender, and a majority were bisexual. It is plausible that autonomy support from close others might look different in diverse LGBT+ populations. For example, it is possible that for transgender individuals, autonomy support involves certain behaviours like accepting the person's expressed gender through respectful use of pronouns and any name change. As such, future research should validate this scale in more diverse samples in terms of race, gender, and sexual orientation. These studies were exploratory, and the three components of autonomy support need to be experimentally tested as predictors of well-being before concrete conclusions can be made. Furthermore, all three studies relied on retrospective reporting of support experiences, and the use of a daily diary design may offer a richer and more precise view on how these components of autonomy support influence well-being and downstream relational experiences such as trust and self-disclosure. Finally, these autonomy support components may be useful for other stigmatized identities, notably for other concealed stigmas such as mental illness stigma (e.g., Corrigan et al., 2010), and this should be tested in future studies.

These studies examined aspects of meaningful support for LGBT individuals. Three distinct aspects of support emerged from LGBT participant reports - feeling accepted, that they can express themselves, and that their perspective is

considered. I believe that generating meaningful aspects of support for an LGBT+ identity from LGBT+ participants themselves represents the greatest strength of this study, and an approach that should be done more frequently in further research. Further, two follow up studies validated that these three aspects were distinctly related to mental health, suggesting that these aspects of support may be promising targets for interventions with families, and in schools and workplaces aimed at improving LGBT+ mental health. Taken together, this research demonstrates the importance of examining specific aspects of support that are most linked with mental health in varied populations.

Chapter 7

General Discussion

The current thesis focused on topics related to autonomy as defined within SDT and the effect it has on well-being. More specifically, authenticity, autonomy satisfaction, as well as autonomy support was examined in contexts related to disadvantaged groups, as they generally have lower well-being than the general population. In this final chapter, I will now summarise the findings of the empirical chapters, focusing on the novel contributions of the research, implications of the research, and future directions.

7.1 Discusses the findings of Studies 1-4, reported in Chapter 3, which examined intrapersonal and interpersonal authenticity, need satisfaction, and well-being.

7.2 Provides an overview of Studies 5-7, reported in Chapter 4, which found an effect of increased self-expression in the face of oppression.

7.3 Discusses both Study 8 (Chapter 5) and Studies 9-11 (Chapter 6), which examined the components of autonomy support necessary for LGB/LGBT+ well-being.

Lastly, 7.4 provides concluding remarks on the contributions of the thesis.

7.1 Authenticity and the AIES

In Chapter 3 I explored two types of self-expression, authentic and inauthentic self-expression, as a form of interpersonal authenticity. In Studies 1 and 2, the AIES was developed and validated through confirmatory factor analysis. In Studies 3 and 4, the predictability of the AIES was tested. Results in both studies revealed that while authentic expression was all around great for need satisfaction and well-being, inauthentic expression undermined autonomy satisfaction and increased negative affect. In Study 4, I further found support for intrapersonal and interpersonal authenticity at both the contextual and dispositional level, with intrapersonal authenticity mediating the effects of authentic and inauthentic expressions at the contextual level.

The findings of Study 4 are also in line with previous research on intrapersonal authenticity, which consistently found that feeling authentic has numerous positive outcomes, such as increasing mental health and well-being (Sedikides et al., 2017). Intrapersonal authenticity has also been found to lead to greater positive affect and less negative affect (Thomaes et al., 2017). These findings were replicated in Study 4, which found both intrapersonal authenticity and authentic expressions led to overall greater need satisfaction and well-being, both daily and across seven days. Furthermore, the finding that intrapersonal authenticity mediated the effects of authentic and inauthentic expression at the daily level is an important result (while a mediation analysis looking at expression as the mediator of intrapersonal authenticity was not found to work). This suggests that at the daily level, interpersonal authentic experiences are promoted by internal feelings of authenticity, and not vice versa.

The results of these studies also inform the literature on self-concept consistency. Previous studies on self-concept consistency have found that inconsistency in the expression of traits leads to worse outcomes (e.g., Donahue et al., 1993; Roberts & Donahue, 1994). This is found to be especially true for traits which are not expressed but which are felt to be central to one's true self (e.g., Sheldon et al., 1997). The results of Studies 3 and 4 support this literature, with the finding that authentic expression is overall beneficial, while inauthentic expression consistently related to less autonomy satisfaction and higher negative affect. Inauthentic expression increasing negative affect is also supported by previous literature which finds that acting in ways discrepant from our actual selves causes emotional distress (e.g., Leary, 2003).

7.1.1 Implications and Limitations

The findings of Study 4 highlight the importance of both internal feelings and external expressions of authenticity. This may be especially important for individuals who hold a stigmatised identity. Having a stigmatised identity has been shown to give reason to be inauthentic in interactions with others, such as to avoid negative responses (e.g., Safren & Pantalone, 2006), and this may contribute to the resulting minority stress and health disparities faced by

stigmatised populations (e.g., Pachankis, 2007; Quinn & Chaudoir, 2009). Future research could use the AIES to test whether stigmatised individuals have lower interpersonal authenticity than the general population, and the implications this has on their well-being. Further, a potential study would be to conduct another diary study design to test days in which one's stigmatised identity is authentically expressed, versus inauthentically expressed, and whether this effects daily well-being and well-being overall.

It is worth noting a similar, yet distinct construct to authenticity, the construct of self-disclosure, which has also been widely researched. Self-disclosure, or the communication of more confidential personal thoughts and feelings with another person (Jourard, 1971), has been examined as a relationship and mental health enhancing phenomenon (e.g., Frattaroli, 2006; Laurenceau, Barrett, & Pietromonaco, 1998). Although similar to authenticity, self-disclosure involves the divulging of specific, and usually sensitive, information to another person, while authentic and inauthentic expressions refer to more general and commonplace communications with others. It is often researched in the context of disclosing a stigmatized and concealable (not visible) identity, such as disclosing one's sexual orientation to others (e.g., Meyer, 2003). Like authenticity, self-disclosure is also measured with various scales, including ones that understand self-disclosure as situational or context dependent (e.g., Chelune, 1976) though, like authenticity, there may also be a dispositional tendency toward self-disclosure (e.g., Jourard, 1971). It may be that, if one feels safe to self-disclose, greater authenticity and authentic expression would also be achieved, but this has yet to be investigated. Future research should incorporate self-disclosure with authenticity and authentic/inauthentic expressions.

As discussed in Chapter 3, there were limitations to Studies 1-4. The samples used across studies varied in their age composition but were limited in their gender and racial/ethnic diversity. The studies were also correlational in nature. Longitudinal designs could be used to examine factors that may encourage authentic and/or inauthentic expression at the dispositional level, such as autonomy support from parents. As discussed in Chapter 1, children of parents who provide conditional regard feel controlled (less autonomous), resulting in

greater negative outcomes (Assor et al., 2004). Conversely, parents can show their children unconditional positive regard (Roth, Kanat-Maymon, & Assor, 2016), which may promote more authentic expressions and foster feelings of internal authenticity.

The AIES has implications for future research and clinical use. This scale could aid in future research on authenticity by narrowing in on verbal expressions and disentangling authentic versus inauthentic self-expression. Verbal expressions are thought to be a prominent way by which people express themselves (e.g., Rime et al., 2002), and this scale can be useful in future tests of interpersonal exchanges and conversations, for example in clinical contexts (e.g., Pawelczyk, 2011). Furthermore, these studies have demonstrated the scales' utility at both the contextual and dispositional levels. And finally, while the current studies take an important first step at disentangling concepts of intrapersonal and interpersonal authenticity and their roles for psychological need satisfaction, further work on these closely tied constructs should be conducted. With these studies, research is a step closer at parsing out the relationship between authentic and inauthentic expressions, how they relate to internal feelings of authenticity, and how this process affects need satisfaction and well-being.

7.2 Gender Oppression and Self-Expression

Studies 1-4 were an important first step in studying the relationship between authentic and inauthentic self-expressions, need satisfaction, and well-being. The next three studies found that women experienced a greater desire to self-express (Study 5), as well as displayed a behavioural increase in expression (Studies 6 and 7), when exposed to the oppression (in the form of censorship) of other women, as compared to control conditions. This finding was consistent for manipulations in the form of a news article (Study 5) and a picture ad campaign (Studies 6 and 7). Study 6 further compared women's censorship to men's censorship, in an all-female sample, finding the effect of increased self-expression was only present for the women's censorship condition. Study 7 further revealed this effect was mediated by reactance.

Previous research has primarily focused on how women internalise oppressive social norms. As discussed in the introduction, this internalisation can occur whether the sexism is hostile or benevolent, resulting in internalised misogyny, and leading to lowered relationship quality and psychological distress (Dehlin & Galliher, 2019; Szymanski et al., 2009). Likewise, self-objectification has been shown to occur with internalised sexism, whereas women objectify themselves and other women, which also leads to negative outcomes such as anxiety, depression, and disordered eating (Calogero, Tantleff-Dunn, & Thompson, 2011). Although past research is well versed in the processes and effects of internalised sexism, studies have yet to show how women individually and externally react in the face of oppression. One paper suggests the reason for this is the subtlety of everyday resistances that are hard to measure and record (Rosales & Langhout, 2020). Indeed, resistance to oppression may not always take the form of marches or other forms of protest which could lead to punishment; reactions to oppression can still undermine power on an individual, less obvious level. This proposed “every day” resistance has yet to be studied empirically but seems to be supported by the results of my studies. The results of Studies 5-7 are the first step into exploring these more subtle external reactions of women in the face of oppression, even when the oppression is indirectly experienced.

Significantly, the effects found in Studies 5-7 were from women experiencing indirect oppression, with the results still displaying strong effects on personal desire to self-express as well as significant behaviour change in the form of number of words written. This is in line with previous research on collective autonomy which found that undermining an in-group’s collective autonomy also undermines individual autonomy satisfaction (Kachanoff et al., 2019). The idea that restricted collective autonomy in intergroup contexts undermine autonomy satisfaction is also consistent with social identity theory (SIT; Tajfel & Turner, 1986). SIT posits that a person’s personal identity, or self-concept, is developed from the cultural values and norms associated with one’s in-group, social identity. Social identity has been shown to effect personal autonomy satisfaction, in line with the recorded results of indirectly being affected by oppression of in-group members (Greenaway, Cruwys, Haslam, & Jetten, 2016). This is supported by

my results in Study 6 which found that being an in-group member mattered for the effect to take place.

7.2.1 Implications and Limitations

The observations that women express in restrictive contexts are further supported by SDT and by reactance theory, both of which state that when there is a threat to an individual's freedoms, they are motivated to restore that freedom (Brehm & Brehm, 2013). For SDT, this is expressed in terms of an autonomy thwarting, which drives the individual to restore their autonomy satisfaction (Ryan & Deci, 2017). Since a thwarting in collective autonomy is known to undermine individual autonomy, my results, and particularly the results of the manipulation checks (which show the participants perceived the women in the story to have diminished autonomy), provide evidence that this may be the driving effect of reactance and increased self-expression. Future research should test whether thwarted autonomy satisfaction is regained through reactance and increased self-expression. It would also be beneficial to examine whether the observed effect occurs within other in-groups. As stated previously, the effect of undermined collective autonomy and individual autonomy satisfaction is driven by social identity. Of importance, a previous longitudinal study found that stronger in-group identification was associated with greater autonomy satisfaction, as well as greater belonging, self-esteem, and felt meaningful existence (Greenaway et al., 2016). Furthermore, an experimental study within the same paper revealed that while social identity gain increased these outcomes, social identity loss also decreased them. Within intergroup contexts, it may be that collective autonomy is undermined when in-group members feel that other groups (out-groups) have attempted to control the defining characteristics of their social identity (Greenaway, Wright, Willingham, Reynolds, & Haslam, 2015). Future studies examining oppression and increased self-expression should consider measuring the effect in other groups, with in-group identity and autonomy need satisfaction both considered.

As previously stated, the results of increased self-expression in the face of oppression in Studies 5-7 show a form of reactance and subtle resistance. These

results may help us to understand the popularity of recent collective action initiatives which asked for individual voices to speak out (self-express), such as the 'Me Too' movement. The 'Me Too' movement is a predominately female collective action movement which originated on social media (Shugerman, 2017). The purpose of the movement was to give women a space to express instances in which they were subjected to sexual harassment and/or assault, and solidarity with other women with similar experiences (Shugerman, 2017). As the movement gained momentum, it also became about demonstrating to men the sheer number of women who have been subjected to these adverse experiences (Xiong, Cho, & Boatwright, 2019). This movement has had an enormous impact on the current social climate and inspired women from all over the world voice their personal experiences, most of which are difficult to express, and speak against injustices against women (Bhattacharyya, 2018). It may be that reading other women's stories produced feelings of reactance, motivating an increased desire for self-expression in the form of sharing personal stories (an act which would presumably also increase autonomy satisfaction), among other factors which may have affected the popularity of this movement (e.g., feelings of relatedness). Online collective action movements like these, which are gaining in popularity (Xiong et al., 2019), should be further investigated as they do not possess the same consequences of in-person collective action (e.g., Rosales & Langhout, 2020) and may feed into the literature on subtle resistances, reactance, and autonomy satisfaction.

Some limitations need to be considered when interpreting these results. Participants' education level was not measured in Study 7, and this could have potentially impacted the results of number of words written. Those with higher education may generally be expected to write more. Along the same line, female identity, belief in feminism, as well as degree of internalised misogyny might also be potential moderators of the recorded effect. From these studies we still do not know the specific conditions, or personality characteristics or traits, under which women would be more likely to self-express when witnessing injustice to other women. Personality type, such as Big-5 traits, may play a role in the extent women respond with self-expression (Zillig, Hemenover, & Dienstbier, 2002). While findings in Study 6 suggest that social group membership may influence

the reactance effect, I did not directly test this, for example, by directly comparing men and women. Future work focusing on gender may include both male and female samples. These and other potential moderators could be examined in future studies for a richer understanding of the phenomenon identified here.

Moreover, as discussed previously, participants were taken from the United Kingdom, a country known to be fairly gender-equal and developed. These participants were largely comprised of White, young adult students. To generalise findings, it is crucial that future research examine the observed effect among women in non-industrialised countries with more explicit gaps in gender equality to understand whether effects generalize.

While literature on the effects of oppression has yet to examine the individual external behaviours and reactions of women who are in the presence of oppression, Studies 5-7 were a good first step for understanding how subtle resistance can take shape. As noted in other research within SDT, the driving mechanism of this effect of reactance may be due to individual autonomy depletion, from observed collective autonomy depletion, driving women to restore their autonomy satisfaction through increased self-expression. Future studies should explore autonomy depletion and satisfaction in this context, along with the role of in-group identity.

7.3 Autonomy Support Components for LGB and LGBT+

7.3.1 Study 8

Previous research both within and outside of SDT has not examined the specific components that make up quality autonomy support. It was my belief that certain components of autonomy support, and the supportive relationships that utilise these components, may be especially important for the well-being of LGB individuals. In Study 8, a large pre-existing dataset was used to assess the importance of two qualities of autonomy support (self-expression and perspective-taking), and one quality of social support (reliance) within close relationships of friends, family, and partners. Using this dataset, I was able to examine the relationship between supportive close relationships and mental

health over a period of two years. When analysed separately, results showed that each supportive relationship contributed to mental health both immediately and two years later. When supportive relationships were placed in a single model, family support was robustly found to be important to LGB individuals' well-being two years later. Within family support, between the three support components, I found support for self-expression to also robustly impact well-being two years later.

The results found illustrated the importance of family support for those who identify as LGB, and importantly, that the mental health benefits of being supported by family are sustained over a long period of time. This is in line with previous research which found lasting effects of parental autonomy support (or lack thereof) well into adulthood (e.g., Roth, 2008). The extent to which a parent is autonomy-supportive has been shown to have effects on emotion regulation (Roth et al., 2009) and mental health, in general (Chirkov & Ryan, 2001). It may be that family support is especially important within LGB populations, as compared to straight populations. But this has yet to be tested. Previous research on minority stress revealed that, for LGB adolescents, rejection from their primary caregiver was linked to more depression, suicide attempts, drug use and sexual risk-taking behaviours (e.g., Rosario et al., 2009; Ryan et al., 2010). Likewise, adolescents whose parents rejected their sexual orientation reported greater depression, and engaged in more drug use, suicide attempts, and risky sexual behaviours later in adulthood, suggesting a long-term impact (Ryan et al., 2009).

Within family support, I further found that support for self-expression was especially important to mental health two years later. Support for self-expression allows one to freely share important feelings, thoughts, and actions (Tobin, 1995). The felt ability to freely express oneself has been shown to be important for well-being, for example one study found these types of interactions lowered social anxiety and raised self-awareness (Itzchakov et al., 2018). Self-expression has also been found to be important for individuals to connect and form meaningful relationships (Bargh et al., 2002). For LGB individuals, it could be that support for self-expression is particularly important. Those who hold a stigmatised identity have a greater reason to inhibit self-expression of the true self (Greene et al.,

2006). Because of this, previous research has found that for LGB individuals, self-expression may vary across contexts, depending on their level of “outness” in each context (Riggle et al., 2017). For example, one might be completely out with their identity with their friends, but not at work. Higher levels of outness have been found to lead to greater self-esteem and less depression (Kosciw et al., 2012).

7.3.1.1 Implications and Limitations

Support for self-expression might be especially important within family relationships, as it could be a proxy indicator for how “out” the LGB individuals are within their family relationships. Previous research has established that concealment of an important identity leads to negative outcomes, while being out with that identity, especially in autonomy-supportive environments, leads to positive outcomes (Legate et al., 2012; Riggle et al., 2017). One study found that LGB individuals are also most likely to come out to others who they perceive to be autonomy-supportive (Legate et al., 2012), thus the positive benefits of outness and self-expression would most likely occur with autonomy-supportive close others, especially if their self-expression is supported. The current finding that family support and support for self-expression are closely linked to mental health across time suggests the importance of family-based interventions for improving the well-being of sexual minorities, even in adulthood. Future studies should build on this work by utilising longitudinal designs to test the long-term effects of support in this population. It may be that certain supportive relationships become more important at certain periods in one’s life, especially for LGB individuals who tend to come out in their adolescent and young adult years (e.g., Reynolds & Hanjorgiris, 2000), and this could have implications for how to address health disparities in this population.

There are some limitations to this study and its findings. The use of correlational data limits my confidence in making causal conclusions. The measures used also merit some consideration. Family support, which was shown to be the most robust type of support, was not defined to participants and therefore was up for interpretation. While family usually represents parents and/or siblings, for older

adults in this population, they may have a “chosen family”, a phenomenon common in the LGB community (Hull & Ortyl, 2019). Likewise, self-expression in this study was measured using a single item “can talk about my worries with”, an important albeit simplified aspect of the self-expression of emotions. This type of expression of emotions has been shown to be important to well-being, but only if the expression is toward a supportive and caring other (e.g., Clark & Finkel, 2005). Likewise, both perspective-taking and reliance were also defined in terms of a single construct. A problem with the extant literature was that these constructs had not been developed carefully in previous research, and especially in terms of what support is meaningful to LGB individuals. Instead, existing autonomy support scales have been created with heteronormative samples, with the items maybe not reflecting what is important to those with a minority orientation or gender. Furthermore, there may be other aspects of autonomy support and social support more broadly that have not been considered in this study. Studies 9-11 addressed some of these issues.

7.3.2 Studies 9-11

In Studies 9-11, I further expanded on the findings from Study 8 by starting from the bottom up. Using a mixed methods design, I examined the autonomy support components important to LGBT+ individuals and created a scale to measure these components more accurately. In Study 9, I gathered qualitative responses from LGBT+ individuals describing important qualities of social support from close others. In Study 10, I used these qualitative responses to develop the 9-item Autonomy Support Components for LGBT+ individuals (ASC-LGBT+) scale which measures levels of support for acceptance, self-expression, and perspective-taking. An EFA validated the scale structure and an experimental design revealed that this scale was representative of support. In Study 11, I again tested whether these components reflect support, while also evaluating the extent to which each component of autonomy support relates to well-being. The findings of Study 10 were replicated, the ASC-LGBT+ mapped onto support, once again validating the measure. Moreover, all three autonomy support components of the ASC-LGBT+ were found to be simultaneous mediators linking the effect of recalling support on well-being.

Studies 9-11 developed and empirically tested a new scale to be used to measure quality autonomy support from close others in populations of people who hold stigmatised sexual orientations or genders. Understanding and testing these specific components of autonomy support is essential given the minority stress and resulting health disparities in this population (e.g., King et al., 2008; Meyer, 2003). The stress that stigmatised individuals face is related to discrimination and prejudice, which are relational in nature (e.g., D'Augelli et al., 2006; Herek, 2009). For example, within close relationships, others can know about the individual's sexuality and are unaccepting, or do not know and do not provide an environment in which one feels they can come out (e.g., Legate et al., 2012). These studies are another step toward finding the key components of autonomy support within close relationships needed to improve the well-being of LGBT+ individuals.

These findings build on findings from Chapter 5, which tested specific components of support in an LGB sample and found that self-expression was particularly important for well-being both immediately and over time. Results from Chapter 5 were based on a pre-existing dataset with measures meant for a range of contexts and in the general population. The measures were also lacking as close relationships were not defined and each support component consisted of a single item. The current findings from Chapter 6 inform and strengthen this body of literature. These findings are also supported by previous research which has identified the importance of autonomy support on well-being for LGB populations (e.g., Legate et al., 2012). This previous literature, although valuable, relied on global measures of autonomy support developed for the general population. These previous autonomy support scales do not distinguish specific components of autonomy support and differentiating the components of autonomy support may be especially valuable when assessing quality close relationships and their effects on LGBT+ well-being.

One component of autonomy support that emerged from Study 9 findings involved feelings that one is accepted. Specifically, this was characterised by individuals feeling that their sexual identity was recognised and feelings

unchanged toward them. Acceptance from close others has been shown to greatly increase LGB health and well-being (e.g., Van Der Star & Bränström, 2015). UPR, which reflects a complete acceptance of an individual as they are (Wilkins, 2000), has also been shown to be of importance in this population (e.g., Pachankis & Goldfried, 2004). Previous studies have noted the importance of perceived UPR from close others, with conditional regard shown to lead to negative well-being outcomes such as lowered self-esteem and poorer relationship quality (e.g., Assor et al., 2004; Kanat-Maymon et al., 2012). In clinical settings, UPR is considered an essential aspect of counselling for improving the mental health in LGB youth (Lemoire & Chen, 2005). It may be the case that acceptance is especially valuable in close relationships for someone with a stigmatised identity, which makes sense, as it has been shown that those with high perceived acceptance also have feelings of unconditional positive self-regard, or self-acceptance (Rogers, 1959), and this should be studied in future research.

Likewise, self-expression might be particularly important for this population. For stigmatised identities that are concealable, being 'out' with others about one's gender and/or sexual identity may be a large part of self-expression for LGBT+ individuals. Previous research has established the negative consequences of concealment and the positive benefits of being out, especially being out with autonomy-supportive others (Legate et al., 2012; Riggle et al., 2017). Authenticity, or expressing as one's true self, has consistently been shown to positively impact well-being in the LGB population (e.g., Riggle et al., 2017). Study 8 in Chapter 5, which looked at autonomy-supportive components, found self-expression from family members to be especially important for LGB individuals well-being over time, further researcher should explore whether support for self-expression is especially important for those with concealable stigmatised identities.

The last component of autonomy support found in Study 9 was perspective-taking. Like the previously discussed components, feeling that one's perspective

is being taken into consideration by others has been shown to link to better mental health and well-being in prior research (e.g., Payton et al., 2000). Within close relationships, for example within heterosexual couples, feeling understood has been found to be important for relationship satisfaction and mental health (Cramer & Jowett, 2010). Perspective-taking is an important aspect of support for LGB individuals, who otherwise might feel their identity is misunderstood by close others, but this has yet to be explored in the literature.

7.3.2.1 Implications and Limitations

With the development of the ASC-LGBT+ scale, future studies will be able to measure the specific aspects of autonomy support in populations of individuals who hold a minority orientation or gender. This is the first autonomy support scale developed using an LGBT+ sample, as previous studies use a generalised scale developed from heteronormative samples (e.g., Legate et al., 2012). Although findings from this previous work are useful, they fail to recognise the unique experiences and needs of LGBT+ individuals which are important to consider. Future research should examine autonomy support components in a heterosexual sample to see if some components (e.g., acceptance) are uniquely necessary for well-being for those with oppressed identities.

Likewise, LGBT+ is a summation of many identities, with previous research showing that each of these identities face unique challenges. For example, it is consistently shown that bisexuals have the worst mental health outcomes when compared to gay and lesbian samples, which may, in part, be due to less support and visibility of bisexual identities both within straight and LGB communities (Ross et al., 2018). Within LGBT, transgender individuals have been shown to have the worst mental health overall, and this has been largely attributed to lack of acceptance, both by the self and by close others (Su et al., 2016). It may be that some autonomy support components are uniquely necessary for some identities over others, but this can only be examined within a large dataset.

Understanding the specific autonomy support components necessary for well-being in this population is essential to use for education and intervention

purposes. For example, many schools and workplaces pour money into programs and policies to improve the social climate for LGBT+ individuals, and my research, which isolates key autonomy support factors important for well-being, could tell them how to best support them (e.g., Badgett et al., 2013). The ASC-LGBT+ scale has been shown to represent support and predict well-being for close-other relationships in this population. This scale could potentially be adapted and tested within work or school environments to further find what components of autonomy support are necessary for corresponding positive outcomes. For example, previous research has found receiving autonomy support from one's supervisor is essential for positive workplace outcomes, such as job satisfaction (Gillet, Gagne, Sauvagere, & Fouquereau, 2013). Meanwhile, LGBT+ individuals are more likely to have lowered workplace well-being due to unsupportive environments, such as perceiving discrimination and microaggressions from others (e.g., Galupo & Resnick, 2016; Mule et al., 2009). It may be that, in addition to providing an inclusive policy and generally supportive environment, delivering the necessary components of autonomy support may help to bridge the well-being gap in the workplace.

Future studies should examine support in different types of close relationships, and whether the type of relationship matters for the effectiveness of particular autonomy support components. Chapter 5 revealed family support, and support for self-expression within family support, was more important to mental health over time in an LGB sample. Large scale LGBT+ data is needed to further examine specific close relationships and the components of autonomy support that may be most important within them. Furthermore, although these studies are informative in their own right, future studies need to experimentally test acceptance, self-expression, and perspective-taking as predictors of well-being before concrete conclusions can be made. Studies 10 and 11 assessed previous supportive, or unsupportive, close-other experiences as the manipulation. A daily diary design may offer a more precise view on how these three components of autonomy support influence well-being and downstream relational experiences such as trust and self-disclosure.

7.4 Conclusions

This thesis explored topics related to autonomy support, authenticity, and well-being. My work, based on a Self-Determination Theory (Ryan & Deci, 2017) view that autonomy need satisfaction – the ability to experience and express oneself volitionally and self-congruently – is necessary for mental health and well-being, and can be supported interpersonally with close others. I further posited that individuals with disadvantaged identities, such as women and those who identify as LGBT+, may particularly benefit from autonomy support. In Chapter 3 I examined two types of self-expression: self-expression that is authentic and true to the self, and self-expression which is inauthentic and aimed at pleasing others. Findings highlighted the importance of authentic self-expression on well-being and need satisfaction. In Chapter 4, I further explored the topic of agency through its counterpart: namely, oppression. In a series of studies, I found that women tend to express themselves more when faced with instances of in-group oppression; a type of constructive reactance which may be due to a vicarious autonomy depletion. Finally, in Chapters 5 and 6, I took the view that measuring autonomy support is crucial to developing a better understanding of how it can be supported in LGB/LGBT+ individuals by their close others. I found in Chapter 5 family support for self-expression was especially important for well-being over a period of two years in LGB individuals. In Chapter 6, I extended the finding that certain components of autonomy support may be especially important to LGBT+ individuals. Importantly, two scales were developed and validated: the AIES can now be used by future studies to measure interpersonal authenticity, namely authentic and inauthentic self-expressions, and the ASC-LGBT+ scale can be used to test specific autonomy support components (self-expression, perspective-taking, and acceptance) in LGBT+ samples. Both these scales were necessary to create and validate to further the research into the benefits of authenticity and necessity of certain components of autonomy support for LGBT+ individuals. With these empirical chapters, many gaps in the literature have been filled, and many first steps taken, in expanding knowledge in autonomy support and well-being in disadvantaged groups.

Appendix A

Study 1 Original 60 Items Used for Item Selection

Authentic Expression Items

1. I share my true feelings with others
2. I express myself to others around me
3. I express my real thoughts and feelings to others
4. I think it's important to express my real thoughts and feelings to others
5. The things I say to others reflect exactly who I am
6. I share the things I think and feel
7. I say things that are true to me
8. I express my true self when I'm with others
9. I express my true self to others
10. I feel genuine when I express myself to others
11. I express my opinion even if others won't agree with it
12. I share my true opinions with others
13. I share my actual views with others
14. I can be who I am with others
15. I express my real thoughts and feelings
16. I express myself.
17. I only express my true self under very specific conditions.
18. I only express my real thoughts and feelings with people who are closest to me.
19. If I disagree with others, I tell them
20. If I disagree with others, I have no problem letting them know it
21. I express myself unapologetically
22. I can express myself even if someone disagrees with me
23. I would never say something I didn't believe
24. I say things I believe in
25. I only say things I believe in

26. I'm honest with myself when expressing my thoughts
27. All in all, I just try to be myself with others
28. All in all, I just try to say things that reflect the real me
29. No matter what, I express my genuine thoughts and feelings
30. I express myself even if others don't like it

Inauthentic Expression Items

1. I share fake feelings with others
2. I think it's better to keep my real thoughts and feelings to myself and only share ones people will like
3. I often express false parts of myself to others
4. I feel fake in how I express myself to others
5. If I think others won't agree with what I say, I say what they want to hear
6. I pretend to agree with others even if I secretly don't
7. I share opinions I think people will like
8. What others think of what I say is more important than what I think
9. If someone disagrees with me, I change what I'm saying
10. I share untrue thoughts and feelings with others to please them
11. I sometimes say things I don't believe when speaking to others
12. I don't see why anyone needs to know what I truly think or feel
13. I express myself a certain way so that others will like me
14. Others' views of me changes how I express myself
15. I carefully choose my words to make sure others view me positively
16. I say the things I think people want to hear
17. I feel insincere in how I express my thoughts and feelings
18. What I say doesn't reflect the 'real me'
19. My expression doesn't reflect the 'real me'
20. I like to think of myself as a people pleaser, even if it's not really 'me'
21. I try to express the 'right' emotions to other people

22. I try to express the emotions people want to see
23. I express emotions I do not truly feel
24. I pretend to be happy even if I'm feeling sad
25. I say things just to make people happy, even if they aren't 'really me'
26. I feel that how I express myself is fake
27. Often when I'm sharing things with others, I feel those things are out of touch with who I am
28. I feel there is a divide between who I am and how I express myself
29. Who I am and how I express myself are two completely different things
30. What I say and who I am are not at all the same

Appendix B

Study 2 Items Removed

Authentic Expression Items

- ☐ I express my true self to others
- * I express my real thoughts and feelings
- * I express my true self when I'm with others
- ☐ I express myself to others around me
- * I think it's important to express my real thoughts and feelings to others
- ☐ I can be who I am with others

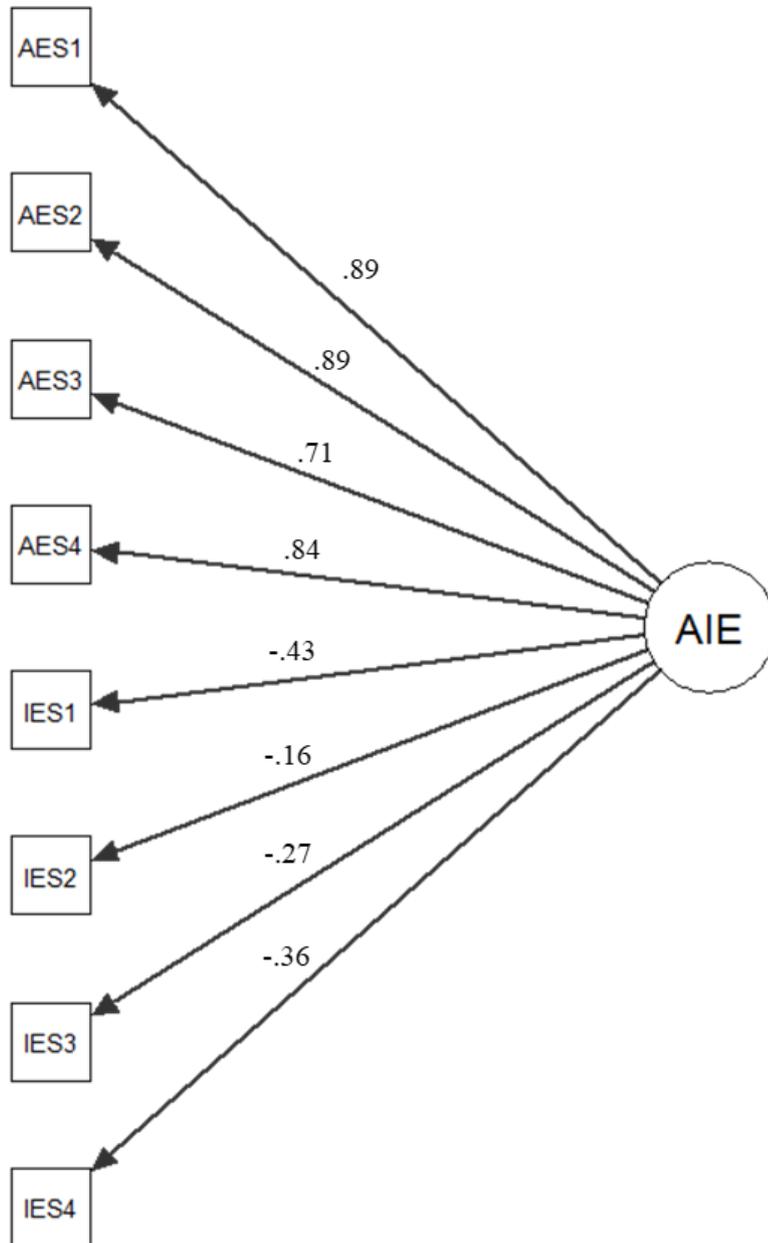
Inauthentic Expression Items

- ☐ I try to express the emotions people want to see
- ☐ I like to think of myself as a people pleaser, even if it's not really 'me'
- ☐ Others' views of me changes how I express myself
- ☐ I express myself a certain way so that others will like me
- * What others think of what I say is more important than what I think
- ☐ I try to express the 'right' emotions to other people

* Items were found to be redundant

☐ Items were found to be conceptually distant (from verbal expression)

Appendix C Study 2 Confirmatory Factor Analysis: One-Factor Structure



Note. Factor loadings are standardized estimates. CFI = .66, SRMR = .18, TLI = .53, RMSEA = .27, 90% CI [.25, .29]

Appendix D

Study 4 Results of AES and IES as Simultaneous Mediators of the Effects of Intrapersonal Authenticity on Well-Being Outcomes

Outcome	AES				IES			
	Level 1: Daily level		Level 2: Across 7 days		Level 1: Daily level		Level 2: Across 7 days	
	B(SE)	95% CI	B(SE)	95% CI	B(SE)	95% CI	B(SE)	95% CI
Autonomy	-.06(.11)	[-.25, .12]	-.06(.09)	[-.21, .10]	.30(.15)	[.05, .54]	.41(.27)	[-.03, .85]
Competence	.03(.02)	[-.01, .07]	.05(.06)	[-.06, .15]	.05(.03)	[.01, .10]	.21(.10)	[.05, .37]
Relatedness	-.19(.07)	[-.30, -.08]	-.12(.21)	[-.45, .22]	.04(.05)	[-.05, .12]	-.14(.14)	[-.38, .09]
Positive Affect	.16(.10)	[.00, .32]	.68(.34)	[.12, 1.24]	.01(.05)	[-.08, .10]	-.22(.29)	[-.69, .25]
Negative Affect	.24(.09)	[.09, .39]	.19(.14)	[-.03, .41]	.00(.08)	[-.13, .13]	-.05(.15)	[-.29, .20]
Self-Esteem	.17(.09)	[.02, .32]	-.22(.25)	[-.63, .19]	.05(.12)	[-.14, .24]	-.30(.39)	[-.93, .34]

Note. Bs represent the unstandardized regression coefficients and SEs are their standard errors. Previous day's outcome was controlled for in all analyses

Appendix E

Study 5 Experimental Materials

Self-expression oppression condition:

The image is a screenshot of the BBC News website. At the top, there is a navigation bar with the BBC logo, a search bar, and links for 'Your account', 'News', 'Sport', 'Weather', 'iPlayer', 'TV', 'Radio', and 'More'. Below this is a red banner with the word 'NEWS' in white, a 'Find local news' button, and a secondary navigation bar with links for 'Home', 'UK', 'World', 'Business', 'Politics', 'Tech', 'Science', 'Health', 'Family & Education', 'Entertainment & Arts', and 'More'.

Arrests in Egypt of the many, not the few

Changes to Egypt's government structures in recent years have centralized the power of President Hamdeen Sisi, elected in 2014. The result is major social changes within the country, especially for women.

A new study conducted by sociologists from the University of Cambridge suggests that, as a result of the new dictatorship, Egypt is now the worst of the 22 Arab states to be a woman. Primarily, this is due to heavy restrictions placed on women's behaviour in and outside of the home.

In fact, women now report feeling they are treated like second class citizens. Despite attempts to resist these restrictions, new restrictions on behaviour have permeated women's lives, and rules predominate thoughts and increase feelings of helplessness. The situation is aggravated by frequent government punishments inflicted on those who attempt to resist the restrictions and protest. There is a real danger posed to women who attempt to demonstrate their discontent. It is not uncommon for women to be arrested following expressing their views in non-violent protests.

The story of Maaïke Hassan is a clear example that illustrates these findings. On 26th September 2016, Hassan, attended a protest near the Journalist Syndicate in downtown Cairo. A relatively small group of around 50 women took part in this expression, to protest against acts of public sexual harassment of women. The women carried posters and chanted. Within moments, protesters were harassed by a mob of angry men, who told them to go home to their fathers.

Many escaped to the refuge of a nearby building. Hassan was not able to escape, and was subsequently stopped and arrested by armed officials. As a result of a peaceful expression of her views, Hassan was jailed on the terms of public disruption and interfering with national unity. Following a release on bail for the two-month long trial, she was sentenced to three years in prison. Egyptian women say, they feel, the story of Maaïke is a clear message from society: do not speak your views, do not choose a different way than that which is chosen for you by others.

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Economic oppression condition:



Changes in Egypt's economy and women

Changes to Egypt's government structures in recent years have centralized the power of President Hamdeen Sisi, elected in 2014. The result is economic changes within the country, especially for women.

A new study conducted by economists from the University of Cambridge suggests that, as a result of the new dictatorship, Egypt's GDP growth is now the lowest of the 22 Arab states. Primarily, this is due to higher tariffs on imports that have interfered with trade with the rest of the world.

In fact, these changes have been impacting women the most. Despite efforts to ameliorate the problem, grocery businesses have increased their prices, resulting in women facing difficulties feeding their families. The economic decline has also resulted in increases in petrol prices. This means many women cannot afford to use their cars and so are unable to maintain their previous lifestyle as public transport is limited in many areas of Egypt.

The situation is aggravated by the frequent government changes to education prices. Young women who wish to go to university face rises in tuition fees. This is concerning as education is key to women's development in society in Egypt.

The story of Maaik Hassan is a clear example that illustrates these findings. On 26th September 2016, Hassan was rejected from Ain Shams University in Cairo just weeks before her term was due to start. She was rejected due to lack of funding. Tuition fees had been increased from 150,000 Egyptian Pounds to over 175,000 (around £7500). Hassan was given minimal notice so could not apply for additional funding. However, even with sufficient notice, funding of these sums of money are difficult to come by for the typical Egyptian woman.

Rates of women being educated in Egyptian universities had been rising but these changes in the economy and taxes have been a major step back. Hassan has been passionate about Biology since a young age. She has been determined to increase her knowledge and gain a degree for many years. Her single-minded attitude meant through weeks of searching, she found sufficient funding in order to study Biology at Mansoura University. Due to social media campaign that Hassan had lead, her application was given special consideration and she was accepted onto the course. This story demonstrates how the determination of these women will get them to where they want to be, even if the odds are against them.

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Reporter oppression condition:

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Arrests in Egypt of the many, not the few

Changes to Egypt's government structures in recent years have centralized the power of President Hamdeen Sisi, elected in 2014. The result is major social changes within the country, especially for the media.

A new study conducted by sociologists from the University of Cambridge suggests that, as a result of the new dictatorship, Egypt is now the worst of the 22 Arab states for free press. Primarily, this is due to the dictatorship placing considerable censoring of public information and heavy restrictions on the press.

In fact, journalists now report feeling they are treated like second class citizens. Despite attempts to resist these restrictions, new restrictions on media have permeated journalists work lives, and these rules have increased thoughts and feelings of helplessness. The situation is aggravated by frequent government punishments inflicted on those who attempt to cover Muslim-Brotherhood (the political opposition) activities as well as other protests. There is a real danger posed to reporters who attempt to demonstrate their discontent or even carry out routine duties. It is not uncommon for journalists to be arrested following expressing their views by doing their routine duties.

The story of Mohammed Hassan is a clear example that illustrates these findings. On 26th September 2016, Hassan, a photojournalist went to a protest near the Journalist Syndicate in downtown Cairo. Upon arrival, he began to interview people on the street and take pictures of the protesters who carried posters and chanted; behaviour expected of any journalist. Within moments, the protest was harassed by an angry mob, who told them to go home to their fathers.

Many escaped to the refuge of a nearby building. Hassan was not able to escape and was subsequently stopped and arrested by armed officials. As a result of simply doing his job, Hassan was jailed on the terms of spreading fake news and harming national unity. Following a release on bail for the two-month long trial, he was sentenced to three years in prison. Egyptian journalists say, they feel, the story of Mohammed is a clear message from society: do not speak your views, do not choose a different way than that which is chosen for you by others.

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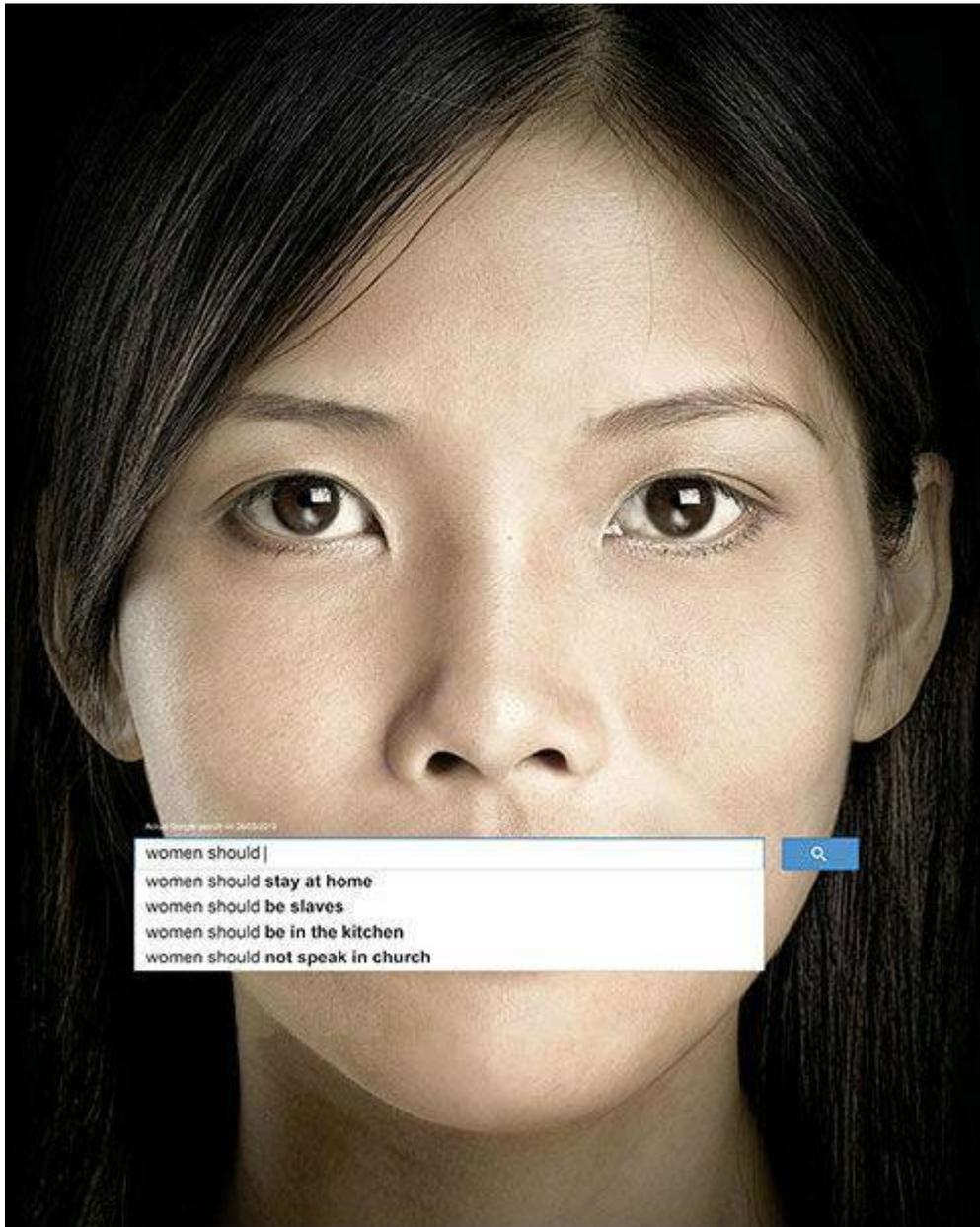
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Appendix F Studies 6 and 7 Experimental Materials

Women's censorship condition:

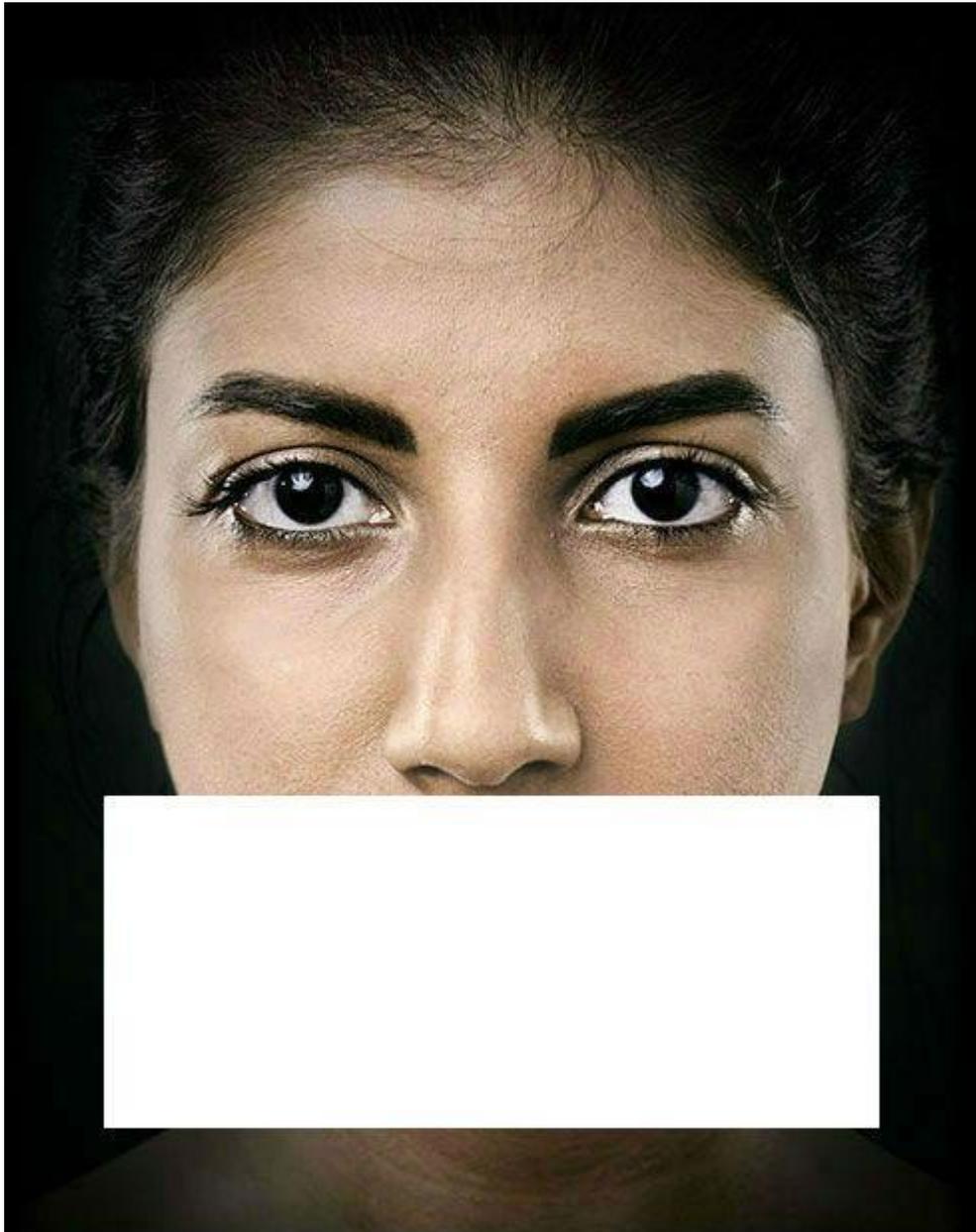


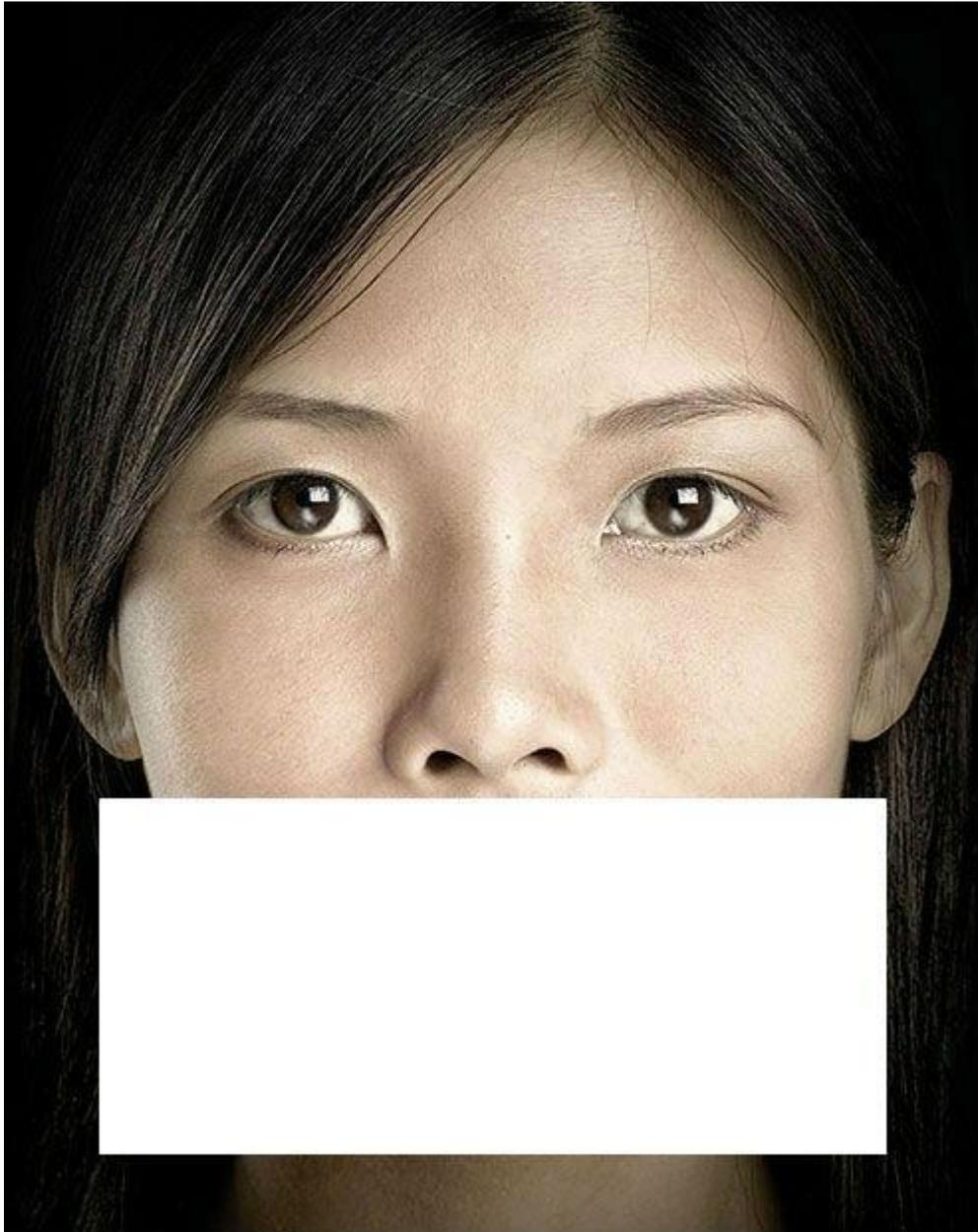


women should |

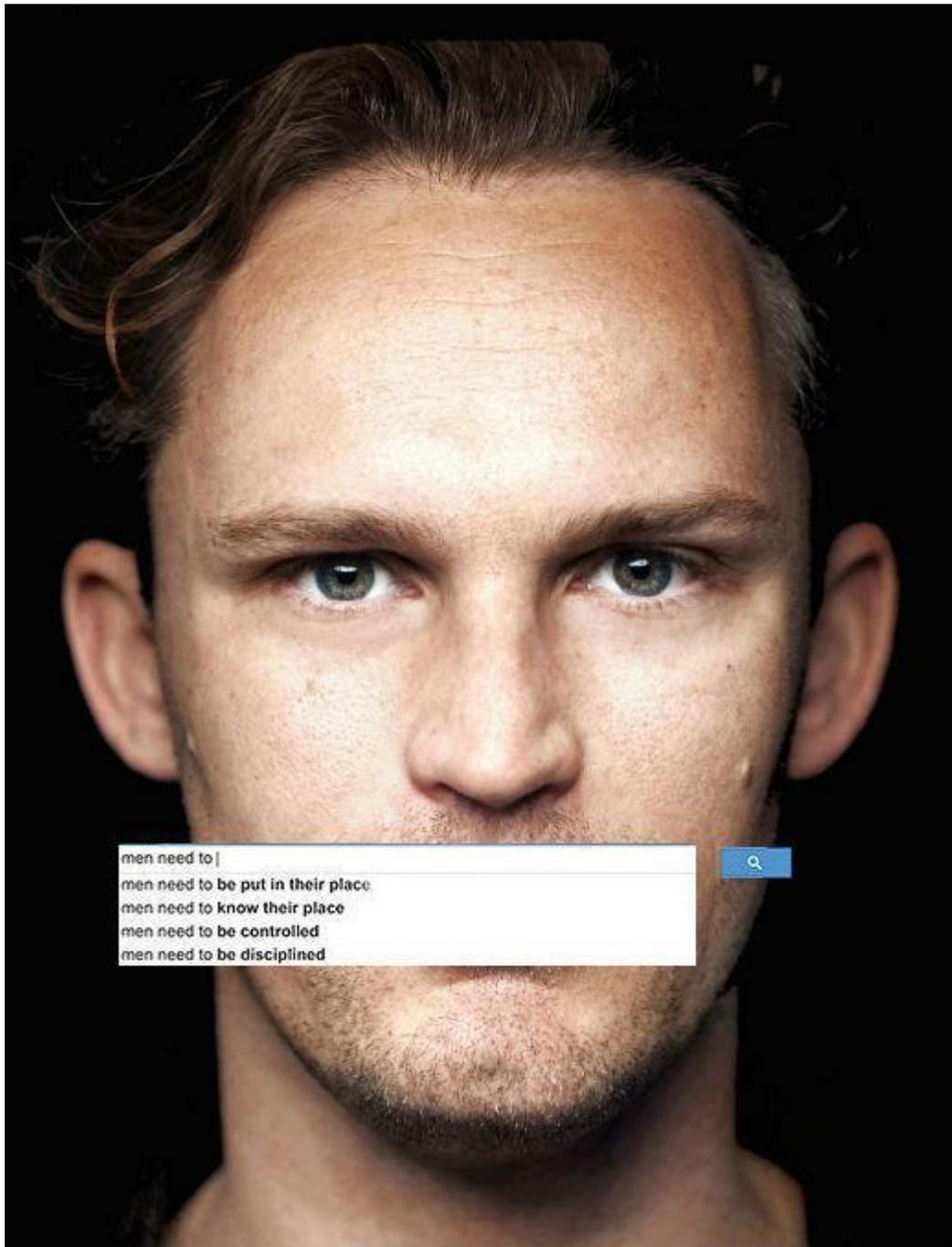
- women should **stay at home**
- women should **be slaves**
- women should **be in the kitchen**
- women should **not speak in church**

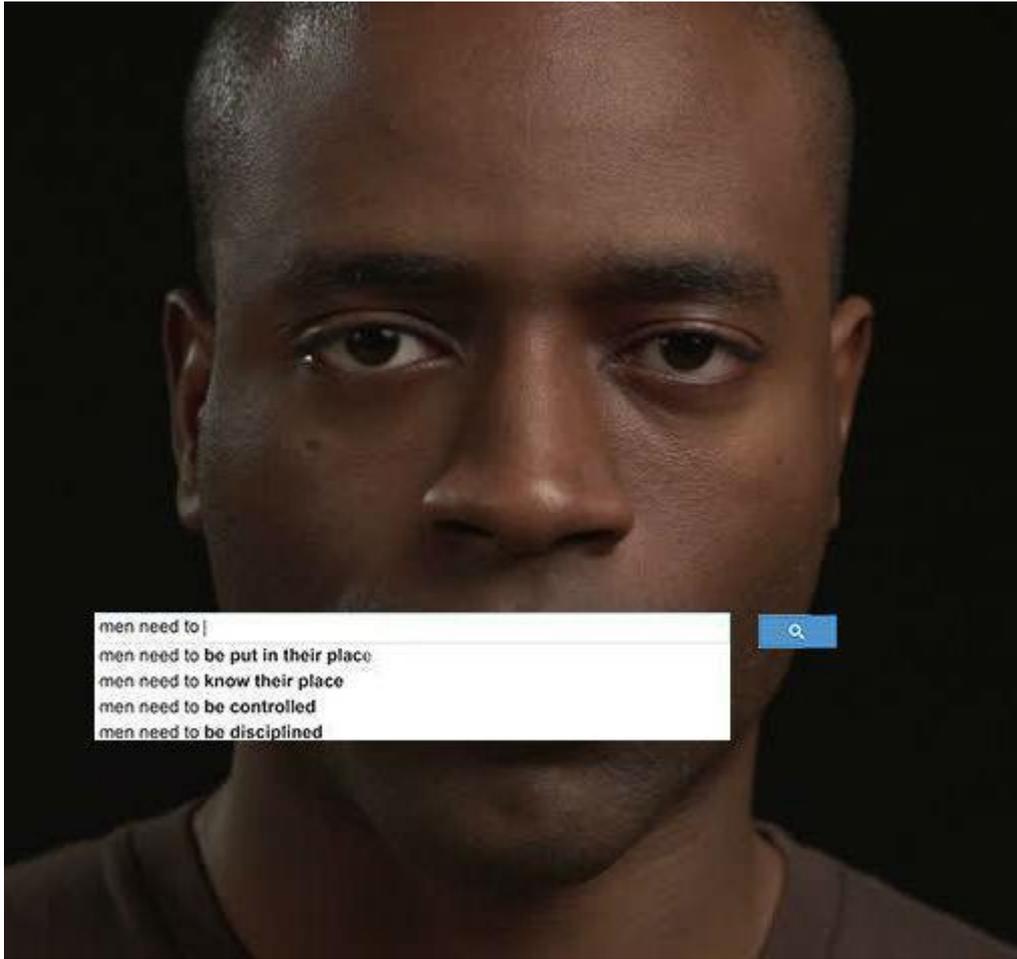
Women's neutral condition:





Men's censorship condition:





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