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Social change and perceived societal norms: An application to sexual minorities in Switzerland

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« Social Change and Perceived Societal Norms: An Application to Sexual Minorities in Switzerland »

Marie SANTIAGO DELEFOSSE
Doyenne

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Abstract

When we decide to express our opinion, reveal a (minority) group status, or react to persistent inequalities in a society, we do so by taking into consideration what we believe other people think. Where do these perceptions come from and how exactly do they affect our expressions, our feeling of belonging, and our intention to act up for social change? What if these perceptions are inaccurate? Drawing on different populations in Switzerland (i.e., general population, university students, and sexual minority members) and research designs (i.e., quasi-representative, natural experiment, and a large-scale survey of sexual minorities), the present thesis seeks to answer to these questions. Overall, the results of Study 1 ($N = 743$) indicate that in a time of social change people are more likely to misperceive others' opinions for debated issues compared to less debated issues. Specifically, people misperceived others' opinions toward same-sex female parenting (and other sexual minority issues) as more intolerant than they actually were. Building on this, Study 2 ($N = 437$) indicates that these misperceptions can be influenced by new institutional decisions (i.e., the new law on stepchild adoption) that reflect the social change process. Notably, students perceived less societal disapproval when they were informed about a new law legalizing stepchild adoption for sexual minorities. Finally, results of Study 3 ($N = 1'220$) indicate that perceptions of intolerant societal norms (i.e., intolerant others) have a dualistic effect on sexual minorities, as they are simultaneously associated with both increased and decreased support for social change. Together these findings have important implications for sexual minorities, policy makers, and activists in their effort to address structural inequalities and increase minorities' feeling of inclusion in society.

Résumé

Lorsque nous décidons d'exprimer notre opinion, révéler un statut de groupe (minoritaire), ou réagir à des inégalités sociétales, nous considérons souvent l'opinion des autres. D'où viennent ces perceptions de l'opinion des autres et dans quelle mesure influencent-elles notre expression, notre appartenance sociale, et surtout notre soutien pour le changement social ? Que se passe-t-il si nos perceptions sont inexactes ? Cette thèse essaie de répondre à ces questions en se basant sur différentes populations suisses (i.e., population générale, étudiant·e·x·s, et membres de minorités sexuelles) et divers plans de recherche (i.e., quasi-représentatif, expérimentation naturelle, et enquête à grande échelle sur les minorités sexuelles). Dans l'ensemble, les résultats (1ère étude, $N=743$) indiquent que les personnes ont une perception incorrecte de l'opinion des autres (ignorance pluraliste) en période de changement social et pour des enjeux débattus. En particulier, les individus ont tendance à surestimer le degré d'intolérance envers l'homoparentalité féminine (et d'autres enjeux liés aux minorités sexuelles) en Suisse. Les résultats (2ème étude, $N=437$) indiquent aussi que ces perceptions de l'opinion des autres peuvent être modifiées lorsque l'on informe les individus d'une nouvelle loi. Ainsi, des étudiant·e·x·s universitaires perçoivent moins d'intolérance en Suisse envers les minorités sexuelles, après avoir été informé·e·x·s d'une nouvelle loi sur l'adoption de l'enfant du conjoint dans un couple de même sexe. Finalement, les résultats de la troisième étude ($N=1'220$) indiquent que ces perceptions d'une norme intolérante (c'est-à-dire, opinions des autres) en Suisse peuvent avoir un effet contradictoire sur l'engagement des minorités sexuelles. Percevoir une norme intolérante semble motiver et démotiver les membres des minorités sexuelles à s'engager pour demander plus de droits. Les résultats présentés dans cette thèse ont des implications pratiques importantes tout autant pour les membres de minorités sexuelles, que les politicien·ne·x·s et les militant·e·x·s dans leur effort pour lutter contre les inégalités sociales.

Acknowledgment

"I can see now that a concept or even a feeling makes no sense unless out of our substance we spin around it a web of references, of relationships, of values." Ella Maillart

My PhD journey has been an adventurous one – from first stammering to great experiences and discoveries. There are so many people I would like to thank for their incredible support and inspiration throughout this journey.

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What are we without social support? I would like to thank all the friends who supported me, cheered me up, and encouraged me throughout this journey. Thanks to *Alice Genoud and Lara Martelli* for everything and *Erwan Le Bec* for putting up with us – looking forward to our next 'apéro' and adventures. I also would like to thank *Zélia Bourquin* – the conversations we have are eyes opening in so many ways – and *Firmin Manoury, Max Walter, Maarten Sap, Marko, Simona Haasova and all of my friends* who are always here to support me and to celebrate. I also have no words to thank *my family (Françoise, Philippe, Maïté, Paul, Gaby, Catherine, Patricia, Céline, and Dominique; Nadine and François; my wonderful grandparents and all the others) and extended family (particularly Martin, Taslina, Elke, Ortwin, and Soraya)* who have inspired me in so many ways. You have encouraged me to 'think out of the box' and pursue my goals. A special thanks goes to my parents *Françoise and Philippe* and my siblings *Maïté and Paul* who also knew when (and when not) to ask about academia and my PhD. Of course, I hope you know that I would have never managed this PhD without you, your love, and your support ('au propre comme au figuré' as we say in French).

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Introduction and Outline

"The world changes according to the way people see it, and if you can alter, even by a millimeter, the way people look at reality, then you can change the world."

— James Baldwin

CHAPTER 1: INTRODUCTION AND OUTLINE

General Introduction

Think about most people residing in your country—to which extent do you believe they approve or disapprove of same-sex marriage? What about other social issues such as same-sex parenting or gender equality? While you may be confident that your answers to these questions reflect reality, your perceptions of the opinions of most people in your country may actually be inaccurate. This is because you do not have a direct access to people's minds, and instead can only use cues that are available in your social environment in order to perceive people's opinions. Moreover, because the social reality is not static but constantly changing, your perception might lag behind changes in opinions. Understanding when and why people might have misperceptions of others' opinions and how to change these is important, because it can affect people's behaviors and actions. For instance, LGBTIQ+ (i.e., lesbian, gay, bisexual, trans, intersex, and questioning) individuals' and their allies' decisions to demonstrate in the streets to demand greater equality might be influenced by the way they perceive other people's opinion toward LGBTIQ+ individuals. Building on this, the present thesis aims to investigate perceptions of other people's opinions by offering a better understanding of i) individuals' perceptions of others' opinions in a constantly changing society, ii) the conditions under which these perceptions might be inaccurate, and iii) their impact on individuals' intentions to change the social context.

To achieve these three goals, it is crucial to systematically examine the dynamic interplay between the social context, perceptions of others' opinions, and the individual. To do so, I draw on a social representation approach (Moscovici, 1976; Sammut, Andreouli, Gaskell, & Valsiner, 2015a). This approach, also referred to as "a modern theory of social change" (Howarth, 2006, p.72), aims to explore the interaction between individuals and their social world through social representations (i.e., collectively shared ideas that have a dual function of enabling both orientation and communication; Moscovici, 1988). Integrating

models developed by the social representation approach (e.g., Bauer & Gaskell, 1999; Doise, 1980) and social psychological model (e.g., Pettigrew, 1997, 2018), I propose a normative representation model to describe various interactions between the social context, perceptions, and the individual (see Figure 1). Guided by the proposed normative representation model, I then investigate the interactions between the social context, perceptions, and the individual in the context of sexual minority members (i.e., individuals with a minority sexual orientation such as gay, lesbian, bisexual, or pansexual people) in Switzerland in three empirical chapters.

Attitudes toward sexual minority members in Switzerland, their legal situation, and actions to change this situation are interesting topics of study for three major reasons: First, previous studies have documented rapid social change toward greater acceptance of sexual minorities in many Western countries (e.g., Baunach, 2011; Hicks & Lee, 2006 in different Western countries similar to Switzerland). However, the perception of the opinion of the Swiss population might lag behind these rapid changes in opinions, resulting in inaccurate perceptions. Second, a new law on stepchild adoption for same-sex couples has recently been implemented in Switzerland. This raises the question of how this new information affects the perception of societal norms. Third, in comparison to other neighboring countries such as France or Germany, equal rights for sexual minorities are lagging behind (e.g., same-sex marriage is not legal in Switzerland; ILGA, 2019). Hence, the contested legal situation for sexual minorities and the recent implementation of the new 'stepchild adoption' law offer a perfect laboratory for testing the interactions between the social context and individuals through perceptions of others' opinions.

The goal of the present thesis is to provide a comprehensive understanding of how individuals' perceptions of societal norms are simultaneously influenced by the social context and social change and how these perceptions, in turn, affect individuals' actions to promote

social change. The thesis is structured around three empirical chapters. **Chapter 2** looks at how (mis-)perceptions of others' opinions may vary depending on the contextual controversy around an attitude object under study. Drawing on a representative sample of the population in the canton of Vaud in Switzerland, I suggest that misperceptions of others' opinions (or perceived social norms) are more likely to occur for new debated objects (e.g., sexual minorities' rights in the context of Switzerland) in a time of social change compared to objects for which opinions are more settled. Building on this, **Chapter 3** looks at how (mis-)perceptions of others' opinions toward sexual minorities may be influenced by institutional changes. More specifically, using a natural experiment, I investigate how a new institutional decision (i.e., implementation of stepchild adoption) affects the perceptions of societal norms. Finally, **Chapter 4** looks at how these (mis-)perceptions, in turn, influence the willingness to act for structural change toward greater legal equality for sexual minority individuals.

In what follows, I will first outline the normative representation model and its different components, then derive possible interactions (i.e., paths) between the different components of the model, and finally present the contexts in which the studies take place (i.e., Swiss political system and sexual minorities). I will then introduce and present the three empirical chapters contained in this thesis, before finishing with a general discussion and conclusion.

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Bridging the Social Context and Individuals: The Normative Representation Model

Individuals are embedded in the social world, which defines people's realities and perspectives, and is also, in turn, defined by people's actions (Jovchelovitch, 1996). For instance, lesbian, gay, and bisexual individuals living in countries criminalizing same-sex relationships (e.g., Nigeria, Iran, or Indonesia) are exposed to an entirely different reality and, in turn, might perceive the societal world differently than those living in countries granting equal rights to sexual minorities (e.g., same-sex marriage in the Netherlands, Germany, or Spain; see ILGA, 2019). This indicates that opinions and actions are inherently dependent on the social world. The social world is, however, also shaped by individuals' actions. Indeed, social movements such as the Stonewall Riots brought LGBTIQ+ individuals together to pave the way for greater legal equality for all (as indicated by Garretson, 2018).

Social psychological literature has long investigated the impact of the social world (or social context) on individuals (e.g., Crandall & Stangor, 2005; Fishbein & Ajzen, 1975; Kauff, Green, Schmidt, Hewstone, & Christ, 2016; Perkins & Berkowitz, 1986), but also the impact of individuals' actions on the social world (see for example literature on collective action; Wright, 2010; Wright & Tropp, 2002; Van Zomeren, Postmes, & Spears, 2008). To better understand this interaction, scholars have proposed theoretical models integrating the social context and individuals (e.g., Coleman, 1986; Pettigrew, 1997, 2018). One of these models is Coleman's (1986, 1987) boat—a causal diagram for the bidirectional relationship between macro (e.g., social structure) and micro levels (e.g., individuals' actions). It proposes that macro states influence individuals, while individuals' actions, in turn, influence macro processes at a later point (Coleman, 1986, 1987).

Another essential model is the one proposed by Pettigrew (1997, 2018), which connects macro (e.g., social context), meso (e.g., social groups), and micro levels (e.g., individuals). This model places psychological phenomena back in their social context in

reaction to the criticism of the "near-exclusive attention to cognition" in the field of social psychology (see Pettigrew, 2008, p. 964). Moreover, the model also aims to suggest that the "discipline should be acting as a meso level link between the micro level of psychology and the macro level of the other social sciences—sociology, political science, social anthropology, and economics" (Pettigrew, 2008, p. 964). Relevant for the present thesis, this model connects macro, meso, and micro levels through six different paths (i.e., Path A: macro to micro; Path B: micro to meso; Path C: meso to macro; Path D: macro to meso; Path E: meso to micro; and Path F micro to macro; see also Figure 1) reflecting *top-down* and *bottom-up* processes.

In order to understand how the social context impacts individuals (micro level) and how individuals can change the social context (macro level), it is important to consider that individuals can only rely on their perceptions of the situation and act upon these perceptions. Hence, perceptions can be seen as a link between macro and micro levels. This idea goes in line with the social representation approach (see for example Bauer & Gaskel, 1999; Jovchelovitch, 1996; Moscovici, 1988), which considers social representations as form of communication between the social context and individuals. Social representations—such as collectively shared ideas, thoughts, images, and values—have a dual function of enabling orientation and communication (Duveen & Lloyd, 1990; Moscovici, 1988; see also Eisner, Clémence, Roberts, Joost, & Theler, 2019 for an empirical example). They are neither solely individual nor solely social, rather they are common spaces between individuals and the social context (see Jovchelovtich, 1996 in particular) and are simultaneously influenced by the individual and the social world (Howarth, 2001). Consequently, in the present thesis I will combine this approach with the model proposed by Pettigrew (1997, 2008) to conceptualize the relationship between the social context and individuals through perceptions of others' opinions (a form of social representation, as indicated by Bertoldo & Castro, 2015).

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Research drawing on the social representation approach has emphasized the centrality of perceptions (or representations) to better understanding the connection between the different levels of analyses. For instance, Doise (1980) refers to the systems of representations, evaluations, and norms as one level of explanation in social psychology. He distinguishes between four different levels of explanations, namely i) intraindividual processes, ii) interindividual processes, iii) social position, and iv) systems of representations, evaluations, and norms. The first level, 'intraindividual processes', refers to individuals' perceptions and evaluations of their social environment. The second level, 'interindividual processes', explains the dynamic of relationships established among individuals in a given situation. The third level, 'people's social position' refers to people's status and group membership, while the fourth level, 'systems of representations, evaluations, and norms' explains how these belief systems impact individuals and their actions. Hence, in this discussion of the different levels of analyses in social psychology (Doise, 1980), representation occupy an important position.

Another integrating model of social representations is the *toblerone model* (Bauer & Gaskell, 1999). The toblerone model is composed of a triad consisting of two subjects (ego and alter) and one object and the development of this triadic relationship throughout time. Both subjects perceive the object, but each subject has a unique representation of it. The model integrates individuals' perceptions of the past and expectations about the future, and takes the shape of an elongated triangle (i.e., the toblerone model). In sum, this model proposes ways to consider representations at the center of individuals' interactions and, in particular, integrates perceptions of reality with individual and social processes.

To investigate how individuals' perceptions of others' opinions are simultaneously influenced by the social context and how these perceptions, in turn, affect individuals' actions, I propose to adapt Pettigrew's model (1997, 2008) by integrating social

representations (e.g., perceptions of others' opinions). Specifically, in this model—the

normative representation model—I suggest that representations can serve as a link between

social context and individual (see Figure 1). In order to keep the model parsimonious, the

original meso link (i.e., group processes) integrated in Pettigrew's model (1997, 2008) is not

displayed in the normative representation model. While the present thesis focuses on

perceptions of societal norms, it is important to note that intergroup processes as well as

group norms are integrated in the following sections as well as in the empirical chapters.
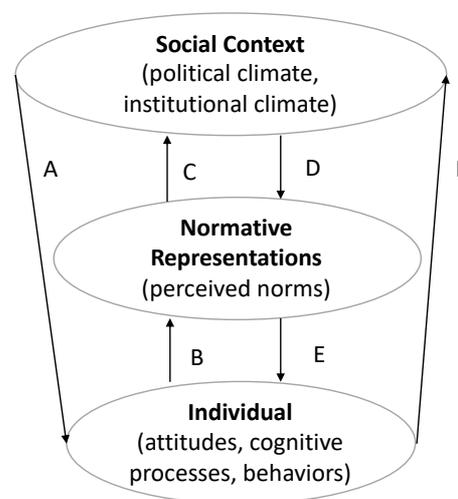
Figure 1. A Normative Representation Model

The normative representation model is composed of three levels, namely the social

context, normative representations, and the individual. Six paths connect the three levels to

represent how the social context affects the individual directly and indirectly via normative

representations (i.e., top-down processes) and how the individual, in turn, affect the social

context directly and indirectly via normative representations (i.e., bottom-up processes). In

the following sections, I will first define the three components of the model. I will then

discuss the interaction between these three levels (namely path A to F) theoretically, which

will be investigated in the empirical part of the present thesis. I conclude by discussing the

theoretical and practical implication of the empirical evidence.

Three Levels of the Normative Representation Model

This section gives an overview of the three levels of the normative representation model (see Figure 2), namely the social context, normative representations, and the individual. Hence, I first introduce the social context and its changing nature. Next, I discuss the concept of normative (mis-)representation. Because misperceptions of others' opinions (i.e., misrepresentations) are at the center of the different empirical chapters, I will also define the concept of pluralistic ignorance, which arises from misperceptions of others' opinions. Finally, I discuss the individual level.
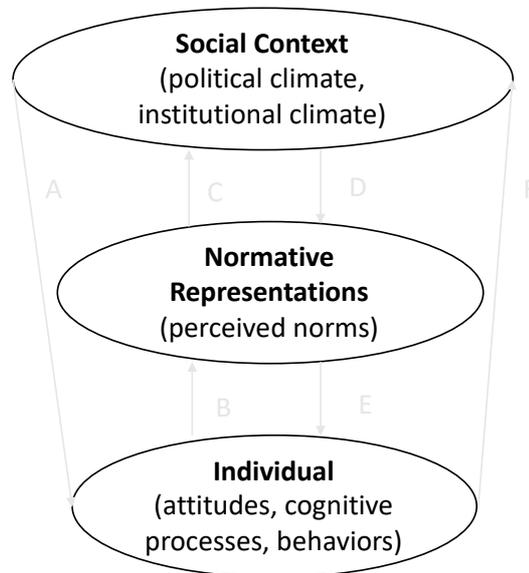
Figure 2. A Normative Representation Model: Three Levels

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Social Context: Continuity and Social Change

The first level depicted in the normative representation model is the 'social context'. Wherever people are, they are inherently embedded in a social context, generally defined in the present thesis as the social environment where things happen (i.e., who, where, when, with what, how; Howarth, Campbell, Cornish et al., 2013). The social context has several layers and encompasses different contexts such as the national, institutional, or political contexts surrounding a specific issue or group. For instance, LGBTIQ+ individuals' lives in a specific country are inherently limited by the institutional context (i.e., institutions that govern, educate, or organize a reference group and their social interactions, such as governments or schools as reported by Tankard & Paluck, 2016).

Notably, the social context also encompasses laws, rules, and norms that are defined within different contexts. Being given the right to marry is an example of laws defined by the institutional context. In the present thesis, the focus is placed on social norms and, as will be discussed in the next section (i.e., normative representations), perceptions of these norms. I will define social norms in this section and then focus on perceptions of these norms in the next section. A social norm is "a generally accepted way of thinking, feeling or behaving that is endorsed and expected because it is perceived to be right and proper thing to do. It is a rule, value or standard shared by members of a social group that prescribes appropriate, expected or desirable attitudes and conduct in matters relevant to the group" (Turner, 1991, p.3). Social norms toward minority groups, such as sexual minorities, can range from tolerant opinions toward some groups to intolerant opinions toward other groups (Visintin, Green, Falomir-Pichastor, & Berent, 2019). Hence, a social norm can take on the form of the majority opinion in the population.

An example of shared norms is the concept of heteronormativity. When a woman mentions her partner, people are likely to picture the woman's partner as a man. Similarly,

when children talk about their parents, people assume them to be a heterosexual couple. These are common examples of what is called heteronormativity (i.e., the tendency to consider heterosexuality as the norm; Warner, 1991). Heteronormativity is present in many different contexts such as school, the legal framework, the workplace, or the medical sphere, and might negatively impact the attitudes toward LGBTIQ+ individuals, which can have negative consequences for LGBTIQ+ individuals' feelings of inclusion (see Robinson, 2013; see also Van der Toorn, Pliskin, & Morgenroth, 2020 for an overview).

Importantly, however, social context is not static; rather norms, laws, and rules do sometimes evolve as a result of the social change process. Hence, a main goal of this thesis is to examine these dynamic social change processes by drawing on the societal psychology literature. The study of the different contexts which promote or inhibit societal change is a major aim of societal psychology (as indicated by Himmelweit & Gaskell, 1990; Howarth et al., 2013; Staerklé, 2011). The notion of societal psychology was originally proposed to emphasize the importance of conducting research that is directly connected to the real world outside the discipline (Howarth et al., 2013). Thus, societal psychology, compared to social psychology, places a stronger emphasis on how both social context and social psychological processes relate to social issues (Doise, 1993; Staerklé, 2011). Importantly for the present thesis, research in societal psychology emphasizes the study of change—the needs, resistance, and actors of change (Howarth et al., 2013).

Any social context, perceived through the lens of social change, is in an ongoing and debated process of social continuity versus social change (Howarth et al., 2013), respectively conformity versus innovation (Moscovici, 1976). This situation of continuity versus social change can be aptly described by the concept of normative window of time, defined as a situation "where the prevailing norms are neither entirely positive nor entirely negative toward the groups, but where there is a general social change toward more acceptance"

(Crandall & Warner, 2005, p. 138). The normative window of time approach was developed to provide a better understanding of the reasons why some prejudices capture public attention at a certain point in time while others do not (Crandall, Ferguson & Bahns, 2013). The authors proposed that prejudices that capture attention are i) considered morally wrong, ii) appear to be shared by a lot of people in the general population, and iii) are shifting from being acceptable (i.e., acceptable to express prejudice toward a specific group) to being unacceptable in the society (Crandall et al., 2013). For groups present in a normative window of time, there are no agreed-upon social norms about how to feel toward these groups. One example of a situation that might be defined as a normative window of time is that of sexual minorities in many Western countries (Crandall et al., 2013), as: i) intolerant opinions toward sexual minorities are increasingly considered morally wrong, ii) there is a controversial debate between supporters and opponents of sexual minorities' rights, and iii) sexual minorities are shifting toward greater acceptability in society (e.g., Andersen & Fetner, 2008; Brewer, 2014; Herek & McLemore, 2013; Keleher & Smith, 2012; McCarthy, 2018). In the present thesis, I will place a particular emphasis on studying such social change processes in the sexual minority context.

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Normative Representations: Perceived Norms and Pluralistic Ignorance

The second level depicted in the normative representation model is the 'normative representations' level (see Figure 3). When people are interacting with one another, they have expectations about what other people think. For instance, a sexual minority member might choose to conceal their sexual orientation from someone because they expect that this person is not tolerant of sexual minority members. On the other hand, this same person might choose to share their sexual orientation with someone they perceive as tolerant. These expectations about the effects of interactions between individuals in specific situations are referred to as normative representations (Spini & Doise, 2005) and are a central part of the present thesis.

One specific form of normative representations is the perception of others' opinions in a given situation, referred to as perceived norm. While 'objective' social norms can be considered part of the social context, perception of social norms exists on the normative representation level. When it comes to perceived norms, people can hold perceptions of what most people *do/think* in a society (e.g., most people are in favor of same-sex marriage), but also perceptions of what most people *should do* in a society (e.g., most people should be in favor of same-sex marriage). This is a common distinction in the literature, which distinguishes between *descriptive norms*—perceptions of what most people do and think— and *injunctive norms*—perceptions of what most people should do or think (Cialdini et al., 1991).

Importantly, not only the kind of perceived norms but also to what kind of group the norms and, especially, the perceived norms apply can differ. Relevant to the present thesis, salient groups can differ in their size and their social distance to the individual. For instance, some perceived norms can characterize a small neighborhood or community. Other norms— such as perceived societal norms—can correspond to perceptions of the opinion of wider communities, including large geographical areas or nations (Paluck & Shepherd, 2012).

Hence, people's perception of the norm can vary depending on the salient group. For instance, people's perceptions of the norm toward same-sex marriage can vary depending on whether they consider the opinions of their neighbors or of most people in their country. In the present thesis, a focus is placed on perceived societal norms (i.e., societal level).

Normative misrepresentations: pluralistic ignorance. People do not form perceptions of the norms (or accurate normative representations) in an unbiased manner, as they cannot know the actual views or positions of others. These misperceptions might be especially likely in a period of social change, when opinions are rapidly changing. The term *pluralistic ignorance w*as first suggested to characterize such situation of shared misperception of others' opinions (Katz & Allport, 1931). This concept grew out of another concept, namely 'the illusion of universality', which describes individuals' tendencies to believe that opinions are universally held by members of a social group (Allport, 1924; Halbesleben & Buckley, 2004). Both the concepts of 'pluralistic ignorance' and 'illusion of universality' are based on the idea that individuals cannot know the actual views or positions of others, they instead make assumptions that tend to become illusions of universality (O'Gorman, 1986).

In the first study documenting pluralistic ignorance, the authors showed that students were in favor of racial minorities being integrated in their institutions or dormitories, but wrongly perceived that other students would not agree (Katz & Allport, 1931). Following this initial study, research exploring the concept of pluralistic ignorance was mostly undertaken by Allport's (former) students (e.g., Katz & Braly, 1933; Morse & Allport, 1952; Schanck, 1932) and did not gain much popularity until the 1970's. Renewed interest in the concept of pluralistic ignorance first came from the field of public opinion (and sociology) (Fields, 1971; Fields & Schuman, 1976). It occurred almost by chance, as researchers in the field

initially sought to investigate attitude behavior consistency among residents in Detroit, but ended up writing an article on pluralistic ignorance:

> "Beginning with an interest in the issue of attitude behavior consistency, we sought to test the widely held assumption that attitudes assessed in surveys are often not manifested in subsequent behavior because individuals believe significant others will be displeased (DeFleur and Westie, 1958; LaPiere, 1934; Schuman and Johnson, 1976). […] But we were curious about the accuracy of respondent beliefs themselves, and took advantage of our cluster sampling design to compare perceptions of neighbors' opinions with the expressed opinions of neighbors, so far as we could assess the latter. Our puzzlement at the results of this comparison and of other related analyses led to a more thorough exploration of the subject - drawing on two additional data sets - and to a very different paper from the one we at first set out to write."
> (Fields & Schuman, 1976, pp. 428-429).

This research documented a mismatch between people's perception of others' opinions and others' actual expressed opinions. Indeed, a majority of people in Detroit were in favor of intergroup friendship but thought that only a minority of people in Detroit would approve of interracial playmates. In addition, residents in Detroit also misperceived, to some extent, most of their neighbors', friends', and spouses' opinions (see Fields & Schuman, 1976).

This initial article in the field of public opinion (Fields & Schuman, 1976) was closely followed by research on pluralistic ignorance in the ethnic context (O'Gorman, 1975, 1979, 1986, 1988; O'Gorman & Gary, 1976). This research showed that Americans wrongly perceived that most White Americans were in favor of racial segregation (O'Gorman, 1975). It also reintroduced the concept of pluralistic ignorance as a shared false idea (O'Gorman, 1975, 1979, 1988) describing a situation when a minority position is incorrectly perceived to be the majority position and vice versa (O'Gorman, 1975; Merton, 1968; Taylor, 1982).

CHAPTER 1: INTRODUCTION AND OUTLINE

These initial studies on pluralistic ignorance in the public opinion literature (Fields &
Schuman, 1976; O'Gorman, 1975, 1979, 1986, 1988; O'Gorman & Gary, 1976) have
influenced the way pluralistic ignorance is defined in at least three ways. First, these initial
studies define pluralistic ignorance as false social knowledge. Second, they operationalize
pluralistic ignorance as a mismatch between minority and majority opinions. Third, rather
than focusing on one specific group, these works have also assessed perceptions of others'
opinions in the general population as well as for other groups of reference such as friends and
neighbors.

The second resurgence of the pluralistic ignorance concept was brought on by an
experimental study in the field of social psychological (Miller & McFarlands, 1987; notably
however, see Latané & Darley, 1970 for a mention of pluralistic ignorance to explain
bystander effects). Students were given extremely difficult tasks which they could not solve
by themselves. The other students in the classroom (who were confederates) did not ask for
help. Observing this, the subjects did not ask for help, wrongly assuming that the other
students understood the material (i.e., pluralistic ignorance according to the authors; Miller &
McFarland, 1987).

Notably, the social psychological understanding of the concept of pluralistic
ignorance (e.g., Miller & McFarland, 1987) differs from the understanding in the public
opinion research in four key ways (see Table *1*). First, the authors integrated both the concept
of norms ('[…]to describe the situation in which virtually all members of a group privately
reject *group norms* yet believe that virtually all other group members accept them') and the
concept of behaviors ('pluralistic ignorance occurs when individuals infer the identical
actions of the self and others', Miller & McFarland, 1987, p. 298) into their definition of
pluralistic ignorance. Second, rather than studying pluralistic ignorance at a societal level, the
authors tested this effect among students. Third, rather than relying on survey data, they used

three experiments to control for the causality (i.e., they measured perceptions and actual

behaviors of one student at a time). Finally, their definition of pluralistic ignorance no longer

included the concept of minority/majority distribution, and pluralistic ignorance was hence

analyzed as the mean difference between perceptions of the self and of others' opinions (or

behaviors).

Table 1

Pluralistic Ignorance in Public Opinion and Social Psychology Literatures

	Public Opinion Literature	**Social Psychology Literature**
Main Focus	Misperceptions of others' opinions	Misperceptions of social norms
Definition	Minority position on issues is incorrectly perceived to be the majority position and vice versa	Discrepancy between people's private beliefs and public behavior
Samples	Large scale (e.g., geographical area, countries)	Small scale (e.g., schools)
Measure	Different levels (e.g., state, neighborhood)	Group-level (e.g., students)
Design	Surveys	Surveys, experiments
Central articles	Fields & Schuman, 1976; O'Gorman, 1975	Miller & McFarland, 1986; Prentice & Miller, 1993

The most influential research on pluralistic ignorance in the field of social

psychology, however, has been Prentice and Miller's (1993) work on alcohol consumption

(see Halbesleben & Buckley, 2004). In this article, the authors investigated pluralistic

ignorance regarding alcohol consumption among students. They used the same definition of

pluralistic ignorance as the previous paper (Miller & McFarland, 1987) and directly

investigated the link between private attitudes and social norms. They found that students

wrongly perceived other students to approve of alcohol use more than they themselves did.

Most importantly, they showed that the attitudes of male students (but not female) shifted in

the direction of the perceived norm (i.e., more comfort with alcohol practice) and that

pluralistic ignorance (i.e., perceived deviance with others) was associated with higher campus

alienation. Following up on this research, training to counter pluralistic ignorance reduced

own drinking behavior and the prescriptive strength of the drinking norm among students (Schroeder & Prentice, 1998).

Following these initial studies on pluralistic ignorance (Katz & Allport, 1931) and the renewed interest for this concept in the fields of public opinion (Fields & Schuman, 1976; O'Gorman, 1975) and social psychology (Miller & McFarland, 1986; Prentice & Miller, 1993), pluralistic ignorance has been studied in numerous areas (see Bjerring, Hansen, & Pedersen, 2014; Mendes, Lopez-Valeiras, Lunkes, 2017 for an overview). Pluralistic ignorance has been documented in topics including *climate change* (e.g., Chumg, Shi, Sun, 2019; Geiger & Swim, 2016; Leviston, Walker, & Morwinski, 2013; Monin & Norton, 2003), *alcohol and tobacco usage* (e.g., Schroeder & Prentice, 1998; Suls & Green, 2003), *sexuality and dating* (e.g., Boon, Watkins, & Sciban, 2004; Reiber & Garcia, 2010); *gender and masculinity norms* (e.g., Munsch, Weaver, Bosson, & Connor, 2018; Sobotka, 2020; Van Grootel, Van Laar, Meussen, Schmader, & Sczesny, 2018; Vandello, Ransom, Hettinger, & Askew, 2009), *intergroup contact* (e.g., Shelton & Richeson, 2005; Stathi et al., 2020), *mental health* (Karaffa & Koch, 2016), and *LGBTIQ+ issues* (e.g., Bowen & Bourgeois, 2001; Perryman, Davis, & Hull, 2018). These studies have shown, for instance, that some people tend to underestimate others' support/beliefs in climate change (e.g., Leviston, Walker, & Morwinski, 2013), that men tend to overestimate sexist behaviors among other men (e.g., Sobotka, 2020), and that students tend to overestimate intolerance toward lesbian, gay, and bisexual individuals (Bowen & Bourgeois, 2001). In the present thesis, I will place a particular emphasis on such misperceptions of others' opinions (i.e., pluralistic ignorance), especially those arising in a time of social change (see in particular Chapters 2 and 3).

CHAPTER 1: INTRODUCTION AND OUTLINE

Individual: Opinions and Actions

The third level depicted in the normative representation model is the 'individual'

level. In any given situation, individuals have their own characteristics that make them

unique. For instance, they are members of different categories (e.g., sexual minority

category), they hold opinions toward different issues or groups, and engage in particular

behaviors. The way people perceive reality and the opinions they hold influence their

behavioral intentions and shape their individual and collective dynamics (e.g., see theory of

reasoned action; Fishbein & Ajzen, 1975). For instance, people differ in the degree to which

they are in approval or disapproval of same-sex marriage. Indeed, research has shown that

people with a left-wing political orientation (i.e., liberal people) and higher levels of

education, women, younger people, less religious people, and less authoritarian people tend

to be more supportive of sexual minorities (e.g., Anderson & Fetner, 2002; Becker &

Scheufele, 2009; Herek, 2009; Herek & McLemor, 2013; Ohlander, Batalova, & Treas, 2005;

van den Akker, van der Ploeg, & Scheepers, 2013). Furthermore, people who hold very

positive opinions toward sexual minorities (e.g., sexual minorities themselves and allies),

might be more likely to intend to engage in actions aiming at increasing sexual minorities'

rights. These behavioral intentions, in turn, are important prerequisites for individuals' actual

behaviors, which might then manifest in collective actions (any action individuals undertake

as group members to pursue group goals of social change; Wright, Taylor, & Moghaddam,

1990).

The notion of individuals does not mean that individuals are considered independently

of others; any mention of individuals does not exclude their positions in society or their group

membership. In social psychology literature, much has been written about individuals who

identify with different social groups and how they relate to each other. Scholars differentiate

between categorization into and identification with different social groups (Tajfel & Turner,

1979; 1986). Some people can be members of a certain category (i.e., ingroup members) and some can be external to this category (i.e., outgroup members). Among the members of a group, individuals can vary in their level of identification meaning how important they consider this group to be in their everyday lives (Tajfel & Turner, 1979). These different categories are interrelated with people's thoughts and actions.

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Dynamic Interplays in the Normative Representation Model

In this section, I will describe the dynamic interplay between the social context, normative representations, and the individual (see Figure 3) that lay the ground for the three empirical chapters of this present thesis. I will start by discussing the paths from the social context to individual (Path A) and from individual to normative representations (Path B). These two paths will lay the groundwork for the first empirical chapter (Chapter 2). I will then discuss the bidirectional paths between normative representations and social context (Paths C and D), which are the topic of the second empirical chapter (Chapter 3). Finally, I will discuss the path from normative representations to individual processes (Path E) and from individual processes to the social context (Path F). These two last paths will be investigated in the third empirical chapter of the present thesis (Chapter 4).
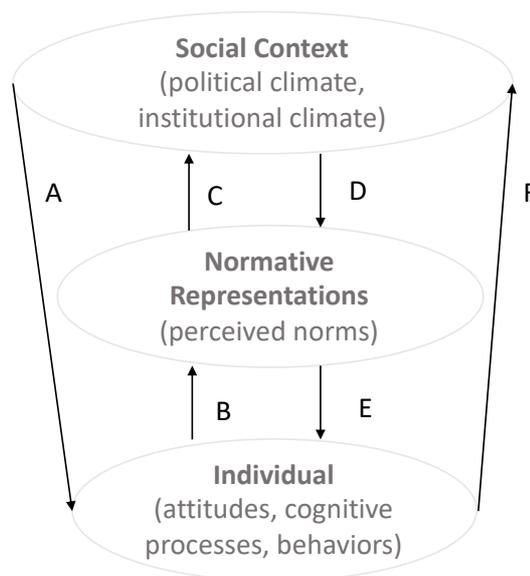
Figure 3. A Normative Representation Model: Six Paths

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Social Context to Individuals (Path A) to Normative Representations (Path B)

People are inherently embedded in a social context, which rather than being static, is made of dynamic processes (Howarth et al., 2013). For instance, in the last few decades, the situation of sexual minorities in many Western countries has shifted dramatically: from criminalization of same-sex activities to the implementation of same-sex marriage (see ILGA, 2019 for an overview of the legal situations of sexual minorities). In a time of social change, when a topic becomes an object of public debate (e.g., debate around same-sex marriage in Switzerland), individuals might reconsider their opinions and, especially, their perceptions of the opinions of others. This dynamic process—between social context, individual and normative representations—is the topic of the present section (see Figure 4).
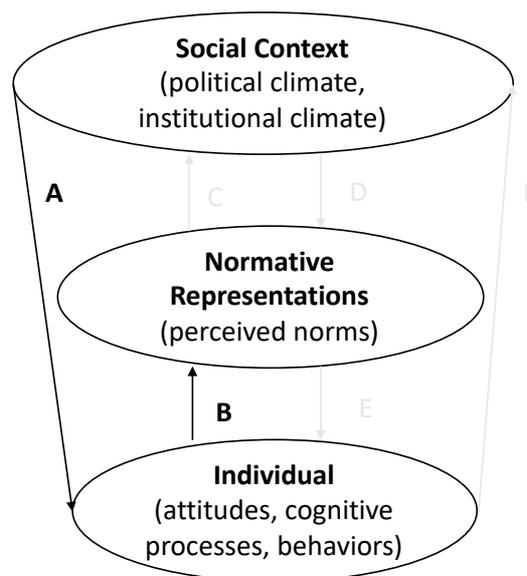
Figure 4. A Normative Representation Model: Social Context to Individual to Normative Representations

Social debates and individuals' positions (Path A). In a time of social change and political debates, opinions and, especially, representations of an object (e.g., same-sex marriage) become a source of conflict among different social and political actors (Elcheroth, Doise, & Richer, 2011; Marková, 2003). In what follows, I will illustrate how debates and

social change influence individuals. During new debates on a specific topic, symbolic

meanings of the object will develop and become a map of common shared points of reference

for people. This process, defined as *objectivation*, leads to stable, shared perceptions of the

objects (Moscovici, 1976, 1984). While individuals will perceive these common points of

reference (i.e., the dominant norms), this does not imply that they will agree with them

(Sammut, Andreouli, Gaskell, & Valsiner, 2015b). The process of *anchoring* results in the

integration of this common meaning in various groups and leads to divergent positions

expressed in public spaces by individuals belonging to different social groups (Kronberger,

2015; Moscovici, 1976, 1984; Sammut et al., 2015b). The idea of *social positioning* derives

from this anchoring, which is the result of the adaptation between what we think (i.e.,

personal opinions) and what other social groups think (i.e., perceptions of other people's

opinions) (Clémence, 2001, 2003; Clémence, Doise & Lorenzi-Cioldi, 1994; Sammut et al.,

2015b). Social positioning allows individuals with different social stakes to express their

identity (Mugny & Carugati, 1989). While social positioning also incorporates perceptions of

others' opinions, it also especially reflects the influence of the social context and the level of

debate around an issue on individuals (Path A).

Relevant to the present thesis, social positioning can be seen as a (strategical)

adaptation between personal opinions (i.e., what we think) and perceptions of different

groups' opinions (i.e., what other social groups think). Hence, different cognitive processes—

or cognitive biases—might be at stake in times of social change. Depending on the process

surrounding the issue at stake, some people might tend to wrongly perceive that their opinion

is shared with others (i.e., false consensus), while others might wrongly perceive that their

opinion is unique (i.e., false uniqueness).

False consensus and false uniqueness (Path B). While false consensus and false

uniqueness are usually considered to be individuals' cognitive biases, these effects are

discussed in this section (rather than the 'individual' section) because I maintain that they represent the interaction between individuals and their perceptions (i.e., Path B). *False consensus* was initially defined as people's tendency "to see their own behavioral choices and judgment as relatively common and appropriate to existing circumstances while viewing alternative responses as uncommon, deviant, or inappropriate" (Ross, Green, & House, 1977, p. 280). In this initial study, the authors illustrated false consensus among university students in situations of i) *behavioral choices in hypothetical conflict situations* (e.g., vote in favor of or against a 'space program referendum'), ii) *rating of personal characteristics* (e.g., political expectations such as having the first woman in the supreme court within a decade); and iii) *actual behaviors in conflict situations* (e.g., wearing a sandwich board sign saying 'Repent'). In all these situations, students tended to perceive their responses as being similar to other people's responses, while responses differing to their own response were seen as relatively uncommon (see Ross et al., 1997).

Since this initial study, false consensus has been observed in a wide variety of situations, such as *political values/preferences* (e.g., Amit, Roccas, Meidan, 2010; Howell & O'Mara, 2020; Van Boven, Judd, & Sherman, 2012), *vaccination* (e.g., de Bruin, Galesic, Parker, & Vardavas, 2020), *gender preferences* (e.g., Krueger & Zeiger, 1993), *land use* (e.g., Mannarini, Roccato, & Russo, 2014), *vacation preferences* (e.g., Coleman, 2018), and *media use* (e.g., Gvirsman, 2015; Schulz, Wirth, & Müller, 2018; Yousif, Aboody, & Keil, 2019). One of these studies has shown, for instance, that Trump supporters overestimated their agreement with Trump (Howell & O'Mara, 2020).

In the literature, several explanations have been presented for the false consensus effect (see Mark & Miller, 1987). Scholars often differentiate between four different processes (see Marks & Miller, 1987; Verlhiac, 2000; Coleman, 2018 for an overview). The first three explanations are cognitive and non-motivational. The first is *selective exposure and*

cognitive availability—people have interpersonal contacts with others that tend to act and think like them. This favors exposure to available cognitions and limits exposure to alternative beliefs or behaviors, which can lead to false consensus. The second is *salience and focus of attention*—people use information about themselves to infer information about others' opinions. They therefore focus on their preferred position, rather than alternative positions, which can lead to false consensus. The third is *attribution*—people explain their opinions by attributing their causes to situational factors and therefore expect that others share their opinions. Hence, people tend to assume that the same circumstances that drive their opinions or behaviors should drive those of others. This can therefore also lead to false consensus. The last explanation is *motivation*—people use positioning of others to validate the correctness of their position and to strengthen perceived social support (i.e., self-validation). This process is especially salient when people feel that their beliefs or behaviors are undesirable. In this case, they express false consensus to legitimate their own beliefs and behaviors and avoid feeling deviant (Marks & Miller, 1987; Verlhiac, 2000; Coleman, 2018).

People not only tend to overestimate the level of consensus for their views, they also tend to do the opposite. *False uniqueness* refers to the perception that one's attribute, opinion, or behavior is more unique than is actually the case (Mullen, Dovidio, Johnson, & Copper, 1992; Perloff & Brickman, 1982; Suls & Wan, 1987). The term false uniqueness was originally associated with the idea that people holding desirable attitudes tend to underestimate consensus (Suls & Wan, 1987; see Chambers 2008 for an overview). In a study among female university students (Suls & Wan, 1987), researchers found that high-fear students (i.e., fear of spiders, snakes, being criticized, speaking before a group, not being a success, being self-conscious, and of making mistakes) were more likely to express false consensus (i.e., overestimate the amount of people who share their fears), while low-fear

students were more likely to express false uniqueness (i.e., overestimate the amount of high-fear students).

False uniqueness has been documented in a variety of areas such as *mental health* (e.g., Suls, Wan, Barlow, & Heimberg, 1990), *stigmatized conditions* (e.g., Frable, 1993), *political preferences* (e.g., Stern, West, & Schmitt, 2013), *school performance* (e.g., Thorpe, Snell, Hoskins, & Bryant, 2007), *moral or altruistic acts* (e.g., Monin & Norton, 2003), and *driving abilities* (Svenson, 1981). These studies have shown, for instance, that (at the time of the study) people with culturally stigmatized 'conditions' (e.g., gay people or incest victims) tend to underestimate the commonality of their 'conditions' (Frable, 1993), and that people underestimated the prevalence of a desirable behavior (i.e., not showering after a shower ban; Monin & Norton, 2003).

Early studies on the false uniqueness effect have mostly demonstrated false uniqueness for desirable attributes or behaviors (i.e., people tend to perceive themselves in a more desirable way than others; see Chambers, 2008 for an overview). These studies have therefore explained false uniqueness primarily by a motivation to bolster self-enhancement (e.g., enhance one's self-esteem when the behavior or opinion is perceived to be desirable; see for instance Suls & Wan, 1987). While the false uniqueness effect seems to appear in desirable situations especially (Pope, 2013), research has also documented that people tend to perceive themselves as worth less than average (e.g., Suls, Wan, Barlow, & Heimberg, 1990) or at greater risk for illness (e.g., Dolinski, Gromski, & Zawisza, 1987). There are different explanations for such false uniqueness effects in the literature. For instance, a review on false uniqueness has pointed out three non-motivational explanations (see Chambers, 2008 for a review on research on false uniqueness). The first is *egocentrism*—people tend to focus on what is accessible to them (i.e., self-relevant information). When we feel (un)skilled or we feel like we have (un)desirable opinions or behavior, we tend to judge ourselves as (less)

more likely to possess these traits, opinions, or behaviors than others. The second is *focalism*—people tend to give more weight to information about themselves. Hence, if we focus on ourselves, we might tend to exaggerate the extent to which we are unique. The last one is *generalized groups*—people tend to give greater weight to single, individualized persons than abstract social groups. Accordingly, people tend to perceive the other groups as quite homogenous and perceive themselves as singular and unique (Chambers, 2008).

While the respective explanations for false consensus and false uniqueness cannot necessarily account for both effects simultaneously, several factors with relevance to both effects have been proposed in the literature (e.g., Bosveld et al., 1995; Lee, Karimi, Wagner, Jo, Strohmaier, & Galesic, 2019; Mullen & Hu, 1988). There is some evidence in the literature that minority/majority status impacts the occurrence of false consensus and false uniqueness. Indeed, research has shown that some minorities tend to overestimate the level of consensus with its view (i.e., false consensus), while some majorities tends to underestimate it (i.e., false uniqueness; see for instance Dvir-Gvirsman, 2015). In line with this, research has indicated that members of groups who express false consensus have a stronger willingness to express their opinions, which might then reinforce the false consensus/uniqueness effect in the population (see Glynn, Hayes, & Shanahan, 1997; Matthes, Knoll & von Sikorski, 2018). While evidence shows that group size (<50 minority group; >50 majority group) can influence occurrences of false consensus and uniqueness, it remains unclear whether these effects also apply for other forms of minorities and majorities (e.g., on the basis of power or status).

Social change, political orientation, and false consensus/uniqueness (Paths AB).

In the study of political and social changes, occurrences of false consensus and false uniqueness among conservative (i.e., right-wing) people and liberal (i.e., left-wing) people seem to be of particular importance. Research indicates that these effects are directly linked

to political orientation (e.g., Stern, West, & Schmitt, 2013). Conservative people (mostly operationalized as people having a right-wing political orientation) tend to experience false consensus (e.g., Amit et al., 2010; Dvir-Gvirsman, 2015; Howell & O'Mara, 2020; Rabinowitz, Latella, Stern, & Jost, 2016; Reid & Hogg, 2005; Stern et al., 2013; Stern, West, Jost, & Rule, 2014; Strube & Rahimi, 2006). The occurrence of false consensus among conservatives has been mostly explained by motivational factors (see Gvirsman, 2015; Stern et al., 2013; Stern, West, Jost, & Rule, 2014). Particularly, research has linked conservatives' false consensus with 'shared reality theory' and the idea that individuals are motivated to seek social verifications (share reality) for their beliefs (Hardin & Higgins, 1996 cited in Stern et al., 2014). Hence, conservatives should express stronger need for shared reality due to their desire to attain certainty, order, stability, and closure (Jost, Glaser, Kruglanski, & Sulloway, 2003) and their motivation to place higher value on conformity and group cohesion than liberals (Feldman, 2003). In line with this argument, research has shown that the impact of ideology on perceived consensus is mediated by desire to share reality with others (Stern et al., 2014).

While evidence of false consensus among conservatives has been effectively demonstrated (see above), little research has focused on the occurrence of false consensus and false uniqueness among liberal people (see for exception, Stern et al., 2013). There is some evidence that liberal people tend to express false uniqueness (Babad & Yacobos, 1993; Rabinowitz et al., 2016; Stern et al., 2013). This effect has been mostly explained by liberals' need for uniqueness and need to develop a distinctive sense of self (e.g., preference for creativity or unconventional ideas, Stern et al., 2013) that includes attitudes that differ from others (Rabinowitz et al., 2016). Perhaps the most relevant evidence for false uniqueness among liberals is a paper combining a set of studies conducted among MTurkers (Stern et al., 2013). In this paper, authors have found that liberals experienced false uniqueness, whereas

moderates and conservatives experienced false consensus. Findings showed that liberal people experience false uniqueness between their personal preferences (i.e., personality inventory items and political statements) and other people who shared their political beliefs (Study 1) as well as other Americans' (Study 2) preferences. Authors have shown that this effect was partially mediated by liberals' desire to be unique (see Stern et al., 2013).

Finally, it has been suggested that false consensus and false uniqueness among conservative and liberal people stem primarily from the extent to which someone is in a majority or minority position (see in particular Dvir-Gvirzsman, 2015). In particular, it has been argued that conservative people are more affected by threat (e.g., when they see that their opinion declines in the population) than liberal people due to differences in moral values (e.g., authoritarianism, Graham, Haidt, & Nosek, 2009 cited in Dvir-Gvirzsman, 2015). In a paper combining multiple studies conducted in the Israeli-Palestinian context (Dvir-Gvirsman, 2015), researchers have shown that conservatives (operationalized as people holding right-wing attitudes) tend to overestimate their group size, especially when they are in the minority or when they see that support for their opinion declines. This indicates that, in a time of social change (e.g., social change toward more tolerance for sexual minorities), conservative people might be especially prone to false consensus if they perceive that their opinion is threatened in their society (illustrating Paths AB).

For political and institutional changes, the occurrence of false consensus and false uniqueness among different citizens or political actors might not only lead to biased perceptions but might also have a direct impact on political changes. If liberals tend to underestimate the degree to which people share their opinion and conservatives tend to overestimate the level of consensus in the population, this might have a dramatic impact on the social change process itself. This would mean that people tend to act in 'conservative ways' by taking more time to acknowledge changes in opinions and transpose them in

political changes. While research suggests that conservative people (i.e., right-wing) tend to experience false consensus (e.g., Amit et al., 2010; Dvir-Gvirsman, 2015; Howell & O'Mara, 2020; Rabinowitz et al., 2016; Stern et al., 2013) and liberal people (i.e., left-wing) false uniqueness (e.g., Babad & Yacobos, 1993; Rabinowitz et al., 2016; Stern et al., 2013), there is seldom evidence of the occurrence of these effects congruently (i.e., leading to pluralistic ignorance). Moreover, the occurrence of these effects in a time of social change has never been explored directly. The first empirical goal of the present thesis (see Chapter 2) is to investigate occurrences of false consensus and false uniqueness among conservatives and liberals among debated and non-debated attitude objects. In particular, the first empirical chapter aims at testing whether false consensus and false uniqueness are more likely to occur in a time of social change for debated objects than for objects that are not debated (i.e., for which there is no motivation to form false consensus/uniqueness for liberal and conservative people).

Social Context to Normative Representations (Path C) to Social Context (Path D)

When misperceptions of others' opinions arise in a society, they might have a crucial impact on individuals' lives. To illustrate, if people hold rather positive opinions towards sexual minorities but expect others to be intolerant, individuals with more positive opinions and sexual minorities themselves may feel (unnecessarily) isolated from their respective society (e.g., Cialdini & Goldstein, 2004; Prentice & Miller, 1993). Consequently, these individuals might be less willing to express their personal opinions, perpetuating the unsupported perception of intolerance (e.g., Cox, Navarro-Rivera, & Jones, 2014; Noelle-Neumann, 1974; Prentice & Miller, 1993). While misperceptions might have a large impact on people's sense of inclusion, little is known about *when* misperceptions arise. The present section focuses on the interaction between normative (mis-)representations and the social context (see Figure 5).
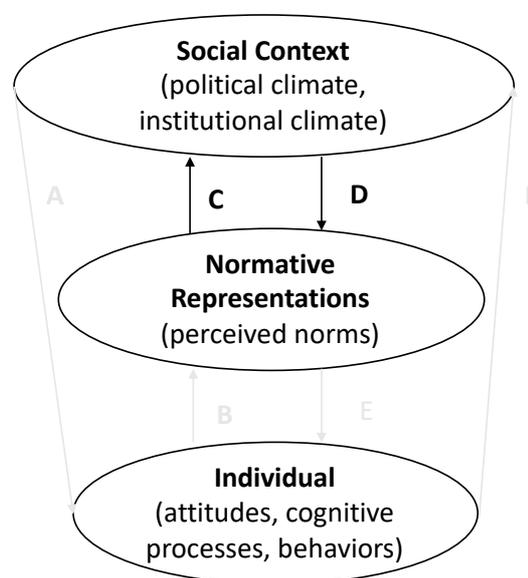
Figure 5. A Normative Representation Model: Normative Representations to Social Context to Normative Representations

Sources of norm perception (Paths CD). In this section, I focus on sources of norm perceptions (or normative representations), especially institutions and information about the

social context. The focus is placed on Path D (social context to normative representations) rather than Path C (normative representations to social context). However, Path C remains an integral part of this section, as each source of norm perceptions is also influenced by the perceived norm (e.g., information reflects and impacts perceived norm).

Several studies have shown that perceptions of norms are based on cues from the environment (e.g. Mutz, 1992; Tankard & Paluck, 2016). Three different cues have been identified in the literature: group members' behavior, institutional decisions, and information. Two of them are particularly relevant to understanding the impact of the social context on perceptions of societal norms: Institutional decisions and information. In what follows, I will briefly describe the first source of information (i.e., group members' behavior). I will then discuss the two other sources of information, which might arise from the social context directly, and might therefore be more relevant sources for understanding perceived societal norms (in contrast to perceived group norms).

First, *group members' behavior* can influence perceptions of norms. Indeed, cues arising from behavior and opinions expressed by other individuals, such as social referents (i.e., salience based on their personal connection to the individual and their number of connections within the group) can influence perceptions of norms (Tankard & Paluck, 2016; Paluck & Shepherd, 2012). For instance, research relying on social network surveys (e.g., identifying people's social referents) in the high school context has shown that changing the behavior of a subset of student social referents changes peers' perceptions of the school norm toward harassment and, consecutively, affected students' harassment behavior (Paluck & Shepherd, 2012).

Besides social referents, other group members, such as leaders of particular groups (e.g., political leader) have also been considered as a source of influence (see Hogg, 2010). One explanation of this is that leaders are perceived to be prototypical of the group (e.g.,

representative of the group and similar to many members) and legitimate (Hogg, 2010 cited in Tankard & Paluck, 2016). For example, recent evidence has shown that national political campaigns and political leaders play an important role in redefining prejudice norms (i.e., it became more acceptable to express prejudice toward Muslims, immigrants, and disabled people in America following Donald J. Trump's election campaign; Crandall, Miller, & White, 2018). This suggests that certain (political) representatives have a lot of power to (re)define societal norms (in comparison to members of the general public).

Second, *institutional signals*, such as new laws coming from institutions (i.e., governments that govern, educate, or organize a group and their social interactions; Getzels & Guba, 1957; Hodgson, 2006; Silverblatt, 2004; Tankard & Paluck, 2016), have been shown to influence norm perceptions. Indeed, because governmental institutions are one of the few large-scale representatives of a society, they often inform us about what is desirable or acceptable in a society (Hogg, 2010; Tankard & Paluck, 2016). Institutional signals differ from those of leaders or social referents because they are not necessarily associated with one person or a group of people, but rather with the institution in general (Tankard & Paluck, 2016). Despite the centrality of institutions in societies, this last source of information is seldomly accounted for in the social psychological literature (see Tankard & Paluck, 2016, 2017).

It is important to further consider that institutions can both comply with or drive the direction of the society (see Jackson et al., 2012; Tyler & Jackson, 2014; Tankard & Paluck, 2016, 2017). On the one hand, institutions, and especially news about institutional decisions, can influence perceived societal norms. This might especially be the case when institutional decisions are in line with the direction of social changes (e.g., more tolerance toward sexual minorities). For instance, researchers have shown that U.S. Americans perceived others in the U.S. society to be more supportive of same-sex marriage following a U.S. Supreme court

decision supportive of same-sex marriage compared to before the decision (Tankard &
Paluck, 2017). However, institutions can also introduce an innovation (e.g., law change) that
does not directly follow previous changes in the society. Thus, institutional decisions do not
only reflect previous social change, but they can also change perceived norms through
innovation, such as new laws. When a new law is implemented, citizens retrospectively infer
that a certain level of support in the society must have previously existed to support this
change (Tankard & Paluck, 2016).

Finally, *information about the social context* can influence perceptions of norms. For
instance, information (e.g., statistics or results of public opinion polls) presented through
media has been shown to influence perceptions of norms (Perkins & Craig, 2006; Mutz,
1992; Tankard & Paluck, 2016). Information about groups is often mobilized to manipulate
the perceived norms and to influence behaviors (e.g., information about a group's
environmental behavior to change actual behaviors; Sparkman & Walton, 2017). For
instance, a field study conducted in Rwanda showed that a radio soap opera program
impacted listeners' perceptions of norms and led to a reduction of ethnic tensions among the
Hutus and Tutsis (see Paluck, 2007, 2009). This example also highlights the role of media in
informing people about norms on perceptions.

A large area of research has explored the association between information reported in
media, perceptions of norms, and personal opinion (see Mcleod, Wise, & Perryman, 2017 for
a systematic review). There is much evidence in the literature that people tend to see media
influence as being greater on other people than on themselves (see Mcleod et al., 2017; Sun,
Pan, & Shen, 2008)—what has been referred to as the third-person effect (Davison, 1983).
The third-person effect has been observed in a variety of contexts including influence of polls
on the 2008 U.S. presidential election (i.e., authors have found that people perceive others as
being more vulnerable than themselves to election polls; Wei, Chia, & Lo, 2011) and beliefs

about the influence of the legalization of same-sex marriage on others (i.e., participants believed that allowing same-sex marriage in the U.S. would affect other people's attitudes and behaviors, more than it would affect their own; Winslow & Napier, 2012). In addition, it has been shown that the third-person effect tends to be stronger with increases in perceived social distance between the respondents and the reference group (i.e., people perceive greater media effects on more general and abstract others; Meirick, 2005).

The third-person effect has been used to explain the influence of media messages on perceptions of others' opinions (see McLeod et al., 2017). Authors have generally argued that i) people perceive that others will be strongly affected by a media message, ii) people expect that the media message will reach a broad audience, and that iii) based on these assumptions of media influence, people adjust their perceptions of others' opinions (see McLeod et al., 2017; Zerback, Koch, & Krämer, 2015). Another explanation for the relationship between media messages and perceptions of others' opinions, however, has also been suggested in the literature. Indeed, several authors have also pointed to the 'reflection' effect of media (see Gunther, 1998; Zerback et al., 2015). This explanation suggests that rather than perceiving others to be shaped by media, people perceive media as a mirror of others' opinions. Perceptions of others' opinions can be affected by the news, particularly by new information about social change, because it serves as a source of information to perceive others' opinions in the population. In the present thesis, I consider this latter explanation as being more in line with the study of pluralistic ignorance in a time of social change (see below for further explanation).

Misperceptions, social structure, and visibility (Paths CD). In the present thesis, a particular focus is placed on understanding misperceptions of others' opinions in society, rather than focusing only on sources of perceptions. The goal of this section is to discuss how information about the social context and institutional decisions might impact these

misperceptions. Some insights may come from past research on pluralistic ignorance (particularly, Shamir & Shamir, 1997).

At the societal level, pluralistic ignorance often stems from a 'disruption in synchronization' between opinions and perceptions of others' opinions in the society (Shamir & Shamir, 1997). This lag can take two main forms depending on the context of social change (Shamir & Shamir, 1997). On the one hand, opinions may be shifting but perceptions are lagging behind the actual opinions. This is for instance the case in many initial studies on pluralistic ignorance (e.g., overestimation of intolerant racial attitudes in the U.S., O'Gorman, 1976). On the other hand, perceptions may be changing while attitudes are not actually changing. In both situations, the lag between perceptions and actual opinions might be explained by 'salience of some non-representative or biased indicators of the distribution of opinion that mistakenly signal either stability or change' (Shamir & Shamir, 1997, p. 230), such as institutions. In times of stability, these indicators can provide people with accurate information (e.g., heteronormative laws). In times of social change, however, these indicators might create or perpetuate pluralistic ignorance. If opinions change but institutions do not, these indicators can become 'invalid', decrease visibility of the changes in opinion, and therefore lead to pluralistic ignorance (Shamir & Shamir, 1997).

This argument is in line with the social representation approach, which suggests that i) there are different forms of representations that are contingent to the social context and ii) institutions can play an important role in these dynamics. First, according to the social representation approach (Moscovici, 1988), there are three different categories of representations that are dependent on the social dynamics of the attitude object. The first category of representations, *polemical* representations, is generated in the course of social controversy. Such representations are present when different opinions circulate in society, resulting in group and identity conflicts. The second category, *emancipated* representations,

varies among subgroups who create their own version of reality. Such representations are very context-dependent, and the norms associated with them are quite flexible. The third category is *hegemonic* representations, which are associated with widely shared and coercive ideas that govern our life (Bertoldo & Castro, 2015; Moscovici, 1988).

Furthermore, two key factors are associated with this last category of social representations and might foster our understanding of the reasons why people misperceive (or represent) others' opinions in a society and how these (mis-)perceptions can be updated. First, some representations, especially hegemonic ones, are deeply linked to the past and change very slowly (Glaveanu, 2009). They are fossils anchored within the social structure (Moscovici, 2000) and are often reified through institutions. These characteristics of hegemonic representations might be an essential cue to understand why perceptions of others' opinions do not automatically follow changes in personal opinions in society. Indeed, when it comes to hegemonic representations, people might be overly influenced by the past. Second, according to the social representation approach, the same mechanisms that build hegemonic representations can be used to update them (Glaveanu, 2009). In that sense, changes in institutions (e.g., a new law) can influence representations. Together, the social representation approach as well as studies on pluralistic ignorance (especially, Shamir & Shamir, 1997) suggest that institutional decisions might not only explain evidence of pluralistic ignorance but might also help to correct these misperceptions. Furthermore, information about these changes should play a crucial role in this effect, as '[media] may also at times be 'liberating' or 'enlightening' when they unveil an actual distribution of opinion or break pluralistic ignorance by priming salient information as to the actual distribution of opinion in society' (Shamir & Shamir, 1997, p 231).

Perhaps the best empirical evidence of the impact of information (or visibility) and institutional change (or structural change) on pluralistic ignorance is a combination of

different studies conducted in the Israeli context (Shamir & Shamir, 1997). In this article, the authors were interested in investigating the impact of visibility and structural changes on pluralistic ignorance. In a first step, they investigated whether or not pluralistic ignorance was more likely to occur when an issue was less visible in the media. To achieve this, they relied on a large representative sample of the adult Jewish population of Israel ($N = 808$) to measure personal opinions and perception of others' opinions toward 24 issues (e.g., Israeli-Arab conflict, religious secular cleavage, gender). In combination with this sample, they also relied on a survey of media experts and professionals ($N = 34$) who had to rate the prominence of each of these 24 issues in the media. Results of their analyses indicated that the more an issue was visible in the media, the less people misperceived others' opinions.

In a second step, the authors specifically investigated whether changes in social structure impacted pluralistic ignorance. To achieve this, they investigated pluralistic ignorance regarding opinions toward returning territories as gestures of peace. Using a longitudinal assessment on opinions and perceptions, the authors showed that an increasing proportion of people was in favor of supporting territorial concessions for peace but perceived that a small proportion of people shared their views. This situation of pluralistic ignorance was only resolved after the elections of June 1992, in which the right-wing dominant coalition was replaced by a labor coalition. While the authors concluded that both the visibility condition and structural changes are necessary conditions for reducing pluralistic ignorance (Shamir & Shamir, 1997), their research design (i.e., two different steps) did not allow them to directly investigate the combined impact of visibility and structural change on (mis-)perceptions of others' opinions. The second empirical chapter (Chapter 3) aims at directly investigating the impact of information about institutional changes on (mis-)perceptions of others' opinions.

In sum, if social change occurs without people realizing it, this can have a tremendous impact on the perpetuation of unsupported social norms and on the social change process itself. Hence, knowing that institutional decisions can both perpetuate these misperceptions and help to correct for them might be crucial information for policy makers and activists. At the same time, it is crucial to also better understand the conditions under which new institutional decisions can lead to changes in perceptions. In the second empirical chapter (Chapter 3), building on initial evidence (Shamir & Shamir, 1997), I suggest that visibility and institutional changes can impact perceptions of others' opinions and can even be an essential cue to correct pluralistic ignorance. Hence, the goal of Chapter 3 is to empirically test the ideas that i) the absence of institutional changes can lead to pluralistic ignorance and ii) changes in institutions (especially new laws) can help people adjust their (mis-)perceptions to the extent that people are informed about these changes.

Social Context to Normative Representations (Path E) to Individuals (Path F)

Norms and perceptions of these norms (i.e., normative representations) influence

people in their daily lives (see Crandall, Eshleman, & O'Brien, 2002). What is accepted or

not and, most importantly, what is perceived to be accepted by others has been shown to

influence people's own opinions and behaviors (e.g., Paluck, 2011). However, people are not

only passive receivers of influence—they also, in turn, bring social change by influencing the

social context via their common actions (see literature on collective action, Van Zomeren et

al., 2008). In this regard, people's belonging to a minority or a majority group and, most

importantly, whether they perceive that their view is shared by most others or not, will impact

the mechanisms of influence (Moscovici, 1980). This section will present all of these points,

with particular focus on discussing the impact of normative representations on individuals as

well as the impact of individuals' (collective) actions on the social context (see Figure 6).
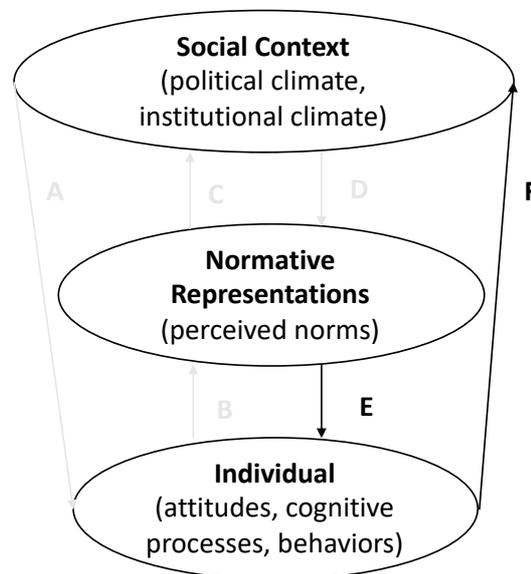
Figure 6. A Normative Representation Model: Normative Representations to Individuals to

Social Context

CHAPTER 1: INTRODUCTION AND OUTLINE

(Perceived) social norms and social influence (Path E). To discuss the impact of perceptions of social norms on individuals (Path E) it is important to first introduce the mechanisms of normative influence (i.e., influence of social norms on individuals; Path A). Social influence has been a major topic for research in social psychological literature that investigates the impact of the social world on individuals' lives (Moscovici, 1985; Prentice & Miller, 1993). In the social psychological literature, social norms are central sources of social influence. Indeed, there is plenty of evidence that social norms influence individuals' attitudes and behaviors (e.g., Asch, 1956; Berkowitz, 2004; Crandall et al., 2002; Crandall & Stangor, 2005; Fishbein & Ajzen, 1975; Kauff, Green, Schmidt, Hewstone, & Christ, 2016; Perkins & Berkowitz, 1986; Reynolds, 2019; Sherif, 1936; Sparkman & Walton, 2017).

For instance, an important social psychology article on social influence shows that people tend to conform to the opinion of others even when this opinion is incorrect (Asch, 1956). In this article, the author looked at how people conform to other people's opinion when comparing the length of different lines. In different experiments, participants had to indicate which of three lines had the same length as the reference line. The participant was included in a group of people who were instructed (in most situations) to give incorrect answers at a certain point. The experiments, which varied regarding group size and the unanimity of the majority group, indicated a clear pattern: confronted with an opposing opinion, people shift their judgment in the direction of the social norm (i.e., view of the majority). This influential work (Asch, 1956) shows that individuals are influenced by the social norms that they observe.

While many scholars have highlighted the centrality of social norms, others have pointed to the importance of perceptions of social norms for influencing attitudes and behaviors (Path E of the model; see for example Eicher, Settersten, Penic, Glaeser, Martenot, & Spini, 2015; Paluck, 2009). For instance, studies have shown that representations or

perceptions of social norms may affect attitudes and behavior over and above actual norms (Eicher et al., 2015). The theory of planned behavior (Ajzen, 1985, 1987), an extension of the theory of reasoned action (Fishbein & Ajzen, 1975), is probably the most well-known model integrating perceived social norms as a predictor of behavior. It postulates that norm perceptions and personal attitudes predict intentions, which, in turn, predict behaviors (Ajzen, 1987; Terry & Hogg, 1996). Within the theory of planned behavior framework, perceived norms have been shown to influence behavioral intentions and, indirectly, behavior (e.g., Conner, Norman, & Bell, 2002).

In addition to perceived norms, the extent to which these perceptions are in line with or go against the direction of one's own opinion should also affect opinions and behavior. Individuals' positions (or opinions) that go against the direction of the perceived norm are called *heterodox* positions (see Moscovici, 1976). Individuals' positions (or opinions) that are in line with in the direction of the perceived norm are called *orthodox* positions (Moscovici, 1976). Both heterodox and orthodox positions are likely to bring about motivation and action (Moscovici, 1976). A heterodox position might bring social change, as this position brings conflict and novelty. An orthodox position might, however, also bring about success, as there is less change to achieve (i.e., one's position is already close to the norm). I build on this to suggest that perceptions of societal norms, especially the extent to which one's position is perceived to be heterodox (e.g., norm is perceived to be against one's group) or orthodox (e.g., norm is perceived to be supportive of one's group) should be relevant to individuals' actions to change the social context.

Thus, the reasoning presented so far also implies that the extent to which one's opinion is *perceived* to be shared by a majority (e.g., the norm is perceived to be in favor of one's group) or a minority of people (e.g., the norm is perceived to be against one's group) might play a central role in influencing people's attitudes and behaviors. The idea that

perceived minority/majority support can impact attitudes and behaviors has been discussed in the social psychology literature (e.g., Falomir-Pichastor, Mugny, Quiamzade, & Gabarrot, 2008; Falomir-Pichastor, Mugny, Gabarrot, & Quiamzade, 2011; Lalot, Falomir-Pichastor, & Quiamzade, 2017; Van Zomeren, Spears, Fischer, & Leach, 2004). For instance, an article (Falomir-Pichastor et al., 2011) presenting results of three experimental studies conducted in the Swiss context indicated that attitudes toward homosexual people were a function of regulatory focus (i.e., promotion vs. prevention focus) and perceived minority/majority support. Specifically, non-discriminatory participants who were regulated in terms of *prevention* focus (e.g., security needs) were more likely to report more positive attitudes toward homosexual people when their opinion was supported by a *majority* of people. In contrast, non-discriminatory participants who were regulated in terms of *promotion* focus (e.g., accomplishments of ideals) were more likely to report more positive attitudes toward homosexual people when their opinion was supported by a *minority* of people. What these findings might also indicate is that perceptions of the direction of the norm (i.e., particularly the extent to which one's opinion is shared by a majority or minority of people) can have a dualistic impact on people attitudes and behaviors such as collective action intentions.

Collective action (Path F). So far, I have discussed how norms, perceived norms, and perceived minority/majority support might impact attitudes and behaviors. In the present section, I will go one step further to discuss how behaviors might change the social context (Path F). I will start by discussing how traditional research investigates the impact of individuals on the social context by focusing on the concept of collective actions.

Within the field of social psychological, much research has been conducted into when and why people engage in collective actions to reduce historical disadvantages. Most scholars have traditionally endorsed a rather narrow definition of collective action, in which collective action was defined as aiming to improve the status (e.g., new rights) and treatment of one's

ingroup (Wright et al., 1990; Wright, 2010). According to social identity theory (Tajfel & Turner, 1979; 1986), people strive to achieve and maintain positive social identities associated with their group membership. Therefore, *identification* with and salience of the respective social group plays a central role in promoting support for social change to collectively improve the status and treatment of one's ingroup (Simon & Klandermans, 2001; Wright et al., 1990; Wright, 2010).

However, people must not only identify with a group to engage in collective action, but must also engage in social comparison with others (Wright & Tropp, 2002). In particular, people's perception of *relative deprivation* (or feelings of injustice) in comparison to others (e.g., a dominant majority group; see Walker & Smith, 2002) also impacts collective action tendencies. An example of relative deprivation is the perception of a heteronormative system from the perspective of a sexual minority member. Relative deprivation can be divided into a cognitive and affective component (Walker & Pettigrew, 1984; Wright & Tropp, 2002). Whereas the first refers to individuals' perceptions of deprivation, the other reflects individuals' emotional responses to deprivation (see Walker & Pettigrew, 1984). Research has mostly focused on this emotional form of response to deprivation, as emotional reactions (e.g., feeling angry or furious) to these perceived group-based deprivations have been shown to trigger willingness to engage in collective action to achieve greater equality (Mackie et al., 2000; Thomas et al., 2009; Van Zomeren et al., 2004; Van Zomeren et al., 2008; Walker & Smith, 2002).

Emotional reaction to perceived deprivation alone might not be sufficient to promote collective action. People most likely strive for social change to the extent that they consider the disparities in a given context as illegitimate and the status quo as unstable and changeable (Tajfel & Turner, 1979; Wright & Tropp, 2002). Perception of *legitimacy* of the social structure is closely related to emotional reactions to injustices (e.g., anger) (see Major, 1994;

Van Zomeren et al., 2008). Indeed, if a group member perceives that their group deserves more, this implies that the situation is perceived as unjust or illegitimate (Major, 1994). In addition, *perceiving the status quo to be changeable* should impact collective action intentions. It is therefore important to also consider the availability of resources in challenging social injustice (Bandura, 1995). According to resource mobilization theory (e.g., Klandermans, 1984; McCarthy & Zald, 1977), people weigh costs and benefits and subsequently engage in collective action when the expected benefits outweigh the collective costs. Hence, individuals are more willing to engage in collective action when they perceive that their group has the necessary resources (i.e., perceived efficacy) to reach the desired change (Hornsey et al., 2006; Mummendey et al., 1999; Van Zomeren, Saguy, & Schellhaas, 2012).

This positive effect of perceived efficacy on collective action intentions has been widely demonstrated in the literature (see literature mentioned above). Early research (Olson, 1965), however, pointed out some detrimental effects of efficacy beliefs. In line with the idea of free riding, rational citizens might be less willing to engage in action if they perceive that the goal will be achieved even without an active contribution (Bäck, Bäck, & Sivén, 2018; Olson, 1965). In this case, it may be more rational to let other people bear the cost of engaging in collective action (e.g., the time and energy that political engagement requires), and experience the benefits of these actions without having participated. In line with this, researchers have proposed that too much faith in the collective can decrease collective action intentions because people believe that *social change will follow even without active contributions* (see Ellemers, 2002; Wright & Tropp, 2002). This behavior might be the case especially when people perceive that othersin society would be likely to support their actions.

Part of the literature discussed above has been integrated into the Social Identity Model of Collective Action (SIMCA; Van Zomeren et al., 2008), which combines

assumptions based on the social identity theory (Tajfel & Turner, 1979; 1986), relative deprivation theory (Walker & Smith, 2002), and resource mobilization theory (Klandermans, 1984; McCarthy & Zald, 1977) into a coherent framework. The social identity model of collective action posits that identification with a disadvantaged group predicts collective action intentions and that this effect is partially mediated by perceived injustice (especially, emotional reactions to perceived injustice) and perceived efficacy of a social movement (see Van Zomeren et al., 2008). In line with the SIMCA, a large body of evidence demonstrates that individuals are indeed more likely to engage in collective action when they i) highly identify with their group (e.g., with opinion-based groups; Bliuc, McGarty, Reynolds, & Muntele, 2007 or politicized groups; Stürmer and Simon, 2004), ii) feel angry about group-based disparities (Mackie, Devos, & Smith, 2000; Thomas, McGarty, & Mavor, 2009), and iii) perceive that a social movement will be efficient in achieving its goal (Hornsey et al., 2006; Mummendey, Kessler, Klink, & Mielke, 1999).

Perceived norms and collective action (Paths EF). Based on the traditional predictors of collective action described above, and empirical evidence showing that (perceived) social norms affect attitudes, behaviors, and intentions (e.g., Eicher et al., 2015; Paluck, 2009), one would expect research that investigates when people engage in collective action to also consider perceived norms. Especially when collective actions aim to change the (legal) situation of a specific group (e.g., sexual minorities in a time of social change) at the societal level, one would expect that the perceived societal climate affects whether or not people intend to engage in collective action. Surprisingly, the impact of perceived societal norms on collective action intentions has received little attention to date.

As displayed in Figure 6, the aim of the present section is to discuss the impact of norm perceptions on individual (Path E) and the impact of individuals' actions on the social context (Path F). In what follows, I will therefore discuss several ways to integrate perceived

societal norms into traditional models of collective actions. It is worth mentioning that I do not expect a singular positive or negative effect of perceived societal norms on collective action intentions. Rather, and in line with past research on minority/majority support (e.g., Falomir-Pichastor et al., 2011), I expect that perceiving others to not support one's cause (i.e., perceived intolerant norms) can simultaneously hinder and foster support for social change.

Perceived societal norms should trigger emotions as reactions to perceived injustice and, therefore, impact collective action intentions in two different ways. On the one hand, based on relative deprivation literature (e.g., Walker & Pettigrew, 1984; Wright & Tropp, 2002) and the social identity model of collective action (Van Zomeren et al., 2008), perceiving intolerant others should increase emotions related to relative deprivation and, in particular, *anger about the public opinion*, which should then motivate people to engage in collective actions. On the other hand, the literature on perceived illegitimacy (see Major, 1994; Van Zomeren et al., 2008) points to the (de)motivating effect of perceived (in)tolerant societal norms on collective action intentions, through decreased anger about the legal situation. To illustrate, if disadvantaged group members perceive that the majority is in favor of extending their rights (i.e., a *tolerant* norm), they might perceive the lack of rights to be even more unjust than if the majority would not support their cause. This, in turn, should lead disadvantaged group members to be *angrier* about the legal situation (i.e., because they perceive the legal situation as particularly unjust). This link has been demonstrated in a set of experiments, which showed that social support (which can serve as a parallel to perceived *tolerant* societal norms) was associated with greater group-based anger, which led to greater collective action intentions (see Van Zomeren et al., 2004). Hence, one would expect perceived *intolerant* societal norms to decrease anger about the legal situation (due to decreased perceived injustice/illegitimacy), which should then hinder collective action

intentions. This indicates that perceiving an intolerant societal norm might simultaneously facilitate (via anger about the public opinion) and hinder (via anger about the legal situation) collective action intentions.

Perceived societal norms should also impact perceptions of efficacy of a social movement in two different ways. On the one hand, perceptions of intolerant societal norms might evoke the sense that social change will not naturally move toward greater equality, signaling that a social movement is necessary to achieve societal change. Consequently, people should only be eager to engage in collective action when they believe that a social movement plays a critical role and has a high likelihood of achieving desired societal changes (Bäck, Bäck, & Sivén, 2018). On the other hand, perceiving others to be in support of one's cause should lead to increased perceived efficacy of a social movement (e.g., the minority group can count on more support from the general population and, potentially, more resources), which should then lead to greater collective action intentions. This indicates that perceiving an intolerant societal norm might simultaneously hinder (via perceived efficacy) and facilitate (via need for a social movement) collective action intentions.

In sum, perceptions of intolerant societal norms should have simultaneously hindering and facilitating effects on collective action through the anger and efficacy pathways. However, no research thus far has directly investigated the relation between perceived societal norms and collective action intentions via anger and efficacy. The aim of the last empirical chapter will be to close this gap by testing the proposed relations between perceived intolerant norms and collective action intentions.

Finally, it is important to mention that social change does not occur in a vacuum. Thus, minority members' struggle for social change is often affected by support from members of majority groups. Indeed, many successful movements have not only recruited disadvantaged group members but also mobilized some members of majority groups. Thus,

members of both minority and majority groups have been actively involved in the struggle for greater equality (i.e., solidarity-based collective action). The role of allies among majority groups is reflected in a recent wave of studies, which has investigated solidarity-based collective action (Hässler et al., 2020; Subasic, Reynolds, & Turner, 2008).

While identification with a politicized group (Simon & Klandermans, 2001; Stürmer & Simon, 2004), or more generally, opinion-based groups supporting minority groups' demands (Bliuc et al., 2007; McGarty, Bliuc, Thomas, & Bongiorno, 2009; Thomas et al., 2012), anger about existing disparities, and perception of efficacy to change the status quo play key roles in fostering majority group members' support for social change, the role of perceived societal norms remains unclear. Perceived intolerant norms might also be expected to have a dualistic impact on collective actions among majority group members. The size of the effects, however, might differ. Indeed, majority groups might generally have a different understanding of the societal norms than minority group members. While minority group members might perceive the norm as being the one of the majorities (i.e., outgroup norm), majority group members might perceive the norm as being their own norm (i.e., ingroup norm). Hence, because relative deprivation is stronger when people compare themselves with an outgroup and, especially, a dominant outgroup (see Tropp & Wright, 2002), the effects for minority group members might be expected to be generally stronger than for majority group members. Particularly, one might expect that the effect of anger about public opinion on collective actions intentions will be weaker for majority group members (who perceive the majority opinion as being their own group's opinion).

In sum, if perceptions of others' opinions do indeed impact collective actions, it is crucial to know the conditions under which this happens. Perceiving that others are intolerant toward a specific group might demotivate and/or motivate people to engage in collective actions. The answer to the question of whether perceiving intolerant others hinders and/or

facilitates collective actions has tremendous practical implications, especially if people misperceive others' opinions. It is therefore crucial to better understand the impact that these perceptions have on collective actions in order to inform activists, practitioners, and policy makers aiming for social change about ways to communicate about social norms. The last empirical chapter of the present thesis (Chapter 4) aims to answer these questions by integrating perceived societal norms into the social identity model of collective action (Van Zomeren et al., 2008) alongside the core predictors of collective action (i.e., identification, anger, and efficacy).

So far, I have discussed the main theoretical approach and concepts drawn from in the present thesis. In the following section, I will present the main contexts in which the three empirical chapters take place, namely the sexual minority context in Switzerland.

CHAPTER 1: INTRODUCTION AND OUTLINE

An Application of the Normative Representation Model to Sexual Minorities in

Switzerland

Swiss Political System

The present thesis relies on data collected among sexual minority members in Switzerland. The Swiss political system as well as the specific political situation of sexual minorities in Switzerland make it an interesting context for the study of perceived societal norms and social change for several reasons, which are developed in the following section.

Swiss political system. Switzerland is a multilingual country (i.e., German-, French-, Italian-, and Romansh-speaking) divided into 26 cantons. Two fundamental institutions underpin the Swiss political system and are keys to understanding the psychological and social processes described in the empirical chapters. First, Switzerland is characterized by 'coming together' federalism. This means that, like the United States and Australia, autonomous units in Switzerland (i.e., cantons) came together 'to pool their sovereignty while retaining their individual identities' (Stepan, 1999, p. 23). Hence, within the Swiss political system, the distribution of power lies between different levels (i.e., centralized state, cantons, and municipalities). This implies that cantons play an important role during the federal legislative process (e.g., adoption of new laws). Indeed, the federal parliament is composed of two chambers, the Council of States representing the cantons and the National Council representing the people, which can both submit a veto to any legislative process (Kriesi & Trechsel, 2008).

The second fundamental institution that underpins the Swiss political system is direct democracy, which gives Swiss citizens the voice and power to revise Swiss law. The main forms of direct-democratic instruments in Switzerland are referendums and initiatives. Referendums intervene at the end of the decision-making process and serve as a veto function for a majority of people and/or cantons to block policies suggested by the parliament (Kriesi

& Trechsel, 2008). A referendum can be mandatory or optional. First, any change in the constitution must be approved by the people via mandatory referendum. Second, any changes in federal laws are subject to an optional referendum. In this case, a procedure can be initiated if 50,000 citizens sign a petition opposing a proposed change in the federal law within three months after the adoption of the federal law by the parliament (Kriesi & Trechsel, 2008). Popular initiatives, on the other side, intervene at the beginning of the legislative process. This way, if 100,000 citizens sign a petition, they can initiate a procedure to change a law in the constitution. Finally, the outcome of any referendum and successful initiative is popular voting. Any changes in the constitution are dependent on the double majority of both the people and the cantons, while changes in the federal law are dependent on only the majority of the people (Kriesi & Trechsel, 2008).

The Swiss political system presented above has important implications for understanding the psychological and social processes described in the present thesis. First, the direct democracy setting implies that the majority of (voting) people will influence the outcome of any popular vote. In that sense, the public opinion and, specifically, the majority opinion is central in direct democracy settings. This majority opinion (referred to as most people's opinion or perceived societal norm in this thesis) is key to determining the outcome of a popular vote. The way people perceive this majority opinion, however, also plays a central role in political strategies. Indeed, people's perception of the majority (or most people's) opinion can directly influence whether people are going to launch an initiative, bring an issue on the political agenda, postpone a popular voting, or organize a political campaign.

In addition, federalism and direct democracy imply a reactive, slow, and incremental decision-making process (Kriesi, 1998; Kriesi & Trechsel, 2008; Papadopoulos, 2003). Indeed, the distribution of power at different levels implies that all social actors who might

use a veto voice are included within the decision-process. Hence, any proposition of changes in laws must go through multiple commissions and necessitate a large amount of administrational work. As a result of this, changes in law regarding major societal issues often take a very long time. They are also often only undertaken in situations of high social pressure. This implies that politicians must first perceive this social pressure in the population (e.g., through large-scale collective action) before they act to quicken the decision process. In addition, the slow decision-making process implies that changes in laws do not necessarily mirror changes in public opinion. Rather, they might lag behind actual changes in society and might, at the same time, be contingent to perceptions of people's opinions in Swiss society.

The legal situation of sexual minorities in Switzerland. In the present thesis, I focus primarily on opinions and perceptions of others' opinions toward sexual minority issues in Switzerland, and also include opinions and perceptions toward gender equality as a control in the first empirical chapter. The first empirical chapter describes the differences in political context and political agenda of gender equality and sexual minorities in Switzerland. At the time the study reported in this chapter was conducted (end of 2016), issues concerning women were less politically debated (as will be emphasized in the discussion of the present thesis, the political climate and probably the perceived norms around gender equality evolved greatly during the course of my thesis). Most importantly, the debate around gender equality consisted of a slower social change process and older debate than sexual minorities, which still face many legal inequalities in Switzerland.

While many countries around the world have implemented new rights for sexual minorities in the past decades (e.g., same-sex marriage and adoption in Netherlands in 2001, the United States in 2015, in France in 2013, in Germany in 2017, in Australia in 2017; see Caroll & Mendos, 2017; ILGA 2020), Switzerland is lagging behind. In Switzerland, same-sex marriage as well as single adoption are currently not legal (Law Clinic, 2019). There has,

however, been some change. In 2007, same-sex partnership was implemented through an optional referendum (58% of the population voted in favor of it) and stepchild adoption, which is discussed in further detail in the second empirical chapter, was implemented January 1st 2018 without going through a referendum, because opponents did not gather enough signatures (ILGA, 2020). More recently (February 2020), a majority of swiss citizens (63.1%) voted in favor of adding protection against discrimination on the basis of sexual orientation in the law (see https://www.bk.admin.ch/ch/d/pore/va/20200209/det630.html).

Due to the current legal situation[1], Switzerland ranked 28th among the 49 European countries in terms of lesbian, gay, bisexual, bisexual, trans, and intersex rights in 2019, reaching a score of 31% on a respect of human rights equality index (ILGA, 2019; see Figure 7). The human rights equality index is based on an assessment of the presence or absence of different legal and policy human rights (e.g., equality and non-discrimination rights such as protection against discrimination in the workplace; family rights such as marriage equality; hate crime and hate speech rights such as hate crime law; legal gender recognition and bodily integrity rights such as the possibility to change one's name; civil society space rights such as no state restriction of freedom of LGBTIQ+ associations; and asylum rights such as laws to favor asylum on the basis of sexual orientation; see https://www.ilga-europe.org/sites/default/files/Attachments/rainbowindex2019online_0_0.pdf for a full list of these different rights). The score of 100% indicates that the country offers full equality for LGBTIQ+ individuals (all the listed legal and policy human rights are provided by the country), while the score of 0% indicates that the country is does not offer equality.

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[1] Please bear in mind that the results of the 2020 voting on discrimination is not yet accounted for in this 2019 ranking.
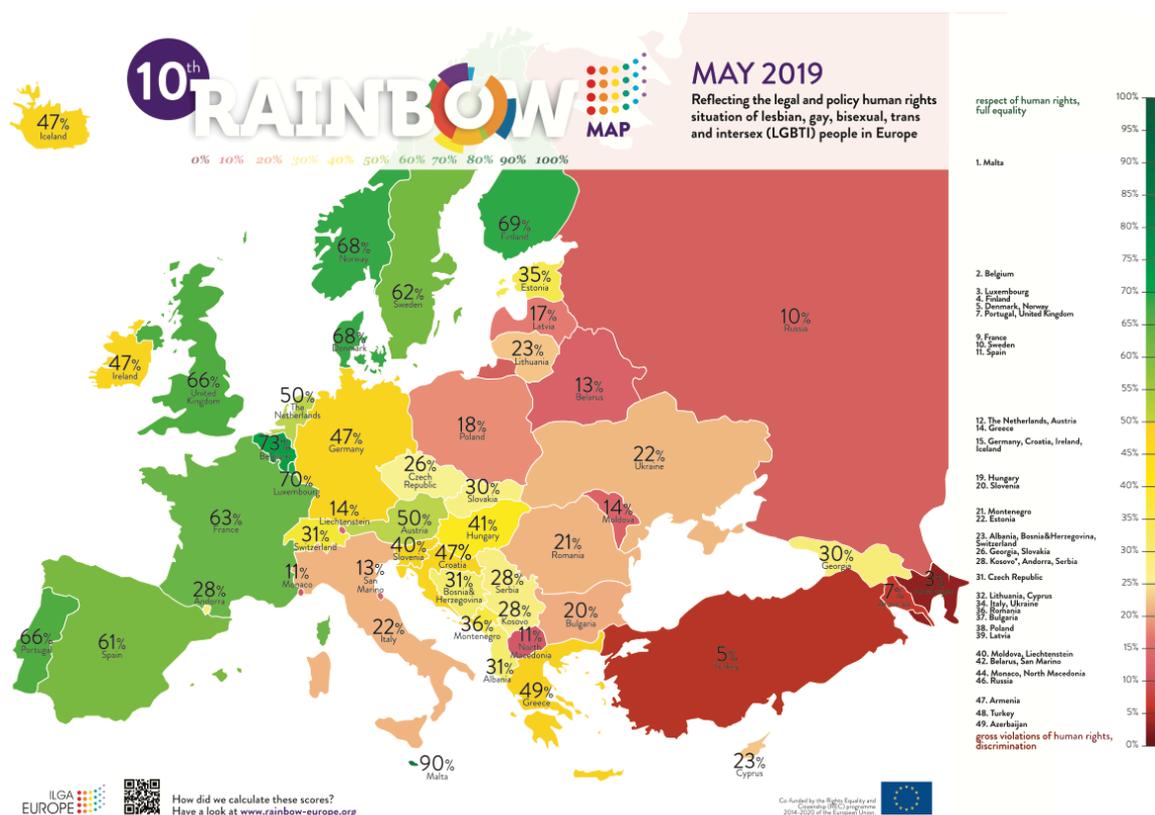
Figure 7. ILGA 2019 Country Ranking of Human Rights Equality

While many rights are still denied to sexual minorities, they have become more and more central to the political agenda. For instance, a law project was launched in 2013 to extend marriage to same-sex couples (see https://www.parlament.ch/fr/ratsbetrieb/suche-curia-vista/geschaeft?AffairId=20130468). Two propositions of a potential law legalizing same-sex marriage were being discussed in the parliament. One involved a multiple step procedure, in which Swiss citizens would only have to vote for same-sex marriage, but many rights (e.g., artificial insemination, full adoption, and eased naturalization) would not be integrated in the project. The other one was more inclusive and contained additional rights such as artificial insemination. In August 2019, the parliament voted in favor of the multiple-step procedure, which should lead to a popular voting by 2021. This example highlights the changing political climate around sexual minority issues in Switzerland (see also ILGA, 2019).

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Attitudes Toward LGBTIQ+ Individuals

The situation of LGBTIQ+ individuals and opinions toward them have been at the core of different researches conducted in Switzerland (see Astier Cholodenko, Matras, & Topini, 2019 for a review of research conducted in the French speaking part of Switzerland; see also Dayer, 2011; Hässler, Shnabel, Ullrich, Arditti-Vogel, & SimanTov-Nachlieli, 2019; Hoffmann, Lüthi, & Kappler, 2019; Lloren & Parini, 2017; Ott, Regli, & Znoj, 2017; Parini & Lloren, 2017; Roca i Escoda, 2006, 2016; Voegtli & Delessert, 2012; Ziegler, Montini, & Copur, 2015). These researchers have focused on various element such as the history of social movements and laws associated with LGBTIQ+ individuals in Switzerland (e.g., Roca i Escoda, 2006; Ziegler et al., 2015), the history of male homosexuality in Switzerland (Voegtli & Delessert, 2012), and the situation of LGBTIQ+ individuals in the workplace in Switzerland (Lloren & Parini, 2017; Parini & Lloren, 2017).

Research conducted in Switzerland and other countries has provided several explanations for variations in support for different policies and public acceptance of sexual minority issues across time and social change processes. In general, public acceptance of sexual minorities has grown rapidly in many Western countries (e.g., Andersen & Fetner, 2008; Brewer, 2014; Herek & McLemore, 2013; Keleher & Smith, 2012; Twenge, Sherman, & Wells, 2016). This rapid social change toward greater acceptance of sexual minorities has often been attributed to the increase in contact between sexual minorities and heterosexual individuals as more sexual minorities were able to come out (see Hoffarth & Hodson, 2019 for a review). These shifting attitudes in many western contexts have been accompanied with increasing debates about social and political changes (e.g., same-sex marriage) reflecting these shifts (Garretson, 2018). While some people, such as most sexual minority members and their allies, are supportive of sexual minorities and sometimes fight for new rights, others are not and call for a conservation of the status quo.

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In the literature, it has been suggested that new rights in favor of sexual minorities might lead people to be more tolerant toward sexual minorities in general (see in particular, Tankard & Paluck, 2017 who found little support for this effect). Others have investigated whether such rights might actually lead to an opinion backlash and bring more negative opinions in the population (see in particular, Bishin, Hayes, Incantalupo, & Smith, 2016). To examine a potential backlash, the authors conducted an experiment assessing the impact of exposure to new information about LGBTIQ+ rights (e.g., legislature passing a law in favor of same-sex issues; the court making this issue legal; a public referendum making this issue legal) on personal opinions and a natural experiment investigating changes in opinions over time. Results indicate no opinion backlash in reaction to new rights offering greater equality to LGBTIQ+ individuals (Bishin et al., 2016). While the impact of new laws legalizing LGBTIQ+ rights on personal opinions remains unclear, the present thesis focuses on perceptions of such opinions in the population.

In addition to the variety of opinions on sexual minorities, the specific issues these opinions are directed at can vary as well. For instance, researchers have taken interest in opinions about politicized sexual minority issues such as same-sex marriage and opinions about social issues in general, such as same-sex parenting (see Herek, 2002). In addition, opinions toward different issues or specific sexual minority groups can vary as well. For instance, research has shown that people, especially men, tend to hold more negative attitudes toward male sexual minority members compared to female sexual minority members (e.g., Baiocco, Nardelli, Pezzuti, & Lingiardi, 2013; Herek, 2000; Pacilli, Taurino, Jost, & Van der Toorn, 2011; Webb, Chonody, & Kavanagh, 2017). However, there is also some evidence in the literature that this finding is more complex, as women might experience different forms of negative attitudes and discrimination to men (e.g., women who are sexual minority members are more often sexually harassed than men who are sexual minority members; Fahs,

2009; see also Eisner & Hässler, 2019). Indeed, results from a study conducted among 952

sexual minorities residing in Switzerland indicate that women are more likely to experience

verbal stigmatization, exclusion, and harassment in the work context than men (Lloren &

Parini, 2017; Parini & Lloren, 2017).

In the present thesis, I decided to focus on sexual minorities[2] and, in particular,

opinions toward same-sex marriage, same-sex female parenting, and same-sex male

parenting. These issues, as well as the sexual minority context in general, are relevant topics

to the study of perceived societal norms and their impact on social change for several

reasons. First, the sexual minority context is a context in which a minority group (i.e., sexual

minorities) has historically experienced discrimination and intolerance from the general

population and has also engaged in political activism to achieve greater legal equality.

Second, as discussed above, the sexual minority context is a context characterized by rapid

social change toward greater acceptance. This rapid social change is not necessarily

perceived by the general population and people might not necessarily see that the norm has

changed and might therefore misperceive others' opinions. Third, the sexual minority context

is also associated with political debates. Hence, people's opinions and most importantly

liberals' and opponents' perceptions of others' opinions toward sexual minorities have a

strategical function for their actions to bring about political changes or conserve the status

quo. Finally, and in line with the previous point, institutional changes occurring, which make

it possible to look at how changes in laws (e.g., implementation of stepchild adoption) impact

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[2] It is important to acknowledge that the LGBTIQ+ community is made up of various subgroups and, particularly, people who identify as gender and sexually diverse (i.e., non-cisgender or non-heterosexual). Importantly, much research has been conducted on sexual minority members and, in particular, gay men. Gender diverse individuals (i.e., gender minorities such as trans, non-binary, or intersex individuals), however, have encountered less visibility in the scientific and political sphere (see Hoffarth & Hodson, 2019). Moreover, research has shown that gender minority members experience more discrimination and poorer well-being than sexual minority members and especially than cis-heterosexual individuals (e.g., Eisner & Hässler, 2019). Due to the current political discussions and social change processes around sexual minority issues, this thesis focuses on lesbian, gay, and bisexual individuals and other sexual minority members (e.g., pansexual individuals), while acknowledging the potential cis-normativity therein.

perceptions of others' opinions toward sexual minorities. The reasons mentioned above led me to investigate the interaction between the social context, perceived societal norms, and the individual in relation to sexual minority issues.

The present thesis builds on this to study opinions and perception of opinions about sexual minorities, particularly same-sex parenting and same-sex marriage in Switzerland. The first empirical chapter explores *when* misperceptions of others' opinions arise in a society. It relies on a study conducted at the end of 2016 to gather opinions and perceptions of others' opinions among the population in the canton of Vaud. The second empirical chapter explores whether people misperceive societal norms toward sexual minorities and how these (mis-)perceptions of societal norms are affected by institutional changes. This chapter builds on the field study conducted in the canton of Vaud and another study conducted right after the implementation of the new law on stepchild adoption. In this later study, I manipulated information about this new law to examine the causal impact of institutional decisions on perceptions of others' opinions (see Chapter 3). Finally, the third empirical chapter aims at understanding how perceived societal norms impact support for social change among sexual minorities (and to a lesser extent among cis-heterosexual allies). This chapter relies on a study conducted at the beginning of 2019 to assess sexual minority members' and cis-heterosexual individuals' perceptions of others' opinions and their impact on collective action intentions to improve sexual minorities' rights (see Chapter 4). In the next section, I will further discuss the three studies presented in the empirical chapters.

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Empirical Studies

As highlighted above, all three empirical chapters in the present thesis focus on sexual minorities in Switzerland. In order to achieve social change, minority groups often challenge the status quo (e.g., legal discrimination) and challenge authority (Moscovici, 1976; Subasic et al., 2008). However, social change toward more tolerance for a minority group, such as sexual minorities, cannot be conceptualized without the involvement of an important 'societal audience' (Mugny, 1982; Mugny & Perez, 1991; Subasic et al., 2008). This societal audience may also be comprised of people who are not members of the minority group, such as heterosexual people in the context of sexual minority issues. One central goal of the present thesis is to better understand how this larger societal audience thinks and perceives others' opinions toward sexual minorities. Another goal is to understand *when* sexual minorities themselves and heterosexual allies alike might engage in collective action to achieve social change toward greater legal equality for sexual minorities. These two goals had some practical implications for the sampling method and data collection used in the different studies, which will be presented in the following section.

Field survey in Vaud. The first two empirical chapters rely on a field survey conducted in the canton of Vaud. This field survey was a quasi-representative sample of adult residents in Vaud and assessed opinions and (mis-)perception of others' opinions toward sexual minorities. In particular, participants were asked to reply to a questionnaire including questions on i) their personal opinions as well as their perceptions of ii) their friends'/families' opinions, iii) their neighbors' opinions, iv) opinions of residents in the canton of Vaud, and v) most people's opinions toward working mothers, same-sex female/male parenting, and same-sex marriage.

I used a two-stage sampling method to select the sample of participants. In the first stage, the 316 municipalities that compose the Canton of Vaud were categorized into three

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geographical areas—urban areas (N_{Vaud} = 53), peri-urban areas (N_{Vaud} = 200), and rural areas

(N_{Vaud} = 65)—in order to reflect the historical political cleavage between politically

progressive urban areas and politically conservative rural areas in Switzerland (Kübler,

Scheuss, & Rochat, 2013). Within each of these three categories, 10 municipalities were

randomly selected, resulting in a sample of 30 municipalities (see Table *2* for the selected

municipalities). Within each municipality, a minimum of two postal addresses were randomly

selected as starting points, based on the Swiss telephone directory.

Table 2

Selected Municipalities

Municipality	District	Type of Municipality
Aigle	Aigle	Urban
Lavey-Morcles	Aigle	Rural
Ollon	Aigle	Rural
Cudrefin	Broye-Vully	Peri-urban
Faoug	Broye-Vully	Rural
Grandcour	Broye-Vully	Rural
Lucens	Broye-Vully	Rural
Villarzel	Broye-Vully	Rural
Vully-les-Lacs	Broye-Vully	Rural
Bioley-Orjulaz	Gros-de-Vaud	Peri-urban
Cugy	Gros-de-Vaud	Peri-urban
Ballaigues	Jura-Nord vaudois	Rural
Donneloye	Jura-Nord vaudois	Peri-urban
Montagny-près-Yverdon	Jura-Nord vaudois	Urban
Romainmôtier-Envy	Jura-Nord vaudois	Rural
Epalinges	Lausanne	Urban
Lausanne	Lausanne	Urban
Chexbres	Lavaux-Oron	Peri-urban
Apples	Morges	Peri-urban
L'Isle	Morges	Peri-urban
Morges	Morges	Urban
Pompaples	Morges	Rural
Préverenges	Morges	Urban
Romanel-sur-Morges	Morges	Peri-urban
Begnins	Nyon	Peri-urban
Bursins	Nyon	Peri-urban
Commugny	Nyon	Urban
Coppet	Nyon	Urban
Prilly	Ouest lausannois	Urban
Blonay	Riviera-Pays d'en haut	Urban

During the second stage, residents of the 30 municipalities were randomly selected using the random-route method (Bauer, 2014; Brace & Adams, 2006; Carricano & Poujol, 2009). I followed a random itinerary to distribute the questionnaire among household addresses, reaching randomly selected addresses (see Figure 8 for an illustration). A questionnaire was delivered to each selected household and a maximum of 10 residents per building were contacted. In each municipality, 80 self-administered paper-based questionnaires ($N = 2,400$) and 40 contact letters with a link to a web survey ($N = 1,200$) were distributed from the 3th to the 14th of September 2016. In addition, I distributed reminder letters from the 5th to the 14th of October in the postal boxes of the contacted households. In order to avoid biases in participations associated with participants' opinion toward sexual minorities, the questionnaire was presented as a study on 'new family forms' and the sensitive questions (e.g., sexual minority issues) were displayed in the middle of the questionnaire after questions about different family forms and traditional gender roles.

In total, 1,105 (30.7%) participated in the survey: 892 participants sent back the completed paper-based questionnaire and 213 completed the web version of the questionnaire. While I initially planned to account for the difference between the municipalities using multilevel modelling, preliminary analyses indicated that perceptions of other opinions did not vary substantially between the municipalities (e.g., low intraclass correlation < .02).
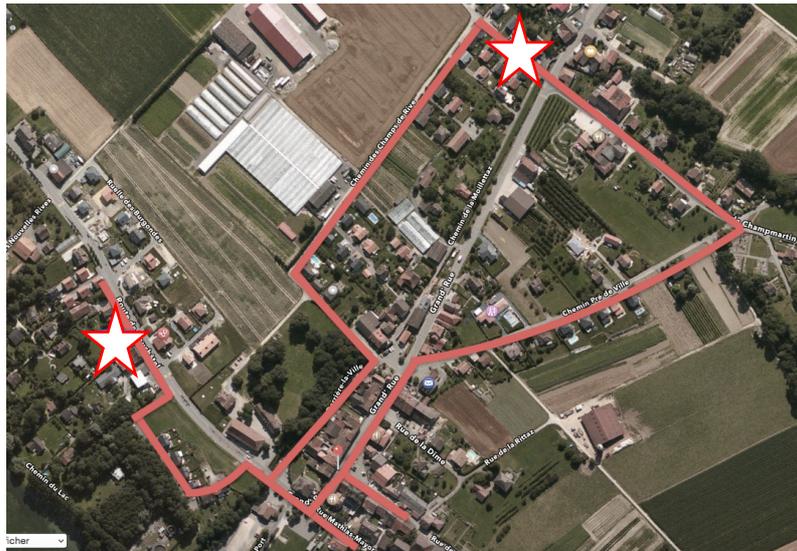
Figure 8. Example of Circuit in Cudrefin. Stars Represent the Two Selected Addresses

Natural experiment among university students. The second study presented in Chapter 3 applied an experimental design to assess whether or not institutional decisions influence perceptions of others' opinions in society (i.e., perceived societal norms). The questionnaire assessed personal opinions and perceived Swiss people's opinions toward same-sex female parenting, same-sex male parenting, and same-sex marriage. In addition, participants were asked to indicate their level of knowledge about the new law on stepchild adoption. The information about the new law was experimentally manipulated.

The sample in this study was composed of students at the university of Lausanne. The university students were contacted at random (i.e., I walked around the university campus and asked students to fill out the paper-based survey) in February 2018. More specifically, students were asked if they were willing to respond to a questionnaire on 'diversity at the university'. The questionnaire also included questions about sport and homophobia. A large majority of students agreed to answer to the questionnaire right away. As soon as they agreed to participate, I gave them the questionnaire along with a blank envelope. After completing the questionnaire, they were instructed to put it back in the blank envelope. I returned to

collect the envelopes approximately 25 minutes later and added the envelopes to a large bag

containing many others, in order to ensure anonymity.

National survey among the LGBTIQ+ population and heterosexual allies.

Chapter 4 aimed to investigate *when* individuals engage in collective action intentions to

achieve social change toward greater equality. Heeding calls for transparent and reproducible

research processes (Nosek et al., 2015), the hypotheses, questionnaires, and the analysis plan

were pre-registered online before the start of data collection (see online at

https://osf.io/zye6q/?view_only=27a5b38c973847d9be4df7a38f8b1b67). Relevant to the

present thesis, the questionnaire included measures assessing i) collective action tendencies;

ii) perceived Swiss people's opinions toward same-sex female parenting, male parenting, and

same-sex marriage; iii) opinion-based identification; iv) anger about the legal situation; v)

anger about public opinion; vi) perceived efficacy of a movement; and vii) perceived change

without a movement.

To reach enough sexual minority members, I decided to move away from

representative samples of the general population and directly targeted sexual minorities.

However, there are no registers or geographical areas that could help me to reach out to this

minority group. Consequently, I had to rely on a snow-ball sampling method to reach as

many sexual minority members as possible.

The data collection for this study was completed in collaboration with Tabea Hässler

(University of Zurich). An online version of a questionnaire on LGBTIQ+ people integration

in Switzerland was developed in French, German, Italian, and English. In order to recruit

participants, we contacted as many LGBTIQ+ organizations and magazines as possible and

asked them to share our study. Out of the 67 German-speaking LGBTIQ+ organizations or

magazines that were contacted, 36 shared our study via Facebook, their newsletter/magazine,

and/or on their website. Out of the 29 French-speaking LGBTIQ+ organizations that were

contacted, 24 shared our study via Facebook, their newsletter, and/or on their website.

Finally, both of the two Italian-speaking LGBTIQ+ organizations that were contacted shared

our study via Facebook and on their website (see Figure 9 for illustrations of posts or

articles). This also allowed us to reach out to heterosexual allies, who were friends of

LGBTIQ+ individuals or were affiliated with the different organizations or magazines.

Moreover, in order to reach out to additional heterosexual allies, we also advertised the study

at the university campuses.

The online questionnaire was tailored to sexual minority or gender minority issues

depending on the sexual and gender minority status of the participant. The questionnaire was

composed of items on collective action and norm perceptions—the topic of Chapter 4—as

well as other measures (e.g., discrimination, social support, political situation in Switzerland

—all not relevant to the current thesis).

Figure 9. Illustration of Posts Promoting the Study

Having presented the theoretical approach, context, samples, and measures used in the

present thesis (see Table 3 for an overview), the following chapters will present the three

studies conducted during the course of my PhD.

Table 3

Summary of Studies Organized by Chapters

Chapters	Studies	Main research questions	N	Sample	Main variables
Chapter 2 – Article 1: Eisner, Spini, & Sommet (2019)	Vaud Study	When do misperceptions of others' opinions arise in a society?	743	Residents Canton of Vaud in Switzerland	1. Perceived friends' and families', neighbors', and people's opinions toward working mothers and same-sex female parenting 2. Personal opinion toward working mothers/same-sex female parenting 3. Political orientation
Chapter 3 – Article 2: Eisner, Turner-Zwinkels, & Spini (under review)	Vaud Study	Do people misperceive societal norms toward sexual minorities?	892	Residents Canton of Vaud in Switzerland	1. Perceived residents' opinions toward same-sex parenting and marriage 2. Personal opinion toward same-sex parenting and marriage
	Uni Study	How are these (mis-)perceptions of societal norms affected by institutional changes?	437	University students in Switzerland	1. Perceived Swiss' opinions toward same-sex parenting and marriage 2. Knowledge about the new law on stepchild adoption (manipulation)
Chapter 4 – Article 3: Eisner, Hässler, Turner-Zwinkels, & Settersten (under review)	LGBTIQ+ Study (Sample 1a)	How do perceived societal norms impact support for social change among sexual minorities?	1'220	Sexual minorities in Switzerland	1. Collective action tendencies 2. Perceived Swiss' opinions toward sexual minorities 3. Opinion-based identification 4. Anger about legal situation 5. Anger about public opinion 6. Perceived efficacy 7. Perceived change w/o movement
	LGBTIQ+ Study (Sample 1b)	How do perceived societal norms impact support for social change among cis-heterosexuals?	239	Heterosexuals in Switzerland	

Chapter 2

A Contingent Perspective on Pluralistic Ignorance: When the Attitudinal Object Matters[3]

[3] ***Reference:*** Eisner, L., Spini, D., & Sommet, N., (2019). A Contingent Perspective on Pluralistic Ignorance: When the Attitude Object Matters. *International Journal of Public Opinion Research.* https://doi.org/10.1093/ijpor/edz004

CHAPTER 2: A CONTINGENT PERSPECTIVE ON PLURALISTIC IGNORANCE

A Contingent Perspective on Pluralistic Ignorance:

When the Attitudinal Object Matters

One of the most common findings in social psychology and public opinion research is the mismatch between perceptions of others' opinions and actual personal opinions, which is known as pluralistic ignorance (Eveland & Glynn, 2008). While some people, often conservatives, overestimate how widely their own opinions are shared, others, often liberals, wrongly believe that their own opinions differ greatly from those of others (Stern, West, & Schmitt, 2014)[4]. It has been suggested, though not empirically tested, that mismatches between perceived others' opinions and actual personal opinions do not occur in every circumstance, as they "only hold sway over a society for a limited period of time" (Noelle-Neumann & Petersen, 2004, p. 350). Arguably, pluralistic ignorance is more likely to occur with debated attitude objects "by which the individual isolates or may isolate himself in public" (Noelle-Neumann, 1983, p. 141). Despite these suggestions, to our knowledge, no studies have directly investigated the circumstances under which pluralistic ignorance is more likely to occur. In this paper, we measure perceived opinions related to different reference groups (e.g., most people or most friends and relatives) and personal opinions about new or older debates.

In the present research, we draw upon a social representation (SR) approach (Moscovici, 1976; Sammut et al., 2015) to classify individuals based on their social positioning (i.e., differences between opinions and perceptions of different nested groups' opinions) toward same-sex female parenting (a newly debated object) and working mothers (an older and more agreed-upon object). We consider that individuals' opinions toward an object and their perceptions of others' opinions are contingent on a broader context in which

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[4] In this article, we operationalize conservatives as people with a right-wing political orientation and liberals as people with a left-wing political orientation.

representations have contextual, historical, and practical anchoring (Elejabarrieta, 1994). On this basis, we propose that pluralistic ignorance is present mainly in newly debated objects. Moreover, as opinions and perceptions are part of a social metasystem linked to conflict and political agendas (Elcheroth et al., 2011), conservatives and liberals may hold strategic positions regarding the future of the debate. Therefore, we suggest that pluralistic ignorance might occur in a specific normative window of time "where the prevailing norms are neither entirely positive nor entirely negative toward the groups, but where there is a general social change toward greater acceptance of the group" (Crandall & Warner, 2005, p. 138).

Pluralistic Ignorance, False Consensus, and False Uniqueness

Since the first studies on students' attitudes (Katz & Allport, 1931), the concept of pluralistic ignorance has been supported for various "controversial" attitude objects, such as race (Fields & Schuman, 1976), drinking behavior (Prentice & Miller, 1993), sexual minorities (Bowen & Bourgeois, 2001), or sexual intercourse (Cohen & Shotland, 1996). Pluralistic ignorance has also been shown to occur for various groups of reference, such as most people, friends, or neighbors (e.g., Fields & Schuman, 1976; Glynn, 1989).

Pluralistic ignorance refers to a situation in which individuals perceive that their opinion is shared by the minority when it is in fact shared by the majority (Katz & Allport, 1931), or vice versa (Merton, 1968). In the present article, we endorse an expanded definition of pluralistic ignorance by focusing on the perceived self-other distance. We focus on the perceived difference between personal opinions and the opinions of others rather than the factual accuracy of perceptions of others' opinions.

According to this expanded definition, pluralistic ignorance is a cognitive bias that can have two directions (Eveland & Glynn, 2008; O'Gorman, 1988). The first is *false consensus*, whereby one has the tendency to falsely consider his or her opinion as commonly shared and alternative views as uncommon or deviant (Eveland & Glynn, 2008; Miller &

McFarland, 1987; Ross et al., 1977). The second is *false uniqueness*, whereby one has the tendency to falsely consider his or her opinion as unique and not shared by others (Bosveld et al., 1995; Stern et al., 2014).

Two underlying mechanisms explain false consensus and—to a lesser extent—false uniqueness. The first is a cognitive mechanism arising from a lack of information to make people realize that their personal opinion is much more/less shared than what they think. The second is a motivational mechanism arising from ego-defensive motivations through which people justify their personal opinion (Gross et al., 1997; Marks & Miller, 1987; Mullen & Hu, 1988; Wojcieszak, 2008, 2009). However, while both cognitive and motivational mechanisms may explain false consensus and false uniqueness, they are so intertwined that it is difficult to distinguish between them.

In the literature, false consensus and false uniqueness have been linked to political values. Research indicates that conservative values are a predictor of false consensus. People scoring high in conservative values showed greater social projection regarding political attitudes (i.e., false consensus), which was accounted for by a higher need for closure (Amit et al., 2010). Moreover, European Americans scoring high in right-wing authoritarianism and social dominance orientation were more likely to express false consensus in evaluating opinions toward African Americans (Strube & Rahimi, 2006). Several studies have shown that right-wing supporters tend to express false consensus, especially when they see that support for their opinion declines (e.g., Dvir-Gvirsman, 2015; Reid & Hogg, 2005).

In contrast, research indicates that the endorsement of liberal values is a predictor of false uniqueness. In a study of Israeli voters, extreme left-wing supporters had a tendency for false uniqueness, which might be explained by their motivation to be perceived as a unique minority and distinct from conventional right-wing voters (Babad & Yacobos, 1993).

Moreover, liberals tended to underestimate their similarity with other people due to their desire to feel unique (Rabinowitz et al., 2016; Stern et al., 2014).

Whereas the social and temporal contexts around the attitude object are often implicitly considered in the justification for false consensus and false uniqueness, the idea that the activation of false consensus and false uniqueness among right-wing and left-wing supporters might vary for different objects has, to our knowledge, never been tested. In the present article, we rely on an SR approach (Sammut et al., 2015) to study the phenomena of pluralistic ignorance, false consensus, and false uniqueness for attitude objects that differ in their novelty in the public debate.

Toward a Social Representational Understanding of Pluralistic Ignorance, False Consensus, and False Uniqueness

Social representations are ideas, thoughts, images, and knowledge that are collectively shared (Moscovici, 1988, 1991; Sammut et al., 2015). They are created when an object is newly inserted into the public sphere or becomes an issue in a given context. In such situations, individuals tend to develop representations of what other groups believe (Wagner, 1995) and position themselves toward these representations. This action is *social positioning*, which is the "process by which people take up a position about a network of significations" (Clémence, 2001, p. 83). More broadly, social positioning is the result of the adaptation between what we think and what other groups think (Clémence, 2001).

Social positioning may vary depending on the group to which people refer when taking positions. In particular, the level of closeness to different groups of reference might influence pluralistic ignorance. It is conceivable that people perceive larger self-other disparities with general others (e.g., most people) than with close others (e.g., friends). This finding is consistent with findings from research on the "third-person effect", which focuses on the perceived impact of mass media messages: Self-other disparities tend to grow in

magnitude as the perceived social distance between self and others increases (Perloff, 2009; see also the work on the spiral of silence, e.g., Hampton et al., 2014).

Within the scope of an SR approach, false consensus and false uniqueness can be considered to stem from different social positions reflecting the interaction between actual opinions and perceptions of other groups' opinions. Because these two positions are social in nature, they are likely to be influenced by the social and temporal contexts around the object and, in particular, its novelty in the public debate and its connection with specific political strategies. First, the novelty of the debate might lead people to lack information when picturing others' opinions. For a novel issue, perceptions of others' opinions might lag behind the changes in the actual climate of opinions. This explanation is in line with the cognitive mechanism (Mullen & Hu, 1988; Wojcieszak, 2008, 2009). Second, political contentiousness is likely to favor the polarization of false consensus and false uniqueness. For conservatives, there is a motivation to demonstrate the normative legitimacy of one's position and a motivation to be different for liberals. This second explanation is in line with the motivational mechanism (Mullen & Hu, 1988; Wojcieszak, 2008, 2009). Hence, endorsing an SR approach to study false consensus and false uniqueness provides a tool to obtain a better theoretical understanding of these effects.

Endorsing an SR approach is also meaningful from an analytical perspective. Within the SR field, a three-step analytical approach has been proposed to explore social positioning as an articulation of the points of reference and groups of individuals supporting different positions in the debate (Clémence, 2001; Elejabarrieta, 1994). The first step aims to identify the shared points of reference (for example, the perception of most people's opinions). The next step is focused on social positioning and aims to identify the association between the opinions held by participants and the shared points of reference. This step can be linked with the idea of identifying false consensus and false uniqueness. The last step addresses the

characteristics of individuals and groups to identify the principles (e.g., political orientation) that organize these social positions. This analytical approach rests upon factorial analyses, such as cluster analyses, as they provide tools to classify individuals depending on their social positioning (Clémence, 2001).

In this article, we apply the SR analytical approach to study false consensus and false uniqueness. This approach, particularly the application of cluster analyses, allows for grouping individuals based on their answers. It also allows for measuring consensus and uniqueness without reducing answers to the different variables to a single indicator, as is usually done in studies of false consensus and false uniqueness (e.g., Dvir-Gvirsman, 2015; Stern et al., 2014; Strube & Rahimi, 2006). The added value of such an approach is that different groups of reference and perceptions of their opinions can be considered along with personal opinions. Moreover, it provides tools to account for false consensus and false uniqueness among groups of respondents, particularly conservatives and liberals.

The SR analytical approach allows us to show in this paper that the occurrence of pluralistic ignorance (i.e., false consensus, false uniqueness) is likely to be highly dependent on the attitude object through its novelty in the public debate and on the political strategies that it implies for conservatives and liberals. To show this influence, we compare social positioning—regarding different groups of reference—toward two attitude objects: same-sex female parenting and working mothers.

Swiss Societal Background on Same-Sex Female Parenting and Working Mothers

In the context of this study, same-sex female parenting and working mothers have several similarities that make an examination of the pluralistic ignorance phenomenon valuable. While both issues target mothers, their novelty in the public debate differs. This difference was documented in a March 2015 report on the modernization of family law released by the Swiss Federal Council. This report was dedicated to past and present family

dynamics through the evolution of the role of women (e.g., increasing proportion of working mothers). It also addressed future and current legal changes through a discussion of same-sex couples' rights (e.g., the legal gap between Switzerland and several countries that opened marriage and adoption to same-sex couples). This distinction between past and future changes highlights differences in the novelty in the public debate, as much as the political strategies involved, for issues regarding working mothers and same-sex (female) parenting.

While the number of working mothers with a preschool-age child tripled between 1980 and 2017 and working mothers have switched from being a minority to a majority in Switzerland (Giudici & Schumacher, 2017), issues around same-sex couples occupy a central position in the political sphere. Same-sex marriage and same-sex adoption (with the exception of stepchild adoption since 2018) are not legal in Switzerland. However, same-sex marriage and adoption, as well as same-sex parenting, are currently being debated in parliament. For example, a parliamentary initiative to open marriage to same-sex couples was proposed in 2013 and is still being discussed in the Swiss government. The debate and legal issues around this object—especially regarding what marriage for all would mean for same-sex adoption and parenting—led the government to extend the discussions to 2019.

The differences in the social and temporal contexts around same-sex (female) parenting (i.e., not legally allowed, jurisdictional discussions, new debate) and working mothers (i.e., legally allowed, different laws, older debate) are likely to lead to variations in social positioning. We expect to find more occurrences of pluralistic ignorance for this "new" changing issue because a polemical new process is involved in same-sex (female) parenting (i.e., the opinion climate is not settled). Simply put, people may lack information to identify the changes in the actual opinion climate. Moreover, as same-sex (female) parenting is a more contentious issue than that of working mothers, it is more likely to lead to the activation

of ego-defensive/group motivations, resulting in false consensus for conservatives and false uniqueness for liberals.

To summarize, we formulated the following hypotheses. *H1: Pluralistic ignorance (i.e., a mismatch between the perceived majority/minority of others' opinions and the actual minority/majority of personal opinions) is stronger for same-sex female parenting than for working mothers. H2: Right-wing respondents (conservatives) express a stronger false consensus toward same-sex female parenting than working mothers; left-wing respondents (liberals) express a stronger false uniqueness toward same-sex female parenting than working mothers.* In this study, we also consider representations depending on groups of reference and their level of closeness to each respondent (i.e., people, neighbors, friends and relatives). We will also explore the role of the level of closeness of the group of reference because research has documented that people perceive larger self-other disparities with general others than with close others (e.g., Hampton et al., 2014; Perloff, 2009).

Method

Participants and Procedure

Data were collected in the canton of Vaud in Switzerland in October 2016. The canton of Vaud is geographically organized into 316 municipalities, which are historically divided into politically progressive urban areas and conservative rural areas (Kübler, Scheuss, & Rochat, 2013). To reflect these geographical cleavages, the study was based on a two-stage sampling method,[5] with adult residents of municipalities within the canton of Vaud as the target population. In the first stage, 30 municipalities within three geographical categories of municipality—urban areas (N_{Vaud} = 53), peri-urban areas (N_{Vaud}= 200), and rural areas (N_{Vaud} = 65)—were selected. Within each of these three categories, 10 municipalities were randomly

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[5] The initial goal was to conduct a multilevel analysis to reflect differences among municipalities. The low intraclass correlation (<.02) led us to ignore the hierarchical structure of the data.

selected. Within each municipality, a minimum of two postal addresses were randomly selected as starting points. During the second stage, residents of the 30 municipalities were randomly selected using the random-route method. A questionnaire was delivered to each selected household, and a maximum of 10 residents per building were contacted. In each municipality, 80 self-administered paper-based questionnaires ($N = 2,400$) and 40 contact letters with a link to a web survey ($N = 1,200$) were distributed.

Of the 3,600 contacted people, 891 (37.3%) returned the paper-based questionnaire, and 213 (17.8%) responded to the web version of the questionnaire. Due to missing cases ("do not know" answers or nonresponses mainly pertaining to questions about other people's opinions), 361 participants were excluded a priori. The final sample included 743 residents (320 men, 421 women, 2 unspecified; $M_{age} = 51.74$, $SD = 15.81$; 26.6% with a university degree).[6]

Variables

Political orientation. Liberal-conservative orientation was measured with the question, "On political issues, when people talk about right and left, where would you place yourself?" The response scale was 1 = *far left*, 2 = *left-wing*, 3 = *center-left*, 4 = *center*, 5 = *center-right*, 6 = *right-wing*, 7 = *far right* ($M = 4.10$, $SD = 1.18$).

Personal opinion and perceived opinions toward same-sex female parenting.[7] Personal opinion toward same-sex female parenting was measured with a single item: "To what extent do you approve or disapprove of a same-sex female couple bringing up a child?" The response scale ranged from 1 = *strongly disapprove* to 5 = *strongly approve* ($M = 3.00$, $SD = 1.40$).

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[6] In comparison to the population of the canton of Vaud in 2015 (STATVD, 2016), our sample is slightly older (mean age in the canton of 47.7 years old), feminized (51.5% of the population is women), and educated (21.4% have a university degree).

[7] We also measured opinions toward same-sex male parenting and same-sex marriage. To simplify the comparison, these measures were not included in this article.

Perceived opinions toward same-sex female parenting were measured by asking each respondent: "How do you think most people ($M = 2.06$, $SD = 0.81$) [/most of your neighbors ($M = 2.24$, $SD = 0.92$)] [/most of your friends and relatives ($M = 2.51$, $SD = 1.32$)] would react to a same-sex female couple bringing up a child?"[8]. These items were adapted from the validated and pretested European Social Survey (2006) items measuring perceived opinions. Each time, the response scale was 1 = *would openly disapprove*, 2 = *would disapprove without saying it*, 3 = *would not mind either way*, 4 = *would approve without saying it*, 5 = *would openly approve*. An additional "I don't know" response, excluded from the analyses, was offered to the respondents.

Personal opinion and perceived opinions toward working mothers. Personal opinion toward working mothers was measured by asking each respondent, "To what extent do you approve or disapprove of a woman having a full-time job while she has a child aged under 3?" ($M = 3.04$, $SD = 1.25$). Perceived opinions toward working mothers were measured by asking each respondent, "How do you think most people ($M = 2.59$, $SD = 0.92$) [/most of your neighbors ($M = 2.71$, $SD = 0.98$)] [/most of your friends and relatives ($M = 2.72$, $SD = 1.36$)] would react if a woman has full-time job while she has a child aged under 3?" (also adapted from the European Social Survey, 2006). The response categories for all the items were the same as those for same-sex female parenting.

Control variables. Participant sex (1 = *female*, 56.8%), age (in years, $M = 51.74$, $SD = 15.81$), university degree (1 = *having a university degree*, 26.6%), level of religiosity (from 1 = *not at all religious* to 5 = *completely religious*; $M = 2.89$, $SD = 1.39$), and geographic type of municipality of residence (1 = *rural municipality*, 32.5%) were included in the analyses.

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[8] Respondents also had to answer for residents of the canton of Vaud. As the answers were almost the same as those for ''most people'' this item was not included in the analyses.

Results

All the analyses presented below were conducted with R software (version 3.3.2).[9]

Differences in Pluralistic Ignorance

To test for pluralistic ignorance by comparing majority/minority perceptions of others' opinions with majority/minority actual personal opinions (H1), we computed a percentage of disapproval score for personal opinions and the mean percentage of respondents who perceived that others (people, neighbors, friends and relatives) disapproved. This procedure enabled us to directly compare majority/minority perspectives, as is commonly done in studies of pluralistic ignorance (e.g., Fields & Schuman, 1976). It also enabled us to standardize the differences in terms of response categories for personal and perceived opinions.

To compare same-sex female parenting and working mothers, we first conducted two-sample t-tests comparing percentages of disapproval (or perceived disapproval) for the two objects. Then, one-sample t-tests were conducted to test, on one hand, whether a majority (more than 50%) or a minority (less than 50%) of respondents disapproved and, on the other hand, whether a majority or a minority of respondents perceived that the majority of others (most people, most neighbors, most friends and relatives) disapproved.

First, as shown in Table 4, the percentages of actual disapproval did not significantly differ between same-sex parenting and working mothers, $t(742) < 1$, $p = .660$. A minority of

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[9] The analyses were conducted on the reduced dataset. To control for the robustness of our results, we imputed nonresponses using a multiple imputation procedure (10 imputed datasets). We do not report the results based on the imputed dataset in the text due to clarity issues and limitations to pool the results of complex analyses. The results between the imputed and restricted dataset were similar: a minority of respondents (38.2%) disapproved of same-sex female parenting (disapproval significantly below 50%, $t(828) = -6.97$, $p < .001$), and a minority of respondents (37.7%) disapproved of working mothers (significantly below 50%, $t(828) = -7.33$, $p < .001$). A majority of respondents (78.6%) perceived that most people would disapprove of same-sex female parenting (significantly above 50%, $t(828) = 20.15$, $p < .001$), and respondents (52.8%) were not a majority in perceiving that most people would disapprove of working mothers (not significantly above 50%, $t(828) = 1.60$, $p = .060$). There was a significant three-way interaction among the object, the group of reference, and political orientation, $F(3,2481) = 17.64$, $p < .001$, $\eta_p^2 = .02$. Political orientation was a strong predictor of the probability of being in the FC cluster, $OR = 1.52$, 95% CI [1.31, 1.76], $p < .001$.

respondents (38.4%) disapproved of same-sex female parenting, and a minority of respondents (37.4%) also disapproved of working mothers. Second, the percentages of perceived most people's disapproval differed between same-sex female parenting and working mothers, $t(742) = 12.07$, $p < .001$, $\eta_p^2 = .16$. A majority of respondents (77.7%) perceived that most people would disapprove of same-sex female parenting, and neither a majority nor a minority of respondents (52.0%) perceived that most people would disapprove of working mothers. Third, the percentages of perceived most neighbors' disapproval differed between same-sex female parenting and working mothers, $t(742) = 11.30$, $p < .001$, $\eta_p^2 = .15$. A majority of respondents (69.3%) perceived that most of their neighbors would disapprove of same-sex female parenting, and a minority of respondents (45.5%) perceived that most of their neighbors would disapprove of working mothers. Finally, the percentages of perceived disapproval among most friends and relatives differed between same-sex female parenting and working mothers, $t(742) = 3.48$, $p = .001$, $\eta_p^2 = .02$. A majority of respondents (58.8%) perceived that most of their friends and relatives would disapprove of same-sex female parenting, and neither a majority nor a minority (51.5%) perceived that most of their neighbors would disapprove of working mothers. In sum, consistent with our first hypothesis, we observed that although both objects were associated with the same level of disapproval, pluralistic ignorance was found for same-sex female parenting only.

Table 4

Percentage of Disapproval Using One-Sided T Tests for Comparison with 50%

Item	Disapproval %	90% CI	One-sided *t* test
Same-sex female parenting			
Personal opinion	38.4	[34.9, 41.9]	-6.52***
Most people's opinion	77.7	[74.7, 80.7]	18.09***
Most neighbors' opinion	69.3	[66.0, 72.6]	11.41***
Most friends' and relatives' opinion	58.8	[55.3, 62.4]	4.88***
Working mothers			
Personal opinion	37.4	[33.9, 40.9]	-7.08***
Most people's opinion	52.0	[48.4, 55.6]	1.06
Most neighbors' opinion	45.5	[41.9, 49.1]	-2.47**
Most friends' and relatives' opinion	51.5	[47.9, 55.1]	< 1

Note. *** $p < .001$, one-tailed. ** $p < .01$, one-tailed.

Finally, to explore the role of the level of closeness of the group of reference on self-other disparities, we conducted a two-way ANOVA on the percentage scores with the group of reference and the object as within-participant variables. We observed a significant two-way interaction between the group of reference and the object, $F(3, 2226) = 51.21$, $p < .001$, $\eta_p^2 = .06$. In particular, the effect of the group of reference was stronger for same-sex female parenting, $F(3, 2226) = 151.82$, $p < .001$, $\eta_p^2 = .17$, than for working mothers, $F(3, 2226) = 21.33$, $p < .001$, $\eta_p^2 = .03$. In the case of same-sex female parenting, personal opinions (38.4%) were more distant from the opinion of general others (i.e., most people, 77.7% disapproval) than from the opinion of close others (i.e., most friends and relatives, 58.8% disapproval). This finding suggests that for this object, self-other disparities increased as the level of closeness decreased.

Consensus and Uniqueness Among Different Political Orientations

In the previous section, we documented evidence of pluralistic ignorance for same-sex female parenting and, hence, a false social knowledge of other people. However, no

evidence of pluralistic ignorance for working mothers was found. With the following analyses, we further investigated the nature of this false knowledge by testing for differences in expressions of false consensus and false uniqueness among conservatives and liberals (H2).

Interaction between objects, group of reference, and political orientation. To see whether differences among political orientation for the two objects were likely to be found, we conducted three-way mixed measures ANOVA with the group of reference and the object as within-participant variables and political orientation (7-point scale) as a between-participant continuous variable.

The visual representation of mean differences among political orientation is displayed in Figure 10. The results of the three-way ANOVA revealed a significant three-way interaction between the object, the group of reference, and political orientation, $F(3, 2223) = 17.03$, $p < .001$, $\eta_p^2 = .02$. The interaction between the level of reference and political orientation was stronger for same-sex female parenting, $F(3, 2223) = 57.51$, $p < .001$, $\eta_p^2 = .07$, than for working mothers, $F(3, 2223) = 9.45$, $p < .001$, $\eta_p^2 = .01$. In the specific case of same-sex female parenting, the analyses revealed that the effect of the group of reference was stronger for liberal respondents (-1 SD), $F(3, 2223) = 210.47$, $p < .001$, $\eta_p^2 = .22$ (corresponding to a stronger differentiation between personal and other opinions, i.e., false uniqueness) than for conservative respondents (+1 SD), $F(3, 2223) = 17.9$, $p < .001$, $\eta_p^2 = .02$ (corresponding to a weaker differentiation between personal and other opinions, i.e., false consensus). In the specific case of working mothers, the analyses revealed that the effect of the group of reference was weak for both liberal respondents, $F(3, 2223) = 37.81$, $p < .001$, $\eta_p^2 = .05$ and conservative respondents, $F(3, 2223) = 10.26$, $p < .001$, $\eta_p^2 = .01$.
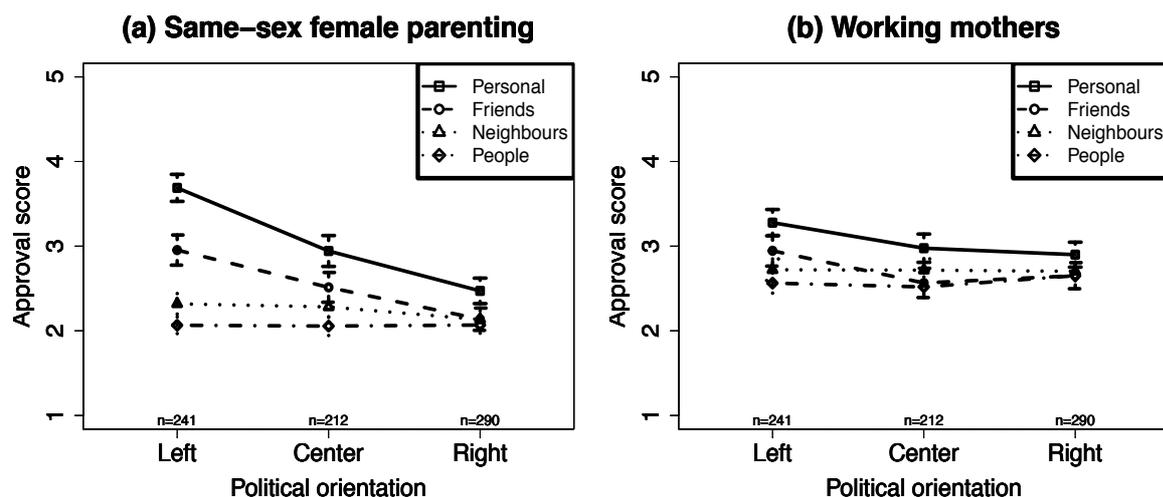
Figure 10. Approval Score as a Function of Same-sex Female Parenting, Working Mothers, and Political Orientation. Note. Error bars Represent 95% CI.

These results show that the effect of political orientation differs between same-sex female parenting and working mothers. The effects of political orientation on personal opinions and perceived others' opinions were stronger for same-sex female parenting than for working mothers. These analyses also showed that, in the case of same-sex female parenting, liberal respondents differentiated more between their personal opinion and those of others.

To directly test for false consensus and uniqueness and, in particular, to see whether these two social positions really structure answers at a theoretical level, we conducted cluster analyses by focusing on same-sex female parenting (the more-debated object) only. Such an approach, based on SR, allowed for controlling the existence of false consensus and false uniqueness without inferring or creating a priori categories. It allowed us to directly test for the effect of political orientation on these social positions and comprised a more comprehensive and robust analysis.

Cluster analyses, false consensus, and false uniqueness. To compare different cluster solutions and assess the reliability of our results, hierarchical agglomerative cluster analyses were conducted on the four items for same-sex female parenting. This procedure

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allowed us to compare different cluster solutions (e.g., varying the number of clusters), as there is a hierarchy between the clusters (Hair, 2010). The hierarchical cluster analysis was performed using Ward's method and the Euclidean distance metric. We first identified the possible best number of clusters using the NbClust package (Charrad, Ghazzali, Boiteau, & Niknafs, 2014) and then reported the cluster solutions.

Based on the methods encoded in the R package NbClust (Charrad et al., 2014), a two-cluster analysis was conducted[10]. These two clusters classified respondents based on their personal opinion and on their perceptions of others' opinions. Cluster 1 gathered 422 respondents who held a positive personal opinion ($M = 3.86$), similarly to their friends and relatives ($M = 3.28$) but differently from their neighbors ($M = 2.64$) and most people ($M = 2.25$). Hence, this cluster could be named the false uniqueness (FU) cluster. In contrast, Cluster 2 gathered 321 respondents with a negative personal opinion ($M = 1.87$) who, in the same way, perceived that most of their friends and relatives ($M = 1.50$), their neighbors ($M = 1.70$), and most people ($M = 1.82$) held negative opinions. This cluster grouped people who did not differentiate between their personal opinion and others' opinions and could be consequently named the false consensus (FC) cluster.

Because pluralistic ignorance was less documented for working mothers, the positions should differ less on the basis of consensus and uniqueness. To control for this expectation, we conducted a cluster analysis for working mothers. As expected, the analysis was much less conclusive for working mothers than for same-sex female parenting. A large majority of respondents (74.3%) were grouped in a cluster in which perceptions and opinions only differed to a small extent (see supplementary materials for additional analyses on working mothers).

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[10] An examination of the scree plot as well as the results of the analyses contained in the NbClust package (i.e., identifies the cluster solution that is preferred by a majority of indices) indicated that the best number of clusters was 2.

Logistic regression to explain false consensus and false uniqueness. From the results of the cluster analysis, a variable that assigned one cluster to each respondent was created. To test the second hypothesis, a binomial logistic regression was conducted to predict the probability of being in the FC cluster instead of the FU cluster. The focal independent variable was political orientation and the control variables were sex, age, university degree, level of religiosity, and type of municipality of residence (see Table 5).

Confirming our second hypothesis, political orientation was a strong predictor of the probability of being in the FC cluster, $OR = 1.50$, 95% CI [1.30, 1.73], $p < .001$. Level of religiosity was also a strong predictor of being in the FC cluster ($OR = 1.31$, 95% CI [1.16, 1.48], $p < .001$), and male respondents were 1.7 times more likely to be in the FC cluster ($OR = 1.72$, 95% CI [1.24, 2.39], $p = .001$). The analyses were also conducted on the clusters for working mothers, and no significant effect of political orientation was found (see Table S2). This finding indicates that political orientation strongly influenced false consensus and false uniqueness for same-sex female parenting only.

Table 5

Logistic Regression Analyzing Likelihood of Being in the False Consensus Cluster Toward Same-Sex Female Parenting

	Odds Ratio	95% CI
Intercept	0.04***	[0.02, 0.10]
Sex (male)	1.72**	[1.24, 2.39]
Age	1.01	[1.00, 1.02]
Level of education (university degree)	0.83	[0.57, 1.20]
Level of religiosity	1.31***	[1.16, 1.48]
Geographic category (rural)	0.94	[0.67, 1.32]
Political orientation	1.50***	[1.30, 1.73]

Note. *** $p < .001$, $n = 706$, Nagelkerke $R^2 = .139$, Accuracy = 62.9 %

Discussion

This research is the first to formally work on attitude objects by examining differences between personal opinions and perceived opinions toward same-sex female parenting (current debated object) and working mothers (older debated object). Furthermore, we proposed a new way of conceptualizing pluralistic ignorance (false consensus and false uniqueness) among conservatives and liberals through the endorsement of an SR approach to explore the processes by which people categorize themselves through social positioning (Elcheroth et al., 2011; Moscovici, 1991). The results discussed below indicate that (a) there is evidence that pluralistic ignorance occurs for same-sex female parenting and that this phenomenon might be due to the issue's novelty in the public debate (i.e., settled or unsettled issue) and (b) pluralistic ignorance arises from false consensus among conservatives and from false uniqueness among liberals.

First, by showing that pluralistic ignorance was documented for opinions toward same-sex female parenting (for all groups of reference) and not for working mothers, we illustrated that the social and temporal contexts around the object influence pluralistic ignorance. In line with our first hypothesis (H1), we showed that a majority of respondents did not disapprove of same-sex female parenting, while a majority of these respondents perceived that most people/their neighbors/their friends and relatives disapproved. On the other hand, this effect was not documented for working mothers, as a majority did not perceive that most people/their neighbors/their friends and relatives disapproved. Moreover, we showed that in a situation of pluralistic ignorance, the distance between personal opinions and perceptions of others' opinions was greater for more distant groups of reference. On the whole, our findings might indicate that less debated and/or older objects, for which the opinion climate is more settled, lead to less evidence of pluralistic ignorance.

Second, our analyses on social positioning toward same-sex female parenting reveal that false consensus and false uniqueness explain pluralistic ignorance. In line with the second hypothesis (H2), our results show that conservative (right-wing) respondents almost never differentiate between their personal opinion and their perception of others' opinions. However, liberal (left-wing) respondents differentiate a great deal between their personal opinion and their perception of others' opinions. These results corroborate previous findings in the literature on false consensus (e.g., Amit et al., 2010; Dvir-Gvirsman, 2015) and false uniqueness (e.g., Rabinowitz et al., 2016; Stern et al., 2014). Furthermore, the comparison between opinions toward same-sex female parenting and working mothers might also indicate that these effects are more likely to be found for newly debated objects that involve political strategies for the future.

Beyond these findings, our research does not provide clear evidence to distinguish the effects of the novelty of the debate (cognitive mechanism) from the effects of the political strategies (motivational mechanism) around the objects. To disentangle the effects of novelty and political strategies on false consensus and false uniqueness, future research should consider adding a measure of the perceived level of novelty of the debate and a measure of political interest in the debate. Although the design of our study did not provide us with tools to disentangle the effects, it is likely that both effects influence pluralistic ignorance. Below, we discuss this question by expanding the novelty of the debate to the idea of a time lag and expanding the level of controversy to the idea of group conflicts.

Do Perceptions of Others' Opinions Lag Behind Opinions for New Debates?

Our first suggestion is that the evidence of pluralistic ignorance documented in this study might come from the novelty of the debate around same-sex female parenting. Perceptions of most people's opinion toward same-sex female parenting are very homogenous and negative. Indeed, even though opinions vary, the perception of most

people's opinions reflects a stable conservative representation of most people's opinions. Thus, these results show the dynamic nature of representations. Some representations, especially when they are shared, serve as a framework for the interpretation of new objects (Sammut, Tsirogianni, & Wagoner, 2012). Within the SR approach, stable and uniform representations are defined as *hegemonic*. Such representations are so widely shared between the groups that they are implicit and often reified through institutions (Moscovici, 1988). However, such hegemonic representations also ensure a form of primacy of the past over the present (Moscovici, 2000), suggesting the presence of a time lag. This idea of a time lag might be an explanation, arising from a cognitive mechanism, for our results. We find that opinions are polarized, but our results suggest that individuals do not actualize their representations and still perceive others' opinions as being conservative.

Our observations are in accordance with studies on pluralistic ignorance (e.g., Fields & Schuman, 1976; O'Gorman, 1988; Zou et al., 2009) that showed that "a society's perception of itself tends to lag behind actual change in people's private beliefs and values" (Zou et al., 2009, p. 581). Furthermore, these findings have also been documented in new research on norms (Tankard & Paluck, 2016, 2017) that explained the stability of the perceptions by the fact that in times of social change, people may fail to identify ongoing changes in opinions due to a lack of information. In the scope of our study, we could imagine that the institution's position toward same-sex couples is an important source of information to perceive others' opinions, especially in Switzerland. Future research should examine the evolution of perceptions and opinions across time or in an experimental setting.

Why Are Representations of Debated Objects So Stable?

The non-actualization of representations documented here may also be accounted for by variables other than the temporal context. Group status and conflict between groups might serve as additional explanations arising from a motivational mechanism. Through the

investigation of false consensus and false uniqueness, we found that for same-sex female parenting, being male and religious and holding a right-wing political orientation are strong predictors of the probability of being in the false consensus cluster. These groups have historical specificities that may explain their presence in this cluster. Historically, the native Swiss, the right, religious people, and males have been dominant in the political system (Kriesi & Trechsel, 2008). Hence, one can understand this presence of dominant groups that hold political power in the false consensus cluster through the idea of the influence of group status on representations. Indeed, social representations also have a historical dimension, and they endorse the "power of the groups that embody the values that underpin them" (Joffe & Staerklé, 2007, p. 143). Therefore, the stability of negative hegemonic representations might also be accounted for by the fact that dominant groups endorse them (Staerklé et al., 2011).

Limitations and Concluding Remarks

There are some limitations to the data and analyses that warrant discussion. First, the comparison between same-sex female parenting and working mothers might be limited, as we did not experimentally test for the effects of debate or novelty on pluralistic ignorance. For this reason, we limited the comparison to their legal frame of reference and their novelty in the public debate. However, our results still indicate that pluralistic ignorance, false consensus, and false uniqueness vary among objects. Moreover, the novelty of the debate in addition to the political strategies involved with controversial debates seem to account for these differences. Ideally, one should study the evolution of social positioning across time for the same object.

Another limitation is related to the measures of perceived opinions, which differ slightly from the measures of personal opinions. We decided to have different measures of opinions for two main reasons. First, to enhance the comparison while also using reliable and valid items, we used the measures of perceived opinions proposed in the third round of the

European Social Survey (2006). Second, the response categories were chosen to facilitate respondents' cognitive process and, in particular, to allow us to access their "true" perception of others' opinions. Measures that do not include expression are difficult to interpret because one cannot differentiate between an opinion's expression and actual opinions (e.g., a respondent may believe that other people would approve, given their expressions, and at the same time believe that they privately disapprove). We account for the fact that, although this formulation further illuminates the phenomenon of consensus and uniqueness, the difference between the two measures might affect evidence of pluralistic ignorance. Consequently, we standardized the data for the analyses of pluralistic ignorance by comparing percentages of disapproval instead of the mean differences, which allowed us to directly access majority/minority opinions.

A final limitation is related to the social desirability bias. This bias arises when participants are asked questions about socially sensitive issues (Glynn 1989), such as homosexuality (e.g., Tourangeau & Yan, 2007). In these situations, people are unwilling to report their "true" opinions, but they may project them when reporting their perceptions of others' opinions (Glynn, 1989). To minimize this bias, the questionnaire was presented as a study on different family forms, and the topic of homosexuality was not salient because only a few items touched on it. Moreover, the questionnaire was anonymous and self-administered.

Despite the limitations mentioned above, we believe our findings have normative and policy-making implications. In this specific normative window of time (i.e., social change toward more equality; Crandall & Warner, 2005), the perception that others hold negative opinions toward same-sex (female) parenting might serve as an argument for both conservatives and liberals to change or maintain the legal situation. Conservatives might argue against legal changes toward greater recognition of same-sex parenting based on the perceived consensus around their opinion within the population. For liberals, the picture is less

straightforward. On the one hand, based on the perceived uniqueness of their opinion, liberals might strategically argue that it is better to retain the law until opinions in the population shift toward a greater acceptance of same-sex parenting. On the other hand, perceptions of positive opinions among their friends and relatives might motivate them to act for legal change. Thus, political parties and policy makers aiming to convince liberals to act for legal change may have to take liberals' feelings of uniqueness into account, trying to adjust their misperceptions of others' opinions.

To summarize, our method based on social positioning provided an effective way to congruently study false consensus and false uniqueness by integrating as many variables and groups of reference as needed. We showed that perceptions are not always accurate mirrors of personal opinions, particularly when the object is new and/or debated in the political sphere.

Chapter 3

The Impact of Laws on Norms Perceptions[11]

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[11] ***Reference:***
Eisner, L., Turner-Zwinkels, F., & Spini, D. (under review). The Impact of Laws on Norms Perceptions.

CHAPTER 3: THE IMPACT OF LAWS ON NORMS PERCEPTIONS

Introduction to the Chapter

Findings of Chapter 2 indicate that people misperceive others' opinions regarding same-sex female parenting and, most importantly, that these misperceptions are widely shared among people holding different personal opinions (i.e., left-wing and right-wing participants). Yet, while Chapter 2 provides a better understanding on when misperceptions can occur (i.e., in a time of social change), it also brings many unanswered questions: Why do people misperceive others' opinions, why are these perceptions so shared among social actors, and how can they be updated? Chapter 3 aims to provide keys to answer to these questions by first verifying whether Swiss residents also misperceive others' opinions regarding other sexual minorities' issues and then to see whether these misperceptions can be updated by new laws.

The Impact of Laws on Norms Perceptions

Times change, laws evolve, and societies become more open toward some social groups but less toward others. In the last few decades, the legal situation of sexual minorities has changed dramatically. In many countries (e.g., the Netherlands, Taiwan, Uruguay, the United States), new laws legalizing same-sex marriage and same-sex adoption have been implemented (see ILGA, 2019). In other countries, sexual minorities have faced an upsurge of legal discrimination. For instance, Russia legally banned on "homosexual propaganda", while Brunei planned to impose the death penalty for same-sex sexual activity (ILGA, 2019). These changes in law, have direct effects on sexual minorities' lives and their well-being by legalizing previously illegal actions or behavior, such as same-sex marriage (e.g., Badgett, 2011; Eskridge & Spedale, 2006; Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010; Ogolsky, Monk, Rice, & Oswald, 2019). What is less understood, however, is the effect that new laws have on sexual minorities due to their impact on the general tolerance toward and/or acceptance of this group by wider society. We argue that informing wider society (i.e., non-sexual minorities) about new laws should also impact the lives of sexual minorities by signaling which opinions are typical in the society (see Tankard & Paluck, 2016, 2017).

In the present research, we not only test the impact of new laws on perceptions of most people opinions in a society, but we move beyond prior research by also testing their ability to adjust and reduce pluralistic ignorance (i.e., defined as a misperception of others' opinions, Eveland & Glynn, 2008 as inspired by Katz & Allport, 1931; e.g., thinking that society is intolerant to sexual minorities when the typical societal opinion is actually tolerant). A new law, such as the implementation of same-sex marriage, might be particularly impactful in situations of rapid societal change toward greater acceptance or disapproval of a social group (see also normative window; Crandall & Warner, 2005). Indeed, in contexts such as this, perceptions of most people opinions in a society, referred to as perceived societal norms

(Cialdini et al., 1991), tend to lag behind actual changes in personal opinions (see Eisner et al., 2019; O'Gorman, 1976; Zou et al., 2009). This lag often results in a situation of pluralistic ignorance in which people misperceive others' opinions (Katz & Allport, 1931). To illustrate, people might hold positive opinions toward sexual minorities but still see the societal norms as intolerant. Research has suggested that this lag might be at least partly explained by the prominence of some specific, incorrect indicators of the majority opinions (e.g., heterosexual marriage) that mistakenly signal stability even in times of social change (Shamir & Shamir, 1997). This process may result in (the amplification of) pluralistic ignorance (Shamir & Shamir, 1997). Hence, in this situation, informing people about new laws can be particularly impactful by signaling to people that the societal norm has changed and, in turn, lead them to adjust their perception of societal norms.

In this article, we investigate how new laws impact (mis-)perceptions of societal norms in Switzerland. Sexual minorities are increasingly accepted in Switzerland (see general trends in different Western countries reported in Baunach, 2011; Hicks & Lee, 2006), but same-sex marriage and joint adoption by same-sex partners are still illegal. This potential discrepancy makes Switzerland an excellent test case for assessing overestimation of the level of intolerance toward sexual minorities and to investigate the impact of information about new laws on people's perceptions. To accomplish this, three steps are necessary. First, we need to establish whether people in Switzerland actually misperceive others' opinions (i.e., pluralistic ignorance about societal norms) and overestimate the level of intolerance toward sexual minorities. Second, we need to assess whether informing people about new laws does indeed impact their perceptions of the societal norms. Third, we need to investigate the impact of institutional changes on pluralistic ignorance. To address these goals, we conducted two studies exploring societal norms toward same-sex parenting and same-sex marriage in Switzerland. Based on a quasi-representative field study, Study 1 investigates evidence of

pluralistic ignorance concerning sexual minorities. Building on this, Study 2 investigates the influence of a new law legalizing stepchild adoption on perceptions of societal norms and pluralistic ignorance using a naturally occurring experimental manipulation. Study 2 both builds on and moves beyond prior research (Tankard & Paluck, 2017) by testing the role of being (a) informed about a new law and (b) having (no) prior knowledge about this law. Together this allows us to bridge the literature on changing social norms and pluralistic ignorance, and give new insight into how laws impact normative perceptions.

Perceived Societal Norms and Societal Change

Individuals' attitudes and behaviors are inherently embedded in and influenced by social contexts, and social norms are a key component of this contextual influence (McDonald & Crandall, 2015; Pettigrew, 2018). Even more proximately, *perceptions* of societal norms (i.e., perception of most people's opinions in a society) may affect attitudes and behavior over and above actual norms (Eicher et al., 2015). As a result of this, perceptions of societal norms can play a central role in the social change process as they are of increasing interest of public policy experts who aim to influence perceptions in order to change opinions and behaviors (Reynolds, Subašic, Tindall, 2015; Paluck & Ball, 2010).

Although perceived societal norms are important determinants of behavior (Paluck & Ball, 2010), people often have perceptions of societal norms that are outdated, exaggerated or simply wrong (Prentice & Miller, 1993). In some cases, this (mis-)perception of the societal norm can diverge quite strongly from the actual opinions of people within this society (i.e., when the societal norm toward sexual minorities is seen as intolerant, while most people in the society hold rather positive opinions), to the extent that the phenomenon of pluralistic ignorance (Katz & Allport, 1931) arises. The social representation approach (Moscovici, 1976, 1988) might provide further theoretical suggestions on why this might be the case. According to the social representation approach, some societal norms are so widely shared

among all members of a respective society (i.e., hegemonic representations) that perceptions of these societal norms become highly stable. They are 'fossils' anchored within the social structure (Moscovici, 2000) and are often reified through institutions. When opinions change, people might not necessarily perceive these changes.

Pluralistic ignorance is consequently often conceptualized as a *misperception* of others' opinions and can have important implications for individuals. To illustrate, if members of society typically hold rather positive opinions toward sexual minorities but perceive the societal norms as intolerant, individuals with positive opinions and sexual minorities themselves may feel (unnecessarily) isolated from their society (e.g., Cialdini & Goldstein, 2004; Prentice & Miller, 1993). They may, in turn, be less willing to express their personal opinions, therefore perpetuating the unsupported societal norm

Research has shown that people are particularly likely to misperceive others' opinions in a time of rapid social change. Indeed, studies have found evidence of pluralistic ignorance in the form of time lag, as perceptions of societal norms tended to lag behind actual change in personal opinions (see O'Gorman, 1976,1979; Zou et al., 2009). In the present research, we suggest that institutional decisions, especially learning about new laws, might help to correct these misperceptions of the societal norms. In this situation, institutional decisions and, in particular, laws that reflect these changes might serve as a strong signal to help people change their (mis-)perception of the societal norm (e.g., Cox, Navarro-Rivera, & Jones, 2014; Prentice & Miller, 1993), and therefore not only change perceived societal norms, but also reduce pluralistic ignorance.

Institutional Decisions, Laws, and Societal Change

Institutional signals (e.g., new laws) come from institutions that govern or organize a group and their social interactions, such as governments (Getzels & Guba, 1957; Tankard & Paluck, 2016). Governments are one of the few large-scale representatives of a society and

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new laws enacted by a government might, therefore, inform perceptions of what is desirable or acceptable in a society (Hogg, 2010; Tankard & Paluck, 2016). In the political psychology literature, a large number of studies has investigated the impact of institutional decisions on opinions and behaviors. Studies have shown that institutional decisions (e.g., new laws or Supreme Court decisions) influence individuals' opinions or behaviors depending on their political knowledge or personal experience with the institutional decision (e.g. Bartels & Mutz, 2009; Beaman, Chattopadhyay, Duflo, Pande, & Topalova, 2012; Bishin et al., 2016; Castro, 2012; Murphy & Tanenhaus, 1968). For instance, research has shown that legal, policy, and institutional innovations in the context of sustainability and environmental protection have the potential to promote social change to the extent that the general public is informed about these innovations (i.e., generalization phase; see Castro, 2012).

In the present research, we suggest that institutional decisions, and new laws in particular, can impact perceptions of societal norms. Recent evidence has shown that national elections play an important role in redefining prejudice norms (i.e., in America it became more acceptable to express prejudice toward Muslim, immigrants, and disabled people following Donald J. Trump's election campaign; Crandall, Miller, & White, 2018). This suggests that certain (political) representatives have a lot of power to (re-)define societal norms (in comparison to members of the general public). Recent research by Tankard and Paluck (2017) has presented strong evidence supporting the idea that institutional decisions (i.e., by the U.S. Supreme Court) play an important role in updating societal norms. Applying an experimental design, their first study demonstrated that participants' perceptions of the likelihood that the Supreme Court would rule in favor of same-sex marriage affected perceptions of the societal norm toward this issue: Participants reported a less negative perception of the societal norm in the positive ruling condition than in the negative one. In addition, in a five-wave times series (Study 2), they showed that the Supreme Court's

decision to legalize same-sex marriage in 2015 led individuals to have a more positive perception of the societal norm in the U.S. than before. These findings suggest that institutional decisions, such as new laws, have a direct impact on people's perception of the societal norm.

Although these findings suggest that institutional decisions might shift perceptions of societal norms, the causal link between the implementation of a new law and its effect on (mis-)perceptions of societal norms has not yet been tested experimentally. Most importantly, Tankard and Paluck (2017) followed a group of participants who were most likely all aware of the outcome of the supreme court ruling on same-sex marriage due to the large media coverage. However, not all the legal changes draw that much media attention and some people might not be aware of them. As such, it is still unclear how knowledge about a law which is less discussed might impact norm perceptions. We move beyond Tankard and Paluck's (2017) research in at least two key ways. First, we investigate the relative impact of being newly informed about the legal changes versus (already having knowledge of the law and) being reminded of the law/making it salient in situ. This is important to test because there is reason to believe that there will be strong variation in (a) how politically well informed members of a society are (i.e., some individuals may have little political knowledge or interest and are likely to be unaware of new legal changes that do not affect themselves) and (b) how well publicized the introduction of a new law is. Second, we test how legal changes might affect pluralistic ignorance (i.e., gap between perceived societal norms and personal opinions. This is important because knowing solely about how changes in laws impact perceptions does not tell us about their impact on accuracy of these perceptions. Hence, in the present research, we were not only interested in the ability of laws to change perceived norms, but also in understanding whether legal changes serve to update norms that were *misperceived* in the first place.

The Present Research

This research aimed to investigate people's (mis-)perception of the societal norms toward sexual minorities and the impact of new laws on these perceptions, including its potential to reduce pluralistic ignorance (i.e., the gap between perceived most people opinion in society and the actual opinion of most people in society). Yet, addressing these two goals requires a specific research design. Identifying pluralistic ignorance in perceptions of others' opinions in the population entails that the sample is representative of this population. Likewise, understanding the causal effect of an actual new law is difficult without the ability to randomize exposure to the new law. The present research capitalized on the Swiss political context to address these requirements. In Study 1, we present a quasi-representative field study of Swiss residents in order to assess the degree to which Swiss people misperceive people's actual opinion using a representative dataset. We complement this with Study 2, which combined a natural experiment that tests the impact of informing people about a new law on stepchild adoption and their prior knowledge of this law to provide new insight into how a new law affects people's perceptions of societal norms and pluralistic ignorance.

Switzerland offers a perfect context for studying perceptions of others' opinions, as increasingly positive attitudes toward sexual minorities have been documented in the last decades (see general trends in different Western countries reported in Baunach, 2011; Hicks & Lee, 2006; Smith, Son, & Kim, 2014). While more than one third (37.1%) of Swiss people considered homosexuality as 'never justifiable' in 1989, only 10.5% held this opinion in 2007 (World Value Survey, 2009). Moreover, it has not yet been explored whether these positive shifts in attitudes are reflected in perceptions of societal norms. To address this, Study 1, conducted at the end of 2016, focused on the relationship between personal opinions and perceived societal norms toward same-sex issues.

The contested legal rights for sexual minorities and the Swiss political context make Switzerland an ideal context to study the impact of a new law on norm perception. While many countries have reduced legal inequalities for same-sex couples (e.g., marriage for all and joint adoptions in Netherlands in 2001, United States of America in 2015, and Germany in 2017; see ILGA, 2019), sexual minorities in Switzerland still face many institutional inequalities (e.g., denied same-sex marriage, assisted procreation, and joint adoptions; ILGA, 2019). Right before we collected data for Study 2, a new law legalizing stepchild adoption was implemented (Swiss info, 2017). Study 2 uses this natural experiment setting to investigate whether this new law affects people's perceptions of societal norms. In combination, these studies further our understanding of the extent that laws inform perceptions of societal norms/ public opinions in a normative window of time.

Study 1: Field Study

In Study 1 we explore differences between personal opinions and societal norms in the canton of Vaud in Switzerland. Vaud is one of the largest of the 26 cantons of Switzerland, covering 8% of Swiss territory, and is the third most populous (BIC, 2016). We gathered quasi-representative data of the population of the canton of Vaud to investigate pluralistic ignorance about same-sex parenting and same-sex marriage. We sought to address the question: Do members of society overestimate the level of disapproval toward sexual minorities? We hypothesized the following: *Participants perceive most residents in the canton of Vaud to be more disapproving than they actually are (Hypothesis 1).*

Method

Participants and Design. We collected a cross-sectional quasi-representative sample in October 2016 in the canton of Vaud, Switzerland, as part of a larger project including additional measures. Some data from this project was previously reported in Eisner et al. (2019), however, the present study departs from this study by focusing on different dependent variables

and as such selected a different subset of the sample. The sample was randomly selected based on a geographical criterion. First, 30 municipalities[12] (ten urban, ten rural, and ten peri-urban) in the canton of Vaud were randomly selected. Next, residents of these municipalities were contacted using the random route method (Brace & Adams, 2006) and the drop-off technique for delivering questionnaires. Finally, we distributed 80 paper-based questionnaires in each municipality. In addition, to increase the sample size, we also distributed 40 letters including a link to a web survey in each municipality ($N = 3,600$ in total).

Out of the 3,600 contacted persons, 1,105 (30.7%) participated in the survey: 892 participants sent back the completed paper-based questionnaire and 213 completed the web version of the questionnaire. Due to missing answers on the questions about perceptions of residents of the canton of Vaud opinions, 275 participants were excluded[13], leading to a final sample of 830 participants. This provided over 99% power for detecting a small effect size (Cohen's $d = 0.20$) for paired t-tests. The collected data was quasi-representative of the actual distribution of the population characteristics in the canton of Vaud in 2016 (Statistique Vaud, 2016). However, there were minor variations: Our sample was slightly older (M_{age}= 51.97 vs. mean age in the canton = 47.7), included more women (56.7% of women in the sample vs. 51.5% of women in the population), and was more educated (26.6% of respondents with a university degree vs. 21.4% in the population).

Measures. *Personal opinions* toward same-sex parenting and marriage were assessed with three items (see Table 6), using a 5-point Likert type scale (1 = *I strongly approve*, 3 = *I neither disapprove nor approve*, 5 = *I strongly disapprove*): "To which extent do you approve

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[12] The low intraclass correlation (< .02) indicated that multilevel modelling was not necessary.
[13] Because many participants failed to reply to perceptions of most Vaud opinion (either "don't know" or non-response), but still provided their personal opinions, we checked if the results were consistent when including participants who were excluded due to missing answers. Importantly, even after including these participants, a minority (less than 50%) of participants was in disapproval of same-sex female parenting, t(1095) = -7.23, p < .001, male parenting, t(1094) = -2.39, p = .008, and same-sex marriage, t(1097) = -16.10, p < .001 indicating that the results are consistent.

or disapprove of a… i) same-sex male couple bringing up a child? ii) same-sex female couple bringing up a child? iii) same-sex couple getting married?"

Perceived societal norm toward same-sex issues in the canton of Vaud was assessed with three validated and pre-tested items from the European Social Survey (2006; Eicher et al., 2015): "How do you think most residents in the canton of Vaud would react if a… i) same-sex male couple raises a child? ii) same-sex female couple raises a child? iii) same-sex couple gets married?" Responses were given using a 5-point Likert type scale (1 = *They would openly approve*, 2 = *They would secretly approve*, 3 = *They would not mind either way*, 4 = *They would secretly disapprove*, 5 = *They would openly disapprove*).

To avoid order effects, the order of personal opinions and perceived societal norms items was randomized (i.e., one version of the questionnaire presented the personal opinions items first, the other started with the perceived societal norms items).

Table 6

Correlations Between Perceived Societal Norms and Personal Opinions (Study 1)

Variable	(1)	(2)	(3)	(4)	(5)	(6)
(1) Personal male parenting	–					
(2) Perceived male parenting	.23***	–				
(3) Personal female parenting	.94***	.20***	–			
(4) Perceived female parenting	.19***	.72***	.23**	–		
(5) Personal same-sex marriage	.75***	.16***	.76***	.11***	–	
(6) Perceived same-sex marriage	.13***	.41***	.13***	.47***	.21***	–

Note. Spearman correlations. *** $p < .001$, ** $p < .01$, * $p < .05$

Results

Pluralistic ignorance toward same-sex parenting and marriage. To test for pluralistic ignorance (H1), we conducted paired *t*-tests to compare perceived societal norms with personal opinions (for similar analytical approach see Shelton & Richeson, 2005). All of the results displayed in this section are based on the weighted dataset[14] (by age groups and gender using the "Survey" package in R, Lumley, 2018) to correct for the overrepresentation[15] of women and older people (see Table 7).

Table 7

Means (SDs) for Opinions and Perceived Societal Norms Toward Same-Sex Issues (Study 1)

	Personal opinions		Perceived societal norm	
	Weighted	Unweighted	Weighted	Unweighted
Same-sex male parenting	3.11 (1.52)	3.18 (1.46)	4.23 (0.85)	4.23 (0.78)
Same-sex female parenting	2.94 (1.49)	2.99 (1.41)	3.99 (0.91)	3.99 (0.82)
Same-sex marriage	2.60 (1.49)	2.68 (1.45)	3.72 (1.03)	3.72 (0.94)

Note. The weighted and unweighted data are very similar due to the fact that the sample distribution in terms of age and gender was really close to the actual distribution in the population. In addition, for perceived societal norms there was very little variation in answers between different groups of participants leading to identical means.

Table 7 shows that participants had the greatest disapproval (in personal opinions) toward same-sex male parenting followed by same-sex female parenting, and same-sex marriage; all the differences between the three same-sex issues were significant at *p* < .001). Perceived societal norms also followed the same pattern, with perceived intolerance of same-

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[14] To conclude whether there is a mismatch between the aggregated personal opinions (which should represent the accurate estimate of the norm) and the perceived societal norm, our sample should be representative (in term of population distribution) of the respective context, in this case the canton of Vaud. Using the weighted datasets allows us to match our sample demographics with those of the canton of Vaud and consequently to investigate evidence of pluralistic ignorance. Notably, analyses using the unweighted dataset do not differ substantially (see supplementary material).

[15] We did not weight the data by level of education but added level of education as a control variable in the models. Level of education impacted neither perceptions of societal norm nor personal opinions.

sex male parenting being most negative and same-sex marriage being most positive (all differences between the three same-sex issues were significant at $p < .001$).

According to Hypothesis 1, participants should overestimate the level of disapproval toward same sex marriage and parenting in the canton of Vaud. Consistent with predictions, paired t-test[16] revealed evidence of a mismatch between perceived societal norms and personal opinions. Specifically, participants significantly overestimated the level of disapproval toward same-sex male parenting ($M_{\text{perception}} = 4.23$ vs. $M_{\text{opinion}} = 3.11$, $t(828) = 20.26$, $p < .001$, $\eta_p^2 = .33$), female parenting ($M_{\text{perception}} = 3.99$ vs. $M_{\text{opinion}} = 2.94$, $t(828) = 19.18$, $p < .001$, $\eta_p^2 = .31$), and same-sex marriage ($M_{\text{perception}} = 3.72$ vs. $M_{\text{opinion}} = 2.60$, $t(828) = 19.03$, $p < .001$, $\eta_p^2 = .30$). In line with Hypothesis 1, people in Vaud overestimated the level of disapproval toward same-sex (male and female) parenting and same-sex marriage –indicating pluralistic ignorance.

However, it is interesting to note that although the majority of participants (i.e., more than 50%) think that the norm is disapproving of sexual minorities, the majority of participants did not disapprove (see supplementary material). Hence, this 'misperception' of the norm is extreme enough to comply even with early definitions of pluralistic ignorance (i.e., individuals perceive their opinion to be shared by a minority while it is actually shared by the majority of people, or vice versa see; Katz & Allport, 1931; Merton, 1968).

Discussion

Study 1 examined differences between personal opinions and perceived societal norms toward same-sex parenting and same-sex marriage in the canton of Vaud in Switzerland. In line with Hypothesis 1, people in Vaud overestimated the level of disapproval toward same-

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[16] In order to control for differences in labels between perceived societal norm (1 *openly approve* to 5 *openly disapprove*) and personal opinions (1 *totally approve* to 5 *totally disapprove*), we collapsed the first and second response categories (approval) as well as the fourth and fifth response categories (disapproval). This allowed us to standardize the response categories. Paired t-test indicated that means for the recoded variables differed between perceived societal norms and personal opinions for same-sex male parenting ($t(828) = 21.86$, $p < .001$), same-sex female parenting ($t(828) = 21.25$, $p < .001$), and same-sex marriage ($t(828) = 21.62$, $p < .001$).

sex male parenting, same-sex female parenting, and same-sex marriage. Hence, we found evidence of pluralistic ignorance regarding societal norms toward same-sex issues in the canton of Vaud.

Study 2: Natural Experiment

Study 1 indicated that people tend to overestimate societal intolerance toward same-sex issues in Switzerland. This supports our claim that Switzerland is a particularly relevant context to study the impact of new laws on perceptions of societal norms. Indeed, misperceptions of others' opinions might not only lead to the perpetuation of unsupported norms (e.g., Cox, Navarro-Rivera, & Jones, 2014; Noelle-Neumann, 1974; Prentice & Miller, 1993), but also negatively impacts sexual minorities' and their allies' well-being (Goldberg & Smith, 2011; Hatzenbuehler, 2011; Oswald, Routon, McGuire, & Holman, 2018). It is therefore important to understand if introducing new laws and informing people about them might serve as cue to correct these misperceptions, which arise in a time of social change.

The principal goal of Study 2 was to demonstrate if a new law allowing stepchild adoption for same-sex couples influences people's perceptions of the Swiss societal norm toward same-sex parenting. In addition, Study 2 aimed to explore the impact of a new law on pluralistic ignorance. Study 2 was conducted shortly after the implementation of the new law legalizing stepchild adoption (January 2018; Swiss info, 2017). This law was implemented by parliament (i.e., without popular voting), and there was little media coverage and societal awareness. We took advantage of this unique context by experimentally manipulating information about the law: Participants were either informed about the new law before assessing their opinions and perceptions, or after this assessment. Additionally, we measured whether participants already had prior knowledge about this law.

Our first hypothesis was that *people who newly learned about the law (i.e., participants who were informed about the new law in the study and did not have prior*

knowledge about it) would report a less negative perception of Swiss people's opinions toward same-sex parenting than people who had never heard about it (H1). Since we do not know whether institutional decisions have a durable impact on normative perceptions, we had no definitive expectations as to whether people with prior knowledge about the law should differ from people with new information about the law. However, given that institutional decisions have been shown to impact perceived societal norms (Tankard & Paluck, 2017), our second hypothesis predicted that *among the people who were not informed about the law, those with prior knowledge about the new law have a less negative perception of Swiss people's opinions toward same-sex parenting than people with no prior knowledge (i.e., their norm perception has already been updated; H2)*. As the new law was specifically about stepchild adoption, we had no definitive expectation about the influence of the law on perceptions of the societal norm on same-sex marriage.

Method

Sample. Based on a priori power analysis for a 2x2 ANOVA (assuming a smaller effect size, $f = .15$, $\alpha = .05$ and power of 80%) we aimed for at least 400 participants. A total of 456 students were recruited in February 2018 at the University of Lausanne (the capital of the canton of Vaud) and participated voluntarily. Importantly, most students at the University of Lausanne are from the canton of Vaud. This allows us to maintain our chief focus on the same target population as in Study 1 (i.e., people from and living in the Canton of Vaud), however, this now entails a (non-representative) student population, which is younger and likely more tolerant. Notably, however, although younger participants in Study 1 were generally more tolerant toward same-sex issues than older participants, perceptions of societal norms in Study 1 were not affected by participants' age (see supplementary material).

The sample for Study 2 was collected among students present at the main university buildings (e.g., cafeteria and main libraries). Due to social desirability concerns, students were

given the questionnaire with a blank envelope and were told that the investigator would return approximately 30 minutes later to gather the closed anonymous envelopes. Nineteen participants were excluded a priori due to missing answers on relevant items (i.e., measures of perceived societal norm), leaving a final sample of 437 participants (209 men, 227 women, 1 other; $M_{age} = 22.10$, $SD_{age} = 2.65$).

Design. We conducted a 2 (Informed about law: yes vs. no) x 2 (prior knowledge about the law: yes vs. no) between-subjects quasi-experiment. Participants were randomly allocated to the first, experimentally manipulated condition, either informing them about the new adoption law (n = 228) or not (n = 209). These experimental conditions were then crossed with a naturally occurring variation of whether participant reported prior knowledge about the law (n = 236) or not (n = 201).

Procedure. Participants were randomly allocated into one of the two 'informed about law' conditions: (1) informed and (2) uninformed. In the informed about the law condition, participants were presented with the following information about the implementation of the new law before the assessment of the questionnaire items: "Since January 2018, a new law on adoption has been implemented in Switzerland. Before, same-sex couples were not allowed to adopt children, now they can adopt the child of their partner".

In the uninformed condition, participants were presented with this paragraph at the end of the questionnaire after assessment of all other items. This allowed us to assess participants prior level of knowledge about the new law in both conditions. We assessed prior knowledge right after the information about the law: "Have you ever heard of this law? *1) No; 2) Yes, but I am not familiar with it; 3) Yes, I am familiar with it".* As few participants reported being familiar with the law in the two conditions (n < 20 in both versions), these participants were pooled with the group who had heard of but were not familiar with it, resulting in one group of

participants who had heard about the law. Thus, analyses were made on the dichotomized level of prior knowledge: no (*never heard)* vs. yes (*yes, familiar* or *yes, unfamiliar).*

Before running our actual analyses, we tested for differences between the conditions. The composition of the sample did not differ significantly across the two experimental conditions (informed about the law condition: 50.2% of women, M_{age} = 22.31; uninformed condition: 45.6% of women, M_{age} = 21.87). However, prior level of knowledge varied between the two experimental conditions. More participants reported that they knew about the law in the informed about the law condition (n = 151) than in the uninformed about the law condition (n = 89), $\chi^2(1)$ = 21.93, p < .001[17].

Measures. All items were assessed on a 5-point Likert type scale (1 = *openly approve,* 5 = *openly disapprove*) unless otherwise stated. These items were part of a larger questionnaire, but the remaining items were not relevant to the focus of this research. Correlations are provided in Table 8.

Personal opinion was assessed with three items: "How would you react if a… i) same-sex male couple raises a child? ii) same-sex female couple raises a child? iii) same-sex couple gets married?"

Perceived societal norm in Switzerland was assessed with three items: "How do you think most people in Switzerland would react if a… i) same-sex male couple raises a child? ii) same-sex female couple raises a child? iii) same-sex couple gets married?"

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[17] We identified two possible explanations for this effect. First, this might simply be a random error (i.e., differences in sample composition between the two conditions). Second, if it was not a random error, the positioning of the text might have influenced participants' answers to the question concerning the level of knowledge. On the one hand, some participants in the informed condition might have wrongly recalled already knowing about the law due to social desirability pressure (see Tourangeau & Yan, 2007 for a discussion of social desirability). On the other hand, participants in the uninformed condition might have realized that they did not use this information about the new law when answering. They were hence more likely to honestly say that they did not know about the law. However, although this effect was unexpected, we maintain that our main results were not substantively affected by it. Indeed, such effect—by adding noise—might have made it harder to find differences in the informed condition.

Table 8

Correlations Between Perceived Societal Norms and Personal Opinions (Study 2)

Variable	(1)	(2)	(3)	(4)	(5)	(6)
(1) Personal male parenting	–					
(2) Perceived male parenting	.01	–				
(3) Personal female parenting	.92***	.00	–			
(4) Perceived female parenting	.07	.75***	.12*	–		
(5) Personal same-sex marriage	.67***	−.08	.66***	−.02	–	
(6) Perceived same-sex marriage	.00	.37***	.01	.37***	.07	–

Note. Spearman correlations. *** $p < .001$, ** $p < .01$, * p $< .05$

Results

Pluralistic ignorance toward same-sex parenting and marriage.

We compared perceived societal norms with personal opinions across all conditions, following Study 1's analytical approach. As in Study 1, participants showed the greatest disapproval toward same-sex male parenting ($M = 2.29$) followed by same-sex female parenting ($M = 2.21$), and same-sex marriage ($M = 1.91$; all the differences between the three same-sex issues were significant at $p < .01$). In addition, paired t-tests[18] also revealed evidence of a gap between perceived societal norms and personal opinions. Specifically, participants perceived most people in Switzerland to be significantly less tolerant than themselves toward same-sex male parenting ($M_{\text{perception}} = 4.05$ vs. $M_{\text{opinion}} = 2.29$, $t(436) = 24.59$, $p < .001$, $\eta_p^2 =$

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[18] In order to control for differences in labels between perceived societal norm (1 *openly approve* to 5 *openly disapprove*) and personal opinions (1 *totally approve* to 5 *totally disapprove*), we collapsed the first and second response categories (approval) as well as the fourth and fifth response categories (disapproval). This allowed us to standardize the response categories. Paired t-test indicated that means for the recoded variables differed between perceived societal norms and personal opinions for same-sex male parenting ($t(436) = 26.22$, $p < .001$, $\eta_p^2 = .61$), same-sex female parenting ($t(436) = 24.64$, $p < .001$, $\eta_p^2 = .58$), and same-sex marriage ($t(436) = 17.65$, $p < .001$, $\eta_p^2 = .42$).

.58), female parenting ($M_{perception}$ = 3.79 vs. $M_{opinion}$ = 2.21, $t(436)$ = 23.58, $p < .001$, η_p^2 = .56), and same-sex marriage ($M_{perception}$ = 3.21 vs. $M_{opinion}$ = 1.91, $t(436)$ = 19.55, $p < .001$, η_p^2 = .47). Although these findings are not representative of the general population, and thus do not directly reflect pluralistic ignorance (i.e., within the population as a whole), they do show that individuals in this sample also have tendencies toward perceiving a widely intolerant norm. Bringing this together with findings in Study 1, which highlighted pluralistic ignorance, this evidence that students in Study 2 also seem to overestimate the level of disapproval toward the different issues.

Influence of the law on perceived norms and personal opinions. To investigate the influence of the information about the law on perceptions of the societal norms toward same-sex parenting and same-sex marriage, we conducted a two-way ANOVA among information about the law condition (yes vs. no) and prior knowledge about the law (yes vs. no). Consistent with Study 1, preliminary analyses revealed that the scores for same-sex male parenting and same-sex female parenting were strongly correlated (see Table 8) and that the results are very similar for both categories. Thus, we combined these items (see supplementary material for additional analyses).

Next, we turned to assess our hypotheses, of the effect of the new law (H1) and prior knowledge (H2) on the perception of Swiss people's opinions toward same-sex parenting. In line with our hypotheses, we found a significant interaction between information about the law and prior knowledge about the law, $F(1, 433)$ = 12.07, $p < .001$, η_p^2 = .03. In line with Hypothesis 1, participants without prior knowledge about the law perceived less societal disapproval toward same-sex parenting when they were informed about the implementation of the new law (M = 3.66) than when they were not informed (M = 4.09), $t(433)$ = 3.72, $p < .001$, η_p^2 = .03. This supports Hypothesis 1 that being newly informed about a recent change in law is an important cue that individuals use to update their perceptions of social norms.

In line with Hypothesis 2, participants who had no prior knowledge about the law and were not informed about it ($M = 4.09$) perceived slightly more societal disapproval than participants who had prior knowledge about the law and were not informed about it ($M = 3.85$), $t(433) = 2.14$, $p = .033$, $\eta_p^2 = .01$. This supports the expectation of Hypothesis 2 that knowing about a new law at all (not only its situational salience) is associated with a more positive perceptions of societal norms toward same-sex parenting.

Finally, participants who had no prior knowledge about the law and were not informed about it ($M = 4.09$) did not differ from participants who had prior knowledge about the law and were informed about it ($M = 3.97$), $t(433) = 1.23$, $p = .221$, $\eta_p^2 < .01$. This is an unexpected effect, suggesting that reminding participants who already know about a law change of that specific law may make them feel that society is somewhat less tolerant.[19]

Besides testing the effect of the law legalizing stepchild adoption on perception of Swiss people's opinions toward same-sex parenting, we also tested whether the effect extended to more general same-sex issues, namely Swiss people's opinions toward same-sex marriage. Because the new law introduced was specifically about adoption, we did not have any definitive expectation of the effect of the adoption law on perceptions of the societal norm on same-sex marriage. We found a significant interaction between information about the law and prior knowledge about the law, $F(1, 433) = 6.37$, $p = .012$, $\eta_p^2 = .01$. We found no significant difference between people who were not informed about the law and had no prior knowledge about it ($M = 3.24$) and all the three other conditions (informed and no prior knowledge ($M = 3.15$), $t(433) = 0.65$, $p = .517$, $\eta_p^2 < .01$; uninformed and prior knowledge ($M = 2.98$), $t(433) = 1.95$, $p = .052$, $\eta_p^2 = .01$; informed and prior knowledge ($M = 3.36$), $t(433) = 1.07$, $p = .288$, $\eta_p^2 < .01$). Yet, participants who had prior knowledge about the law

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[19] However, among the participants who had prior knowledge about the law, means of perceived societal disapproval did not differ between participants who were informed or not informed about the new law, $t(433) = 1.11$, $p = .269$, $\eta_p^2 < .01$. Thus, it is perhaps fairer to say that this "prior knowledge/informed" condition occupy an intermediate position.

and were informed about it perceived more societal disapproval ($M = 3.36$) than those who were not informed about it ($M = 2.98$), $t(433) = 3.00$, $p = .003$, $\eta_p^2 = .02$.
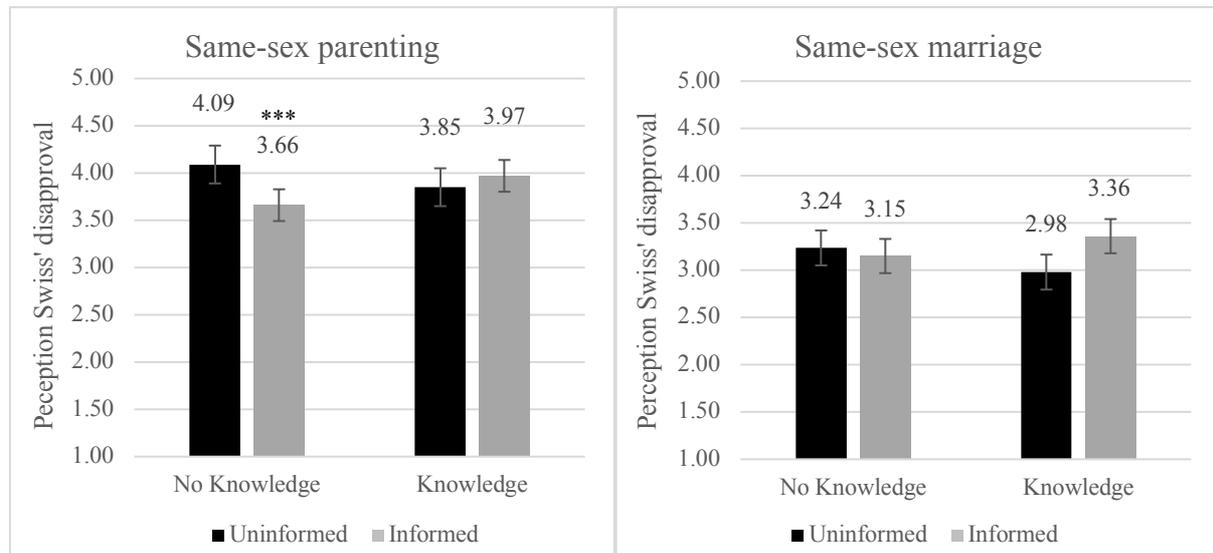
Figure 11. Effect of the two conditions (uninformed; informed) among participants with different prior level of knowledge (no; yes) on perceived Swiss people's level of disapproval toward same-sex parenting and same-sex marriage. Error bars represent 95% CI. *** p < .001, ** p < .01.

Third, as an exploratory analysis we tested whether the new law affected personal opinions toward same-sex issues (see Table 9 and Table 10). In contrast to perceptions of Swiss people's opinions, we found no significant interactions between information about the law and prior knowledge about the law for personal opinion toward same-sex parenting, $F(1, 433) = 0.26$, $p = .613$, $\eta_p^2 < .01$.

Table 9

Means (SD) of Personal Opinions Toward Same-Sex Parenting Between the Two Conditions (Uninformed; Informed) Among Participants with Different Prior Level of Knowledge (No; Yes) (Study 2)

	No knowledge	Knowledge
Uninformed	2.39 (1.16)	2.15 (1.31)
Informed	2.28 (1.19)	2.17 (1.25)

Moreover, we also did not find any significant interactions between information about the law and prior knowledge about the law for personal opinion toward same-sex marriage, $F(1, 433) = 0.07$, $p = .790$, $\eta_p^2 < .01$.

Table 10

Means (SD) of Personal Opinions Toward Same-Sex Marriage Between the Two Conditions (Uninformed; Informed) Among Participants With Different Prior Level of Knowledge (No; Yes) (Study 2)

	No knowledge	Knowledge
Uninformed	2.00 (1.10)	1.89 (1.17)
Informed	1.90 (0.98)	1.84 (1.14)

Thus, while the information about the law influenced perceptions of most Swiss people's opinions, it did not influence personal opinions. Together, these findings strongly support that new information about institutional decisions can influence people's perceptions of societal norms.

Influence of the law on perceived norms and personal opinions. Finally, as an exploratory analysis we tested whether the new law affected the gap between perceived societal norms and personal opinions toward same-sex parenting. In contrast to perceptions of

Swiss people's opinions, we found no significant interactions between information about the law and prior knowledge about the law for the perceived others/personal difference in opinions toward same-sex parenting, $F(1, 433) = 2.38$, $p = .124$, $\eta_p^2 < .01$. The same pattern was found for same-sex marriage (see Supplementary Materials). Thus, while the information about the law influenced perceptions of most Swiss people's opinions, it did not reduce the gap between perceived societal norms and personal opinions.

Discussion

Study 2 aimed to illuminate the impact of new laws on perception of the societal norm using an experimental approach, in a Swiss context where residents generally perceived others' opinions toward same-sex issues as more intolerant than they actually are (see Study 1) and that sexual minorities in Switzerland still face many legal inequalities. First, in line with our predictions, we found that information about a new institutional decision in favor of same-sex adoption had an immediate positive impact on perceptions of the societal norm toward same-sex parenting (H1). Moreover, our results also suggest that new institutional decisions have a durable (approximately 8 weeks later) but small impact (to the extent that people were not reminded of it) (H2).

Findings, however, indicated that participants without prior knowledge about the law and were not informed about it did *not* differ in their perceptions of the norm from people who had prior knowledge and were informed about it. One possible explanation may be that reminding people about the law might have made participant more sensitive to the social debate around sexual minorities' issues in Switzerland and the extent of lack of rights (e.g., same-sex marriage is not legal) despite the new law on step-child adoption.

Results indicate that pluralistic ignorance was not affected by the new information about the law. Despite this, it is important to note that some of the necessary ingredients for adjusting pluralistic ignorance were found. Specifically, the information about the new law

did lead to more accurate perceptions of the societal norms. However, we found no evidence that the gap between personal opinions and perceived norms was reduced. This seems to indicate that not only did people switch their perception of the norm in the direction of the law, but that their personal opinions tended to also follow this direction (although the new law did not significantly impact personal opinions). This brings the question whether—on the long run—new laws reflecting social change do indeed reduce pluralistic ignorance (i.e., as the effect of the law is stronger on perception of the norm than personal opinions).

Finally, we found some interesting deviations in the results for same-sex marriage. First, participants who were in the informed condition and had prior knowledge about the adoption law reported a more negative perception of the societal norm toward same-sex marriage than those who did not have prior knowledge. This unexpected finding may be partly explained by the fact that students saw the societal norm as being more tolerant toward same-sex marriage (see supplementary material). Hence, it seems plausible that the information about a new law on same-sex parenting might have stimulated—among students who were generally informed on the legal situation—an awareness of all the rights that sexual minorities are still lacking in Switzerland. Knowing about the law and being made aware of it might have made participant more sensitive to the social debate around sexual minorities' issues in Switzerland and the extend of the social disapproval despite the new law on stepchild adoption.

General Discussion

The present research furthers our understanding of the impact of new laws on perceptions of societal norms and pluralistic ignorance in the context of sexual minorities. Study 1 documented pluralistic ignorance in perceptions of others' opinions toward sexual minorities using a representative sample of the Swiss population in the canton of Vaud: Residents in the canton of Vaud overestimated the level of disapproval toward same-sex male

parenting, same-sex female parenting, and same-sex marriage. Moreover, Study 2 highlights an important factor that influences perceptions of societal norms: institutional decisions in the form of new laws. Most prominently, Study 2 demonstrates that presenting information about a new adoption law for same-sex couples can decrease perceptions of disapproval toward same sex parenting not only incidentally (i.e., when individuals first learn about the law) but potentially more durably. Study 2 also showed that in the absence of a reminder about this law, prior knowledge about the new law was associated with lower perceptions of societal disapproval toward same sex parenting. However, overall pluralistic ignorance was not strongly affected.

Our findings have several implications for literature on norms and pluralistic ignorance. First, results speak to the mechanisms that can give rise to perceptions of societal norms which inform pluralistic ignorance. Substantial prior evidence has pointed to the role of individual perception biases in producing pluralistic ignorance (i.e., a bottom-up process; Prentice & Miller, 1993). However, our research also suggests that higher-level, institutional decisions (i.e., new laws that are imposed from the top-down) can play a major role in the formation of perceived societal norms. In particular, new institutional decisions may provide important additional cues to update perceptions of the societal norm in a "normative window of time in which social norms are shifting toward equal treatment . . . but for which the entire process has not yet been completed" (Crandall et al., 2013, p. 56). Second, results suggest that pluralistic ignorance may be more resilient to change than norms. Results provide no firm evidence that pluralistic ignorance was reduced by the new law. This raises the question of what conditions would facilitate the reduction of pluralistic ignorance. On the one hand, integrating this finding with theory from Crandall and colleagues (2013), it is possible that the change in individual's perceptions of norms is one step in a long-term process of normative (window of) change which remains incomplete until higher degrees of equality are met (e.g.,

implementation of multiple laws such as same-sex marriage but also more agreement in

society about sexual minorities) across multiple domains (e.g., group prejudice, stereotypes).

As such, it is likely that the adjustment of pluralistic ignorance will take more time to reduce

and ultimately disappear. On the other hand, these findings might suggest that changing

pluralistic ignorance is not necessarily gradual. Instead, there may be a tipping point whereby

an accumulation of felt or perceived change towards sexual-minorities may result in a

qualitative shift in pluralistic ignorance that corrects misperceptions (see also Livingstone,

2014; Shamir & Shamir, 1997).

Despite this, our research joins a growing body of literature (e.g., Paluck & Shepherd,

2012) in emphasizing that even when perceived societal norms are highly shared among

members of a society (i.e., hegemonic representations; Moscovici, 1988), they are not static.

Rather, they can be renegotiated among groups within society, creating opportunities for

social change to occur. This work provides an initial answer to the question of when this

renegotiation results in the updating of norms: It suggests that new laws might shift the

balance by updating the norm and resulting societal change. However, further research should

assess whether institutional decisions influence perceptions of the societal norm only when

the decisions are in line with ongoing opinion shifts or also when institutional decisions

precede or conflict with changes in opinions.

All in all, these findings, particularly in a context of a normative window of time (i.e.,

norms shifting toward greater acceptance, but rights are still lacking; Crandall et al., 2013),

indicate that laws might play a central role in the social change process. In federalist political

systems like Switzerland and the United States, these findings are of great importance.

Indeed, federalist political systems and direct democracies in particular are characterized by

slow and incremental decision-making processes (Kriesi, 1998, 2008). This means that

changes in laws might take time to be implemented even when an object (or a law) is largely

supported by citizens. For instance, although an increasing number of Swiss people were supportive of women's vote, women were given the right to vote in 1971 and the last canton to grant women the right to vote was in 1991. Moreover, a law to legalize same-sex marriage, first suggested in 2012, is still being discussed in the Swiss Parliament (in 2019). Our findings suggest that slow decision-making processes might perpetuate both existing legal inequalities and a (mis-)perception of intolerant societal norms. In that sense, these findings also present a strong signal to policy makers that institutional changes are central and impactful.

Indeed, new institutional decisions can have a dual impact on a society, improving not only the legal situation for sexual minorities, but also shifting perceptions of the societal norm by setting a new status quo which is more inclusive of sexual minorities. This could increase feelings of connectedness and inclusion in society among sexual minorities and liberal people (e.g., Cialdini & Goldstein, 2004), reduce feeling of discrimination (Schmitt, Branscombe, & Postmes, 2014), and also benefit sexual minorities' well-being (e.g., Badgett, 2011). Yet, these positive changes are dependent on citizens being *informed* about these new laws. Despite this, 46% of our participants did not know about the new law on stepchild adoption, which occurred two months previously. Hence, not only changing laws, but effectively communicating and publicizing these changes is crucial in updating norm perception.

Interestingly our findings in Study 2 indicate that personal opinions were not affected by the new law. At present results in the literature present mixed support for the idea that institutional decisions and shifts in norms impact people's opinions. Some research supports this idea (e.g., Bartel & Mutz, 2009; Stangor, Sechrist, & Jost, 2001), others contradict it (see Tankard & Paluck, 2017; Paluck & Shepherd, 2012). There are at least three possible explanations for this absence of association between new laws and personal opinions in our data. First, our sample was mostly composed by people holding already a tolerant opinion toward sexual minorities (means of personal disapproval were around 2 on a five-point scale).

Hence, being informed about the new law was more likely to have supported their tolerant opinions, rather than changing them. Second, people's opinions are more likely to be affected by laws when they are experienced personally by individuals (e.g., Beaman et al., 2012; Tankard & Paluck, 2017). In Study 2, participants however, were unlikely to directly experiencing the law (i.e., younger participants who were probably not parents yet and not sexual minorities themselves) and were also not invited to think or discuss about the new law in the questionnaire. Third, these findings might also indicate a third-person effect; that people tend to see media influence as being greater on other people than on themselves (see Davison, 1983; Mcleod et al., 2017; Sun et al., 2008). In line with this, participants might have expected that others would be impacted by the new law (i.e., shifting their perception of the norms), while not adjusting their opinions.

Nevertheless, there is reason to think that the current findings may have important implications for people's behavior, even if there is no substantial change in personal opinions. This is because, important group norms, such as those of the society we live in, have an important impact on people's behavior (e.g., Goldstein, Cialdini, & Griskevicius, 2008; Paluck, 2009; Sparkman & Walton, 2007). In line with this, shifts in the perceived norms might impact the behavior of people who hold relatively *intolerant* attitudes toward sexual minorities. Although these behavior changes may first reflect some level of compliance (e.g., people who are less tolerant may be less willing to express intolerant attitudes toward sexual minorities), they may be internalized as defining of the self over time. In addition, shifts in the perceived norms might impact the behavior of people who hold *tolerant* attitudes toward sexual minorities. Indeed, research indicate that attitudes become a more predictive of behavior when people learn that their opinion is shared by other people (see Guimond et al., 2013; Sechrist & Stangor, 2001). As such, it would be interesting to conduct a long-term

study exploring the impact of changing societal norms on behavior and (subsequent) personal opinions.

Our findings also have several implications for research on the LGBTIQ+ (e.g., lesbian, gay, bisexual, trans, intersex, questioning) population. Our results suggest that LGBTIQ+ individuals and allies might, on occasion, overestimate the level of intolerance toward LGBTIQ+ individuals in the society (see also Tankard & Paluck, 2017). This misperception might increase LGBTIQ+ individuals' concealment and internalized stigma, and decrease their willingness to come out (e.g., Meyer, 2003). As reflected by the following tweet: "I never expected that the #swiss people are that tolerant and open minded. I'm out since 4 months and everyone is very supporting; I experienced not a single negative thing thank you #TransIsBeautiful". Thus, new information indicating that people are more tolerant than expected might positively impact on LGBTIQ+ individuals' well-being. In line with this reasoning, the information that individuals are on average accepting of LGBTIQ+ individuals might also impact the well-being of families and friends of sexual minorities and their reaction to coming out. Indeed, family members often worry about the intolerance of society toward LGBTIQ+ individuals as reaction to the coming out of a close person. Therefore, future research is needed to understand the impact of perceptions of societal norms on coming out processes, concealment, and internalized stigma.

Limitations

There are several limitations that we want to discuss. First, we focused on one type of law, in one country. As such, replicating our results for other issues, in other national contexts, and at other time periods would be a valuable extension to this work. Despite this, we think there is reason to think that the processes explored in this article should be relevant to other countries and may therefore generalize. Indeed, we already know that people use cues available in society to update perceptions of social norms (e.g., Donald Trump's election

campaign; Crandall et al., 2016), while Tankard and Paluck (2016) also specifically highlighted the impact of supreme court rulings in the U.S. on social norms. Currently, it remains however unclear whether informing people about new laws only impact perceptions of the norms about the de facto situation (i.e., law on same-sex adoption impacting perceptions of societal norm toward same-sex parenting) or whether it spreads to other issues as well. Based on the findings on same-sex marriage, one would expect the effects to be at least stronger for de facto situations. Replication of this work in other places and with other issues is necessary. Second, while a mismatch between perceptions of others' opinions and personal opinions, especially for sensitive topics (like sexual minorities), might reflect a social desirability bias (Tourangeau & Yan, 2007), we are less concerned in this case given that we showed that a decision in favor of sexual minorities only influenced perceptions of the societal norm, but did not influence personal opinions. Another limitation of our design is that we did not include a control condition to see whether *any* new law might also have influenced perceptions of the societal norm. Reducing this concern was our observation that the new law on same-sex adoption had no positive impact on perception of the societal norm toward same-sex marriage, but this possibility should be tested again with a control condition.

Conclusion

Thomas Hobbes (1651) claimed that "The law is the public conscience". The present article reinforces the importance of laws as one possible driver of society's perception of its norms. We showed that the implementation of and, particularly, informing individuals about a new, more tolerant law toward same-sex couples led them to update their perception of the societal norm to also be more tolerant. This even occurred in a context of pluralistic ignorance where people perceived the norm to be more intolerant than it actually was. As such, our studies are a source of information for researchers and practitioners who aim to assess the impact of new institutional decisions on norm perceptions to achieve greater social harmony.

Chapter 4

Perceptions of Norms and Collective Action: An Analysis of Sexual Minorities[20]

CHAPTER 4: PERCEPTIONS OF NORMS AND COLLECTIVE ACTION

Introduction to the Article

Chapter 4 of the present thesis builds on findings from Chapters 2 and 3 to investigate whether perceived societal norms influence collective action intentions to change the legal situation for sexual minorities. Indeed, Chapters 2 and 3 found that people tend to overestimate the level of intolerance toward sexual minorities in Switzerland. However, before taking any action to disseminate the findings among the general public, I wanted to better understand how they might impact collective action intentions. In particular, we wanted to see whether perceiving intolerant societal norms hinders or facilitates collective action intentions. In order to achieve this goal, Chapter 4 of the present thesis builds on models of collective action in the social psychology literature and proposes an integration of perceived societal norm into these models.

CHAPTER 4: PERCEPTIONS OF NORMS AND COLLECTIVE ACTION

Perceptions of Norms and Collective Action:

An Analysis of Sexual Minorities

Although 27 countries, such as the Netherlands, United States, and Taiwan, have implemented same-sex marriage and adoption by same-sex parents, sexual minorities (e.g., lesbian, gay, bisexual, or pansexual individuals) from other countries do not yet have these rights. Switzerland is one of the countries where same-sex marriage and joint adoption by same-sex partners is not legal (ILGA, 2019). When sexual minorities attempt to advance equal rights by taking part in collective action—defined as any action individuals undertake as group members to pursue group goals of social change (Wright et al., 1990)—they are often confronted with the reactions of others in society. The perception of others' opinions in society (i.e., perceived societal norms; Cialdini et al., 1991) should have two paradoxical effects on whether and when people act for greater equality. On the one hand, perceptions of intolerant others may suppress collective action because they might feed into a belief that society is not ready for social change and therefore dampen the propensity toward action. On the other hand, perceptions of intolerant others may have a motivating effect because they might feed into a belief that the only way to achieve greater equality is to 'act up' for social change. Given the importance of these divergent effects for public policies, further studies are needed to illuminate how perceptions of others' opinions affect individuals' support for and involvement in social change.

While norms and perceptions of these norms have been shown to impact behaviors (e.g., McDonald et al., 2014; Paluck, 2009; Sparkman & Walton, 2017), little research has investigated the impact of perceptions of societal norms on collective action. Much research on collective action has applied the Social Identity Model of Collective Action (SIMCA, van Zomeren et al., 2008), which proposes that individuals are more likely to engage in collective action when they strongly identify with a politicized group (e.g., women's rights movements; Klandermans, 2014), perceive that a social movement will be effective in achieving its goal

(Mummendey et al., 1999), and feel angry about group-based disparities (Mackie et al., 2000). Whereas much research supported the model's predictions that identification, perceived efficacy, and anger are key predictors for collective action across a range of issues and contexts (e.g., Çakal et al., 2011; Tabri & Conway, 2011; Van Zomeren et al., 2013), little research has examined how perceptions of others' opinions in a society affect collective action over and above these traditional predictors. In order to address this shortcoming, the key contribution of the present study is to assess the independent effect of social norms on collective action over and above the previously reported effects of identification, perceived efficacy, and anger.

In this research, we examine the case of rights for sexual minorities to develop and test a model that integrates societal norms—that is, perceptions of what most people approve or disapprove of in a society (Cialdini et al., 1991)—into the SIMCA (Van Zomeren et al., 2008). Specifically, we aim to add perceived societal norms to the SIMCA to better understand how these perceived societal norms affect sexual minority group members when they engage in collective action to decrease legal discrimination in Switzerland. Although sexual and gender minorities have gained visibility and achieved greater acceptance in Switzerland, they still face structural inequalities (ILGA, 2019) and public opinions continue to be perceived as intolerant (e.g., Eisner et al., 2020). Notably, the implementation of new laws protecting and extending the rights of sexual minority members in Switzerland are currently being discussed, making this context especially interesting for the examination of processes leading to social change.

Perceived Societal Norms as a Motivator of Collective Action

Perceived societal norms should affect people's willingness to engage in collective action to achieve greater equality for at least two reasons. First, a large amount of social psychological research points to the importance of social context and, especially, social norms, in shaping behaviors and opinions (for a review, see Pettigrew, 2018). In line with

this, research on dual identity emphasizes the importance of identification with a social movement and internalization of societal norms for engagement in collective action (Klandermans et al., 2008). Consequently, societal norms should affect whether people support or oppose social change toward greater social justice. Second, research about politicized identities suggests that there is strategic value is considering the national context in collective action. Specifically, in order to engage in an active power struggle, a social movement must try to gain the support or sympathy of the wider society (Simon & Klandermans, 2001; Subašic, et al., 2008). Indeed, many successful movements such as the Black Lives Matter or Women's movements have been supported not only by members of the disadvantaged group but also members of advantaged groups. Hence, the perceptions of the current opinion climate in a society should be a main concern to people who engage in collective action (Simon & Klandermans, 2011).

To date, research integrating the social norm literature and collective action literature mostly emphasizes *actual* societal norms (e.g., rate of behaviors or opinions; e.g., Kauff et al., 2016). However, individuals have no direct access to the entire social context, therefore it is important to consider how individuals make sense of 'their' social reality through individuals' *perceptions* of societal norms. To examine the centrality of perceptions of others' opinions in influencing behavior such as collective action (see Batel & Castro, 2015; Wagner, 1998), we build on a social representation approach (Moscovici, 1976). Perceived societal norms are important determinants of behavior (Paluck & Ball, 2010), yet they might differ from actual societal norms. Indeed, people often have perceptions of societal norms that are outdated, exaggerated, or simply wrong (Prentice & Miller, 1993).

The literature suggests that perceptions of intolerant societal norms should simultaneously have inhibitory and facilitating effects on collective action. On the one hand, intolerant societal norms might *inhibit* collective action by decreasing perceived efficacy and anger about the legal situation. To illustrate, previous research shows that perceived social

support (i.e., via a tolerant norm) increases collective action tendencies through perceived efficacy and group-based anger (Mackie et al., 2000; Van Zomeren et al., 2004). While perceived instrumental social support (e.g., that others are willing to act) increases people's perception that their group has the necessary resources to reach their goal (i.e., perceived efficacy), perceived emotional social support (e.g., that others are dissatisfied with inequality) validates people's beliefs and thus allows them to feel angrier (i.e., anger). If, however, people believe that social support for their concern is lacking, they might perceive that the society is not (yet) ready for social change and feel less angry about existing disparities. In the context of injustices toward sexual minorities, perceived instrumental social support should increase a sense that acting will be efficacious in reaching greater equality for sexual minorities. Simultaneously, perceived emotional social support should increase a shared sense of injustice and therefore raise anger about existing (legal) inequalities (Van Zomeren et al., 2004). In line with this reasoning, perceptions of *intolerant* societal norms should *inhibit* collective action intentions by not only decreasing perceptions of efficacy, but also reducing anger about legal inequalities by signaling that the society is not (yet) ready for change.

On the other hand, intolerant societal norms might *facilitate* collective action by increasing anger about the public opinion and increasing the perception that a social change movement is necessary to achieve the desired societal change. First, based on the relative deprivation literature (e.g., Walker & Pettigrew, 1984; Wright & Tropp, 2002), perceiving intolerant others should increase emotions related to relative deprivation and, in particular, anger about the public opinion, which should then motivate people to engage in collective actions. Second, while the collective action literature has mostly focused on positive effect of perceived efficacy of a social movement on collective action intentions (see for example social identity model of collective action, Van Zomeren et al., 2008), researchers have proposed that too much faith in the collective (e.g., perceiving a tolerant societal norms) can decrease collective action intentions because people believe that social change will follow

even without active contributions (see Ellemers, 2002; Wright & Tropp, 2002). Indeed, people's collective action intentions are a function of the perceived personal benefits (i.e., reaching social change) and costs of participation (Klandermans, 1984), and at the individual level, non-participation is the most likely outcome of mobilization campaigns (Klandermans & Stekelenburg, 2014).

In line with this reasoning, perceptions of *intolerant* societal norms might evoke the sense that social change will not follow without active contribution, signaling that a social movement is necessary to achieve the desired societal change. Consequently, if people fail to see social support for an issue that is of high personal relevance (e.g., a moral conviction; Skitka et al., 2015), they should be eager to engage in collective action when they believe that a social movement can play a critical role in achieving desired societal changes (Bäck et al., 2018). Indeed, a discrepancy between 'descriptive norms' (what most people actually do) and 'injunctive norms' (what most people should do; Cialdini et al., 1991) should increase collective action intentions (e.g., McDonald et al., 2014; Smith & Louis, 2008; Smith et al., 2015). Individuals should therefore be more likely to engage in collective action when they want to align the group's descriptive norm with the desired injunctive norm. Bringing together these two lines of research, perceptions of intolerant societal norms should have simultaneously inhibitory and facilitating effects on collective action.

Integrating Norm Perceptions into Research on Collective Action

As indicated earlier, our aim is to understand how perceived societal norms affect the intentions of members of sexual minorities to engage in collective action in order to decrease legal discrimination of sexual minorities in Switzerland. Although sexual minorities are reasonably well accepted in Switzerland (see statistics reported in Eisner et al., 2020), a recent representative study found evidence of 'pluralistic ignorance' regarding opinions toward sexual minorities: Swiss residents misperceived the societal norm to be less tolerant than it actually was (Eisner et al., 2019; Eisner et al., 2020). Moreover, while many neighboring

countries are more progressive in terms of sexual minority rights (e.g., France and Germany), sexual minorities in Switzerland still face many institutional inequalities – for example, same-sex marriage and joint adoptions by same-sex couples remain illegal (ILGA, 2019). The current opinion climate and legal situation makes Switzerland an interesting context to study how perceptions of intolerant societal norms affect sexual minorities' collective action intentions.

To predict engagement in collective action, we integrate perceived societal norms with a popular model of the psychological motivators of collective action: The Social Identity Model of Collective Action (SIMCA; Van Zomeren et al., 2008). We used the SIMCA as a starting point because it has been shown to be a robust explanation of collective action engagement across various issues and contexts (Cakal et al., 2011; Tabri & Conway, 2011; Van Zomeren et al., 2013). We take a sequential approach by first examining mediators that might be particularly relevant in explaining collective action (see Figure 12), and then adding potential inhibiting (see Figure 13) and facilitating effects (see Figure 14) of perceived societal norms on support for social change.

The first set of hypotheses is based on the SIMCA (Van Zomeren et al., 2004), which focused on understanding the precursors of collective action such as ingroup identification, perceived efficacy, and anger about group disparities. According to the SIMCA, stronger identification with a social movement, stronger perceptions that a social movement will be efficient in achieving its goal, and increased anger about group-based disparities should promote individuals' engagement in collective action. Moreover, group identification has been shown to indirectly predict collective action via the latter two motives, by empowering a sense of collective efficacy and increasing feelings of group-based anger. Based on the SIMCA, we hypothesize that:

Hypothesis 1: *Stronger identification with the group of people who support equal rights for sexual minorities (i.e., opinion-based identification) should be positively associated with intentions to engage in action to promote the rights of sexual minorities.*

Hypothesis 1a: *Moreover, stronger identification with this opinion-based group should also be positively associated with efficacy perceptions, which, in turn, should be positively associated with collective action intentions.*

Importantly, because norms may refer to both the normative conventions of a society (i.e., defined by law) or opinions of a society, we measure anger towards these two targets. Moreover, previous research has suggested that public opinion and laws, though related, may be distinct (e.g., Tankard & Paluck, 2017).

Hypothesis 1b: *Stronger identification with this opinion-based group should be positively associated with anger about the legal situation, which, in turn, should be positively associated with collective action intentions.*

Because previous research indicated that Swiss people perceive public opinion toward sexual minorities to be intolerant (Eisner et al., 2020), we expect that identification should be positively associated with anger about (intolerant) public opinion.

Hypothesis 1c: *Opinion-based identification should be positively associated with anger about the (intolerant) public opinion toward sexual minorities, which, in turn, should be positively associated with collective action intentions.*
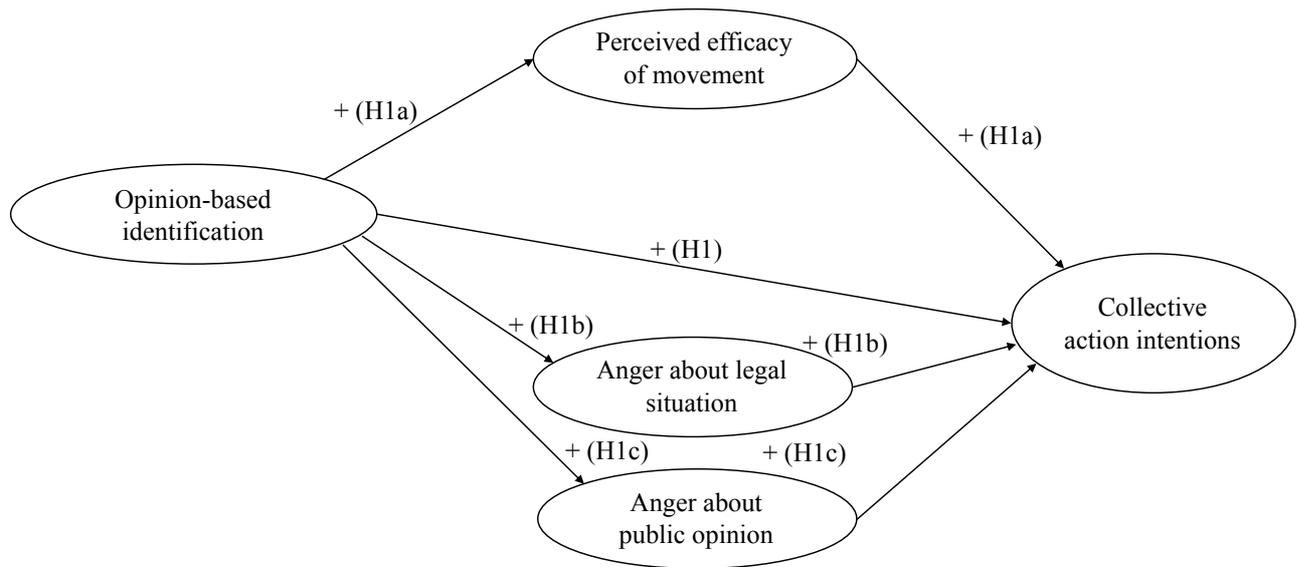
Figure 12. Social Identity Model of Collective Action

A central goal of the research was to examine how perceptions of intolerant societal norms predict collective action. As described above, perceptions of intolerant societal norms might simultaneously exert facilitating and inhibiting indirect effects on collective action intentions. Consequently, we extended the SIMCA (Van Zomeren et al., 2008) by (a) distinguishing different forms of anger (i.e., the legal situation and public opinion), (b) adding the concept of perceived social change without a movement, and (c) testing the effect of perceived societal norms on these potential mediators and collective action intentions.

As illustrated below, we propose hypotheses that address both the inhibiting and facilitating pathways to collective action. On the inhibiting side (Figure 13), we build on research on social support and emotion appraisal in collective action (van Zomeren et al., 2004; Lazarus, 1991; Mackie et al., 2000; Smith, 1993) to hypothesize that:

Hypothesis 2a: *Perceptions of intolerant societal norms should be negatively associated with efficacy perceptions and, therefore, collective action intentions.*

Perceiving that others are tolerant toward sexual minorities should increase anger about the fact that laws are lagging behind actual opinions. To illustrate, if minority group members perceive that the majority of people is in favor of extending their rights (compared

to when the majority does not support their cause) they will perceive that laws are lagging behind and, in turn, consider the current legal situation to be illegitimate. This should lead minority group members to be angrier about the legal situation (i.e., because the situation is particularly unjust). On the other hand, if minority members perceive the societal norm to be intolerant, they might feel that current laws are representing the actual opinions, and therefore be less angry about the current legal inequalities.

Hypothesis 2b: *Perceptions of intolerant societal norms should be negatively associated with anger about the legal situation and, therefore, collective action intentions.*
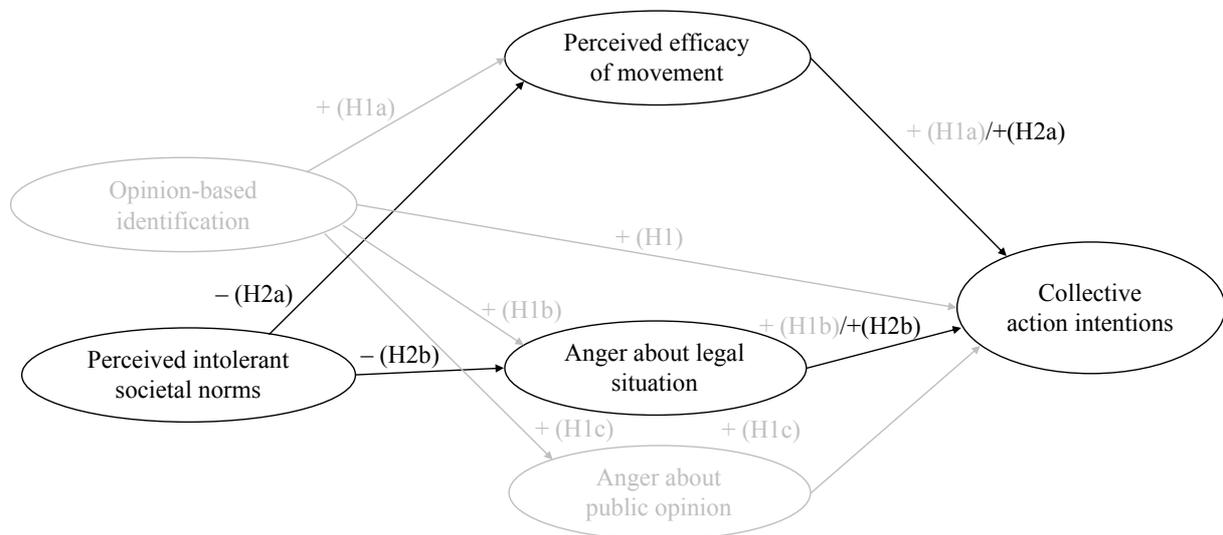
Figure 13. Inhibiting Effects of Intolerant Societal Norms

On the facilitating side (see Figure 14), we build on the relative deprivation literature (e.g., Ellemers, 2002; Walker & Pettigrew, 1984; Wright & Tropp, 2002) and resource mobilization literature (Klandermans, 1984) to hypothesize that:

Hypothesis 2c: *Perceptions of intolerant social norms should be negatively associated with perceptions that social change will happen without a social movement, which should be negatively associated with collective action intentions.*

Especially in times of social change, public opinion and laws often do not match. For instance, if opinions are changing toward more tolerance or less tolerance of a social group

(as is the case for sexual minorities), laws are likely to lag behind actual opinions (see Eisner et al., 2019; Tankard & Paluck, 2017). Hence, we did not expect that anger about public opinion would follow the same logic as anger about the legal situation. Rather, we expected that perceived intolerant societal norms—the mechanism that might ultimately change the law—would facilitate collective action via heightened anger about public opinion.

Hypothesis 2d: *Perceptions of intolerant societal norms should be positively associated with anger about public opinion, which should be positively associated with collective action intentions.*

While we expect that perceived intolerant societal norms would have asymmetrical effects on anger about the legal situation and anger about public opinion, we expect that both forms of anger will be positively correlated.
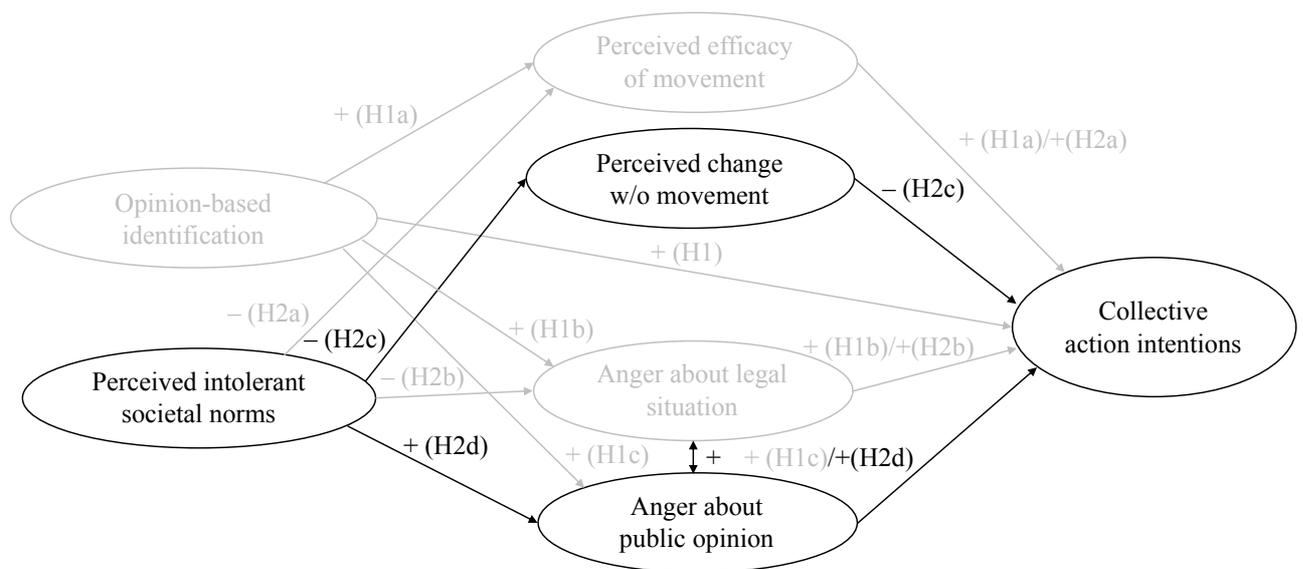
Figure 14. Facilitating Effects of Intolerant Societal Norms

Method

Participants

We collected a sample of sexual minorities[21] living in Switzerland. We used a variety of strategies to recruit a diverse sample from LGBTIQ+ online platforms (e.g., relevant organizations and social networking sites), social media, social events, and flyers on university campuses from January 11 to February 28, 2019. In this sexual minority sample, 50% reported that they learned about the questionnaire via Facebook, 18% via a newsletter or mailing list, 7% via a chat-group, 12 % via personal contact (e.g., my friend, my partner, or my mother told me about the study), and 13% via other media (e.g., LGBTIQ+ magazines, twitter, or websites). The questionnaire was available in German, French, Italian, and English.

The sample consists of 1,220 sexual minority members (859 homosexual individuals, 233 bisexual individuals, 15 asexual individuals, and 113 individuals indicating another sexual orientation; 690 women, 503 men, and 27 non-binary individuals) from the four linguistic regions of Switzerland (716 German-speaking, 421 French-speaking, 71 Italian-speaking, 12 Romansh-speaking[22]), with less than 20% of missings on the relevant items. Participants' mean age was 33.47 ($SD = 13.24$).

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[21] We also collected data among cis-heterosexual individuals ($n = 239$) and gender minorities ($n = 193$). Cis-heterosexual allies responded to a similar questionnaire as sexual minorities. Participants who identified as gender minorities, however, were confronted with an adapted questionnaire to account for the fact that their legal situation differs from sexual minorities. Because our focus was on sexual minorities, we do not report findings related to cis-heterosexual individuals and gender minorities in this article. Notably, results among both the cis-heterosexual and gender minority samples are similar to the findings in the sexual minority sample (see Supplementary Material).

[22] Because participants from different linguistic regions of Switzerland were included in our model, we tested measurement invariance across language using the 'equaltestMI' R package (Jiang, Mai, & Yuan, 2017). Due to the low number of participants from the Italian speaking part of Switzerland, we collapsed across linguistic region to compare the measurement invariance between the German-speaking part of Switzerland (the majority) and other languages (French-speaking, Italian-speaking, and Romansh-speaking parts of Switzerland). Notably, models comparing only the German-speaking and French-speaking part of Switzerland led to the same results. We tested the measurement invariance (see Putnick & Bornstein, 2016) by assessing configural invariance (i.e., equivalence of model form across languages), metric invariance (i.e., equivalence of factor loading across languages), and scalar invariance (i.e., equivalence of item intercepts across languages). To compare models, we used difference in fit indices rather than relying on the chi-square difference test (as it is sensitive to large sample sizes; in line with Chen, 2007; Cheung & Rensvold, 2002; Putnick & Bornstein, 2016). We used changes in -.01 CFI and .015 RMSEA between the models as cut-off values. Results indicate measurement invariance across languages (see Supplementary Material).

CHAPTER 4: PERCEPTIONS OF NORMS AND COLLECTIVE ACTION

Procedure and Measures

Participants were invited to voluntarily participate in an online survey on perceptions of LGBTIQ+ issues in Switzerland (see

https://osf.io/zye6q/?view_only=27a5b38c973847d9be4df7a38f8b1b67). Participants first completed demographic information. Next, we assessed all measures relevant to the current study.

Collective action intentions (α = .83). Collective action intentions were measured as general support for social change. Five items adapted from Hässler et al. (2019) were assessed on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Participants rated the extent to which they intended to engage in the following activities in the future to improve the legal situation of *sexual minorities* in Switzerland: (a) attend a demonstration, (b) sign a petition, (c) cooperate with heterosexuals, (d) support actions to improve the legal situation of *sexual minorities* and (e) talk to sexual minority members.

Identification with opinion-based group (α = .82). The two items adapted from Bliuc and colleagues (2007) and Stürmer and Simon (2004) assessed identification on a 7-point Likert scale (1 = *not at all*, 7 = *totally*): (a) "To which extent do you identify with people that support the rights of sexual minorities?" and (b) "I feel strong ties with people that support the rights of sexual minorities."

Perceived intolerant societal norms (α = .82). The four items were adapted from the European Social Survey (2006). All items were assessed on a 7-point Likert scale (1 = *would totally approve*, 7 = *would totally disapprove*). Participants rated their perception of most Swiss people's opinion toward (a) improving the rights of *sexual minorities*, (b) same-sex female parenting, (c) same-sex male parenting, and (d) same-sex marriage (e.g., "If a same-sex couple wants to get married, most people in Switzerland would…").

Perceived efficacy of social movement (α = .89). The two items used to assess perceived efficacy of a social movement were adapted from Van Zomeren, Saguy et al.

(2012). All items were assessed on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*): (a) "I believe that through joint actions we will improve the rights of sexual minorities in Switzerland," and (b) "I think that, together, those who support lesbians, gays, and bisexuals will be successful in improving the rights of sexual minorities in Switzerland."

Perceived legal change without social movement (α = .90). We developed two measures to assess the perception that greater rights will be gained even without a social movement. These measures were adapted from Van Zomeren, Saguy et al.'s (2012) items of perceived efficacy of a social movement (see measures of perceived efficacy above) and assessed on a 7-point-Likert scale (1 = *strongly disagree*, 7 = *strongly agree*): (a) "The rights of sexual minorities in Switzerland will improve even without a social movement" and (b) "The rights of sexual minorities in Switzerland will get better even without joint actions."

Anger about legal situation (α = .81). The three items were derived from Mackie et al. (2000). Participants rated the extent to which they feel (a) displeased, (b) angry, and (c) furious about the legal situation toward sexual minorities in Switzerland (e.g., "Public opinion toward *sexual minorities* in Switzerland makes me angry") on a 7-point Likert scale (1 = *not at all*, 7 = *totally*).

Anger about public opinion (α = .88). The three items were adapted from Mackie et al. (2000). Participants rated the extent to which they feel (a) displeased, (b) angry, and (c) furious about public opinion toward *sexual minorities* in Switzerland (e.g., "Public opinion toward *sexual minorities* in Switzerland makes me angry") on a 7-point Likert scale (1 = *not at all*, 7 = *totally*).

Preregistration

This study follows a preregistered analysis plan stored along with the questionnaire, data, and code at the Center for Open Science and its Open Science Framework: https://osf.io/zye6q/?view_only=27a5b38c973847d9be4df7a38f8b1b67.

Analytic Procedure

CHAPTER 4: PERCEPTIONS OF NORMS AND COLLECTIVE ACTION

All the analyses presented below were conducted with R software (2018) and the lavaan package (Rosseel, 2012). Data analysis proceeded in three steps: Preliminary analyses examined means, standard deviations, correlations, and construct validity (see Table 11). Next, structural equation modelling (SEM) using latent constructs was applied to test the postulated model (see Figure 15). A two-phase approach, which separated the model into its measurement and structural portions, was used to prevent overfitting of the final model.[23] To handle missing data and account for possible non-normality, we applied a robust maximum likelihood estimator. Finally, we assessed the fit of the entire SEM.[24] We estimated the size of the indirect effects using bias-corrected bootstrapping. The fit criterion was based on the following minimal values: Rule-of-thumb guidelines for acceptable model fit, suggested by Hu and Bentler (1999), are a CFI of .95 or above, a RMSEA of close to .06, and a SRMR of close to .08.

Descriptive statistics (see Table 11) indicate that the means were rather high. In particular, participants indicated high intentions to engage in collective action, identification with and perceived efficacy of social movement, and anger about the legal situation.

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[23] We added two residual correlations that were not in our initial analytic plan but affected the fit of the model (see supplementary material). These two additional residual correlations did not affect the main findings of this study.

[24] We decided to deviate from our initial preregistered plan by keeping outliers in our analyses (see supplementary material). The exclusion/inclusion of outliers did not affect the main findings of this study.

Table 11

Means, Standard Deviations, and Intercorrelations Matrix Among the Latent Variables Included in the Structural Equation Model

Variables	*M* (*SD*)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Collective action intentions	5.73 (1.11)	–						
(2) Opinion-based identification	6.12 (1.12)	.46***	–					
(3) Perceived intolerant societal norms	4.09 (0.90)	.00	–.03[25]	–				
(4) Perceived efficacy of movement	5.97 (1.08)	.53***	.34***	–.16***	–			
(5) Perceived change w/o movement	2.84 (1.47)	–.22***	–.14***	–.15***	–.09**	–		
(6) Anger legal situation	6.12 (1.22)	.40***	.28***	.13***	.26***	–.13***	–	
(7) Anger public opinion	4.26 (1.44)	.22***	.12***	.41***	.04	–.14***	.46***	–

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[25] In the present research, we did not have any specific expectations regarding the association between identification and perceived intolerant norms. First, the relation between perception of societal norms and identification was not straightforward, and we did not necessarily expect to find any association between both concepts. Second, in case of an association, the direction of the association was unclear to us. On the one hand, one might have expected that perceived intolerant societal norms bolstered identification with the disadvantaged group (see rejection-identification model – where norms could be seen as a proxy for perceived discrimination: Branscombe, Schmitt, & Harvey, 1999; Cronin, Levin, Branscombe, van Laar, & Tropp, 2012; Leonardelli & Tormala, 2003; and optimal distinctiveness model of social identity: Brewer, 1991). On the other hand, perceived tolerant societal norms might also have been associated with higher identification with the disadvantaged group. For instance, one might expect that people who identify highly might be surrounded by a more supportive network and, therefore, perceive the norm to be more supportive. It is important to note, however, that the association between both constructs is by default included in the structural equation model, as the association between independent variables is automatically accounted for in SEM. Results seem to indicate that there is no association between the constructs. What remains unclear, however, is whether the constructs are not associated at all or whether this absence of correlation actually masks a dualistic association (i.e., positive and negative).

Results

Findings of the structural equation model are displayed in Figure 15 and Table *12*. We first estimated the model fit. The model fit was good: χ^2 (173) = 600.38, CFI = .96, RMSEA = .049, SRMR = .054. We then tested paths predicted by the SIMCA (see Figure 12). In line with Hypothesis 1, opinion-based identification had a significant positive association with collective action intentions (B = .39, SE = .06, p < .001). Next, we tested for the proposed indirect effects of opinion-based identification on collective action intentions via the perceived efficacy of a social movement (Hypothesis 1a), anger about the legal situation (Hypothesis 1b), and anger about the (intolerant) public opinion (Hypothesis 1c). As hypothesized, opinion-based identification was positively associated with the perceived efficacy of a social movement, which was, in turn, positively associated with collective action intentions (H1a, indirect effects, B = .23, SE = .03, p < .001). As expected, opinion-based identification was also positively associated with anger about the legal situation, which was, in turn, positively associated with collective action intentions (H1b, B = .07, SE = .02, p = .002). Finally, in line with our predictions, opinion-based identification was positively associated with anger about public opinion, which, in turn, was positively associated with collective action intentions (H1c, B = .02, SE = .007, p = .034). Hence, in line with the SIMCA, these findings indicate that opinion-based identification was directly and indirectly (via perceived efficacy and anger about the legal situation/public opinion) associated with collective action intentions.

Next, we estimated the *inhibiting* effects (see Figure 13) of perceived intolerant societal norms on collective action intentions via the lower perceived efficacy of a social movement (Hypothesis 2a) and lower anger about the legal situation (Hypothesis 2b). As expected, perceived intolerant societal norms were associated with lower perceived efficacy of a social movement, which was associated with greater collective action intentions (H2a, B = −.13, SE = .03, p < .001). Thus, we found a negative indirect effect of perceived intolerant

societal norms on collective action intentions via the lower perceived efficacy of a social movement. Contrary to our expectation, perceived intolerant societal norms were positively, not negatively, associated with anger about the legal situation, which was associated with greater collective action intentions (H2b, $B = .03$, $SE = .01$, $p = .014$). In sum, we found mixed support for the proposed *inhibiting* effects of perceived intolerant societal norms on collective action intentions.

Second, we estimated the proposed *facilitating* effects (see Figure 14) of perceived intolerant societal norms on collective action intentions via lower perceptions that social change will happen without a social movement (Hypothesis 2c) and anger about public opinions (Hypothesis 2d). As hypothesized, perceived intolerant societal norms were negatively associated with perceptions that sexual minorities will achieve greater legal equality without a social movement, which was, in turn, negatively associated with collective action intentions (H2c, $B = .04$, $SE = .012$, $p = .001$). In addition, perceived intolerant societal norms were positively associated with anger about public opinion, which was, in turn, positively related to collective action intentions (H2d, $B = .06$, $SE = .023$, $p = .010$). In sum, we found support for the proposed *facilitating* effects of perceived intolerant societal norms on collective action intentions.

Overall, our results are in line with the predictions of the SIMCA. Moreover, building on the collective action literature, our results indicate that perceived intolerant societal norms have simultaneously inhibitory and facilitating effects on collective action intentions. On the one hand, perceived intolerant societal norms *inhibit* collective action intentions via lower perceived efficacy of a social movement. On the other hand, perceived intolerant societal norms *facilitate* collective action intentions via greater anger (about the legal situation and public opinion) and a lower perception that social change will take place without a social

movement.
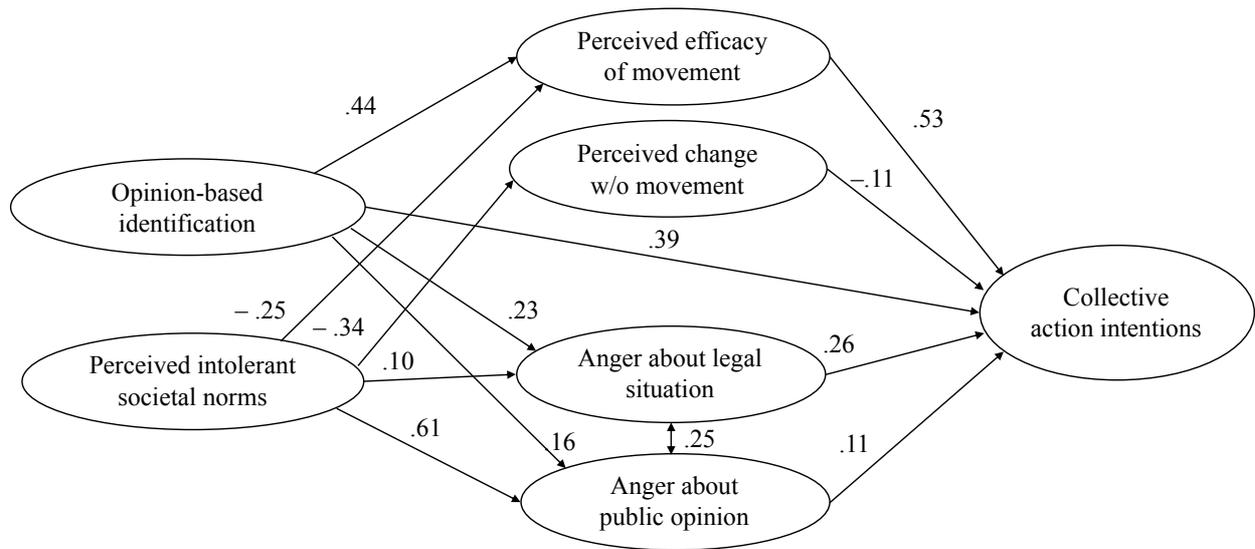
Figure 15. Hypothesized Model for the Sexual Minority Sample

Table 12

Summary of Direct Path for Sexual Minorities

Path	B	SE B	p-value
Opinion-based identification → Collective action intentions	.39	.06	<.001
Opinion-based identification → Perceived efficacy of movement	.44	.05	<.001
Opinion-based identification → Anger about legal situation	.23	.04	<.001
Opinion-based identification → Anger about public opinion	.16	.04	<.001
Perceived intolerant societal norms → Perceived efficacy of movement	−.25	.04	<.001
Perceived intolerant societal norms → Perceived change w/o movement	−.34	.07	<.001
Perceived intolerant societal norms → Anger about legal situation	.10	.03	<.001
Perceived intolerant societal norms → Anger about public opinion	.61	.06	<.001
Perceived efficacy of movement → Collective action intentions	.53	.05	<.001
Perceived change w/o movement → Collective action intentions	−.11	.03	<.001
Anger about legal situation → Collective action intentions	.26	.08	.002
Anger about public opinion → Collective action intentions	.11	.04	.003

Discussion

Sexual minorities in many countries have experienced significant gains in equality in the fifty years since the Stonewall riots. Nevertheless, they continue to be subject to legal inequalities in many countries around the world and are often confronted with rejection. This raises the question of when sexual minorities engage in collective action for greater social equality and how perceptions of the societal climate hinder or promote social change. The present research sought to integrate perceptions of societal norms into the Social Identity Model of Collective Action (SIMCA, Van Zomeren et al., 2008). In line with assumptions based on the social identity model of collective action (Van Zomeren et al., 2008), the present research revealed support for the motivating effects of opinion-based identification, anger, and efficacy on collective action intentions among sexual minorities. Moreover, our findings revealed that perceptions of intolerant others in society have a dualistic effect on collective action intentions: Results among sexual minorities showed that perceived intolerant societal norms were associated with (1) greater anger about the legal situation, (2) greater anger about public opinion, and (3) lower perceptions that the situation might get better even without a movement—thereby having a *facilitating* effect on collective action intentions. Simultaneously, however, perceived intolerant societal norms were associated with lower perceived efficacy of a social movement—thereby having an *inhibiting effect* on collective action intentions.

Theoretical Implications

By extending the 'traditional' SIMCA (Van Zomeren et al., 2008) the present research demonstrates that perceptions of societal norms are critical in motivating support for social change—alongside the other three core predictors of collective action (i.e., identification, anger, and efficacy). This joins previous research in showing the importance of an

individuals' embeddedness in society in order for them to engage in collective action (Klandermans et al., 2008; Simon & Klandermans, 2001).

Notably, the present results highlight the dualistic role that societal norms play in both inhibiting and facilitating collective action. On the inhibiting side, when a group is seeking equality, intolerant societal norms were associated with lower group efficacy and lower action intentions. This suggests that intolerant societal norms may function similarly to low external political efficacy (Finkel, 1985). In other words, the group may judge their society to be resistant or unresponsive to their goal. But on the facilitating side, an intolerant societal norm highlights an existing injustice, which fuels the individual's anger about the public opinion and, sometimes, also about the legal situation. Given that anger has been shown to be a strong motivating emotion (Fischer & Roseman, 2007), awareness of intolerant societal norms should therefore indirectly motivate group members to act.

Contrary to our initial expectations, intolerant social norms were not only negatively associated with anger towards the public, but also with anger toward the legal situation. This unexpected finding might be due to the fact that there is a general trend toward increased tolerance of sexual minorities in Western countries, which is reflected in changes in law (e.g., legalizing same-sex marriage and adoption by same-sex parents). Switzerland, however, lags behind in this regard. This particular situation might explain why perceptions of intolerant norms were negatively associated with anger about the legal situation in the present study. In other words, we might not expect to find the same association in countries where the behavior of sexual minorities is still criminalized, as people might perceive the society as not ready for change. This suggests that the association between perception of intolerant norms and anger toward the legal situation might be more dependent on context than previously assumed.

Moreover, awareness of intolerant societal views might also catalyze collective action by decreasing social loafing among individuals that perceive the status quo as unjust. While people who perceive the societal climate shifting towards more acceptance might be tempted to do nothing and wait for social change to come 'naturally' (e.g., political engagement requires time and energy), perceptions of intolerance might signal that the desired change cannot be achieved without one's individual engagement. We found that sexual minorities were *more* likely to engage in collective action when they perceived that society was going in an intolerant direction and, thus, that perceived change without a movement would be unlikely. This finding parallels those in studies on hope (e.g., Hasan-Aslih et al., 2019; Hornsey & Fielding, 2016), which show that hope can have a dualistic impact on collective action tendencies, as it can motivate people to engage, but that it can also increase social loafing and, in turn, become a barrier to collective action. Considering a potential sedative effect of "perceived change without a movement" on collective action intentions therefore presents an important avenue for future research: mismatches between approval of and action for social change (e.g., principle-implementation gap; Dixon et al., 2007) may be largely explained by perceptions that the desired social change will be achieved without personal engagement in a social movement.

Based on the findings of this study, we suggest an adjusted Normative Social Identity Model of Collective Action (NOSIMCA; see Figure 16), which enables an examination of how perceptions of (intolerant) societal norms predict collective action intentions alongside the traditional core motivators of social changes. Incorporating the findings of the present studies, the model differs from our original hypothesized model in one regard: It posits that the relationship between perceived intolerant societal norms and anger about legal situations might differ depending on the context. The Normative Social Identity Model of Collective

Action suggests that, for multiple psychological or strategic reasons, societal norms are likely to be highly relevant to collective action processes.
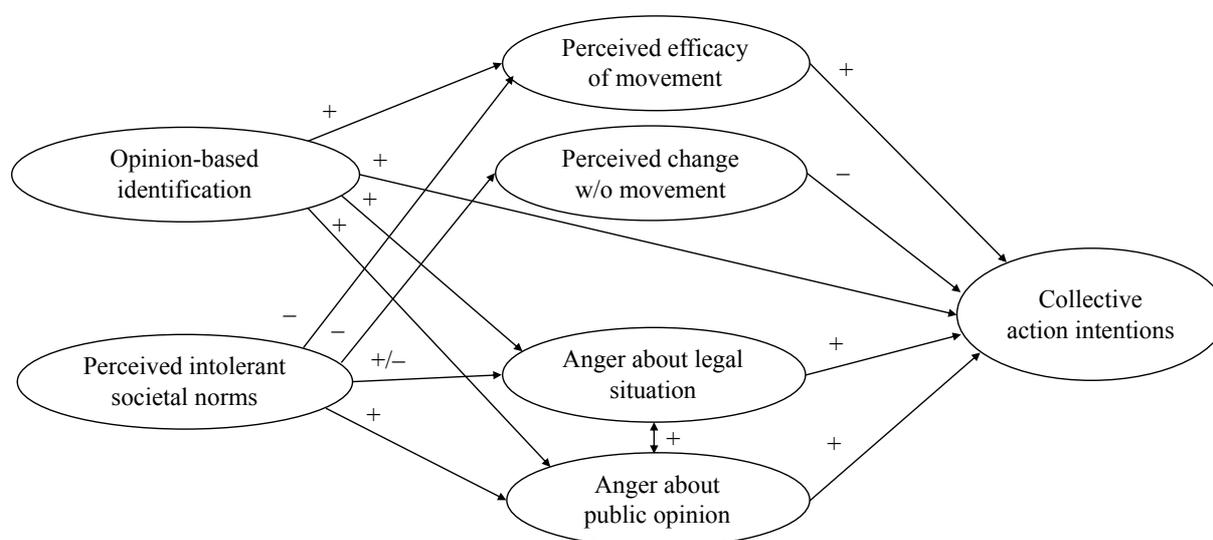
Figure 16. Normative Social Identity Model of Collective Action (NOSIMCA)

Practical Implications

Overall, the dualistic effect of perceived societal norms on collective action tendencies has high practical relevance. The perceived disapproval toward sexual minorities documented in Switzerland (Eisner et al., 2020) and the U.S. (Tankard & Paluck, 2017) negatively affects sexual minority members' well-being and feelings of inclusion in society (e.g., Badgett, 2011; Cialdini & Goldstein, 2004). It is therefore important to address these perceptions of intolerant societal norms while also working to prevent people from disengaging from collective action. This implies that practitioners and advocates need to address the harmful overestimation of negative norms, while acknowledging anger about existing inequalities and the need to act toward equal rights. In that sense, targeted messages such as "People are becoming more tolerant but you still need fight for equal rights!", "Time's up: For Marriage Equality", or "The Swiss population is ready to go for equality, let's move forward" might be highly effective in motivating people to engage in support for social change.

The current situation in Switzerland makes the country a particularly relevant context for studying social change related to sexual minorities for at least two reasons. First, the Swiss context is one in which marriage for all is not yet implemented and, therefore, collective action remains a valid means to reach marriage equality. It is important for collective action research to not only examine contexts in which action is already occurring, but also contexts in which action has the potential to emerge (Kutlaca et al., 2019). Second, indicators suggest that Switzerland is in a "normative window" (Crandall & Warner, 2005): While sexual minorities are increasingly accepted in Switzerland, perceptions might not be readily updated to reflect these changes and sexual minorities still lack many rights (ILGA, 2019). Consequently, the "objective" conditions for collective action, such as group-based illegitimacies and anger about them, are present. Indeed, in 2019, Switzerland experienced demonstrations supporting demands for marriage for all, and a record number of attendees at Zurich's pride event (30% higher than the previous year). Thus, we believe that our data gives a relevant insight into a developing group consciousness.

Limitations and Future Directions

Several limitations are important to acknowledge. First, due to the correlational nature of the data, we cannot draw causal inferences. Future experiments should be conducted to manipulate perceived societal norms (e.g., with institutional decisions, see Eisner et al., 2020) and test their direct impact on collective action intentions. Correcting the overestimation of intolerant societal norms seems critical for improving the well-being of members of disadvantaged groups, but this might come at the cost of what we might call a "spiral of structural disengagement": People who perceive the societal climate to be more tolerant might be less aware of, and therefore less angry about, existing inequalities. This, in turn, might increase the assumption that the situation is getting better even without active engagement.

Second, contrary to our expectations, we did not find contrasting effects for the two forms of anger (i.e., anger about the legal situation and the intolerant public opinion). Although confirmatory factor analysis indicated that the two-factor solution fit the data better, both anger about the legal situation and the intolerant public opinion mediated the positive effect of perception of intolerant societal opinion on collective action. This might be partly due to the fact that, in contrast to previously reported intolerant norms (see Eisner et al., 2020), sexual minority members perceived the Swiss society to have neutral opinions.

In addition, this neutrality and low variance of perceived societal norms might account for the emerging dualistic effect on collective action intention: simultaneously inhibiting and facilitating support for social change. It is yet unclear whether perceptions of strongly intolerant or strongly tolerant societal norms are leading to dualistic effects equally. Moreover, future research should test the generalizability of our model to other societal issues and other contexts (e.g., ethnicity, gender [identity], immigration, or climate change) varying in the level of perceived norms.

Conclusion

This research emphasizes the importance of integrating the social context into social psychological research (Pettigrew, 2018). Our research reveals a dualistic influence of perceived intolerant societal norms on support for social change among sexual minorities. They might simultaneously *inhibit* and *facilitate* individuals' engagement in collective action – inhibiting through lower perceptions of perceived efficacy and facilitating through greater anger and lower perceptions that change can occur without a movement. This dynamic implies that preventing possible inhibiting effects is critical for interventions aiming to promote social change. Interventions must not only focus on making people aware of a shift in societal norms toward more tolerance, but also point to the need to 'act up' for social change if the goal is to promote greater equality.

Chapter 5

General Discussion

"Research that produces nothing but books will not suffice."

<div align="right">—Kurt Lewin</div>

Chapter 5: General Discussion

When we decide to express our opinion, reveal a (minority) group status, or react to persistent inequalities in a society, we do so by taking into consideration what we believe other people think. How exactly do these perceptions affect our expression, social belonging, or even our support for social change? What if these perceptions are inaccurate? Drawing on different survey populations (i.e., general population, university students, and sexual minority members and their heterosexual allies) and research designs (i.e., quasi-representative, natural experiment, and large-scale survey of a minority group), the present thesis explores i) whether misperceptions of others' opinions (i.e., pluralistic ignorance) are more likely to occur in a time of social change (Chapter 2), ii) examines the impact of information about new institutional decisions on (mis-)perceptions of societal norms (Chapter 3), and iii) seeks to understand the impact of perceptions of societal norms on collective action intentions (Chapter 4). Overall, the results indicate that the general population is more likely to express pluralistic ignorance for newly debated objects in a time of social change (Chapter 2). Moreover, (mis-)perceptions of societal norms can be influenced by new institutional decisions that reflect the social change process (Chapter 3). Finally, (mis-)perceptions of societal norms have a dualistic effect on collective action intentions, as they are simultaneously associated with both increased and decreased support for social change (Chapter 4).

More specifically, Chapter 2 addresses the question as to whether pluralistic ignorance is more likely to occur for issues regarding same-sex female parenting in Switzerland (a newly debated object at the time of the study) than for working mothers (an older and less debated object at the time of the study). Moreover, it sought to test the assumptions that liberal people are more likely to express false uniqueness, while conservative people are more likely to express false consensus. Using a quasi-representative

sample of residents of the canton of Vaud in Switzerland, results indicate pluralistic ignorance toward same-sex female parenting, as residents wrongly perceived that a majority of people, their neighbors, and their friends were in disapproval of same-sex female parenting. This was not the case for opinions toward working mothers. In addition, while liberal people experienced false uniqueness (i.e., wrongly perceived that no one shared their opinion) and conservative people false consensus (i.e., wrongly perceived that most people shared their opinion), results indicated that liberals and conservatives did not differ in their perception of other people's opinions. Hence, these findings indicate a potential time lag between personal opinions and perceptions of other people's opinions, as people might fail to perceive ongoing social change toward more tolerant opinions in the population.

Chapter 3 also assesses whether Swiss residents of the canton of Vaud overestimated the level of intolerance in their society (via perceived societal norms) toward other sexual minority issues. Building on previous findings by drawing on a sample of University students in Lausanne (canton of Vaud), it also aims to further examine how a new institutional decision in favor of same-sex rights (i.e., a 2018 law legalizing stepchild adoption) can help to reduce these misperceptions. Results indicate that i) residents of the canton of Vaud overestimate the level of intolerance toward sexual minorities in their society and that ii) (mis-)perceptions are influenced by institutional decisions such that people perceive the norm to be more tolerant when they are informed about a new institutional decision in favor of sexual minorities.

Finally, Chapter 4 aims to go one step further by investigating whether perceptions of societal norms toward sexual minorities impact collective action intentions to reduce legal discriminations among sexual minorities residing in Switzerland. The findings suggest a dual and contradictory pathway between perceptions of intolerant societal norms and collective action. On the one hand, perceived intolerant societal norms are associated with i) greater

anger about the legal situation, ii) greater anger about the public opinion, and iii) lower perceptions that the situation might get better even without a movement—thereby facilitating collective action intentions. On the other hand, perceived intolerant societal norms are associated with lower perceived efficacy of a social movement—thereby inhibiting collective action intentions.

Social Context, Social Representations, and the Individual

In addition to the general findings summarized above, the three empirical chapters contained in the present thesis add to the social psychological literature and, especially, its *social* dimension. Individuals' opinions and behaviors do not take place in a social vacuum; rather, they are inherently embedded in a social context. Psychological literature has often been criticized for its inattention to social contexts (Tajfel, 1972) as "the social has consistently represented a polluting danger to the purity of scientific psychology" (Moscovici, 2000, pp.4-5). This diversion from the social context of psychological phenomena remains a concern within contemporary social psychology (Pettigrew, 2018).

Societal psychology, however, predominantly draws on the social context and investigates social psychological processes and how they relate to social issues (Doise, 1993; Staerklé, 2011). Two central principles underlying the societal psychology approach (see Staerklé, 2011) are relevant for the present thesis. The first is a focus on normative determinants of human thoughts—such as societal norm perceptions—which inform individuals as to what to expect from others. The second principle is a focus on the social, historical, and institutional contextualization of social psychological processes (Staerklé, 2011; Staerklé et al., 2011). The present thesis adds to the societal psychological literature by investigating the interaction between *normative determinants of human thoughts* (i.e., perceived societal norms), *social, historical, and institutional context,* and *psychological processes*.

CHAPTER 5: GENERAL DISCUSSION

In past years, various social psychological research has heeded the call to integrate the social context into social psychological research, mostly by examining social norms (e.g., Christ & Wagner, 2013; Kauff et al., 2016; Pettigrew, 2018; Reynolds, 2019). Most researchers have, however, assessed actual social norms rather than perceptions of these social norms. However, individuals do not know what the actual norm is. Indeed, perceptions of social norms do not necessarily correspond to actual social norms, resulting in pluralistic ignorance as documented in Chapters 2 and 3 of the present thesis. Consequently, perceptions of social norms rather than actual social norms themselves should impact opinions and behaviors (see e.g., Eicher et al., 2015).

The present thesis advances the literature by offering new theoretical and empirical insights into the impact of perceptions of social norms on social psychological processes. Drawing on a social representation approach, this thesis focuses on the interaction between the social context and individuals through perception of social norms. I suggest that perceptions of societal norms are a specific form of normative representations (defined as expectations about the effects of interactions between individuals in specific situations; Doise, Clémence, Savory, Spini, & Staerklé, 1995; Spini & Doise, 2005). Perceptions of soci(et)al norms can be considered a form of normative representations, as they carry expectations regarding other people's opinions. In this regard, the three empirical chapters presented above investigate different paths between the individual and the social context through normative representations.

Several models have already been proposed to account for the interaction between different levels of analyses (see in particular Pettigrew, 1997, 2018; Doise, 1980) and the impact of norms on individual processes (Fasel, Green, & Sarrasin, 2013; Green, Sarrasin, Baur, & Fasel, 2016; Guimond et al., 2013; Sarrasin, Green, Fasel, Christ, Staerklé, & Clémence, 2012). For instance, Fasel and colleagues (2013) discussed models accounting for

the impact of ideological climate and norms on individual processes. Another relevant example is a model proposed to account for the impact of diversity policies on personal endorsement of a policy and intergroup attitudes through perceptions of cultural norms (see Guimond et al., 2013). These models, however, either do not account for perceptions of norms (normative representations) or focus mainly on top-down processes (i.e., norms impacting individual processes). To investigate how individuals' perceptions of others' opinions are simultaneously influenced by the social context and how these perceptions, in turn, affect individuals' actions, I proposed to adapt Pettigrew's model (1997, 2008) by integrating social representations (e.g., perceptions of others' opinions) (see Figure 17). In the following section, I will discuss how the present thesis illustrates the six paths connecting the social context, normative representations, and the individual (i.e., the Paths A to F).
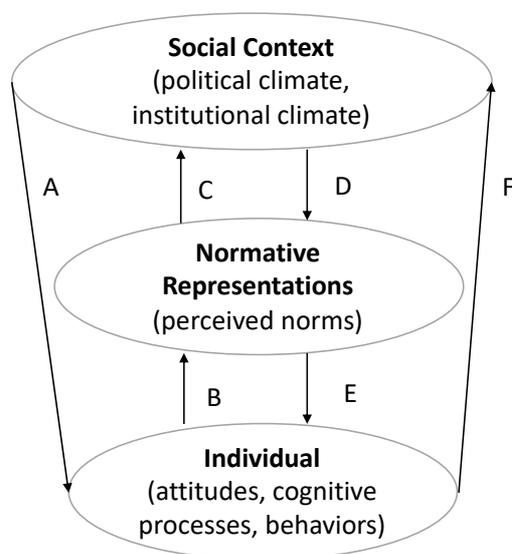
Figure 17. A Normative Representation Model: Six Paths from Three Levels of Analysis

Social context affects individuals and their normative representations (Paths AB). First, one focus of Chapter 2 is placed on the influence of the social context (differences in political climate and level of debate around an attitude object) on liberal and conservative people (i.e., their expression of false consensus and false uniqueness). More specifically,

results in Chapter 2 indicate that the social context around an attitude object interacts with occurrences of misperceptions of others' opinions, false consensus, and false uniqueness among conservative and liberal individuals. Indeed, pluralistic ignorance, false consensus, and false uniqueness were only found to occur for the newer and more debated object— same-sex female parenting. We did not find evidence of these effects for an older and less debated object—working mothers. Hence, Chapter 2 provides evidence that the social context is associated with the occurrence of false consensus and false uniqueness.

Chapter 2 therefore complements the literature on false consensus and false uniqueness (e.g., Amit et al., 2010; Coleman, 2016; Eveland & Glynn, 2008; Krueger, & Zeiger 1993; Mannarini et al., 2015; Verlhiac, 2000). While previous work mostly focused on individual cognitions to explain false consensus and false uniqueness (e.g., lack of motivation or selective exposure), Chapter 2 demonstrates that the occurrence of false consensus and false uniqueness can be impacted by the stage of public debate and, more generally, the social change process around an attitude object. Although studies on false consensus and false uniqueness do to some extent integrate the social context in their explanation of these effects (e.g., selective exposure can be directly affected by the social context), the historical and social context of the object under study is rarely discussed. Our findings show that researchers who study cognitive effects might benefit from discussing and reflecting on the context (e.g., social change process, national context, sample) in which their studies are conducted.

Individuals affect normative representations (Path B). Another central theme of Chapter 2 and Chapter 3 is how individuals' characteristics (e.g., age or political orientation) interact with normative representations (i.e., perception of others' opinions, perceived soci[et]al norms). Findings indicate that perceptions of societal groups' opinions (i.e., most people's opinions or the opinions of most residents of the canton of Vaud) toward same-sex

female parenting in Chapter 2 and sexual minority issues in Chapter 3 did not seem to be directly affected by the individuals' characteristics under study. This is reflected in the fact that perceptions of norms were not affected by individuals' age, political orientation, or gender, rather there was a stable perception of a conservative norm (i.e., intolerant toward sexual minorities). In contrast, people's own opinions were affected by individuals' characteristics such that the perceived conservative norm was closer to the opinions held by right-wing compared to left-wing people. Similar findings have been documented in a representative study of the French population, which showed that the perception of the norm of assimilation was widely shared (regardless of gender, age, or political orientation) and that this perception was closer to far-right people's opinions (see Guimond, Streith, & Roebrock, 2015). Hence, past research (Guimond et al., 2015) and findings documented in Chapter 2 of the present thesis seem to indicate that perceptions of societal norms are widely shared among people holding different opinions, therefore reflecting a form of hegemonic representations (Moscovici, 1988).

In contrast to the perception of societal norms, perceptions of small-scale groups' norms (e.g., most friends' opinions) were more likely to be associated with individuals' characteristics and, hence, more likely to vary among individuals. The findings that societal norms (i.e., macro-level) are more stable and shared than small-scale groups' norms (i.e., meso-level) suggest that future research should investigate the different levels of analyses more closely (e.g., Pettigrew, 2018; Vacchiano & Spini, 2019). In sum, the finding that perceived opinions for societal groups (e.g., most people) are more shared among individuals than perceptions of small-scale groups' opinions complement the pluralistic ignorance literature by adding on additional layers. While the initial definition of pluralistic ignorance, particularly Allport's (1924) concept of 'illusion of universality', is more likely to relate to perceptions of societal groups' opinions, this might be less the case for perceptions of small-

scale groups' opinions. Indeed, 'illusion of universality' (widely shared perception of others'

opinions or hegemonic representation) was generally found for the perception of most

people's opinion, but this was less the case for the perception of friends' and peers' opinions.

These findings also add to the social psychological literature on pluralistic ignorance, as they

show that it might be worth measuring perceptions of others' opinions (or social norms) at

different levels, for different groups, and specifically at the societal level, which is seldom

assessed.

Normative representations interact with the social context (Path CD). While the

empirical chapters did not directly assess the impact of normative representations on the

social context, Chapter 3 discusses the interaction between both levels. Building on Chapter

2, Chapter 3 first indicates a lag between perceptions of others' opinions and actual opinions

(i.e., pluralistic ignorance) regarding opinions toward sexual minorities. Research has

suggested that this lag might be at least partly explained by the prominence of some specific,

biased institutionalized indicators of the majority opinions (e.g., heterosexual marriage) that

mistakenly signal stability even in times of social change (Shamir & Shamir, 1997). This

process may result in (the amplification of) pluralistic ignorance (Shamir & Shamir, 1997).

Hence, in this situation, informing people about new laws can be particularly impactful by

signaling that the societal norm has changed and, in turn, leading people to adjust their

perception of societal norms.

Drawing on this argument, Chapter 3 explores the impact of visibility of a new

institutional decision (i.e., institutional context) on (mis-)perceptions of societal norms (i.e.,

normative representations). The second study presented in Chapter 3 tested the impact of an

institutional decision implementing stepchild adoption on perceptions of others' opinions in a

natural experiment. Results indicate that information about this new law influenced

perceptions of societal norms. It provides causal evidence for the impact of the social context

(i.e., institutional decision) on perceptions of the societal norms. However, the manipulation failed to directly impact pluralistic ignorance (i.e., a gap between perceptions and actual opinions), which seems to reflect the processual nature of such an effect.

Despite this, the demonstrated impact of institutional decisions on norm perceptions has important implications for literature on social norms (e.g., institutional decisions can be mobilized to manipulate norm perceptions). Indeed, little research has investigated the impact of institutional signals on perceptions of social norms. Notable exceptions to this are recent studies, which investigated the impact of policies on norm perceptions (e.g., de la Sablonnière, Nugier, Kadhim, Kleinlogel, Pelletier-Dumas, & Guimond, 2020; Guimond et al., 2013; Kleinlogel, Nugier, Pelletier-Dumas, de la Sablonnière, & Guimond, 2020; Tankard & Paluck, 2017). For instance, Guimond et al. (2013) proposed a model accounting for the impact of policies on individual processes via norm perceptions. This line of research has been followed by recent articles demonstrating the impact that the clarity and coherence of a law has on individuals' perceptions, adherence to the law (Kleinlogel et al., 2020) and well-being (de la Sablonnière et al., 2020). Relevant to the LGBTIQ+ context, another set of studies has demonstrated the impact of the legalization of same-sex marriage on norm perceptions (Tankard & Paluck, 2017). As such, findings reported in the third empirical chapter build on this work to show that, in order to study the impact of laws on perceptions, one must also consider (1) informing people about new laws and (2) people's (lack of) prior knowledge about it. Chapter 4 indicates that not only new institutional decisions themselves but particularly informing people about these decisions (in contrast to reminding people of a law that they already know about) impact perceptions of the societal norms.

Normative representations affect individuals (path E) and individuals affect social context (path F). Finally, Chapter 4 directly investigates how normative representations affect individuals by looking at the effect of perceived societal norms on

collective action intentions (*path E*). In turn, individuals' intentions to engage in collective action could lead to changes in the social context (institutional changes). Particularly, if collective actions aim to change the legal situation (*path F*). The results of the present thesis indicate that perceiving an intolerant societal norm has a dualistic impact on collective action intention. On the one hand, perceived intolerant societal norms *inhibit* collective action intentions via lower perceived efficacy of a social movement. On the other hand, perceived intolerant societal norms *facilitate* collective action intentions via greater anger (about the legal situation) and lower perception that social change will take place without a social movement. Consequently, normative representations (i.e., perceptions of the societal norm) are related to individuals' behavioral intentions (i.e., collective action intention: *paths E*).

This dualistic impact of perceived societal norms on collective action intentions was also indirectly discussed in the social representation literature (Moscovici, 1976). A smaller difference between the minority position and the norm (i.e., orthodox position) was expected to motivate people to 'act up' (Moscovici, 1976). On the contrary, a larger difference between the minority position and the norm (i.e., heterodox position) was also expected to facilitate collective actions. This latter finding was explained by minorities' willingness to bring about conflict, innovation, and social change (Moscovici, 1976). Hence, findings that perceived intolerant societal norms are simultaneously associated with both less and more collective action intentions provide an empirical parallel to Moscovici's (1976) theoretical reasoning. Together, these findings also reflect the polemical and hegemonic forms of normative representations. While polemical representations bring conflict and action, hegemonic ones bring stability and dominance of the past (see Moscovici, 1988). The finding that perceived norms can both facilitate (e.g., polemical form) and hinder (e.g., hegemonic form) actions indicates that different forms of norms might coexist at the same time and be activated in different situations. Future research should aim at investigating whether

perceived norms always have a dualistic impact on collective action intentions or whether this impact is contingent on the polemical/hegemonic nature of the representation.

The findings in Chapter 4 might, more generally, complement models on behavioral intentions and normative influence. Although many scholars have advocated for the integration of social norms or perceived societal norms into models of behaviors and especially behavioral intentions, others have been more reluctant. One central criticism of normative models has drawn from empirical evidence in the literature, which showed that social norms do not necessarily influence behaviors or intentions (see for example Farley, Lehmann, and Ryan, 1981; Ajzen, 1991). More specifically, the direct impact of perceived social norms on behaviors has not always been significant. In response to these findings, some scholars have argued that perceptions of norms should matter most, if not only, to people who care about them (see Terry & Hogg, 1996). The research presented in the present thesis might suggest an additional mechanism to explain this lack of empirical evidence. Indeed, the dualistic effect of perceived societal norms on collective action intentions suggests that people might not only engage in behaviors to conform to norms but might also be motivated to act against them. Hence, in some cases, the absence of direct positive effect of perceived norms on behaviors might mask a dualistic indirect impact. Future research should aim to also consider a potential dualistic impact of social norms, especially the negative impact of norm perceptions on behavioral intentions and behaviors.

A Spiral of (Dis)engagement?

As discussed above, this thesis illustrates the interactions between the social context, normative representations, and the individual. As illustrated on Figure 18 below, findings of the three studies reported in the empirical chapters (i.e., Study among residents of the canton of Vaud, Study among university students, and Study among sexual minority members and cis-heterosexual allies) also illustrate a potential interaction between the social context (i.e.,

social change), perceptions of others' opinions (i.e., normative representations), and the individual (i.e., collective action intentions). Indeed, the data collected among residents in Vaud (Vaud Study; Chapter 2-3) show that residents *misperceive the societal norm* toward sexual minorities in a time of social change, as they overestimate the level of intolerance toward sexual minorities. Following this finding, data collected among LGBTIQ+ individuals (LGBTIQ+ Study, Chapter 4) show that this *(mis-)perception of an intolerant norm* can simultaneously hinder and facilitate collective action to change the *legal situation*. Finally, the University sample (Uni Study) reported in Chapter 3, shows that people tend to update their perceptions of the societal norms and perceive *a less intolerant societal norm* toward sexual minorities as a response to *changes in the legal situation*.
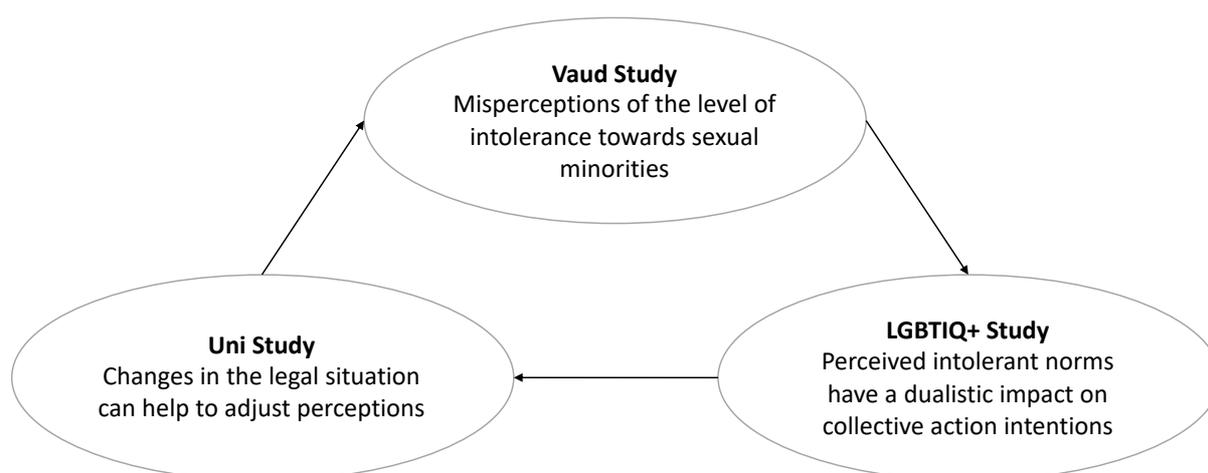
Figure 18. Circular Dynamic Between the Findings of the Three Studies

In sum, the present thesis suggests a circular dynamic whereby the social context influences social representations (*path D*), which, in turn, influence individuals' behavioral intentions (*path E*). The individual, in turn, influences the social context (*path F*), leading to a constant interaction between the social context and the individual. This circular dynamic shares similarities with Coleman's (1986, 1987) boat (i.e., a causal diagram for relating micro

and macro levels), as both conceptualize the interaction between macro and micro societal processes.

To account for the circular dynamic between the different level of analyses and the social change process, I propose the normative representation model of social change (see Figure 19). By integrating the notion of time, this model goes beyond many similar models proposed by social psychologists (e.g., Pettigrew, 1998, 2008; Doise, 1980) that account for the interaction between different levels. In the normative representation model, social change is represented through a sinusoid wave between the social context, normative representations, and the individuals that evolves over time.
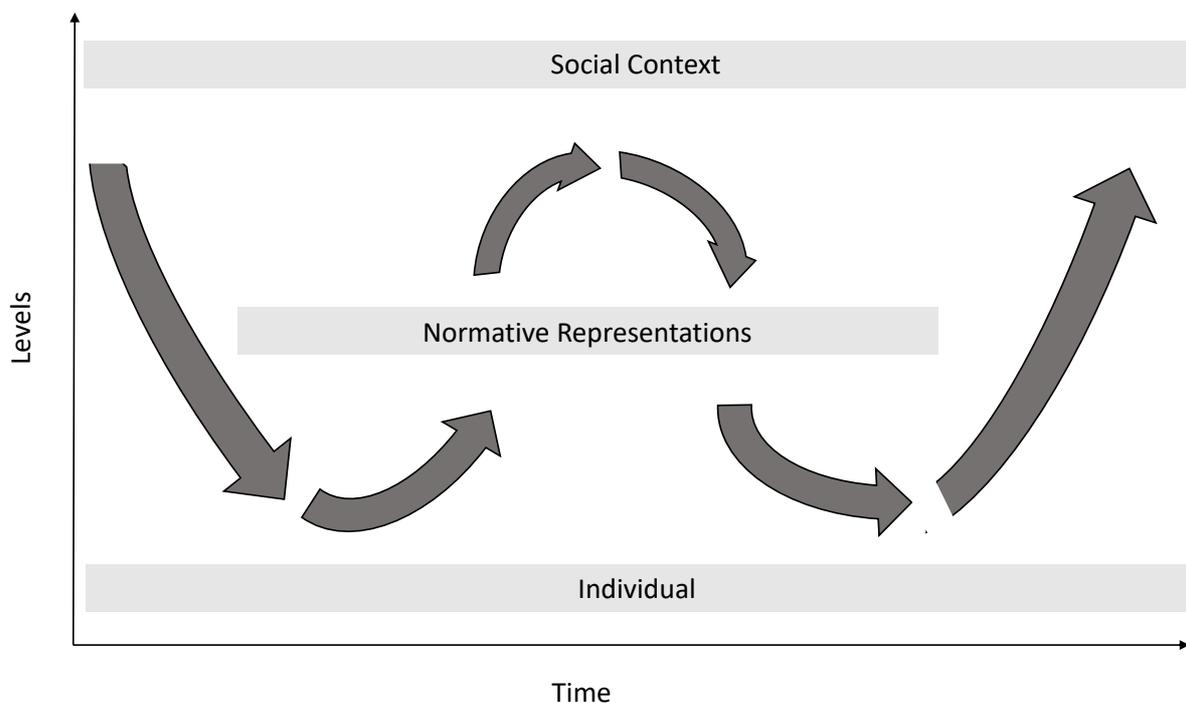
Figure 19. Normative Representation Model of Social Change

Including a time perspective in the model also brings additional considerations that would not have been as obvious before. For instance, one might wonder how the interaction shown in the three empirical chapters of this thesis can continue over time. Indeed, one may also imagine how the situation might evolve after changes in perceptions of the societal norms following institutional decisions. To illustrate, if people perceive the norm to be less

intolerant over time, they might be more likely to perceive that a movement to change the status quo will be efficient. This, in turn, might foster engagement in support for legal change, which then leads to changes in the perceived norms. This dynamic process can continue up to a point where people perceive the societal climate to be tolerant and might be less aware of and less angry about existing inequalities. This, in turn, might increase the assumption that the situation is getting better even without active engagement and may ultimately lead to less collective action.

This dynamic parallels findings in the spiral of silence literature. According to the spiral of silence theory, perceptions of the opinion climate (e.g., majority opinion) are key to understanding social change processes (Noelle-Neumann, 1974). The spiral of silence theory proposes that people mostly speak out in public when they perceive themselves to be a future or actual majority on an issue (Porten-Cheé & Eilders, 2015). In that sense, people who do not see support for their cause in the opinion climate might fail to express their opinion, perpetuating the unsupported social norm. While our findings of pluralistic ignorance toward sexual minorities might be due to a spiral of silencing (i.e., majorities of people who are tolerant of sexual minorities wrongly believe that they are a minority), they also suggest a spiral of (dis)engagement.

The 'spiral of (dis)engagement' might help us to better understand the situation of women and their rights in Switzerland. At the time the work underlying Chapter 2 was accepted for publication, women's rights in Switzerland were, in general, not highly debated and were not at the center of the political agenda. Mirroring this rather static state, Swiss residents did not misperceive others' opinions toward working mothers and opinions and perceptions of others' opinions toward working mothers were rather neutral (see Eisner et al., 2019). The 'spiral of (dis)engagement' might serve as a theoretical framework to better understand this situation. To illustrate, it is possible that changes in the political situation for

women (e.g., women's rights or increase participation in the working market) has led to a perception of a quite tolerant societal norm toward women. In this situation, perceptions of norms as being 'too' tolerant toward women might have inhibited collective action intentions and political actions in the past.

However, since the time the work underlying Chapter 2 was conducted, many things have changed for women in the international and national spheres. First, there was the emergence of the '#MeToo' movement, which pointed out the sexual harassment that women still face. This may have shifted the focus to the recurring intolerant norms and, hence, triggered anger and collective action to change the situation. Second, in the Swiss context, a large campaign started in 2018 aimed to mobilize women and allies to engage in a large demonstration on the 14 of June 2019. A central goal of this campaign was to raise awareness about the persistent inequalities and discrimination that women still face. This focus on the recurrent intolerant norms might have triggered anger about the situation and therefore facilitated collective action intentions. Indeed, this call led to a massive participation of women* and allies in the demonstrations: Between 300'000 and 500'000 of people demonstrated in the streets of Switzerland on the 14th of June 2019. More generally, these changes that characterize the gender context seem to indicate that a new normative window of time (Crandall et al., 2013) has opened for women and gender equality.

Practical Implications

Implications for the political debate. Overall, the findings of the present thesis have high practical relevance. The present thesis provides additional evidence that people tend to overestimate the level of intolerance in their society (also called conservative lag) for debated or changing issues. This effect was already documented in other contexts and for other social issues (e.g., racial issues in the US; O'Gorman, 1975). Findings presented in this thesis add to the literature by showing that people, independently of their political orientation, wrongly

perceive an intolerant norm toward sexual minorities. Communicating about this misperception can have important political implications. First, it can impact political strategies among liberals, as it might motivate liberals to reach out to the population and legitimize political actions to improve the situation of sexual minorities. Second, it can impact the political strategies among conservatives who might in some cases change their strategies in order to avoid losing support from the population. Indeed, political parties often take the majority opinion in their country into consideration when they run their political campaign. As an illustration of this, one might use the example of the Swiss Christian Democratic people's party, which was initially publicly against same-sex marriage. In 2019, however, the Christian Democratic people's party made multiple statements in favor of sexual minorities' rights. This raises the question as to whether the changes in strategies of political parties are also related to changes in perceptions of the societal norms concerning sexual minorities.

Implications for policy makers. In addition, the present thesis highlights the influence of institutions on individuals' lives. Institutions send strong messages about the direction in which the society is heading (Tankard & Paluck, 2016). As shown in Chapter 3, new institutional decisions affected perceptions of societal norms toward sexual minorities. Consequently, new institutional decisions strengthening sexual minority rights seem to have a dual impact on a society, improving not only the legal situation for sexual minorities, but also shifting perceptions of the societal norm by setting a new status quo, which is more inclusive of sexual minorities. In that sense, these findings also present a strong message to policy makers that institutional changes are central and impactful in many ways. On the other hand, this also suggests that slow and incremental organization of the political system in Switzerland might negatively impact individuals who would benefit from the direct and indirect consequences of the implementation of new rights.

More specifically, the results of the present thesis should inform past and current discussions in the Swiss Parliament regarding same-sex marriage. As mentioned previously, a new law on same-sex marriage was suggested by Parliament in 2013. In 2018, Parliament suggested a two-step procedure on same-sex marriage. First, Swiss citizens will have to vote on same-sex marriage only ('marriage light'). In a second step, citizens will have to vote on other rights, such as assisted procreation for same-sex couples and female widow pension (until now, women in a partnership receive the reduced male widow pension instead of the highest female widow pension). The main argument from the Parliament was that this light version was more likely to be accepted by the majority of Swiss citizens. Although Parliament recently opted in favor of this light version, the fact that this new law might not only change the legal situation, but also lead to more tolerant societal norms toward sexual minorities might lead to the implementation of more inclusive laws.

Implications for vulnerable populations. The examined overestimation of intolerance toward sexual minorities has high practical relevance for sexual minority members themselves. Sexual minorities (but also people who support them) might be negatively affected by perceptions of an intolerant norm toward them. Indeed, perceiving an intolerant norm can affect feelings of connectedness and inclusion in society (e.g., Cialdini & Goldstein, 2004; Prentice & Miller, 1993), feelings of discrimination (Schmitt et al., 2014), and sexual minorities' general well-being (e.g., Badgett, 2011; Meyer, 2013). Hence, in order to buffer against these negative consequences on minorities' and allies' well-being, it seems crucial that individuals are not only informed about the actual tolerant climate, but that new institutional signals reflect changes toward more inclusiveness as well (Eisner, Turner-Zwinkels, et al., 2020).

Implications for the Swiss context. The studies reported in the present thesis are also unique portrayals on the situation for LGBTIQ+ individuals in Switzerland. First, the quasi-

representative data collected in the canton of Vaud provides a unique opportunity to assess

the public opinion toward different LGBTIQ+ issues. It is important that future research and

large representative surveys include measures of opinions toward sexual minorities as well as

gender minorities. Second, little research directly investigates the impact of actual

implemented laws on individuals. Data from the second study (i.e., university of Lausanne

Study) provides the unique opportunity to assess the impact of such laws on individuals and,

especially, their perception of the Swiss opinion climate. Finally, existing research focusing

on the LGBTIQ+ population in Switzerland has often placed a particular emphasis on

subgroups of this population (e.g., gay people) in specific language regions and little research

has been conducted among different subgroups such as trans people (for an exception see for

instance Ott et al., 2017) or bisexual individuals. The national LGBTIQ+ survey reported in

the third empirical chapter of the present thesis allows for an impression of the situation of

subgroups of the LGBTIQ+ community (e.g., more than 100 trans people residing in

Switzerland participated in the survey). This data combined with dissemination of analyses

describing the general situation (see Eisner & Hässler, 2019a) offer the unique opportunity to

provide a (not yet representative) overview of the situation of lesbian, gay, bisexual, trans,

intersex, and questioning individuals residing in the four linguistic regions of Switzerland.

Bridging the gap between academia and communities. The studies reported in the

present thesis draw on opinions, perceptions, and behavioral intentions of different

populations. Understanding people's opinions, perception of the societal climate, and

behaviors is essential to offering targeted implementations that aim to address inequalities in

the LGBTIQ+ context. Therefore, the results of the present thesis can inform activists,

organizations, and policy makers who aim to improve the situation for LGBTIQ+ individuals

in the Swiss society. In order to achieve this goal, different tools were mobilized to share the

findings of the present studies with the Swiss population.

First, in order to bridge the gap between academia and the general public, a newsletter presenting the main findings of the Vaud study was shared with participants (see supplementary material). The Vaud study asked residents about their opinions toward sexual minority issues as well as opinions toward different family forms and gender roles. Second, a newsletter presenting the main findings of the university (Uni) study was shared with the participants (see supplementary material). The university study included not only relevant items for Chapter 3, but also items related to homophobia in sport and homophobia in the university context. These items are part of an additional project (in collaboration with Tabea Hässler), which involves data collected at the University of Lausanne, University of Zurich, and the University of Cologne. Finally, the goal of the LGBTIQ+ study was to not only inform about collective action intentions, but also to better understand the situation for LGBTIQ+ individuals in Switzerland. Hence, the questionnaire also included questions tapping into other LGBTIQ+ issues, such as coming-out (for members of sexual and gender minorities), experiences and perceptions of discrimination, and well-being. We wrote a summary report to share the main findings with participants and LGBTIQ+ organizations (Eisner & Hässler, 2019a). Moreover, we also had the chance to write a short article "Perceiving intolerance... how perception can influence reality in social change movements" posted on "the social change lab blog" (Eisner & Hässler, 2019b). By sharing the results, I hope to bridge the gap between academia and the general public and to inform policy makers about the current climate.

Potential Objections and Future Direction

The present thesis makes important contributions to the literature on pluralistic ignorance, social norms, and collective action, and highlights the value of relying on a variety of samples from different social groups. Some potential limitations that point to new directions for future research need to be acknowledged, however.

CHAPTER 5: GENERAL DISCUSSION

Practical limitations. First, the three empirical chapters focus on perceptions of others' opinions (as perceived norms). A central argument for this focus is that perceived norms are significant in that they have a direct impact on individuals' lives through their feelings and actions. While the impact of norm perception on behavioral intentions was investigated in Chapter 4 of the present thesis, none of the empirical studies have directly addressed the influence of norm perceptions on well-being. Norms, however, have been shown to exert a strong influence on how individuals feel (Goldberg & Smith, 2011; Hatzenbuehler, 2011; Oswald, Routon, McGuire, & Holman, 2018). Moreover, recent evidences based on correlational studies suggest that clear and coherent policies impact perceptions of norms, which then impact individuals' well-being through personal attitudes (de la Sablonnière et al., 2020). These initial evidences suggest that well-being (as an individual factor) could also be integrated in the normative model of social change. Future research should aim at testing the impact of laws on perceptions of the norm and well-being of different populations (e.g., LGBTIQ+ individuals, allies, and opponents) longitudinally.

Samples biases. The Vaud Study relies on a quasi-representative sample of the population; however, this was not the case for the university and LGBTIQ+ studies. A quasi-representative cross-sectional sample allows us to generalize the findings to the general population with more confidence (given sampling and measurement errors). However, this method also comes at a cost. Populations that are hard to reach, such as sexual and gender minorities, cannot easily be recruited via (quasi-)representative samples. Consequently, I decided to rely on a snow-ball sampling method to reach out to as many sexual (and gender) minority members as possible. This questions the generalizability of the findings of the LGBTIQ+ study. Rather than drawing on an accurate picture of the degree of misperception among LGBTIQ+ individuals in Switzerland, the main goal of Chapter 4 was to better understand the psychological processes underpinning the impact of perceived societal norms

on collective action intentions. Future research should aim to replicate findings in the

LGBTIQ+ sample concerning different issues (e.g., gender inequalities or racial

discrimination) and different samples (e.g., ethnic and religious minorities, people with

disabilities, low SES individuals).

Measurement biases. Despite the fact that all the studies contained in this thesis

assess perceptions of others' opinions, the phrasing of the items does sometimes vary. When

developing the first questionnaire for the study on residents of the canton of Vaud, I decided

to use a phrasing that was pre-tested and validated in the European Social Survey (ESS,

2006). These items simultaneously assess strength (level of disapproval) and expression

(openly vs. secretly) of perceived others' opinions. During the course of my thesis, I realized

that this phrasing did not allow us to test for the differences in strength of opinions directly.

Moreover, the phrasing of the items might also have led to additional errors, such as

satisficing (see Roberts, Allum, Gilbert, & Eisner, 2019), due to their complexity (e.g., some

of the non-responses in the Vaud Study might be due to the complexity of the item). I

accounted for this bias by recoding the items to cancel out the effect of the expression of

opinions in Chapter 2 and 3. In addition, in the LGBTIQ+ study, I adapted the phrasing of the

items, focusing only on opinion strength. I also assessed the items on a 7- instead of 5-point-

Likert scale to allow for more variability in the answers. Consequently, the phrasing of the

items and response categories changed during the course of my thesis.

Moreover, the measures of perceived others' opinions between the studies did not

only differ in their phrasing but were assessed regarding different groups of reference that

vary in their degree of proximity to the respondent. In Chapter 2, the analyses are based on

perceptions of most friends' and relatives' opinions, most neighbors' opinions, and most

people's opinions. In Chapter 3, the analyses are based on the opinions of most residents of

the canton of Vaud and most Swiss people's opinions. Finally, in Chapter 4, the focus is on

perceptions of most Swiss people's opinions. These variations were determined by the theoretical framework described in the empirical chapters (i.e., Chapter 2: pluralistic ignorance as social distance; Chapter 3: pluralistic ignorance as accuracy, and the effect of an institutional decision in Switzerland on the Swiss population; Chapter 4: perceived societal norms at the societal level).

These variations in groups of reference also reflect the plurality of perceptions. People are aware of what is happening in other societies, which is reflected by more global perceptions. At the same time, one's perception can be affected by local differences. Even within a society, certain groups differ in their degree of tolerance and their laws or policies differ in the inclusiveness of certain groups. It is therefore important to keep in mind that a society itself does not have a singular stance and people do recognize this plurality in their action. There is a need for future research to acknowledge this plurality more by investigating the effects of perceptions of norms at different level (e.g., more global in Europe in general and more local among peers or allies) on collective action intentions.

Social desirability bias. Another central limitation of the three empirical chapters is a potential social desirability bias. Social desirability bias arises when participants are asked questions about socially sensitive issues (Glynn 1989), such as homosexuality, or desirable behaviors (e.g. Powell, 2013; Tourangeau & Yan, 2007). Social desirability might have affected part of the results presented in this thesis in different ways.

First, because participants in the Vaud and university studies were asked to report their opinion toward sexual minority issues, some participants might have failed to report their intolerant opinions. Instead, they might have projected their "true" opinion when reporting their perceptions of others' opinions (Glynn, 1989). To account for this potential bias, I used different procedures aiming to minimize social desirability bias during data collection for the Vaud and the university study. In the Vaud study, participants i) were told

that their answers would be analyzed anonymously and would only be used for the purpose of this study, ii) received the questionnaire at home and had to send it back anonymously by post, iii) were told that the questionnaire was a study on different family forms (thus, it was not centered around homosexuality). In the university study, i) participants were also assured of the confidentiality of their answers, ii) they had to place the completed questionnaire in a blank envelope that prevented identification, iii) the main findings of the study are based on norm perceptions rather than actual opinions.

In addition to the effects mentioned above, research on ambivalent attitudes suggests that people who hold ambivalent opinions are able to adapt themselves to the pressure of the majority and strategically control their expressed opinions, which can also be seen as a form of social desirability. Particularly, research shows that expressing ambivalent attitudes can be positively valued in the debate of controversial issues (see Pillaud, Cavazza, & Butera, 2013). If this is the case, people holding ambivalent attitudes toward sexual minorities might have expressed a more neutral position due to the controversial nature of such an attitude object. This seems, however, rather unlikely given the actual distribution of personal opinions (i.e., regression to the mean for attitudes toward working mothers—a non (or less)-controversial issue—and more balanced opinions toward sexual minorities—a controversial issue).

Finally, social desirability may have affected the results presented in the LGBTIQ+ study. Indeed, people tend to overreport desirable behaviors or intentions, such as collective action intentions (see also principle-implementation-gap; Dixon et al., 2007). Hence, it is likely that the high levels of collective action intentions found in the LGBTIQ+ study are also due to social desirability bias. To address this, future research should try to assess not only behavior intentions but actual behaviors as well.

Study design biases. A final important limitation of the present thesis is that the cross-sectional nature of the data does not allow for the assessment of causality—with

exception of the experimental data from the university study. Consequently, most of the findings should be replicated using longitudinal data or an experimental design. For instance, looking at the evolution of the perceptions of norms over time would allow us to better understand how they interact with personal opinions, especially in a time of social change. Moreover, longitudinal data as well as experimental data would also allow us to directly assess the impact of perceived norms on collective action intentions. It would also allow us to test the model of a spiral of disengagement suggested in the discussion of the present thesis. In order to address part of these limitations, I am currently building a Swiss LGBTIQ+ panel together with Tabea Hässler (we began the second wave of data collection in December 2019). Despite the limitations mentioned above, the findings discussed in all the three empirical chapters offer new possibilities for future research that should investigate the evolution of perceptions of norms over time, across different issues, and their impact on actual behaviors and, ultimately, on the social change process.

Positioning of the researcher. A central goal of my work is to address social and institutional equalities. It is important to acknowledge that my personal history has had a strong influence on the topics addressed in my research. To conduct my research, gather survey participants, and disseminate the findings, I have relied on several networks that I have built within and outside of the academic world. Throughout my work, I have conducted research that is significant to both me and the social world. I have always endeavored to maintain my perspective as a researcher and leave action and activism to organizations, private actors, or policy makers. For this reason, it has always been crucial to me to disseminate the findings of my research and share it with people who engage and act for greater equality for all.

CHAPTER 5: GENERAL DISCUSSION

Conclusion

"There are things known and there are things unknown,

and in between are the doors of perception." Aldous Huxley

When people interact with others, they do so by taking in consideration what other people think. A central goal of the present thesis was to better understand *when* and *why* people might hold wrong assumptions about the opinions of others. People might be more likely to misperceive others' opinions (also called pluralistic ignorance) in a time of social change and for debated issues. Specifically, Chapter 2 demonstrated that while people held relatively accurate perceptions of the opinions of residents in the canton of Vaud about working mothers, they assumed others to be in general less tolerant toward same-sex female parenting and other LGBTIQ+ issues than they actually were. This indicates that people might, at least on occasion, overestimate the level of intolerance toward LGBTIQ+ individuals in the society. Such findings have important implications for LGBTIQ+ individuals, their families, and their friends as they often worry about how others' in the society react to one's sexual and/or gender minority identity.

Drawing on the finding that people overestimate the level of intolerance toward LGBTIQ+ individuals, another central goal of this thesis was to better understand *how to change* these perceptions. To answer this question, Chapter 3 explored how perceptions can be changed and particularly the role that new institutional decisions play in this process. The findings indicate that changes in laws affect perceptions of others' opinions: People perceived others to be less disapproving of sexual minority issues when they were informed about a new law legalizing stepchild adoption for same-sex couples. This indicates that new institutional decisions strengthening sexual minority rights seem to have a dual impact on a society, improving not only the legal situation, but also shifting perceptions of the societal norm by setting a new status quo, which is more inclusive of sexual minorities. Hence, these

findings also present a strong message to policy makers and LGBTIQ+ activists that institutional changes are central and impactful in many ways.

Having demonstrated that misperceptions are stronger for debated topics and that they can be impacted by institutional changes, the final goal of the present thesis was to understand how (mis-)perceptions of others' opinions *impact behavioral outcomes* such as people's willingness to strive for social change. To provide an answer to this question, the final study reported in Chapter 4 examined the impact of (mis-)perceptions of others' opinions on individuals' willingness to support social change in the LGBTIQ+ context. Results indicate a dual and contradictory pathway between perceptions of others' opinions in the society and support for social change. Perceiving that others are intolerant (see Chapter 2 and 3) simultaneously motivates but also demotivates people to engage in support for social change. This implies that practitioners and advocates need to address the harmful overestimation of the level of intolerance toward LGBTIQ+ individuals, while acknowledging anger about existing inequalities and the importance of working toward equal rights. In that sense, targeted messages such as "Time's up: For Marriage Equality", or "The Swiss population is ready to go for equality, let's move forward" might be highly effective in motivating people to engage in support for social change.

These findings conclude a long journey from illustrating the degree of misperceptions to the investigation of their real-life impacts. The conclusions of the present thesis can be best summarized by a statement made by one participant in the LGBTIQ+ study. This participant —a 24-year-old lesbian woman—explained her engagement in the LGBTIQ+ context with the following statement:

"I believe that everyone should have the same rights and, as a member of the LGBTIQ+ community, I wish I could live in a world where I am not considered a second-class citizen. I do not think that the Swiss public opinion is truly against

change. I think that Swiss politicians just refuse to take risks and see this type of

change as too big. We must always do everything very slowly and in the end, the

Swiss legal framework does not really correspond to the real opinion of the

majority but only to that of a conservative part of the population which is

important but a minority and the only way to make that happen is to be heard."

The statement of this participant resonates well with the present PhD thesis and Moscovici's

(1976, p. 93) saying on social influence— "In any case, the conditions for exerting influence

remain unchanged: one must exist and be active".

Appendix

Chapter 2

Main Measures

Perceptions of others' opinions. How do you think most people of these groups would react in these different situations? *There are no right or false answers. Please provide an approximation of your perceptions*:

If a same-sex female couple would raise a child, most people would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

If a same-sex female couple would raise a child, most of your neighbors would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

If a same-sex female couple would raise a child, most of your friends and relatives would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

If a woman has full-time job while she has a child aged under 3, most people would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

If a woman has full-time job while she has a child aged under 3, most of your neighbors would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

If a woman has full-time job while she has a child aged under 3, most of your friends and relatives would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

APPENDIX

Personal opinions. We will know ask you questions regarding your personal opinions about different family forms. Please indicate the extent to which you approve these different situations.

To what extent do you approve or disapprove of a same-sex female couple bringing up a child? 1 "strongly disapprove", 2 "slightly disapprove", 3 "neither approve nor disapprove", 4 "slightly approve", 5 "strongly approve".

To what extent do you approve or disapprove of a woman having a full-time job while she has a child aged under 3? 1 "strongly disapprove", 2 "slightly disapprove", 3 "neither approve nor disapprove", 4 "slightly approve", 5 "strongly approve".

Political orientation. On political issues, when people talk about right and left, where would you place yourself? 1 "far left", 2 "left-wing", 3 "center-left", 4 "center", 5 "center-right", 6 "right-wing", 7 "far right".

APPENDIX

Supplementary Material

Table S1

Summary Hierarchical Cluster Classification for Opinions Towards Working Mothers by

Cluster

Cluster	N	Means			
		Personal	Friends	Neighbors	People
1	438	2.23	1.99	2.45	2.42
2	289	4.26	3.83	3.11	2.83

Table S2

Logistic Regression Analyzing Likelihood of Being in the False Consensus Cluster towards

Working Mothers

	Odds Ratio	95% Confidence Interval
Intercept	2.15	[0.91; 5.11]
Sex (male)	1.07	[0.75; 1.54]
Age	1.00	[0.99; 1.01]
Level of education (university degree)	0.68	[0.47; 1.01]
Level of religiosity	1.07	[0.95; 1.22]
Geographic category (rural)	1.12	[0.78; 1.63]
Political orientation	1.07	[0.92; 1.24]

Note. *** $p < .001$, ** $p < .01$, * $p < .05$, $n = 706$, Nagelkerke $R^2 = .013$, Accuracy = 74.1 %

APPENDIX

Chapter 3

Main Measures

    Study 1.

    Perceptions of others' opinions. How do you think most people of these groups would react in these different situations? *There are no right or false answers. Please provide an approximation of your perceptions*:

    If a same-sex female couple would raise a child, most residents in the canton of Vaud would … 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

    If a same-sex male couple would raise a child, most residents in the canton of Vaud would … 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

    If a same-sex couple would get married, most residents in the canton of Vaud would … 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve", 6 "I don't know".

    Personal opinions. We will know ask you questions regarding your personal opinions about different family forms. Please indicate the extent to which you approve these different situations.

    To what extent do you approve or disapprove of a same-sex female couple bringing up a child? 1 "strongly disapprove", 2 "slightly disapprove", 3 "neither approve nor disapprove", 4 "slightly approve", 5 "strongly approve".

    To what extent do you approve or disapprove of a same-sex male couple bringing up a child? 1 "strongly disapprove", 2 "slightly disapprove", 3 "neither approve nor disapprove", 4 "slightly approve", 5 "strongly approve".

To what extent do you approve or disapprove of a same-sex couple getting married? 1 "strongly disapprove", 2 "slightly disapprove", 3 "neither approve nor disapprove", 4 "slightly approve", 5 "strongly approve".

Study 2.

Manipulation. Since January 2018, a new law on adoption has been implemented in Switzerland. Before, same-sex couples were not allowed to adopt children, now they can adopt the child of their partner. Have you ever heard of this law? 1) No; 2) Yes, but I am not familiar with it; 3) Yes, I am familiar with it

Perceptions of others' opinions. How do you think most people of these groups would react in these different situations? *There are no right or false answers. Please provide an approximation of your perceptions*:

If a same-sex female couple would raise a child, most residents in the canton of Vaud would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve".

If a same-sex male couple would raise a child, most residents in the canton of Vaud would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve".

If a same-sex couple would get married, most residents in the canton of Vaud would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve".

Personal opinions.

If a same-sex female couple would raise a child, I would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve".

APPENDIX

If a same-sex male couple would raise a child, I would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve".

If a same-sex couple would get married, I would ... 1 "openly disapprove", 2 "disapprove without saying it", 3 "not mind either way", 4 "approve without saying it", 5 "openly approve".

APPENDIX

Supplementary Material

Vaud study: pluralistic ignorance toward same-sex parenting and marriage unweighted dataset. To test for pluralistic ignorance, the analyses were also conducted on the unweighted dataset. In line with findings reported in the article, there is evidence of a mismatch between perceptions and opinions. Specifically, paired t-tests revealed evidence of a mismatch between perceived societal norms and personal opinions. Participants significantly overestimated the level of disapproval toward same-sex male parenting ($M_{perception} = 4.23$ vs. $M_{opinion} = 3.18$, $t(828) = 20.17$, $p < .001$), same-sex female parenting ($M_{perception} = 3.99$ vs. $M_{opinion} = 2.99$, $t(828) = 19.70$, $p < .001$), and same-sex marriage ($M_{perception} = 3.72$ vs. $M_{opinion} = 2.68$, $t(828) = 19.56$, $p < .001$.

Vaud study: perceived and actual level of disapproval toward same-sex parenting and marriage. We assessed how many people were in disapproval of same-sex marriage and parenting, and how many people perceived that the majority of the population is in disapproval of same-sex marriage and parenting, respectively. We calculated the percentage of disapproval for personal opinions (4–5 = *disapproval*, 1–3 = *approval or neutral*) and most residents of the canton of Vaud's opinions (4–5 = *perceived disapproval*, 1–3 = *perceived approval or neutral*).

First, ne sample t-tests were conducted to test whether a minority of participants (less than 50%) was in disapproval of same-sex male parenting, female parenting, and marriage. Second, we tested whether a majority of participants (more than 50%) perceived that other residents are in disapproval of same-sex parenting/marriage. All the results displayed in this section are based on the weighted dataset. In general, participants showed the greatest disapproval toward same-sex male parenting (44.9%), followed by same-sex female parenting (38.2%) and same-sex marriage (27.0%; all the differences were significant at $p < .001$).

APPENDIX

The data revealed evidence of a mismatch between perceptions and opinions (see Table S3). A minority of participants disapproved of same-sex male parenting (44.9%), while a large majority of them (87.7%) thought that most residents of the canton of Vaud would disapprove. Similar results were observed for same-sex female parenting (38.2% of disapproval, 80.8% perceived disapproval) and same-sex marriage (27.0% of disapproval, 64.1% perceived disapproval). These results are consistent with a pattern indicating pluralistic ignorance.

Table S3

Percentage of Disapproval Using One-Sided t-Tests for Comparison With 50% (Study 1)

Item	Disapproval %	90% CI	One-sided *t* test
Same-sex male parenting			
Personal opinion	44.9	[42.0, 47.9]	− 2.85[**]
Most residents' opinion	87.7	[85.6, 89.7]	30.63[***]
Same-sex female parenting			
Personal opinion	38.2	[35.3, 41.1]	− 6.71[***]
Most residents' opinion	80.8	[78.4, 83.2]	20.97[***]
Same-sex marriage			
Personal opinion	27.0	[24.5, 29.5]	− 14.93[***]
Most residents' opinion	64.1	[61.2, 67.1]	7.89[***]

Note. The analyses were conducted on the weighted data. *** $p < .001$, ** $p < .01$, one-tailed, df = 828.

Vaud study: personal opinions and perceived norms toward same-sex female and male parenting. There was a significant interaction between group of reference and age for same-sex female parenting, $F(1, 827) = 50.61$, $p < .001$, $\eta_p^2 = .058$, and same-sex male parenting, $F(1, 827) = 56.73$, $p < .001$, $\eta_p^2 = .064$. For same-sex female parenting and same-sex male parenting, the effect sizes were stronger among younger participants— $F(1, 828) = 375.86$, $p < .001$, $\eta_p^2 = .31$ and $F(1, 828) = 402.87$, $p < .001$, $\eta_p^2 = .33$ – and weaker among

older participants— $F(1, 828) = 86.38$, $p < .001$, $\eta_p^2 = .09$ and $F(1, 828) = 88.14$, $p < .001$, $\eta_p^2 = .10$.

Finally, there was a significant increase in score of personal disapproval toward same-sex female parenting and same-sex male parenting with age— $F(1, 828) = 47.77$, $p < .001$, $\eta_p^2 = .05$ and $F(1, 828) = 77.75$, $p < .001$, $\eta_p^2 = .09$. However, we found that perceptions of most residents in the canton of Vaud's opinions toward same-sex female parenting and same-sex male parenting were not dependent on the age of the respondent— $F(1, 828) = 0.57$, $p = 0.45$, $\eta_p^2 < .001$ and $F(1, 828) = 3.37$, $p = .067$, $\eta_p^2 = .004$.

Uni study: perceived and actual level of disapproval toward same-sex parenting and marriage. We looked at the percentages of personal opinions disapproval and the percentages of perceived societal norm disapproval across conditions, following Study 1's analytical approach (see Table S4). While the minority of students was in disapproval of same-sex parenting (male = 18.8%, female = 13.3%) and same-sex marriage (8.9%), a majority of students perceived that most Swiss people would disapprove of same-sex male parenting (80.1%) and same-sex female parenting (71.6%). However, and contrary to Study 1, students perceived that a minority of Swiss people would disapprove of same-sex marriage (39.8%). Thus, the perceived societal norm was in disapproval of same-sex parenting but not of same-sex marriage.

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Table S4

Percentage of Disapproval Using One-Sided t-Tests for Comparison with 50% (Study 2)

Item	Disapproval %	90% CI	One-sided t test
Same-sex male parenting			
Personal opinion	18.8	[15.1, 22.5]	-13.87^{***}
Most Swiss people's opinion	80.1	[76.9, 83.2]	15.74^{***}
Same-sex female parenting			
Personal opinion	13.3	[10.6, 16.0]	-22.60^{***}
Most Swiss people's opinion	71.6	[68.1, 75.2]	10.02^{***}
Same-sex marriage			
Personal opinion	8.9	[5.6, 12.2]	-20.36^{***}
Most Swiss people's opinion	39.8	[36.0, 43.7]	-4.34^{***}

Note. *** $p < .001$, one-tailed, $df = 436$

Uni study: influence of the law on perceptions and opinions toward same-sex female and same-sex male parenting. For perceived Swiss people's opinions toward same-sex male parenting, we found a significant interaction between information about the law and prior knowledge about the law, $F(1, 433) = 10.84, p = .001, \eta_p^2 = .02$. Participants who had prior knowledge about the law perceived less disapproval when they were informed about it ($M = 3.79$) than not ($M = 4.17$), $t(433) = 2.99, p = .001, \eta_p^2 = .02$. However, in the no information about the law condition, participants who had prior knowledge about the law ($M = 3.98$) did not perceive less societal disapproval than participants who had no prior knowledge about the law ($M = 4.17$), $t(433) = 1.67, p = .10, \eta_p^2 = .01$. Finally, among the participants who had prior

knowledge about the law, means of perceived societal disapproval did not differ between the two conditions, $t(433) = 1.40$, $p = .162$, $\eta_p^2 = <.001$.

For perceived Swiss people's opinions toward same-sex female parenting, we found a significant interaction between information about the law and prior knowledge about the law, $F(1, 433) = 10.39$, $p = .001$, $\eta_p^2 = .02$. Participants who had no prior knowledge about the law perceived more approval when they were informed about it ($M = 3.53$) than not ($M = 4.00$), $t(433) = 3.77$, $p < .001$, $\eta_p^2 = .03$. Moreover, in the no information about the law condition, participants who had prior knowledge about the law ($M = 4.00$) perceived slightly less societal disapproval than participants who had no prior knowledge about the law ($M = 3.72$), $t(433) = 2.32$, $p = .021$, $\eta_p^2 = .01$. Finally, among the participants who had prior knowledge about the law, means of perceived societal disapproval did not differ between the two conditions, $t(433) = 0.69$, $p = .490$, $\eta_p^2 = <.001$.

In contrast to perceptions, we found no significant interactions between information about the law and prior knowledge about the law for personal opinions toward same-sex male parenting, $F(1, 433) = 0.22$, $p = .643$, $\eta_p^2 < .01$, and same-sex female parenting, $F(1, 433) = 0.28$, $p = .598$, $\eta_p^2 < .01$

Chapter 4

Main Measures

Identification with opinion-based group. In this first section, we will ask you questions regarding your belonging to the LGBTIQ* (lesbian, gay, bisexual, trans*, intersex, queer and questioning) community and your coming-out. Since members of sexual minorities (for example lesbians, gays, bisexuals) and gender minorities (for example, trans*, intersex) face different legal challenges, we will ask questions specifically targeting either sexual minorities or gender minorities.

I identify with people that support the rights of sexual minorities: 1 "strongly disagree" to 7 "strongly agree".

I feel strong ties with people that support the rights of sexual minorities: 1 "strongly disagree" to 7 "strongly agree".

Perceptions of other's opinions (i.e., perceived societal norms). In the next section, we want to understand what people think about sexual minorities (for example, lesbian, gay, and bisexual persons) and ask questions regarding the legal situation of LGBTIQ* individuals. *There are no right or false answers. Please provide an approximation of your perceptions, which can either be based on your personal experience or on a general idea/feeling*:

Most people in Switzerland would (dis)approve of improving the rights of sexual minorities: 1 "totally disapprove" to "4 "neither approve nor disapprove" to 7 "totally approve".

If two women in a relationship would raise a child (female same-sex parenting), most people in Switzerland would ...: 1 "totally disapprove" to "4 "neither approve nor disapprove" to 7 "totally approve".

If two men in a relationship would raise a child (male same-sex parenting), most people in Switzerland would ...: 1 "totally disapprove" to "4 "neither approve nor disapprove" to 7 "totally approve".

If a same-sex couple would get married, most people in Switzerland would ...: 1 "totally disapprove" to "4 "neither approve nor disapprove" to 7 "totally approve".

Anger about public opinion. In the next sections, we will ask you questions regarding your perspective on the situation of sexual minorities in Switzerland. We will first ask you questions about public opinion towards sexual minorities. Then we will ask you questions about their rights.

Public opinion towards sexual minorities in Switzerland displeases me: 1 "Not at all" to 7 "totally".

Public opinion towards sexual minorities in Switzerland makes me angry: 1 "Not at all" to 7 "totally".

Public opinion towards sexual minorities in Switzerland makes me furious: 1 "Not at all" to 7 "totally".

Anger about legal situation. Now we will ask you questions about sexual minorities' rights.

It displeases me that sexual minorities in Switzerland do not have the same rights as heterosexual persons: 1 "Not at all" to 7 "totally".

It makes me angry that sexual minorities in Switzerland do not have the same rights as heterosexual persons: 1 "Not at all" to 7 "totally".

It makes me furious that sexual minorities in Switzerland do not have the same rights as heterosexual persons: 1 "Not at all" to 7 "totally".

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Perceived efficacy of social movement. I believe that through joint actions we will improve the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

I think that, together, those who support sexual minorities will be successful in improving the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

Perceived legal change without social movement. The rights of sexual minorities in Switzerland will improve even without a social movement: 1 "strongly disagree" to 7 "strongly agree".

The rights of sexual minorities in Switzerland will get better even without our joint actions: 1 "strongly disagree" to 7 "strongly agree".

Collective action intentions. In the future I intend to engage in the following activities to improve the rights of sexual minorities in Switzerland:

Attending demonstrations to improve the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

Signing an online/regular petition to improve the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

Talking to [corresponding in-group] about ways to improve the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

Cooperating with [corresponding out-group] to improve the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

Supporting action that improve the rights of sexual minorities in Switzerland: 1 "strongly disagree" to 7 "strongly agree".

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Preregistration Plan

 Introduction. In many countries across the world, sexual and gender minorities have gained visibility and achieved greater acceptance in recent years. Despite these positive developments, sexual and gender minorities still face discrimination and suffer from structural inequality all over the globe (ILGA, 2017). Given the impact of legal discriminations on sexual and gender minorities' well-being (e.g., Fingerhut, Riggle, & Rostosky, 2011; Meyer, 2013; Rostosky, Riggle, Gray, & Hatton, 2007), it is important to understand when people engage in collective action to achieve greater social equality.

 Previous research has shown that individuals are more likely to engage in collective action when they (1) highly identify with their ingroup (e.g., with opinion-based groups; Bliuc et al., 2007 or politicized groups; Stürmer and Simon, 2004), (2) feel angry about group-based disparities (Mackie et al., 2000; Thomas et al., 2009), and (3) perceive that a social movement will be efficient in achieving its goal (Hornsey et al., 2006; Mummendey et al., 1999). These three factors have been integrated in the Social Identity Model of Collective Action (SIMCA; Van Zomeren et al., 2008), which posits that the direct positive effect of identification on collective actions intentions is partly mediated through anger about injustices and perceived efficacy of a social movement.

 However, research on collective action has largely neglected the role of perceived norms (for exceptions see McDonald, Fielding, & Louis, 2014; Smith & Louis, 2008), which have been shown to impact on intentions and behaviors (Cialdini & Goldstein, 2004). Hence, perceptions of what most people in the society disapprove or approve of (i.e., perceived societal norm) should be a central predictor of collective actions. Indeed, perceived (positive) societal norms might encourage collective actions through both increased perceived efficacy and anger about the legal situation. Yet, perceived (positive) societal norms might also reduce anger about public opinion and increase the perception that social change will happen

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anyway, which might discourage collective actions. Consequently, perceived (positive) societal norms might both encourage and discourage collective action through anger and perceived efficacy.

In the present research, we aim to understand when sexual minorities in Switzerland intend to engage in collective action to increase sexual minority rights. In Switzerland, sexual minorities suffer from many structural inequalities (ILGA, 2017). For instance, same-sex couples are not legally allowed to marry, make use of assisted procreation, or adopt children (with the exception of stepchild adoption since 2018). To predict engagement in collective action, we included the established motivators of collective action outlined in the SIMCA-model: identification, efficacy, and anger. Based on our reasoning, we also added the new concept 'perceived societal norm toward sexual minorities' as well as additional potential mediators - perceptions of change without the movement and anger about public opinions.

Hypotheses. Figure S1 shows the proposed model at the level of constructs. Based on the Social Identity Model of Collective Action and in line with empirical results (Van Zomeren et al., 2013), we expect that stronger identification with an opinion-based group (opinion-based identification) will be positively associated with collective action. Thus, in this case identification with the group of people who support equal rights for sexual minorities should predict engagement in action which promotes the rights of sexual minorities. Moreover, stronger identification with this opinion-based group should also be positively associated with anger about the legal situation for sexual minorities and efficacy perceptions, which will encourage collective action. Yet, individuals might not only be angry about the legal situation, but also about the perceived public opinion. Indeed, Swiss residents perceive public opinion toward sexual minorities to be rather negative (Eisner, Turner-Zwinkels et al., 2020). Therefore, we expect that anger about public opinion should positively affect collective action intentions. In addition, opinion-based identification should be

positively associated with anger about the public opinion toward sexual minorities in Switzerland. We hypothesize that:

H1: Opinion-based identification is positively associated with collective action intentions (direct effect).

*H2a: The positive direct effect between opinion-based identification and collective action intention should be partly mediated by anger **about the legal situation** for sexual minorities.*

*H2b: The positive direct effect between opinion-based identification and collective action intention should be partly mediated by anger **related to perceived public opinion** toward sexual minorities.*

*H2c: The positive direct effect between opinion-based identification and collective action intention should be partly mediated by **perceived efficacy of the social movement**.*

For the effect of positive perceived societal norms on collective action intentions, we expect the possibility of both positive and negative effects. A branch of research has found that perceived social support encourages collective action through increased anger and increased efficacy perceptions (Van Zomeren et al., 2004). In contrast, perceptions of positive societal norms might also evoke the sense that social change will naturally bend toward greater equality and does not require collective action. In addition, perceptions of positive societal norms might be accompanied by less anger about public opinion toward sexual minorities in a country. Hence, we have no firm expectations regarding the direct link between perceived positive societal norms and collective action intentions.

*H3a: Positive perceptions of societal norms should be **positively** associated with collective action among sexual minority individuals through <u>greater anger about the legal situation</u> for sexual minorities.*

*H3b: Positive perceptions of societal norms should be **positively** associated with collective action intentions among sexual minority individuals through greater <u>perceived efficacy of the social movement</u>.*

*H3c: Positive perceptions of societal should be **negatively** associated with collective action intentions among sexual minority individuals through <u>lower anger about the public opinion climate</u> toward sexual minorities.*

*H3d: Positive perceptions of societal norms should be **negatively** associated with collective action intentions among sexual minority individuals through <u>stronger perceptions that sexual minorities will achieve greater legal equality even without their active contributions</u> (which, in turn, should discourage collective action intentions).*

Finally, because we expect that Swiss people will perceive public opinion toward sexual minorities to be negative (see Eisner, Turner-Zwinkels et al., 2020), we therefore expect that anger about the legal situation and anger about public opinion should be positively correlated.
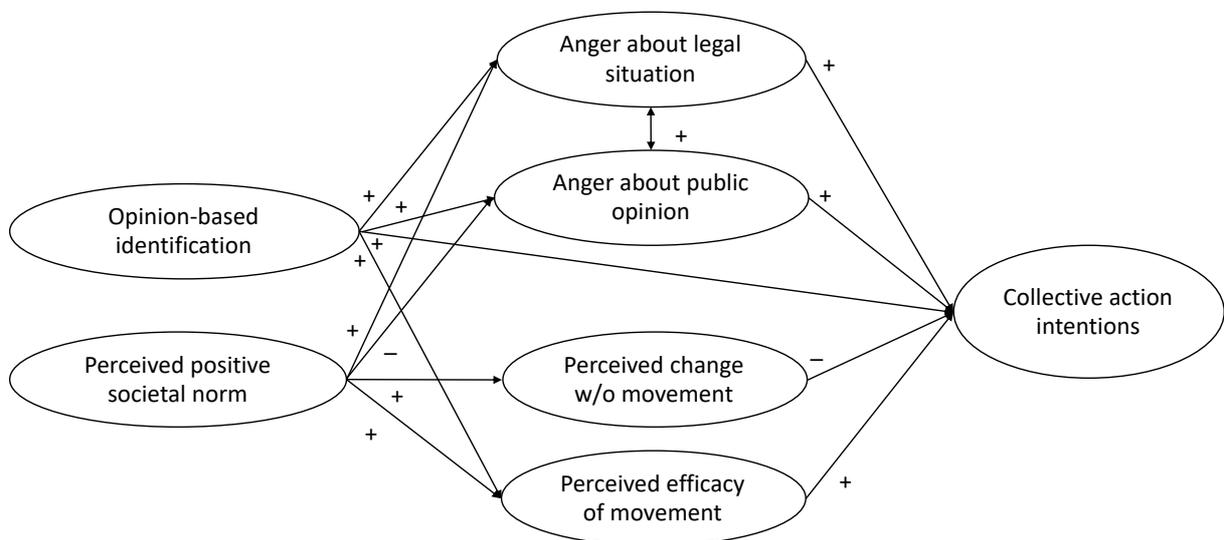

Figure S1. Normative Model of Collective Action

Measures. We will assess the following variables for the postulated model. We included additional variables for exploratory analyses and research unrelated to the current project. The complete questionnaire can be found online at **https://osf.io/zye6q/**

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Dependent variables. Collective action intentions. Five items adapted from Hässler et al. (2018) will be assessed on a 7-point-Likert scale (1 = strongly disagree, 7 = strongly agree). Participants will rate the extent to which they intend would like to engage in the following activities in the future to improve the legal situation of sexual minorities in Switzerland: (a) attend demonstration, (b) sign a petition, (c) cooperate with heterosexuals, (d) support actions to improve the legal situation of sexual minorities and (e) talk to sexual minorities.[26]

Independent variables.

Perceived societal norm. The three items used to assess perceived societal norms were adapted from the European Social Survey (2006). All items will be assessed on a 7-point-Likert scale (1 = *would totally disapprove*, 7 = *would totally approve*). Participants will rate their perception of most Swiss people's opinion toward (a) improving the rights of *sexual minorities*, (b) same-sex female parenting, (c) same-sex male parenting, and (d) same-sex marriage (e.g., "If a same-sex couple wants to get married, most people in Switzerland would…").

Identification with opinion-based group. The two items were derived from Bliuc and colleagues (2007), as well as Stürmer and Simon (2004) and will be assessed on a 7-point-Likert scale (1 = *not at all*, 7 = *totally*): (a) "To which extent do you identify with people that support the rights of *sexual minorities*?" and (b) "I feel strong ties with people that support the rights of sexual minorities."

Anger about legal situation. The two items were derived from Mackie et al. (2000). Participants will rate on a 7-point-Likert scale (1 = *not at all*, 7 = *totally*) the extent to which they feel (a) displeased, (b) angry, and (c) furious about the legal situation toward *sexual*

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[26] Talking to in-group members about disparities could be the first step that encourages them to engage in collective action. However, a large multinational (Hässler et al., 2018) study has shown that both members of disadvantaged and advantaged groups are hesitant to talk with in-group members about discrimination. Therefore, this item might not be included in the final analyses.

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minorities in Switzerland (e.g., "It makes me angry that *sexual minorities* do not have the same rights as heterosexual persons").

Anger about public opinion. The two items were adapted from Mackie et al. (2000) and assessed on a 7-point-Likert scale (1 = *not at all*, 7 = *totally*). Participants rated the extent to which they felt (a) displeased, (b) angry, and (c) furious about public opinion toward *sexual minorities* in Switzerland (e.g., "Public opinion toward *sexual minorities* in Switzerland makes me angry").

Perceived efficacy of social movement. The two items used to assess perceived efficacy of a social movement were adapted from Van Zomeren et al., (2012). All items were assessed on a 7-point-Likert scale (1 = *strongly disagree*, 7 = *strongly agree*): (a) "I believe that through joint actions we will improve the rights of *sexual minorities* in Switzerland," and (b) "I think that, together, those who support lesbians, gays, and bisexuals will be successful in improving the rights of *sexual minorities* in Switzerland."

Perceived legal change without social movement. We developed two measures to assess the perception that greater rights will be gained even without a social movement. These measures were adapted from Van Zomeren et al.'s (2012) items of perceived efficacy of a social movement. These items will be assessed on a 7-point-Likert scale (1 = *strongly disagree*, 7 = *strongly agree*): (a) "The rights of *sexual minorities* in Switzerland will improve even without a social movement" and (b) "The rights of *sexual minorities* in Switzerland will get better even without joint actions."

Planned sample. We will recruit members of sexual (e.g., lesbian, gay, and bisexual individuals) and gender (e.g., transgender persons, intersex persons[27]) minorities living in Switzerland through online platforms (e.g., social networking sites, snowball sampling, and

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[27] Transgender people have a gender identity/expression that differs from their assigned sex. Intersex refers to a person born with ambiguous sex characteristics that do not seem to conform to cultural or societal expectations of a distinctly male or female gender.

contacting relevant organizations in Switzerland) and on university campuses. Participating cis-heterosexual28 participants will be included in a second step to test whether the postulated model can be generalized. Rule of thumb guidelines for structural equation models are a minimum of 200 participants (Weston & Gore, 2006), but these are not without challenges (Wolf, Harrington, Clark, & Miller, 2013). We plan to collect at least 200 sexual minority members, and as many participants as possible, during the given time frame (January 2019 until end of February 2019) to reach an acceptable power.

Exclusion Criteria

We will include participants for our analyses who completed the questionnaire until the final collective action item and with less than 20% missingness on relevant items for the structural equation model (SEM).

Analysis plan. In order to test the postulated model (see Figure S2), we will only include sexual minorities (i.e., participants that self-identify as cis-gender or non-binary and lesbian, gay, or bisexual) as items are tailored towards sexual minorities.

In an exploratory fashion, we will assess whether the postulated model might also generalize to cis-heterosexual (solidarity-based support).

Note: While gender minorities belong to the LGBTIQ* spectrum, the legal situation differs in many regards. Hence, we confronted them with a specific sub-version in which we tailored the items towards gender minorities rights. If we recruit enough participants, we might run the same postulated model for this specific sub-sample.

Structural equation modeling (SEM). Data analyses will proceed in three steps. First, preliminary analyses will examine means, standard deviations, correlations, and construct validity for the measures. SEM using latent constructs will be used to test the postulated

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[28] Cisgender is a term for people whose gender identity matches the sex that they were assigned at birth. It is the opposite of the term transgender.

model. A two-phase approach, which separates the model into its measurement and its structural portions will be used to prevent overfitting of the final model. To deal with missing data and to account for possible non-normality we will apply robust maximum likelihood estimator (MLR) to determine the goodness-of-fit of the measurement and the structural model. The fit criterion that we will use is based on the following minimal values. Rule of thumb guidelines for acceptable model fit suggested by Hu and Bentler (1999) are a CFI of .95 or above, a RMSEA of close to .06., and a SRMR of close to .08. If the fit of the measurement model is not good, we might delete/rearrange single items. Next, we will assess the fit of the whole SEM. We will exclude outliers (defined as a distance 3 times the interquartile range away from the end of the box in Tukey's boxplot).

Additional exploratory analyses.

1) Perceived societal norm and collective action intentions to improve public opinion toward *sexual minorities*.

Since measures of perceived societal norms are linked to public opinion. We will also test for the effect of perceived societal norms on collective action intentions to improve public opinion about *sexual minorities*. We expect that the effect will be mediated through anger about public opinion and perceived efficacy of a movement to improve the public opinion. Hence, the questionnaire also includes three measures of collective action intentions to improve public opinion about *sexual minorities* (e.g., "Participating in a LGBTIQ* pride to improve public opinion about *sexual minorities* in Switzerland"). The questionnaire includes as well measures of perceived efficacy of a movement to improve public opinion about *sexual minorities* (e.g., "I think that, together, those who support *sexual minorities* will be successful in improving the rights of these groups in Switzerland").

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Supplementary Material

Deviation from the preregistration plan. This study follows a preregistration stored together with the code and data at:

https://osf.io/zye6q/?view_only=27a5b38c973847d9be4df7a38f8b1b67. We deviated from our original analytic strategy in two regards. First, we added a residual correlation between being furious about the legal situation and furious about public opinion, because the wording of the items was similar. In a similar vein, we also added a residual correlation between the perceived societal norm about same-sex female parenting and the perceived societal norm about same-sex male parenting. Second, we decided to deviate from our preregistration by keeping outliers in our analyses. Due to high means on different variables, a large number of participants would have been excluded from our model. These participants did not report aberrant opinions and excluding them does not alter the effect sizes.

Measurement invariance.

Table S5

Invariance Analyses Across Language-regions (German Speaking vs Others)

	df	Chisq	ΔChisq	CFI	ΔCFI	RMSEA	ΔRMSEA
Configural	346	918.43	-	0.96	-	0.05	NA
Metric	360	945.75	27.32	0.96	0.001	0.05	0.000
Scalar	374	1014.44	68.69	0.95	0.004	0.05	0.001

Note. df = degrees of freedom, CFI = Comparative Fit Index, RMSEA = Root Mean Square Error of Approximation

Cis-heterosexual sample. Fortunately, our sample included enough heterosexual participants to enable us to test whether the present model would also generalize to a context of solidarity-based collective action (Figure S2 and Table S6). The sample consists of 239 heterosexuals (153 women, 86 men) from three linguistic regions of Switzerland (99

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German-speaking, 130 French-speaking, 9 Italian-speaking). Participants' mean age was 32.05 (SD = 13.22). In interpreting the results, it is important to keep in mind the smaller sample size relative to the sexual minority sample. The fit of the proposed model among heterosexuals was acceptable χ^2 (173) = 368.56, CFI = .94, RMSEA = .072, SRMR = .064.

In line with Hypothesis 1 and results from the sexual minority sample, opinion-based identification was *positively* associated with collective action intentions. Moreover, as hypothesized and in line with the results for sexual minorities, opinion-based identification was positively associated with perceived efficacy of a social movement, which was in turn positively associated with collective action intentions (H1a, B = .30, SE = .11, p = .006). Opinion-based identification was as well positively associated with anger about the legal situation, which was in turn positively associated with collective action intentions (H1b, B = .27, SE = .10, p = .007). Contrary to the sexual minority sample, we found no significant indirect effect of opinion-based identification on collective action intentions via anger about public opinion. Thus, Hypothesis 1c was rejected among heterosexuals, even though the observed association mirrored the one observed among sexual minorities. In sum, while we found support for the assumptions of the SIMCA, anger about public opinion did not appear to mediate the effect of opinion-based identification on collective action intentions.

Next, we estimated the proposed *inhibiting* effects of perceived intolerant societal norms on collective action intentions. As expected, perceived intolerant societal norms were associated with lower perceived efficacy of a social movement, which was in turn associated with more collective action intentions. However, the indirect effect was not significant (H2a, B = –.09, SE = .06, p = .127). Hence, Hypothesis 2a was partially supported. Again, contrary to our expectation, but in line with the results among sexual minorities, perceived intolerant societal norms were positively, not negatively, associated with anger about the legal situation, which was in turn associated with greater collective action intentions. However, this indirect

effect was not significant (H2b, $B = .08$, $SE = .045$, $p = .106$). Hence, we found mixed

support for the proposed inhibiting effects of perceived intolerant societal norms on

collective action intentions.

Finally, we assessed the proposed *facilitating* effects of perceived intolerant societal

norms on collective action intentions. As hypothesized and in line with results in the sexual

minority sample, perceived intolerant societal norms were negatively associated with

perceptions that there will be greater legal equality for sexual minorities even without a social

movement, which was in turn negatively associated with collective action intentions.

However, we found a non-significant indirect effect (H2c, $B = .06$, $SE = .04$, $p = .127$).

Hence, Hypothesis 2c was partially supported. As for the sexual minority sample, perceived

intolerant societal norms were positively associated with anger about public opinion. Anger

about public opinion, however, was not significantly associated with collective action

intentions, even though a positive trend emerged. Hence, Hypothesis 2d was not supported

among heterosexuals.[29]

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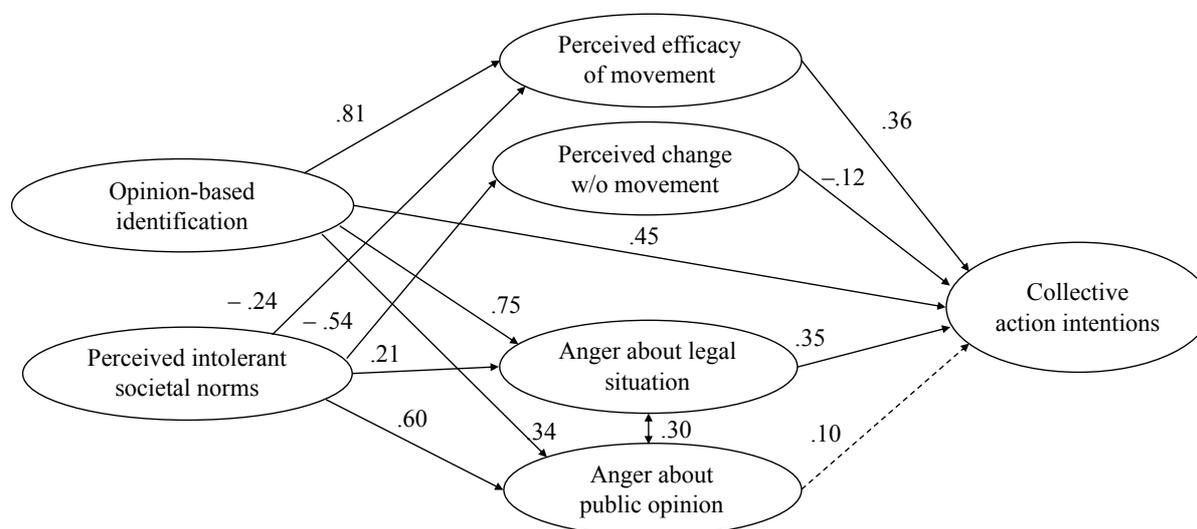
[29] The non-significant findings for the bootstrapped indirect effects might be due to the smaller sample size. In order to check whether our findings mirror those in Sample 1a, we also ran a path analysis, which requires a lower sample size. The findings indicate that the effect of perceived intolerant norm was partially mediated by anger about the legal situation ($B = .07$, $SE = .03$, $p = .029$), perceived efficacy ($B = -.08$, $SE = .03$, $p = .013$), and marginally by perceived change without a movement ($B = .03$, $SE = .02$, $p = .089$).

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Figure S2. Normative Social Identity Model of Collective Action for Heterosexuals (Sample 1b)

Table S6

Summary of Direct Path for Heterosexuals (Sample 1b)

Path	B	SE B	p-value
Opinion-based identification → Collective action intentions	.45	.21	.031
Opinion-based identification → Perceived efficacy	.81	.10	<.001
Opinion-based identification → Anger legal situation	.75	.11	<.001
Opinion-based identification → Anger public opinion	.34	.08	<.001
Perceived intolerant norms → Perceived efficacy	−.24	.11	.035
Perceived intolerant norms → Perceived change w/o movement	−.54	.15	<.001
Perceived intolerant norms → Anger legal situation	.21	.10	.044
Perceived intolerant norms → Anger public opinion	.60	.10	<.001
Perceived efficacy → Collective action intentions	.36	.14	.008
Perceived change w/o movement → Collective action intentions	−.12	.21	.031
Anger legal situation → Collective action intentions	.35	.13	.007
Anger public opinion → Collective action intentions	.10	.08	.203

Gender minority sample. There are differences in the perceived norms toward sexual and gender minorities and the respective legal situations of both groups. We therefore tailored this study to collective action toward sexual minority issues. Participating individuals who identified as gender minorities were, however, confronted with an adapted questionnaire. Overall, 193 gender minorities (43 trans* women, 50 trans* men, 71 trans* non-binary, 12 trans* other, 17 cis-gender; 51 men, 47 women, 2 intersex, 60 non-binary, 33 other gender) with less than 20% of missing on the relevant items. The age of the participants ranged from 16 to 87, with a mean age of 32.99 ($SD = 14.53$). Descriptive statistics as well as correlations between the relevant constructs are displayed in Table S7.

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Table S7

Means, Standard Deviation, and Correlations SEM Variables for Gender Minorities

Variables	*M* (*SD*)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) CAGM	5.73 (1.04)	–						
(2) IDGM	6.02 (1.30)	.28***	–					
(3) INGM	4.19 (0.89)	−.03	−.09	–				
(4) EMGM	5.74 (1.10)	.48***	.24***	−.15*	–			
(5) NOMGM	2.49 (1.34)	−.17*	−.21**	−.19**	−.17*	–		
(6) ALGM	6.14 (1.22)	.32***	.21**	.15*	.12	−.31***	–	
(7) AOGM	4.85 (1.50)	.20**	.17*	.35***	.10	−.36***	.58***	–

Note. Explanation of the Abbreviations: CAGM = collective action intentions gender minority sample, IDGM = opinion-based identification gender minority sample, INGM = perceived intolerant societal norm gender minority sample, EMGM = perceived efficacy of social movement gender minority sample, NOMGM = perceived change without a movement gender minority sample, ALGM = anger about the legal situation gender minority sample, AOGM = anger about public opinion gender minority sample

APPENDIX

Outreach Publications

In what follows, you can find the three newsletters that we shared with participants of the (1) Vaud study, (2) Uni study, and (3) LGBTIQ+ study. The first two studies were written for a French-speaking audience. Therefore, the two reports are available in French. The LGBTIQ+ study was written for all participants from the different parts of Switzerland. This report is available in French, German, Italian, and English. In what follows, you can find the French versions of the Vaud and Uni studies reports, and the English version of the LGBTIQ+ study report (the other versions of the LGBTIQ+ report are available at: https://osf.io/s4w9n/files/).

APPENDIX

Newsletter Vaud Study

ENQUÊTE VAUDOISE SUR LES VIES FAMILIALES

Chères participantes, chers participants,

Dans un contexte social et politique d'évolution des formes de vie en couple, il est important pour les sciences sociales et la société en général de comprendre l'opinion des Vaudois vis-à-vis de ces changements. L'enquête sur les vies familiales à laquelle vous avez participé a permis de réunir des connaissances précieuses sur ces changements. Entre septembre et novembre 2016, vous avez été 1105 à y répondre. Nous vous remercions très sincèrement pour votre participation.

Dans cette newsletter, nous vous présentons deux grands aspects de notre recherche : tout d'abord les opinions sur le mariage, le rôle de la femme dans la famille et les droits des homosexuels ; puis la relation entre les opinions individuelles et la perception de l'opinion des « autres » comme indicateur de changement social.

Grâce à votre aide précieuse, nous pouvons mener un large travail d'analyse et de diffusion des résultats à travers une thèse, diverses publications scientifiques et des présentations à des conférences.

Nous tenons donc à vous remercier chaleureusement !

Léïla Eisner et Dario Spini

NOTRE PROJET

L'« *Enquête Vaudoise sur les vies familiales* » est une étude réalisée dans le cadre d'une thèse à l'Université de Lausanne avec le soutien de l'Institut des Sciences Sociales et du Programme de recherche national LIVES. Notre enquête se focalise sur les opinions des gens envers différentes formes de vie familiale. Cette étude vise aussi à rendre compte des perceptions de l'opinion des autres. Ce type de mesures a pour but de voir comment ces perceptions, comme des réflexions du contexte social, sont liées aux opinions individuelles. En effet, lors de périodes de changements sociaux, les travaux d'opinion publique montre de grandes différences entre les perceptions et les opinions. Pour répondre à ces divers enjeux, nous avons choisi aléatoirement 32 communes vaudoises (10 urbaines, 11 périurbaines et 11 rurales), puis nous avons distribué des questionnaires dans les boîtes aux lettres des personnes résidant dans ces communes en marchant aléatoirement dans les rues.

VOTRE PARTICIPATION

1105 personnes résidant dans les 32 communes vaudoises ont répondu à l'enquête dans son intégralité, ce qui représente un taux de réponse de 37% pour les questionnaires papiers et de 8% pour les questionnaires web. Les trois communes vaudoises ayant le plus participé à l'enquête sont Chexbres, Bursins et Cudrefin. Par rapport à la population vaudoise, l'échantillon sous-représente légèrement les hommes, les étrangers et les « jeunes ». En effet, il est composé de 40% d'hommes, de 11.2% d'étrangers, et de 9.6% de personnes âgées de moins de 30 ans (âge moyen de 53 ans).

VOS OPINIONS SUR LE MARIAGE, LE RÔLE DES FEMMES ET LES DROITS DES HOMOSEXUELS

LE MARIAGE N'EST PLUS UNE INSTITUTION INDISPENSABLE

Dans l'étude, nous vous avons demandé d'indiquer votre degré d'accord par rapport aux propositions suivantes : « les couples qui veulent des enfants devraient se marier » et « le divorce est généralement la meilleure solution lorsqu'un couple n'arrive pas à résoudre ses problèmes ». Les réponses semblent indiquer qu'il n'y a pas de réel consensus sur ces questions. En effet, 40% des personnes ayant répondu à l'enquête considèrent que le mariage n'est pas indispensable pour un couple voulant des enfants ; au contraire, 37.5% des répondants considèrent que c'est une institution indispensable. Ces différences sont en partie expliquées par l'âge. Alors que les plus jeunes cohortes considèrent le mariage comme n'étant pas nécessaire, les personnes les plus âgées (plus de 55 ans) sont une majorité à penser que le mariage est nécessaire. Ce résultat semble indiquer un changement dans la conception du mariage et de son importance pour les couples. Alors qu'une distribution similaire se retrouve pour la question concernant le divorce, bien qu'une plus grande part des personnes pense que le divorce est « la meilleure solution lorsqu'un couple n'arrive pas à résoudre ses problèmes » (47.9%), l'effet de l'âge se retrouve inversé. En effet, les personnes plus jeunes ont moins tendance à approuver le divorce que les personnes plus âgées. 60.8% des personnes de plus de 65 ans pensent que le divorce est nécessaire alors que les personnes de moins de 30 ans ne sont « que » 22.7% à le penser. Ici, il semblerait que les personnes plus âgées, qui ont peut-être vécu des période difficiles dans un couple, aient une représentation différente du divorce.

UNE VISION TRADITIONNELLE DU RÔLE DE LA FEMME

Tout au long de l'enquête, différentes questions avaient pour but de mesurer les opinions envers la conciliation travail–vie familiale. En général, une majorité (50.2%) des personnes pense que la vie de famille « souffre» du travail à temps plein de la femme. Parallèlement, 55.4% considèrent que, contrairement au travail féminin, la vie familiale ne « souffre » pas du travail à temps plein de l'homme. Dans une autre mesure, alors qu'une majorité (38.6%) des répondants désapprouve le fait qu'une « femme exerce une activité à temps plein tout en ayant un enfant de moins de trois ans », une grande partie d'entre vous n'a pas pris position sur ce sujet (28.8% « n'approuve, ni ne désapprouve). Certains ont commenté cette question en indiquant qu'il leur était difficile de répondre sans connaître la situation exacte (par exemple, est-ce que la femme est seule, est-ce que les deux partenaires travaillent à temps plein ?). De telles considérations montrent que les opinions peuvent varier en fonction de la situation des individus. Finalement, nous avions demandé aux personnes concernées d'indiquer leur taux de travail lorsque leur « enfant était en âge préscolaire ». Les résultats descriptifs montrent un parallèle avec les opinions. En effet, alors qu'une majorité des femmes ont travaillé à temps partiel (54.9% contre 17.5% à temps plein), la grande majorité des hommes a travaillé à temps plein (85.6% contre 12.1% à temps partiel). Ces résultats semblent indiquer que le modèle le plus plébiscité est celui de la répartition des rôles « traditionnels » où la femme s'occupe principalement de la vie familiale avec un emploi « d'appoint » et l'homme travaille à temps plein.

LES DROITS DES HOMOSEXUELS : UN SUJET QUI POLARISE

Différentes questions concernant les couples de même sexe ont été posées dans l'enquête. En général, les réponses ont été très polarisées. Alors que 39.3% des répondants désapprouvent le fait qu'un « couple composé de deux femmes élève des enfants », 36% approuvent. Cette polarisation s'est moins retrouvée pour l'homoparentalité masculine. En effet, une majorité désapprouve (46.4%) le fait que deux hommes élèvent des enfants alors que 32.6% approuvent. Cette différence peut en partie s'expliquer par le fait que les hommes ayant répondu à l'enquête ont eu plus tendance à désapprouver l'homoparentalité masculine que féminine. En effet, alors que 17.9% des femmes désapprouvent tout à fait le fait que deux hommes élèvent des enfants, 38.9% des hommes désapprouvent. Finalement une question de l'enquête concernait directement les droits des homosexuels en demandant les opinions sur le mariage entre deux personnes de même sexe. En Suisse, les couples de même sexe n'ont pas le droit de se marier légalement. Néanmoins, une votation sur ce sujet aura probablement lieu dans le futur proche. C'est pour cette raison qu'il nous a semblé central de poser cette question. À nouveau, nous avons retrouvé une forte polarisation des opinions. Celle-ci s'est reflétée dans le fait que les réponses intermédiaires « désapprouve / approuve plutôt » ont été peu choisies par les participants à l'enquête. Contrairement aux questions concernant l'homoparentalité, une majorité s'est prononcée en faveur du mariage entre deux personnes de même sexe (45.8% pour et 28.1% contre). Pour cette question, beaucoup de personnes ont choisi la catégorie de réponse « n'approuve, ni ne désapprouve » (26.1%). Dans le futur, il sera très intéressant de voir où les personnes « entre-deux » vont se situer. Tout comme pour les autres enjeux, les personnes plus jeunes, moins croyantes et les femmes avaient plus tendance à approuver les droits des homosexuels.

Mariage pour tous opinion personelle
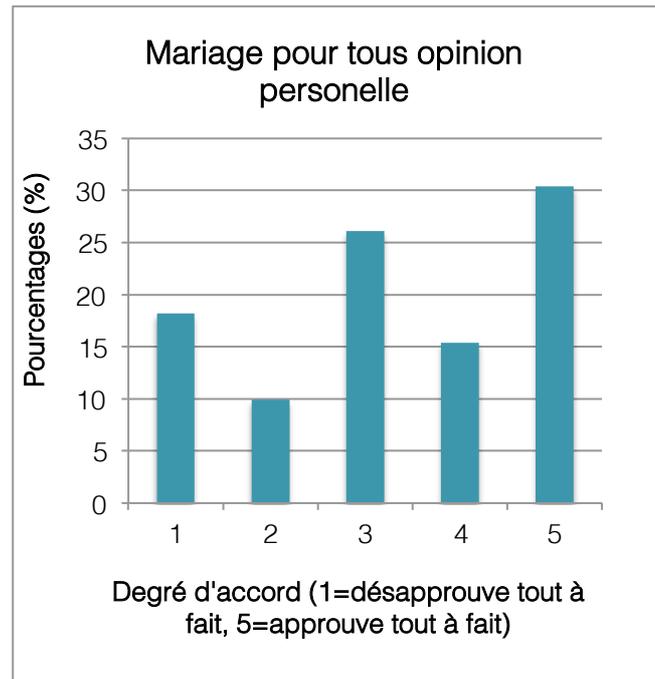
Les Droits des homosexuels en Suisse – le mariage civil pour tous

Le 5 décembre 2013, la conseillère nationale verte-libérale Kathrin Bertschy a déposé une initiative parlementaire « mariage civil pour tous ». Cette dernière vise à ouvrir le mariage aux couples de même sexe et le partenariat enregistré aux couples hétérosexuels. Les Commission des Affaires Juridiques du Conseil national et du Conseil des Etats ont respectivement donné suite à cette initiative les 20 février 2015 et 1er septembre 2015. Dès lors, les deux conseils doivent procéder à l'élaboration du texte de loi et, si ils adoptent ce texte, il sera soumis au référendum obligatoire. Ainsi, une votation populaire à ce sujet va probablement avoir lieu dans le futur proche.

LES « AUTRES » SONT MOINS CONSERVATEURS QUE L'ON NE LE PENSE

Une autre partie de notre enquête avait pour but de voir dans quelle mesure les opinions étaient reliées à la perception que les gens avaient de l'opinion des autres (de leurs proches, de leurs voisins, des Vaudois en général, et de la plupart des gens). Alors que les opinions perçues étaient très proches des opinons réelles pour les « mères qui travaillent », de grandes différences ont été identifiées pour les opinions envers les couples homosexuels. Pour les trois enjeux liés à l'homosexualité, les Vaudois ont perçu que les autres avaient des opinions beaucoup plus conservatrices qu'eux. Ainsi, alors qu'une majorité approuve le mariage homosexuel, une grande majorité pense que les autres désapprouvent. Cet effet s'accentue avec l'élargissement des groupes de référence: « la plupart des gens » sont perçus comme étant plus conservateurs que la plupart des Vaudois, la plupart des voisins et la plupart des proches. Dans une perspective de changement social, il est intéressant de regarder comment ces différences se retrouvent en fonction de l'âge des répondants. Il semblerait que plus les personnes sont jeunes, plus elles perçoivent une différence entre leur opinion et celle des autres. Alors que les personnes de moins de 30 ans ont, en général, une opinion positive envers le mariage homosexuel et l'homoparentalité, elles perçoivent l'opinion des autres comme étant très conservatrice. Au contraire, les personnes de plus de 65 ans ont, en général, une opinion plutôt négative et perçoivent l'opinion des autres comme étant similaire à la leur. De telles différences peuvent être expliquées par plusieurs facteurs. Néanmoins, nous avons décidé de retenir ici une hypothèse de changement social. Il semblerait que les opinions envers les couples de même sexe deviennent de plus en plus libérales, comme le

montrent les droits récemment acquis par la communauté homosexuelle. Cependant, la norme perçue par la plupart des gens, c'est à dire leur perception de l'opinion des autres, n'a pas encore suivi ces changements d'opinions et reste liée aux opinions des personnes ayant vécu à une autre période.
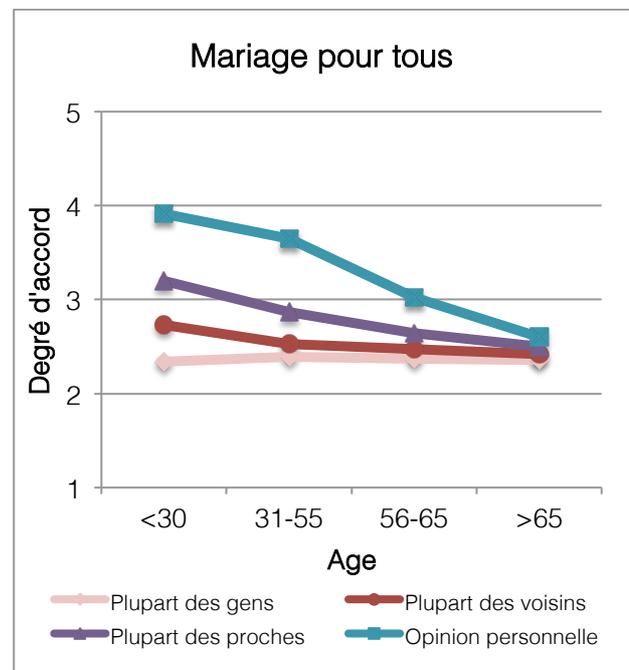
Contactez-nous !

Si vous avez une question particulière concernant cette newsletter, ainsi que pour toute suggestion que vous auriez à nous faire au sujet de l'étude, n'hésitez pas à envoyer un e-mail à l'adresse leila.eisner@unil.ch. Nous nous ferons un plaisir de vous répondre personnellement.

APPENDIX

Newsletter Uni Study

ENQUÊTE SUR LA DIVERSITÉ À L'UNIL

Chères participantes, chers participants,

Dans un contexte social et politique d'évolution des opinions liées aux personnes lesbiennes, Gaies, et Bisexuelles (LGB), il est important pour les sciences sociales et la société en général de comprendre l'opinion des jeunes générations vis-à-vis de ces changements. L'enquête sur la diversité à l'Unil à laquelle vous avez participé a permis de réunir des connaissances précieuses sur ces changements. En février 2018, vous avez été 456 à y répondre. Nous vous remercions très sincèrement pour votre participation.

Dans cette newsletter, nous vous présentons trois grands aspects de notre recherche : tout d'abord votre perception (de l'évolution) des opinions liées aux personnes LGB dans la société et dans le contexte du sport ; vos expériences de discriminations envers les personnes LGB ; puis votre positionnement vis-à-vis de ces discriminations (légales) et votre volonté d'agir (ou non) pour améliorer les droits des personnes LGB.

Grâce à votre aide précieuse, nous pouvons mener un large travail d'analyse et de diffusion des résultats à travers une thèse, diverses publications scientifiques et des présentations à des conférences.

Nous tenons à vous remercier chaleureusement !

Léïla Eisner, Tabea Häßler, et Dario Spini

NOTRE PROJET

L'*« Enquête sur la diversité à l'Unil »* est une étude réalisée dans le cadre d'un projet de recherche mené conjointement avec l'Université de Lausanne et l'Université de Zürich. Notre enquête se focalise sur les personnes LGB dans le contexte du sport et dans la société en générale. Le sport est un contexte propice à l'étude des personnes LGB étant donné qu'il est très souvent associé avec des expériences d'homo/bi/transphobies. En plus de mesures d'opinions, nous avons inclus des mesures visant à rendre compte de votre perception de la norme dans la société (opinion des « autres ») et dans quelle mesure elle diffère de votre propre opinion. Pour répondre ces divers enjeux, nous avons décidé de questionner des étudiants de l'Université de Lausanne. Les étudiants ont été accosté en Février 2018 soit dans un bâtiment principal de l'Unil, soit dans une cafétéria ou une bibliothèque et ont gentiment accepté de répondre au questionnaire.

VOTRE PARTICIPATION

456 personnes qui se trouvaient sur le campus de l'Unil ont répondu à l'enquête dans son intégralité. Une majorité des répondants est inscrite en SSP (32.4%), suivi par la faculté de Droit (25.0%), la faculté de Lettres (22.0%), la faculté de Biologie et Médecine (8.6%), et enfin la faculté de Géosciences et Environnement (3.1%). La moyenne d'âge est de 22.11 et une petite majorité de femmes (51.5%, contre 48.2% d'hommes et 0.3% de personnes non-binaires) a répondu au questionnaire.

VOTRE PERCEPTION DE LA SOCIETE SUISSE

UNE SOCIÉTÉ SUISSE PLUS TOLÉRANTE QU'AVANT…

Lorsque l'on vous demande si vous percevez que la société Suisse est plus tolérante qu'avant envers les personnes LGB, vous êtes une grande majorité (75.4 %) à penser que c'est le cas. Vous êtes aussi plutôt optimistes pour le futur, puisque 87.6% d'entre vous pense que la société sera plus tolérante dans le futur.

En revanche, même si vous percevez que la société est plus tolérante qu'avant envers les personnes LGB, vous pensez que les gens sont très négatifs envers l'homoparentalité masculine, un peu envers l'homoparentalité féminine, et peu envers le mariage pour tous (voir graphique « Perceptions et opinions envers les droits LGBT »). Il semblerait ainsi que l'homoparentalité masculine reste un sujet tabou en Suisse.

De plus, vous avez tendance à penser que les personnes de plus de 60 ans sont plus négatives envers l'homoparentalité et le mariage pour tous que les suisses, les jeunes adultes, les personnes dans votre université, et finalement vous. Ainsi vos perceptions semblent refléter des clivages générationnelles, géographiques, éducationnelles et d'autres considérations morales.

DANS LE CONTEXTE DU SPORT

Dans le contexte du sport, vous percevez aussi que les gens sont plus négatifs envers les couples gays que les couples lesbiens. En effet, selon vous la réaction des gens sera plus négative envers un sportif gay qu'une sportive lesbienne. De plus, vous percevez que les gens auraient plus de problème si un footballeur/se célèbre était homosexuel plutôt qu'une personne avec qui ils/elles font du sport. Selon vous, cela s'explique par l'image viril du sportif et la pression médiatique (voir nuage de mots ci-dessous regroupant votre explication au fait qu'aucun footballeur célèbre n'a fait son coming-out en Suisse.)

Perceptions et droits LGBT

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DISCRIMINATION PERCUE ET REACTION

…MAIS ENCORE DE LA DISCRIMINATION PERCUE

Dans notre enquête, nous vous avons posé différentes questions liées à votre expérience de discrimination à l'université. Une large majorité d'entre vous (73.4%) a reporté avoir entendu au moins une fois l'expression « c'est tellement gay » à l'université. De plus, 62.5% des personnes questionnées ont reporté avoir entendu cette expression plus d'une fois par année et 27.5% fréquemment. Lorsque l'on vous a demandé d'indiquer la fréquence à laquelle vous avez entendu des remarques dénigrantes ou blagues sur des personnes LGB, les mêmes résultats ont pu être observés. En effet, 73.6% des répondants ont indiqué avoir entendu au moins une fois ce type de remarque, 60.1% ont reporté que cela a eu lieu plus d'une fois par année, et 22.0% fréquemment. Finalement, les répondants ont été beaucoup moins à observer des expériences d'exclusion dans le contexte universitaire en fonction de l'orientation sexuelle. En effet, 7.5% des répondants ont reporté avoir constaté au moins une fois que des personnes ont été exclues en raison de leur orientation sexuelle. Ces résultats semblent indiquer que, dans le contexte universitaire, les personnes LGB sont fréquemment discriminées (indirectement via des blagues ou directement), même si des expériences d'exclusion sont moins observées.

Contactez- nous !

Si vous avez une question particulière concernant cette newsletter, ainsi que pour toute suggestion que vous auriez à nous faire au sujet de l'étude, n'hésitez pas à envoyer un e-mail à leila.eisner@unil.ch. Nous nous ferons un plaisir de vous répondre personnellement.

Discrimination légale – Le mariage et l'adoption pour tous en Suisse

En Suisse, les couples de même sexe ne sont pas légalement autorisés à se marier. De plus, ils ne peuvent pas adopter d'enfants autre que l'adoption de l'enfant biologique du partenaire. Cette nouvelle loi concernant l'adoption de l'enfant du partenaire a été implémentée le 1er janvier 2018. Lorsque nous vous avons demandé si vous connaissiez cette nouvelle loi, vous étiez beaucoup (46 %) à n'avoir jamais entendu parler de cette loi.

Récemment, un texte de loi a été proposé par la commission juridique du conseil national visant à ouvrir le mariage à tous. Ce texte a entrainé certaines réactions au sein de la communauté LGB car il propose une version « light » du mariage (amener les citoyens à voter seulement pour le mariage pour tous sans inclure d'autres droits, tels que la procréation assistée).

VOTRE REACTION FACE A LA DISCRIMINATION

Le but de ce questionnaire était aussi de rendre compte de votre réaction en lien avec la situation juridique des personnes LGB. Vous êtes 75.4% à penser que cela n'est pas légitime que les personnes homosexuelles n'ont pas les mêmes droits que les hétérosexuels. En lien avec cela, vous êtes 67.5% à penser signer une pétition, 51.5% à penser parler avec des personnes hétérosexuelles, 49.0% à penser coopérer avec des personnes non-hétérosexuelles, et finalement 18.3% à penser participer à une manifestation dans le futur pour améliorer les droits des personnes LGB. Ainsi, il semblerait que vous percevez que la situation s'améliore en Suisse pour les personnes LGB, même si la discrimination est encore présente et que des droits encore manquants.

APPENDIX

Newsletter LGBTIQ+ Study

NATIONAL LGBTIQ+ SURVEY 2019

SUMMARY REPORT

Léïla Eisner & Tabea Hässler

FOREWORD

In this report we will present the results of a large national survey of LGBTIQ+ people (i.e., individuals identifying as lesbian, gay, bisexual, trans*, intersexual, queer, and other sexual or gender minorities) in Switzerland. Despite changes toward greater acceptance and equality, LGBTIQ+ people in Switzerland still suffer from discrimination and face structural inequalities. For example, marriage for same-sex couples (sometimes called same-sex marriage) and joint adoption are currently not legal and LGBTIQ+ people are not protected against discrimination based on sexual orientation and gender identity.

In January 2019, we launched a survey to gather more information about the experiences of LGBTIQ+ people in Switzerland. We designed a web-based questionnaire asking people about their experiences living as a LGBTIQ+ person in Switzerland. While the primary aim of the study was to survey LGBTIQ+ people, interested cis-heterosexual individuals (heterosexual individuals who identified exclusively as men and women and where this was consistent with their sex as assigned at birth) were also invited to take part in the survey. These participants were asked about their opinions toward LGBTIQ+ individuals and their perception of the situation for LGBTIQ+ individuals in Switzerland. Therefore, we designed different versions of a web questionnaire that were tailored to sexual minorities (i.e., individuals with a minority sexual orientation such as gay, lesbian, bisexual, or pansexual people), gender minorities (i.e., individuals identifying as trans* or intersex), and cis-heterosexual individuals. All versions were translated into French, German, Italian, and English. The survey response was higher than expected. Thanks to the help of many LGBTIQ+ organizations, LGBTIQ+ magazines, and individuals who largely shared our study on different media, 1'664 people replied to our questionnaire from January 2019 to April 2019. This document provides a summary of the key findings of the survey.

GLOSSARY

Bisexual A term used to describe a person who is attracted toward more than one gender or sex. Distinct from pansexual, which includes attraction toward people regardless of gender or sex.

Cis-female Someone who was assigned female at birth and identifies and lives as a woman.

Cis-heterosexual Used in this report to refer to people whose gender identity matches their sex assigned at birth (e.g. who are not members of gender minorities) and who are attracted to members of the opposite gender.

Cis-male Someone who was assigned male at birth and identifies and lives as a man.

Coming out When a person first tells someone about their sexual orientation or gender identity.

Gay man A man who is attracted to other men.

Gender identity A person's internal sense of their own gender.

Gender identity – Other An umbrella category used to describe individual who choose 'other' as category for their gender identity. This includes individuals identifying as agender, demiwomen, female outside & inside as person, female but as male during childhood, genderqueer, gender fluid, mostly male, male and non-binary, male and female, non-binary, open, trans*, trans* genderqueer, trans* men, trans* women, queer, questioning and persons who do not need a gender.

Gender minority members Individuals with a minority gender identity such as trans* or intersex people.

Heterosexual   A term used to describe a person who is attracted to members of the opposite gender. Also referred to as straight.

Homosexual   A term used to describe someone who has an emotional, romantic or sexual orientation towards someone of the same gender.

Intersex   An umbrella term for people with sex characteristics (hormones, chromosomes and external/internal reproductive organs) that differ to those typically expected of a male or female.

Joint adoption   A term used to describe adoption by two partners. Contrary to stepchild adoption, joint adoption is currently not legal in Switzerland.

Lesbian woman   A woman who is attracted to other women.

LGBTIQ+   An abbreviation used to refer to all people who identify as lesbian, gay, bisexual, trans*, intersex, queer, or as having any other minority sexual orientation or gender identity.

Minority sexual orientation   Used in this report to refer to anyone not identifying as heterosexual. This includes individuals identifying as gay, lesbian, bisexual, pansexual, queer, etc.

Non-binary   An umbrella term used to describe gender identities where the individual does not identify exclusively as a man or a woman. There are many categories included within this, such as agender, genderqueer, and gender fluid.

Pansexual   Attraction towards people regardless of gender or sex.

Same-sex marriage   A term used to describe the legal union between two people of the same gender.

Sexual orientation   Attraction towards people regardless of gender or sex.

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Sexual orientation – Other

An umbrella category used to describe individual who choose 'other' as category for their sexual orientation. This includes individuals identifying as asexual (partly with romantic attraction), demisexual, fluid, gray-asexual (partly with romantic attraction), heteroflexible, homoflexible, homosexual open for trans*, queer, questioning, as well as individuals who do not like categories or who say that they fall in love with a person.

Trans*

Umbrella term used to describe individuals who have a gender identity that is different to the sex recorded at birth.
Non-binary people may or may not consider themselves to be trans*.

Trans* female

Someone who was assigned male at birth but identifies and lives as a woman.

Trans* male

Someone who was assigned female at birth but identifies and lives as a man.

Queer

A term used mainly by people who identify with a minority sexual orientation.

Questioning

The process of exploring your own sexual orientation or gender identity.

CONTENTS

THE NATIONAL LGBTIQ+ SURVEY

WHY WE DID THE SURVEY

The aim of the survey was to develop a better understanding of the positive and negative experiences of LGBTIQ+ people in Switzerland. We were interested in better understanding where LGBTIQ+ individuals are comfortable being themselves and where they may not be. We wanted to know where LGBTIQ+ individuals still face discrimination but also from whom they receive support. We further wanted to hear to which degree both LGBTIQ+ and participating cis-heterosexual respondents demand equal rights and how much they engage themselves for LGBTIQ+ issues.

It is important to bear in mind that the LGBTIQ+ community consists of a plurality of identities and experiences and much research has fallen short of considering these diverse subgroups. In the present research we therefore tried to be inclusive of different subgroups. We tailored the questionnaires to either members of sexual minorities, members of gender minorities, or cis-heterosexual individuals on the basis of respondents answer to the question of sexual orientation and gender identity (members of gender minorities had the opportunity to also complete the sexual minority version, if applicable). In the current report, we will provide the results separately for sexual minority, gender minority and, where relevant, for cis-heterosexual respondents separately, to account for different legal situations and challenges.

IMPORTANT METHODOLOGICAL NOTES

Before interpreting the results of this report, please read these important methodological notes.

The LGBTIQ+ survey was hosted online for almost 4 months. An online survey was considered the best way to reach out to a large number of LGBTIQ+ respondents and allowed respondents to provide anonymous and confidential responses. LGBTIQ+ individuals and cis-heterosexual individuals who participated voluntarily in our study were mostly informed by LGBTIQ+ organizations through posts, articles, newsletters, and chats. Though the number of respondents to the survey was large, we still need to be careful when interpreting the data and extrapolating from the findings. The sample was self-selected and is **not representative of the entire LGBTIQ+ population in Switzerland**. In particular, LGBTIQ+ individuals who are/were not connected to LGBTIQ+ organizations or not "out" are probably less represented in our study. These people may have different experiences to those people who are connected to the LGBTIQ+ scene. In addition, most cis-heterosexual individuals who participated in this survey learned about the survey from LGBTIQ+ individuals (although some university students took part as well) and might be generally more supportive of LGBTIQ+ issues than the Swiss population. **This implies that responses by cis-heterosexual individuals displayed in the present report are particularly NOT representative of the cis-heterosexual population**. Please be aware of this when interpreting the results displayed in this report.

KEY FINDINGS

- Members of sexual minorities (i.e., individuals with a minority sexual identity such as gay, lesbian, bisexual, or pansexual) are more likely to be out compared to gender minority members (i.e., individuals identifying as trans* or intersex). For example, in the educational context (i.e., school and university) 2/3 of the responding gender minority members are not out.

- A valuable source of support for both members of sexual and gender minorities are friends, the LGBTIQ+ scene, and family members, while the school setting is experienced as less supportive.

- More frequent forms of discrimination for LGBTIQ+ individuals are jokes about members of sexual and gender minorities and feelings of not being taken seriously (e.g., being bisexual is "just a phase"). Moreover, sexual minority women and gender minorities reported particularly high levels of sexual harassment by men. Finally, gender minority members reported frequent experiences of structural discrimination (e.g., legal disadvantages and binary toilets).

- LGBTIQ+ individuals reported being (or having been) frequently discriminated against in the school context. Furthermore, gender minority members often face discrimination by legal institutions, hospitals, and family members. LGBTIQ+ individuals also mentioned being discriminated against in the medical context.

- Members of gender minorities report a lower well-being than sexual minority members and cis-heterosexual individuals.

- LGBTIQ+ individuals were largely in favor of extending protection from discrimination on the basis of **both** sexual orientation and gender identity. They were also largely in favor of the introduction of marriage for all **including equal rights** such as access to artificial insemination ('one-step procedure'). This means that the decisions of the Swiss Parliament to not include gender identity in the discrimination law and to favorize a 'marriage light' stands in strong contrast with what most LGBTIQ+ people are hoping for.

THE RESULTS

In this section, we relay some of the main findings from the survey. Because different versions of the questionnaire were tailored to sexual minorities' and gender minorities' rights we will, in what follows, present the findings of sexual minority, gender minority, and cis-heterosexual respondents separately.

WHO RESPONDED?

In total, 1'664 individuals participated in our survey: 1'247 filled out the sexual minority version of the questionnaire, 182 the gender minority version, and 235 the cisheterosexual version. A summary of participants' sexual orientation, gender identity, age group, geographical area, education, and religion is presented in Table 1 below. We present the percentage and numbers of participants for each category.

For example, 57.0% respondents (949 people) identified as homosexual, 16.9% (281 people) as bisexual, 6.1% (101 people) as pansexual, 14.9% (248 people) as heterosexual, and 5.1% (85 people) as another sexual orientation (asexual, demisexual, questioning, queer and other).

Table 1. Who responded?

Participants by	HOMO-SEXUAL	BISEXUAL	PANSEXUAL	HETERO-SEXUAL	OTHER	
Sexuality %	57.0%	16.9%	6.1%	14.9%	5.1%	
N	949	281	101	248	85	

Participants by	CIS–FEMALE	CISMALE	TRANS*FEMALE	TRANS*MALE	NON-BINARY	OTHER
Gender %	49.6%	37.9%	2.5%	2.5%	5.2%	2.2%
N	826	631	42	42	87	36

Participants by	Under 20	20-29	30-39	40-49	50-59	Over 60
Age group %	8.8%	40.6%	21.5%	13.6%	10.5%	4.9%
N	147	675	358	226	175	82

Participants by	GERMAN	FRENCH	ITALIAN	ROMANSH		
Geo area %	61.0%	33.6%	4.6%	0.7%		
N	1015	559	77	12		

Participants by	NO UNI	UNI DEGREE				
Education %	48.6%	51.4%				
N	808	855				

Participants by	ATHEIST	CATHOLIC	PROTES-TANT	JEWISH	ISLAMIC	BUDDHISM	OTHER
Religion %	58.3%	15.5%	14.7%	0.5%	0.9%	1.3%	8.7%
N	969	257	244	9	15	22	145

Note. Percentages have been rounded; therefore, the sum might not round up to 100%.

In Table 2, we show the sample composition in greater detail, separating out respondents by both sexual orientation and gender (identity). The numbers in brackets represent trans* participants.

For example, the second line can be read as follows: There are 195 bisexual female participants, 12 of them identify as trans. There are 51 bisexual male participants, 12 of them identify as trans*. There are 21 bisexual non-binary participants and 15 of them are trans*. There are 14 bisexual participants who do not identify as either female, male, or non-binary and 8 of them are trans*.*

Table 2. Sample Composition

Sexual Orientation/ Gender identity	Female	Male	Non-binary	Other
Homosexual	409 (17)	511 (9)	24 (15)	5 (3)
Bisexual	195 (12)	51 (12)	21 (15)	14 (8)
Pansexual	60 (2)	12 (8)	21 (13)	8 (3)
Heterosexual	160 (2)	84 (6)	2 (2)	2 (2)
Other	44 (9)	15 (7)	19 (15)	7 (5)
Total	868 (42)	673 (42)	87 (60)	36 (21)

Note. In brackets: Individuals identifying as trans*.

SECTION 1:
COMING OUT

INNER AND PUBLIC COMING OUT

In this section, we present findings related to the coming out process for both members of sexual and gender minorities. Please be aware that the coming out is not a single moment in time but a continuous process.

First, respondents to the survey were asked about their age when they became aware of either their sexual orientation (sexual minority members) or gender identity (gender minority members) (inner coming out). They were also asked about their age when they first told someone about their sexual orientation/ gender identity (public coming out). On average, sexual minority members had their inner coming out at the age of 16 and their first public coming out at the age of 20. Gender minority members had, on average, their inner coming out a bit later (see Figure 1). Members of gender minorities had their inner coming out on average at the age of 19 and their first public coming out at the age of 25. We further see more variation in the time of the coming out among members of gender minorities compared to sexual minorities. While most sexual minority members outed themselves in their teens (until their early twenties), the large majority of members of gender minorities outed themselves between their teens and their mid-thirties.
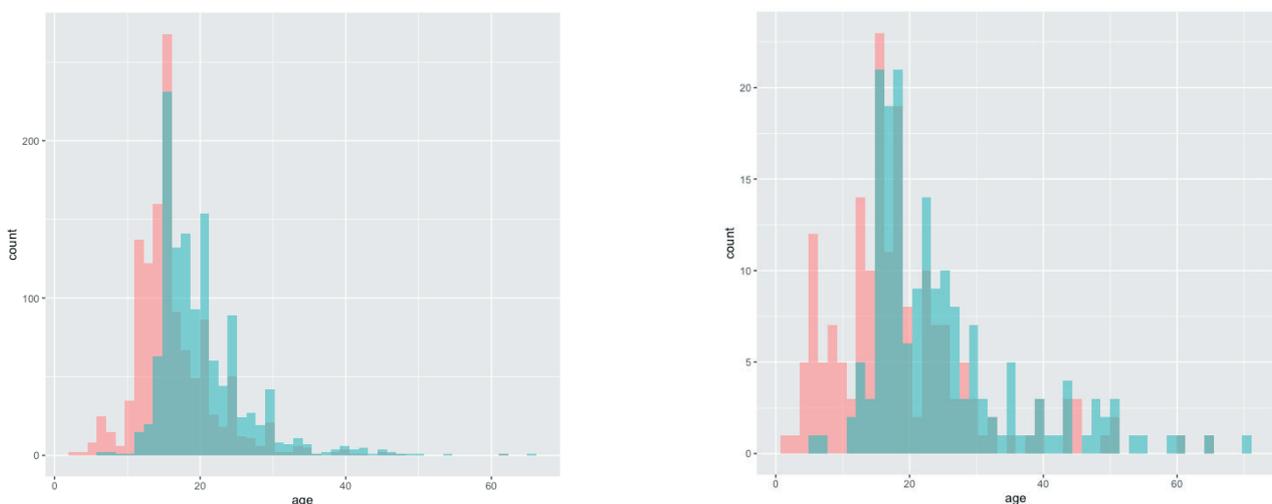
Figure 1. Age at inner (colored red) and public coming out (colored in blue) as a sexual minority member (left) and gender minority member (right).

CONTEXT OF COMING OUT

Next, respondents in the survey were asked in which contexts they were out and among how many people. While the sexual orientation/gender identity might not always be relevant, this measure still provides a valid estimate for how openly people can talk about their identity and current relationship/activities. We grouped the answers into three categories: (1) Being out to none or a few people, (2) approximately half of the people, and (3) most/all people. The results are shown separately for sexual minority (see Figure 2) and gender minority members (see Figure 3). Please keep in mind that respondents could also choose that a context was not applicable for them (e.g., if they do not visit a church or any other religious setting). Therefore, the valid number of responses vary widely between contexts.

Sexual minority group members (see Figure 2 below) were out among most of their friends and family. Half of the respondents for which the categories university and workplace was applicable were openly out to most/all people. However, almost half of the respondents did not come out in the school context and among their neighbors. Finally, most of the respondents for which the category church/religious organization was applicable were not out in this context.

Context Coming-Out: Sexual Minorities

	None/A few	Half	Most/All
FAMILY (1239/1247)	20.8%	14.9%	64.3%
ACQUAINTANCES (1237/1247)	21.3%	27.0%	51.7%
FRIENDS (1241/1247)	7.2%	8.5%	84.4%
NEIGHBORS (1138/1247)	56.2%	12.1%	31.7%
SCHOOL (729/1247)	45.3%	13.7%	41.0%
UNIVERSITY (737/1247)	33.8%	14.7%	51.6%
WORKPLACE (1090/1247)	30.1%	18.6%	51.3%
SPORT (729/1247)	40.1%	13.3%	46.6%
CHURCH (298/1247)	65.8%	11.1%	23.2%
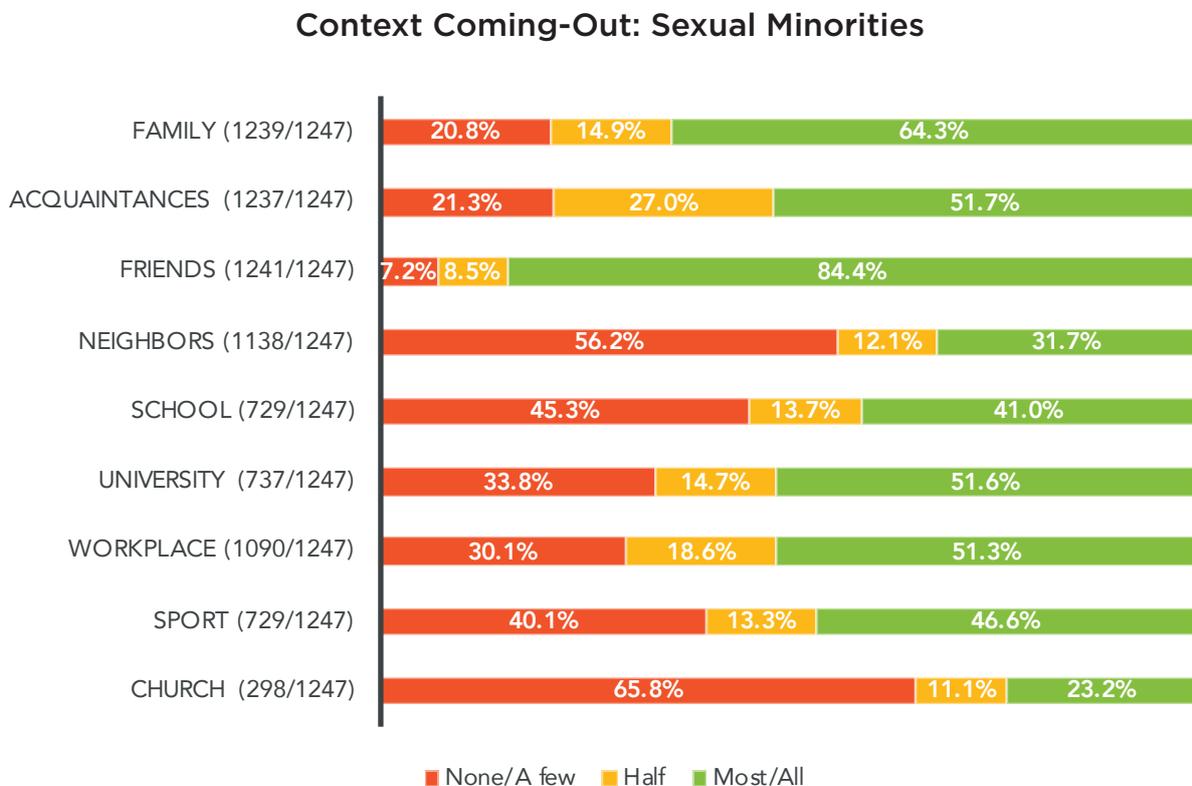
Figure 2. Context of Coming Out Among Sexual Minority Members

Members of gender minorities (see Figure 3 below) were on average more likely than sexual minority members to not reveal their gender identity. Two-thirds of respondents were out to most/all of their friends. More than half of gender minority respondents were out among most/all family members, while one third chose not to out themselves to family members at all. In the workplace, almost half of the respondents chose not to out themselves. These numbers were even higher in the school, university, sport and church contexts, and among neighbors, as approximately two-thirds of respondents did not reveal their gender identity to (almost) everyone.

Context Coming Out: Gender Minorities

Context	None/A few	Half	Most/All
FAMILY (182/182)	34.4%	10.0%	55.5%
ACQUAINTANCES (181/182)	40.3%	26.5%	33.2%
FRIENDS (182/182)	17.6%	17.7%	64.9%
NEIGHBORS (176/182)	67.6%	11.9%	20.5%
SCHOOL (97/182)	68.0%	7.3%	24.8%
UNIVERSITY (85/182)	64.7%	16.5%	18.8%
WORKPLACE (142/182)	46.5%	18.3%	35.2%
SPORT TEAM (85/182)	61.2%	11.8%	27.1%
CHURCH (63/182)	76.2%	1.6%	22.2%

■ None/A few   ■ Half   ■ Most/All
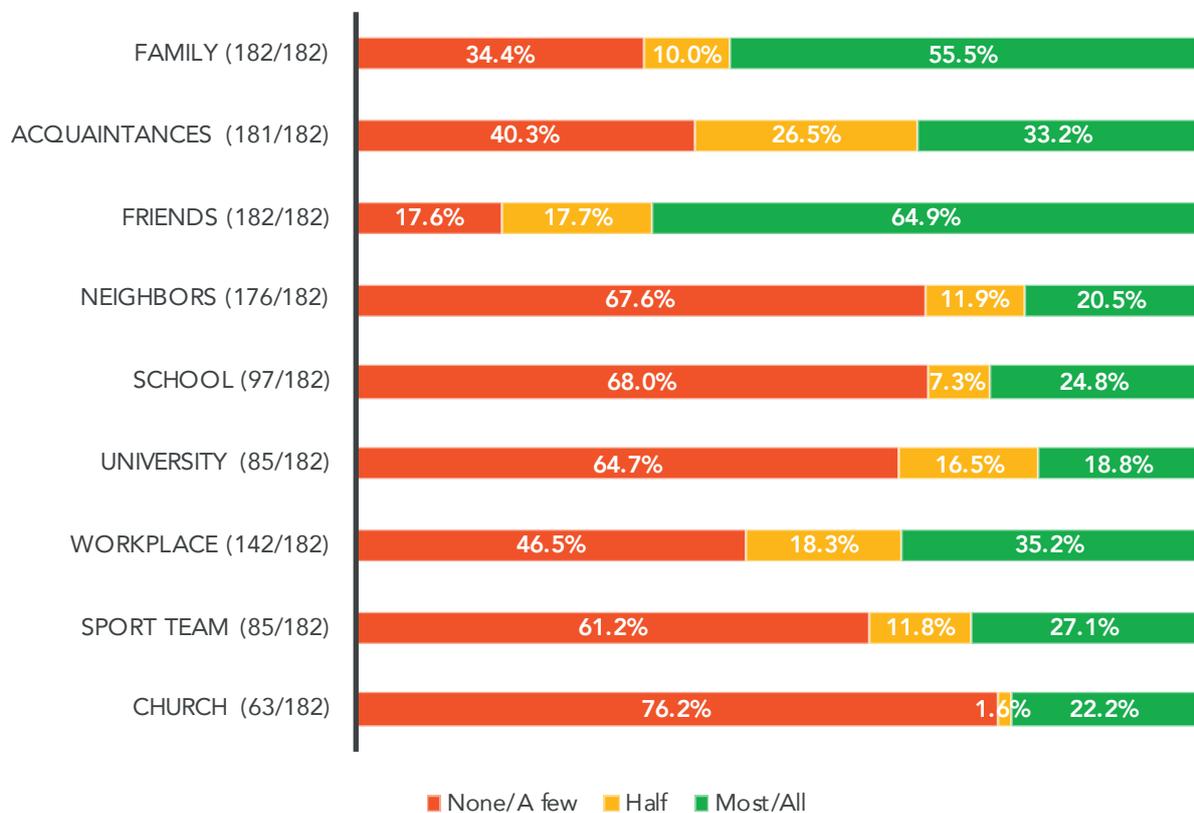
Figure 3. Context of Coming Out Among Gender Minority Members

SECTION 2:
SUPPORT AND EXPERIENCED DISCRIMINATION

SUPPORT BY DIFFERENT GROUPS

In this section, we present findings related to support and experienced discrimination. First, members of sexual and gender minorities were asked to indicate how supported they felt in different contexts (see Figure 4). Respondents could choose values between 1 (Not at all) to 7 (Totally) or that a context was not applicable for them (e.g., if they do not participate in sport). Thus, higher numbers correspond to higher perceived support, while valid numbers of responses vary widely between contexts (see Table 3).

Both members of sexual and gender minorities (see Figure 4) reported that they felt most supported by their friends, followed by the LGBTIQ+ scene, and their families. Respondents reported mixed support from their neighbors, school, and university, and felt little support from their church/other religious settings. Overall, members of gender minorities perceived slightly less support than members of sexual minorities.

Supported by ...
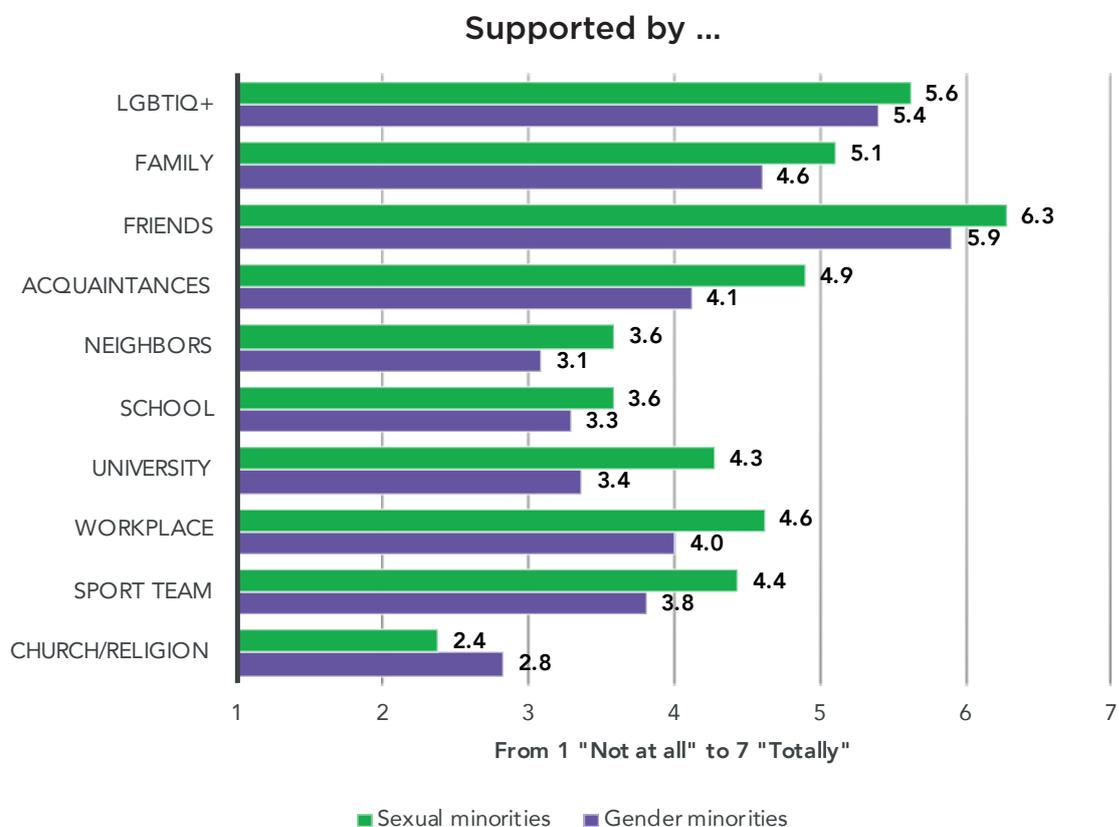
Figure 4. Support by Social Group

Table 3. Support by Social Group – Number of Valid Answers

Valid Answers	Sexual minorities	Gender minorities
LGBTIQ+	1'208	173
Family	1'197	169
Friends	1'232	173
Acquaintances	1'159	156
Neighbors	775	113
School	445	62
University	520	57
Workplace	957	109
Sport team	442	59
Church/religion	294	40

EXPERIENCES OF DISCRIMINATION

Next, members of sexual and gender minorities were asked to indicate how often they experience different types of discrimination (see Figure 5). Respondents could choose values between 1 (Never) to 7 (Very often). Thus, higher numbers correspond to higher exposure to discrimination. Members of gender minorities reported that they often face structural discrimination and exclusion, while members of sexual minorities reported less exposure to structural discrimination and exclusion. Both members of sexual and gender minorities, however, reported that they are often exposed to jokes and feel that their sexual orientation/gender identity is not taken seriously. While most respondents reported that they did not experience physical violence, members of gender minorities reported slightly more physical violence.

When comparing subgroups, we see that especially lesbian, bi- and pansexual women as well as trans* respondents report that they experience sexual harassment by men, while this is less of a problem for gay men. Further, especially bi- and pansexual respondents, lesbian women, and trans* respondents report that their sexual orientation/gender identity is not taken seriously.

Experienced Discrimination
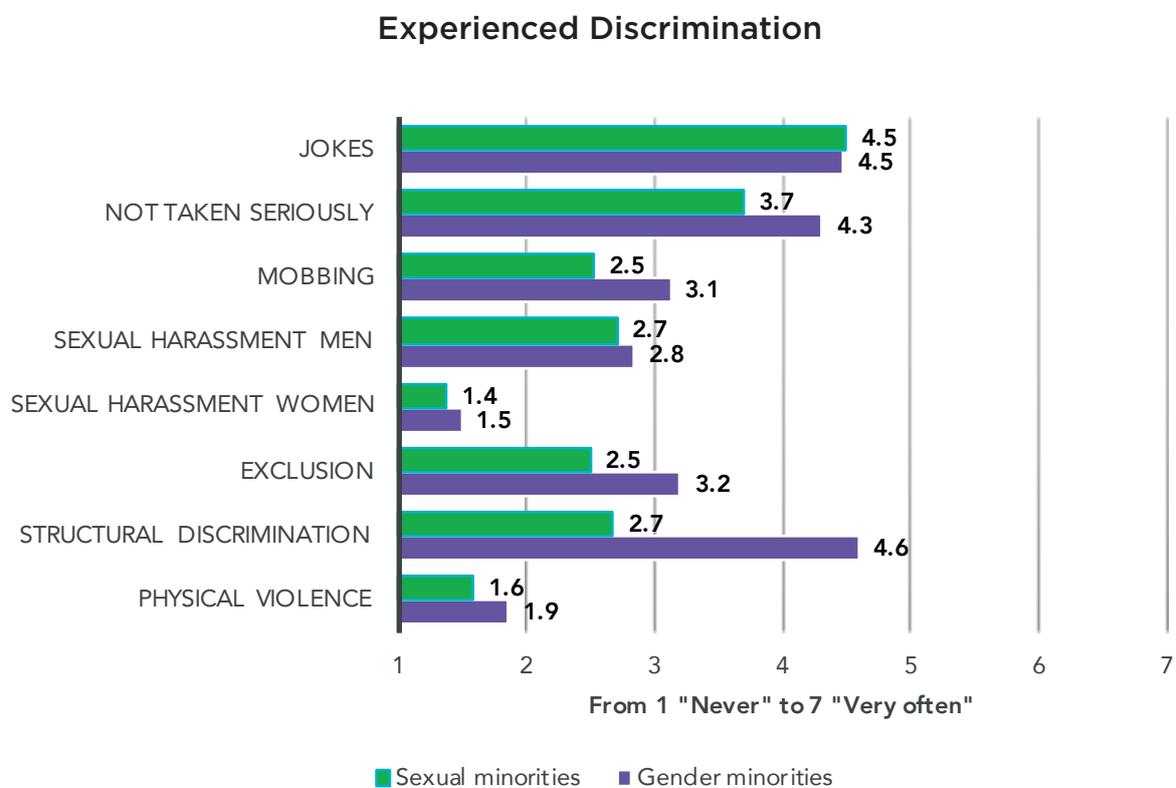
Figure 5. Types of Experienced Discrimination

CONTEXTS OF DISCRIMINATION

Because we know that discrimination can occur in very different situations, we wanted to get a better understanding of the contexts in which LGBTIQ+ individuals feel discriminated against. Again, respondents could choose values between 1 (Never) to 7 (Very often) or that a context was not applicable to them. Please keep in mind that numbers of valid responses vary widely between contexts (see Table 4). In general (see Figure 6), members of gender minorities reported more discrimination in all contexts. Yet, this was different for the church/other religious settings, as both members of gender and sexual minorities reported similar degrees of discrimination (importantly, more than two-thirds said that the religious context was not applicable for them). Gender minorities reported that they sometimes experience discrimination in school, church/other religious settings, legal institutions, hospitals, and by their families (all means around 3). Members of sexual minorities reported that they more often experienced discrimination in church/other religious settings and school (both means around 3) than in other contexts.

Context of Discrimination

Context	Sexual minorities	Gender minorities
LGBTIQ+	1.7	2.4
FAMILY	2.5	3.1
FRIENDS	1.8	2.2
ACQUAINTANCES	2.6	2.8
NEIGHBORS	1.9	2.4
SCHOOL	3.2	3.6
UNIVERSITY	1.9	2.7
WORKPLACE	2.3	2.9
SPORT TEAM	1.9	2.4
POLICE	1.5	2.1
LEGAL INSTITUTIONS	2.3	3.3
HOSPITALS	1.9	3.1
CHURCH	3.5	3.3

From 1 "Never" to 7 "Very often"

■ Sexual minorities ■ Gender minorities
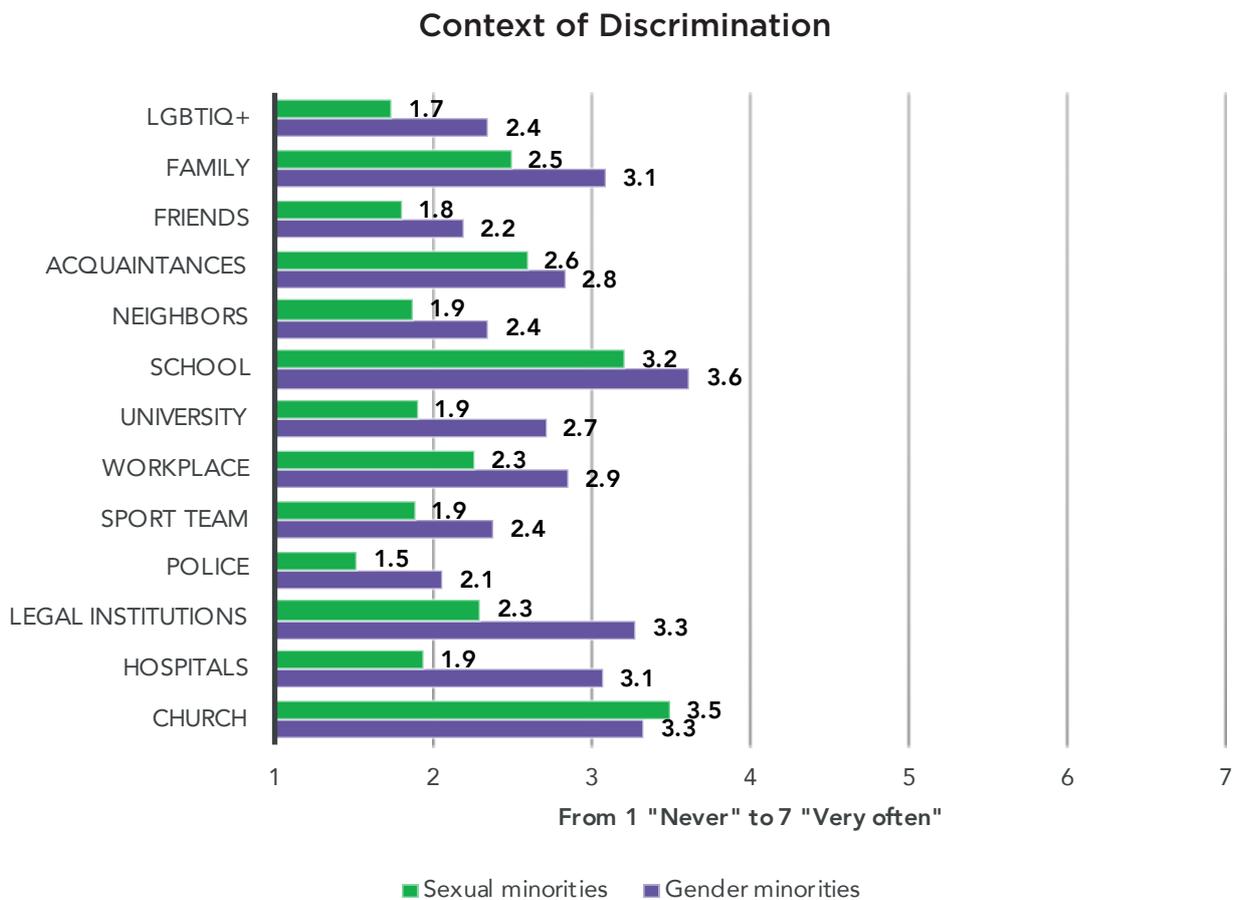
Figure 6. Context of Discrimination

Table 4. Context of Discrimination – Number of Valid Answers

Valid Answers	Sexual minorities	Gender minorities
LGBTIQ+	1117	161
Family	1143	166
Friends	1178	167
Acquaintances	1119	149
Neighbors	826	111
School	701	76
University	641	59
Workplace	973	104
Sport team	577	56
Police	806	103
Legal institutions	848	119
Hospitals	970	133
Church	426	46

In order to also give respondents the possibility to suggest other contexts of discrimination, we added an open category "other". Three main contexts appeared to be relevant. First, respondents often mentioned being the target of discrimination in the streets or in other public spaces. This includes verbal harassment by strangers or being stared at. Second, respondents also often mentioned invisibility as a form of discrimination (e.g., "bisexual erasure", marginalization of members of gender minorities). Finally, respondents often mentioned discrimination in the medical sphere (e.g., "I find the medical profession including places specifically directed towards the community as the worst source of harassment and discrimination in daily life.").

SECTION 3:
WELL-BEING

In this section we report on respondents' subjective well-being. We ask sexual and gender minority members as well as cis-heterosexual respondents about both their positive affect (i.e., feeling enthusiastic, happy, satisfied) and their negative affect (i.e., feeling sad, helpless, and dejected) in the last 12 months (see Figure 7). This allowed us to compare the well-being between the respondents. Values range between 1 (Very rarely) to 7 (Very frequently), thus higher numbers indicate both higher positive and negative affect. Cis-heterosexual respondents and members of sexual minorities do not differ in positive affect and negative affect, while members of gender minorities report less positive affect and more negative affect. This indicates that members of gender minorities feel worse off than both cis-heterosexual individuals and members of sexual minorities.

Well-Being

From 1"Very rarely" to 7"Very frequently"

■ Sexual minorities ■ Gender minorities ■ Cis-heterosexuals
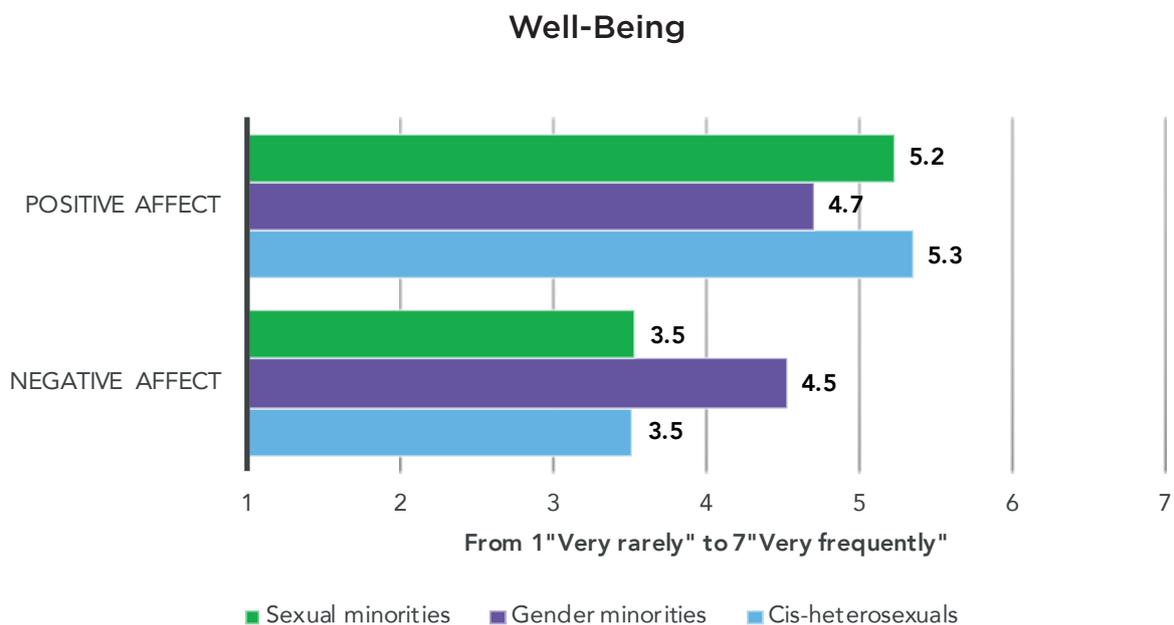
Figure 7. Well-Being

SECTION 4:
OPINIONS ON THE SITUATION IN SWITZERLAND

SUPPORT LGBTIQ+ RIGHTS

In this section we report on opinions on the situation of LGBTIQ+ individuals in Switzerland and support for LGBTIQ+ issues. We asked sexual and gender minority members as well as cis-heterosexual respondents about their disapproval (1 = strongly disagree) or approval (7 = strongly agree) of different rights that affect LGBTIQ+ individuals. Importantly, some of these rights are already in place in Switzerland, while others are currently still lacking. Overall, all three groups of respondents are very supportive of the different LGBTIQ+ rights (see Figure 8). While cis-heterosexual respondents in the current sample are likely to be more supportive of LGBTIQ+ individuals than the average population (see Methodological section), they nevertheless report less support than respondents who are directly affected by the different rights.

Opinion to LGBTIQ+ Rights

From 1 "strongly disagree" to 7 "strongly agree"

■ Sexual minorities   ■ Gender minorities   ■ Cis-heterosexuals
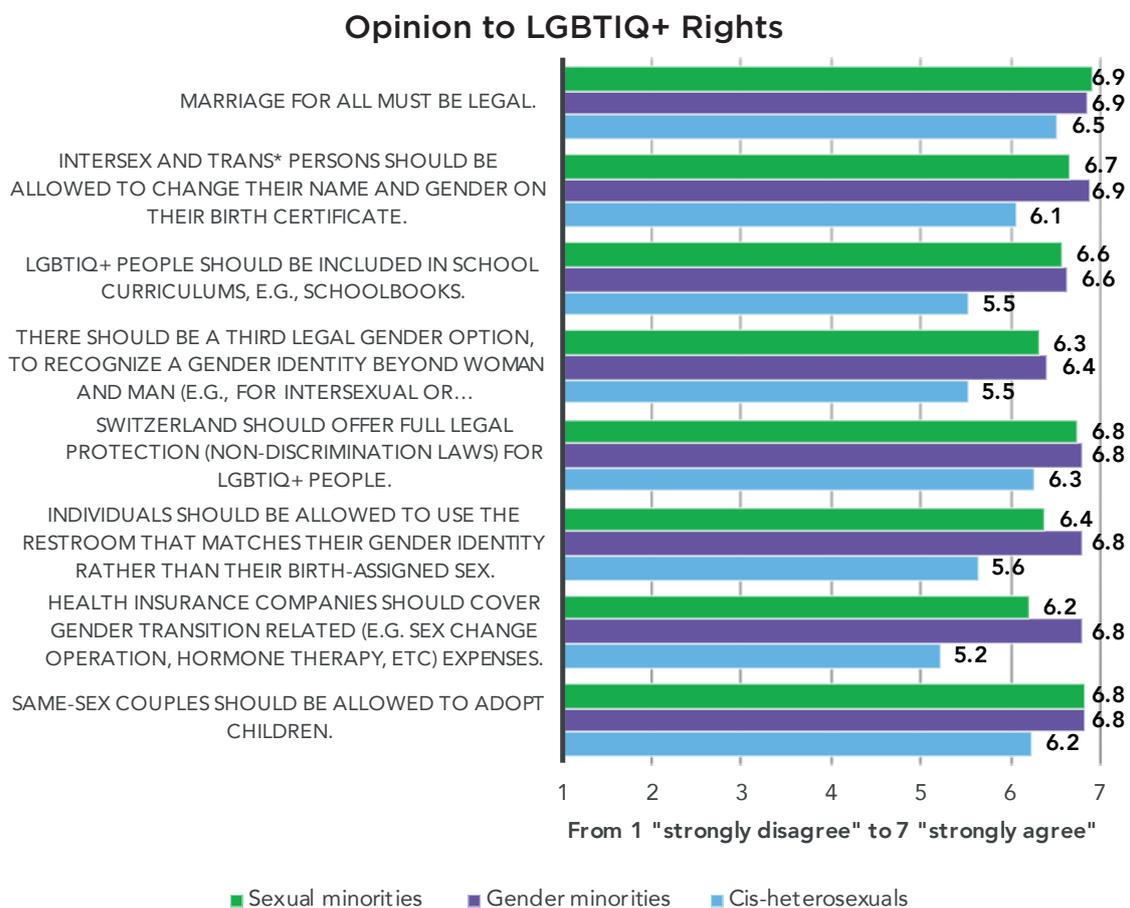
Figure 8. Support of LGBTIQ+ Rights

LAW SAME-SEX MARRIAGE

Shortly before we conducted the survey underlying this report, the Swiss Parliament suggested to first introduce a law on same-sex marriage ("marriage light"). In a second step, other rights such as assisted procreation for same-sex couples and female widow pension (until now women in a partnership receive the reduced male widow pension instead of the highest female widow pension) would be included. We wanted to know whether LGBTIQ+ individuals and participating cis-heterosexual individuals were in favor of this so-called two-step procedure or whether they preferred a one-step procedure (marriage and equal rights at the same time). We found a clear preference for the 1-step procedure among all three groups:

- **Sexual Minority Members**
  65.4% (816 sexual minority members) reported being in favor of the 1-step procedure, 24.8% (309 sexual minority members) reported being in favor of the 2-step procedure, and 9.8% (122 sexual minority members) were indifferent.

- **Gender Minority Members**
  61.0% (111 gender minority members) reported being in favor of the 1-step procedure, 19.8% (36 gender minority members) reported being in favor of the 2-step procedure, and 19.2% (35 gender minority members) were indifferent.

- **Cis-Heterosexual Individuals**
  Among cis-heterosexual respondents, 48.8% (121 cis-heterosexual individuals) reported being in favor of the 1-step procedure, 37.9% (94 cis-heterosexual individuals) reported being in favor of the 2-step, and 13.3% (33 cis-heterosexual individuals) were indifferent.

LAW PROTECTION AGAINST DISCRIMINATION

Before we launched the survey, the Swiss Council of States voted on another issue that was relevant for the current report. Parliament voted in favor of a law adjustment offering protections from discrimination on the basis of sexual orientation. While the Swiss National Council included gender identity in the bill, the Swiss Council of States decided against including discrimination on the basis of gender identity. We wanted to know to which degree members of gender minorities and sexual minorities as well as our cis-heterosexual respondents disagreed or agreed with this decision. We found a clear disagreement with the decision to not include protection on the basis of gender identity in the law.

- **Sexual Minorities**

    82.4% (1026 sexual minority members) reported being against the decision to not include protection on the basis of gender identity in the law, 9.6% (119 sexual minority members) were indifferent, and only 8.0% (100 sexual minority members) reported agreeing with this decision.

- **Gender Minorities**

    90.1% (164 gender minority members) reported being against the decision to not include protection on the basis of gender identity in the law, 7.7% (14 gender minority members) were indifferent, and only 2.2% (4 gender minority members) reported agreeing with this decision.

- **Cis-Heterosexual Individuals**

    69.7% (173 cis-heterosexual respondents) reported being against the decision to not include protection on the basis of gender identity in the law, 21.0% (52 cisheterosexuals) were indifferent, and only 9.3% (23 cis-heterosexuals) reported agreeing with this decision.

SECTION 5:
INVOLVEMENT IN THE LGBTIQ+ CONTEXT

PRESENT ENGAGEMENT IN THE LGBTIQ+ CONTEXT

In this section we report on respondents' involvement in the LGBTIQ+ context. We asked sexual and gender minority members as well as cis-heterosexual respondents whether they are currently engaged in the LGBTIQ+ context. A little less than half of the sexual minority members, more than half of the gender minority members, and one fourth of the cis-heterosexual respondents are currently engaged in the LGBTIQ+ context (see Table 5). The relatively high engagement from participating cis-heterosexual individuals indicates that our cis-heterosexual respondents are often allies of LGBTIQ+ individuals (e.g., some are involved in FELS – friends or parents of sexual minorities and other in school projects that inform students about LGBTIQ+ individuals). Therefore, we want to emphasize once again that the reported results among cis-heterosexual participants must not be generalized to the Swiss population, which are likely to be less supportive of LGBTIQ+ individuals.

Table 5. Present Engagement

	Sexual minority members	Gender minority member	Cis-heterosexual individuals
Yes	44.7 %	54.4 %	25.4 %
No	43.3 %	34.6 %	71.4%
Not Anymore	12.0 %	11.0 %	3.2%
Total N	1245	182	248

REASONS OF ENGAGEMENT IN THE LGBTIQ+ CONTEXT

We also wanted to better understand why people are engaged in the LGBTIQ+ context. Therefore, we asked respondents to write down the reasons for their engagement. On the next page, you can find some selected answers of respondents.

"I am only able to be out thanks to the activism of others. I feel that all LGBTIQ+ people have a duty to engage in some form of activism in a way that it is safe for them. (E.g. those not comfortable being out can donate money or engage in online advocacy.) It also benefits me directly (e.g. my workplace now recognizes homophobia as undermining personal integrity in its policies which was not the case in the past.)"

"I don't believe rights are given for free. I believe in the value of being together fighting for our rights."

"I want the rights and justice we deserve, not only for myself but also for my friends, the LGBTIQ+ community at large, and for the generations to come."

"I want to make a difference to other younger LGBTIQ perhaps closeted kids. They shouldn't have to worry and fail school 'cause of that. Been there done that 20 years ago. Let's make it a happy place for these kids and less harmful for them."

"To support human rights in general, make an impact in my environment and be informed for me and my family. My partner and I are foreign and we are willing to have a family. Once we started our project, we realized all the obstacles and the lack of information. My motivation today is to support other LGBTQ families or in becoming families in their journey."

"I want to show them that although in our canton people don't talk about all the issues but also good experiences that come with being a part of the LGBTIQ+ community, they are not alone and that there are people with whom they can talk and ways to get information of the subject."

"My main motivation is to live in a place where I would feel accepted. And even though I am a foreigner, Switzerland is my home, and I will do my best to make my home the best place to live for LGBTIQ+."

"Reducing misinformation and spreading acceptance. I saw it within my hetero friends, that information can change their mind. Sometimes it's not hatred, but just ignorance."

We further wanted to know whether our respondents intended to support LGBTIQ+ issues in different ways such as signing petitions, talking to cis-heterosexual people to improve the public opinion, or demonstrating for equal rights. The questionnaires were tailored to either sexual minorities or gender minorities rights. Overall, respondents were very motivated to act up for LGBTIQ+ rights (see Figure 9).

Intentions to Support LGBTIQ+ Issues

From 1 "Strongly disagree" to 7 "Strongly agree"

■ Sexual minorities   ■ Gender minorities   ■ Cis-heterosexuals
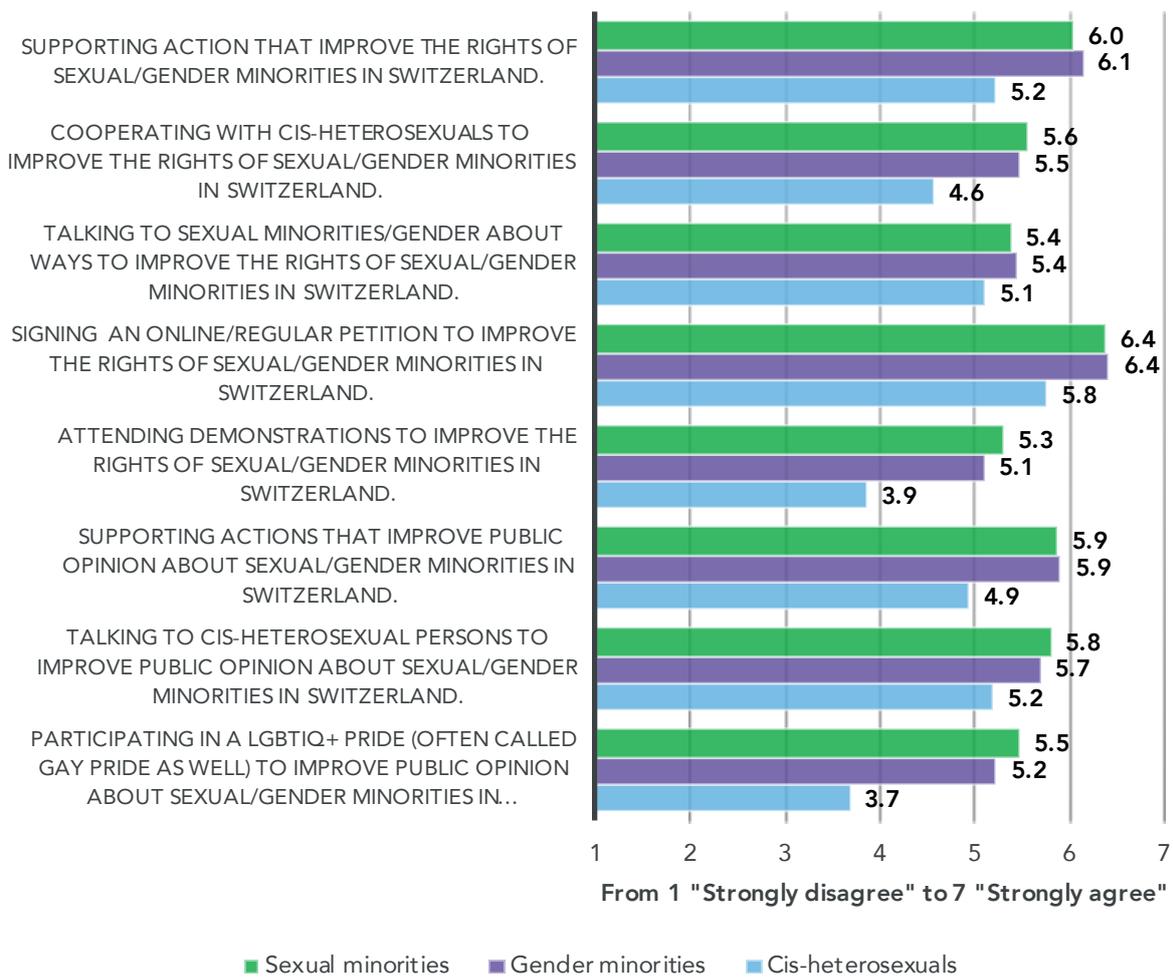
Figure 9. Intention to Support LGBTIQ+ Issues

SECTION 6:
FUTURE DIRECTIONS

The Swiss national LGBTIQ+ survey has yielded a substantial amount of data thanks to all respondents and the help of various LGBTIQ+ organizations, LGBTIQ+ magazines, and individual efforts. In this summary report, we have provided an overview of the data. The results demonstrate that despite some achievement, members of sexual and gender minorities in Switzerland still face structural inequalities, discrimination, and don't feel fully accepted everywhere. These inequalities are more pronounced among gender minority compared to sexual minority members. In addition, the results of the present report reveal that participating sexual minority members are equally well off as cis-heterosexual respondents in terms of well-being, while gender minority members report more negative well-being, which is likely to result from lower rates of acceptance and higher structural inequalities. Importantly, LGBTIQ+ and cisheterosexual respondents of the present survey overwhelmingly support equal legal status for LGBTIQ+ individuals and many LGBTIQ+ individuals as well as cisheterosexual allies are united in their struggle for greater acceptance of LGBTIQ+ individuals and greater equality for all.

We are planning to follow up this initial report with an annual survey because we think that it is important to better understand how the situation for LGBTIQ+ individuals in Switzerland develops. Switzerland will soon vote on topics that will have a direct impact on the lives of many sexual and gender minority members as well as their families and friends. We also asked all of our respondents in which contexts they see the need for additional research. The word cloud in Figure 10 provides a rough overview of the many responses we received. Many of the covered topics were mentioned by our respondents – e.g., experience of discrimination, lacking rights (e.g., marriage for all, joint adoption), and mental health. Importantly, many respondents still see a need to improve the situation for younger LGBTIQ+ individuals for example in the educational context. Finally, many respondents would like to raise awareness of the plurality of identities and experiences in the LGBTIQ+ community, which is not always accurately represented by the general public, the media, and even within the LGBTIQ+ community itself.

In every survey, we will add some questions to take these remarks into account. We are also planning to look at interdependencies between different answers –

such as the experiences of discrimination and adverse mental health. Finally, we will also try to look in detail at specific subgroups, such as bisexual and pansexual people or different gender minority members, that have been both under-studied and under-sampled. Yet, we need enough LGBTIQ+ individuals to participate to draw valid conclusions. Therefore, we hope that many people will continue to participate in our survey in the future.

*Figure 10*. What Should be Studied in the Future?

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