



**FORTE**

Swedish Research Council for  
Health, Working Life and Welfare

# THE HEALTH AND SITUATION OF YOUNG LGBTQ PEOPLE IN SWEDEN

What do we know and where  
is more research needed?

# Foreword

Over the last decade, there has been an increase in research into people's health and lives based on sexual orientation and gender identity.

Representative studies of the Swedish population have shown that homosexual and bisexual men and bisexual women have approximately twice as high a risk of mental illness compared with heterosexuals. The increased risk of poorer physical and mental health among LGBTQ people compared to heterosexuals begins early in life. There is a growing body of research showing that the common cause of these disparities lies in the specific exposure to stress associated with stigma, also known as minority stress, which LGBTQ people experience. Young LGBTQ people continue to be a vulnerable group and it is therefore important to gain more knowledge about their health and their lives.

In this report, Forte – the Swedish Research Council for Health, Working Life and Welfare – seeks to elucidate what we currently know about the lives and health of young LGBTQ people, and show differences and similarities in the experience of young lesbian, gay, bisexual, trans and queer people. The report provides knowledge-based data, recommends areas for further study and identifies knowledge gaps. The report demonstrates a need for greater knowledge of the exposure of young LGBTQ people to risk factors and illness and calls for this to be addressed by research.

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Forte is a Swedish government agency under the Ministry of Social Affairs. Forte's mission is to fund and evaluate research and to work to see research results disseminated and made available to all. Forte has a mandate from the government to coordinate research on topics including children and young people, disabilities, and integration, migration and ethnic relations (IMER). Besides upholding the highest academic quality, Forte's research is to be highly socially relevant. We encourage users, professionals and practitioners to be involved in the research processes to increase the practical application of the research.



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# Summary

Over the last decade, research on health and living conditions based on sexual orientation and gender identity has increased substantially. Early studies were conducted among non-representative samples and were based on self-reports of health, but in recent years, higher quality studies have been conducted in representative populations. The following report summarises the results of research from recent years on health and living conditions for young (13–25 years) lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals focusing on knowledge gaps and areas that need priority in future research.

Forte has a special responsibility to coordinate research that focuses on children and adolescents throughout their upbringing – from newborns to young adults. The responsibility includes strengthening and highlighting research on the health of children and adolescents, as well as research on vulnerable children and adolescents. Therefore, this report focuses on young and young adult LGBTQ people and their health.

Today, a large number of studies from different parts of the world clearly show that young LGBTQ individuals have an increased risk of mental illness, especially depression, anxiety, and suicidal behaviour, compared to young heterosexual and heterosexual cis people (persons for which the gender they were assigned at birth corresponds with their legal, social and perceived gender). Recent research has also shown that LGBTQ people report poorer general health and more frequent impaired functioning than heterosexual persons and cis people. Some specific health problems and stress-related symptoms are also more common among young LGBTQ people, such as sleep disabilities, headache and migraine as well as gastrointestinal disorders. HIV is also much

more common among gay and bisexual men and other men who have sex with men compared to heterosexual men. Some health-related risk behaviours are more common among LGBTQ people. Young gay men and bisexual women report more frequent daily tobacco smoking and young gay/bisexual men and bisexual women more often report use of cannabis. The situation among transgender individuals and those who do not identify themselves as heterosexual, homosexual or bisexual are not as well investigated as the situation for those identifying as homosexual and bisexual.

The increased risk of impaired physical and mental health, as well as suicide among LGBTQ people compared to heterosexuals begins early in life. There is a growing body of research showing that the common cause of these disparities lies in the specific vulnerability to stress associated with stigma (also known as minority stress) to which LGBTQ people are exposed. Examples of this kind of stress are exposure to discrimination, violence, stress about concealing their sexual identity or gender identity, expectations of being rejected because of one's sexual identity or gender identity, and

social isolation. There is growing support that the exposure to minority stress can increase the risk of both psychological stress reactions (e.g. impairment of mental wellbeing and suicidal behaviour) and physiological stress reactions affecting the sympathetic nervous system, stress axis (regulating hormone secretion in the hypothalamus, pituitary and adrenal cortex) and inflammatory markers for stress.

A significant proportion of the research on the health of young LGBTQ individuals has been conducted in North America. There are major difficulties in drawing conclusions about the situation among young LGBTQ people in Sweden based on these studies. Sweden is a relatively open and tolerant country where LGBTQ people enjoy comparatively strong legal protection, and there is growing evidence showing that structural factors has a major impact on the health and living conditions of LGBTQ people.

It is important to strengthen research on the situation of LGBTQ people in Sweden. In particular, more high-quality studies are required with representative samples of people with an LGBTQ identity. Below are a number of suggestions for improvement, both in terms of mapping LGBTQ people's living conditions and areas that need to be highlighted in future research.

### **Knowledge gaps and recommendations from the author**

1. Questions about LGBTQ identity should be used in all population surveys in Sweden.
2. Questions about LGBTQ identity should be included in health surveys at schools and in working life.
3. Awareness about the increased vulnerability of young LGBTQ people to risk factors and ill health must be present in youth research and a LGBTQ perspective should always be part of such research.
4. In order to increase knowledge about risk and protection factors for the health of young LGBTQ people, longitudinal studies are required in representative populations where health and living conditions are followed with both self-reported and objective measures.
5. Since the majority of the research carried out on causes of increased risk of ill health among LGBTQ people has been conducted in North America, in-depth studies are required for Swedish conditions.
6. More knowledge about the strengths and protection factors of LGBTQ people is needed. Such knowledge may then serve as a basis for interventions aimed at improving care, prevention and treatment tailored for LGBTQ people.
7. More research is needed in some subgroups within the LGBTQ group, especially those with different sexual identities than gay or bisexual (e.g. queer) and among transgender people.
8. More research is needed on vulnerability among LGBTQ people and its causes, including violence from a partner, sexual violence and honour-related violence, with particular focus on the situation of transgender and bisexual women.
9. In order to reduce the dramatically increased risk of mental illness, interventions aimed at preventing and effectively treating mental health among LGBTQ people need to be developed and evaluated.
10. There is a need for randomised controlled studies that investigate the effect of LGBTQ- specific psychological treatment.
11. National suicide prevention efforts must be adapted to meet the high risk among LGBTQ people.
12. More research should have an intersectional perspective that takes into account the impact of multiple social identities and the consequences of gender, class, ethnicity, skin colour, function variation and age in conjunction with sexual orientation and gender identity.
13. There is a need for more knowledge about how to best to deal with the care of young transgender and the effects of gender affirming care on transgender health, well-being and living conditions.
14. More knowledge about the long-term effects of sex-confirming care for transgender is needed.
15. Research also needs to be done in specific groups of LGBTQ people, e.g. socially vulnerable and newly arrived.

16. More knowledge is needed about the care, care needs and life situation of persons with intersexual variation, that is, those who have a body that cannot be categorised as male or female according to social norms for gender.

17. Research funding should encourage applicants to specifically consider and motivate the inclusion or exclusion of LGBTQ people in their research.

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## Glossary

<b>Bisexual</b>	A person who is sexually and romantically attracted to both men and women.
<b>Cis</b>	Cis is Latin for “on this side of”. The term is used for a person whose legal sex, biological sex and gender identity match, and have always matched, the prevailing norms of society.
<b>“Coming out”</b>	“Coming out of the closet” or “coming out” is an expression used to describe LGBTQ people’s openness about their sexual orientation or gender identity to themselves and others.
<b>Gay man</b>	A person who identifies as a man and has a romantic and/or sexual attraction to other men.
<b>Gender-confirming treatment</b>	Different treatments to change the body so that it better matches a person’s gender identity.
<b>Gender dysphoria</b>	A term that covers mental suffering based in gender identity and sex assigned at birth. At the moment, a diagnosis of gender dysphoria is needed to gain access to gender-confirming treatment in Sweden. A gender assessment at a gender clinic is required to obtain such a diagnosis.
<b>Gender expression</b>	Characteristic features linked to appearance, personality and behaviour that are culturally defined as male or female.
<b>Gender identity</b>	An individual’s fundamental experience of being a man, a woman or another gender identity.
<b>Genderqueer</b>	Queer is used as a term to describe a sexual orientation and/or gender identity that differs from the heteronormative. Genderqueer refers to people who have a gender identity that differs from the gender-normative division into male and female.
<b>Heterosexual</b>	A person who is sexually and romantically attracted to people of the opposite sex.
<b>Homophobia</b>	A term covering different expressions of stigma and prejudice linked to homosexual or bisexual orientation.
<b>Homosexual</b>	A person who is sexually and romantically attracted to people of the same sex.
<b>Hypervigilance</b>	A high state of alertness and attention to potential threats.
<b>Intersectionality</b>	A theory used to analyse how social and cultural categories interact.

<b>Intersex</b>	Having a body that cannot be categorised as male or female in accordance with society's norms for determining sex, resulting in the medical diagnosis of intersex. Conditions classified as intersex are very different but what they have in common is that they involve being born with differences in sexual development linked to sex chromosomes, sex glands or sexual organs. Although intersex does not have its own letter in the abbreviation LGBTQ, intersex variations are often included in discussions and work on LGBTQ issues.
<b>Lesbian</b>	A woman who is sexually and romantically attracted to women.
<b>LGBTQ</b>	A combination of letters that stands for lesbian, gay, bisexual, trans and queer.
<b>MSM</b>	Men who have sex with men.
<b>Non-binary</b>	A person who identifies between the gender division of male and female.
<b>Pansexual</b>	A person who is sexually and romantically attracted to people irrespective of their gender identity.
<b>Queer</b>	Today used as a term to describe a sexual orientation and/or gender identity that differs from the heteronormative.
<b>Trans</b>	An umbrella term that covers many groups of people whose gender identity and/or gender expression does not match the sex they were assigned at birth.
<b>Transphobia</b>	A term that covers different expressions of stigma and prejudice linked to trans people or trans identity.
<b>Transvestite</b>	A person who wears clothes and other attributes usually considered typical of the sex other than that which they were assigned at birth.



# 1. Introduction

Forte has a special responsibility to coordinate research that focuses on children and adolescents throughout their upbringing - from newborns to young adults. This responsibility includes strengthening and highlighting research on the health of children and young people, as well as research on vulnerable children and young people. This report therefore particularly focuses on young and young adult LGBTQ people and their health.

Young people go through a number of different physical, psychological and environmental changes. They are expected to navigate their way through these changes and for many people – if not the vast majority – these years are a challenging period of their lives. Besides having to deal with the demands that youth and adolescence make of all young people, young people who identify as lesbian, gay, bisexual, trans or queer (LGBTQ) have to learn to tackle a number of challenges that are specifically linked to these identities (Savin-Williams & Cohen, 2015). Lesbian, gay, bisexual and queer people have to cope with the reaction of society, their communities and their families to their contravening society's norms of sexual identity, attraction and behaviour. Trans people share the fact that they are contravening the norms of society in terms of gender, gender identity and gender expression (i.e. characteristics linked to appearance, personality and behaviour that are culturally defined as male or female) in different ways and have to cope with society's reaction to this too.

How young LGBTQ people experience their situation and the challenges they face is strongly shaped by the environment and the context in which these young people find themselves. Society's view of people with an LGBTQ identity has changed a great deal over a relatively short period (Flores & Park, 2018) and research on the health and lives of LGBTQ people has increased significantly over the past 10–15 years (Hatzenbuehler & Pachankis, 2016a). The purpose of this report is to provide an overall picture of the knowledge currently available on young LGBTQ people and identify areas on which further light should be shed. The majority of research into the health and situation of young LGBTQ people has been carried out in North America and to better understand the relevance of these research results to the health of young LGBTQ people in Sweden, the results need to be placed in a Swedish context. The report therefore begins with a brief description of the conditions in which young LGBTQ people live in Sweden and the climate on LGBTQ issues in Swedish society.

The intention for this report is to sum up the knowledge available on the health of young LGBTQ people in Sweden and the circumstances in which they live. The report summarises international research on the health and lives of LGBTQ people in recent years and knowledge of the determinants of health in this group. Besides providing a picture of the current status of research, an important purpose of the report is also to identify knowledge gaps and areas in which more information and initiatives are necessary.

## **DEFINITIONS OF GENDER, GENDER IDENTITY, GENDER EXPRESSION AND SEXUAL ORIENTATION**

The term LGBTQ spans a broad group of individuals with different genders, gender identities, sexual orientations, ethnicities and sociodemographic backgrounds. Although as a group LGBTQ people share similar experiences in terms of divergence from society's norms

and experience of stigma, the report attempts to highlight the differences that exist within the group and the specific needs of the different sub-groups in terms of their health and circumstances.

### **Trans people**

Being trans, or having a trans or transgender identity is used as an umbrella term for people whose gender identity differs from the sex they were assigned at birth, and for people whose gender expression differs from the culturally bound gender expression associated with the sex they were assigned at birth. In Sweden, currently, there are two legal sexes that can be assigned at birth – male or female. Trans people, however, define their gender identity in many different ways, such as being: a man, a woman, a transman, a transwoman, transsexual, genderqueer, non-binary, intergender, bigender or a transvestite. The gender expression of trans people also varies between individuals depending on factors including cultural and ethnic background, socioeconomics, age and place of residence (White, Hughto, Reisner & Pachankis, 2015). Some trans people choose to change their social gender and change their name, pronoun and gender expression. Trans people may also seek gender-confirming treatment, such as hormone treatment or surgery.

Studies of trans identity around the world use international diagnosis systems and the term “gender dysphoria” is used to categorise individuals with a trans identity. The use of the term gender dysphoria, which is listed as a psychiatric diagnosis, is contentious and it is likely that a new term, “gender incongruence”, will be introduced in future international diagnosis systems. At the moment, a diagnosis of gender dysphoria is needed to gain access to gender-confirming treatment in Sweden. A gender assessment at a gender clinic is required to obtain such a diagnosis. In Sweden, statistics from national health records show that about 0.04 percent of the population (approximately 3,500 people) sought treatment for gender dysphoria in the last ten years (Swedish

National Board of Health and Welfare, 2017). Being diagnosed with gender dysphoria is more common among younger people and the proportion seeking treatment has increased in recent years (National Board of Health and Welfare, 2017). The opportunity to access a gender assessment and gender-confirming treatment has also increased (Lundgren et al., 2016).

There are also trans people with a non-binary gender identity who do not fall within the categories male or female (Public Health Agency of Sweden, 2015). Gender-confirming treatment is available for both binary and non-binary trans people.

### **Intersex**

Having a body that cannot be categorised as male or female in accordance with society’s norms for determining sex can result in the medical diagnosis of intersex. Conditions classified as intersex are very different but what they have in common is that they involve being born with differences in sexual development linked to sex chromosomes, sex glands or sexual organs. Some conditions are identified at birth while others do not become evident until puberty or adulthood. Early surgery may be carried out, sometimes with the intention of making the child’s sexual organs more like those of the sex the child has been assigned. There is an ongoing national and international debate about surgical interventions in intersex conditions, the right to reject unwanted surgery, and the right to decide over one’s own body. Although intersex does not have its own letter in the abbreviation LGBTQ, intersex variations are often included in discussions and work on LGBTQ issues.

### **Sexual orientation**

Sexual orientation involves several elements but is often defined by sexual attraction, behaviour and identity, or a combination of these. What lesbians, gay men, bisexual and queer people have in common is that their sexual identity is not exclusively heterosexual. However, this is a group that includes men and women, homosexuals (gay men and lesbians) and bisexuals, people who identify as queer, pansexual or use another word

for their identity, and people who do not have an LGBTQ identity but experience same-sex sexual attraction and have same-sex sexual contact. This report attempts to highlight the information available on differences in the health and lives of all the groups that can be categorised as LGBTQ.

### **PURPOSE OF THE REPORT AND DELIMITATION**

This report comprises a review of the literature with a focus on research and knowledge on young LGBTQ people's lives and health. The overview spans scientific literature in academic, peer-reviewed journals and seeks to identify knowledge gaps and questions that require further research. The report constantly considers which research results are relevant to Swedish circumstances and particularly highlights results of Swedish studies.

The report attempts to find answers to questions including:

1. What knowledge is there today about the circumstances in which young LGBTQ people (aged 13–25) grow up and their health based on recent research results?
2. What is the status of knowledge in the field? What areas are the most researched and which areas need to be researched and studied more?
3. What policy recommendations can be formulated on research priorities and ongoing knowledge needs in the light of the literature review?

### **METHODOLOGY OF THE SYSTEMATIC LITERATURE REVIEW**

The methodology of the structured literature review is set out in detail in appendix 2 (at [www.forte.se/en/publication/young-lgbtq](http://www.forte.se/en/publication/young-lgbtq)). Systematic searches were conducted in the databases: MedLine, Web of Science Core Collection and PsycInfo. The search terms used are listed in detail in the appendix, but encompass different expressions of LGBTQ identity combined with health, circumstances, and determinants of health, and were restricted to

covering children, young people and young adults.

The search encompassed publications up to December 2017 and identified 6,714 unique hits. The distribution of the number of articles published per year is presented in appendix 2. Due to the large volume of articles, the report will mainly focus on the results of review articles published in the last five years, a total of just over 300 articles. The areas covered by the review articles are summarised in appendix 2.

Besides a review of the academic literature identified in the systematic search, reports by government agencies and other literature describing the situation of young LGBTQ people in Sweden are also cited. The reports help to provide a picture of the specific situation for LGBTQ people from a Swedish perspective.

### **STRUCTURE OF THE REPORT**

The report is divided into three main parts. The first part presents an overview of what life is like for LGBTQ people in Sweden today (section 2). This section presents the data available today on the number of people thought to be LGBTQ in Sweden. The report sums up the situation in terms of legislation, guidelines and attitudes in the population towards LGBTQ people and places the situation in Sweden in a wider international context. The second part of the report, sections 3–6, presents a review of the currently available knowledge on the lives and health of LGBTQ people based on the structured review of the literature described in detail in appendix 2. This section addresses health differences among LGBTQ people compared with heterosexuals and cis people (section 3), health risk and protective health factors for LGBTQ people (section 4), differences in health and circumstances of specific sub-groups of LGBTQ people based on social status and ethnicity, etc (section 5), and finally care, prevention and treatment to improve the health of LGBTQ people (section 6). The report concludes with a section on knowledge gaps and recommendations (section 7).



## 2. LGBTQ in Sweden

This section sets out what we currently know about the sociodemographic composition of the group LGBTQ people and how many people can be assumed to be part of this group. A brief description is provided of the cultural climate surrounding gender identity, gender expression and sexual orientation in Sweden and how this has evolved in the past few years.

### DEMOGRAPHIC DESCRIPTION OF THE GROUP LGBTQ PEOPLE IN SWEDEN

Key issues in research into the lives and health of minority groups include the size of the group and its sociodemographic composition. Due to difficulties in gathering credible data from sufficiently large groups, it is difficult to provide a good description of the sociodemographic composition of minority groups based on sexual orientation, gender identity or gender expression. Describing the composition of different minority groups would require data from major national surveys on health and circumstances. It is still unusual for this type of survey to include questions about sexual orientation, gender identity or gender expression. Even in representative surveys that do contain these questions, the sample is often too small to be able to satisfactorily analyse differences linked to ethnicity, migration background or disability within the group. Given these shortcomings, what we currently know regarding the demographic make-up of the group LGBTQ people in Sweden is outlined below.

#### Sexual orientation

Exactly how many people in the population

identify as lesbian, gay, bisexual or queer is hard to say but the best estimates come from the regular health surveys conducted covering the Swedish population. In 2005 the Public Health Agency of Sweden (then Statens folkhälsoinstitut) included a question on sexual orientation in its annual national health survey “Health on equal terms” (Public Health Agency of Sweden, 2014). The proportion of respondents stating a homosexual or bisexual identity has remained relatively stable over the years but has increased slightly in recent years. The proportion of the population in general stating a homosexual or bisexual identity has varied between 2.4 and 2.8 percent. This proportion is slightly higher among young people and this has increased somewhat in recent years. Table 1 presents the proportion of young people (aged 16–25) who are homosexual or bisexual from two representative surveys in Sweden. A question including sexual orientations other than homosexual, bisexual or heterosexual has also been added to the more recent surveys (Bränström, 2017; Bränström & Pachankis, 2018e).

#### Trans people

In 2015 a question on trans experience was also added to the national public health survey “Health on equal terms”. According to the results of these surveys, which aim to be representative of the population as a whole, approximately 0.4 percent of the population state that they are or have been trans.

However, one single question on trans identity does not provide a good picture of the diversity of identities within the trans group. In 2014 the Public Health Agency of Sweden conducted an extensive survey of trans people in Sweden (Public Health Agency of Sweden, 2015). While the survey cannot be said to be representative of the group, it provides a wider ranging picture of trans people than was previously available. The survey asked people how they themselves described their trans identity and gender identity.

**Table 1. Proportion of young people in Sweden reporting a lesbian, gay or bisexual identity or identity other than lesbian, gay, bisexual or heterosexual in representative population surveys**

	Year of survey			
	2010/2011	2012/2013	2014/2015	2014/2015
	Lesbian, gay or bisexual	Lesbian, gay or bisexual	Lesbian, gay or bisexual	Identity other than lesbian, gay, bisexual or heterosexual
Public Health Agency's national public health survey "Health on equal terms" (aged 16-25)	4.7 %	4.7 %	6.1 %	1.9 %
Stockholm County Council's public health survey, Health Stockholm (aged 18-25)	5.6 %		7.5 %	4.4 %

**Table 2. Proportion of transgender people in Sweden reporting different trans and gender identities**

Transgender identity	Proportion	Gender identity	Proportion
Trans	47 %	Man	26 %
Transsexual	37 %	Woman	36 %
Former transsexual	6 %	Both male and female/ in between male and female	26 %
Transvestite	16 %	Queer	26 %
Intergender	31 %	Agender/neither male or female	23 %
Other	5 %	Unsure	8 %
Unsure	7 %		

Source: Public Health Agency of Sweden report: Health and health determinants among transgender persons, 2015.

Table 2 shows how those who responded identified themselves in different ways in the survey.

14 percent of the trans people who participated in the Public Health Agency's survey had changed legal sex, while more than a third expressed a desire to change legal sex. A quarter of those who participated in the survey expressed a desire to change to a legal sex that does not currently exist in Sweden.

### **THE CULTURAL CLIMATE SURROUNDING GENDER IDENTITY, GENDER EXPRESSION AND SEXUAL ORIENTATION IN SWEDEN**

How young LGBTQ people experience their situation and the challenges they face is strongly shaped by the environment and the context in which these young people find themselves. Society's view of people with an LGBTQ identity has changed a great deal over a relatively short period and awareness of the health and situation of LGBTQ people has increased

significantly over the past 10–15 years. In order to understand the health situation of young LGBTQ people, the research results must be placed in a Swedish context. The following section presents a summary of the conditions in which young LGBTQ people live in Sweden and the Swedish climate on LGBTQ issues.

### **Social welfare and Sweden's LGBTQ strategy**

Equal rights and opportunities for all citizens is an important goal of Swedish policy and in 2014 the Swedish government drew up a strategic plan for working to attain equal rights and opportunities regardless of sexual orientation, transgender identity or expression (Swedish Government Offices, 2014). The goal of the strategy is to improve the situation for homosexual, bisexual and trans people by:

- a) reducing violence, discrimination and harassment,
- b) supporting young LGBTQ people's access to welfare and influence,
- c) working for equal opportunities for good health, welfare and social services,
- d) defending the right to privacy and freedom for the individual and the family,
- e) encouraging the arts sector to contribute towards diversity, openness and norm-critical expression,
- f) strengthening opportunities for civil society to contribute towards equal rights and opportunities.

Besides formulating these goals, responsibility for carrying out measures to attain these goals was also allocated to a number of different government agencies. For example, the Swedish Agency for Youth and Civil Society (MUCF) is responsible for work to promote equal rights and opportunities irrespective of sexual orientation, gender identity and gender expression with a focus on young people aged 13–25. They have issued a number of reports focusing on different aspects of being young and LGBTQ in Sweden (Swedish Agency for Youth and Civil Society,

2017a, 2017b). The agency has also been entrusted with carrying out initiatives seeking to promote an open and inclusive environment for young LGBTQ students in schools and has produced a number of documents to this end (Agency for Youth and Civil Society, 2015, 2016).

### **Legislation and policy**

In the past 15 years, major changes have taken place in Sweden in terms of discrimination legislation and the population's attitudes to LGBTQ people (Hooghe & Meeusen, 2013; Swedish Federation for Lesbian, Gay, Bisexual and Transgender Rights, 2015). In particular, several laws that protect LGBTQ people against discrimination were introduced in and around the early 21st century, e.g. on discrimination in the workplace (Swedish Code of Statutes, 1999). Hate crime legislation was also reworded to include sexual orientation and gender identity (Swedish Code of Statutes 2003) and in 2006 protection against discrimination at school was included. Furthermore, gender-neutral marriage legislation was introduced in 2009 (Swedish Code of Statutes, 2009).

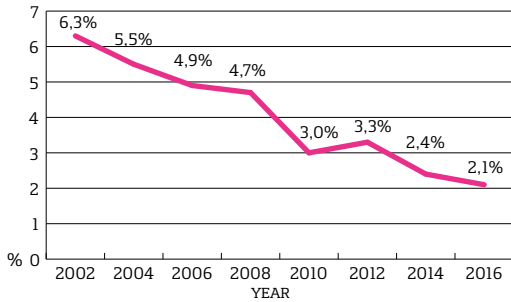
### **Attitudes in society**

The population's attitudes have also changed, in pace with improved legislation. Data from the European Social Survey, which has been carried out every two years since 2002, shows that the proportion of people in Sweden who disagree with the statement that "Gay men and lesbians should be free to live their own lives as they wish" fell continuously over the past 15 years, from 6.9 percent in 2002, to 4.7 percent in 2008 and to 2.1 percent in 2016 (Norwegian Social Science Data Services, 2002–2017), see figure 1. Other surveys have also been conducted into European attitudes. One, carried out in 2015, showed that 95 percent of the Swedish population agreed that gay, lesbian and bisexual people should have the same rights as heterosexual people and 93 percent agreed that there was nothing wrong in a sexual relationship between two people of the same sex (European Commission, 2015). Support for same-sex marriage increased from 71 percent in 2006 to 90

percent in 2015 (European Commission, 2006). In a survey in 2016, only 4.3 percent of respondents in Sweden said they would be ashamed if a close family member was homosexual (Norwegian Social Science Data Services, 2002–2017).

**Figure 1. Attitudes to homosexuality in the population**

Proportion of people in Sweden who do not agree with the statement “Gay men and lesbians should be free to live their own lives as they wish”



Source: European Social Survey.

Attitudes to trans people have improved in the population too. In a European attitude survey carried out in 2015, 93 percent of respondents said that they would feel comfortable if one of their work colleagues was a transgender or transsexual person, and 78 percent said that they would feel comfortable if one of their children was in a loving relationship with a transgender or transsexual person (European Commission, 2015). In the same survey, 80 percent of respondents in Sweden said they thought transgender or transsexual people should be able to change their civil documents to match their inner gender identity.

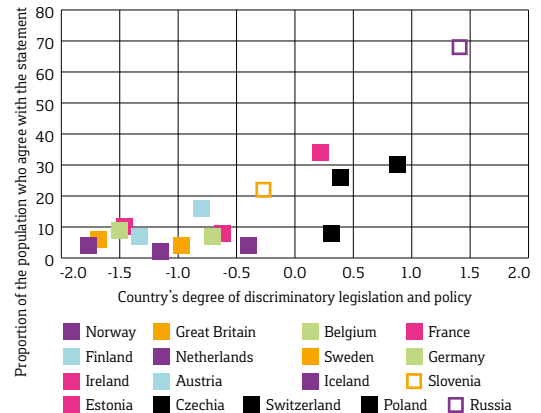
### Sweden compared with other countries in Europe

Another example showing how factors such as legislation and rights are linked to attitudes among the population can be illustrated by the figure below (see figure 2). The figure shows results from a number of European countries regarding the proportion of the population who agree with the statement “If a close family member was a gay man or a lesbian, I would feel ashamed.” The horizontal axis shows how discriminatory the country’s legislation and policy are compared with other countries in 2017. Data on a country’s discriminatory legislation

and policy is produced by the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA). The figure clearly shows that in societies with more discriminatory legislation and poorer conditions for LGBTQ people a higher proportion of the population respond that they would be ashamed if a close family member was a gay man or a lesbian.

**Figure 2. The population’s attitudes to homosexuality in a number of European countries compared with that country’s degree of discriminatory legislation and policy**

If a close family member was a gay man or a lesbian, I would feel ashamed.



Source: The International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA) Europe, 2017 och European Social Survey.

### Religion and homosexuality

Sweden is often described as a very secular and liberal country in which the majority of the population think that homosexuality is a legitimate way of life (Bränström & van der Star, 2013; Van den Berg et al., 2014). Religious faith in Sweden has been characterised by “the Swedish paradox” (Bäckström, Edgardh Beckman & Pettersson, 2004). The paradox is that extremely few members of the population attend services, but the majority of Swedes think that church rituals such as christenings and weddings are important (Bäckström et al., 2004). The Church of Sweden, which is the largest faith community in Sweden with more than 6 million members, has managed to retain its status relatively well over the years since its disestablishment in 2000 and has largely adapted to the

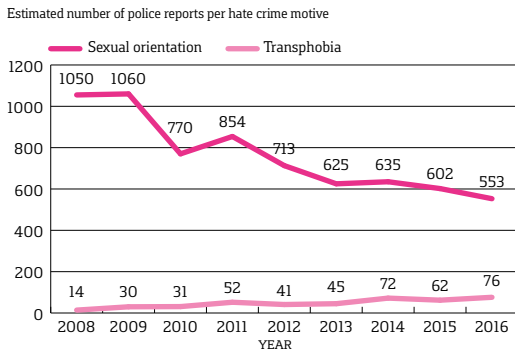


population's attitudes and opinions on homosexuality. In public debate in Sweden, a picture has been created and reinforced which describes "true" Christianity as tolerant and inclusive of people irrespective of their sexual orientation, gender identity and gender expression (Van den Berg et al., 2014). Whether this inclusive attitude also extends to other religions and faith communities in Sweden is more unclear.

### Hate crime and violence

Hate crime can be seen as an extreme expression of the consequences of certain specific norms in society. The number of hate crimes reported to the police linked to sexual orientation has fallen dramatically in Sweden in the past decade (see figure 3), from 1,055 reported cases in 2008 to 553 cases in 2016 (Swedish Council for Crime Prevention, 2017). On the other hand, hate crimes due to trans identity appear to have increased from 14 cases in 2008 to 76 cases in 2016 (Swedish Council for Crime Prevention, 2017). Statistics on reported hate crime should be interpreted with care as the vast majority of crimes are not reported to the police.

**Figure 3. Number of hate crimes with a hate crime motive linked to sexual orientation and transphobia 2008-2016**



Source: The Swedish National Council for Crime Prevention

There is a certain amount of evidence of a reduction in violence towards homosexuals and bisexuals in national population surveys. In the past ten years, results of national representative surveys show a decline in self-reported experience of violence and threats of violence, with a reduc-

tion from 17 percent in 2005 to 6 percent in 2015 among homosexuals and a fall from 25 percent in 2005 to 16 percent in 2015 among bisexuals (Hatzenbuehler, Bränström & Pachankis, 2017).

### Openness about sexual orientation and trans identity

The climate in Sweden today is relatively open surrounding sexual orientation, gender identity and gender expression. The accepting climate and the relatively non-discriminatory legislation are probably the reasons why many gay men, lesbians and bisexuals can be open about their sexual orientation. Studies have shown that about 80 percent of gay men, 84 percent of lesbians and 53 percent of bisexuals in Sweden are open about their sexual orientation with at least some of the people around them (Pachankis & Bränström, 2018). Here Sweden differs considerably from Eastern European countries such as Latvia, Lithuania and Romania, where approximately 20 percent of lesbians, gay men and bisexuals are open about their sexual orientation.

### International migration

In the past decade, large groups of refugees have come to Europe from other parts of the world. Sweden has taken in a relatively high proportion of refugees and need for protection on grounds of sexual orientation has been one reason for granting residence permits to asylum seekers. International migration has affected the demographic composition of lesbian, gay and bisexual people in Sweden. Considerably more homosexuals and bisexuals in Sweden today were born outside Europe than was the case a decade ago. The proportion of gay men and lesbians in Sweden who were born outside Europe was 19 percent in 2015, compared with 6 percent in 2005 (Hatzenbuehler et al., 2017). Many of the lesbians, gay men and bisexual men and women who immigrate to Sweden come from countries with more discriminatory laws and societies where acceptance of homosexuality is much lower than among the Swedish population (Bränström & Pachankis, 2018b).

A recently conducted survey of gay, bisexual and queer young men showed that those who had immigrated to Sweden from countries in the Middle East in the past five years concealed their sexual identity more often than gay, bisexual and queer men born in Sweden (Bränström & Pachankis, 2018b). Openness about sexual orientation among migrants increased the longer they had lived in Sweden.

Just over 11 percent of the trans people who contact the healthcare service and undergo a gender identity investigation are born outside Europe, which is a slightly higher proportion than the proportion of people born outside Europe in the population as a whole (Bränström & Pachankis, 2018c).

### ACCESS TO HEALTHCARE

Sweden has a national health system that covers everyone who lives in Sweden, including asylum-seekers. The philosophy is that everyone in need of healthcare is offered the healthcare they need. However, for asylum-seekers, this mainly involves emergency treatment. For example, gender-confirming treatment for asylum-seekers with a diagnosis of gender dysphoria is not covered. Many countries have private medical insurance that does not always cover the entire population. In the USA, for example, where a large proportion of the research into LGBTQ health has been carried out, access to healthcare varies considerably depending on the insurance cover held and people who are married are often covered by the medical insurance of their spouse. This makes it difficult to judge how well American research results on access to treatment translate to the situation in Sweden.

Trans people in Sweden are entitled to gender-confirming treatment if they so wish. At the moment, a diagnosis of gender dysphoria is needed to gain access to gender-confirming treatment. Trans people need to undergo a gender identity assessment to obtain a diagnosis of gender dysphoria. To improve care and

reduce regional differences in access to and the quality of care, the National Board of Health and Welfare has drawn up national information support for young (National Board of Health and Welfare 2015a) and adult trans people (National Board of Health and Welfare 2015b).

On 1 December 2016 the Swedish government appointed a special inquiry charged with surveying the living conditions of trans people in Sweden and proposing measures that could help to improve the conditions in which trans people live and make the lives of trans people safer and more secure. The inquiry presented its proposals for a raft of measures in November 2017 (Swedish Government Official Reports, SOU 2017) including:

- Better knowledge on the situation of LGBTQ people among health service professionals and in society in general
- Measures to reduce waiting lists for gender-confirming treatment and to make treatment more equal
- An inquiry into the possibility of a third legal sex
- Stronger support for LGBTQ families
- Better awareness of the situation of trans people in the labour market
- Better inclusion of trans people on forms and in surveys
- More awareness of the conditions in which people with intersex conditions live
- Improved work for LGBTQ asylum-seekers

### 3. Research on the health and situation of LGBTQ people in Sweden

The AIDS epidemic of the 1980s and 1990s drew attention to the health of sexual minorities and specifically the health of men within this group of sexual minorities.

The majority of the research described the greatly increased risk of HIV infection affecting gay, bisexual and other men who have sex with men (MSM) both in Sweden and in the rest of the world. However, during this period, studies were also presented which showed a growing risk of poor mental health in LGBTQ people, founded in stigma and discrimination (D'Augelli, 1989; Garnets, Herek & Levy, 1990). Over the last decade, there has been a marked increase in research on health and living conditions based on sexual orientation and gender identity and the quality of the studies conducted has improved. The majority of studies have researched health and sexual orientation, but an increasing number also describe the health situation and the lives of trans people. The following section summarises the findings reported in the overview articles identified in international research mainly from the past five years (between 2012 and 2017). See appendix 2 for a detailed description of the search strategy and selection of articles.

#### **IS THERE A DIFFERENCE BETWEEN THE HEALTH AND SITUATION OF LGBTQ PEOPLE AND THAT OF THE REST OF THE POPULATION?**

There are currently a large number of studies showing that young LGBTQ people have a

higher risk of illness compared to young heterosexual and cis people. The results of these studies have been summarised in a number of literature reviews (Adelson, Stroeh & Ng, 2016; Blondeel et al, 2016; Connolly, Zervos, Barone, Johnson & Joseph, 2016; Dhejne, Van Vlerken, Heylens & Arcelus, 2016; King et al., 2008b; Lick, Durso & Johnson, 2013; Oost, Livingston, Gleason & Cochran, 2016; Ploderl & Tremblay, 2015; Russell & Fish, 2016a; Semlyen, King, Varney & Hagger-Johnson, 2016; Williams, Connolly, Pepler & Craig, 2005). Early studies were conducted among small non-representative samples and were based on self-reported health, but in recent years, higher quality studies have been conducted in representative populations and with more objective measurements of health. The studies constantly show that lesbians, gay men and bisexuals have a considerably higher risk of certain health problems than heterosexuals, and trans people have a considerably higher risk of illness than cis people. The greatest amount of research has been carried out into differences in mental health among young lesbians, gay men and bisexuals, but more and more studies also show an increased risk of certain physical symptoms and illnesses (see below).

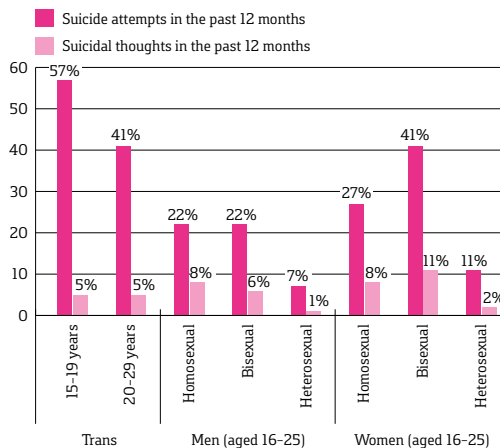
#### **MENTAL HEALTH OF LGBTQ PEOPLE**

Today a large number of studies from different parts of the world clearly show that young LGBTQ people have an increased risk of mental illness, especially depression, anxiety and suicidal behaviour compared with young heterosexuals (Adelson et al., 2016; Blais, Bergeron, Duford, Boislard & Hebert, 2015; Lucassen, Stasiak, Samra, Frampton & Merry, 2017; Russell & Fish, 2016b; Semlyen et al., 2016). Because questions of sexual orientation and trans experience have been included in health surveys in Sweden in the past 10–15 years, we now have a better picture of the situation in these groups. The results of representative surveys show that compared with heterosexual young people, young LGBTQ people display about twice as high a risk of depression, anxiety

problems and substance abuse problems (Bränström, 2017; Bränström, Hatzenbuehler, Tinghög & Pachankis, 2018). Trans people who seek treatment and are diagnosed with gender dysphoria are five or six times more likely to be treated for depression and anxiety (Bränström & Pachankis, 2018c). The heightened risk of depression and anxiety within the group declines, however, as time passes after gender-confirmation treatment (Bränström & Pachankis, 2018c). Young LGBTQ people also have a severely heightened risk of suicidal thoughts and suicidal behaviour (Blais et al., 2015; King et al., 2008a; McNeil, Ellis & Eccles, 2017; Miranda-Mendizabal et al., 2017; Zeluf et al.).

Figure 4 presents results of self-reported data on suicidal thoughts and suicide attempts from the national public health survey “Health on equal terms”, conducted by the Public Health Agency of Sweden every year since 2005 (Bränström, van der Star & Pachankis, 2018), and data from a survey of trans people in Sweden (Public Health Agency of Sweden, 2015). The figure clearly shows that all LGBTQ groups have a significantly increased risk of reporting suicidal thoughts and suicide attempts in the past 12 months. There is a particularly high risk among young trans people and bisexual women.

**Figure 4. Proportion of LGBT people who reported suicidal thoughts and suicide attempts in the past 12 months**



Source: Public Health Agency of Sweden’s national public health survey (2010-2015). Note: Data on suicide attempts among trans people in the past 12 months is an average for all ages 15-94.

Besides better describing the increased risk of mental illness among LGBTQ people, recent research has been able to show that the cause of these major differences compared with heterosexual and cis people can at least partly be explained by the greater exposure of LGBTQ people to stigma-related stress such as discrimination, violence, stress over not being able to be open about one’s sexual identity or gender identity and expectations of being rejected due to one’s sexual identity or gender identity (Bränström, 2017; Bränström & Pachankis, 2018e; Hatzenbuehler et al., 2017; Hatzenbuehler & Pachankis, 2016c; White Hughto et al., 2015; Zeluf et al.). An overview of research into health risk and protective factors among LGBTQ people is presented in section 4.

### PHYSICAL HEALTH OF LGBTQ PEOPLE

There has long been a major lack of studies on the physical health of LGBTQ people. Of the 4 million research studies on physical health published between 1980 and 1999, only 0.1 percent reported on health impacts in LGBTQ people. The least amount of research focused on the health of trans people (Boehmer, 2002). However, in recent years questions on sexual orientation and trans identity have started to be asked in representative health surveys and awareness of the specific health situation of LGBTQ people has increased.

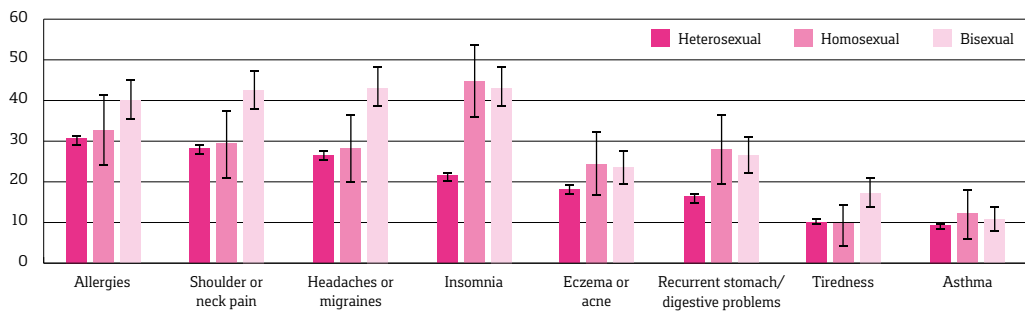
Recent research has also shown that LGBTQ people report poorer general health and more frequent impaired functioning than heterosexual and cis people (Bränström, Hatzenbuehler & Pachankis, 2016; Cochran & Mays, 2007; Public Health Agency of Sweden, 2015; Lick et al., 2013). A greater risk of specific health problems has also been reported. Homosexual and bisexual men have a significantly increased risk of HIV infection (Bränström & Pachankis, 2018f; Cochran & Mays, 2007) and other sexually transmitted infections (Blondeel et al., 2016). International studies of trans people also show a higher risk of HIV infection (Blondeel

et al., 2016) but it is more unclear whether trans people in Sweden also have a higher risk of HIV. Homosexuals and bisexuals, especially lesbians and bisexual women, report more often that they have asthma (Diamant & Wold, 2003; Heck & Jacobson, 2006). There is also more limited evidence for lesbians, gay men and bisexuals having a higher risk of diabetes (Lick et al., 2013) and for gay and bisexual men having a higher risk of infection-related types of cancer (Boehmer, Cooley & Clark, 2012). Certain studies have reported that lesbians and bisexual women have a higher risk of breast cancer, but these studies have not been of sufficiently good quality to demonstrate such an increased risk with any certainty (Blondeel et al., 2016). In the same way, there are insufficient studies to demonstrate with any certainty a higher risk of cardiovascular disease among LGBTQ people (Caceres, Brody & Chyun, 2016). However, some studies have found indications of a higher risk of cardiovascular disease linked to the use of tobacco, alcohol

and drugs, mental illness and obesity among lesbians and bisexual women (Caceres et al., 2017). Similarly, a Swedish study shows that lesbians, gay men and bisexual men and women have a higher risk of suffering diseases that are preventable with good access to the right healthcare and preventive measures compared with heterosexuals (Bränström, Hatzenbuehler, Pachankis & Link, 2016).

Figure 5 presents the results of self-reported data on physical symptoms from the national public health survey “Health on equal terms”, conducted by the Public Health Agency of Sweden each year since 2005. The figure shows that bisexuals report problems with allergies, pain in the shoulders or neck, headache or migraine, insomnia, eczema/acne, recurring stomach/digestive problems and tiredness more than heterosexuals. It was more common for lesbians and gay men to report insomnia and recurring stomach/digestive problems (figure 5).

Figure 5. Proportion of people who report different types of physical symptoms in health surveys



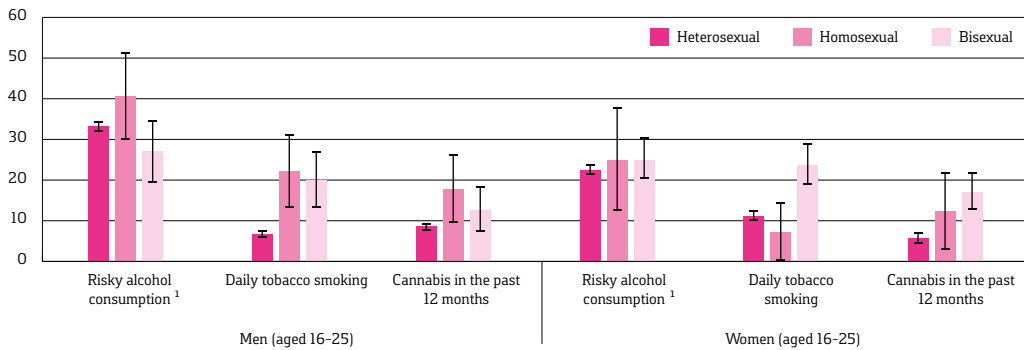
Source: Public Health Agency of Sweden’s national public health survey (2008–2015).

### HEALTH-RELATED BEHAVIOUR

There is research that indicates that certain health-related risk behaviours are more common among LGBTQ people than among heterosexuals and cis people (Blosnich, Lee & Horn, 2013; Bourne & Weatherburn, 2017). The strongest evidence of a higher risk among LGBTQ people relates to the use of alcohol, drugs and tobacco smoking (Blosnich et al., 2013; Bourne & Weatherburn, 2017; Bränström & Pachankis,

2018e; Goldbach, Tanner-Smith, Bagwell & Dunlap, 2014). Figure 6 presents self-reported alcohol consumption, tobacco smoking and cannabis use among young people (aged 16–24) in the Public Health Agency of Sweden’s national public health survey by sexual orientation. The figure shows that gay men and bisexual women more frequently report daily tobacco smoking and gay/bisexual men and bisexual women more often report use of cannabis.

**Figure 6. Proportion of people who report risky alcohol consumption, daily tobacco smoking and cannabis use in the past 12 months.**



Source: Public Health Agency of Sweden's national public health survey (2008-2015).

Some studies, predominantly in the USA, have found an increased risk of obesity among lesbians and bisexual women (Eliason et al., 2015) and an increased risk of dissatisfaction with their weight and muscle mass among gay men (Frederick & Essayli, 2016). There are also certain indications that trans people have a higher risk of eating disorders (Åhman, 2017).

There is no convincing support in the literature for lesbians, gay men and bisexuals being less physically active than heterosexuals and cis people (Hasson et al., 2017). On the contrary, lesbians, gay men and bisexuals seem more often to achieve the recommended level of physical activity. However, there are some indications that trans people in Sweden are less physically active than the population in general (Public Health Agency, 2015).

### EDUCATION AND WORK

There is limited research into young LGBTQ people's experiences of higher education, career opportunities and experience of the world of work (Dispenza, Brown & Chastain, 2016). How these aspects of life are experienced is highly likely to be greatly affected by how stigmatising the environment in which LGBTQ people find themselves is. As described more exhaustively in

section 4, LGBTQ people more often experience bullying at school and bullying has been linked to a higher risk of truancy, poorer educational outcomes and a lower likelihood of going on to study at university (Dispenza et al., 2016). These studies mainly come from North America and it is unclear how relevant the results are to the situation in Sweden. In Sweden, lesbians, gay men and bisexuals generally have higher education but a lower average income compared with heterosexuals (Bränström, Hatzenbuehler & Pachankis, 2016).

Discrimination in the workplace has also been reported among LGBTQ people (Badgett, Lau, Sears & Ho, 2007; Dispenza et al., 2016) but what the specific situation looks like in Sweden is more unclear. A Swedish report from 2004, however, showed that only 50 percent of lesbians, gay men and bisexual men and women were open about their sexual orientation in the workplace and that prejudice and discrimination linked to sexual orientation does occur (Bildt, 2004). One study also found that both gay men and lesbians were discriminated against in recruitment in some cases (Ahmed, Andersson & Hammarstedt, 2013). In particular, gay men applying for jobs in a male-dominated workplace and lesbians applying for jobs in a female-

<sup>1</sup> Note: Risky alcohol consumption = average alcohol consumption more than 14 standard units for men per week and more than 9 standard units for women per week, or consumption of more than 4 standard units on a single occasion.

dominated workplace were discriminated against. Trans people's education, work and careers have not been sufficiently studied (Hafford-Letchfield, Pezzella, Cole & Manning, 2017).

Sweden has legislation intended to protect against discrimination at school and in the workplace, but more data is needed about the effects this has on LGBTQ people's experience of the world of work and education. More data is also needed on compliance with this legislation.

### **FAMILY LIFE, RELATIONSHIPS AND DAILY LIFE**

Many children today are growing up in families with LGBTQ parents. The research available in this area shows that these children appear to develop and function in the same way and equally as well as children who grow up in families with more traditional parental constellations (Webster & Telingator, 2016). To reduce potential obstacles to access to healthcare and a good reception in the school environment, it is important that healthcare professionals and school staff are familiar with specific LGBTQ-related concepts and language use, and have an understanding of different types of families and the specific challenges that these families may encounter.

There are several options whereby trans people choosing to have gender-confirming treatment can retain their fertility (De Roo, Tilleman, T'Sjoen & De Sutter, 2016). It is important that trans people are informed of these options and their consequences at an early stage before gender-confirming treatment is begun and carried out.

Although some less focused studies on non-representative populations have been carried out, more data on the situation of LGBTQ families in Sweden is required. Some interview studies have enabled the children of LGBTQ parents and LGBTQ parents themselves to express their experiences of treatment by paediatric health professionals, and at schools and preschools (Ankarblom & Gudmundsson,

2014; Everum & Viebke, 2010; Streib-Brzic et al., 2011).

There is a certain amount of supporting research showing that social stigma has a negative effect on relationships (Doyle & Molix, 2015). Internalised forms of stigma, such as internalised homophobia, appear to have a particularly negative effect on the quality of relationships.





## 4. Risk and protective factors affecting the health of LGBTQ people

There are many explanations for the differences in the health and the situation of LGBTQ people described in the previous section. As knowledge of the greater risk of illness among LGBTQ people has grown, the research field has increasingly focused on understanding the causes of these higher risks.

The higher risk of certain diseases among LGBTQ people can partly be explained by underlying biological mechanisms. For example, anal sex is common among homosexual men and being the receiving partner in anal sex is also a risk factor for HIV infection and anal cancer (Boehmer et al., 2012).

Besides the possible biological explanations of differences in health, there is growing support for the increased risk of physical and mental illness among LGBTQ people being due to the experience of stigma-related stress – also termed minority stress – among LGBTQ people compared to heterosexual and cis people. The section below presents theories on stigma and minority stress as explanatory mechanisms for the higher risk of illness in young LGBTQ people. A summary is first provided of the research evidence currently available on stigma at individual, interpersonal and structural level contributing towards illness in LGBTQ people. This is followed by a presentation of a theoretical model of stigma, minority stress and a number

of cognitive, emotional, interpersonal and physiological processes affected by experience of stigma. The research showing how these processes can lead to a heightened risk of illness among LGBTQ people in different ways is then presented.

### THEORIES ON STIGMA AND MINORITY STRESS

Stigma can be defined in several ways, but is often described as singling out certain groups that are then:

- a) labelled,
- b) linked to undesirable characteristics and negative stereotypes,
- c) separated into “us” and “them”, and
- d) subjected to varying degrees of discrimination (Link & Phelan, 2001).

The process by which certain groups are stigmatised is contingent on access to power. The separation of specific groups, the labelling, the attribution of negative stereotypical characteristics and discrimination take place in a context of unequal access to resources and power that allows stigmatisation to take place (Link & Phelan, 2001).

Today there is growing scientific evidence linking the heightened risk of illness in LGBTQ people at least partly with the greater stigma-related stress that LGBTQ people experience compared with heterosexual and cis people. The minority stress model was originally developed to explain differences in mental health based on sexual orientation (Meyer, 2003), but in recent years has been expanded to facilitate understanding of differences in physical health and sexual orientation (Lick et al., 2013) and to understand the increased risk of illness among trans people (Operario, Yang, Reisner, Iwamoto & Nemoto, 2014; White Hughto et al., 2015). According to the minority stress theory, LGBTQ people experience specific stressors (such as discrimination, violence, threats, social isolation and stress over not being able to be open about

their sexual orientation or gender identity) that are unique and linked to their sexual identity or gender identity. Exposure to these stressors builds up during upbringing and if there are insufficient means of tackling this stress, it leads to mental illness (Meyer, 2003). Increasing research indicates that exposure to discrimination and violence can partly or entirely explain differences in mental health among LGBTQ people (Bränström, 2017; Mays & Cochran, 2001).

Minority stress can also provide possible explanations for differences in the physical health of LGBTQ people. Exposure to minority stress could give rise to both psychological stress reactions (e.g. poorer mental health) and physiological stress reactions affecting the sympathetic nervous system, stress axis or the HPA axis (which regulates hormone secretion in the hypothalamus, pituitary and adrenal cortex) and inflammatory markers for stress (Hatzenbuehler, McLaughlin & Slopen, 2013; Hatzenbuehler, Slopen & McLaughlin, 2014).

### **HOW CAN STIGMA SURROUNDING LGBTQ IDENTITY AFFECT HEALTH?**

The minority stress theory is based on LGBTQ people being exposed to stigma-related stress linked to their identity, leading to stress reactions that result in illness in the long term. The stigma can be found at different levels and can be divided into structural and interpersonal forms of stigma. An overview of the research evidence that exists on risk and protective factors at these different levels affecting the health of young LGBTQ people is presented below.

### **STRUCTURAL RISK FACTORS**

Despite the major changes seen in recent years, in certain cases LGBTQ people face discriminatory legislation and differences in their rights. This type of stigma found at a societal level is usually described as structural stigma. Many of the areas in which LGBTQ people previously faced discriminatory legislation – e.g. marriage,

adoption, protection against discrimination in the workplace and in education – have improved in recent years. However, improvements are still needed regarding the right of trans people to change their legal sex. There is also an expressed need to review the rules on assisted conception and parenthood, so as to better adapt these to LGBTQ people (Swedish Federation for Lesbian, Gay, Bisexual and Transgender Rights (RFSL), 2017). The opportunity to register a different sex from male and female has also been proposed as a measure that would change the quality of life for many people who identify as non-binary (Swedish Government Official Reports, SOU, 2017).

Besides discriminatory legislation, the stigma faced by LGBTQ people is influenced by negative cultural attitudes against individuals who breach the norms regarding sexuality and gender (Hatzenbuehler, 2017; Hatzenbuehler & Pachankis, 2016b; Poteat & Russell, 2013).

Healthcare can also be a source of stress for LGBTQ people at a structural level. The expectation of being discriminated against or not treated with respect in the health service can be a reason for people avoiding the health system, not being open about their sexual orientation or gender identity to healthcare professionals and not receiving adequate healthcare (Mattocks et al., 2015). In order to offer a good experience and good care, it is important that healthcare professionals have the right skills to care for LGBTQ patients. The experiences of LGBTQ people in the healthcare system today and how their experience and equal treatment can be improved are areas in need of further research.

As described in section 2, Sweden has seen major changes at structural level, in particular regarding discriminatory legislation and the population's attitudes to LGBTQ people (Flores & Park, 2018). These changes have also been able to be linked to a reduction in mental illness among lesbians and gay men (Hatzenbuehler et al., 2017).

## INTERPERSONAL RISK FACTORS

Besides the structural forms of stigma described above, stigma also affects the lives of LGBTQ people at an interpersonal level. Interpersonal forms of stigma concern discrimination and prejudiced actions inflicted on one person by another. This involves actions and situations in which the stigmatised and the non-stigmatised interact. Interpersonal forms of stigma often reported by young LGBTQ people are discrimination, violence and bullying, but also more indirect ways that stigma is expressed, such as being rejected and ignored due to sexual orientation or trans identity.

### Experience of violence, discrimination and bullying

Discrimination and violence are linked to mental illness and can to a certain extent also explain the greater risk of illness reported by LGBTQ people (Bränström, 2017; Mays & Cochran, 2001). There is currently insufficient knowledge of the exact prevalence of different types of violence experienced by LGBTQ people and the contexts in which this violence takes place and its consequences (Blondeel et al., 2018; National Centre for Knowledge on Men's Violence Against Women, 2018). Surveys in Sweden show experience of violence as being common among young LGBTQ people, including partner violence and sexual violence, and that this experience has negative effects on mental health, suicidal thoughts, suicide attempts and health-related risk behaviours (Bränström, 2017; Bränström & Pachankis, 2018e; Bränström, Hatzenbuehler, van der Star, et al., 2018; Donahue, Langstrom, Lundstrom, Lichtenstein & Forsman, 2017; National Centre for Knowledge on Men's Violence Against Women, 2018; Zeluf et al. 2016; Priebe & Svedin, 2012). A recently conducted review shows major gaps in knowledge regarding violence suffered by LGBTQ people in Sweden (National Centre for Knowledge on Men's Violence Against Women, 2018). Bisexual women and LGBTQ people who are growing

up in an honour-based context appear to be particularly vulnerable, but more research is needed to better describe the scope and causes of different types of violence suffered by LGBTQ people. More light should be shed on the consequences of discrimination and stigmatising attitudes in terms of opportunities for LGBTQ people to seek help in the face of violence.

Many studies report that bullying is commonly experienced by young LGBTQ people (Bell, Breland & Ott, 2013; Earnshaw, Bogart, Poteat, Reisner & Schuster, 2016). Bullying is often described as a behaviour that is undesired (i.e. the victim wants it to stop), aggressive (i.e. the behaviour is carried out with an intent to hurt), happens repeatedly or risks happening repeatedly and arises in a situation of an unequal power balance (i.e. a real or perceived opportunity for the perpetrator to control the behaviour or experience of the victim). The power imbalance may be due to superiority of physical strength, popularity or status (Earnshaw et al., 2016).

The vast majority of studies on bullying of LGBTQ people have been carried out in the USA (Earnshaw et al., 2016; Maniglio, 2017; Poteat & Russell, 2013). According to the published surveys, the vast majority of LGBTQ people report some form of bullying. In an extensive survey of young LGBTQ people (aged 13–20) in the USA (Earnshaw et al., 2016), the most common form of bullying reported was being the victim of verbal abuse and threats of violence (92 percent). Being the victim of different types of physical violence, such as hitting and kicking, was also common (45 percent). Many young LGBTQ people also reported experiencing gossip, online bullying and social isolation (90 percent).

Research into experience of violence and other types of bullying (both in real life and online) shows that young LGBTQ people have a greater risk of experiencing this (Aboujaoude, Savage, Starcevic & Salame, 2015; Earnshaw et al., 2016; Olsen, Kann, Vivolo-Kantor, Kinchen

& McManus, 2014; Pham & Adesman, 2015; Schneider, O'Donnell, Stueve & Coulter, 2012; Toomey & Russell, 2016). This greater risk seems to be somewhat higher for boys compared with girls. There are relatively few studies on which young LGBTQ people are most often the victims of bullying (Earnshaw et al., 2016). However, some research shows that those who are open about their sexual orientation or trans identity to friends and school staff are victimised to a greater extent than those who are not open. However, the causal connection is not entirely clear, as it is possible that bullied LGBTQ people are more inclined to tell staff and other adults about their sexual orientation. Sexual orientation or trans identity can also be harder to keep hidden if one is being bullied because of it.

The extent of different types of bullying among young LGBTQ people in Sweden is unclear today due to a lack of systematic data collection on this topic and the fact that questions about sexual orientation and gender identity are not asked in surveys on the lives of young people. An indication of the extent of bullying among young people in Sweden comes from a survey carried out by the European Union Agency for Fundamental Rights (FRA) among LGBTQ people aged 18 and over in 2012. The survey asked the question: "During your schooling before the age of 18, how often did you hear or see negative comments or conduct because you were LGBT?" 62 percent of trans people responded that they often or constantly experienced this during their schooldays (Bränström & Pachankis, 2018a). The proportion of trans people who stated that they had been bullied at school was considerably higher among those who were open about their trans identity (80 percent) compared with those who were not open (58 percent). 70 percent of lesbians, gay men and bisexual men and women stated that they often or always experienced derogatory comments or negative behaviour during their schooldays due to their sexual orientation (Bränström & Pachankis, 2018a). Among

lesbians, gay men and bisexuals too those who were open about their sexual orientation at school stated that they were the victims of bullying to a slightly greater extent than those who were not open, but the difference was not as obvious as it was for trans people. 54 percent of bisexuals stated that they were bullied at school due to their sexual orientation. This proportion was considerably higher among bisexuals who had been open about their sexual orientation at school (72 percent) compared with those who were not open about their sexual orientation (49 percent).

### **Consequences of experiencing bullying and violence**

Experiencing bullying and violence has serious consequences for LGBTQ people, with studies proving a link between bullying and mental health, physical health and health risk behaviours (Blais et al., 2015; Collier, van Beusekom, Bos & Sandfort, 2013; Earnshaw et al., 2016). There is further research suggesting that bullying is part of the reason for the heightened risk of suicidal thoughts and suicide attempts among LGBTQ people (Earnshaw et al., 2016; Hong, Kral & Sterzing, 2015; Schneider et al., 2012; Zeluf et al.). Experiencing bullying and violence has also been linked with symptoms of depression, anxiety problems, low self-esteem and poorer quality of life (Bränström, 2017; Bränström & Pachankis, 2018a; Earnshaw et al., 2016; Hall, 2017b; Hong et al., 2015). In addition to the actual physical injuries that can occur when young LGBTQ people experience bullying and violence, such as bruises and broken bones, research shows that bullying can increase the risk of numerous physical symptoms, including stomach pains, headaches, loss of appetite, insomnia and poorer general health compared with young people who are not bullied (Earnshaw et al., 2016). There is also some evidence that LGBTQ people who are bullied because of their sexual orientation or gender identity run a greater risk of health-related behaviours such as smoking and alcohol and drug use (Earnshaw et al., 2016; Maniglio, 2017).

### **Negative consequences of revealing one's LGBTQ identity**

Other risk factors presented in the research literature concern reactions to and consequences of revealing one's LGBTQ identity. Research has, for example, shown that experiencing poor reactions to revealing one's identity to others and being rejected by parents on the grounds of one's sexual identity increase the risk of alcohol and drug use and mental illness (Blais et al., 2015; Goldbach et al., 2014; Hall, 2017b; Katz-Wise, Rosario & Tsappis, 2016). Weighing up the decision to reveal one's sexual orientation or gender identity in different social contexts can lead to stress and a greater risk of mental illness (Hall, 2017b). Studies into parents' reactions to non-heterosexual orientation indicate that even parents who are initially negative and dismissive become more accepting over time (Katz-Wise et al., 2016). It is, however, unclear whether the same pattern applies when it comes to gender identity.

### **Protective factors**

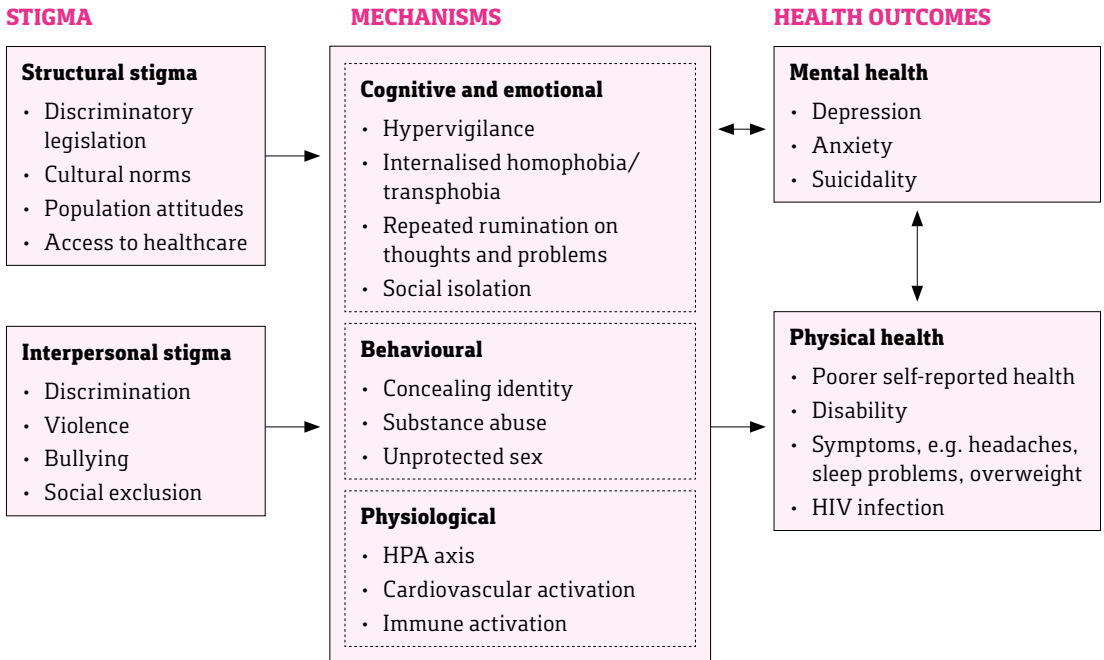
Today's research literature reports significantly less on the factors that provide protection for young LGBTQ people. Nevertheless, certain protective factors have been identified. Revealing one's sexual identity to others can increase opportunities to seek out and receive social support in particular contexts (Larson, Chastain, Hoyt & Ayzenberg, 2015), and social support from friends and family can provide protection against mental illness among young LGBTQ people (Freitas, Coimbra & Fontaine, 2017; Goldbach, Fisher & Dunlap, 2015; Hall, 2017b; Zeluf et al.). Other protective factors presented in the research literature include a positive LGBTQ identity, positive experiences of "coming out" (revealing one's LGBTQ identity to others) and self-confidence (Freitas et al., 2017; Hall, 2017b; Katz-Wise et al., 2016). Experiencing solidarity in school and in families and feeling safe in school are other reported protective factors (Blais et al., 2015).

### **MECHANISMS THAT LINK MINORITY STRESS AND HEALTH**

The section above outlines the various risk and protective factors at a structural and interpersonal level that have been identified and linked with the health of LGBTQ people, but the link between these factors is not immediately obvious. Various processes at individual level affect the way risk and protective factors lead to different health impacts. There are also links between mental and physical health and how physical symptoms are perceived (Watson & Pennebaker, 1989). The relatively large differences in mental health that have been identified between LGBTQ people and heterosexual/cis people may to some extent explain differences in physical health too. Mental health is also linked to health risk behaviours such as smoking and alcohol consumption, which contribute to differences in physical health based on sexual orientation (Bränström & Pachankis, 2018e).

The following section attempts to describe in more detail the complex mechanisms underlying the effect different risk and protective factors have on the health of LGBTQ people. A model for the way stigma affects health and potential mechanisms is presented in figure 7.

Figure 7. Model of how stigma affects the health of LGBTQ people



Model of how stigma at different levels affects the health of LGBTQ people and potential mechanisms leading to reduced physical and mental health through stigma.

### COGNITIVE AND EMOTIONAL PROCESSES

A number of specific processes relating to thoughts and emotions have been described as being linked to experiences of minority stress and stigma surrounding LGBTQ identity: hypervigilance (increased alertness and awareness of potential threats) about being rejected, internalised homophobia/transphobia, loneliness and repeated rumination on thoughts and problems.

#### Hypervigilance and expectations of rejection due to LGBTQ identity

Current research clearly shows that experiencing stigma leads to greater alertness and heightened sensitivity to signs (hypervigilance) of rejection (Crocker, Major & Steele, 1998). Expectations and hypervigilance regarding rejection due to stigma are a process through which a stigmatised individual learns to expect to be rejected in the future, based on previous experience of

prejudice and discrimination against their own group (Mendoza-Denton, Downey, Purdie, Davis & Pietrzak, 2002). Sensitivity to being rejected by others is particularly acute as a young person and may continue to affect mental wellbeing in adult life (Lev-Wiesel, Nuttman-Shwartz & Sternberg, 2006). This greater alertness may protect against experiencing stigma, but it also has negative consequences. Heightened anxiety about being rejected socially can lead to avoidance behaviours, which can damage the ability to establish and maintain social relationships. There have been relatively few studies into the health effects of the expectation of rejection among young LGBTQ people, but a small number of studies have shown that rejection increases the chances of health-related risk behaviours (Pachankis, Hatzenbuehler & Starks, 2014; Wang & Pachankis, 2016) and mental illness (Feinstein, Goldfried & Davila, 2012). Increased alertness to social threats can

also cause negative physiological stress reactions (Slavich, O'Donovan, Epel & Kemeny, 2010; Slavich, Way, Eisenberger & Taylor, 2010). Studies of HIV-positive gay men have shown that the expectation of rejection is associated with poorer treatment outcomes and higher mortality (Cole, Kemeny, Fahey, Zack & Naliboff, 2003; Cole, Kemeny & Taylor, 1997).

### **Internalised homophobia and transphobia**

Internalised homophobia and transphobia means that society's negative attitudes towards lesbian, gay, bisexual or trans people are internalised, made one's own and directed towards oneself or towards other LGBTQ people (Newcomb & Mustanski, 2010). Connections have been made between this type of negative self-image and poorer health among LGBTQ people (Blais et al., 2015; Hatzenbuehler & Pachankis, 2016a). Research has also linked internalised homophobia with alcohol and drug use (Goldbach et al., 2015; Goldbach et al., 2014), sexual risk-taking (Rosario, Schrimshaw & Hunter, 2006) and depression (Hall, 2017b). Studies have further shown a link between internalised transphobia and suicide attempts (Perez-Brumer, Hatzenbuehler, Oldenburg & Bockting, 2015). Experiencing minority stress can thus lead to negative feelings about oneself and LGBTQ individuals in general, which in turn leads to harmful ways of dealing with stress and poorer physical and mental health.

### **Loneliness and social isolation**

Minority stress can increase feelings of loneliness among LGBTQ people. A sense of loneliness appears to be particularly strongly associated with experiences of being rejected by family and friends on the grounds of sexual orientation or gender identity (Katz-Wise et al., 2016; Ryan, Russell, Huebner, Diaz & Sanchez, 2010). Social isolation and loneliness are more common among LGBTQ people than heterosexual and cis people (Bränström & Pachankis, 2018e). Social isolation is also strongly linked to mental illness (Bränström, 2017), as well as alcohol and drug

use and smoking (Bränström & Pachankis, 2018e). The increased incidence of social isolation may also, to some extent, explain the greater risk of mental illness and substance abuse among lesbians, gay men and bisexuals (Bränström, 2017; Bränström et al., 2017). In addition, loneliness has been linked with physiological processes such as high blood pressure, elevated activation of the HPA axis and impacts on the immune system (Hawkey & Cacioppo, 2010). There is now strong support for the hypothesis that loneliness and social isolation increase the risk of ill-health and premature death (Holt-Lunstad, Smith, Baker, Harris & Stephenson, 2015). Experiencing minority stress can thus lead to loneliness and social isolation, which in turn leads to poorer health and an increased risk of premature death.

### **Repeated rumination on thoughts and problems**

Regularly suffering minority stress can lead LGBTQ people to develop poor strategies for coping with emotions, experiences and problems such as repeated rumination. Research has shown that young LGBTQ people are more inclined to repeatedly focus on and dwell on problems, thoughts and causes of depression (Hatzenbuehler, McLaughlin & Nolen-Hoeksema, 2008; Hatzenbuehler, Nolen-Hoeksema & Dovidio, 2009). This pattern of rumination has also been linked with young LGBTQ people's experiences of minority stress (Hatzenbuehler et al., 2009). A US study found that young lesbians, gay men and bisexuals were more inclined to ruminate on thoughts and problems on the days that they also encountered stigmatising treatment associated with their sexual orientation. This rumination in turn led to an increase in feelings of depression (Hatzenbuehler et al., 2009). Some studies have also seen a correlation between rumination and increased physiological stress (Gevirtz, Jepsen, Weits & Correll, 2000; Roger & Najarian, 1998). Over the longer term, this way of dealing with emotions can therefore impact negatively on health.

## BEHAVIOURAL PROCESSES

In addition to the processes linked to thoughts and emotions, minority stress can also affect LGBTQ people's actions and behaviours.

Research has identified three key behavioural processes that are important for LGBTQ people's health and life: 1) how open one is about one's sexual orientation and trans identity, 2) abuse of various substances and 3) sexual risk-taking.

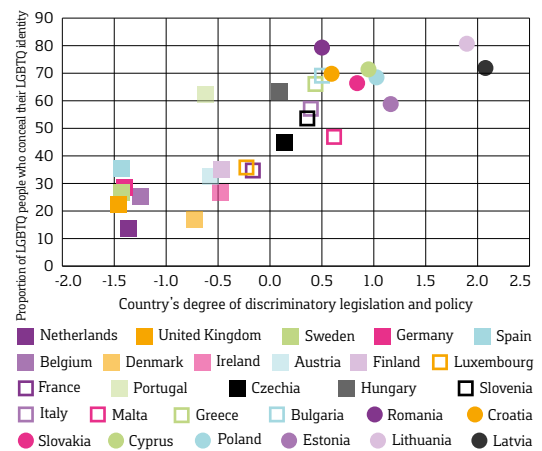
### Openness about sexual orientation and trans identity

Experiencing various forms of stigma can also lead LGBTQ people to conceal or avoid revealing their sexual identity or trans identity. The stress associated with not being open about one's sexual orientation or trans identity has been linked to negative health outcomes (Pachankis, 2007). There is relatively good research evidence that the stress of not being open about one's sexual orientation is associated with a higher risk of mental illness (Hall, 2017b; Hatzenbuehler & Pachankis, 2016c) and other negative effects (Ragins, Singh & Cornwell, 2007). However, evidence of the positive effects of openness about sexual orientation is more varied (Hall, 2017a). Some studies find a link between lower risk of mental illness and openness about sexual orientation. Others find no significant correlation. It is likely that the effect of being open versus not being open depends on the social context and the society in which one lives. More generally, research into the psychological effects of concealment has shown that concealment per se does not necessarily have negative impacts; it can, however, become harmful if it leads to avoidance behaviours and poor strategies for coping with emotions (Larson et al., 2015). Not being open about one's sexual identity or gender identity can protect against exposure to discrimination and violence (Pachankis & Bränström, 2018), but it can also make it harder to ask for and receive social support from family, friends, other LGBTQ people and the health service. There is some research that links openness about sexual orientation in a situation

where social support is lacking with an increased risk of displaying symptoms of depression (van der Star, Pachankis, Bränström, 2018).

Studies comparing the situation in different European countries suggest that mental wellbeing among LGBTQ people in EU countries can be explained by how open the LGBTQ individuals are able to be about their sexual orientation or trans identity in the country where they live (Bränström, Karlin & Pachankis, 2018; Pachankis & Bränström, 2018). The studies also show that openness about sexual orientation and trans identity increases the risk of exposure to discrimination and violence, and that the correlation between openness and discrimination is greatest in countries with a high level of stigma. An illustration of the link between a country's stigmatising legislation and the proportion of LGBTQ people who hide their identity from most of the people in their life is presented in figure 8.

Figure 8. Proportion of LGBTQ people who conceal their LGBTQ identity



Proportion of LGBTQ people who conceal their LGBTQ identity from most people in their lives in different countries in Europe. The x-axis shows a measurement of each country's discriminatory legislation and policy, where a higher value means more stigmatising legislation.

Lack of openness can also lead to specific problems for trans people. Trans people who are not open about their trans identity have difficulty



accessing gender-confirming treatment if they want it. Receiving gender-confirming treatment early in life can reduce the risk of experiencing discrimination and stigma (Hatzenbuehler & Pachankis, 2016; White Hughto et al., 2015). Not being able to be open about one's background as a trans person can lead to inadequate medical treatment and insufficient preventive care (Alegria, 2011; Samuel & Zaritsky, 2008).

### **Substance abuse**

It is more common for homosexuals and bisexuals to report daily tobacco smoking, risky alcohol consumption and drug use compared with heterosexual, cis people (Bränström & Pachankis, 2018e; Lindstrom, Axelsson, Modén & Rosvall, 2014). Research also shows that abuse of addictive substances is linked to LGBTQ people's experiences of minority stress in the form of discrimination, violence and social isolation (Bränström & Pachankis, 2018e; Goldbach et al., 2014; Newcomb, Heinz, Birkett & Mustanski, 2014; Newcomb, Heinz & Mustanski, 2012). A study of homosexual men found a link between increased risk of substance abuse and the factors of internalised homophobia, expectations of rejection and experiences of discrimination (Hatzenbuehler, Nolen-Hoeksema & Erickson, 2008). More research is needed into substance abuse among trans people, but there are indications that there is a greater prevalence in this group too (Newcomb et al., 2012). A growing body of literature suggests that minority stress lies at the heart of the elevated risk of substance abuse among LGBTQ people.

### **Sexual risk-taking**

Homosexual men in Sweden run a 150 times higher risk of contracting HIV than heterosexual men do, and bisexual men have a 16 times higher risk (Bränström & Pachankis, 2018f). Unprotected anal sex is the most common route of infection among men who have sex with men. US studies have found that knowledge of the routes of infection and

access to testing and adequate care are worse among gay and bisexual men who live in areas with a higher level of stigma against LGBTQ people (Oldenburg et al., 2015). Internalised homophobia, expectations of rejection and avoidance of revealing one's sexual identity have been linked to sexual risk-taking in a number of studies (Hatzenbuehler, Nolen-Hoeksema, et al., 2008; Pachankis, Hatzenbuehler, Hickson, et al., 2015; Wang & Pachankis, 2016). There is, however, some uncertainty about how well this translates to the Swedish context

## **PHYSIOLOGICAL PROCESSES**

There is relatively extensive literature from animal and human studies showing that psychosocial stress can affect the nervous system, the hormonal/endocrine system and the function of the immune system, which can lead to ill-health. Since LGBTQ people in many cases experience higher levels of stress associated with sexual orientation and/or gender identity, it is important to understand the physiological processes that can lead the stress to affect bodily functions and in the long term cause health problems. Despite a recent increase in research into how psychosocial stress affects physiological processes, it remains very unclear exactly how minority stress affects the physiological processes of LGBTQ people. The systems most likely to be affected by minority stress are outlined below.

### **HPA axis**

The HPA axis regulates the release of hormones from the hypothalamus, the pituitary gland and the adrenal glands. During instances of social threat and psychosocial stress, this system initiates the release of the stress hormone cortisol (Dickerson & Kemeny, 2004). Chronic stress has been proven to lead to negative changes in the function of the HPA axis, with an increased risk of cardiovascular disease and diabetes as a consequence (Lundberg, 2005). Almost all the research into the correlation

between social stress, the function of the HPA axis and health lacks data specifically related to LGBTQ people, but there is some evidence that the function of the HPA axis is affected by minority stress. In a study of homosexual and bisexual men, higher release of cortisol was found during a working day amongst those who were open about their sexual orientation at work, compared with those who were not 'out' (Huebner & Davis, 2005). The interpretation of the results was that those who were open about their sexual orientation had an increased risk of experiencing discrimination and stigmatising treatment associated with sexual orientation, which led to a fear of social rejection and thus the release of cortisol. In another study, in which lesbians, gay men and bisexuals were subjected to a stress test (in the form of a fake employment interview with critical assessors), elevated cortisol levels were found in lesbian and bisexual women compared with heterosexual women (Juster et al., 2015). Gay and bisexual men, on the other hand, had lower levels of cortisol than heterosexual men. These preliminary studies provide some indication that the function of the HPA axis may have changed in LGBTQ people due to their increased exposure to minority stress. However, more studies are needed to better understand these links.

### **Cardiovascular disease**

Social and psychological stress such as minority stress can affect the function of the autonomous nervous system and lead to poorer regulation of the pulse and blood pressure (Hjortskov et al., 2004; Kirschbaum, Pirke & Hellhammer, 1993). Poorer regulation of the pulse and blood pressure in association with stress has a proven association with an increased risk of cardiovascular disease (Bongard, Al'Absi & Lovallo, 2012). Few studies have looked specifically at these mechanisms in LGBTQ people, but a population-based study in the US found a higher proportion of risk factors for cardiovascular disease among young gay and bisexual men than in young heterosexual men (Hatzenbuehler et al., 2013).

### **Immune function**

The immune system may also be a link through which minority stress can lead to poor health in LGBTQ people. A large number of studies show that social stress leads to increased inflammation in the body (Marsland, Walsh, Lockwood & John-Henderson, 2017; Steptoe, Hamer & Chida, 2007). There is also evidence that both acute social stress (created in experimental situations) and chronic stress (e.g. high work-related stress or when caring for a sick relative) leads to the poorer function of the immune system (Segerstrom & Miller, 2004). Few studies have looked specifically at these mechanisms in LGBTQ people, but there is some research into the immunological effects of not being open about one's sexual orientation. This research showed that HIV-positive men who hid their sexual orientation ran a higher risk of suffering other infectious diseases, a higher risk of cancer and an elevated risk of premature death (Cole, Kemeny, Taylor & Visscher, 1996). This higher level of illness could not be attributed to sociodemographic, behavioural or psychological differences. It could, however, be explained by the poorer function of the immune system. Significantly more research is needed to establish what role the immune system plays in the increased risk of ill-health that is reported among LGBTQ people.

## 5. Gender, socioeconomics, ethnicity and disability

The term LGBTQ covers an extremely mixed group of individuals who differ in areas such as sex and gender, age, ethnicity, cultural background, socioeconomic situation and mental and physical ability. Understanding how these factors affect the health and lives of the people in this group, how different identities interact and who is particularly vulnerable within the LGBTQ group would be an important focus of any future research. More research should have an intersectional perspective that takes into account the impact of multiple social identities and the consequences of sex, gender, class, ethnicity, skin colour, functional variation and age in conjunction with sexual orientation and gender identity. The section below describes some of the groups that are particularly highlighted in the research literature.

### **LGBTQ PEOPLE AND ETHNIC MINORITY STATUS**

A great deal of research into ethnic minority status and LGBTQ identity has been conducted in the USA, with a focus on the consequences of

double minority status as both youth of colour/black and LGBTQ (Toomey, Huynh, Jones, Lee & Revels-Macalinao, 2017). Most of the research has been conducted on homosexual and bisexual men or men who have sex with men, and relates to sexual health (Wade & Harper, 2017). There are fewer studies regarding women and trans people. The results of these US studies must be understood in their cultural context – their relevance for the situation in Sweden is unclear. The studies have shown that LGBTQ people who also belong to an ethnic minority may experience stigma and discrimination due both to their LGBTQ identity and their ethnic identity (Toomey et al., 2017), plus specific discrimination because of their LGBTQ identity and the heterosexism within their ethnic minority group on the one hand, and racism from other LGBTQ people on the other (Balsam, Molina, Beadnell, Simoni & Walters, 2011).

It has been proven that young people with double minority status are more likely to engage in sexual risk-taking and smoking and have poorer access to information about HIV (Toomey et al., 2017). No differences have been found in the alcohol consumption of young LGBTQ people with and without ethnic minority status, but the latter group does display lower levels of drug use. Studies looking at mental health among young LGBTQ people from ethnic minorities compared with LGBTQ people who belong to the ethnic majority present varied results (Toomey et al., 2017). Some studies found higher levels of mental illness among those from an ethnic minority, others found better mental health among ethnic minorities or found no difference in mental health between the groups (Toomey et al., 2017).

Overall, the international research suggests that it is important to take account of ethnic minority status in combination with LGBTQ identity in order to better understand the situation of young LGBTQ people (Toomey et al., 2017; Wade & Harper, 2017). Many studies

have focused on risk-taking and on protective factors among young LGBTQ people who are also from an ethnic minority.

More knowledge is needed on the significance of ethnic minority status among young LGBTQ people in Sweden. As described in section 2, significantly more lesbians, gay men and bisexuals in Sweden were born abroad than was the case a decade ago. The proportion of gay men and lesbians born outside Europe was 19 percent in 2015, compared with 6 percent in 2005 (Hatzenbuehler et al., 2017). Many of the lesbians, gay men and bisexuals who immigrate to Sweden come from countries with more discriminatory legislation and from societies where acceptance of homosexuality is much lower than among the Swedish population (Bränström & Pachankis, 2018b; Flores & Park, 2018). The specific circumstances of LGBTQ people who come to Sweden as refugees need to be highlighted to ensure a good reception and to facilitate social integration (United Nations High Commissioner for Refugees, 2015). Sweden also needs more research into the situation for LGBTQ people who are second-generation immigrants and who often have roots in cultures with more discriminatory legislation and lower acceptance of LGBTQ identity (Flores & Park, 2018).

## **BISEXUALS**

Many studies lump together homosexuals and bisexuals when presenting their results. The studies that have surveyed mental illness and reported the situation for homosexuals and bisexuals separately indicate that bisexual young women consistently seem to run a much higher risk of mental illness than both heterosexual women and lesbians (Bränström, 2017; Bränström, Hatzenbuehler, Tinghög, et al., 2018). Young bisexual women also experience more violence, threats and social isolation than heterosexual women. The unique situation for bisexual men has also been noted in relation to

sexual health in particular (Jeffries, 2014). It is not completely clear why both the health status and the risk factors differ for homosexuals and bisexuals.

Explanations that have been offered include bisexuality being less visible in society and bisexuals more rarely being open about their sexual orientation, plus the fact that bisexuals can find it more difficult to feel entirely included in the LGBTQ group. More research is needed to better understand the situation of bisexuals and the factors that specifically affect the health of bisexual people.

## **LGBTQ AND SOCIOECONOMIC STATUS**

There is currently strong scientific evidence linking socioeconomic status, often defined based on income and level of education, with health, illness and mortality (Adler et al., 1994; Link & Phelan, 1995). The fact that individuals with better socioeconomic conditions have better health has often been put down to individuals with higher income and longer education having better access to good care, knowledge of healthy practices and social security. Other explanations describe how people in a socioeconomically disadvantaged position have fewer resources available to handle the stresses in their lives (Gallo & Matthews, 2003). Socioeconomically disadvantaged people experience more stress and have poorer opportunities to build up both financial and social reserves that can make it easier to deal with stressful events in the future.

In research concerning the health of LGBTQ people, socioeconomic factors tend only to be used as control variables in the analyses (McGarrity, 2014). There are, however, grounds to investigate the specific effects, if any, that income and education might have on LGBTQ people's experience of social stress and its impact on LGBTQ people's ability to handle that stress. The model of minority stress that was presented earlier does not take into account any differences in exposure to stress or differences in ability to

handle stress across different socioeconomic groups. As an example of differences between high and low socioeconomic status, one study showed that openness about one's sexual orientation correlated with good health among gay and bisexual men with a high socioeconomic status. The opposite appeared to be true for homosexual and bisexual men of low socioeconomic status, however, where openness about their orientation was linked with poor health (McGarrity, 2014). Future research should look more closely at how the consequences of an economically disadvantaged situation combined with specific LGBTQ minority stress affect health (McGarrity, 2014).

In Sweden, national surveys show that gay men and lesbians in particular have a higher level of education and lower income than heterosexuals (Bränström & Pachankis, 2018e). The higher level of education has been explained by gay men and lesbians being more motivated to obtain a higher education in order to move away from working class occupations that are seen as less accepting, and so avoid experiencing discrimination (Black, Sanders & Taylor, 2007; Pachankis & Hatzenbuehler, 2013). Gay men and lesbians also do not have children as often during the period in life when most people are in education.

Although certain sections of the LGBTQ group have a higher level of education (particularly lesbians and gay men), more research is needed into the situation for socially disadvantaged LGBTQ people.

## **HOMELESS LGBTQ PEOPLE**

Among the large proportion of homeless people in North America who are young (Cronley & Evans, 2017), LGBTQ people are overrepresented (Ecker, 2016; Keuroghlian, Shtasel & Bassuk, 2014; Ream & Forge, 2014). Compared with homeless young heterosexuals, young homeless LGBTQ people are at greater risk of a wide range of health-related problems, such as mental illness, suicide attempts, substance abuse, sexual

risk-taking, violence, discrimination, poor relations with family and less social support (Ecker, 2016). Trans people appear to be particularly vulnerable to these risks (Keuroghlian et al., 2014). It is, however, difficult to carry out good quality studies among homeless people. It is therefore difficult to know how representative these results are and it is also hard to determine with any certainty why LGBTQ people are at higher risk of becoming homeless. In addition, it is unclear how relevant the studies conducted in North America are to the situation in Sweden. More research is needed into the extent of homelessness among young LGBTQ people and on the form successful measures to reduce homelessness should take.



## 6. Care, prevention and treatment to improve the health of LGBTQ people

Most young LGBTQ people are both physically and mentally healthy. However, in order to offer equal care on the same terms, the health service needs to know about the specific needs within the group and the specific challenges that young LGBTQ people face. The highly elevated risk of mental illness, suicide and HIV among young LGBTQ people requires not only greater knowledge of the reasons for these disparities, but also the development of methods to prevent and treat mental illness within the group. Trans people who seek gender-confirming treatment have specific care needs and the health service needs to be prepared to meet these.

Despite the clear need for evidence-based care, prevention and treatment specifically tailored to LGBTQ people, there are currently few such programmes due to insufficient supporting research (Fisher & Mustanski, 2014; Public Health Agency of Sweden, 2018). The following section outlines research into targeted psychological treatment for mental illness among LGBTQ people, LGBTQ people's experiences in the health service, gender-confirming treatment and the need to include an LGBTQ perspective in health promotion work.

### TARGETED PSYCHOLOGICAL TREATMENT FOR MENTAL ILLNESS AMONG LGBTQ PEOPLE

Despite the elevated risk of mental illness among LGBTQ people, until recently, knowledge of the mechanisms behind this added risk was relatively limited. However, there are now a number of studies suggesting several possible mechanisms that might explain LGBTQ people's increased risk of mental illness, and describing how experiencing stigma-related stress is associated with stress-related mental illness (Bränström, 2017; Hatzenbuehler & Pachankis, 2016a). As described in more detail in section 4, stigma surrounding LGBTQ identity leads to poorer mental health via various psychosocial mechanisms that are rooted in stresses relating to discrimination, violence, identity concealment and expectations of rejection (Meyer, 2003). These processes, which begin in the teenage years, can have deep psychological effects that influence the risk of mental illness throughout a person's life (Hatzenbuehler & Pachankis, 2016c; Pachankis, 2007; Pachankis & Hatzenbuehler, 2013). The majority of the research that describes these mechanisms has been conducted among homosexuals and bisexuals, but the existing research indicates that similar mechanisms also lie behind the greater risk of mental illness among trans people (Oost et al., 2016; White Hughto et al., 2015; Zeluf et al.).

Some of the mechanisms that lie behind LGBTQ people's increased risk of mental illness are universal risk factors for psychopathology, such as poor methods of dealing with emotions, rumination on thoughts and problems, social isolation and negative basic assumptions, which occur more commonly among LGBTQ people than among heterosexual and cis people (Hatzenbuehler, 2009). There are, however, effective evidence-based psychological treatments now available to reduce many of these universal risk factors, including cognitive behavioural therapy (Elliott, Watson, Goldman & Greenberg, 2004; Farchione et al., 2012).

Other mechanisms that increase the risk of mental illness are specific to LGBTQ people, such as stress of not being able to be open about one's LGBTQ identity, expectations of rejection and internalisation of society's negative attitudes (Pachankis, 2015). Since these mechanisms are specific to LGBTQ people, they are likely to require specifically tailored treatment strategies in order to effectively counter them. Research into effective psychological treatments to reduce mental illness specifically among LGBTQ people still remains extremely limited (Chaudoir, Wang & Pachankis, 2017; Public Health Agency of Sweden, 2018). Literature reviews only report one randomised controlled study. This study, which produced promising results, examined the effect of treatment aimed at gay and bisexual men that was based on strategies to confirm and reinforce their LGBTQ identity (Pachankis, Hatzenbuehler, Rendina, Safren & Parsons, 2015). Various other studies have looked at the effect of LGBTQ-specific psychological treatments, but have lacked a comparison group and have had only a short monitoring period (Chaudoir et al., 2017; Public Health Agency of Sweden, 2018). Most LGBTQ-specific psychological treatments are based on adapted cognitive behavioural therapy (CBT) methods. These LGBTQ-specific CBT treatments focus on the capacity to handle minority stress through strategies such as: normalising the negative impact of the minority stress; facilitating emotional awareness, control and acceptance; reducing avoidance; boosting self-confidence in communication; restructuring thoughts relating to minority stress; reaffirming unique strengths and encouraging a healthy, rewarding expression of sexuality (Pachankis, 2014). The studies that have been carried out so far show the positive effects of these LGBTQ-specific treatment methods in both improving mental health and reducing health risk behaviours (Pachankis, Hatzenbuehler, Rendina, et al., 2015).

Sweden currently lacks evidence-based psychological treatment specifically aimed at LGBTQ

people. Young LGBTQ people are vulnerable to mental illness and more research and development work is required in the area of effective psychological methods for this group.

### **EXPERIENCES IN THE HEALTH SERVICE**

For healthcare professionals to provide a good experience and equal care on the same terms, they need to know about young LGBTQ people's lives and specific circumstances (Hadland, Yehia & Makadon, 2016; Silberholz, Brodie, Spector & Pattishall, 2017). As described in section 3, some LGBTQ people are at greater risk of depression, anxiety, HIV, other sexually transmitted infections, substance abuse and experiencing violence and discrimination. There is a risk of LGBTQ people avoiding seeking healthcare due to the possibility of an unwelcoming experience or a fear of revealing their sexual orientation or gender identity. There is also a risk of LGBTQ people being offered incorrect, inadequate or insufficient care due to not feeling comfortable about opening up to healthcare professionals about their sexual orientation or gender identity (Hafeez, Zeshan, Tahir, Jahan & Naveed, 2017). Another factor in the experience of care is the familiarity of healthcare professionals with the language used by young LGBTQ people to talk about sexual orientation and gender identity (Hadland et al., 2016). Many young people do not feel that the terms homosexual, bisexual or trans properly capture their identities. Some young people identify instead as queer, an umbrella term to include everyone who is non-heterosexual and non-cisgender. Other young people identify as pansexual, non-binary or genderqueer (see glossary on pages 7–8 for definitions).

An extensive survey in 2012 asked questions regarding openness with healthcare professionals about sexual orientation and trans identity. The survey showed that among young LGBTQ people (aged 16–25) in Sweden, only 53 percent of gay men, 29 percent of bisexual men, 64 percent of lesbians, 47 percent of bisexual women and 48 percent of



trans people were always or usually open with healthcare professionals about their sexual orientation or trans identity (Bränström & Pachankis, 2018d). In the survey, few young homosexual and bisexual people felt that their specific needs were ignored by healthcare professionals. On the other hand, 17 percent of the young trans people who took part in the survey stated that they felt their specific needs were ignored or not taken into account by healthcare professionals (Bränström & Pachankis, 2018d).

In Sweden, RFSL offers training in LGBTQ awareness for healthcare professionals and carries out what it calls LGBTQ certification of healthcare provision. Many youth clinics, medical centres and school/student health centres have undergone this training. The aim of the LGBTQ certification scheme is to create a working environment free from discrimination where staff can offer an LGBTQ-aware experience. There has, however, been insufficient research into the effects of LGBTQ certification on how LGBTQ people feel about their experience and the quality of the care they receive.

### **GENDER-CONFIRMING TREATMENT**

Some trans people wish to receive gender-confirming treatment, such as hormone therapy or surgery. A large number of papers on recommended treatments have been published internationally (Cartaya & Lopez, 2017; Conard, 2017; Meriggiola & Gava, 2015; Shumer & Spack, 2013; Unger, 2014; Vance, Ehrensaft & Rosenthal, 2014). These studies emphasise the importance of offering safe and welcoming environments, ensuring a good experience and ensuring that healthcare professionals have the right expertise. In Sweden, the National Board of Health and Welfare has drawn up recommendations for the medical care given to young trans people who wish to receive gender-confirming treatment (National Board of Health and Welfare, 2015a). The recommendations stress the importance of the care being provided by a multidisciplinary team that is tailored to the

individual trans person's needs. This team may comprise many different professions, such as psychiatrist, psychologist, social worker, endocrinologist, speech therapist, dermatologist, skin therapist, gynaecologist or andrologist, sexologist and plastic surgeon. The recommendations also emphasise the importance of offering psychosocial support during examination and treatment. A review of international studies provides some evidence that the mental health of trans people improves once they have undergone gender-confirming treatment (Dhejne et al., 2016). The strongest evidence comes from a recent study of trans people in Sweden who had sought gender-confirming treatment (Bränström & Pachankis, 2018c). The study shows that the heightened risk of depression and anxiety within the group falls away as time passes after gender-confirmation treatment (Bränström & Pachankis, 2018c). However, more knowledge about the long-term effects of gender-confirming treatment for trans people is needed. There has been insufficient research into the effect of treatment in accordance with the National Board of Health and Welfare's recommendations, as published in 2015, which combines gender-confirming treatment with psychosocial support.

In Sweden, several interview studies have been conducted among trans people with experience of gender-confirming treatment and trans people who would like to receive the treatment (Linander, Alm, Goicolea & Harryson, 2017; Linander, Alm, Hammarström & Harryson, 2017; Swedish Government Official Reports, SOU, 2017; Vogelsang, Milton, Ericsson & Strömberg, 2016). The studies identified multiple shortcomings in access to and provision of healthcare. Long waiting times to receive gender-confirming treatment and a lack of knowledge and support appear to be particularly common problems (Linander, Alm, Hammarström, et al., 2017). In order to gain access to gender-confirming treatment, some trans people describe having been forced to take lead responsibility for the treatment process. They also describe the

healthcare service as being defined by conformative norms around gender and a view of gender as something binary and unchanging (Linander, Alm, Goicolea, et al., 2017). The official government report SOU 2017:92 ‘Transgender persons in Sweden – Proposals for stronger status and improved living conditions’, which was published in November 2017, presented a number of measures to improve the quality and availability of gender-confirming treatment (Swedish Government Official Reports, SOU, 2017).

### **SUICIDE PREVENTION**

As described in section 3, LGBTQ people are at higher risk of suicidal behaviours than heterosexual and cis people. Although the scientific evidence is limited, there are studies showing that certain initiatives to create a safer environment in school reduce the risk of suicidal behaviours among LGBTQ people. Such initiatives may include specifically incorporating LGBTQ identity into the school’s anti-bullying policy and setting up support groups (e.g. ‘gay/straight alliances’) (Public Health Agency of Sweden, 2018).

Given the highly elevated risk of suicidal thoughts and suicide attempts among young LGBTQ people compared with heterosexual and cis people, there is a need not only for greater knowledge of the reasons for these disparities, but also for the development of effective methods to prevent suicide within the group. National suicide prevention efforts should also take account of the much higher risk among LGBTQ people.

### **HIV PREVENTION**

Compared with other countries, the spread of HIV in Sweden has stabilised at a low level. In 2016, Sweden was one of the first countries in the world to achieve UNAIDS’s 90-90-90 target whereby 90 percent of all people living with HIV will know their HIV status, 90 percent of all people with diagnosed HIV infection will receive sustained antiretroviral therapy and 90 percent of all people receiving

antiretroviral therapy will have viral suppression (undetectable virus levels in the blood). Nevertheless, between 400 and 500 new cases of HIV infection are reported each year in Sweden (Public Health Agency of Sweden, 2017). Over half of those diagnosed with HIV in Sweden who give Sweden as the country of infection become infected via sex between men.

Reviews of research into HIV prevention work show that few interventions are targeted specifically at the group homosexual and bisexual men or men who have sex with men (MSM) (Public Health Agency of Sweden, 2018; Harper & Riplinger, 2013; Hergenrather, Emmanuel, Durant & Rhodes, 2016). There is, however, evidence that health-focused communication campaigns aimed at MSM do have some impact on sexual risk-taking (Friedman, Kachur, Noar & McFarlane, 2016). It is remarkable that so few interventions specifically aimed at homosexual and bisexual men have been studied, given the highly elevated risk of infection, compared with other groups (Bränström & Pachankis, 2018f). A number of specific risk factors for HIV have also been identified in this group, such as depression, anxiety, social isolation and internalised homophobia, and these factors should be taken into account when designing interventions (Mustanski, Newcomb, Du Bois, Garcia & Grov, 2011). There is currently insufficient knowledge about HIV and the risk of HIV among trans people in Sweden.

Considering the significantly higher risk of HIV among gay and bisexual men and MSM, improved knowledge is required about the effect of measures targeted at this group in particular. In addition, the effect of offering risk groups preventive measures such as post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP) should be studied in a specific Swedish context (Delany-Moretlwe et al., 2015; Hergenrather et al., 2016; Pettifor et al., 2015). The opportunities that mobile phones, the internet and social media offer for reaching groups that are otherwise difficult to reach with preventive measures ought to be explored (Condran, Gahagan & Isfeld-Kiely, 2017; Hergenrather et al., 2016).

## 7. Knowledge gaps and recommendations

One general aim of this report has been to highlight knowledge gaps and point out areas where more research is required. The following section presents the author's recommendations on how future research can improve our knowledge and understanding of the health and lives of young LGBTQ people.

### CHALLENGES FOR RESEARCH

Conducting research relating to LGBTQ people poses a number of challenges. Some of these challenges are unique to this group, while others are common to all research conducted into minority groups. One challenge for research is that sexual orientation and gender identity cover a broad spectrum of individuals with many different identities. It is therefore difficult to clearly define, operationalise and delimit the LGBTQ group and its subgroups. Some people can be reticent about answering questions relating to gender identity and sexual experiences with partners of the same sex.

Much of the research into LGBTQ people's health has involved non-randomised samples and it is often unclear how representative these people are of the group they are meant to represent. There is a risk that those who are interviewed or who respond to questions in this sample are more open about their identity and more verbal about their views. Despite this shortcoming, the research has improved our knowledge in this field, not least in understanding the links between different factors that affect the health and lives of LGBTQ

people. Some groups are also particularly small and difficult to reach, and then this type of study can be the only way of gaining any information.

There is currently considerable data about the health and lives of LGBTQ people. These sources of information should be exploited to develop better and more representative descriptions of LGBTQ people's health status. Questions about LGBTQ identity should also be used in all population surveys in Sweden.

### KNOWLEDGE GAPS REGARDING THE HEALTH AND LIVES OF LGBTQ PEOPLE

The Public Health Agency of Sweden's national public health survey in particular enables the health status of people who identify as homosexual or bisexual in Sweden to be surveyed relatively well. However, there is insufficient knowledge about the health status of people with a sexual identity other than homosexual, bisexual or heterosexual. Nor is there sufficient knowledge about the health status of different subgroups within the transgender group. More research is therefore needed in certain subgroups within the wider LGBTQ group, especially those with sexual identities other than lesbian, gay, bisexual or heterosexual (e.g. queer) and among trans people. Studies of these groups should, as far as possible, rely on a representative sample of the population.

The vast majority of studies among LGBTQ people have been cross-sectional studies or interviews conducted on a single occasion. A better understanding of this group's health status, their lives and the factors that affect them can be achieved by adopting a life course perspective and taking a longitudinal approach that follows people over time. This type of study would provide unique new insights into how the health of LGBTQ people changes over time and is affected by changes in circumstances. This type of study can be achieved either by building up new cohort studies of LGBTQ people and following these over time, or by

including questions about sexual orientation and gender identity in existing large-scale cohort studies.

There is also a lack of studies on certain aspects of the health and lives of LGBTQ people in Sweden. Few studies, for example, have investigated the situation for LGBTQ people in schools, higher education and the workplace. More knowledge is needed in these areas. One way of gaining a better understanding of the situation for LGBTQ people in these areas is to include questions about sexual orientation and gender identity in school surveys and work environment surveys.

### **KNOWLEDGE GAPS REGARDING RISK AND PROTECTIVE FACTORS FOR THE HEALTH OF LGBTQ PEOPLE**

The majority of the studies on risk and protective factors among LGBTQ people have been cross-sectional studies, which makes it difficult to draw firm conclusions about any causal links. In order to increase knowledge about risk and protective factors for the health of young LGBTQ people, more rigorously designed studies are required, preferably longitudinal studies among representative samples of the population, where health and situation in life are monitored both through self-reporting and objective measures of risk and preventive factors. Most of the studies on risk and protective factors and the mechanisms behind the elevated risk of ill-health among LGBTQ people have been conducted in North America. There is thus a need for more research that takes account of the situation in Sweden.

Factors need to be considered on many levels in order to better understand what affects the health and lives of LGBTQ people. Social, structural and individual deciding factors need to be studied, along with the way norms surrounding gender and sexual orientation affect the lives of LGBTQ people. Much of the previous research has focused on risk factors among LGBTQ people. Future studies need to place more of an emphasis on strengths and

the different ways that LGBTQ individuals deal with their challenges.

More knowledge about strengths and protective factors may provide important information that can form the basis of interventions aimed at improving healthcare, prevention and treatment aimed at LGBTQ people. Better definitions and well-validated measures of minority stress and other risk and protective factors among LGBTQ people also need to be developed.

### **KNOWLEDGE GAPS REGARDING CARE, PREVENTION AND TREATMENT TO IMPROVE THE HEALTH OF LGBTQ PEOPLE**

There is a need for research into effective methods of reducing the health inequalities between LGBTQ people and heterosexual and cis people. Such methods require both development and evaluation. There is a pressing need for interventions aimed at particularly vulnerable groups, the most important of which are interventions to reduce mental illness, suicide risk and the risk of contracting HIV.

In order to reduce the dramatically increased risk of mental illness, interventions aimed at preventing and effectively treating mental health issues among LGBTQ people need to be developed and evaluated. There is currently knowledge of key mechanisms for ill-health that are specific to LGBTQ people and proposals for treatment strategies to tackle these (see section 4). There is, however, a need for randomised controlled studies that investigate the effect of LGBTQ-specific psychological treatment. These studies must also be designed in a way that makes it possible to determine for whom (i.e. which subgroups of LGBTQ individuals) and under which circumstances these treatments are effective. In addition, studies of more generally targeted psychological treatment should include measures of sexual orientation and gender identity in order to establish whether these treatments work specifically for LGBTQ people. National suicide prevention efforts must be

adapted to meet the much higher risk among LGBTQ people.

There is a need for more knowledge about how best to design healthcare for young trans people and the effects that care has on the health, well-being and lives of trans people. More knowledge about the long-term effects of gender-confirming treatment for trans people is needed.

### **PERSPECTIVES IN THE RESEARCH**

Research into LGBTQ people's health should always bear in mind that LGBTQ identity is only one of many factors that affect the health and life of an individual. To obtain a better and deeper understanding of the situation for LGBTQ people, other aspects must be analysed, such as ethnic and cultural background, plus socioeconomic and regional differences. Research should have an intersectional perspective that takes into account the impact of multiple social identities and the consequences of gender, class, ethnic and cultural background, skin colour, functional variation and age in conjunction with sexual orientation and gender identity.

There is also a need for research focusing on specific groups of LGBTQ people. Although certain sections of the LGBTQ group have a higher level of education (particularly lesbians and gay men), more knowledge is required about the lives of socially disadvantaged and homeless LGBTQ people. In addition, more knowledge is needed about the significance of ethnic minority status among young LGBTQ people in Sweden. The specific circumstances of LGBTQ people who come to Sweden as refugees need to be highlighted to ensure a good reception and to facilitate social integration.

A diversity perspective is important in all people-related research. Research funding bodies should therefore encourage applicants to specifically consider and justify the inclusion or exclusion of LGBTQ people in their research.

### **PEOPLE WITH INTERSEX VARIATIONS**

Research into the health and lives of people with intersex variations is extremely limited, and the general articles identified in our literature review draw the conclusion that more knowledge is required (Beale & Creighton, 2016; Tishelman, Shumer & Nahata, 2017). Since the group comprises individuals with a wide range of intersex variations, it is difficult to give general recommendations regarding healthcare needs and care provision. There is a need for more research that takes a life course perspective in examining the lives of people with intersex variations and their healthcare needs and provision. However, the limited number of individuals involved may make international research necessary in this area.

### **Knowledge gaps and recommendations from the author**

- Questions about LGBTQ identity should be used in all population surveys in Sweden.
- Questions about LGBTQ identity should be included in health surveys at schools and in working life.
- Awareness about the increased vulnerability of young LGBTQ people to risk factors and ill health must be present in youth research and a LGBTQ perspective should always be part of such research.
- In order to increase knowledge about risk and protection factors for the health of young LGBTQ people, longitudinal studies are required in representative populations where health and living conditions are followed with both self-reported and objective measures.
- Since the majority of the research carried out on causes of increased risk of ill health among LGBTQ people has been conducted in North America, in-depth studies are required for Swedish conditions.
- More knowledge about the strengths and protection factors of LGBTQ people is needed. Such knowledge may then serve as a basis for interventions aimed at improving care, prevention and treatment tailored for LGBTQ people.

- More research is needed in some subgroups within the LGBTQ group, especially those with different sexual identities than gay or bisexual (e.g. queer) and among transgender people.
- More research is needed on vulnerability among LGBTQ people and its causes, including violence from a partner, sexual violence and honour-related violence, with particular focus on the situation of transgender and bisexual women.
- In order to reduce the dramatically increased risk of mental illness, interventions aimed at preventing and effectively treating mental health among LGBTQ people need to be developed and evaluated.
- There is a need for randomised controlled studies that investigate the effect of LGBTQ- specific psychological treatment.
- National suicide prevention efforts must be adapted to meet the high risk among LGBTQ people.
- More research should have an intersectional perspective that takes into account the impact of multiple social identities and the consequences of gender, class, ethnicity, skin colour, function variation and age in conjunction with sexual orientation and gender identity.
- There is a need for more knowledge about how to best to deal with the care of young transgender and the effects of gender affirming care on transgender health, well-being and living conditions.
- More knowledge about the long-term effects of sex-confirming care for transgender is needed.
- Research also needs to be done in specific groups of LGBTQ people, e.g. socially vulnerable and newly arrived.
- More knowledge is needed about the care, care needs and life situation of persons with intersexual variation, that is, those who have a body that cannot be categorised as male or female according to social norms for gender.
- Research funding should encourage applicants to specifically consider and motivate the inclusion or exclusion of LGBTQ people in their research.

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## References

- Aboujaoude, Savage, Starcevic & Salame. (2015). Cyberbullying: Review of an Old Problem Gone Viral. *The Journal of adolescent health: official publication of the Society for Adolescent Medicine*, 57(1), 10–18.
- Adelson, Stroeh & Ng. (2016). Development and mental health of lesbian, gay, bisexual, or transgender youth in pediatric practice. *Pediatric Clinics*, 63(6), 971–983.
- Adler, Boyce, Chesney, Cohen, Folkman, Kahn & Syme. (1994). Socioeconomic status and health: the challenge of the gradient. *American Psychologist*, 49(1), 15.
- Ahmed, Andersson & Hammarstedt. (2013). Are gay men and lesbians discriminated against in the hiring process? *Southern Economic Journal*, 79(3), 565–585.
- Åhman. (2017). *Linjer mot lycka – en kunskapsfördjupning rörande transpersoner med ätstörningar*. (Kandidat), Stockholms universitet, Stockholm.
- Alegria. (2011). Transgender identity and health care: Implications for psychosocial and physical evaluation. *Journal of the American Association of Nurse Practitioners*, 23(4), 175–182.
- Ankarblom & Gudmundsson. (2014). *Samkönade föräldrars upplevelse av bemötandet på barnavårdscentralen*. Lunds universitet, Lund, Sverige.

- Bäckström, Edgardh Beckman & Pettersson. (2004). *Religious Change in Northern Europe.: The Case of Sweden*. Verbum, Stockholm.
- Badgett, Lau, Sears & Ho. (2007). *Bias in the Workplace: Consistent Evidence of Sexual Orientation and Gender Identity Discrimination*. Retrieved from Williams Institute, UCLA School of Law, CA, USA.
- Balsam, Molina, Beadnell, Simoni & Walters. (2011). Measuring multiple minority stress: the LGBT People of Color Microaggressions Scale. *Cultural Diversity and Ethnic Minority Psychology*, 17(2), 163.
- Beale & Creighton. (2016). Long-term health issues related to disorders or differences in sex development/intersex. *Maturitas*, 94, 143-148.
- Bell, Breland & Ott. (2013). Adolescent and Young Adult Male Health: A Review. *Pediatrics*, 132(3), 535-546.
- Bildt. (2004). *Fackmedlemmars uppfattningar om diskriminering på grund av sexuell läggning på arbetsplatsen*. Arbetslivsinstitutet, Stockholm, Sweden.
- Black, Sanders & Taylor. (2007). The economics of lesbian and gay families. *Journal of economic perspectives*, 21(2), 53-70.
- Blais, Bergeron, Duford, Boislard & Hebert. (2015). Health Outcomes of Sexual-Minority Youth in Canada: An Overview. *Adolescencia & saude*, 12(3), 53-73.
- Blondeel, de Vasconcelos, García-Moreno, Stephenson, Temmerman & Toskin. (2018). Violence motivated by perception of sexual orientation and gender identity: a systematic review. *Bulletin of the World Health Organisation*, 96(1), 29-41L.
- Blondeel, Say, Chou, Toskin, Khosla, Scolaro & Temmerman. (2016). Evidence and knowledge gaps on the disease burden in sexual and gender minorities: a review of systematic reviews. *International Journal for Equity in Health*, 15(1), 16.
- Blosnich, Lee & Horn. (2013). A systematic review of the aetiology of tobacco disparities for sexual minorities. *Tobacco Control*, 22(2), 66-73.
- Boehmer. (2002). Twenty years of public health research: Inclusion of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health*, 92(7), 1125-1130.
- Boehmer, Cooley & Clark. (2012). Cancer and men who have sex with men: a systematic review. *The Lancet Oncology*, 13(12), e545-e553.
- Bongard, Al'Absi & Lovallo. (2012). How motivation affects cardiovascular response: Mechanisms and applications. In G. H. E. Gendolla (Ed.), *Cardiovascular reactivity and health* (pp. 223- 241). Washington, DC: American Psychological Association.
- Bourne & Weatherburn. (2017). Substance use among men who have sex with men: patterns, motivations, impacts and intervention development need. *Sexually Transmitted Infections*, 93(5), 342-346.
- Brottsförebyggande rådet. (2017). Hatbrottsstatistik. Från Hemsida: <https://www.bra.se/statistik/statistiska-undersokningar/hatbrottsstatistik.html>
- Bränström. (2017). Minority stress factors as mediators of sexual orientation disparities in mental health treatment: a longitudinal population-based study. *J Epidemiol Community Health*, 71(5), 446-452.
- Bränström, Hatzenbuehler & Pachankis. (2016). Sexual orientation disparities in physical health: Age effects in a population-based study. *Social Psychiatry and Psychiatric Epidemiology*, 51(2), 289-301.
- Bränström, Hatzenbuehler, Pachankis & Link. (2016). Sexual orientation disparities in preventable disease: A fundamental cause perspective. *American Journal of Public Health*, 06(6), 1109-1115.
- Bränström, Hatzenbuehler, Tinghög & Pachankis. (2018). Sexual orientation differences in outpatient psychiatric treatment and antidepressant usage: evidence from a population-based study of siblings. *European Journal of Epidemiology*, May 15, Epub ahead of print.
- Bränström, Hatzenbuehler, van der Star & Pachankis. (2018). Sexual orientation disparities in suicidality: Age and gender effects in a population-based nationwide study in Sweden. *Manuscript in preparation*.
- Bränström, Karlin & Pachankis. (2018). The role of country-level structural stigma on transgender identity concealment, discrimination, and life-satisfaction across Europe. *Manuscript in preparation*.
- Bränström & Pachankis. (2018a). Bullying and school victimization among lesbian, gay, bisexual, and transgender youth in 28 European countries: the

impact of discriminatory legislation and population attitudes. *Manuscript in preparation*.

Bränström & Pachankis. (2018b). Mental health and stigma-related stress among Middle Eastern gay and bisexual migrants in Sweden. *Manuscript in preparation*.

Bränström & Pachankis. (2018c). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. *Manuscript in preparation*.

Bränström & Pachankis. (2018d). The role of country-level structural stigma on sexual orientation concealment and discrimination in health care settings across Europe. *Manuscript in preparation*.

Bränström & Pachankis. (2018e). Sexual Orientation Disparities in the Co-Occurrence of Substance Use and Psychological Distress: A National Population-Based Study. *Social Psychiatry and Psychiatric Epidemiology*, 4(53), 403-415.

Bränström & Pachankis. (2018f). Validating the syndemic threat surrounding sexual minority men's health in a population-based study. *JAIDS*, 78(4), 376-382.

Bränström & van der Star. (2013). All inclusive Public Health--what about LGBT populations? *Eur J Public Health*, 23(3), 353-354.

Caceres, Brody & Chyun. (2016). Recommendations for cardiovascular disease research with lesbian, gay and bisexual adults. *Journal of Clinical Nursing*, 25(23-24), 3728-3742.

Caceres, Brody, Luscombe, Primiano, Maruska, Sitts & Chyun. (2017). A Systematic Review of Cardiovascular Disease in Sexual Minorities. *American Journal of Public Health*, 107(4), E13-E21.

Cartaya & Lopez. (2017). Gender dysphoria in youth: a review of recent literature. *Current opinion in endocrinology, diabetes, and obesity*, 25(1):44-48.

Chaudoir, Wang & Pachankis. (2017). What Reduces Sexual Minority Stress? A Review of the Intervention "Toolkit". *Journal of Social Issues*, 73(3), 586-617.

Cochran & Mays. (2007). Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: results from the California Quality of Life Survey.

*Am J Public Health*, 97(11), 2048-2055.

Cole, Kemeny, Fahey, Zack & Naliboff. (2003). Psychological risk factors for HIV pathogenesis: mediation by the autonomic nervous system. *Biological Psychiatry*, 54(12), 1444-1456.

Cole, Kemeny & Taylor. (1997). Social identity and physical health: accelerated HIV progression in rejection-sensitive gay men. *J Pers Soc Psychol*, 72(2), 320-335.

Cole, Kemeny, Taylor & Visscher. (1996). Elevated physical health risk among gay men who conceal their homosexual identity. *Health Psychology*, 15(4), 243.

Collier, van Beusekom, Bos & Sandfort. (2013). Sexual orientation and gender identity/expression related peer victimization in adolescence: a systematic review of associated psychosocial and health outcomes. *Journal of Sex Research*, 50(3-4), 299-317.

Conard. (2017). Supporting and caring for transgender and gender nonconforming youth in the urology practice. *Journal of pediatric urology*, 13(3), 300-304.

Condran, Gahagan & Isfeld-Kiely. (2017). A scoping review of social media as a platform for multi-level sexual health promotion interventions. *Canadian Journal of Human Sexuality*, 26(1), 26-37.

Connolly, Zervos, Barone, Johnson & Joseph. (2016). The Mental Health of Transgender Youth: Advances in Understanding. *The Journal of adolescent health: official publication of the Society for Adolescent Medicine*, 59(5), 489-495.

Crocker, Major & Steele. (1998). Social stigma. In D. Gilbert, S.-T. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 504- 553). Boston, MA: McGraw- Hill.

Cronley & Evans. (2017). Studies of resilience among youth experiencing homelessness: A systematic review. *Journal of Human Behavior in the Social Environment*, 27(4), 291-310.

D'augelli. (1989). Lesbians' and gay men's experiences of discrimination and harassment in a university community. *American journal of community psychology*, 17(3), 317-321.

De Roo, Tilleman, T'Sjoen & De Sutter. (2016). Fertility options in transgender people. *International review of psychiatry* (Abingdon, England), 28(1), 112-119.



- Delany-Moretlwe, Cowan, Busza, Bolton-Moore, Kelley & Fairlie. (2015). Providing comprehensive health services for young key populations: needs, barriers and gaps. *Journal of the International AIDS Society*, 18(2 Suppl 1), 19833.
- Dhejne, Van Vlerken, Heylens & Arcelus. (2016). Mental health and gender dysphoria: a review of the literature. *International Review of Psychiatry*, 28(1), 44-57.
- Diamant & Wold. (2003). Sexual orientation and variation in physical and mental health status among women. *Journal of Women's Health*, 12(1), 41-49.
- Dickerson & Kemeny. (2004). Acute stressors and cortisol responses: a theoretical integration and synthesis of laboratory research. *Psychological Bulletin*, 130(3), 355.
- Dispenza, Brown & Chastain. (2016). Minority Stress Across the Career-Lifespan Trajectory. *Journal of Career Development*, 43(2), 103-115.
- Donahue, Langstrom, Lundstrom, Lichtenstein & Forsman. (2017). Familial Factors, Victimization, and Psychological Health Among Sexual Minority Adolescents in Sweden. *American Journal of Public Health*, 107(2), 322-328.
- Doyle & Molix. (2015). Social stigma and sexual minorities' romantic relationship functioning: A meta-analytic review. *Personality and Social Psychology Bulletin*, 41(10), 1363-1381.
- Earnshaw, Bogart, Poteat, Reisner & Schuster. (2016). Bullying among lesbian, gay, bisexual, and transgender youth. *Pediatric Clinics*, 63(6), 999-1010.
- Ecker. (2016). Queer, young, and homeless: A review of the literature. *Child & Youth Services*, 37(4), 325-361.
- Eliason, Ingraham, Fogel, McElroy, Lorvick, Mauery & Haynes. (2015). A systematic review of the literature on weight in sexual minority women. *Women's health issues: official publication of the Jacobs Institute of Women's Health*, 25(2), 162-175.
- Elliott, Watson, Goldman & Greenberg. (2004). Learning emotionfocused therapy: The process-experiential approach to change: *American Psychological Association*.
- European Commission. (2006). *Eurobarometer 66: Public opinion in the European union*. Brussels, Belgium. European Commission. (2015). Special Eurobarometer 437: "Discrimination in the EU in 2015". Brussels, Belgium.
- Everum & Viebke. (2010). "Regnbågsfamiljer" – att stå utanför samhällets normer. Malmö högskola, Malmö, Sverige.
- Farchione, Fairholme, Ellard, Boisseau, Thompson-Hollands, Carl, . . . Barlow. (2012). Unified protocol for transdiagnostic treatment of emotional disorders: a randomized controlled trial. *Behavior therapy*, 43(3), 666-678.
- Feinstein, Goldfried & Davila. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *J Consult Clin Psychol*, 80(5), 917-927.
- Fisher & Mustanski. (2014). Reducing Health Disparities and Enhancing the Responsible Conduct of Research Involving LGBT Youth. *The Hastings Center report*, 44 Suppl 4, S28-31.
- Flores & Park. (2018). *Polarized progress: Social acceptance of LGBT people in 141 countries, 1981 to 2014*. Retrieved from Los Angeles, USA.
- Folkhälsomyndigheten. (2014). *Utvecklingen av hälsan och hälsans bestämningsfaktorer bland homo och bisexuella personer – Resultat från nationella folkhälsoenkäten Hälsa på lika villkor*. Stockholm, Sweden.
- Folkhälsomyndigheten. (2015). *Hälsan och hälsans bestämningsfaktorer för transpersoner – En rapport om hälsoläget bland transpersoner i Sverige*. Stockholm, Sweden.
- Folkhälsomyndigheten. (2017). *Hivinfektion*. Retrieved from: <https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/statistikdatabaser-och-visualisering/sjukdomsstatistik/hivinfektion/>
- Folkhälsomyndigheten. (2018). *Metoder för att främja en god hälsa bland hbtqpersoner: resultat från en kartläggande litteraturoversikt*. Stockholm, Sweden.
- Frederick & Essayli. (2016). Male Body Image: The Roles of Sexual Orientation and Body Mass Index Across Five National US Studies. *Psychology of Men & Masculinity*, 17(4), 336-351.
- Freitas, Coimbra & Fontaine. (2017). Resilience in

- LGB youths: A systematic review of protection mechanisms. *Paideia*, 27(66), 69-79.
- Friedman, Kachur, Noar & McFarlane. (2016). Health Communication and Social Marketing Campaigns for Sexually Transmitted Disease Prevention and Control: What Is the Evidence of their Effectiveness? *Sexually Transmitted Diseases*, 43, S83-S101.
- Gallo & Matthews. (2003). Understanding the association between socioeconomic status and physical health: do negative emotions play a role? *Psychological Bulletin*, 129(1), 10.
- Garnets, Herek & Levy. (1990). Violence and victimization of lesbians and gay men: Mental health consequences. *J Interpers Violence*, 5(3), 366-383.
- Goldbach, Fisher & Dunlap. (2015). Traumatic Experiences and Drug Use by LGB Adolescents: A Critical Review of Minority Stress. *Journal of Social Work Practice in the Addictions*, 15(1), 90-113.
- Goldbach, Tanner-Smith, Bagwell & Dunlap. (2014). Minority stress and substance use in sexual minority adolescents: a meta-analysis. *Prevention science: the official journal of the Society for Prevention Research*, 15(3), 350-363.
- Hadland, Yehia & Makadon. (2016). Caring for Lesbian, Gay, Bisexual, Transgender, and Questioning Youth in Inclusive and Affirmative Environments. *Pediatric Clinics of North America*, 63(6), 955+.
- Hafeez, Zeshan, Tahir, Jahan & Naveed. (2017). Health Care Disparities Among Lesbian, Gay, Bisexual, and Transgender Youth: A Literature Review. *Cureus*, 9(4), e1184.
- Hafford-Letchfield, Pezzella, Cole & Manning. (2017). Transgender students in post-compulsory education: A systematic review. *International Journal of Educational Research*, 86, 1-12.
- Hall. (2017a). The Effectiveness of Policy Interventions for School Bullying: A Systematic Review. *Journal of the Society for Social Work and Research*, 8(1), 45-69.
- Hall. (2017b). Psychosocial Risk and Protective Factors for Depression Among Lesbian, Gay, Bisexual, and Queer Youth: A Systematic Review. *Journal of Homosexuality*, 1-54.
- Harper & Riplinger. (2013). HIV Prevention Interventions for Adolescents and Young Adults: What About the Needs of Gay and Bisexual Males? *AIDS and behavior*, 17(3), 1082-1095.
- Hasson, Brown, Dorn, Barkley, Torgan, Whitt-Glover, . . . Keith. (2017). Achieving Equity in Physical Activity Participation: ACSM Experience and Next Steps. *Medicine and science in sports and exercise*, 49(4), 848-858.
- Hatzenbuehler. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychol Bull*, 135(5), 707-730.
- Hatzenbuehler. (2017). Advancing Research on Structural Stigma and Sexual Orientation Disparities in Mental Health Among Youth. *Journal of clinical child and adolescent psychology: the official journal for the Society of Clinical Child and Adolescent Psychology*, American Psychological Association, Division 53, 46(3), 463-475.
- Hatzenbuehler, Bränström & Pachankis. (2017). Societal-level explanations for reductions in sexual orientation mental health disparities: Results from a ten-year, population-based study in Sweden. *Stigma and Health*, 3(1), 16-26.
- Hatzenbuehler, McLaughlin & Nolen-Hoeksema. (2008). Emotion regulation and internalizing symptoms in a longitudinal study of sexual minority and heterosexual adolescents. *J Child Psychol Psychiatry*, 49(12), 1270-1278.
- Hatzenbuehler, McLaughlin & Slopen. (2013). Sexual orientation disparities in cardiovascular biomarkers among young adults. *Am J Prev Med*, 44(6), 612-621.
- Hatzenbuehler, Nolen-Hoeksema & Dovidio. (2009). How does stigma "get under the skin"?: the mediating role of emotion regulation. *Psychol Sci*, 20(10), 1282-1289.
- Hatzenbuehler, Nolen-Hoeksema & Erickson. (2008). Minority stress predictors of HIV risk behavior, substance use, and depressive symptoms: results from a prospective study of bereaved gay men. *Health Psychology*, 27(4), 455.
- Hatzenbuehler & Pachankis. (2016a). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender Youth. *Pediatric Clinics*, 63(6), 985-997.

- Hatzenbuehler & Pachankis. (2016b). Stigma and Minority Stress as Social Determinants of Health Among Lesbian, Gay, Bisexual, and Transgender Youth: Research Evidence and Clinical Implications. *Pediatric Clinics of North America*, 63(6), 985-997.
- Hatzenbuehler & Pachankis. (2016c). Stigma and Minority Stress as Social Determinants of Health Among Lesbian, Gay, Bisexual, and Transgender Youth: Research Evidence and Clinical Implications. *Pediatr Clin North Am*, 63(6), 985-997.
- Hatzenbuehler, Slopen & McLaughlin. (2014). Stressful life events, sexual orientation, and cardio-metabolic risk among young adults in the United States. *Health Psychol*, 33(10), 1185-1194.
- Hawkey & Cacioppo. (2010). Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of behavioral medicine*, 40(2), 218-227.
- Heck & Jacobson. (2006). Asthma diagnosis among individuals in same-sex relationships. *J Asthma*, 43(8), 579-584.
- Hergenrath, Emmanuel, Durant & Rhodes. (2016). Enhancing HIV prevention among young men who have sex with men: A systematic review of HIV behavioral interventions for young gay and bisexual men. *Aids Education and Prevention*, 28(3), 252-271.
- Hjortskov, Rissén, Blangsted, Fallentin, Lundberg & Søgaard. (2004). The effect of mental stress on heart rate variability and blood pressure during computer work. *European journal of applied physiology*, 92(1-2), 84-89.
- Holt-Lunstad, Smith, Baker, Harris & Stephenson. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227-237.
- Hong, Kral & Sterzing. (2015). Pathways From Bullying Perpetration, Victimization, and Bully Victimization to Suicidality Among School-Aged Youth: A Review of the Potential Mediators and a Call for Further Investigation. *Trauma Violence & Abuse*, 16(4), 379-390.
- Hooghe & Meeusen. (2013). Is Same-Sex Marriage Legislation Related to Attitudes Toward Homosexuality? Trends in Tolerance of Homosexuality in European Countries Between 2002 and 2010. *Sex Res Soc Policy*, 10, 258-268.
- Huebner & Davis. (2005). Gay and bisexual men who disclose their sexual orientations in the workplace have higher workday levels of salivary cortisol and negative affect. *Annals of Behavioral Medicine*, 30(3), 260-267.
- Jeffries. (2014). Beyond the Bisexual Bridge Sexual Health Among US Men Who Have Sex with Men and Women. *American Journal of Preventive Medicine*, 47(3), 320-329.
- Juster, Hatzenbuehler, Mendrek, Pfaus, Smith, Johnson, . . . Sindi. (2015). Sexual orientation modulates endocrine stress reactivity. *Biol Psychiatry*, 77(7), 668-676.
- Katz-Wise, Rosario & Tsappis. (2016). LGBT Youth and Family Acceptance. *Pediatric Clinics of North America*, 63(6), 1011.
- Keuroghlian, Shtasel & Bassuk. (2014). Out on the street: a public health and policy agenda for lesbian, gay, bisexual, and transgender youth who are homeless. *The American journal of orthopsychiatry*, 84(1), 66-72.
- King, Semlyen, Tai, Killaspy, Osborn, Popelyuk & Nazareth. (2008a). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8(1), 70.
- King, Semlyen, Tai, Killaspy, Osborn, Popelyuk & Nazareth. (2008b). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC psychiatry*, 8, 70.
- Kirschbaum, Pirke & Hellhammer. (1993). The "Trier Social Stress Test"—a tool for investigating psychobiological stress responses in a laboratory setting. *Neuropsychobiology*, 28(1-2), 76-81.
- Larson, Chastain, Hoyt & Ayzenberg. (2015). Self-concealment: Integrative review and working model. *Journal of Social and Clinical Psychology*, 34(8), 705-729.
- Lev-Wiesel, Nuttman-Shwartz & Sternberg. (2006). Peer rejection during adolescence: Psychological long-term effects—A brief report. *Journal of Loss and Trauma*, 11(2), 131-142.
- Lick, Durso & Johnson. (2013). Minority stress and

- physical health among sexual minorities. *Perspectives on Psychological Science*, 8, 521-548.
- Linander, Alm, Goicolea & Harryson. (2017). 'It was like I had to fit into a category': Care-seekers' experiences of gender regulation in the Swedish trans-specific healthcare. *Health*, 1:1363459317708824.
- Linander, Alm, Hammarström & Harryson. (2017). Negotiating the (bio) medical gaze—Experiences of trans-specific healthcare in Sweden. *Social Science & Medicine*, 174, 9-16.
- Lindstrom, Axelsson, Moden & Rosvall. (2014). Sexual orientation, social capital and daily tobacco smoking: a population-based study. *BMC Public Health*, 14, 565. doi:10.1186/1471-2458-14-565
- Link & Phelan. (1995). Social conditions as fundamental causes of disease. *J Health Soc Behav*, Spec No, 80-94.
- Link & Phelan. (2001). Conceptualizing Stigma. *Annual Review of Sociology*, 27, 363-385.
- Lucassen, Stasiak, Samra, Frampton & Merry. (2017). Sexual minority youth and depressive symptoms or depressive disorder: A systematic review and meta-analysis of population-based studies. *The Australian and New Zealand journal of psychiatry*, 51(8), 774-787.
- Lundberg. (2005). Stress hormones in health and illness: the roles of work and gender. *Psychoneuroendocrinology*, 30(10), 1017-1021.
- Lundgren, Isung, Rinder, Dhejne, Arver, Holm & Farnebo. (2016). Moving transgender care forward within public health organizations: Inclusion of facial feminizing surgery in the Swedish National Treatment Recommendations. *Arch Sex Behav*, 45(8), 1879.
- Maniglio. (2017). Bullying and Other Forms of Peer Victimization in Adolescence and Alcohol Use. *Trauma Violence & Abuse*, 18(4), 457-473.
- Marsland, Walsh, Lockwood & John-Henderson. (2017). The effects of acute psychological stress on circulating and stimulated inflammatory markers: a systematic review and meta-analysis. *Brain, behavior, and immunity*, 64, 208-219.
- Mattocks, Sullivan, Bertrand, Kinney, Sherman & Gustason. (2015). Perceived stigma, discrimination, and disclosure of sexual orientation among a sample of lesbian veterans receiving care in the Department of Veterans Affairs. *LGBT Health*, 2(2), 147-153.
- Mays & Cochran. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *Am J Public Health*, 91(11), 1869-1876.
- McGarrity. (2014). Socioeconomic status as context for minority stress and health disparities among lesbian, gay, and bisexual individuals. *Psychology of Sexual Orientation and Gender Diversity*, 1(4), 383.
- McNeil, Ellis & Eccles. (2017). Suicide in trans populations: A systematic review of prevalence and correlates. *Psychology of Sexual Orientation and Gender Diversity*, 4(3), 341.
- Mendoza-Denton, Downey, Purdie, Davis & Pietrzak. (2002). Sensitivity to status-based rejection: implications for African American students' college experience. *Journal of Personality and Social Psychology*, 83(4), 896.
- Meriggiola & Gava. (2015). Endocrine care of transpeople part I. A review of cross-sex hormonal treatments, outcomes and adverse effects in transmen. *Clinical endocrinology*, 83(5), 597-606.
- Meyer. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychol Bull*, 129(5), 674-697.
- Miranda-Mendizabal, Castellvi, Pares-Badell, Almenara, Alonso, Blasco, . . . Alonso. (2017). Sexual orientation and suicidal behaviour in adolescents and young adults: systematic review and meta-analysis. *The British journal of psychiatry: the journal of mental science*, 211(2), 77-87.
- Mustanski, Newcomb, Du Bois, Garcia & Grov. (2011). HIV in young men who have sex with men: a review of epidemiology, risk and protective factors, and interventions. *J Sex Res*, 48(2-3), 218-253.
- Myndigheten för ungdoms- och civillsamhällesfrågor. (2015). *Öppna skolan! Om hbtqnormer och inkludering i årskurs 79 och gymnasiet* (2015). Stockholm.
- Myndigheten för ungdoms- och civillsamhällesfrågor. (2016). *Stödjande och stärkande – Unga hbtqpersoners röster om identitetsstärkande och hälsofrämjande faktorer*. Stockholm.
- Myndigheten för ungdoms- och civillsamhällesfrågor. (2017a). *Bredda normen – unga hbtqpersoners röster om skola och arbetsliv*. Retrieved from Stockholm.

- Myndigheten för ungdoms- och civillsamhällesfrågor. (2017b). *Fokus 17 Unga hbtqpersoner – Etablering i arbetslivet*. Retrieved from Stockholm.
- Nationellt centrum för kvinnofrid. (2018). *Väld mot hbtqpersoner – en forsknings och kunskapsöversikt*. Retrieved from Uppsala.
- Newcomb, Heinz, Birkett & Mustanski. (2014). A longitudinal examination of risk and protective factors for cigarette smoking among lesbian, gay, bisexual, and transgender youth. *Journal of Adolescent Health, 54*(5), 558-564.
- Newcomb, Heinz & Mustanski. (2012). Examining risk and protective factors for alcohol use in lesbian, gay, bisexual, and transgender youth: a longitudinal multilevel analysis. *J Stud Alcohol Drugs, 73*(5), 783-793.
- Newcomb & Mustanski. (2010). Internalized homophobia and internalizing mental health problems: a meta-analytic review. *Clin Psychol Rev, 30*(8), 1019-1029.
- Norwegian Social Science Data Services. (2002-2017). *ESS Round 18: European Social Survey Round 18 Data*.
- Oldenburg, Perez-Brumer, Hatzenbuehler, Krakower, Novak, Mimiaga & Mayer. (2015). State-level structural sexual stigma and HIV prevention in a national online sample of HIV-uninfected men who have sex with men in the United States. *AIDS (London, England), 29*(7), 837.
- Olsen, Kann, Vivolo-Kantor, Kinchen & McManus. (2014). School violence and bullying among sexual minority high school students, 2009-2011. *Journal of Adolescent Health, 55*(3), 432-438.
- Oost, Livingston, Gleason & Cochran. (2016). Gender performance stress and risk for psychopathology: Looking beyond sexual orientation. *Journal of LGBT Youth, 13*(3), 231-248.
- Operario, Yang, Reisner, Iwamoto & Nemoto. (2014). Stigma and the syndemic of HIV-related health risk behaviors in a diverse sample of transgender women. *Journal of Community Psychology, 42*(5), 544-557.
- Pachankis. (2007). The psychological implications of concealing a stigma: a cognitive-affective-behavioral model. *Psychol Bull, 133*(2), 328-345.
- Pachankis. (2014). *Uncovering Clinical Principles and Techniques to Address Minority Stress, Mental Health, and Related Health Risks Among Gay and Bisexual Men*. *Clin Psychol (New York), 21*(4), 313-330.
- Pachankis. (2015). A transdiagnostic minority stress treatment approach for gay and bisexual men's syndemic health conditions. *Arch Sex Behav, 44*(7), 1843-1860.
- Pachankis & Bränström. (2018). Hidden from happiness: structural stigma, sexual orientation concealment, and life satisfaction across 28 countries. *Journal of consulting and clinical psychology, 5*(86), 403-415.
- Pachankis & Hatzenbuehler. (2013). The social development of contingent self-worth in sexual minority young men: An empirical investigation of the "Best Little Boy in the World" hypothesis. *Basic and Applied Social Psychology, 35*(2), 176-190.
- Pachankis, Hatzenbuehler, Hickson, Weatherburn, Berg, Marcus & Schmidt. (2015). Hidden from health: structural stigma, sexual orientation concealment, and HIV across 38 countries in the European MSM Internet Survey. *AIDS, 29*(10), 1239-1246.
- Pachankis, Hatzenbuehler, Rendina, Safren & Parsons. (2015). LGB-affirmative cognitive-behavioral therapy for young adult gay and bisexual men: A randomized controlled trial of a transdiagnostic minority stress approach. *J Consult Clin Psychol, 83*(5), 875-889.
- Pachankis, Hatzenbuehler & Starks. (2014). The influence of structural stigma and rejection sensitivity on young sexual minority men's daily tobacco and alcohol use. *Soc Sci Med, 103*, 67-75.
- Perez-Brumer, Hatzenbuehler, Oldenburg & Bockting. (2015). Individual- and structural-level risk factors for suicide attempts among transgender adults. *Behavioral Medicine, 41*(3), 164-171.
- Pettifor, Nguyen, Celum, Cowan, Go & Hightow-Weidman. (2015). Tailored combination prevention packages and PrEP for young key populations. *Journal of the International AIDS Society, 18*, 8-22.
- Pham & Adesman. (2015). Teen victimization: prevalence and consequences of traditional and cyberbullying. *Current Opinion in Pediatrics, 27*(6), 748-756.

- Ploderl & Tremblay. (2015). Mental health of sexual minorities. A systematic review. *International review of psychiatry (Abingdon, England)*, 27(5), 367-385.
- Poteat & Russell. (2013). Understanding Homophobic Behavior and Its Implications for Policy and Practice. *Theory into Practice*, 52(4), 264-271.
- Priebe & Svedin. (2012). Online or off-line victimisation and psychological well-being: a comparison of sexual-minority and heterosexual youth. *European Child & Adolescent Psychiatry*, 21(10), 569-582.
- Ragins, Singh & Cornwell. (2007). Making the invisible visible: Fear and disclosure of sexual orientation at work. *Journal of Applied Psychology*, 92(4), 1103.
- Ream & Forge. (2014). Homeless Lesbian, Gay, Bisexual, and Transgender (LGBT) Youth in New York City: Insights from the Field. *Child Welfare*, 93(2), 7-22.
- Regeringskansliet. (2014). *En strategi för lika rättigheter och möjligheter oavsett sexuell läggning, könsidentitet eller könsuttryck. Eng.: "A strategy for equal rights and opportunities regardless of sexual orientation, gender identity, or gender expression"*. Stockholm, Sweden.
- Riksförbundet för sexuellt likaberättigande (RFSL). (2017). *RFSL välkomnar rättslig prövning om föräldraskap*. Retrieved from <https://www.rfsl.se/aktuellt/valkommen-rattslig-provning-foraldraskapsarende/>
- Riksförbundet för sexuellt likaberättigande (RFSL). (2015). *LGBT history: "HBT-historia"*. Retrieved from <http://www.rfsl.se>
- Roger & Najarian. (1998). The relationship between emotional rumination and cortisol secretion under stress. *Personality and Individual Differences*, 24(4), 531-538.
- Rosario, Schrimshaw & Hunter. (2006). A model of sexual risk behaviors among young gay and bisexual men: Longitudinal associations of mental health, substance abuse, sexual abuse, and the coming-out process. *AIDS Education & Prevention*, 18(5), 444-460.
- Russell & Fish. (2016a). Mental Health in Lesbian, Gay, Bisexual, and Transgender (LGBT) Youth. *Annual review of clinical psychology*, 12, 465-487.
- Russell & Fish. (2016b). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual Review of Clinical Psychology*, 12, 465-487.
- Ryan, Russell, Huebner, Diaz & Sanchez. (2010). Family acceptance in adolescence and the health of LGBT young adults. *J Child Adolesc Psychiatr Nurs*, 23(4), 205-213.
- Samuel & Zaritsky. (2008). Communicating effectively with transgender patients. *American family physician*, 78(5), 648, 650-648, 650.
- Savin-Williams & Cohen. (2015). Developmental trajectories and milestones of lesbian, gay, and bisexual young people. *International review of psychiatry (Abingdon, England)*, 27(5), 357-366.
- Schneider, O'donnell, Stueve & Coulter. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, 102(1), 171-177.
- Segerstrom & Miller. (2004). Psychological stress and the human immune system: a meta-analytic study of 30 years of inquiry. *Psychological bulletin*, 130(4), 601.
- Semlyen, King, Varney & Hagger-Johnson. (2016). Sexual orientation and symptoms of common mental disorder or low wellbeing: combined meta-analysis of 12 UK population health surveys. *BMC psychiatry*, 16, 67.
- Shumer & Spack. (2013). Current management of gender identity disorder in childhood and adolescence: guidelines, barriers and areas of controversy. *Current opinion in endocrinology, diabetes, and obesity*, 20(1), 69-73.
- Silberholz, Brodie, Spector & Pattishall. (2017). Disparities in access to care in marginalized populations. *Current Opinion in Pediatrics*, 29(6), 718-727.
- Slavich, O'Donovan, Epel & Kemeny. (2010). Black sheep get the blues: a psychobiological model of social rejection and depression. *Neuroscience & Biobehavioral Reviews*, 35(1), 39-45.
- Slavich, Way, Eisenberger & Taylor. (2010). Neural sensitivity to social rejection is associated with inflammatory responses to social stress. *Proceedings of the national academy of sciences*, 107(33), 14817-14822.
- Socialstyrelsen. (2015a). *God vård av barn och ungdomar med könsdysfori*. Retrieved from Stockholm:

- Socialstyrelsen. (2015b). *God vård av vuxna med könsdysfori*. Retrieved from Stockholm.
- Socialstyrelsen. (2017). *Utvecklingen av diagnosen könsdysfori i Sverige*. Stockholm: Socialstyrelsen.
- Statens offentliga utredningar. (2017). *Transpersoner i Sverige: Förslag för stärkt ställning och bättre levnads-villkor*. Retrieved from Stockholm.
- Stephoe, Hamer & Chida. (2007). The effects of acute psychological stress on circulating inflammatory factors in humans: a review and meta-analysis. *Brain, behavior, and immunity*, 21(7), 901-912.
- Streib-Brzic, Quadflieg, Schmitt, Gustavson, Pan, Sobocan, . . . Bercht. (2011). *School is Out?! Comparative Study 'Experiences of Children from Rainbow Families in School' conducted in Germany, Sweden, and Slovenia*. Retrieved from Lund, Sweden.
- Svensk författningssamling: Lag (1999:133) om förbud mot diskriminering i arbetslivet på grund av sexuell läggning, (1999).
- Svensk författningssamling: Lag (2002:800) om ändring i brottsbalken kring hatbrott, (2003).
- Svensk författningssamling: Lag (2009:253) om ändring i äktenskapsbalken (1987:230), (2009).
- Tishelman, Shumer & Nahata. (2017). Disorders of Sex Development: Pediatric Psychology and the Genital Exam. *Journal of Pediatric Psychology*, 42(5), 530-543.
- Toomey, Huynh, Jones, Lee & Revels-Macalinao. (2017). Sexual minority youth of color: A content analysis and critical review of the literature. *Journal of Gay & Lesbian Mental Health*, 21(1), 3-31.
- Toomey & Russell. (2016). The Role of Sexual Orientation in School-Based Victimization: A Meta-Analysis. *Youth & society*, 48(2), 176-201.
- Unger. (2014). Gynecologic care for transgender youth. *Current opinion in obstetrics & gynecology*, 26(5), 347-354.
- United Nations High Commissioner for Refugees. (2015). *Protection persons with diverse sexual orientations and gender identities: a global report on UNHCR's efforts to protect lesbian, gay, bisexual, transgender, and intersex asylumseekers and refugees*. Retrieved from Geneva.
- Van den Berg, Bos, Derks, Ganzevoort, Jovanović, Korte & Sremac. (2014). Religion, homosexuality, and contested social orders in the Netherlands, the Western Balkans, and Sweden. *Religion in times of crisis*, 116-134.
- Vance, Ehrensaft & Rosenthal. (2014). Psychological and medical care of gender nonconforming youth. *Pediatrics*, 134(6), 1184-1192.
- Vogelsang, Milton, Ericsson & Strömberg. (2016). 'wouldn't it be easier if you continued to be a guy?' –a qualitative interview study of transsexual persons' experiences of encounters with healthcare professionals. *Journal of clinical nursing*, 25(23-24), 3577-3588.
- Wade & Harper. (2017). Young Black Gay/Bisexual and Other Men Who Have Sex With Men: A Review and Content Analysis of Health-Focused Research Between 1988 and 2013. *American journal of men's health*, 11(5), 1388-1405.
- Wang & Pachankis. (2016). Gay-related rejection sensitivity as a risk factor for condomless sex. *AIDS and Behavior*, 20(4), 763-767.
- Watson & Pennebaker. (1989). Health complaints, stress, and distress: exploring the central role of negative affectivity. *Psychol Rev*, 96(2), 234-254.
- Webster & Telingator. (2016). Lesbian, gay, bisexual, and transgender families. *Pediatric Clinics*, 63(6), 1107-1119.
- White Hughto, Reisner & Pachankis. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Soc Sci Med*, 147, 222-231.
- Williams, Connolly, Pepler & Craig. (2005). Peer victimization, social support, and psychosocial adjustment of sexual minority adolescents. *J Youth Adolesc*, 34(5), 471-482.
- Zeluf, Dhejne, Orre, Mannheimer, Deogan, Höijer, . . . Thorson. Targeted Victimization and Suicidality Among Trans People: A Web-Based Survey. *LGBT Health*.

## APPENDIX

For appendix 2, go to  
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