UNIVERSITAT DE
BARCELONA

**Queer terror management:
Theory, test and indicators
towards a psychosocial intervention
in gender stereotypes via death attitudes**

Mel Stiller

UNIVERSITAT DE BARCELONA

QUEER TERROR MANAGEMENT: THEORY, TEST AND INDICATORS

TOWARDS A PSYCHOSOCIAL INTERVENTION IN GENDER STEREOTYPES

VIA DEATH ATTITUDES

DOCTORAL DISSERTATION

Author's Name[*]: Mel Stiller

Director: Andrés Di Masso Tarditti

Programa de Doctorat en Psicologia Social i de les Organitzacions

Departement of Social Psychology and Quantitative Psychology

University of Barcelona

December 2020

---

[*] Preferred name derived from passport name: Melanie Kerstin Stiller

Abstract

Guided by the value of equal opportunities, the present thesis strives to provide indicators for psychosocial intervention that contribute to the eradication of gender stereotypes. For this purpose, a novel theory is proposed and tested. In a first article, possible precursors and dynamics of gender stereotypes are reviewed. As a result, one precursor of gender stereotypes is detected in the management of death anxiety. Death attitudes, especially death acceptance, are hence to be tackled for radical intervention in gender stereotypes. After a review of the gender concept's fragmentary application in current research, the dynamics of gender are examined from a queer perspective. As a consequence, gender as a generic term includes prescriptions for bodily traits (sex), psychological traits (gender as a specific term) and for relational traits (desire) in this thesis. In conclusion, queer terror management theory (QTMT) is proposed as a novel framework for psychosocial intervention in gender stereotypes.

The second article puts the theory to an initial test. The first QTMT hypothesis assumed sex, gender and desire as factors of a queer gender construct. Despite a tendency of most associations to confirm the expectation, the given sample size and measures resulted as insufficient to test the assumption. Therefore, the first hypothesis could not yet be corroborated. The second QTMT hypothesis assumed a reducing effect of death acceptance on gender stereotypes. Since hypothesis 1 was not confirmed, stereotypes on sex, gender and desire were considered separately. Data for death acceptance yielded ambivalent results. On an implicit level, stereotypes for gendered trait ascription slightly diminished with higher death acceptance. However, explicit death acceptance increased ambivalent sexism towards women. Both associations were weak. Covariate analysis yielded stronger associations between the death acceptance precursor of implicit death valence and implicit stereotypes on sex, gender and desire. No explicit measure for death valence was available. A third QTMT hypothesis expected the association between death acceptance and gender stereotypes to be moderated by reminders to one's own mortality (mortality salience). The well-evidenced mortality

salience effects did not occur. Results support the idea of a publication bias in mortality salience research.

Throughout the present research, personal well-being was considered as a possible covariate in order to ensure participants' integrity in future interventions. Findings of the second article indicate that death denial increased fear of death and lowered self-esteem. By contrast, death acceptance was associated with higher self-esteem, more positive affect and increased life satisfaction.

Quantitative results of the second article raised questions about people's emotional reactions to death reminders in regards to death valence and terror management strategies. These questions were addressed by a third article with a mixed method design. Results revealed complex emotional reactions to death reminders beyond the mortality salience expectation of exclusive death denial. Death denial was associated with negative death valence. By contrast, positive death valence was associated with more conscious death fear, but with less implicit death anxiety. In an interrelation of research findings and theories, a revised ontology for terror management strategies is proposed. The review of terror management processes was necessary to explain the previous results of the present research and further studies. Death valence may be an alternative explanation for mortality salience effects. More importantly though, an in-depth understanding of terror management processes detects the starting points for psychosocial intervention in gender stereotypes.

In conclusion, death valence rather than death acceptance or mortality salience resulted as a tangible indicator for radical intervention in gender stereotypes. The queer gender concept, death valence concepts and measures, as well as the test of death valence as an alternative explanation for mortality salience effects remain an open stage for future research. Finally, implications of the present research for psychosocial intervention in gender stereotypes are discussed. A palliative care perspective is adopted to intervention in gender stereotypes. Beyond conceptual questions, methods for interventions with individuals, groups and towards public policies are suggested.

Acknowledgements

First of all, I would like to express my deep gratitude to Professor Andrés Di Masso for giving me the chance to realize this thesis. I thank him for his constant accompaniment, his patience, responsiveness and kindness. I am especially grateful for his support without pressure, for adapting to the current needs of each moment, and for his firm trust in me. I would further like to thank him for the insightful remarks and the concise explanations that significantly helped to improve each manuscript. Last but not least, I am thankful for the encouragement during the academic processes.

I would further like to pay my special regards to Professor Rumen Manolov, Professor Montserrat Yepes, and Professor Marina Romeo for their constructive suggestions during the planning and the development of the thesis.

My gratitude extends to Dr. Domna Banakou for the technical guidance on implicit measures, and to Professor Maribel Peró for the the valuable statistical advice. Their generous support in the course of this thesis is truly appreciated.

I would further like to thank Professor Laurie Rudman, Professor Rainer Banse, Professor Gerard Coll-Planas, Professor Mel Slater, Laura Sanmiquel, Gema Moral and Fernanda Ximenes for the inspiring hints and conversations.

Beyond the indispensable help I received during the process of this thesis, I would like to express my thankfulness to those persons who paved the way for my Ph.D. I am particularly grateful to Professor Neus Roca. Without her acceptance to an exchange program at the University of Barcelona and without her master classes in gender issues, the present research would not have been possible.

My sincere thanks also goes to Mrs. R. and the staff of Hospiz Jena, who taught me to value life and death in a different way. In addition, I would like to recognize the valuable information of AVES Barcelona.

Moreover, I gratefully acknowledge the partial English language revisions by Adam Finis and James McCammond.

Finally, I wish to thank my friends' and colleagues' for their generous support and understanding during the process of this thesis.

CONTENTS

LIST OF FIGURES AND TABLES

Figures

Tables

CHAPTER 1

INTRODUCTION

Ultimately, a thoroughgoing feminist revolution would liberate more than women. It would liberate [...] sexual expression, and it would liberate human personality from the straightjacket of gender. (Rubin, 1975, p. 200)

1.1. Aims of Research

This dissertation aims at detecting indicators for radical intervention in gender stereotypes. The detection of indicators for intervention presupposes a revision of the gender stereotype concept and a revision of possible precursors of gender stereotypes. *Gender stereotypes* are understood as fixed ideas about the cultural meanings of female, male (Brannon, 2017; Wood & Eagly, 2015), and the relations between them (Marecek et al., 2003). Departing from an overarching queer gender concept, stereotypes on sex, gender and desire will be summarized as gender stereotypes (Butler, 1990). According to Butler (1990), sex is understood as the interpretation of bodily aspects, such as anatomy, hormones and chromosomes. These biological aspects are interpreted as a binary sex and therefore form part of the definition of gender stereotypes as cultural meanings of female and male. The subdimension of gender in the broader queer gender concept equals trait ascription upon sexed bodies or social roles and therefore forms part of the cultural meanings of female and male. Desire constitutes the relational part of gender definition. It does not refer to actual desire, but to prescriptive heterosexuality (Butler, 1990).

Radical intervention in gender stereotypes tackles their roots. Since the term *radical* refers to root (Radical, 2020), it is an intervention that addresses the precursors, the presumed origins of gender stereotypes. According to terror management theory (TMT; Greenberg et al., 1986), one possible precursor of stereotypes resides in death attitudes. *Death attitudes* are thoughts, judgments, feelings or actions towards death that include death acceptance, death denial, death valence, death

anxiety and fear of death (Bassett & Dabbs, 2003; Bassett et al., 2004; Greenwald et al., 1998; Wong, 2008). While death anxiety refers to an unconscious, diffuse physical and emotional state, fear of death consists of a rational interpretation of this state with a specific target (Lehto & Stein, 2009). In reaction to death anxiety, death can be accepted by emotionally preparing for the end of life (Wong, 2008) or death can be denied by refusing personal consternation with mortality (Pyszczynski et al., 2015). The acceptance or denial of death depend on a death valence, understood as a positive or negative view on death (Wong, 2008). Despite a focus on death attitudes, terror management research on gender stereotypes does not explain the dynamics of gender that queer theory describes. In turn, queer theory describes the dynamics of gender without explaining its precursors. In order to strengthen both theories, queer theory's assumptions about the dynamics of gender (Butler, 1990) will be synthesized with TMT's assumptions about death attitudes as possible precursors of stereotypes. A novel theoretical framework for the associations between gender stereotypes and death attitudes will be provided. The resulting theory will be tested. Indicators for intervention in gender stereotypes will be deduced and discussed.

1.2. Sociopolitical Relevance in its Historical Context

Discrimination upon gender is a global fact. Stereotypes precede discrimination (Wheeler & Petty, 2001). The following paragraphs will examine the present, past and future of gender stereotypes. First, the current impact of stereotypes on sex, gender and desire will be described. Subsequently, a short history of patriarchy will illustrate the gravity of normative men's millennial oppression over further genders. The history of patriarchy will be contrasted with the past centuries' societal changes initiated by feminism in order to demonstrate that change is possible, but still has to be consolidated. Finally, the importancce of social psychological and interdisciplinary research towards psychosocial intervention in gender stereotypes will be discussed.

1.2.1. The Status Quo of Patriarchies

Patriarchies are societal systems that favor men over women (Glick & Fiske, 1996). Departing from a queer perspective, patriarchies do not only favor normative men over normative women, but also normative men over any further genders (Butler, 1990). The overvaluation of normative men discriminates other genders on an economic, legal, and political level (Glick & Fiske, 1996). Although this thesis mainly refers to the United States (US), the variety of societal systems that favor men over further genders is theoretically addressed by the linguistic plural form of patriarchies. Recent statistics indicate that discrimination upon gender in the US persists on an economic, political and on a legal level.

In 2019, for example, women in the US earned 18.5% less than men and 13% less on an international level (Organization for Economic Cooperation and Development [OECD], 2019). Economic discrimination and other forms of social prejudice are especially prevalent for trans persons (Lombardi et al., 2001). The discrimination of non-normative genders, such as trans persons, is associated with the economic disadvantages they face (Lombardi et al., 2001). Economic disadvantages and other forms of discrimination against non-normative genders go along with increased violence against them (Stotzer, 2009).

In theory, people of all genders are entitled to equal rights (United Nations General Assembly, 1948). Therefore, this thesis assumes violent law infringements as the most relevant form of legal discrimination. Legal discrimination is reflected by the fact that one third of women all over the world (World Health Organization [WHO], 2013), and ca. 27% of the enquired US-based trans persons (Lombardi et al., 2001) experienced physical and/or sexual violence at least once in their lifetime. Likewise, 19% of US hate crimes in 2010 were motivated by homo- and transphobia (Federal Bureau of Investigation [FBI], 2011). More recently, this kind of violence was demonstrated by the killing of 50 people in the gay club shooting in Orlando, US in 2016 (Lyons, 2016). A further example for maximum legal discrimination is indicated by the violent death of three

young racialized trans women in June 2020: Dominque Fells (stabbed at the age of 27), Riah Milton (shot at 25; Patil, 2020), and Layleen Polanco (died at the age of 27 for being neglected medical help in prison after a minor offense that she could not pay the bail for; Gold & Piccoli, 2020).

The limited participation of women and people of non-normative genders in politics exemplifies the ongoing presence of patriarchies. Accordingly, women's political participation in the US parliament was limited to 19% in 2015 (Worldbank, 2015). Despite LGBTIQ+ people's more active political participation in the US (Perez, 2014), their entrance into high-level political offices remains a reason for breaking news all over the world (for example, Ada Colau: Accini, 2019; Nikki Sinclaire: BBC News, 2016; Zakhele Mbhele: DeBarros, 2014; Tomoya Hosoda: Farand, 2017; Lori Lightfoot: Helsel, 2019; Enrique Sánchez: Sequeira, 2017). The contradiction between higher political engagement and comparatively less actual representation in political offices reflects political discrimination of LGBTIQ+ persons.

1.2.2. A Short History of Patriarchy

Economic, political and legal discrimination upon gender are not a problem that has recently emerged. In a revision of history, Lerner (1986) develops an argument by which gender-based oppression persists since thousands of years. Discrimination against women in Ancient Mesopotamia is assumed to illustrate a widespread form of gender discrimination in the first known predecessor of Western societies. Like any version of history, this illustration is limited to interpretation. Conservative researchers presume patriarchy to have always existed in all parts of the world, hence any different explanation would be void. Considering a different explanation, pottery and graves from the past can be interpreted by researchers' current paradigms and cultural worldviews. Furthermore, the transferrence of Ancient Mesopotamia to other contexts, such as modern European and US cultures, must be questioned (Lerner, 1986).

After the first appearance of "upright hominids" 100,000 BC (Lerner, 1986, p. 39), men and women lived in equal status in hunting and gathering nomad tribes. After a climate change in the early Neolithic (Lerner, 1986), ca. 10,000 BC (Encyclopaedia Britannica, 2020), people began to

settle down. With the rise of agriculture, patriarchy in Ancient Mesopotamia was established

between 3,100-600 BC (Lerner, 1986). The comparison of 2,500 years with 100,000 years shows

that during the largest part of human history we did not live in patriarchy, and that its establishment

was not a smooth, natural process. Yet, the comparison emphasizes the possibility for change and

the need for an intervention that tackles the roots of an over 5,000 year-old system. Although a

dissertation cannot abolish patriarchy, it can hopefully contribute to intervention in gender

stereotypes. To derive intervention strategies, the establishment of patriarchy will be revised to the

extent of the author's limited knowledge in history.

Patriarchy in Ancient Mesopotamia began with the exchange of women to secure

agricultural economy by reproducing children as work force (Rubin, 1975). At the time, pregnancy

compared to a life expectation of around 30 years represented a proportionally larger period in

people's lives, while infant mortality was high (Lerner, 1986). Considering the significance of

procreation in ancestral lives, women were assigned to less dangerous tasks that also allowed

constant breast-feeding of the children (Lerner, 1986). This may have been adaptive in the historical

context, but was gradually overgeneralized until becoming a self-propelled system of discrimination

upon gender (Lerner, 1986).

Note that even Lerner's (1986) feminist argument includes patriarchal assumptions that had

not yet been revealed as such at the time of its writing. Lerner (1986) bases on the idea of cisgender

maternal lactation as a legitimization for an ancient sexual division of labour. Although Darwin

(Moorhead, 2005; Thomson, 2011) and von Humboldt (Swaminathan, 2007) had already suspected

male lactation, literature before 2005 insisted on its physical impossibility. More recent literature

discovered that adoptive mothers can often produce milk to breast-feed (Auerbach, 1981; Kunz &

Hosken, 2009), that fathers can participate in breast-feeding by means of milk pumps (Cohen,

Lange, & Slusser, 2002) and that the induction of sufficient male lactation is occassionally possible

(Diamond, 1995; Reisman & Goldstein, 2018; Thomson, 2011), even without external hormone

supply (Diamond, 1995; Kunz & Hosken, 2009; Swaminathan, 2007; Thomson, 2011). Reports on the central African Aka pygmies show that fathers stay with their babies during 47% of the time while women go hunting and babies suckle the fathers' breasts (Moorhead, 2005). Hence, even when departing from a sex/gender binary as Lerner (1986) did, human breast-feeding is not restricted to mothers. Departing from an evolutionary assumption of extreme ancient environments, how would it not have been adaptive for men and non-pregnant women to lactate in order to assure survival? Lerner's (1986) history of women is indispensable to understand our patriarchal heritage. Yet, it has to be read critically in its contexts of time and culture.

In the further development of Lerner's (1986) argument, women were assigned to reproductive tasks, othered and exchanged for reproductive benefits. In Ancient Mesopotamia, the exchange of women to reproduce work force was first limited to times of war and later extended to diplomatic exchange via marriage in times of peace. Property passed through women from one man to another. Men accumulated surpluses, created class society, and expanded territories by means of war and slavery. The first slaves were captive women from conquered territories before children and men were captured as slaves. Yet, the exchange of women, peoples from neighboring territories and slaves bases on the idea of a fictitious other. Symbols were increasingly defined by autoctonous men, while women were excluded from the creation of symbol-systems, from meaning-making, spirituality and education. Fathers decided on the meaning of women in society, on daughters to be killed at birth or to be sold into marriage, slavery or prostitution. Women were subordinated wives, concubines, or slave sexual servants by increasingly institutionalized, men-made laws. A large amount of laws regulating gender relations sharply punished adultery, abortion, and divorce for women. In turn, rape, a common war practice since the 2nd millennium BC, was rather treated as damage of another men's property.

Hence, fathers were like kings in their families, and actual kings were literally deified. In the context of repeated armed conflicts, the Mother-Goddess, who was worshiped until the 4th

millennium BC, was first accompanied by a male god companion, usually a storm god of war, and then gradually replaced by a monotheistic male god (Lerner, 1986). The idea of a monotheistic male god reached its peak in the Book of Genesis (written 1,000-500 BC), in which men made a covenant with a God who indirectly promised land and power to men. Women were excluded from the covenant that made men the sole creators of life (Lerner, 1986). The covenant with God is a symbolic buffer against unconscious death anxiety (Becker, 1973 in Lerner, 1986). People need symbolic immortality, for example via religion, to protect themselves against the threat of death-awareness (Becker, 1973; Greenberg et al., 1986). Man resolved this "dilemma by assigning symbol-making power to himself" (Lerner, 1986, p. 200) in the covenant with God, in the interpretation of history, and in assigning women to death. This mindset was maintained by the mysogynist strands of Greek philosophy such as Aristotle, who proposed future Western science and philosophy that the male spirit was superior to the female mutilated body with its inverted genitals, that she was passive he was active, hence the fruit of her body without soul could not be the fruit of her work but was man's creation (Lerner, 1986). In conclusion of this reasoning, it seemed most obvious to Aristotle that women could not make political decisions.

Women were deprived of equal rights until at least the 19th century, starting from the right to vote and to thereby more actively participate in history (Lerner, 1986). Despite a few exceptions, such as de Pizan's writings for equal rights in the 1400s or de Gouges' Declaration of Women's Rights in the French Revolution (Freedman, 2007), women's history can be said to have started in the 19th century while men's history started with the invention of writing in the 3rd millennium BC (Lerner, 1986). In turn, the record of "Transgender History" has even more recently started with an eponymous book (Stryker, 2008). Until present, there is no history free of essentialized gender binarities.

1.2.3. A Short History of Feminism in Europe and the US

The term *feminism* emerged in the second half of the 19ᵗʰ century. The term was coined in France in 1871 by Fanneau de la Cour in the description of specific tuberculosis symptoms that resulted in an infantilization of the male body (Offen, 2000). As Freedman (2007) and Offen (2000) discuss, "feminism" was afterwards often picked up despectively for male and female activists of the women suffrage movement until equal rights activists increasingly accepted and redefined it. Hence, the term of feminism stems from the colonial class society of France at the end of the 19ᵗʰ century.

The present research departs from feminist movements in Europe and the US, which are often described in waves (Freedman, 2007; Offen, 2000). Until present, there are four (Cochrane, 2013). In a summary of the first three waves by Freedman (2007), the first wave of feminism lasted from the 1800s till 1910. The first wave movement considered women's right to vote and to public education. Until the 20ᵗʰ century, women obtained the right to vote and to education. The second wave refers to women's liberation movement during the late 1960s, which claimed equality at work and in politics, the right to abort and divorce, access to contraceptives, as well as the recognition of female sexuality. Today, methods for birth control, divorce (Freedman, 2007) and abortion (Mishra, Gaigbe-Togbe, & Ferre, 2014) have become legal and accessible in most European countries and in the US. Second wave arguments mostly based on sexual difference on a physical and on a political level. Therein, the term of gender emerged to differentiate between physical aspects and social roles. Transcending the second wave arguments of sexual difference, third wave of feminism started in the 1990s with a more diverse and intersectional approach to feminism in terms of race, class, religion, sexual diversity, gender identity and sexual orientation (Freedman, 2007). The persistent issues of the prior waves are brought into social mass media and into the streets by the current fourth wave of feminism that was exclaimed in 2013 (Cochrane, 2013).

Despite the noteworthy progress towards gender equality in the past two centuries compared to the past 5,000 years, the prevailing economic, legal and political discrimination against women, trans- and non-binary persons demonstrates the gap between the value of equal opportunities and social practice. The present research examines possibilities to reduce this gap by means of social psychological research towards psychosocial intervention.

1.3. Integration into Social Psychology

The embedding of this thesis in the field of social psychology will be argued subsequently. Allport understood social psychology beyond "the social behavior of the individual" as "the intersocial stimulation that occurs between members of groups" (Allport, 1924, p. 703-704). During the past century, some strands of social psychology rather studied "the social embeddedness of experience" (Gough et al., 2013, p. 4) while others focussed on the psychological experience of social embeddedness. Allport's (1924) foundational definition of the discipline encompasses thoughts, feelings, motivations and behavior in interaction between individuals, groups, and individuals with groups, as well as a relationality that is essential to the definition of gender. Therefore, it remains the most inclusive definition of social psychology. Accordingly, the discipline contemplates intra- and intergroup processes, attitudes, stereotypes and prejudice, the study of culture, as well as social cognition, motivation and socially influenced self-perception (Ross et al., 2010).

One of the main objectives of the discipline is to conduct research for intervention in social prejudice beyond social philosophy, to "demonstrate the relevance of social psychologists' work for practitioners, decision makers, and funders outside the field" (Ross et al., 2010, p. 39). In line with the objectives and the current topics of social psychology, this dissertation investigates cognition and motivation behind culture-dependent stereotypes in order to derive hints for intervention in gender-based prejudice.

1.3.1. The Present Research in its Historical Context

Due to the vast influences of political contexts in social psychology, the discipline itself could even be defined as a reflection of history (Gergen, 1973). To situate the dissertation in the history of social psychology, the past 100 years' central contents and methods will briefly be revised with a summary of Ross and colleagues (2010). Stereotypes and prejudice were of main interest to the discipline since the 1920s. After a lean period due to the events of World War II, a special interest for normative group power and subjective meaning evolved in the discipline during the 1950s and 1960s. Research in this area sometimes was accompanied by ethical doubts. These doubts inspired ethical guidelines that are valid until today (Ross et al., 2010) and in vigor for the present research. In the 1970s, the Vietnam War raised questions about minority influence and the self in social psychology (Ross et al., 2010). At the same time, lay people criticized the discipline for the obviousness of results paid by public funds, for example finding that people were more easily persuaded by trustworthy persons. During the 1980s, the cognitive revolution entered social psychology with a computer metaphor for the mind and with methodological adaptations of cognitive psychology, such as eye-tracking experiments. Thereby, social psychology opened up to a greater degree of interdisciplinarity as well as to implicit measures for unconscious attitudes and behaviour. During the 1990s and 2000s, globalization incentivated an increasing interest in cultural psychology, while 9/11 in the US was accompanied by a revival of TMT (Ross et al., 2010).

The present research continues with an interest in stereotypes, prejudice and with the objective to indicate intervention strategies. The accusation of overly obvious research has been considered and can be rejected due to the social relevance of strategies for intervention in gender stereotypes. Ethical questions were verified with the UB Bioethics Commission. The present research includes a concern with normative group power, subjective meaning and the question of the self. All of these topics are integrated into TMT (Greenberg et al., 1986). TMT is a theory of increasing interest since the 1980s until today (Ross et al., 2010). In this dissertation, TMT views on

sex, gender and desire will be reviewed and extended with a queer-theoretical approach of third-wave feminism, which additionally comprises a focus on minorities.

1.3.2. The Present Research in the Context of Methodological Developments

With technological advances, neuroscientific studies on brain functioning came into trend in the 2000s (Ross et al., 2010). Although brain measures refer to inner reactions, the interpretation of brain functioning is a cultural product (Gergen, 2010). Therefore, more implicit measures may help to understand attitudes and actions that became less visible with recent laws against discrimination (Ross et al., 2010). In accordance with this demand, the Implicit Association Test (Greenwald et al., 1998), a computerized test basing on reaction times, proved to be the most used and the most reliable implicit measure in current social psychology (Bar-Anan & Nosek, 2014; Gawronski & De Houwer, 2014).

In accordance with the past decades' tendency, implicit reaction time tests will be used in the present research. Implicit tests are especially relevant for the measure of unconscious death anxiety on the one hand, and for the measure of socially undesirable gender stereotypes on the other hand. The theories that this thesis will base on mostly stem from the US, for example TMT (Greenberg et al., 1986) or Butler's (1990) version of queer theory. Yet, both theories account for cultural variations in one line with the increasing interest in the research of culture since the 1990s. The integration of social psychological terror management research, philosophical queer theory and falsifiable research methods from cognitive psychology further promotes the 1980s trend towards interdisciplinarity.

1.3.3. Terror Management Theory and Psychoanalysis

Implicit measures are especially relevant to terror mangement research since the theory bases in psychoanalytic concepts of the unconscious (Becker, 1973, Greenberg et al., 1986). Although social psychology and psychoanalysis emerged around the same time, social psychology remained largely uninfluenced by psychoanalysis until TMT (Ross et al., 2010). TMT (Greenberg et

al., 1986) bases on Becker's (1973) assumption that the "basic motivation for human behaviour is [...] to control our basic anxiety, to deny the terror of death" (p. xii). Ernest Becker was a cultural anthropologist from the US who mainly argumented with the psychoanalysis of Kierkegaard, Freud and Rank. In a religious language of the early 19th century, Kierkegaard postulated that the basic problem of human the psyche was death anxiety and that children incorporate their parents' norms to feel safe before they are able to question these norms (Becker, 1973). Thereby, the person would become "a slave to [culture]" who "recognizes himself only by his dress" (Becker, 1973, p. 74). For Kierkegaard, culturally adapted people are sick, while healthy people self-actualize. They discover their personal values and meanings. A conscious confrontation with death anxiety according to Kierkegaard would not be "the end for man" (Becker, 1973, p. 87), but rather a "school of possibility" for the self (p. 88). Becker (1973) further explains that in contrast to Kierkegaard, Freud claimed that culture, character and meaning stemmed from repressed sexuality, castration fear and death drive. These assumptions have proven wrong decades ago. More recent psychoanalysis starting with Rank suggests that the basic repression is fear of death and not of sex. Nonetheless, sex and death can easily be related, for example by reproduction (Becker, 1973; Goldenberg et al., 2002). Accordingly, higher vulnerability would be predicted for sex-related death threats.

In contrast to Kierkegaard, Becker (1973) holds that death anxiety must be kept unconscious in order to prevent humans from overwhelming experiences and the resulting madness. Death must hence be rationalized and emotionally denied by means of an identification with cultural beliefs that promise symbolic immortality beyond mortal bodies. In other words, humans create cultures and derive their self-esteem from how well they fit into these cultures in order to become symbolically immortal; to fight the paralyzing anxiety that the consciousness of their bodily mortality produces (Becker, 1973; Greenberg et al., 1986).

A main problem of Becker's (1973) idea is the circular hypothesis that death denial is always the cause of culture and character, since psychoanalysists might interpret the claim to not deny

death as that precise death denial. In the following decade, Becker's (1973) idea was adapted to social psychology with TMT (Greenberg et al., 1986). This step was necessary to derive falsifiable hypotheses from Becker's psychoanalytic, circular assumptions. Death denial is one possible reaction (Becker, 1973), but it is not predetermined. In the past 30 years, TMT has been well-evidenced and has proven as one of the most relevant theories in current social psychology (Pyszczynski et al., 2015). Nonetheless, TMT has been confronted with moderate replication issues (Rodríguez-Ferreiro et al., 2019) that were so far explained with variations in cultural contexts and experimental manipulations (Burke et al., 2009; Pyszczynski et al., 2015; Rodríguez-Ferreiro et al., 2019). In the course of the present research, it will be argued that parts of Becker's (1973) psychoanalytic thinking tacitly remain in TMT. The theory contemplates the possibility to deny death more or less. However, it does not assume any other strategy to deal with human death-awareness. Further terror management strategies might illuminate the replication issues.

Beyond the psychoanalytic fallacy, Becker (1924-1974) himself was influenced by his cultural and historical environment. On the one hand, he wrote in generic male and almost exclusively used male examples and sources. He furthermore pathologized homosexuality and ridiculed "transvestites" as well as "primitives" of unknown cultures (Becker, 1973). On the other hand, his explanation for the construction of culture, personal identity and the conscious mortal body will show as an indispensable clue to understand gender stereotypes.

1.3.4. Value Statement

Research is inevitably embedded in a cultural value system that implicitly guides it (Gergen, 1973). In order to enhance transparency, the values of the present research will followingly be expressed. The main value guiding this dissertation is gender equality. The present research strives to foster equal opportunities beyond the Universal Declaration of Human Rights (United Nations General Assembly, 1948). The declaration of human rights claims the recognition of equal rights for men and women independent of their race, ethnicity, religion, political views, language, and

physical or mental abilities (United Nations General Assembly, 1948). In this thesis, equal

opportunities extend the application of equal rights and the recognition of human dignity for people

of all possibly existing genders, including non-binary and trans people, cis women and men as well

as all kinds of sexes and sexual orientations. These equal rights include the same right to access and

create culture as a vehicle to symbolic immortality (Becker, 1973; Lerner, 1986), as well as a right

to emotional education about our mortality. In accordance with the Universal Human Rights

Declaration, the present research aims at the freedom from oppression and the elimination of fear

that obstructs living (United Nations General Assembly, 1948).

1.4. Relevance to Social Psychology

The present research contributes to social psychology with an integration of previous

theories on death and gender, with hints to improve gender measures, and with indicators for

psychosocial intervention in gender stereotypes.

1.4.1. Theoretical Relevance

To begin with, TMT (Greenberg et al., 1986) will be revised in regards to the adaptivity of

death denial. Thereby, tacit psychoanalytical circularities at the foundation of TMT will be

challenged with alternative strategies to manage death anxiety. Second, death attitudes including

death acceptance and death valence will be integrated into a terror management framework in the

context of gender stereotypes.

Gender stereotypes will be approached with queer theory in the version of Butler (1990). A

queer-theoretical approach to gender issues has been considered as a necessity to innovate the social

sciences (Berard, 1999; Kessler & McKenna, 1985), and especially psychology (Bem, 1995;

Downing & Gillett, 2011; Hammack et al., 2013; Hegarty & Massey, 2006; Minton, 1997). A

multidimensional model of gender basing on queer theory (Butler, 1990) holds an innovative

potential for social psychology and for terror management research on gender stereotypes. First, a

queer-theoretical approach fosters the preservation of human dignity and the refinement of research

results, which both contribute to the compliance with current ethical standards (American Psychological Association [APA], 2020). Second, a queer approach would facilitate the application of the current gender stereotype concept by the disentanglement of theoretical confusions and the inclusion of prevailing omissions.

Finally, social psychology requires an integration of TMT with further death attitudes and a queer perspective in order to improve theory, methods and intervention practice. On the one hand, TMT explains the construction of culture, personal identity and sterotypes. However, current terror management research on gender stereotypes confounds sex, gender and desire (Stiller & Di Masso, 2016; Webster & Saucier, 2011). Terror management research on gender stereotypes would therefore benefit from a queer perspective in order to specify the effects of death anxiety. On the other hand, some queer theorists stress the possibility of body modifications to a point that makes the body seem immortal (Coll-Planas, 2012). This vision neglects the discrimination and violence that subsequently trigger thoughts about death and immortality (Coll-Planas, 2012). In summary, explanations for gender stereotypes come short of precise causes in queer theory and of precise effects in TMT.

Queer theory, TMT and its extension with meaning management theory (MMT; Wong, 2008) on death acceptance will be integrated into queer terror management theory (QTMT; Stiller & Di Masso, 2016). In QTMT, the shortcomings of the theories are compensated with their respective strengths. Thereby, QTMT addresses the origins and dynamics of gender stereotypes, integrates prior omissions and confusions, and initiates a radical approch to psychosocial intervention in gender stereotypes. Support for QTMT would indicate death attitudes as a means to reduce gender stereotypes and as a possible means to reduce further forms of prejudice.

1.4.2. Methodological Relevance

The dissertation aims at the proposal of a theory, its test, and at the derivation of hints for psychosocial intervention in gender stereotypes. A resulting objective is to question currently

available research methods in social psychology in regards to their fit with applied queer theory. Queer theory may be translated to current methods in social psychology, for example by offering free response options for gender identity (Ansara, 2015b), by accounting for intersex people and by proposing non-exclusive thermometers for attraction to various gender identities. Research methods with a queer persepective would better fit the test of QTMT. On a statistical level, they would enable more precise predictions by allowing for sexual variances instead of dividing humans into two groups. However, the development of new methods exceeds the limits of this thesis.

In the course of history, the methods of social psychology shifted from animal testing until the 1960s to prominent behavioral experiments during the 1960s and 1970s. Implicit methods, such as eye-tracking, emerged in the 1980s (Ross et al., 2010). The present research follows the trend towards implicit research via reaction times that guides best practice in social psychology since the past two decades (Gawronski & De Houwer, 2014; Ross et al., 2010). Sophisticated implicit measures provide the most appropriate methods for an initial test of QTMT. Along with the applied implicit methods, most of the theoretical background for QTMT stems from the US. In order to ensure the cultural fit with theory and methods, US participants were recruited on the internet for a computer-based test.

Implicit measures are recommended to be combined with explicit measures to examine processes on various levels of consciousness (Greenwald et al., 2009). Similarly, quantitative research combined with qualitative research facilitates a deeper insight into the research subject, especially if test results raise questions about participants views beyond quantitative test information (Leavy, 2017). Mixed method research integrates both approaches with a focus on practical solutions to social problems (Leavy, 2017). Social problems are usually complex and therefore often not entirely intelligible with a single approach (Leavy, 2017). As a result, the combination of a quantitative and a qualitative perspective as well as of implicit and explicit research is essential to understand the formation of gender stereotypes.

1.4.3. Practical Relevance

Current US-based interventions in gender discrimination aim to increase rational and emotional consciousness about stereotypes, and to translate gender consciousness into action. Gender conscious actions for example tackle workplace discrimination, dating violence, as well as the promotion of women in science, technology, engineering and mathematics (STEM). Four examples shall illustrate recent interventions in gender stereotypes. As a first example, psychosocial intervention in workplace discrimination was implemented with the card game WAGES on the basis of experiential learning (Zawadzki et al., 2014). The card game puts participants into different gender roles, followed by a group discussion. The WAGES program raised empathy, reduced reactance, and significantly reduced sexism until 11 days after the intervention (Zawadzki et al., 2014). Second, the psychosocial intervention program Safe Dates (Foshee et al., 1998) addresses dating violence in US college students with a variety of activities in school and in the community such as theater with peers that aim at "(1) changing norms associated with partner violence, (2) decreasing gender stereotypes, and (3) improving conflict management skills" (Foshee et al., 1998, p. 45). A third approach including role-play aims to raise awareness about sexism and trains assertiveness to reduce rape-myth acceptance in college students (Kilmartin et al., 2015). As a fourth example, a 15-week intervention with US college students improved women's accomplishment in the male-dominated field of physics by affirming personal values in written form twice a week in order to define themselves instead of being defined by society (Miyake et al., 2010).

The mentioned interventions address specific components of gender stereotypes. Yet, none of them tackles death attitudes and the resulting terror management strategies as possible precursors of gender stereotypes. Furthermore, all of the mentioned interventions base on the idea of a binary, sex-determined gender instead of adapting a queer perspective on sex, gender and desire (Butler, 1990). Precisely queer theory can itself be regarded as an intervention (Argüello, 2016). For

instance, health professionals' views in HIV medical care construct stigmatizing risk identities instead of referring to risky behaviors (Argüello, 2016). From a queer perspective, these views can be included "at the center of risk – as *part of* the engine of infection" (Argüello, 2016, p. 242). The present research tackles the possible roots of gender stereotypes in the holistic frame of queer theory. It thereby addresses a broad variety of these stereotypes in order to reduce the prolonged gender discrimination that people still experience all over the world.

1.5. Objectives

1.5.1. General Objectives

Guided by the value of human rights and equal opportunities for people of all genders or no gender, the main aim of the present research is to propose hints for radical intervention in gender stereotypes. The main aim of research translates into various general objectives. The general research objectives are summarized in Figure 1. These are further divided into specific objectives.

Figure 1

Research Objectives

1. Propose a theory	a) revise the precursors of gender stereotypes: extend terror management theory b) revise the dynamics of gender stereotypes: make queer theory comprehensible c) explain the crossfertilization of terror management and queer theory, integrate them into a new theoretical framework
2. Test the theory	a) adapt existing gender measures to queer theory as far as possible b) measure indicators for death attitudes and gender stereotypes c) consider possible covariates, such as indicators for personal well-being d) discuss results and propose future research directions
3. Deduce indicators for intervention	a) summarize implications of results for intervention in gender stereotypes b) address possible conceptual frameworks for intervention c) propose possible methods and strategies for intervention

Note. Hierarchy of general research objectives (left) and the related specific objectives (right).

First, possible precursors and dynamics of gender stereotypes are examined. Both will be integrated into a novel theory. Subsequently, the theory will be tested and possible hints for intervention will be derived.

A focus on intervention instead of prevention is adopted, since gender stereotypes already exist as of an early age all over the world. By contrast, prevention would assume the obviation of a not yet existent issue (Prevention, 2020). Departing from social psychology, the aspired type of intervention is a psychosocial one. To provide indicators for psychosocial intervention in gender stereotypes, a theoretical framework for their assumed origins and dynamics has to be developed and tested. However, the final goal of research is to promote its application to future intervention practice in individual- and group contexts, as well as towards public policies.

1.5.2. Specific Objectives

1.5.2.1. The Precursors of Gender Stereotypes

The precursors of gender stereotypes will be approached with TMT. TMT suggests culture and identity to result from death denial (Pyszczynski et al., 2015). Death denial is assumed as the only strategy to manage the terror of death anxiety (Pyszczynski et al., 2015). One objective of this dissertation is to contrast the singularity and the adaptivity of death denial in TMT with research on trauma and life satisfaction. Research on trauma and life satisfaction may indicate further terror management strategies.

A further objective of this thesis is to review the social impact of terror management strategies beyond death denial. Social impact of terror management strategies beyond death denial is implied by death acceptance in the TMT extension of meaning management theory (MMT; Wong, 2008). Under a holistic approach to gender, TMT and MMT will be integrated into a new theoretical framework for psychosocial intervention in gender stereotypes: queer terror management theory (QTMT). A test of QTMT will additionally contrast the predictions of TMT versus MMT about the influence of death attitudes on gender stereotypes and personal well-being. Thereby, the

test of QTMT contributes to the knowledge about TMT and MMT.

Reminders to one's own death in TMT (Greenberg et al., 1986) and MMT (Wong, 2008) are referred to as *mortality salience*. Mortality salience is expected to trigger antecedents of emotional reactions. A further objective of this thesis is to better understand how people feel about death on a quantitative and on a qualitative level. Research on people's emotions about death aims at finding more proximate precursors of terror management strategies than the distal precursor of death anxiety.

1.5.2.2. The Dynamics of Gender Stereotypes

To reveal the dynamics of gender in the corresponding stereotypes, lacks in prior gender concepts will be reviewed. Confusions between trait ascription and self-categorization in current gender approaches are aimed to be disentangled. Trait ascription, self-categorization and the omitted relational part of heterosexist attitudes are strived to be integrated into an overarching gender concept provided by queer theory in the version of Butler (1990).

Queer theory (Butler, 1990) has been criticized for its incomprehensibility beyond Western academics from philosophy or literature studies (Birkenstein, 2010). Therefore, a further objective of this dissertation is to explain queer theory in a more comprehensible way, including a model for sex, gender and desire. An understandable explanation of queer theory would not only contribute to social psychology and the social sciences. It would furthermore create coherence with queer theory's goals of transversality and intersectionality. The model responds to another line of criticism which accuses queer theory of endless theoretical circles without contributing solutions (Jagose, 1996). The integration of prior gender approaches from a queer perspective allows for a holistic framework for gender stereotypes. Thereby, the proposed model of queer theory aims to facilitate the long-awaited queer revolution in the social sciences (Mehta & Keener, 2017) and psychology (Bem, 1995).

1.5.2.3. Proposal and Test of a Theory towards Intervention Indicators

After the previous objectives concerning the precursors and dynamics of gender stereotypes have been achieved, the dissertation aims to demonstrate why terror management research on gender stereotypes needs a queer perspective, and why queer theory requires the existentialist perspective of TMT. With QTMT, a theoretical framework for an effect of death attitudes and mortality salience in gender stereotypes will be provided. This novel framework holds that death acceptance inhibits the activation of gender stereotypes depending on a moderating effect of mortality salience.

The thesis' objective after the proposal of QTMT is to test the theory. To test the theory, implicit measures will be applied. Implicit measures are especially relevant to socially sensitive topics, such as gender or death. Measures will be adapted to the logic of queer theory as far as possible with currently available tests, for example by the choice of demographic data, test combinations and interpretations. In the process of testing QTMT, hints for queering gender measures in the future are aspired. Subsequently, the associations between death attitudes, mortality salience, gender stereotypes and relevant covariates implied by QTMT will be tested. Results might indicate a practically relevant influence of death attitudes on outgroup prejudice in general and on gender prejudice in particular (Maj & Kossowska, 2016; Wong, 2008). Instead of individualizing gender stereotypes as accidental outcomes of personal death anxiety, the derived test results aim to raise consciousness about the social effects of death anxiety and to indicate ways to combat gender stereotypes. Depending on the pervious research results, possible conceptual frameworks, methods and strategies for intervention will be proposed.

1.6. Logic of Research

Compared to other fields of psychology, social psychology does not depart from a separate research paradigm, but adapts theories and methods from other fields of psychology to social contexts (Ross et al., 2010). Examples for the adoption of methods from other subfields are

neuroscientific measures or implicit approaches from cognitive psychology (Ross et al., 2010). The discipline has therefore remained eclectic and interdisciplinary in its methodology (Ross et al., 2010). The precise choice of relevant theories and methods may be considered as a lack of identity (Ross et al., 2010). By contrast, it may also be considered as a strength in order to achieve social psychology's aim to eradicate stereotypes and prejudice.

Gender stereotypes are a complex social issue that is not assumed to be understood thoroughly with a single method (Leavy, 2017). The present research centers on quantitative methods in order to derive probabilities for effective intervention. Yet, it considers the cruciality of qualitative methods for a thorough understanding of gender stereotypes. The resulting mixed method approach based on philosophical pragmatism fits best where probabilities and subjective meanings have to be examined in order to facilitate intervention research (Leavy, 2017). Mixed method research thereby combines different epistemiologies. The present research combines post-positivism, relativism and critical theory.

1.6.1. Epistemiologies

Post-positivism assumes that there is an objective truth independent of culture and history that can be approached with hypothesis-testing and falsification by means of experiments (Scotland, 2012). TMT is largely grounded on post-positivism (Burke et al., 2009). Queer theory and other feminist theories are typical representatives of critical theory (Scotland, 2012). Nevertheless, Butler's (1990) version of queer theory departs from a relativist paradigm, since it especially focusses on the plural realities created in relation between people and concepts (Scotland, 2012). In a typical relativist post hoc design, Butler extensively reviews literature with culturally and historically situated reasoning (Butler, 1990; Scotland, 2012). In contrast to this relativist approach, the present research reduces this extensive reasoning to a more comprehensible and therefore more accessible model. This model will be tested with data collection and analyses after theoretical reasoning.

Butler's relativism and TMT's post-positivist approach may seem incompatible in epistemiology and methods. Butler assumes gender stereotypes to be culturally constructed in relation while TMT assumes culture to result from the human management of death anxiety. Queer theory might assume TMT's death anxiety as constructed in relation (which the present research partially assumes). In turn, TMT's post-positivist approach (Burke et al., 2009; Pyszczynski et al., 2015) and its heternormative psychoanalytical basis (Sáez, 2004) complicate the scientific study of non-normative, less frequent dissociations between sex, gender and desire that are indispensable to queer theory. In summary, the epistemiology behind TMT might deny the basis of queer theory and vice versa. However, TMT and queer theory might equally benefit from each other by explaining possible precursors of culture that construct gender. Instead of assuming the epistemiologies behind TMT and queer theory as incompatible, the present research assumes them as complementary. Epistemiological flexibility contributes to interdisciplinarity (Johnson & Onwuegbuzie, 2004) and promotes more effective psychosocial intervention. As a consequence, epistemiological rigidity can hence not be said to be critical if it impedes to question social systems and to create social change.

1.6.2. Mixed Method Research

In accordance with social psychology's interdisciplinary approach and its aim to intervene in prejudice (Ross et al., 2010), the present research prioritizes a holistic understanding of death attitudes and gender stereotypes in order to improve intervention strategies. The present research assumes that reality exists and that it can be approached with hypothesis-testing and falsification by means of experiments. However, in accordance with critical theory, it further assumes that realities are plural depending on culture and history, and that they can exclusively be approached departing from researchers' historically and culturally constructed worldviews and values (Scotland, 2012). The present research further presumes that people can change the societies which they are born into (Scotland, 2012). Quantitative methods, as mostly adopted by terror management research, often depart from post-positivism and are therefore assumed to be uncritical. However, quantitative

research can be critical depending on the theories and interpretations it relies on (Evans et al., 2019).

On a methodological level, solution-oriented philosophical pragmatism is best reflected by mixed method research (Johnson & Onwuegbuzie, 2004; Leavy, 2017). Mixed method research is especially attractive due to the fusion of a quantitative cause-and-effect perspective (Leavy, 2017) with the qualitative exploration of subjective, plural, culture- and time-dependent realities (Johnson & Onwuegbuzie, 2004). Mixed method research can therefore more easily approach the "situated knowledges" of communities instead of universal or individualized knowledge (Haraway, 1988, p. 581) that a feminist approach to scientific objectivity consists of. In spite of a century-long dispute that claims quantitative and qualitative research to be incompatible, both approaches address research questions, apply methods for observation, describe and contrast data, and interpret the data's outcomes (Johnson & Onwuegbuzie, 2004). As a result, a "third wave [of] research movement" (Johnson & Onwuegbuzie, 2004, p. 17) emerged with mixed method designs between the 1950s and the 1980s (Leavy, 2017). This comparatively novel approach states that neither quantitative, nor qualitative, nor mixed method research is generally preferrable (Johnson & Onwuegbuzie, 2004). In agreement with Haraway (1988), a mixed method approach to research creates conversation between empiricism and radical constructivism rather than a battle between epistemiologies. Instead of an epistomiological dogma, the selected approach "should follow research questions" (Johnson & Onwuegbuzie, 2004, p. 17) and ethical concerns (Haraway, 1988). Mixed method research recognizes both physical as well as cultural and historical circumstances, bases on provisional truths and takes the values of the researcher into account (Johnson & Onwuegbuzie, 2004). Thereby, it facilitates the interdisciplinarity and the focus on action (Johnson & Onwuegbuzie, 2004) that constitute social psychology (Ross et al., 2010).

Critics of mixed methods often erroneously equate methodology with epistemiology instead of verifying the justification of each research method (Johnson & Onwuegbuzie, 2004). The present

research mainly applies a quantitative approach to determine the probabilities for intervention success. Thereby, it ensures that intervention is not only valid for one person, but for as many people as possible. In addition, emotional reactions to a death reminder will be examined with a qualitative approach. The qualitative approach departs from a minority of people with certain death attitudes that are associated with less gender stereotypes. In accordance with queer theory, it appreciates the marginal, the subjective realities beyond the quantitative approach of TMT. A deeper understanding of how death attitudes affect gender stereotypes implies parameters for psychosocial intervention. While quantitative research represents the width of a phenomenon (its probability, the how much), qualitative research represents the depth of the phenomenon within each person (its possibility, the what and how). Both research approaches reveal clues to psychosocial intervention in gender stereotypes. In summary, implicit and mixed method research are required to advance the understanding of gender stereotypes. This combination of methods prevents endless theoretical circles that would stop queer theory from being applied (Jagose, 1996). Futhermore, the combination of methods facilitates the understanding of conscious and unconscious processes (Greenwald et al., 2009) in the formation of gender stereotypes.

1.6.3. Ethics and Reflexivity

The research process followed the ethical code of the American Psychological Association (APA; 2020). In accordance with the APA code, ethical issues were addressed before the study. The UB Bioethics Commission revised the research proposal and approved the present research procedures (see Annex 1). Participants were informed about the duration and on the remuneration of the quasi-experiment. They were free to give informed consent after the presentation of a cover story. The purpose of research was uncovered in the subsequent debriefing. Participants were further informed about their right to withdraw their consent at any time, without any kind of disadavantage for them. In addition to the minimum requirements of the APA code, the present research complies with ethics in science by the aim of promoting social justice in addition to

academic knowledge (Willig, 2013). Moreover, personal values have been explicited (Willig, 2013). In addition, the present research will be contextualized by biographical information that may affect interests, methods and interpretations (Willig, 2013). Despite the post-positivist objective of scientific neutrality, research values always depend on its historical and cultural context to a certain extend (Scotland, 2012). Therefore, current epistemiological and ethical questions are considered (Willig, 2013).

1.6.3.1. Biographical context

During adolescence I formed part of a subculture whose flagship was death. In this fraction of German gothic subculture, all genders wore make-up, skirts and long hair. Although there surely was more gender prejudice in the subculture than I was aware of at the time, it was where I felt freest to express myself. Driven by the existential matters of the subculture, I was fascinated by existentialist writers and by psychology. An indignation with gender stereotypes arose in my early 20s. With feminist literature I realized that the physical attacks and emotional abuses I had experienced were not an individual case of personal weakness, but the result of an ancient, far-spread system. Gradually, the awareness of this system resulted in the will to promote social change towards gender equality. I started to engage in feminist activism, but felt that its selective actions tackled particular components of patriarchy instead of reaching its core. Parallelly, I started to study psychology and volunteered in a hospice. In my Bachelor's, I learned about TMT and about the social psychology of gender. During my Master's, I increasingly got in touch with queer people and queer theory. I understood that feeling alien to my ascribed gender was not a personal incapacity, but the failure of an imposed gender system. Amidst these views on death and gender, the idea for this thesis started to emerge.

In the process of the thesis I felt increasingly uncomfortable with my passport's first name. My closer social circles had called me Mel for years. Mel is a known non-binary name that, as a historical derivate of Melanie, Melvyn and many other names, can stand alone (Wilson, 2001). As a

consequence, I changed it in official use inasfar as international, academic and private institutions allowed me to. In accordance with the more sensitive politics of gender research journals, the thesis' articles are submitted under my preferred name Mel Stiller.

1.6.3.2. Epistemiological Considerations

At the German universities I studied my Bachelor's and my Master's degree with, quantitative research was clearly more present than qualitative methods. Despite my previous work with both methodologies in psychological statistics departments and laboratories, the initial approach to the test of QTMT was quantitative. This quantitative approach continues to seem appropriate to estimate the probabilities of success for intervention in death attitudes. Nevertheless, a qualitative approach proved to be indispensable to understand the meaning of death attitudes beyond numbers. In conclusion, the initial quantitative research plan shifted to a mixed method design that unites probabilities and meanings.

1.7. Submission States

A first article presenting QTMT under the title "The transience of gender: A queer terror management theory" is currently under second revision with the Journal of Social and Political Psychology (JSPP). JSPP is an Open Science journal in the field of social psychology with a Scientific Journal Ranking of 0.66 in 2019 (Scopus, 2020). A second article with an initial test of QTMT, titled "Queer terror management theory on trial: An initial test for the effect of death attitudes on gender-related stereotypes", has been submitted to Sex Roles. Sex Roles is multidisciplinary, feminist social science journal with a Journal Impact Factor of 2.41 (Journal Citation Reports [JCR]) in 2019 (Clarivate Analytics, 2020a). A third article, "A revised ontology of terror management strategies: The power of death valence in the context of gender-related stereotypes", has been submitted to the multidisciplinary journal of Psychosocial Intervention with a JCR of 4.03 in 2019 (Clarivate Analytics, 2020b).

1.8. The Thesis' Structure

The dissertation is structured in an introduction, three articles and a concluding chapter with suggestions for further research and implications for intervention in gender stereotypes. The first article, "The transience of gender [...]", is of theoretical nature. The article reviews prior research on gender stereotypes and death attitudes in order to then propose queer terror management theory (QTMT; Stiller & Di Masso, 2016).

The second article under the title "Queer terror management theory on trial [...]" tests QTMT on a quantitative level with various implicit and explicit tests. Death attitudes were measured in a first wave and gender stereotypes were measured after the experimental manipulation in a second wave. The appropriateness of death acceptance as a basis for intervention in gender stereotypes is discussed. Finally, the generalizability of a mortality salience effect is scrutinized. Following the results on implicit death attitudes, death valence is proposed as an alternative intervention approach to diminish gender stereotypes. However, the unexpected association between death valence and gender stereotypes raised questions about people's emotional reactions towards death.

The third article, "A revised ontology of terror management strategies [...]", addresses emotional reactions towards death with the qualitative measure of Content Analysis (Mayring, 2000). To better understand the results of the second article, the content of the short essays reminding participants of their own mortality is analyzed in the third article. In a mixed method design, the results of content analysis are situated in the context of quantitative research. Results visibilize emotional reactions to death reminders divided upon rather positive versus negative death valence. Basing on these results, a refined ontological model for terror management strategies is proposed. The model serves to better understand the foundations for intervention in gender stereotypes. Moreover, the conjunction of quantitative and qualitative research reveals an alternative explanation for the occurance (Burke et al., 2009; Pyszczynski et al., 2015) or unpublished absence (Rodríguez-Ferreiro et al., 2019) of the highly renowned mortality salience effect via death valence.

In the conclusions of this thesis, the findings of the three articles will be summarized and discussed. Implications for psychosocial intervention in gender stereotypes will be derived and possible approaches for intervention will be suggested. Finally, limitations of the previous findings and hints for future research will be reviewed.

CHAPTER 2

THE TRANSIENCE OF GENDER: A QUEER TERROR MANAGEMENT THEORY

2.1. Abstract

Gender discrimination on a global scale is undeniable. Gender stereotypes precede such discrimination. Therefore, research on the origins and dynamics of gender stereotypes is central to intervention in gender-based discrimination. The origins of gender stereotypes are approached with terror management theory. Terror management theory states that people identify with stereotypes when death anxiety is managed with death denial. Instead of denial, death acceptance may enable psychosocial intervention. The dynamics of gender are aproached with queer theory. Queer theory accounts for the complexity of gender stereotypes. In a synthesis of terror management and queer theory, we propose queer terror management theory (QTMT). QTMT hypothesizes death acceptance to reduce gender stereotype activation under mortality salience. This novel framework provides an in-depth understanding of gender stereotypes and its precursors. Not only does it clarify theoretical confusions and omissions in prior research on gender. QTMT also suggests a radical intervention approach against gender stereotypes.

Keywords: terror management, queer theory, death acceptance, mortality salience, gender stereotypes, intervention

2.2. Introduction

Research on the origins and dynamics of gender stereotypes is central to intervention in gender-based discrimination. Prior research in the social sciences proposed gender concepts, investigated stereotype activation and derived intervention approaches. These intervention approaches aim at more egalitarian societies in the future. However, confusions in theory and a lack of theory application imply the risk of stereotype replication in the social sciences and

of less effective intervention approaches. Departing from current research challenges, this paper revises possible precursors and dynamics of gender stereotypes from an interdisciplinary perspective. As a result, a novel framework for the intervention in gender stereotypes is proposed.

Prior research has conceptualized *gender* as the cultural meanings of female, male (Brannon, 2017; Wood & Eagly, 2015), and the relations between them (Marecek et al., 2003). Gender is typically assumed to be based on biological sex (Brannon, 2017; Glick & Fiske, 1996; Marecek et al., 2003), whereas Butler's (1990) version of queer theory reasons that sex, as well as the idea of a fixed, binary sexual orientation, are gender constructs. In the course of this article, we will outline why a queer gender concept would not only protect personal rights, but also lead to more valid research results. Meanwhile, we will adopt the mainstream concept of gender as one component of a queer gender concept.

A relational gender definition is not only of theoretical interest, but of practical relevance for societal cohabitation. Gender relations are imbalanced in patriarchal societies. Patriarchies are defined as societal systems that favor men and depreciate women on an economic, legal, and political level (Glick & Fiske, 1996). For such division, patriarchies require gender. Recent reports on employment, gender-based violence, and political participation indicate that patriarchal discrimination still remains a global fact: in 2012, women earned 15% less than men on an international average (OECD, 2012). One third of women all over the world experienced physical and/or sexual violence at least once in their lifetime (WHO, 2013). In 2010, 19% of US hate crimes were motivated by homo- and transphobia (FBI, 2011). Women's political participation in the US parliament was limited to 19% in 2015 (Worldbank, 2015). Discrimination contradicts equal opportunities. Therefore, societies striving for equal opportunities need to intervene in gender-based discrimination.

2.2.1. Gender Stereotypes

Gender stereotypes are an important precursor of gender-based discrimination. Gender stereotypes are overgeneralized, fixed ideas (Jost & Hamilton, 2005) about the cultural meanings of female, male (Brannon, 2017; Wood & Eagly, 2015), and the relations between them (Marecek et al., 2003). These culturally shared ideas are assimilated into personal psyches by means of the power systems that surround people (Berard, 1999; Wood & Eagly, 2015). Thus, gender stereotypes are rather a social issue than a psychological one. Nevertheless, psychology may contribute to their resolution.

In psychological research, a first approach to reduce discrimination was to investigate stereotype activation. Stereotypes are more likely to manifest in behavior once they are activated (Wheeler & Petty, 2001). Their manifestation into behavior particularly depends on the salience of stereotypical beliefs, stereotype fit to the specific current context, or on perceived versus actual behavior control (Ajzen, 1996; Fiske, 2000). Accordingly, gender stereotypes represent a necessary, yet insufficient precondition for discrimination. Therefore, prior intervention approaches were directed to gender stereotypes (De Lemus et al., 2014; Kilmartin et al., 2015; Zawadzki et al., 2014).

However, prior research on gender stereotype content and activation has not yet integrated sexist relational attitudes. A variety of studies has recently associated sexist relational attitudes with gender stereotypes (e. g., Davies et al., 2012; Webster & Saucier, 2011; Whitley, 2001). These studies treated sexist relational attitudes and gender stereotypes as independent concepts. They thereby failed to integrate them into an overarching concept for a system of interacting gender stereotypes. Sexist attitudes are overgeneralized beliefs about gender relations (Marecek et al., 2003). Therefore, sexist relational attitudes, e. g., towards sexual orientation, have to be considered gender stereotypes (Glick & Fiske, 1996), and not just a related concept. Sexist relational attitudes can refer to positively tagged, benevolent traits, or to negative, hostile ones. Both are associated

with detrimental effects, such as gender inequality (Glick et al., 2000) or increased system-justification (Jost & Kay 2005). When sexist relational attitudes are omitted in the research on gender stereotypes, then the relational part of gender definition is not examined. This lack of theory application implies the risk of stereotype replication in science and promises less effective intervention approaches.

Benevolent or hostile stereotypes may be applied to the self or others (Glick et al., 2000; Glick et al., 2004). However, their application to the self and others requires self-categorization. The self-categorization as a gender, along with the ascription of traits that are interpreted as feminine or masculine, form part of gender identity (Wood & Eagly, 2015). Gender identity is a social identity based on group distinction for positive distinctiveness (Tajfel & Turner, 1979). Social identities are constructed by means of group categories and category content (Tajfel & Turner, 1979). The self-categorization as a gender varies within and across cultures, depending on the culturally possible gender categories (Butler, 1990; Kessler & McKenna, 1985), and on the intensity of gender identification (Joel et al., 2014; Wood & Eagly, 2015). Trait contents of gender categories, in turn, depend on people's access to the various discourses on what is feminine or masculine, and on the freedom to choose from gendered contents (Hammack, 2008; Wood & Eagly, 2015). Trait ascription and self-categorization psychologically incorporate intersecting cultures into a gender identity that is more individual than previously assumed (Diamond & Butterworth, 2008; Hammack, 2008, Wood & Eagly, 2015). Since self-categorization and trait ascription incorporate gender, we assume them to form part of gender stereotypes.

Both, self-categorization and trait ascription, are indispensable approaches to the understanding of gender stereotypes, but have often been confounded (Wood & Eagly, 2015). Although self-categorization may reveal content tendencies, trait ascription and self-categorization are neither inspired by the same motivations, nor do they predict the same variables. The trait approach is assumed to be motivated by cognitive order and predicts the cultural content of gender

stereotypes (Wood & Eagly, 2015). By contrast, self-categorization is rather motivated by the emotional need to belong and predicts ingroup versus outgroup biases. The explicit separation of self-categorization and trait ascription promises more valid research results (Wood & Eagly, 2015).

In summary, the theoretical concept of gender stereotypes as overgeneralized ideas about the female, the male (Brannon, 2017) and the relations between them (Marecek et al., 2003) has not yet exhaustively been applied to current research practice. An extended application of the theoretical gender concept to research practice would increase scientific coherence and promote effective intervention. Beyond the application of conceptual specifications, research requires a more profound understanding of the origins and dynamics of gender stereotypes. It is still remains unclear *why* people derive identities from their surrounding cultures and *how exactly* that is the case for gender. If discrimination based on gender stereotypes is a global problem, then psychosocial intervention for equal opportunities requires a clear understanding of gender stereotypes and its precursors. Why do people hold stereotypes? Why do people identify themselves and others with gender stereotype categories and traits? What motivates people to strive for group membership beyond positive distinctiveness? What is the core link between culture and the self behind this motivation?

2.3. Terror Management Theory

One way to understand the link between culture and the self is terror management theory (TMT; Greenberg et al.,1986). This theory is of special interest for the research on stereotypes because it reasons a more profound motivation for group membership than to "just feel good". TMT thereby indicates the possible origins of gender stereotypes. The well-evidenced theory integrates psychoanalysis, social anthropology, as well as evolutionary, developmental, and cognitive psychology (Pyszczynski et al., 2015). It reasons that stereotypes emerge when death anxiety ("terror") is managed by means of death denial. Here, death denial represents the refusal to accept personal consternation with mortality. TMT explains the human need for self-esteem, ingroup

49

preference and outgroup distinction.

2.3.1. The Mechanisms of Death Denial

Since humans are neither the fastest nor the strongest beings on earth, evolution equipped them with self-awareness (Greenberg et al., 1986). Self-awareness serves to know who we are; for example, we are weaker than a full-grown bear, so we avoid fighting with it. With the conscious perception of the self, we are also aware of our mortality. Hence, death-awareness is a by-product of self-awareness. When mortality is made salient, symbolic immortality buffers death anxiety. Symbolic immortality means "being part of something greater than oneself that continues to exist after one's own death" (Pyszczynski et al., 2015, p. 8). Cultural worldviews are greater than an individual person, since they are long-living and they are shared with others. People attain symbolic immortality by sharing cultural worldviews, they derive their personal value, or self-esteem, from how well they fit into their cultural ideology. As a result, self-esteem buffers death anxiety. Without self-esteem, people would feel the threat of death. If a person with their[1] exclusively personal ideas dies, they die physically and symbolically. If their ideology is culturally shared, the person may physically die, but their ideas remain on a symbolic level. Thereby, symbolic immortality denies one's own death.

Another way to acquire symbolic immortality is through relational attachment (Mikulincer et al., 2003). When children do not yet think symbolically, they buffer death anxiety with attachment to their caregivers. In expanding social environments, children implicitly learn about their caregivers' cultural worldviews by selective reinforcement. For example, parents reinforce children to play in a certain way by means of dis-/approving comments and glances – first at home, then at the playground, and later on in kindergarten. If the children play like this, they will feel ensured of parental care even when the parents are absent, first at home, and later in kindergarten. Children then start to buffer death anxiety with cultural worldviews, and derive self-esteem from identifying with them (Pyszczynski et al., 2015). These cultural worldviews encompass gender

---

[1] We use singular they as gender-inclusive language referring to the person.

stereotypes and vary with mortality salience (e. g., Schimel et al., 1999). Once death anxiety is triggered, even by everyday events, the terror of death needs to be managed to avoid paralyzing fear (Pyszczynski et al., 2015). Gender stereotypes are shared worldviews that seem greater than one's own death. Therefore, holding on to gender stereotypes buffers death anxiety with a promise for symbolic immortality. People then derive their self-esteem and their identities from how much they fit into gender norms. Under the cultural norm of gendered identities, self-esteem is derived from identifying as a man or a woman. By contrast, people differing from gender norms are punished in order to maintain cultural worldviews and one's own culture-bound self-esteem. When people are punished for misfitting gender norms, the protective function of self-esteem retaliates with detrimental effects for egalitarian societies.

2.3.2. Terror Management Hypotheses

TMT proposes three main hypotheses (Greenberg et al., 1986; Pyszczynski et al., 2015). 1) Self-esteem buffers death anxiety. 2) Mortality salience (MS) increases the need to buffer death anxiety with cultural worldviews, the derived self-esteem, or relational attachment. 3) Threats to anxiety buffers increase death-related thoughts. These hypotheses have repeatedly been evidenced throughout the past three decades despite moderate replication issues (Pyszczynski et al., 2015; Rodríguez-Ferreiro et al., 2019). A graphic overview of TMT's assumptions is proposed in Figure 2.

2.3.3. The Adaptivity of Death Denial

TMT hypotheses exclusively relate death-awareness to death anxiety via death denial. Facing the anxiety of death by means of denial equals *not* facing death, but refusing personal consternation with mortality. In TMT, death-awareness is only associated with death anxiety. However, death attitudes do not only comprise death anxiety (Bassett et al., 2004), but also fear of death, death denial and death acceptance (Wittkowski, 2001). Fear of death is therein considered as the cognitive component of death anxiety (Lehto & Stein, 2009). Death attitudes are considered as stable in the medium term (Wittkowski, 2001). Yet, they can potentially be changed (Samarel,

1995). Death anxiety is easily triggered in our everyday lives (Gailliot et al., 2008; Pyszczynski et al., 2015). It is inevitable. By contrast, death acceptance promises for intervention at the foundations of gender stereotypes.

TMT's limited focus on death denial might result from the assumption that death anxiety "would seriously impede successful goal-directed behavior and perhaps survival itself unless effectively managed" (Pyszczynski et al., 2015, p. 7). Thereby, death denial is the only proposed

Figure 2

A Superior Mediation Model of Terror Management Theory
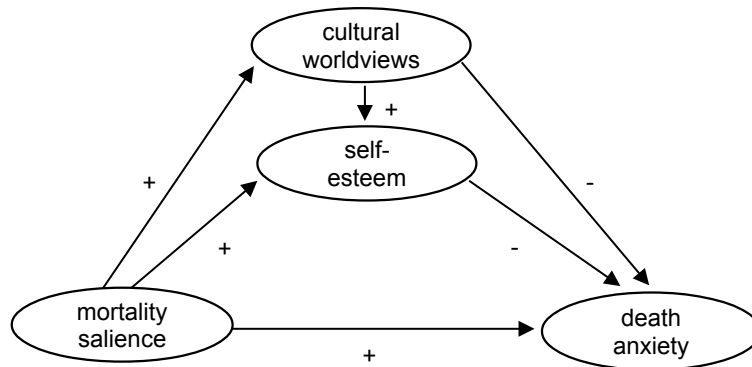
Note. Superior mediation model as implied by terror management theory (Greenberg et al., 1986). Mortality salience represents raised death awareness. A complete mediation is assumed (Pyszczynski et al., 2015).

terror management strategy. On the one hand, anxiety-buffering worldview defense can foster pro-health or pro-environmental behaviors when people hold pro-health or pro-environmental worldviews before mortality is made salient (Vail et al., 2012). On the other hand, facing mortality fosters worldview defense via gender stereotyping (Schimel et al., 1999) and homophobic prejudice (Webster & Saucier, 2011). MS triggers death anxiety. When mortality is salient, people strive to form part of something greater than themselves (Pyszczynski et al., 2015). Gender stereotypes and homophobia are socially shared worldviews. As a result, gender stereotypes buffer death anxiety by

the means of symbolic immortality. Symbolic immortality denies death. Hence, gender stereotypes and homophobia reflect death denial. Neither gender stereotypes nor homophobic prejudice can be said to serve goal-oriented behavior towards equal opportunities.

If death denial was per se adaptive, people under MS would exclusively experience negative consequences once they do not deny death. Yet, traumatized or terminally ill people can barely deny their mortality (Janoff-Bulman, 2006; Samarel, 1995), and also experience positive consequences, such as growth on a personal and an interpersonal level (Janoff-Bulman & Yopyk, 2004; Tedeschi & Calhoun, 1996; Tedeschi & Calhoun, 2004), self-actualization (Samarel, 1995; Wong, 2008), and higher life satisfaction (Triplett et al., 2012). Stress-coping in clinical psychology seems to be synonymous to terror management in social psychology when felt death threat causes stress (Chatard et al., 2011; Pyszczynski & Kesebir, 2011). Avoiding felt death threat in clinical psychology is associated with persistent or even increased PTSD symptoms (Ehlers & Clark, 2000; Ullman et al., 2007), as well as with the persistance of panic- and anxiety disorders (Helbig-Lang & Petermann, 2010; Saniah & Zainal, 2010; Thwaites & Freeston, 2005). By contrast, adaptive coping strategies do not aim to avoid a ficticious death threat, and are "partially defined by their longer term lack of negative impact" (Thwaites & Freeston, 2005, p. 180). Hence, death-awareness usually provokes death anxiety, and death anxiety can be buffered with death denial in the short-term. In the long-term though, death anxiety is boosted by denying it. The process towards death acceptance may result in short-term anxiety, whereas later on it predicts positive outcomes.

Consequently, the untested presumption of death denial as a per se adaptive terror management strategy has been scrutinized (Wong, 2008). The denial of death can represent maladaptive coping on an individual level (Wong, 2008; Wong & Tomer, 2011), as well as on the societal level of stereotyping (Maj & Kossowska, 2016; Wong, 2008). One and the same behavior can be adaptive or maladaptive depending on a person's context (Thwaites & Freeston, 2005; Wong, 2012) and their current resources (Folkman et al., 1986). In the case of death denial versus death

53

acceptance, people's approach versus avoidance motivations seem to play a crucial role in the choice of terror management strategies (Wong, 2012).

2.3.4. Death Acceptance

On a more general level, the adaptivity of a coping strategy depends on the situation's changeability (Brandstätter et al., 2013): if something unpleasant can be changed, it is considered adaptive to change it. In turn, if a fact is unchangeable, it is adaptive to accept it (Brandstätter et al., 2013). Death is an unchangeable fact of life. Therefore, it seems adaptive to accept it. Accordingly, meaning management theory proposes death acceptance to be an additional terror managent strategy (Wong, 2008; Wong & Tomer, 2011). Meaning management theory (MMT; Wong, 2008) is an extension to TMT that bases on existentialism, humanism, and constructivism. MMT proposes two complementary human motivations: to protect ourselves against the terror of death, and to live satisfying lives up to what is important to us. If we want to survive, then what for? Both, TMT and MMT assume that mortality reminders are inevitable in everyday life and across the life-span. Both assume that MS triggers death anxiety. And both theories assume MS to create culture and self-esteem. However, MMT posits that whether MS results in death denial or death acceptance depends on a positive versus a negative focus towards death. Death acceptance is defined as "being psychologically prepared for the final exit" (Wong et al., 1994, p. 124). TMT departs from a negative, defensive focus that denies death. Death denial is related to anxiety only, and death anxiety can have detrimental effects, such as gender stereotyping (Pyszczynski et al., 2015). By contrast, death acceptance in MMT departs from a positive, creative focus that energizes, gives meaning to life and increases life satisfaction. Yet, this focus towards life requires the conscious acceptance of death (Wong, 2008). Although death acceptance is contrary to death denial, it is not contrary to death anxiety or to fear of death. Death acceptance and death anxiety are even positively correlated (Wong, 2008). Maybe without fear there is no courage. Neither can the courage to accept death arise without passing through death anxiety.

Cultural worldviews may not only buffer death anxiety, but they may also facilitate death acceptance (Wong, 2008). Theoretically, death acceptance is associated with psychological well-being and life satisfaction (Wong, 2008; Wong & Tomer, 2011). A pioneering study shows a positive effect of death acceptance on psychological well-being: higher death acceptance prior to a partner's death (MS) predicted more resilience instead of chronic grief after a partner's death (Bonanno et al., 2002).

A recent theoretical review further suggests a reduction of outgroup prejudice when mortality is made salient and death is accepted (Maj & Kossowska, 2016). In this review, outgroup prejudice specifically includes gender stereotyping. When MS triggers death anxiety, death is by default denied (Wong, 2008). In the continuation of Wong's (2008) argument, this defensive focus against death can be consciously changed to a positive focus on an unlasting, but satisfying life. A positive focus towards life via death acceptance is associated with self-actualization, while a negative focus towards death is associated with gender stereotypes. When death is accepted, the search for a positive meaning in life is energized. By contrast, when death is denied, people cling to gender stereotypes.

When death is accepted, people seek for self-actualization rather than to only focus on survival. Self-actualization goes beyond a person's fit into the socially shared ideas of who they have to be, and it is not prescriptive towards others. Self-actualization is centered in: 1) enriching personal life experience, and 2) the pursuit of personal life goals to make a difference in the world (Wong, 2008). Fitting in to what there already is does not make a difference. Therefore, gender stereotypes do not reflect self-actualization, but death denial. However, the social impact of death acceptance on gender stereotypes has not yet been empirically tested.

In prior research, MS increased gender stereotypes (Glick & Fiske, 1996) in work contexts (Hoyt et al., 2011), politics (Hoyt et al., 2009), as well as in interpersonal contexts (Hirschberger et al., 2002; Schimel et al., 1999). These interpersonal contexts included homophobic prejudice

(Webster & Saucier, 2011). Applying gender stereotypes reflects death denial. Logically, death acceptance is expected to inhibit gender stereotype activation. Yet, neither death acceptance nor gender specificity were accounted for in prior terror management research on gender stereotypes. Instead, terror management research has so far repeated the shortcomings that prevail in research on gender stereotypes.

2.4. Queer Theory

Prior approaches to gender stereotypes include self-categorization, trait ascription (Wood & Eagly, 2015) and sexist relational attitudes (Glick & Fiske, 1996). TMT clearly explains why people identify with gender stereotypes, and why they judge upon them (Hirschberger et al., 2002; Hoyt et al., 2011; Hoyt et al., 2009; Rosenblatt et al., 1989; Roylance et al., 2017; Schimel et al., 1999; Webster & Saucier, 2011). However, TMT does not account for the specificity of gender in gender stereotypes and thereby runs the risk of repeating them in science. It remains unclear which categories and contents belong to gender, how they interact, and how they can be combined without being confounded. To specify gender, we complement TMT with queer theory.

Queer theory is a set of critical theories on gender. It is an umbrella term for interdisciplinary, third-wave feminist theories that deconstruct gender and promote non-identitarian politics. While the word queer originally stood for peculiar or strange, it was used in a derogatory manner towards homosexuals in the 20th century (Jagose, 1996; Halperin, 2003). Queer theory was born in 1987 from gay and lesbian studies when Teresa de Lauretis provactively titled a conference "queer theory" in order to criticize 1) how white, middle-class, male-dominated academy created theory and 2) how uncritically gender and sexuality were treated even within gay and lesbian studies (Halperin, 2003). However, queer theory at that point had no content. Yet, its provocative potential was commercially appealing, so the queer was capitalized before queer studies actually entered the academy and contents were elaborated (Halperin, 2003). Today, "queer" can be

understood as not identifying with the patriarchal[2] assumptions about binarized sex, gender and

desire. Where patriarchy is the norm, the deviation from the norm is queer. Hence, queer theory

focusses on the associations and especially on the dissociations between sex, gender and desire

(Jagose, 1996).

We refer to Butler's version of queer theory (1990) for its overarching analysis of sex,

gender and desire in comparison to other contributions focussing on homosexuality (Halperin,

2004) or homophobia (Sedgwick, 1993). Butler's (1990) queer theory integrates philosophical,

medical, psychoanalytical, and sociological discourse on gender mechanisms. The theory has been

criticized for its supposed incomprehensibility, accusing the author of obscurantism (for a critical

discussion, see Birkenstein, 2010). Yet, we consider Butler's style to be especially precise in its

constant specification of interrelated constructs for each context. In the following paragraphs we

will highlight the importance of Butler's queer theory for a deeper understanding of gender

stereotypes.

2.4.1. Gender in Queer Theory

Gender "is the cultural meaning that the sexed body assumes" (Butler, 1990, p. 9). For one

part, this notion corresponds with the prevalent definition of gender as the cultural meanings of

female and male (Brannon, 2017; Wood & Eagly, 2015), including the relations between them

(Marecek et al., 2003). However, the queer gender concept goes beyond the traditional approaches

of self-categorization, trait ascription or sexist relational attitudes. Gender in queer theory is an

interrelated system of what in Western/Northern science is commonly understood as *sex* (the

socially shared idea of a linear relation between chromosomes, hormones, internal and external

genitalia, as well as more visible anatomic aspects), *gender* (trait ascription according to social roles

that are mostly ascribed to upon external genitalia), and *desire* (socially expected sexual orientation,

not actual desire and practice). Emphasis is put on the complexity of gender binaries across cultures

(Butler, 1990). The categories and contents of one culture do not necessarily serve as a default for

---

[2] In contrast to Butler (1990), we do not consider patriarchies as deterministic systems. We therefore maintain the term.

another (De Saussure, 2004).

Queer theory posits that cultures prescribe meanings, or "laws", upon sexed bodies (Butler, 1990). Power to patriarchies is wielded by the individual performance of these cultural laws. Personal identity and self-esteem may be constructed in accordance or in conflict with cultural laws, but always emerges in discourse within the person's surrounding cultures. This notion is consistent with the terror management proposition that self-esteem is derived from a person's fit with cultural ideologies (Pyszczynski et al., 2015). The incorporation of patriarchal cultural meanings into personal identity is detrimental to equal opportunities.

2.4.2. Sex and Gender

In current research, gender usually refers to social roles ascribed to biological men and women (Brannon, 2017; Glick & Fiske, 1996). By contrast, queer theory (Butler, 1990) proposes that humans are not even biological women and men. We undoubtably have certain anatomical, hormonal, and chromosomal characteristics. These characteristics tendentially interact (Fausto-Sterling, 1993). However, these interactional patterns are neither binary (Fausto-Sterling, 1993), nor would a linear interaction between varying chromosomes, hormones, internal and external genitalia, as well as more visible anatomic aspects seem logical. Invisibly, we are all intersexual.

The interaction of sexed characteristics represents a bodily system, much like our digestive system (mouth, stomach, colon, etc.), our locomotor system (nerves, muscles, bones, etc.), or our system for visual perception (eye colour, eye shapes, brain connections, etc.). All of these bodily systems tend to interact, and vary in functioning: think of food incompatibilities for the digestive system, functional diversities of the locomotor system, or different eye colours. Yet, people do not identify as binary eyelings like they identify with binarized genders.

The first group assignment to men or women usually takes place upon externally visible genitalia. The binarized idea of a penis or a vulva is then overgeneralized to the social construct of sex; expecting chromosomes, hormonal states and anatomical expressions displayed in one single

line with two extremes. Sex becomes an identity category, and identity categories are not empty. They are defined by maximum distinctiveness towards the outgroup through minimum criteria (Tajfel & Turner, 1979). Sex visibilizes and incorporates gender, so it looks natural and unquestionable (Butler, 1990). In everyday life, we can observe the idea of gender before sex when pregnant persons are asked whether their baby will be a boy or a girl, assuming that a) the child has to be one of both and b) this assumed biological sex has a cultural meaning (Kessler & McKenna, 1985).

Once they are born, small children cannot yet distinguish the self from the other (Leslie, 1987). The external identification of children as boys and girls incorporates patriarchies into their bodies and psyches from the very start. Therefore, children cannot freely explore and develop their own selves without the limitations of gender. Gender shapes them to fit into patriarchies. If they do not fit in, they are punished, for example with psychological pathologization (Ansara & Hegarty, 2011). Instead, a child may be referred to as a child, while the socio-political reality can be explained in a child-oriented way once they are capable of perspective-taking. People who misfit gender norms, such as genderqueer people, may be marginalized (Grace & Hill, 2001; Pullen, 2014), but promise social change. By contrast, fitting in with gender norms constantly perpetuates discrimination (Hoyt et al., 2011; Schimel et al., 1999) and violence (Campbell et al., 2009; McNaughton Reyes et al., 2016). As an example, operating on intersex children to fit in with norms on sex and gender may be considered a violent intervention on intact bodies and psyches.

Patriarchies require gender, and sex categories are the most common way to impose gender. Since genitals are invisible in public life, gender is incorporated by means of binarized names, beauty ideals, clothing, or the salutation as Mrs. or Mr. in adult life. Neither external gender identification nor personal gender identity are biologically determined, but are rather socially biologized. Nor are external gender identification and personal gender identity required for medical science, the act of sex or for any purpose other than social division. Hence, "sex [… has] been

gender all along" (Butler, 1990, p. 11). We therefore conclude that using sex as a biologized category for personal identity is applying a gender stereotype itself.

The queer gender concept, including sex, complies with the prior definition of gender as the cultural meanings of female and male (Brannon, 2017; Wood & Eagly, 2015). However, gender assignment does not only depend on genitals, but on current political needs for social role performance (Butler, 1990; Kessler & McKenna, 1985). Therefore, the content of gender depends on the sexes each culture assigns, and on the flexibility of sex assignment (Butler, 1990). Sex and gender in their traditional sense are confounded in the concept of gender self-categorization. Therefore, self-categorization partially predicts trait ascription. A two-way interaction between the social construct of sex (the assumption that chromosomes, hormones, genitals and secundary anatomic characterisics interact binarily) and the traditional gender concept (trait ascription upon expected social roles) is hypothesized[3]. Queer theory disentangles sex and gender.

2.4.3. Sex, Gender and Desire

The queer gender concept consists of the construct of sex, trait ascriptions according to expected social role performance (traditional gender), and expected sexual orientation (desire). In prior approaches to gender stereotypes, self-categorization confounded sex and gender with trait ascription (Wood & Eagly, 2015). Furthermore, these prior approaches did not include sexist attitudes as the relational part of gender definition. Queer theory comprises sexist attitudes and separates prior confusions between sex and gender. We believe that this comprehensive analysis of gender is essential for the understanding of gender stereotypes.

Queer theory stems from gay and lesbian studies. Since lesbians are less visibilized, especially gay men are still often equated with queer. However, homosexual men can be as conservative about their gender beliefs as heterosexual men (Bersani, 1987). Although the stereotype questioning of gay men's masculinity might facilitate their gender deconstruction, it also

---

[3] Butler (1990) states sex to primarily result from the general idea of gender. However, only with the gendered construct of sex is a specific gender incorporated into the particular body. A mutual influence is therefore expected.

seems to facilitate compensatory over-identification with cisgender men (Bersani, 1987). Presuming gay to be queer would mask gay machismo with a rainbow flag. We therefore interpret the break with patriarchal sex-gender binaries as constitutive for queerness, whereas actual desire is neither a necessary nor a sufficient criterion.

In traditional research, sexual orientation refers to stable human adult homo-, hetero- or bisexuality, without paraphilia. In other words, desire is defined by the culture-dependent expectation of heterosexuality, but not by a person's actual desire or sexual practice. Actual desire does not form part of a queered gender concept, while the social expectation of a certain desire does. Expected desire forms part of gender, since gender comprises the cultural meanings of the relations between sexed bodies (Butler, 1990; Marecek et al., 2003). Accordingly, ambivalent sexism theory posits that both, benevolent and hostile attitudes, can prescribe heterosexuality, and that these attitudes form part of gender stereotypes (Glick & Fiske, 1996). Similiarly, Butler (1990) concludes that "gender [...] create[s] desire" (p. 104). We do not assume gender to create actual desire, but to foster or inhibit sexual practice and experience. The sexual dominance prescription for men might foster dominating practices in men and submissive practices in women, regardless of actual desire. If gender created actual desire or sexual practice, then homosexuality would not exist in heterosexual hegemony; but it does. If gender created desire, then rape would not be traumatizing when culturally normalized; but it is (Campbell et al., 2009).

We conclude that gender shapes the construct of sex, whereas sex incorporates and visibilizes gender. Gender furthermore shapes prescriptive heterosexuality by fostering or inhibiting sexualized practice and experience. The identification as hetero- or homosexual requires the construct of sex (Butler, 1990). Hence, heterosexuality might have been constructed to incorporate sex, whereas sex incorporates gender. To facilitate comprehension and applicability, we summarize our understanding of Butler's queer theory (1990) in an interactional model (see Figure 3). The model allows for various research questions and statistical assumptions.

61

Since queer theory is a critical theory, it has to be open to revise itself constantly. Thereby, the theory runs into danger of endlessly circling around its realization while never actually being applied (Jagose, 1996). Our notion of a queered gender concept proposed by the interactional model above may be provisional and incomplete. However, we think that with this model, queer theory's insights can finally be made understandable and applicable to the academy beyond philosophy and literary studies. A reduction of queer theory is necessary to enable its applicability. Enabling the

Figure 3

An Interactional Model of Queer Theory
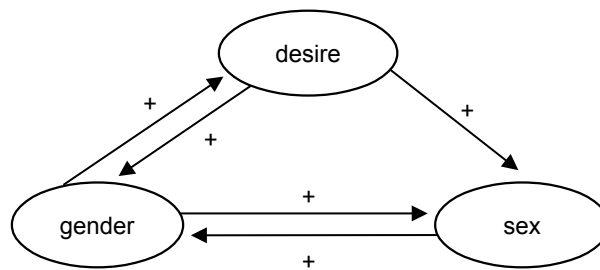
Note. Interactions implied by queer theory (based on Butler, 1990).

Gender: trait ascription along with social roles and/or sexed bodies;

sex: the social interpretation of anatomy, hormones, chromosomes;

desire: socially expected sexual orientation.

application to other branches of science would create coherence with two central ideas of queer theory (Butler, 1990): transversality and intersectionality. The application of queer theory would allow people to express their personal identities in psychological tests. Furthermore, the application of queer theory would prevent scientists from using their expert statuses to reify patriarchal overgeneralizations (Hegarty & Massey, 2006; Minton, 1997). This corresponds with psychologists' responsabilities to not discriminate, to respect people's dignity, and to strive for scientific accuracy (APA, 2020). Psychology needs action for change, instead of its constant reaction to social

transformation (Trott, 2016).

TMT on gender stereotypes needs a queer perspective. But does queer theory need a terror- and meaning management perspective? According to Coll-Planas' (2012) analysis, some queer theorists fall into a mainstream conception of the body as "endlessly malleable" and immortal (p. 11, translated by the authors). This unlimited symbolic deconstruction of the body fails to subvert the mainstream concept of the body that queer theory criticizes. When queer theorists glorify bodily changes as the solution against gender discrimination, for example by means of hormones and plastic surgery, then they neglect the power relations that systematically connect sex, gender and desire (Coll-Planas, 2012). They neglect the violence that people physically and psychologically experience based on gender discrimination, such as feeling the pressure to get such surgery, or even being murdered. So far, sex, gender and desire have been politicized. "Maybe now the challenge is to politicize [...] death; to claim the political potency of taking responsibility for our lives [...]" (Coll-Planas, 2012, p. 64, translated by the authors). Hence, only when queer theory stops to deny and starts to accept death can it reach its full subversive potential.

2.5. A Queer Terror Management Theory

A queer revolution has been called for in the social sciences (Berard, 1999; Kessler & McKenna, 1985), and especially in psychology (Bem, 1995; Downing & Gillett, 2011; Hammack et al., 2013; Hegarty & Massey, 2006; Minton, 1997). This call is crucial for terror management research on gender stereotypes. However, a multidimensional model of gender has barely been applied to scientific practice. Queer theory (Butler, 1990) provides a multidimensional model of gender. A queer perspective would avoid the reproduction of the investigated stereotypes and allow for more specific research results (Hegarty & Massey, 2006; Minton, 1997). TMT states why people cling to cultural constructs such as gender stereotypes, whereas queer theory explains gender above and beyond the prior approaches of self-categorization and trait ascription. Yet, only with queer theory can TMT reveal why gender stereotypes gain the power to be integrated into people's

identities and judgments. Without a queer approach, TMT on gender stereotypes describes the cause of an unclear effect.

2.5.1. Terror Management on Sex, Gender and Desire

Gender stereotypes and homophobic prejudice have been investigated in terror management research. Yet, no precise gender concept has been applied to distinguish self-categorization from trait ascription (sex versus gender). Neither has the relational part of gender definition been conceptually integrated (the expectation of heterosexuality; desire). Queer theory includes sex, gendered traits, and desire as separate factors of a holistic gender concept. If MS triggers death denial, then death denial is expected to activate stereotypes on sex, gender and desire towards the self and others. MS is therefore expected to increase identification with binary sex categories, ascriptions to feminine- or masculine-interpreted traits, and homophobic prejudice.

Death acceptance has been conceptualized as inverted death denial (Bassett et al., 2004; MacDougall & Farreras, 2016). The acceptance of one's own mortality is expected to energize the pursuit of enriching life experiences and personal goals (Wong, 2008). The denial of one's own death is associated with gender stereotypes (Pyszczynski et al., 2015). A positive focus towards death requires its acceptance. The positive focus of death acceptance is assumed to reduce the negative focus of death denial. Logically, death acceptance is expected to inhibit the activation of stereotypes on sex, gender and desire (Maj & Kossowska, 2016). Hence, radical intervention in gender stereotypes requires 1) a queer gender concept to specify what intervention aims at (the output), and 2) death acceptance as an alternative strategy to deal with death anxiety (the input). Neither death acceptance nor a queer gender concept have been applied to prior terror management research on gender stereotypes.

The interactions between sex, gender and desire have started to be accounted for in psychology (Hegarty & Pratto, 2004; Webster & Saucier, 2011). Yet, the factors were confounded instead of being integrated into one gender concept. An overarching, queer concept for gender

stereotypes is necessary to reflect the interacting system of assumptions on sex, gender and desire. These three aspects were considered as associated but independent factors in prior research (Davies et al., 2012; Webster & Saucier, 2011; Whitley, 2001). Their systematic associations and dissociations have therefore not been integrated conceptually.

Terror management research has investigated sex, gender and desire seperately (Hoyt et al., 2011; Hoyt et al., 2009; Hirschberger et al., 2002; Schimel et al., 1999). All of the mentioned studies confounded sex with gender by deriving gender differences from sex measures (female versus male participants as independent variables). In one study, MS increased gender stereotypes and homophobic prejudice (Webster & Saucier, 2011). Since sex, gender and desire have been measured in a terror management study (Webster & Saucier, 2011), queer theory has implicitly been accounted for. Furthermore, an association of the three factors with MS has been demonstrated. However, the lack of a more explicit application of queer theory resulted in confusions between sex, gender and desire: prejudice towards homosexual men increased in heterosexual men under MS. The relationship between MS and homophobic prejudice was mediated by gender-role beliefs. Who are men here, and when is one homosexual? The study (Webster & Saucier, 2011) did not specify whether the self-categorization as a man or attraction to men refers to gender or sex. Assuming we knew that, would homosexual men have exhibited less prejudice against homosexual men?

Terror management research on gender stereotypes requires a clear distinction between sex, gender and desire. This distinction would enrich research with a holistic theoretical framework for the intervention in gender stereotypes. A queer gender concept would enable researchers an insight into gender stereotypes beyond prior confusions and omissions. It would further mitigate the risk of reproducing patriarchal stereotypes in terror management research.

2.5.2. Queering Gender Measures

To achieve the aims of scientific practice (APA, 2020), its objectives have to be aligned with the corresponding research methods (Trott, 2016). For research on gender, that means precise

measures for sex, gender and desire have to be applied and/or created (Mehta & Keener, 2017). To begin with, does sex refer to external genitalia, chromosomes, hormones, or to a self-assigned versus ascribed social role? Scientists may offer free response options for gender identity (Ansara, 2015b) - or at least offer cis-, trans-, and non-binary categories (Ansara, 2015a; Joel et al., 2014). We understand gender categories along two axes: binary and time-stability. The unqueer cisgender category assumes patriarchal sex-gender binaries. Cisgender persons stably identify as the women or men they were assigned to at birth. Transgender persons transgress this sex-gender association by identifying as men being born with vulvas, or as women being born with penises. On a personal level, trans persons are not assumed to forget about their prior gender experiences. Their experience before, while and after transition may increase their likelihood of not identify as cisgender, and to fluctuate between genders at times (Diamond & Butterworth, 2008). However, transition is not yet the transience of gender: socially, transition challenges and reinforces patriarchal categories at a time. The non-binary, narrower-sense genderqueer category comprises subcategories as androgynous (stably identified as masculine and feminine), genderfluid (fluctuating between feminine and masculine), agender (stably genderfree), culture-specific or fictional genders. Non-binary persons are likely to have binary gender interiorizations, but do not necessarily identify with them as personal essence. Rather, they feel free to identify with traits tagged as feminine, masculine and neutral while questioning the tags' appropriateness. Sexual orientation can be measured without a priori categories, since predefined categories may reinforce the ideas of limited sexes and genders that constitute limited desires (Ansara, 2015b; Mehta & Keener, 2017). Alternatively, more precise questions about actual desire and sexual practice may be asked rather than to generalize sexual identity to genital-based desire and a time-stable essence in sexual practice.

2.5.3. Theoretical Propositions

In a synthesis of the previously discussed approaches to gender stereotypes (Glick & Fiske, 1996; Wood & Eagly, 2015), terror management (Greenberg et al., 1986; Pyszczynski et al., 2015),

death acceptance (Wong, 2008), and queer theory (Butler, 1990), we present *queer terror management theory* (QTMT). QTMT specifies gender stereotypes as overgeneralized beliefs about people's psychological traits and their expected sexual orientations according to their expected social roles and/or the assignment to a fictional sex category. In accordance with queer theory (Butler, 1990), the construct of gender stereotypes consists of three subdimensions: a) sex: the social interpretation of biological characteristics as sex, b) gender: the ascription of psychological traits along with expected social roles, and c) desire: expected heterosexuality. This expectation results in the prescription of heterosexuality (Butler, 1990).

QTMT proposes three main hypotheses: 1) sex, gender and desire interact as factors of a queer gender construct; 2) higher death acceptance correlates with lower gender stereotype activation; and 3) the association between death acceptance and gender stereotypes is moderated by MS.

Hypothesis 1: As factors of a queer gender construct, sex, gender and desire are assumed to correlate as factors of a queer gender construct. Detailed assumptions about factor relations are described in Figure 3: whereas gender and desire as well as gender and sex interact in both ways, desire is hypothesized to precede the sex construct. The association from gender to sex is theoretically expected to be stronger, since gender is assumed to create the idea of sex, whereas the idea of sex incorporates and thereby reinforces gender.

Hypothesis 2: Death acceptance is conceptualized as inverted death denial. Since queered gender stereotypes reflect death denial, death acceptance is theoretically expected to inhibit the activation of stereotypes on sex, gender and desire. The more people accept death, the less they are expected to manifest gender stereotypes. Therefore, queer terror management theory posits a negative association between death acceptance and queered gender stereotypes.

Hypothesis 3: The association between death acceptance and queered gender stereotypes is expected to be moderated by MS. When people are reminded of their mortality, higher death

67

acceptance is expected to correlate with less gender stereotype activation in all three factors compared to lower death acceptance. The interactions between death acceptance and MS have not been specified in the theory on death acceptance (Wong, 2008). Death acceptance has recently been proposed to moderate the association between MS and outgroup prejudice (Maj & Kossowska, 2016). By contrast, we assume MS to moderate an association between death acceptance and gender stereotype activation. When mortality is made salient, the activation of stereotypes on sex, gender and desire is expected to increase compared to a control group. However, the levels of death acceptance measured prior to MS set the baseline for the possible impact of MS. A summary of the hypotheses is depicted in a general model of queer terror management theory (Figure 4).

Figure 4

A Moderation Model of Queer Terror Management Theory
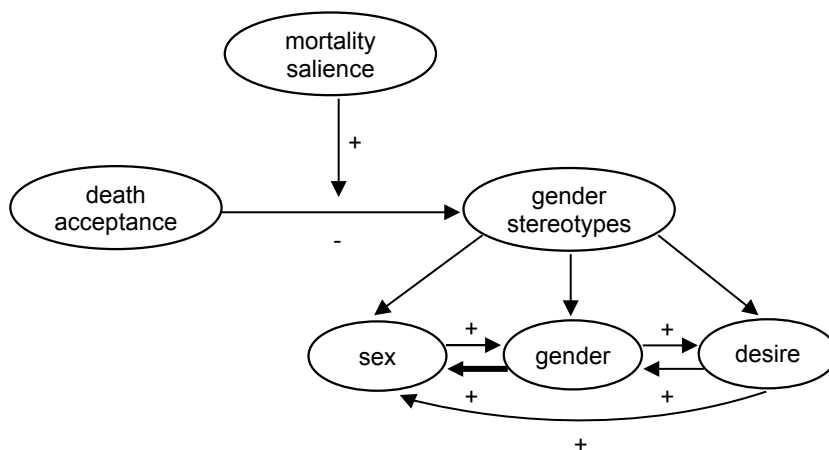
Note. Hypothesized moderation of mortality salience between death acceptance and the activation of queered gender stereotypes.
Sex: the social interpretation of hormones, chromosomes, anatomy;
gender: trait ascription along with social roles and/or sexed bodies;
desire: socially expected sexual orientation; prescriptive heterosexuality.

QTMT conceptually clarifies why people derive gender identities from their surrounding cultures, and why they judge themselves and others upon them. It approximates the origins and

dynamics of gender stereotypes. The theory connects culture and the individual for the case of gender stereotypes, and explains this connection beyond the striving for group membership to feel positively distinct. A queer perspective allows for the integration of prior approaches to gender stereotypes, such as self-categorization, trait ascription, and prescriptive heterosexuality. QTMT provides guidelines for psychosocial intervention in gender stereotypes: if death was accepted rather than denied under MS, the activation of stereotypes on sex, gender and desire is supposed to be inhibited. This inhibition hopefully reduces economic, political, and legal discrimination. Since MS easily triggers antecedents of death anxiety in everyday life, intervention requires a more effective terror management strategy than death denial in the long term. We expect the promotion of death acceptance to reduce the activation of queered gender stereotypes in the long term.

2.6. Conclusion

Gender stereotypes precede globally prevalent gender discrimination. Psychosocial intervention for equal opportunities requires an in-depth understanding of the origins and dynamics of gender. Research on gender complexity and its precursors is therefore indispensable. QTMT reconsiders causes and effects in terror management research on gender stereotypes. In a synthesis of TMT and queer theory, QTMT provides a novel framework for radical intervention in gender stereotypes.

TMT reasons the possible origins of gender stereotypes: gender stereotypes are activated when death anxiety is managed with denial. The per se adaptivity of death denial is questioned, since death denial has predominantly been associated with stereotypes towards the self and others. Death denial is contrasted with the alternative coping strategy of death acceptance. Death acceptance may result in short-term anxiety, but allow for individual self-actualization and social equality in the long-term.

However, terror management research on gender stereotypes needs a queer perspective to understand the dynamics of gender. Prior research on gender stereotypes within and outside of TMT

has often confounded self-categorization and trait ascription (What is sex and/or gender here?), while sexist relational attitudes as the relational part of gender definition (desire in queer theory) have been omitted. These omissions and confusions contradict the responsabilities of psychologists (APA, 2020). QTMT clarifies the confusions between self-categorization and trait ascription in prior research, while prescriptive heterosexuality accounts for the omitted part of relational gender definition. Sex, gender and desire are integrated into a holistic, queer gender concept. This new concept calls for the adaptation of current research measures, and for the invention of new ones.

Vice versa, queer theory needs a terror management perspective to understand the precursors of the dynamics it explains, without losing itself in immortality claims. Death denial in queer theory contradicts the revelation of the power systems that expect the body to have a sex, gender and desire. The subversion of generalizations about the body requires death acceptance. Hence, a more existential queer theory is needed. QTMT provides a synthesis between an existential and a queer perspective. In this novel framework, death acceptance is hypothesized to inhibit the activation of gender stereotypes, while the effect of gender stereotypes is viewed from a queer perspective. The assumed moderation by MS explains alterations of the association, and indicates a basic control condition. With QTMT we aim to tackle the roots of gender stereotypes instead of cropping its branches.

Note that QTMT does not pretend to individualize gender stereotypes. The idea of gender and the resulting stereotypes is created and maintained by patriarchal power systems prior to the person (Butler, 1990). These patriarchal systems influence on the individual. Yet, the individual person is not assumed to be a victim of its surrounding systems, but rather to have certain agency. Agency may be used to agree or disagree with the systems, and to intervene in them on a personal or social level.

2.6.1. Limitations

Investigating death anxiety is an ethically sensitive issue: harm can be done to study participants when their death anxiety is extensively triggered, so they are traumatized. This would contradict the ethical principles for psychologists (APA, 2020). However, research on MS is only associated with the effects TMT expects when the MS trigger is mild (for a meta-analysis, see Burke et al., 2009; Pyszczynski et al., 2015). The most common way to manipulate MS is an essay with two open-ended questions (Burke et al., 2009): "What do you think happens to you as you physically die and once you are physically dead?", and "Please briefly describe the emotions that the thought of your own death arouses in you" (Hirschberger et al., 2002). The essay manipulation is not assumed to traumatize. Furthermore, triggers of MS are found in everyday life, for example by watching the news (Greenberg et al., 1989). When mortality is extremely salient, death cannot be denied anymore, and other mechanisms are assumed to work (Janoff-Bulman, 2006). These mechanisms are associated with death acceptance (Samarel, 1995; Wong, 2008). Yet, they are also associated with psychological trauma (Janoff-Bulman, 2006).

On a personal level, death acceptance has been associated with increased life satisfaction (Wong, 2008). On a social level, death acceptance implies a soothing effect on queered gender stereotypes under MS (Maj & Kossowska, 2016). However, research on the effect of death acceptance on gender stereotypes, and on outgroup prejudice in general, is yet to come. If there was empirical evidence for a reduction of queered gender stereotypes with death acceptance, then this reduction of stereotypes would still not equal a reduction of discrimination in behavior (Fiske, 2000). Even though gender stereotypes are a necessary precondition for behavior discrimination, there are further factors to consider, such as context specificity or behavior control (Ajzen, 1996).

Intervention practice might be limited by its requisites. In the long term, death acceptance promises to serve radical intervention in gender stereotypes and to increase life satisfaction. In the short term however, death acceptance implies a rise in death anxiety. In the process of death

acceptance, death anxiety is accepted and is therefore no longer buffered by symbolic immortality. Excessive death anxiety holds the potential to traumatize, depending on stressor intensity and cognitive coping resources (Folkman et al., 1986). Social support groups and positive mass media use may be resources against the detrimental effects of queer people's marginalization (Pullen, 2014). If people do not possess the necessary resources and contexts, less profound approaches to intervention in gender stereotypes are preferable.

On a cultural level, queer terror management is limited to predominantly white theory from English-speaking, academic contexts. It therefore stems from privileged, very specific contexts that cannot necessarily be generalized to other realities (Kurtiş & Adams, 2015). If scientists do not wish to reinforce discrimination, they need to consider the cultural homogeneity of theories that constitute queer terror management. Although terror management and Butler's queer theory concern cultures with various examples from all over the world, both theories originate from the US. The terror management extension with death acceptance originates from Canada. Cultural homogeneity itself is neither good nor bad, but worth considering to prevent imperialism in science. If QTMT is considered useful for a certain cultural context, then its application requires integration into this context. For an integration beyond translation the consideration of the origins' and destinations' cultural pluralities as well as the collaboration with local experts are necessary (Christopher, Wendt, Marecek, & Goodman, 2014).

2.6.2. Future Research

Empirical evidence for QTMT is required in order to support or reject it, and to determine the extent to which death acceptance potentially influences on queered gender stereotypes. Empirical research can be performed from a quantitative or a qualitative approach. While TMT is usually investigated with quantitative research methods (Burke et al., 2009; Pyszczynski et al., 2015), queer theory as a critical theory is usually investigated with critical qualitative methods, such as discourse analysis (Leap, 2015). A main problem of queer theory is its limited access to an

isolated academic elite. Critical, narrative measures would clearly be appropriate for investigation in QTMT. However, we propose an experimental design for future research in order to broaden the accessibility QTMT to other branches of the social sciences. In alignment with queer theory's central ideas of transversality and intersectionality (Butler, 1990), we aim at making QTMT intelligible on an interdisciplinary level. In terms of methodology, the following quasi-experiment shall show how a queer perspective can, within limits, be applied to quantitative terror management research.

For a possible quasi-experiment, participants with initially higher or lower death acceptance could be recruited. Two points of measurement would be required to inhibit a counterproductive excess of MS (Pyszczynski et al., 2015). MS versus a control condition would be manipulated. After the MS manipulation including a delay, stereotype measures on sex, gender and desire would be applied. Precise questions shall distinguish sex, gender and desire in their specific cultural contexts. Instruments would ideally comprise less biased and less falsifiable implicit measures, along with explicit ones (Greenwald et al., 2009). The analysis of results would question the associations as well as the dissociations between sex, gender and desire.

Overall, people with lower death acceptance under MS would be expected highest in gender stereotype activation. By contrast, people with higher death acceptance in the control condition would possibly show the lowest activation of queered gender stereotypes. If this were the case, first evidence would indicate a reducing effect of death acceptance on the activation of queered gender stereotypes. It would further indicate more constructive ways to manage terror than to deny death. Instead of denying death with social interpretations of biology, we might decide to grow with death acceptance, as individuals and towards egalitarian societies.

CHAPTER 3

QUEER TERROR MANAGEMENT THEORY ON TRIAL: AN INITIAL TEST FOR THE EFFECTS OF DEATH ATTITUDES ON GENDER-RELATED STEREOTYPES

3.1. Abstract

According to queer terror management theory (QTMT), death acceptance inhibits the activation of gender-related stereotypes when controlled for mortality salience (MS). An initial test of QTMT demonstrates that death attitudes beyond denial affect stereotypes on sex, gender and desire. An online test in two waves examined implicit and explicit death attitudes and gender-related stereotypes of 75 US participants. Hypothesis 1 expected stereotypes on sex, gender and desire to form part of a queer gender construct. Results were not conclusive. However, they indicated the obsolescence of binary gender-related demographics and of gender measures that base on warmth versus agency. Consistent with hypothesis 2, results revealed a slight implicit association between death acceptance and less gender stereotypes. By contrast, an increase of hostile sexism towards women with explicit death acceptance suggests a role of anger in the process of death acceptance. Surprisingly, positive death valence as an assumed precursor of death acceptance reduced stereotypes on sex, gender and desire. Death attitudes might hence represent a valuable clue to intervention in gender-related stereotypes. Finally, hypothesis 3 expected a MS effect on gender-related stereotypes. There was no effect of experimental MS or constant death rejection. However, naturally occuring MS increased ambivalent sexism. Results support the idea of an overestimation of the MS effect through publication bias.

Keywords: terror management, queer theory, gender sterreotypes, death acceptance, death valence, mortality salience, intervention

3.2. Introduction

This article examines the infuence of death attitudes and mortality salience (MS) on gender stereotypes. Gender stereotypes include prescriptive heterosexuality and generalizations on the body (Butler, 1990; Glick & Fiske, 1996). The denial of death anxiety triggers gender stereotypes (Greenberg et al., 1986). Queer terror management theory (QTMT; Stiller & Di Masso, 2016) proposes a theoretical framework for radical intervention in gender stereotypes, that accounts for their assumed precursors and mechanisms. Therein, death attitudes represent the precursors of stereotypes, while a queer gender concept, including prescriptive heterosexuality and generalizations on the body, accounts for gender mechanisms. QTMT assumes death acceptance to inhibit gender stereotypes depending on MS. In this article, the theory is put to a first empirical test.

3.2.1. Gender Stereotypes and Mortality Salience

Gender stereotypes are overgeneralized, fixed ideas (Jost & Hamilton, 2005) about being female or male (Brannon, 2017; Wood & Eagly, 2015), and on how the female and the male are interrelated (Marecek et al., 2003). These stereotypes depend on culture (Brannon, 2017; Butler, 1990; Marecek et al., 2003; Wood & Eagly, 2015). When stereotypes are activated, they are more likely to manifest in discriminating behaviour. Patriarchal discrimination grounds on gender stereotypes (Glick & Fiske, 1996). Such discrimination prevails globally on an economic, a legal and on a political level (Glick & Fiske, 1996). The prevalence of gender discrimination is reflected in the following examples. In 2012, women earned 15% less than men on an international average (OECD, 2012). One third of women all over the world experienced physical and/or sexual violence at least once in their lives (WHO, 2013). Furthermore, 19% of US hate crimes in 2010 were motivated by homo- and transphobia (FBI, 2011). Gender stereotypes are further reflected in the limitation of women's political participation to 19% in the US parliament in 2015 (Worldbank, 2015). The promotion of equal opportunities requires intervention in the stereotypes that precede patriarchal discrimination.

76

Stereotypes are more likely to be triggered when people are reminded of their own mortality (Rosenblatt et al., 1989). When mortality is made salient, people apply more stereotypes in work contexts (Hoyt et al., 2011), politics (Hoyt et al., 2009), and in interpersonal contexts (Hirschberger et al., 2002; Schimel et al., 1999). Therefore, mortality salience is an important indicator for intervention in gender-related discrimination. Terror management theory (TMT; Greenberg et al.,1986; Pyszczynski et al., 2015) explains that stereotypes emerge from the denial of death anxiety ("terror"). According to TMT, self-awareness compensates humans' physical weakness in comparison to other species (Greenberg et al., 1986). However, self-awareness holds the potential for paralyzing death anxiety, unless death anxiety is properly managed. To ensure survival, death anxiety must be buffered by feeling "part of something greater than oneself that continues to exist after one's own death" (Pyszczynski et al., 2015, p. 8). This feeling of symbolic immortality emerges when people share cultural worldviews: if people die without sharing their ideas, they die on a biological and on a symbolic level. If, by contrast, they share ideas, people physically die, but symbolically survive. With symbolic immortality, people deny personal consternation with their death.

In TMT, death denial is supposed as the only adaptive strategy to manage death anxiety (Pyszczynski et al., 2015). In the TMT extension of meaning management theory (MMT; Wong, 2008), death acceptance is discussed as an additional strategy to manage death anxiety. Death acceptance may inspire a more meaningful way of life instead of provoking paralyzation (Wong, 2008). If death anxiety was predetermined to paralyze, then people who cannot deny death should exclusively experience negative consequences. People who experience trauma or terminal illness can barely deny death (Janoff-Bulman, 2006; Samarel, 1995), but often experience positive consequences, such as personal and relational growth (Janoff-Bulman & Yopyk, 2004; Tedeschi & Calhoun, 1996; Tedeschi & Calhoun, 2004), self-actualization (Samarel, 1995; Wong, 2008), and higher life satisfaction (Triplett et al., 2012). By contrast, clinical psychology associates the

avoidance of death threat with persistent or increased PTSD symptoms (Ehlers & Clark, 2000; Ullman et al., 2007), as well as with persistant panic- and anxiety disorders (Helbig-Lang & Petermann, 2010; Saniah & Zainal, 2010; Thwaites & Freeston, 2005). In summary, death anxiety can be buffered with death denial in the short-term. In the long-term though, death denial increases death anxiety.

Adaptive coping strategies "do not aim to avoid a ficticious death threat" (Thwaites & Freeston, 2005, p. 180), but to accept unpleasant facts if they cannot be changed (Brandstätter et al., 2013). Death is an unchangeable fact of life. Therefore, it would be adaptive to accept one's own mortality by "being psychologically prepared for the final exit" (Wong et al., 1994, p. 124). Whether MS results in death denial or death acceptance depends on a positive versus a negative focus towards death (Wong, 2008). While the terror management strategy of death denial follows a negative, defensive focus, death acceptance enables a positive, creative focus towards a meaningful and satisfying life (Wong, 2008).

Beyond this individual perspective, a recent theoretical review suggests a reduction of outgroup prejudice, as indicated by gender stereotypes, by means of death acceptance (Maj & Kossowska, 2016). In prior research, MS increased gender stereotypes in work contexts (Hoyt et al., 2011), politics (Hoyt et al., 2009), as well as in interpersonal contexts (Hirschberger et al., 2002; Schimel et al., 1999). These interpersonal contexts included homophobic prejudice (Webster & Saucier, 2011). In these studies, gender stereotypes reflected death denial induced by MS. Death acceptance as inverted death denial (Bassett et al., 2004) is therefore expected to inhibit gender stereotype activation (Maj & Kossowska, 2016). However, the impact of death acceptance on gender stereotypes had not yet been empirically tested. The process towards death acceptance may result in short-term anxiety, and therefore in more intermittent stereotypes, but later on benefit social and personal life.

3.2.2. Extending TMT to the Study of Gender Stereotypes

TMT explains that people deny death by clinging to gender stereotypes as a buffer against death anxiety. Yet, it does not account for the alternative terror management strategy of death acceptance (Wong, 2008). A comprehensive analysis of gender is essential for the understanding of gender stereotypes. TMT comes short of a distinction between self-categorization and trait ascription (e. g., sex versus gender) that is crucial to current gender research (Wood & Eagly, 2015). Neither does TMT account for the relational part of gender definition (prescriptive heterosexuality). Queer theory includes the construct of sex, gendered traits (gender), and prescriptive heterosexuality (desire) as separate factors of a holistic gender construct beyond prior confusions and omissions. We refer to Butler's version of queer theory (1990) for its overarching analysis of sex, gender and desire in comparison to other contributions focussing on homosexuality (Halperin, 2004) or homophobia (Sedgwick, 1993). Gender in queer theory (Butler, 1990) is a system of:

- *sex:* the social interpretation of biological characteristics as binary, including chromosomes, hormones, internal and external genitalia, as well as more visible anatomic aspects,

- *gender:* the ascription of psychological traits along with expected social roles,

- *desire:* socially expected and prescribed sexual orientation, not actual desire and practice.

Expectations about sex, gender and desire can differ upon culture (Butler, 1990). The categories and contents of one culture do not necessarily serve as a default for another (De Saussure, 2004).

Beyond explaining what gender consists of, queer theory describes how gender works. In the mechanisms of gender, the trait expectations shape the idea of a biological sex, so sexed bodies are supposed to comprise gendered traits. Sex incorporates and visibilizes these trait expectations. At the same time, the identification as hetero- or homosexual requires the construct of sex. As a result, gender directly shapes the construct of sex, and indirectly shapes prescriptive heterosexuality.

If MS triggers death denial, then death denial is expected to activate stereotypes on sex, gender and desire, both towards the self and towards others. MS is therefore expected to increase

identification with binary sex categories, ascriptions to feminine- or masculine-interpreted traits, and homophobic prejudice. Hence, without a queer perspective terror management research on gender stereotypes describes the cause of an unclear effect. In turn, TMT with a queer perspective would avoid the reproduction of patriarchal stereotypes in science, respect people's dignity and enable more specific research results (Hegarty & Massey, 2006; Minton, 1997).

Vice versa, queer theory may benefit from TMT and MMT. Some queer theorists conceptualize the body as "endlessly malleable" and immortal (Coll-Planas, 2012, p. 11). This unlimited symbolic deconstruction of the body fails to subvert the mainstream concept of the body that queer theory criticizes. When queer theorists glorify hormones and plastic surgery as a solution against gender discrimination, they neglect the violent emotional pressure to get such surgery, or of the fear to be murdered without bodily changes (Coll-Planas, 2012). They do not only neglect the political potential of gender, but the political potential of our mortality (Coll-Planas, 2012). The subversive potential of queer theory can be notably strengthened by starting to accept death within its conceptualization.

3.2.3. Queer Terror Management Theory

In a synthesis of TMT (Greenberg et al., 1986; Pyszczynski et al., 2015), MMT (Wong, 2008) and a queer perspective (Butler, 1990), we present *queer terror management theory* (QTMT; Stiller & Di Masso, 2016). QTMT suggests the following three hypotheses.

Hypothesis 1: Sex, gender and desire measures are assumed to correlate as factors of a queer gender construct. Detailed assumptions about factor relations are described in Figure 3 (chapter 1, p. 56): whereas gender and desire as well as gender and sex interact in both ways, desire is hypothesized to precede the sex construct. Since gender is assumed to create the idea of sex, the association from gender to sex is expected to be stronger.

Hypothesis 2: Death acceptance is conceptualized as inverted death denial. Since queered gender stereotypes reflect death denial, death acceptance is expected to inhibit the activation of

stereotypes on sex, gender and desire. The more people accept death, the less they are expected to manifest gender stereotypes.

Hypothesis 3: The negative association between death acceptance and queered gender stereotypes is expected to be moderated by MS. When people are reminded of their mortality, higher death acceptance is expected to correlate with less gender stereotype activation compared to lower death acceptance. Death acceptance has recently been proposed to moderate the association between MS and outgroup prejudice (Maj & Kossowska, 2016). By contrast, the activation of stereotypes on sex, gender and desire is assumed to increase under MS compared to a control group. A summary of the hypotheses is depicted in a general model of QTMT (Figure 4, chapter 1, p. 62).

In summary, QTMT tackles the precursors and mechanisms of gender stereotypes. The theory clarifies why people gender their identities, and why they judge themselves and others upon their fit with gender stereotypes. QTMT explains the connection between culture and the individual beyond positively distinct group membership. Its queer perspective allows for the integration of prior approaches to gender stereotypes, such as self-categorization, trait ascription, and prescriptive heterosexuality. Psychosocial intervention departing from QTMT may help to reduce economic, political and legal discrimination upon gender.

3.3. Method

3.3.1. Queered Gender Measures

Precise measures for sex, gender and desire (Mehta & Keener, 2017) are required to preserve human dignity and scientific clarity (APA, 2020; Trott, 2016). Measures may include free response options for gender identity (Ansara, 2015b) - or at least offer cis-, trans-, and non-binary gender categories (Ansara, 2015a; Joel et al., 2014). Specific questions about actual desire and sexual practice may further prevent the generalization of sexual identity to genital-based desire and a time-stable essence in sexual practice (Ansara, 2015b; Mehta & Keener, 2017).

3.3.2. Research Design

A quasi-experiment was conducted in to waves. The quasi-experiment departed from a between-subjects design with one independent variable (naturally varying death acceptance) and one dependent variable (queered gender stereotypes) that is divided into the subconstructs of sex, gender and desire. The assumed moderator variable comprises two groups: MS versus dental pain.

3.3.3. Participants

The quasi-experiment was carried out online via Amazon's Mechanical Turk (MTurk; www.mturk.com). Criteria for participation were a minimum age of 18 years and US residency. In the first wave, 165 MTurk workers participated. Participants with 10% reaction times below 300 ms were excluded for inattentive "wild-clicking" (Carpenter et al., 2017; Greenwald et al., 1998). Furthermore, participants demonstrating a long-term distraction above 10,000 ms were excluded (Carpenter et al., 2017). As a result, 99 MTurk workers' data was considered valid for the first wave (t1: $n = 99$). In the second wave, 89 workers continued to participate. Of these 89, 75 workers' data could finally be used (t2: $n = 75$).

The 75 participants' age ranged from 19 to 63 years ($M = 39$, $SD = 10$). Thirty-five participants described their current gender identity as predominantly feminine, 39 as predominantly masculine, and 1 as non-binary. The sample consisted of 59 Caucasian, 8 Afroamerican, 6 Asian, and 2 Hispanic participants. Their levels of studies and income broadly varied, with a median at a Bachelor's degree and an income of 2-4,000 USD/month. Six of the participants worked or studied in the field of death, five were currently giving terminal care, and 16 had experienced the death of a close relative within the past six months. Most participants were either not religious ($n = 36$) or Christian ($n = 33$). Two participants were Buddhist ($n = 2$), one was Jewish ($n = 1$), and three identified with other religions ($n = 3$: "agnostic", "hermeticist", "spiritual"). No Hindu or Muslim persons participated.

3.3.4. Procedures

Since death acceptance is assumed to be limited (Greenberg et al., 1986; Wong & Tomer, 2011), we pretended to assure its variance by inviting participants from 63 death-related US organizations (firefighters, hospice workers, mortuary students), in addition to the a priori MTurk population. To ensure cultural fit and validity with this study's theoretical foundations and methods, participation was restricted to US residents. Participants were invited via MTurk or by email. MTurk is a crowdsourcing website, which allows social scientists and other requesters to rapidly propose virtual tasks to a diverse worker population against payment (Buhrmester et al., 2011; Mason & Suri, 2012).

The quasi-experiment was presented under the cover story of a study about the influence of community factors on emotional, cognitive and relational experiences including death attitudes. Each wave consisted of surveys and Implicit Association Tests (IAT's, Greenwald et al., 1998). The first wave took ca. 35 minutes and was remunerated with 2.80 USD. The second wave was conducted 7-10 days after the first one to ensure that death-related surveys and IAT's did not represent a separate MS manipulation (Burke et al., 2009). The second wave took ca. 40 minutes and was remunerated with 3.51 USD (3.50 + 0.01 for sending a reminder via MTurk).

Participants in wave 1 were asked for consent and advised that they are free to withdraw their consent at any time. They were then asked to complete an easy calculation task to exclude robots ("How much is three plus two?"), filled in demographic data (age, gender scales, nationality vs. residency, education level, income level, political orientation and religion), answered a few cover story questions (e. g., how well they personally knew their neighbors, and whether they formed part of a social movement), and were inquired about their recent confrontation with death ("Did one of your friends, close relatives [...] die within the past 6 months?", "Do you currently take care of a terminal person?").

Participants were then instructed to the IAT's on their implicit death attitudes, including death anxiety, valence and acceptance. In all the IAT's of this study, categories were demonstrated on the right and left top of the screen. A plus sign in the middle of the screen was used as a placeholder between stimuli. Below the stimuli, an automatic message appeared: "Loading all the content. This should take less than 1 minute." After the death attitude IAT's, participants were presented a survey about their explicit death attitudes, including death fear, acceptance and rejection of death. Finally, they were asked for a participant ID and reminded of the second wave.

In wave 2, participants were asked for informed consent and for their ID. Subsequently they filled in short questionnaires on self-esteem and life satisfaction. MS versus dental pain were then manipulated by answering two standard questions on death versus dental pain with short essays (Birnbaum et al., 2010; Rosenblatt et al., 1989). In the following distraction period, affect was measured as a control variable (Burke et al., 2009). IAT's on sexual identity, sexual prejudice, the valuation of sexual orientations, gender identity and gender prejudice were administered. The IAT's were followed by questionnaires on homonegativity, ambivalent sexism towards men and women, and questions about contact with gay, lesbian, trans, intersex and/or non-binary persons. Finally, participants were debriefed and informed that they are free to withdraw their consent or to ask for further information on the study at any time.

Prior to the quasi-experiment, a pilot study was conducted on MTurk to ensure the correct technical functioning of the instruments (t1: $n = 10$, t2: $n = 7$). In all of the IAT's, the automatic loading message persisted throughout the tests. Since the message could not be removed, participants in the actual quasi-experiment were informed about the reluctance of the message in the instructions of each wave.

3.3.5. Implicit Association Tests

IAT's aim to measure implicit attitudes via reaction times and error rates during stimuli categorization (Greenwald et al., 1998). They have proven to be the so far most reliable, most valid,

and most used implicit measure in social psychology (Bar-Anan & Nosek, 2014; Gawronski & De Houwer, 2014; Greenwald et al., 2009). IAT's for death attitudes and gender stereotypes have been created via Shiny (https://applibs.shinyapps.io/iatui2/), integrated into Qualtrics (www.qualtrics.com) and uploaded to MTurk. Each IAT consisted of seven blocks. Latencies between the stimuli were fixed to 150 ms. For each error, a penalty of 600 ms was added (Greenwald et al., 2003). Subsequently, *D* scores were calculated: mean differences divided by inclusive standard deviations of blocks 3 and 6 were averaged with mean differences divided by inclusive standard deviations of blocks 4 and 7 (Lane et al. 2007). Faster reaction times indicate stronger associations between the concepts of each IAT (Greenwald et al., 1998).

3.3.6. Death Measures

The Death Attitude IAT (Bassett & Dabbs, 2003) has been applied to measure death anxiety (anxious, calm), death valence (good, bad), and death denial (self, other). The dimension of denial represents inverted death acceptance (Bassett et al., 2004). This dimension combines death- versus life-related words with self- versus other-related words under the assumption that a faster combination of death and self indicates higher death acceptance (Bassett et al., 2004). Anxiety and valence were measured as possible covariates.

Explicit measures are recommended as additional measures for IAT's in order to differentiate levels of consciousness in the process of attitude formation (Greenwald et al., 2009). Differences in implicit and explicit measures have been demonstrated for a variety of attitudes, such as death attitudes (Bassett & Dabbs, 2003) or gender stereotypes (Rudman & Glick, 2001). On an explicit level, death acceptance and other death attitudes have been measured with the Multidimensional Orientation toward Dying and Death Inventory (MODDI-F; Wittkowski, 2001). The MODDI-F is one of the few multidimensional instruments that is also valid for non-clinical contexts in the US (Wittkowski, 2001; MacDougall & Farreras, 2016). The inventory comprises 47 items loading on 3 dimensions: fear of death (e. g., "I am frightened by the idea that all my thoughts and feelings will

stop when I am dead"), death acceptance (e. g., "I have a positive attitude to the process of dying as a necessary stage in my life"), and rejection of one's own death (e. g., "Inwardly, I protest against the fact that I will be dead someday"). Cronbach's Alpha of the dimensions reached from $\alpha = .82$ till .92 in a previous study (MacDougall & Farreras, 2016). Fear of death was measured as a possible covariate for death anxiety (Lehto & Stein, 2009), and rejection of death as a possible covariate for death denial. Items were answered on a scale from 1 (*strongly disagree*) to 4 (*strongly agree*). Each dimension was calculated by mean values of the corresponding items. Higher values indicate higher acceptance, rejection or anxiety.

3.3.7. Self-Esteem

State self-esteem has been measured as a possible covariate, since participants with lower self-esteem might show a higher activation of gender stereotypes (Greenberg et al., 1986; Rosenblatt et al., 1989). However, self-esteem may buffer death anxiety prior to MS (Pyszczynski et al., 2004). To not extensively trigger self-esteem, the Single-Item Self-Esteem Scale has been administered (SISE; Robins et al., 2001). The scale, inspired by the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), consists of one item: "I have high self-esteem" that was answered on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The SISE has previously shown a convergent validity of $r = .69$ with the RSE, as well as good discriminant validity via similar correlations with domain-specific self-evaluations on personality scales, and peer-rated group behavior (Robins et al., 2001). Higher values indicate higher self-esteem.

3.3.8. Life Satisfaction

Global life satisfaction was considered as a possible covariate for its expected positive association with death acceptance (Wong, 2008). The 5-item Satisfaction with Life Scale (SWLS; Diener et al., 1985) has been administered prior to MS manipulation, with items like "I am satisfied with my life". The SWLS had previously shown a test-retest reliability of $\alpha = .87$ (Pavot & Diener, 1993). High correlations with other measures of subjective well-being (e. g., $r = .54$ with

Rosenberg's Self-Esteem Scale) indicate the SWLS's convergent validity, whereas low correlations indicate discriminant validity (Pavot & Diener, 1993). A sum score of the items was calculated. Higher values indicate higher satisfaction with life.

3.3.9. Mortality Salience Manipulation

The Mortality Attitudes Personality Survey (MAPS; Rosenblatt et al., 1989) was passed to trigger death-awareness. It consists of two open-ended questions: "What do you think happens to you as you physically die and once you are physically dead?" and "Please briefly describe the emotions that the thought of your own death arouses in you" (Birnbaum et al., 2010). The questions were answered in short essays (50-1,000 words). Participants in the control condition received identical questions about dental pain to test whether results vary between different types of threat (Burke et al., 2009). The MAPS is the so far most reliable manipulation for MS (Pyszczynski et al., 2015), if followed by a 2-6 minute distraction task that allows death-awareness to create an unconscious anxiety buffer (Burke et al., 2009; Pyszczynski et al., 1999). The Positive and Negative Affective Schedule (PANAS-X; Watson & Clark, 1994) was applied as the most used distraction task (Burke et al., 2009). In this task, participants were asked to which extent they felt cheerful, sad, calm, distressed, etc. during the last week on a scale from 1 (*very slightly*) to 5 (*extremely*). If death was denied, no significant differences in negative affect would be expected between MS and dental pain (Pyszczynski et al., 1999; Pyszczynski et al., 2015). More positive versus negative affect are indicated by higher mean scores of the corresponding items.

3.3.10. Implicit Measures on Sex, Gender and Desire

Gender stereotypes in QTMT are defined along three subdimensions: sex, gender and desire. Queer measures for this construct would be fundamental, but do unfortunately not yet exist. Since the primary objective of the present research is to test QTMT hypotheses, the limited existing measures were applied to be interpreted from queer perspective afterwards. Implicit stereotypes on sex, gender and desire were measured with IAT's (Greenwald et al., 1998).

3.3.10.1. IAT's on Sexual Identity and Sexual Prejudice

Consistent with the notion that "sex [... has] been gender all along" (Butler, 1990, p. 8), the Gender Self-Concept IAT assigns self-related words (e. g., I, me, mine) versus other-related words (e. g., they, theirs, other) to concepts of female (female, woman, girl, she) and male (male, man, boy, he; Greenwald et al., 2002). One word pair (lady versus sir) was excluded for its reference to gender roles instead of sex. The Gender Self-Concept IAT tests perceived group membership. An additional Gender Attitude IAT is expected to reveal in-group favoritism versus out-group derogation by combining female versus male words with positive versus negative words (e. g., joy, happy, smile versus agony, stink, filth; Greenwald et al., 2002, p. 11). The more a person identifies with a sex construct, the more positively would the rating of this sex be expected, especially in the case of women (Rudman & Goodwin, 2004).

3.3.10.2. IAT's on Gender Identity and Gender Prejudice

In the Gender Stereotype IAT, six agentic versus six communal traits (e. g., independent, competitive versus communal, cooperative) were combined with female- versus male-associated words (woman, girl, she versus man, boy, he). Although the original version of the Gender Stereotype IAT associated female versus male names (Rudman & Glick, 2001), it is recommended to replace the names with female versus male words that avoid an own-name bias (L. A. Rudman, personal communication, December 30, 2017). In the past, more agentic traits were ascribed to men and more communal traits to women. Today, women are still perceived as more communal despite women and men being valued as equally agentic (Wood & Eagly, 2015). A further IAT on gender self-stereotyping combined feminized traits (e. g., warmth) versus masculinized traits (e. g., competitiveness) with self- versus other-related words (Greenwald & Farnham 2000).

3.3.10.3. IAT on Desire

To measure homonegativity, a variation of the Homosexuality IAT was applied (Banse et al., 2001). As in the original test, participants were instructed to associate stimuli for homosexual or

heterosexual with good or bad words (e. g., cheerful, enjoy versus angry, despise). However, words instead of pictures were used as stimuli for homo- versus heterosexual (e. g., gay, lesbian versus heterosexual, straight). Reaction times and error rates indicated implicit stereotypes towards binarized sexual orientation*.*

3.3.11. Sex Demographics

The social construct of sex has been measured with explicit questions on demographic data: "At birth, my physical sex was identified as: female, male, intersex"; "My sex at birth was supposedly assigned upon: external genitalia, internal genitalia, chromosomes, hormones (multiple responses possible)", and: "Today, my physical sex is identified as: female, male, intersex". These questions refer to physical attributes at certain points in time, instead of being a certain sex.

3.3.12. Explicit Gender Measures

Participants were asked to indicate the intensity of their personal current gender identity on a thermometer scale (0-100): "I feel like a woman / a man / free space". For the explicit measure of gender stereotypes, the Ambivalent Sexism Inventory (ASI; 2 x 11 items; e. g., "Women are too easily offended"; Glick & Fiske, 1996) as well as of the Ambivalent Attitudes toward Men Inventory (AMI; 2 x 10 items; e. g., "Men act like babies when they are sick"; Glick & Fiske, 1999) were applied. Both, ASI and AMI, are divided into benevolent and hostile sexism. Mean scores of the corresponding items indicate higher ambivalent sexism. In a study across 16 nations (Glick et al., 2004), ASI and AMI showed acceptable reliabilities (ASI hostile sexism: α =.82, ASI benevolent sexism: α =.77; AMI hostile attitudes: α = .76, AMI benevolent attitudes: α = .77). Both remain widely used instruments for the explicit measure of sexist attitudes (Glick et al., 2004; Kilmartin et al. 2015; Roets et al., 2012; Zawadzki et al. 2014).

3.3.13. Explicit Desire Measures

Sexual orientation is often understood as an internal disposition, as a time-stable preference for having sex with either men or women (Ansara, 2015b; Bem, 1995; Butler, 1990). Accordingly, it

is measured with binary answering options that presume the existence of binary sexes, genders and desires. Asking participants for whether they are hetero- or homosexual reinforces stereotypes on sex, gender and desire (Butler, 1990). It fosters political inequality instead of depicting actual preferences. We have therefore measured prescriptive heterosexuality and contrasted it with actual desire. Participants were asked about their actual sexual orientation with thermometer scales in the demographic data section: "I feel sexually attracted to: men / women / trans persons / adult human beings / minors / things / noone and nothing". Multiple responses were possible.

Participants were hence asked about their attitudes towards homosexuality with the Modern Homonegativity Scale (MHS; Morrison & Morrison, 2002). The scale consists of 12 items on prejudice towards lesbian women, and 12 items on prejudice towards gay men ($\alpha = .93$; e. g., "Lesbian women / Gay men have become far too confrontational in their demand for equal rights"). Higher sum scores indicate more homonegativity. The MHS is applied to measure contemporary homonegativity beyond traditional stereotypes about homosexuality.

3.4. Results

3.4.1. Reliability

Good internal consistency for the MODDI-F was demonstrated in this sample, with $\alpha = .87$ for the global inventory, $\alpha = .96$ for the fear dimension ($M = 2.56$, $SD = 0.74$), $\alpha = .95$ for death acceptance ($M = 2.53$, $SD = 0.88$) and $\alpha = .88$ for rejection of death ($M = 2.38$, $SD = 0.88$). The reliability of the SISE could not be tested since it only consists of one item at one point of measurement ($M = 3.64$, $SD = 1.34$). The SWLS ($\alpha = .93$, $M = 22.11$, $SD = 8.35$), the positive PANAS-X dimension ($\alpha = .93$ $M = 3.39$, $SD = 0.89$), and the negative PANAS-X dimension ($\alpha = .92$, $M = 1.59$, $SD = 0.69$) revealed excellent internal consistencies. Good reliability was further demonstrated for the ASI global inventory ($\alpha = .89$, $M = 2.42$, $SD = 0.75$), including the dimensions of benevolent sexism ($\alpha = .93$, $M = 2.34$, $SD = 1.04$) and hostile sexism ($\alpha = .89$, $M = 2.51$, $SD = 0.93$) towards women. The AMI revealed good reliabilities for the global inventory ($\alpha = .92$; $M = $

2.51, *SD* = 0.80), as well as for benevolent sexism (α = .88, *M* = 2.44, *SD* = 0.98) and hostile sexism

(α = .88, *M* = 2.58, *SD* = 0.86) towards men. The MHS showed good reliability on a global level (α

= .86, *M* = 67.67, *SD* = 16.56), and acceptable reliabilities for modern homonegativity towards gay

men (α = .73; *M* = 34.16, *SD* = 8.67) and lesbian women (α = .69, *M* = 33.51, *SD* = 8.12).

3.4.2. Data Distribution

Significant Shapiro-Wilk tests indicated non-normal distributions for the IAT's on death

anxiety and death acceptance, for the MODDI-F dimensions of explicit death acceptance and death

rejection, as well as for SISE, SWLS, the negative affect dimension of PANAS-X, the AMI

dimension of benevolent sexism, the entire ASI, and the entire MHS. By contrast, IAT's for death

valence, IAT's for stereotypes on sex, gender and desire, as well as the MODDI-F dimension of

fear, the AMI dimension of hostile sexism, the AMI total score and the positive affect dimension of

PANAS-X were normally distributed. An overview of the Shapiro-Wilk test results is presented in

Table 1 (see Appendix 1).

3.4.3. Validity

Explicit rejection of death conceptionally equals death denial and therefore represents

inverted death acceptance. Convergent validity for the MODDI-F in this sample is supported by

high two-sided Spearman correlations (Spearman's rho: ρ) between explicit death acceptance and

death rejection, $\rho(74) = -.702, p < .001$, between explicit death rejection with more fear of death,

$\rho(74) = .773, p < .001$, and between explicit death acceptance and death anxiety, $\rho(74) = -.694$,

p < .001. By contrast, implicit death attitudes revealed rather weak correlations, indicating the

discriminant validity between the subtests. Implicit death anxiety was slightly associated with death

acceptance, $\rho(72) = .273, p = .019$. A more positive implicit death valence was associated with less

implicit death anxiety, $\rho(73) = .387, p = .001$, and with more implicit death acceptance, $\rho(72) =$

.271, $p = .020$. Implicit and explicit death attitudes were not significantly correlated (see Table 2 in

Appendix 1).

The construct validities of the gender measures are implied by the results on hypothesis 1. Convergent validities for the covariate measures of self-esteem, life satisfaction and positive versus negative affect for this sample were indicated by the comparatively high correlations between self-esteem and life satisfaction, $\rho(74) = .614$, $p < .001$, positive and negative affect, $\rho(74) = -.330$, $p = .004$, positive affect and life satisfaction, $\rho(74) = .544$, $p < .001$, as well as between positive affect and self-esteem, $\rho(74) = .443$, $p < .001$. By contrast, discriminant validity for negative affect is supported by the weak associations between negative affect and less life satifaction, $\rho(74) = -.286$, $p = .013$, as well as between negative affect and less self-esteem, $\rho(74) = -.332$, $p = .004$.

3.4.3. Preliminary Analyses

Associations of the non-normally distributed demographic data with death- and gender measures were explored in two-sided Spearman correlations. Differences in the distribution of demographic data (age, ethnicity, level of education, income level, political identity, religiousness) between the MS group and the dental pain control condition were verified with Mann-Whitney U-tests.

Participants' age was neither associated with implicit death acceptance, $\rho(72) = -.033$, $p = .791$, nor with explicit death acceptance, $\rho(74) = .134$, $p = .252$. However, age significantly differed between the MS group ($M = 42.14$, $SD = 11.08$) and the control condition ($M = 36.37$, $SD = 7.68$), $U = 477.00$, $p = .017$. Furthermore, age was associated with implicit sexual prejudice scores, $\rho(73) = -.305$, $p = .008$, meaning that older participants associated pleasant more with female than with male. Moreover, older age was associated with slightly increased explicit homonegativity, $\rho(74) = .243$, $p = .036$.

Ethnicity, level of education, and income level did not affect death acceptance or any other measure for sex, gender and desire (see Table 3 in Appendix 1). There was no significant difference in the distribution of ethnicity, $U = 669.50$, $p = .620$, education, $U = 542.00$, $p = .069$, or income, $U = 605.00$, $p = .274$, between the MS group and the control condition. Political identity was not

associated with implicit death acceptance, $\rho(72) = .006$, $p = .961$, explicit death acceptance, $\rho(74) = -.057$, $p = .629$, or MS, $U = 592.00$, $p = .229$. However, a more liberal political identity was significantly correlated with less implicit homonegativity, $\rho(73) = .232$, $p = .047$, less explicit homonegativity, $\rho(74) = -.686$, $p < .001$, as well as with less ambivalent sexism towards women, $\rho(74) = -.574$, $p < .001$ and men, $\rho(74) = -.322$, $p = .005$.

Christian versus non-religious participants did not significantly differ in implicit death acceptance, $U = 541.50$, $p = .816$, or explicit death acceptance, $U = 466.00$, $p = .124$. Other religions could not be compared due to the small sample sizes. In the MS group, there were 18 non-religious persons, 14 Christians, 2 Buddhists, 2 people of other religions, and 1 Jewish person. In the dental pain control group, there were 18 non-religious persons, 19 Christians, and 1 person with another religion. Christian versus non-religious participants did not differ in implicit stereotypes on sex, gender and desire (see Table 4 in Appendix 1). However, Christian participants held more explicit gender-related stereotypes (see Table 4).

The intensity of religiousness varied between 1 (*strongly*) and 4 (*not at all*). In two-sided Spearman correlations, there was no association between intensity of religiousness and implicit death acceptance, $\rho(72) = .074$, $p = .536$. However, less religious participants expressed less explicit death acceptance, $\rho(74) = -.276$, $p = .016$. Intensity of religiousness did not differ between the MS group and the control condition, $U = 686.00$, $p = .842$. It did not affect implicit gender measures either (see Table 5 in Appendix 1). However, less intensity of religiousness was associated with less ambivalent sexism towards women, $\rho(74) = -.564$, $p < .001$, with less ambivalent sexism towards men, $\rho(74) = -.512$, $p < .001$, and with less explicit homonegativity, $\rho(74) = -.543$, $p < .001$.

3.4.5. Hypothesis 1

Sex, gender and desire were assumed to be factors of a queer gender construct. After the initially recruited 165 participants downsized to 75, the option to run a factor analysis had to be discarded. Instead, associations between the normally distributed IAT scores for sexual identity,

sexual prejudice, homonegativity, gender identity, and gender prejudice were analyzed with Pearson correlation coefficients. Since QTMT only accounts for one possible direction of the associatons, correlations base on one-sided hypothesis-testing. To ensure inhowfar possible real-world effects can be found by the applied statistical analyses, we ran power analyses. A priori calculations of statistical power with G*Power 3.1 (Faul et al., 2007) demonstrated that in order to detect statistically significant ($\alpha = .005$), large effect sizes in the population ($r = .500$; Cohen, 1988, p. 79-80) a sample size of $N = 38$ would be sufficient, while medium effect sizes ($r = .300$) would be detectable as of $N = 115$, and small effect sizes ($r = .100$) as of $N = 1077$. By contrast, the given sample size of $N = 75$ only reached a statistical power of $1 - \beta = .215$ instead of the aspired .950 for the detection of small effect sizes, and of $1 - \beta = .842$ for the detection of medium effect sizes. According to post hoc analyses, the given sample size can exclusively detect high effect sizes with an adequate statistical power of $1 - \beta = .999$. Scores for the IAT's on sexual identity, sexual prejudice, homonegativity, gender identity, and gender prejudice were expected to highly correlate with each other.

3.4.5.1. Implicit Results

The IAT scores for sexual identity (Greenwald et al., 2002) revealed a very slight tendency to combine male with self faster than female with self ($M = 0.10$). Yet, variation between participants' sexual identity IAT scores was high ($SD = 0.70$). IAT scores for sexual prejudice (Greenwald et al., 2002) compared the fastness to combine male and pleasant (positive score if faster) or female and pleasant (negative score if faster). The sample showed highly varying scores with a slight tendency to value the female as more pleasant ($M = -0.22$; $SD = 0.62$). Homosexuality IAT scores (Banse et al., 2001) indicated a slight tendency to faster combine homosexual with bad compared to good ($M = -0.45$; $SD = 0.53$). Gender identity IAT scores (Greenwald & Farnham 2000) revealed almost no preference to either combine self versus other with male- versus female designated words, such as warmth or competitiveness ($M = 0.07$, $SD = 0.54$).

An independent t-test revealed that gender identity IAT scores did not significantly differ upon explicit gender identity retrieved from the demographic data for feminine (IAT score: $M = 0.12$, $SD = 0.63$) versus masculine identified participants (IAT score: $M = 0.05$, $SD = 0.44$), $t(58.23) = 0.56$, $p = .577$. By contrast, the sample was not sufficient to calculate possible differences or similarities in trans ($n = 0$) and/or non-binary people ($n = 1$). IAT scores for gender prejudice (Rudman & Glick, 2001) showed a slight tendency to faster combine female with comunal and male with agentic compared to female with agentic and male with comunal ($M = 0.18$, $SD = 0.40$). All of the variance scores exceeded their mean score amounts.

Correlations between sexual identity and sexual prejudice, between sexual identity and homonegativity, as well as between sexual prejudice and homonegativity were significant, while gender identity and gender prejudice were not significantly correlated, $r(68) = .013$, $p = .457$. Neither did homonegativity correlate with gender identity, $r(72) = .056$, $p = .318$, nor with gender prejudice, $r(68) = -.053$, $p = .333$. The theoretical assumption of a strong association between gender and sex could therefore not be corroborated with the applied implicit measures in the given sample size.

One-sided Pearson correlations revealed an association between sexual identity and sexual prejudice, $r(73) = .604$, $p < .001$. The association shows that the more a person identified as male, the more they associated male but not female with pleasant. The association between sexual identity and homonegativity, $r(73) = -.309$, $p = .004$, was negative in accordance with the expectation that male identification was associated with more homonegativity (Banse et al., 2001; Morrison & Morrison, 2002). By contrast, a negative association between sexual prejudice and homonegativity, $r(73) = -.328$, $p = .002$, indicated that a more positive valuation of the male (compared to the female) was associated with more homonegativity.

3.4.5.2. Explicit Results

The non-normally distributed explicit measures for sex, gender and desire were analyzed with Spearman's rho. Since QTMT only accounts for one possible direction of the associations, correlations base on one-sided hypthesis-testing. Sex at birth and sex now in this sample correlated at $\rho(74) = 1$, $p < .001$. By contrast, the felt identification as feminine or masculine varied between, but also within males and females (see Table 6). After verification of the test requirements via Shapiro-Wilk tests and non-parametric Levene tests, we applied Mann-Whitney U-tests to check whether the intensity of gender identification depended on sex at birth. Shapiro-Wilk tests had indicated non-normal distributions for the felt identification as feminine by females, $W(35) = .439$, $p < .001$, and males, $W(37) = .326$, $p < .001$, as well as for the felt identification as masculine by males, $W(40) = .445$, $p < .001$, and females, $W(32) = .409$, $p < .001$. Non-parametric Levene-tests basing on Medians with adjusted degrees of freedom had resulted as non-significant for feminine identification, $F(1, 58.29) = 0.07$, $p = .786$, and for masculine identification, $F(1, 54.77) = .0.49$, $p = .485$. Results showed that feeling feminine or masculine significantly depended on sex at birth, while feeling as a different gender identity did not depend on sex assignment.

Table 6

Gender Identification upon Sex Assigned at Birth

	Male			Female			Mann-Whitney U	
	n	*M*	*SD*	*n*	*M*	*SD*	*U*	*p*
Feel feminine	37	4.54	15.94	35	96.31	9.76	2.50	< .001
Feel masculine	40	96.05	10.46	32	6.34	18.12	6.00	< .001
Feel other	26	2.00	10.20	26	5.96	18.07	287.50	.096

Note. Sex at birth is divided upon the only ocurring groups in this sample. Feeling feminine, masculine or other was measured with a gender thermometer from 0 (*not at all*) till 100 (*very much*) for each scale.

In a one-sided Spearman correlation, stereotypes against women (ASI total score) were positively associated with stereotypes against men (AMI total score), $\rho(74) = .782$, $p < .001$. Furthermore, ambivalent sexism towards women was highly associated with homonegativity, $\rho(74) = .705$, $p < .001$, while the correlation between ambivalent sexism towards men and homonegativity was medium-sized, $\rho(74) = .552$, $p < .001$. In order to verify the association between sex at birth and the total scores for ASI, AMI and MHS, Mann-Whitney U-tests were calculated (see Table 7 in Appendix 1). Only the AMI total score significantly differed upon sex at birth, indicating slightly more ambivalent sexism towards men in persons assigned female at birth. Similarly, a more feminine identification was associated with a higher AMI total score, $\rho(71) = .231$, $p = .026$. In turn, a more masculine identification was associated with a lower AMI score, $\rho(71) = -.288$, $p = .007$. Interestingly, participants who identified less as a binary gender also held slightly more stereotypes towards men, $\rho(51) = .295$, $p = .017$. By contrast, neither ASI nor MHS total scores were correlated with how much participants felt as men, ASI: $\rho(71) = -.058$, $p = .315$; MHS: $\rho(71) = .000$, $p = .499$, women, ASI: $\rho(71) = .016$, $p = .446$; MHS: $\rho(71) = .054$, $p = .326$, or another gender identity, ASI: $\rho(51) = .140$, $p = .161$; MHS: $\rho(51) = -.003$, $p = .491$.

3.4.5.3. Covariate Analyses

Sexual orientation was explored as a possible influence factor in implicit and explicit gender measures. Results are displayed in Table 8. In two-sided Spearman correlations, attraction to women was moderately associated with an implicit bias to identify as male, to implicitly view the female as less pleasant than the male, and to demonstrate slightly more ambivalent sexism towards men. Attraction to men was moderately associated with an implicit bias to identify as female and to implicitly view the male as less pleasant than the female. Attraction to trans persons was not significantly associated with implicit or explicit gender stereotypes. By contrast, attraction to other gender identities was associated with a slight implicit preference for male as well as with more ambivalent sexism towards women and men.

The relationship between explicit sex measures and actual desire was calculated with Mann-Whitney U-tests (see Table 9 in Appendix 1) after previous Shapiro-Wilk tests had indicated non-normal distribution (Table 9) and non-parametric Levene-tests had indicated equal variances between males and females for attraction to women, $F(1, 66.75) = 1.78$, $p = .186$, to men, $F(1, 67.04) = .432$, $p = .513$, to trans persons $F(1, 72) = .120$, $p = .730$, and to other persons or things, $F(1, 62.05) = .381$, $p = .539$. Although male sex at birth was associated with more attraction to women, and female sex at birth with more attraction to men, results demonstrate considerable variation in attraction to women, men, trans persons, and further sexes or genders.

Table 8

Spearman Correlations between Sexual Attarction and Gender Stereotypes.

	Attraction to women			Attraction to men			Attraction to trans people			Attraction to other		
	n	Rho	p	n	Rho	p	n	Rho	p	n	Rho	p
IAT for sexual identity	74	.677**	< .001	74	-.663**	< .001	73	.000	.997	70	.002	.986
IAT for sexual prejudice	74	.519**	< .001	74	-.486**	< .001	73	.167	.158	70	.255*	.033
Homosexuality IAT	74	-.167	.154	74	.220	.060	73	.227	.054	70	.150	.214
IAT for gender identity	73	-.114	.337	73	.062	.604	72	.091	.449	69	.212	.081
IAT for gender prejudice	69	.124	.312	69	-.043	.725	68	.009	.941	65	-.262	.063
Ambivalent sexism (w)	75	-.075	523	75	.026	.827	74	.041	.729	71	.385**	.001
Ambivalent sexism (m)	75	-.236*	.041	75	.142	.224	74	.040	.735	71	.427**	< .001
Modern homonegativity	75	-.045	.702	75	-.029	.805	74	-.182	.121	71	.212	.077

Note. ** $p < .001$, * $p < .05$. Attraction to (cis) women or men refers to sexual attraction to women or men whose sex assigned at birth coincides with their gender identity. Attraction to trans people refers to sexual attraction to women or men whose gender identity coincides with gender expectations for the opposite sex. Attraction to other refer to further persons or things. Attraction scales reach from 0-100. Multiple choices are possible. Ambivalent sexism (w) represents scores for ambivalent sexism towards women (Glick & Fiske, 1996), Ambivalent sexism (m) the scores for ambivalent sexism towards men (Glick & Fiske, 1999).

The relationship between explicit gender- and desire measures was calculated with two-sided Spearman correlations. The more participants felt like women, the less they were attracted to women, $\rho(71) = -.831$, $p < .001$, and the more to men, $\rho(71) = .782$, $p < .001$. Attraction to trans identities, $\rho(70) = -.106$, $p = .380$, and further identities, $\rho(67) = .073$, $p = .555$, did not correlate with a more feminine identification. The more participants felt like men, the less they were attracted to men, $\rho(71) = -.804$, $p < .001$, and the more to women, $\rho(71) = .853$, $p < .001$. Attraction to trans identities, $\rho(70) = .142$, $p = .238$, and further identities, $\rho(67) = -.001$, $p = .994$, was not siginificantly correlated with a more masculine identification. By contrast, the more participants identified as a different gender identity, the more they were attracted to trans persons, $\rho(50) = .529$, $p < .001$ and further gender identities, $\rho(49) = .729$, $p < .001$. Participants who rather idenitfied as a different gender identity were not siginificantly more attracted to either men, $\rho(51) = .098$, $p = .489$, or women, $\rho(51) = -.127$, $p = .368$.

Contact with people who contradict the norms on sex, gender and desire might affect implicit and explicit gender measures (Pettigrew & Tropp, 2006). Hence, contact with gay, lesbian, trans, intersexual or non-binary (LGTIQ) people was tested as a possible influence factor on gender stereotypes. Further genders or sexualities were not contemplated in order to maintain comparability with the remaining measures. Participants' number of contacts ($N = 75$, $M = 3.92$, $SD = 2.53$) is shown in Table 10.

Table 10

Participants' Contacts with Gay, Lesbian, Trans, Intersex and/or Non-binary People

	Gay	Lesbian	Trans	Intersex	Non-binary
Family members	21	16	3	3	5
Friends	38	30	15	4	10
Acquaintances	58	45	24	7	15

Note. Numbers indicate the number of familiy members, friends and acquaintances.

Subsequently, a sum score of LGTIQ contacts per person was contrasted with implicit and explicit gender-related measures. The non-normally distributed sum score, $W(75) = .924, p < .001$, was not associated with implicit sexual identity, $\rho(73) = -.228, p = .051$, sexual prejudice, $\rho(73) = -.184, p = .116$, gender identity, $\rho(72) = .147, p = .213$, or gender prejudice, $\rho(68) = -.034, p = .784$ in two-sided Spearman correlations. However, the more LGTIQ contacts people had, the less implicit homonegativity they demonstrated, $\rho(73) = .325, p = .005$. People with more LGTIQ contacts further showed less explicit homonegativity, $\rho(74) = -.322, p = .005$, and less ambivalent sexism towards women, $\rho(74) = -.290, p = .011$. This finding coincides with intergroup contact theory, by which contact on average reduces prejudice (Pettigrew & Tropp, 2006).

3.4.6. Hypothesis 2

Death acceptance is assumed to inhibit the activation of stereotypes on sex, gender and desire. Therefore, a negative association between implicit and explicit measures for death acceptance and queered gender stereotypes was expected. Since hypothesis 1 of a queer gender construct could not be corroborated, results for stereotypes on sex, gender and desire were analyzed separately.

Analyses with G*Power 3.1 (Faul et al., 2007) for linear regression with R² increase, two variables and the given sample size ($N = 75$) revealed a statistical power of $1 - \beta = 0.227$ for small effect sizes ($f^2 = .020$; Cohen, 1988, p. 413-414), of $1 - \beta = .911$ for medium effect sizes ($f^2 = .150$) and of $1 - \beta = .999$ for large effect sizes ($f^2 = .350$). In order to detect small effect sizes, a sample of 652 participants would have been necessary.

3.4.6.1. Implicit Results

One-sided Spearman correlations showed no significant results for implicit death acceptance scores combined with IAT scores for sexual identity, $\rho(71) = -.064, p = .296$, sexual prejudice, $\rho(71) = -.037, p = .379$, homonegativity, $\rho(71) = .157, p = .094$, or gender identity, $\rho(70) = .121, p = .156$. However, a slight association was found between death acceptance scores and the

scores for implicit gender prejudice, $\rho(66) = -.207$, $p = .046$. As expected in hypothesis 2, this result implies that the more participants accepted death, the more they were able to combine female with agentic and male with communal instead of clinging to the reverse gender stereotypes.

3.4.6.2. Explicit Results

Since most explicit measures were non-normally distributed and a unilateral hypothesis was proposed, Spearman's one-sided rho was calculated. Against the hypothesis, explicit death acceptance was associated with significantly more ambivalent sexism towards women, $\rho(74) = .261$, $p = .012$, but not with ambivalent sexism towards men, $\rho(74) = .108$, $p = .178$, or with homonegativity, $\rho(74) = .187$, $p = .054$. In bootstrapped linear regression analysis, explicit death acceptance predicted the total ASI score, $\beta = .289$, $t(73) = 2.58$, $p = .012$, explaining 8.3% of variance in ambivalent sexism towards women, $R^2 = .083$, $F(1, 73) = 6.65$, $p = .012$. The association mostly based on hostile sexism, $\rho(74) = .214$, $p = .033$, and less on benevolent sexism, $\rho(74) = .201$, $p = .042$.

3.4.6.3. Covariate Analyses

Implicit death anxiety as an assumed distal precursor of gender-related stereotypes was not associated with scores for implicit sexual identity, $\rho(72) = -.152$, $p = .200$, sexual prejudice, $\rho(72) = -.064$, $p = .593$, homonegativity, $\rho(72) = .108$, $p = .364$, gender identity, $\rho(71) = .129$, $p = .280$, or gender prejudice, $\rho(67) = -.107$, $p = .387$. Explicit fear of death and death denial were tested as possible covariates. Neither death anxiety nor death denial were significantly associated with the explicit gender stereotype scores of ASI, AMI, MHS or with the gender thermometer (see Table 11 in Appendix 1). By contrast, the covariate of implicit death valence showed significant correlations with IAT's for sexual identity, homonegativity, and gender prejudice. Since the IAT's for death valence and gender were normally distributed, two-sided Pearson correlations were calculated for exploratory purposes. A negative correlation between the IAT scores for death valence and sexual identity, $r(72) = -.274$, $p = .019$, indicated that the faster people associated death with good, the

faster they associated self with female (in contrast to patriarchal othering of the female). In linear regression analysis, implicit death valence predicted implicit sexual identity, β= -.274, $t(71)$ = -2.40, p = .019. Death valence explained 7.5% of the variance in sexual identity, R^2 = .075, $F(1, 71)$ = 5.76, p = .019.

IAT scores for death valence and homonegativity were positively correlated, $r(72)$ = .436, p < .001. Hence, the more positively participants valued death, the more they associated homosexuality with good. In bootstrapped linear regression analysis, implicit death valence predicted implicit homonegativity, β = .436, $t(71)$ = 4.08, p < .001. Death valence explained 19% of the variance in homonegativity, R^2 = .190, $F(1, 71)$ = 16.62, p < .001. Further, a correleation of IAT scores for death valence and gender prejudice, $r(67)$ = -.257, p = .034, showed that the more participants associated death with good, the faster they combined feminine with agentic and masculine with communal. This association contrasts patriarchal stereotypes about feminine communality and masculine agency. In bootstrapped linear regression analysis, implicit death valence predicted implicit gender prejudice, β = -.257, $t(66)$ = -2.16, p = .034. Death valence explained 6.6% of the variance in gender prejudice, R^2 = .066, $F(1, 66)$ = 4.67, p = .034. No significant associations were found between implicit death valence and either implicit sexual prejudice, $r(72)$ = -.033, p = .781, or implicit gender identity, $r(71)$ = .089, p = .459.

According to Wong (2008), positive death valence preceeds death acceptance. Death acceptance was expected to be positively associated with life satisfaction, self-esteem, and positive affect, yet not necessarily with fear of death (Wong, 2008, Wong & Tomer, 2011). Two-sided Spearman correlations revealed positive correlations between explicit death acceptance and explicit life satisfaction, $\rho(74)$ = .347, p = .002, self-esteem, $\rho(74)$ = .407, p < .001, and positive affect, $\rho(74)$ = .406, p < .001, yet not between explicit death acceptance and negative affect, $\rho(74)$ = -.115, p = .325. By contrast, more explicit fear of death was associated with less death acceptance, $\rho(74)$ = -.694, p < .001, with less life satisfaction, $\rho(74)$ = -.257, p = .026, with less self-esteem, $\rho(74)$ =

-.337, p = .003, and with less positive affect, $\rho(74)$ = -.270, p = .019. In turn, more explicit fear of death was reated to more negative affect, $\rho(74)$ = .369, p = .001.

3.4.7. Hypothesis 3

If MS moderated the association between death acceptance and queered gender stereotypes, then MS would be associated with stereotypes on sex, gender and desire. First, the distribution of gender identities and intensities across conditions was checked to assure that MS rather than gender differences accounted for the results. In the MS condition, there were 18 rather feminine persons, 18 rather masculine persons and 1 non-binary person. In the dental pain condition, there were 17 rather feminine and 21 rather masculine persons. A Mann-Whitney U-test showed no significant differences in gender intensity between the MS group and the control condition. Second, the distribution of death acceptance, death anxiety, death valence, self-esteem and life satisfaction prior to MS was checked to verify a priori group differences in potential anxiety buffers. Mann-Whitney U-test revealed no significant a priori differences in implicit or explicit death acceptance, self-esteem, or life satisfaction between conditions. Furthermore, a Mann-Whitney U-tests for implicit death anxiety and an independent t-test for explicit death fear before the experimental manipulation did not show any significant a priori differences between the conditions, $t(73)$ = 1.60, p = .115. The corresponding Mann-Whitney U-test reults are demonstrated in Table 12 (see Appendix 1). An independent t-test neither indicated a priori differences in implicit death valence between MS and the dental pain condition, $t(72)$ = 1.25, p = .215.

In contrast to hypothesis 3, implicit measures for sex, gender and desire did not depend on MS in independent-tests. There were no significant a priori differences between experimental MS versus the control condition in scores for implicit sexual identity, $t(71.98)$ = 0.70, p = .489, sexual prejudice, $t(72)$ = 0.97, p = .338, homonegativity, $t(72)$ = 0.94, p = .352, gender identity, $t(71)$ = -0.52, p = .603, or gender prejudice, $t(67)$ = -0.81, p = .418. Explicit gender-related measures were analyzed subsequently. A Mann-Whitney U-test for an MS effect on the ASI total score revealed a

significant difference between groups. Against the predictions of hypothesis 3, ambivalent sexism against women was higher in the control group than under MS. In contrast to the results for hypothesis 2, the difference was rather related to benevolent than to hostile sexism (see Table 13 in Appendix 1). An independent t-test for the effect of MS on the AMI total score was not significant, $t(73) = 1.86$, $p = .066$. A Mann-Whitney U-test for an MS effect on the MHS scores was not significant either, $U = 530.50$, $p = .067$.

In hypothesis 2, explicit death acceptance predicted the ASI total score. To verify whether MS increased the predictive value of death acceptance on the ASI total score, we ran a bootstrapped hierarchical regression analysis. Analyses with G*Power 3.1 (Faul et al., 2007) for linear regression with R² increase, three variables and the given sample size ($N = 75$) revealed a statistical power of 1 - β = .173 for small effect sizes, of 1 - β = .845 for medium effect sizes and of 1 - β = .997 for large effect sizes. In order to detect small effect sizes, a sample of 776 participants would have been necessary.

Although in hypothesis 2 explicit death acceptance had predicted ambivalent sexism towards women ($p = .012$), a hierarchical regression analysis with MS in the second step resulted as more significant ($p = .001$). The association between death acceptance and the ASI total score, $\beta = .336$, $t(72) = 3.12$, $p = .003$, as well as the association between the dummy-coded MS manipulation (1 = dental pain, 2 = MS) and the ASI total score resulted significant, $\beta = -.321$, $t(72) = -2.99$, $p = .004$. In opposition to hypothesis 3, descriptive statistics indicate that rather dental pain than MS increased ambivalent sexism towards women (see Table 13 in Appendix 1). The moderation model, $R^2 = .184$, $F(2, 72) = 8.14$, $p = .001$, explained 18.4% of the variance in the ASI total score compared to 8.3% for the simple association between explicit death acceptance and ambivalent sexism towards women. Further regression analyses revealed that in the dental pain condition, but not under MS, $\beta = .290$, $t(35) = 1.79$, $R^2 = .084$, $F(1, 35) = 3.21$, $p = .082$, more explicit death acceptance predicted the ASI total score, $\beta = .400$, $t(36) = 2.62$, $R^2 = .160$, $F(1, 36) = 6.84$, $p = .013$.

Hence, the experimental manipulation moderated the association between explicit death acceptance and ambivalent sexism towards women (see Figure 5). However, the direction of the moderation contradicted the expectation of hypothesis 3.

Figure 5

Moderation by Experimental Manipulation versus Control Group
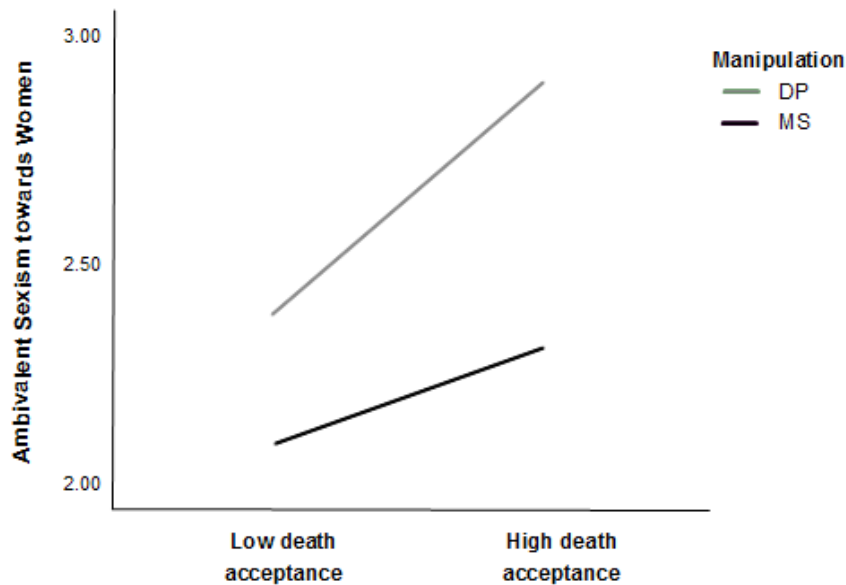
Note. DP: dental pain control condition. MS: Mortality salience as the experimental condition. Death acceptance has been split on its Mean value (M = 2.53; M < 2.52: low; M ≥ 2.53: high) to illustrate the moderation effect.

3.4.7.1. Covariate Analyses

The MODDI-F death rejection scale approaches MS-triggered death denial. Against the TMT expectation, death rejection scores before MS were not significantly associated with the explicit total scores for ASI, $\rho(36) = -.197$, $p = .243$, AMI, $\rho(36) = .052$, $p = .762$, and MHS, $\rho(36) = -.221$, $p = .188$. Rejection of death was measured 7-10 days before self-esteem, life satisfaction and before the experimental manipulation. Self-esteem is assumed to increase (Greenberg et al., 1986) and life satisfaction to decrease with death denial followed by MS (Wong, 2008). These MS effects are not expected to last longer than 6 days unless they are repeated (Kashdan et al., 2014).

To explore whether death rejection was associated with self-esteem and life satisfaction, two-sided Spearman correlations were calculated. Results revealed that the more participants rejected death, the less self-esteem they demonstrated, $\rho(74) = -.262$, $p = .023$. However, death rejection was not significantly associated with life satisfaction, $\rho(74) = -.211$, $p = .069$.

Negative affect is not assumed to differ between MS and a control condition (Pyszczynski et al., 1999). As expected, a Mann-Whitney U-test did not reveal any significant differences between MS versus dental pain in explicit negative affect, $U = 601.00$, $p = .276$. An independent t-test showed that positive affect neither depended on the experimental manipulation, $t(73) = -0.75$, $p = .455$. Hence, the lack of an MS effect for most gender-related measures cannot be derived from different affect states. However, affect was measured after MS in wave 2. The scores for rejection of death in wave 1 were associated with significantly less positive affect, $\rho(74) = -.228$, $p = .049$, and with a tendency towards more negative affect, $\rho(74) = .227$, $p = .050$.

According to TMT (Greenberg et al., 1986), death denial is expected to inhibit death anxiety. However, participants who rejected death more demonstrated much higher levels of explicit fear, $\rho(74) = .773$, $p < .001$. Given that both measures were applied in wave 1, it is also conceivable that the more people feared death, the more they rejected it.

Current death-related work or studies as well as terminal care or recent deaths of friends or family members were considered as possible covariates indicating natural MS beyond experimental manipulation. The sample size for current death-related work/studies ($n = 6$) and for current terminal care ($n = 5$) were too small for further analyses. By contrast, 16 out of 75 participants had experienced the death of a close relative in the past six months. Preliminary two-sided Mann-Whitney U-tests showed no significant differences between natural MS and the control group of participants who had not experienced recent deaths in either implicit death acceptance, $U = 389.00$, $p = .530$, or explicit death acceptance, $U = 381.00$, $p = .239$.

In spite of the unequal sample sizes, an effect of natural MS on implicit and explicit gender-related stereotypes was tested. Independent t-tests for implicit stereotypes on sexual identity, $t(72) = -0.55$, $p = .581$, sexual prejudice, $t(72) = -0.39$, $p = .701$, homonegativity, $t(72) = 0.98$, $p = .331$, gender identity, $t(71) = -0.56$, $p = .579$, and gender prejudice, $t(67) = -1.17$, $p = .248$, did not result as significant. A further U-test did not show a significant difference in modern homonegativity between groups either, $U = 324.00$, $p = .055$. However, the AMI total score significantly differed between the natural MS group and the control condition, $t(73) = 3.17$, $p = .002$. Participants in the recent death group demonstrated significantly more ambivalent sexism towards men ($M = 3.04$, $SD = 0.77$) than participants in the control group ($M = 2.36$, $SD = 0.75$). Furthermore, the ASI total score differed between natural MS and the control condition, $U = 253.00$, $p = .005$. Participants in the recent death group demonstrated significantly more ambivalent sexism towards women ($M = 2.90$, $SD = 0.66$) than participants in the control group ($M = 2.30$, $SD = 0.73$). This finding corroborates the TMT assumption of increased worldview defense after MS (Greenberg et al., 1986), but contradicts the previous findings on experimental MS.

For further analysis, we ran bootstrapped hierarchical regression analysis with explicit death acceptance in the first step and recent deaths in the second step. The moderation model, $R^2 = .166$, $F(2, 72) = 7.16$, $p = .001$, explained 16.6% of the variance in the ASI total score, while the simple association between explicit death acceptance and ambivalent sexism towards women in hypothesis 2 had only explained 8.3% of variance. The association between explicit death acceptance and the ASI total score, $\beta = .242$, $t(72) = 2.22$, $p = .029$ was moderated by the dummy-coded variable of recent deaths (1 = recent death, 2 = no recent death), $\beta = -.291$, $t(72) = -2.67$, $p = .009$. Only in the control condition without recent deaths did explicit death acceptance predict ambivalent sexism towards women, $\beta = .347$, $t(57) = 2.80$, $R^2 = .121$, $F(1, 57) = 7.81$, $p = .007$ (see Figure 6). By contrast, explicit death acceptance did not predict ambivalent sexism towards women under natural MS, $\beta = -.165$, $t(14) = -0.63$, $R^2 = .027$, $F(1, 14) = 0.39$, $p = .541$. Similar to the results on

experimentally manipulated MS, the control conditions of dental pain or no recent deaths moderated the association between explicit death acceptance and the ASI total score. Yet, on a descriptive level, natural MS revealed stronger effects on sexism. In conclusion, hypothesis 3 was not corroborated.

Figure 6

Moderation by Natural Variety in Recent Deaths
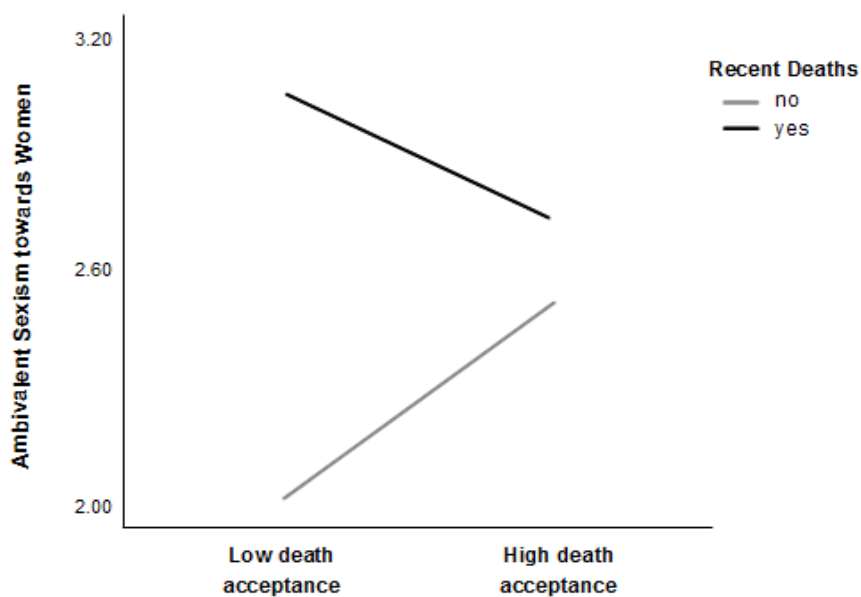
Note. Recent deaths refer to recent deaths of close relatives.

Death acceptance has been split on its Mean value (M = 2.53;

M < 2.52: low; M ≥ 2.53: high) to illustrate the moderation effect.

3.5. Discussion

The aim of this research was to test QTMT (Stiller & Di Masso, 2016) in order to deduce hints for radical intervention in gender stereotypes. QTMT expected death acceptance to predict stereotypes on sex, gender and desire, depending on MS. The theory was put to an initial test with a quasi-experiment on 75 US participants' implicit and explicit death attitudes in wave 1, as well as their implicit and explicit gender-related after MS in wave 2. The hypotheses could not generally be

supported. Yet, the test results indicate central arguments for future research on QTMT, TMT, MMT, applied queer theory, personal well-being and on radical intervention in gender-related stereotypes.

3.5.1. Queered Gender Stereotypes

With the given sample size and measures, the QTMT assumption about sex, gender and desire as factors of a queer gender construct could not generally be corroborated. First, the given sample size did not allow for a factor analysis (Schreiber, 2020). Second, not all of the given implicit and explicit measures on sex, gender and desire were correlated. On an implicit level, sexual identity, sexual prejudice and homonegativity were moderately associated. As expected, more sexual identification as male was highly associated with more a positive valuation of the male compared to the female. This finding is consistent with the assumption of an in-group bias (Greenwald et al., 2002). Both, more identifaction as male and more positive prejudice towards men, were associated with more homonegativity. This finding supports QTMT (Stiller & Di Masso, 2016) and prior research (e. g., Webster & Saucier, 2011).

However, implicit gender identity was not associated with gender prejudice. Neither gender identity nor gender prejudice were associated with sexual prejudice or homonegativity. These results might ground on to the stimuli of the implicit gender tests. In the implicit tests, femininity was associated with communal or warm traits, and masculinity with agentic or confident traits. On the one hand, these traits depend on contexts and personal interpretations: even very stereotyped persons may consider patriarchs as warm, male-dominated soccer as communal, or women as agentic homemakers and confident child-rearers. On the other hand, the ascription of agentic versus communal traits to femininity or masculinity has changed since the evolution of the test paradigm in the 1960s (Wood & Eagly, 2015). Although today men and women describe themselves as equally agentic (Wood & Eagly, 2015), women are still perceived as warmer (Greenwald et al., 2002) or more communal (Wood & Eagly, 2015). Accordingly, the test paradigm's current external validity is

questioned.

In contrast to the ambiguous implicit results, explicit data rather supported hypothesis 1 with strong associations between homonegativity and ambivalent sexism towards women and men. The associations between ambivalent sexism towards women and men further corroborate prior research on the construction of female/feminine and male/masculine as interdependent opposites in patriarchal systems (Glick et al., 2004). Moreover, the association between ambivalent sexism towards women and men with modern homonegativity supports prior research with similar findings (Morrison & Morrison, 2002). From a queer perspective (Butler, 1990), gender both creates binarized trait expectations, the construct of sex, and prescriptive heterosexuality that results in homonegativity. However, the association between homonegativity and gender stereotypes towards men was moderate, while it was high towards women. This finding indicates greater oppression of people considered as feminine.

Explicit and implicit measures do not address the same levels of consciousness (Greenwald & Banaji, 1995). Especially attitudes and stereotypes that were not accessible to conscious judgment have previously shown to affect behaviour (Greenwald & Banaji, 1995). Therefore, the difference between explicit and implicit results may stem from different cognitive systems that are implied in the process of gender stereotyping (Greenwald et al., 2009). Furthermore, the difference between explicit and implicit gender stereotypes might reflect different concepts behind the tests. Implicit gender prejudice referred to communal versus agentic traits while explicit gender prejudice referred to ambivalence towards women and men. In a similar way, death anxiety and fear of death may reflect different concepts or different levels of consciousness. Although being used synonymously in literature (Lehto & Stein, 2009; Wittkowski, 2001; Wong, 2008), death anxiety is assumed as unconscious while fear of death seems to be a conscious derivate of death anxiety (Lehto & Stein, 2009).

110

The intensity of masculine and feminine gender identification depended on sex at birth, but varied within groups. The identification as a different gender did not depend on sex at birth. Gender identification was slightly associated with ambivalent sexism towards men. As might be expected due to an in-group bias (Tajfel & Turner, 1979), people who identified as feminine or non-binary held slightly more sexist attitudes towards men than masculine-identified persons. More contact with lesbian, gay, trans, intersexual and non-binary persons was associated with less implicit and explicit homonegativity as well as with less ambivalent sexism towards women. Our data demonstrated that binary gender options do not depict social reality and are therefore invalid. Participants were assigned to binary sexes at birth, but did not uniquely feel masculine or feminine. Furthermore, most participants personally knew people of other than the hegemonic binary genders. These facts indicate the social and scientific necessity to provide precise gender measures. The same necessity holds for description of sexual orientation. Especially, actual versus expected desire have to be distinguished. As predicted (Butler, 1990), sexual orientation (understood as actual desire) was not associated with implicit or explicit homonegativity (prescriptive heterosexuality). Sexual orientation was moderately till strongly associated with sex at birth and with felt gender identification. Yet, more importantly, results revealed the expected dissociations (Butler, 1990) between actual and expected desire. If not presented as binary and predetermined, then gender identification and sexual orientation were not overall binary or exclusive. If sex, gender and desire are not measured in more precise ways, scientists may rather create and reify stereotypes than depict realities. Given the limitations of current research standards, our data cannot specify whether participants understood the hetero- versus homosexual catgeories of the applied tests as based on genitals or personality traits. Hence, we do not know whether we have depicted reality or reified stereotypes. Methods to distinguish between sex, gender and expected versus actual desire need to be created and implemented beyond demographic box-checking options.

3.5.2. Death Acceptance

QTMT expected death acceptance to inhibit the activation of implicit and explicit stereotypes on sex, gender and desire. On an implicit level, death acceptance in wave 1 was slightly associated with less gender prejudice in wave 2. This finding partially corroborates the assumption that death acceptance may reduce gender stereotypes (Maj & Kossowska, 2016; Wong, 2008). However, implicit death acceptance did not predict implicit gender prejudice in regression analysis. It was not associated with implicit homonegativity, sexual identity, sexual prejudice, or gender identity. This finding implies that implicit death acceptance is not a primary indicator for intervention in gender-related stereotypes.

On an explicit level, more death acceptance predicted ambivalent sexism towards women. This finding contradicts hypothesis 2. The association between explicit death acceptance and ambivalent sexism was especially related to hostile sexism against women. Unconsciously people applied less gender stereotypes when they accepted death, yet consciously they stereotyped more. This finding may firstly be explained by different levels of consciousness (Greenwald & Banaji, 1995), and secondly by possible feelings of anger-induced scapegoating in the process of death acceptance (Kübler-Ross, 1969). Although explicit death acceptance predicted ambivalent sexism towards women, it did not predict ambivalent sexism towards men or homonegativity. This unexpected finding warrants further research. Overall, implicit and explicit associations between death acceptance and gender stereotypes were weak. In conclusion, factors beyond death acceptance may represent more tangible clues to intervention in stereotypes on sex, gender and desire.

Additional implicit death attitudes as well as self-esteem and life satifaction were analyzed as covariates of death acceptance and death denial. MMT assumes positive death valence as a precursor of death acceptance (Wong, 2008). In turn, death acceptance is expected to be associated with more life satisfaction, self-actalization and self-esteem (Wong, 2008). By contrast, TMT expects death denial to increase self-esteem, to decrease fear of death and to decrease death anxiety.

112

Implicit death valence was considered as a possible covariate for gender-related stereotypes, since it is assumed to precede death acceptance (Wong, 2008). Hence, a positive association between death valence and death acceptance was expected. Although the association was found, the relationship was weak. This result may in part be explained by the low level of death acceptance in the present sample, and by the low level of death acceptance in current Western/Northern societies (Wong & Tomer, 2011). However, it also implies that death acceptance may not or not entirely base on death valence. Possibly, the understudied field of death (Wittkowski, 2001) requires a more precise understanding of the psychological processes leading to emotional death acceptance above and beyond death rationalization in TMT (Greenberg et al.,1986).

A more positive implicit death valence in wave 1 reduced homonegativity in wave 2, and slightly diminished stereotypes on sex and gender. Positive death valence predicted more identification with the female, more positive attitudes towards homosexuality, and a higher capacity to see women as agentic and men as communal. These findings contradict patriarchal stereotypes. If positive death valence precedes death acceptance (Wong, 2008), this finding would indirectly support the idea of a soothing effect of death acceptance on gender stereotypes (Maj & Kossowska, 2016; Wong, 2008). However, death acceptance itself did not reveal similar effects. Results indicate death valence rather than death acceptance as a clue for intervention in gender-related stereotypes. Death valence seems to influence gender-related stereotypes in a comparatively time-stable manner, since it explained noticeable amounts of variance in unconscious stereotypes on sex, gender and desire even after 7-10 days. This finding encourages further research on people's concepts and emotions about death depending on prior death valence. Such research might provide hints on mindsets and skills that are to be fostered in intervention.

Implicit positive death valence and death acceptance were associated with less death anxiety. On an explicit level, more death acceptance was further associated with less fears of death. In contrast to TMT (Greenberg et al., 1986), this finding indicates that fear and anxiety may

decrease as death is accepted. Death acceptance may be facilitated by a more positive valuation of death that inspires meaning in life (Wong, 2008). In addition, increased death acceptance was related to higher self-esteem, more life satisfaction and more positive affect. These results support Wong's (2008) assumption of more personal well-being via death acceptance. Findings corroborate the idea that, in the short term, death denial (as inverted death acceptance; Bassett et al., 2004) is associated with more death anxiety (Greenberg et al., 1986), and in the long term, death acceptance can decrease death anxiety (Wong, 2008).

3.5.3. Mortality Salience

According to the third QTMT assumption, mortality salience moderates the association between death acceptance and gender-related stereotypes. Results for hypothesis 3 revealed no effect of the experimental MS manipulation on implicit gender-related stereotypes, explicit homonegativity or ambivalent sexism towards men. Explanations for the lack of association are threefold. First, MS triggered by the death measures in wave 1 may have lasted longer than the expected six days (Kashdan et al., 2014). However, so far there is no evidence that an experimental MS manipulation lasts longer than six days. Second, the measures for self-esteem and life satisfaction prior to MS may have buffered the effect. Nevertheless, we do not suppose that answering six items would have a significant impact. Third, maybe MS studies predominantly got published when an effect was found. A vast body of published literature supports TMT hypotheses, indicating a significant increase of worldview defense after reminders of one's own mortality (Burke et al., 2009). By contrast, a recent revision of the MS effect reveals a publication bias that overestimates the effect in meta-analyses (Rodríguez-Ferreiro et al., 2019). Similar to Rodríguez-Ferreiro et al. (2019), we have found more variance within groups than between the groups of MS versus dental pain, yet in a more gender-diverse, non-student sample from the US. Results hence support the idea of an overstimation of the MS effect through publication bias. In agreement with Rodríguez-Ferreiro et al. (2019), we suppose that the MS effect depends on context factors and that

independent of contexts, it does not necessarily occur. We argument that, against the TMT assumption (Greenberg et al., 1986), MS does not necessarily result in death denial. The contrary assumption is supported by the result that the rather stable attitude of death rejection was not associated with any of the explicit stereotypes related to gender, but with more fear of death and with the less self-esteem. This result rather indicates opportunities for other terror management strategies that may favor social equality and personal well-being (Wong, 2008).

Despite the lack of an MS effect on most implicit and explicit gender-related measures, the experimental manipulation moderated an association between explicit death acceptance and ambivalent sexism towards women. Surprisingly, the dental pain control condition instead of MS was associated with more ambivalent sexism towards women. In the control condition, explicit death acceptance was related to more ambivalent sexism towards women, while under MS it was not. In the process of death acceptance, women might become scapegoats against anger and fear like health professionals can become scapegoats for terminally ill people (Kübler-Ross, 1969). By contrast, implicit death acceptance slightly inhibited gender stereotypes. This finding supports our assumption of more transitory stereotypes in the process of anxiety management towards less stereotypes.

In further support of the assumptions, the exploration of naturally ocurring MS as a covariate showed similar results. Naturally occuring MS was indicated by recently experienced deaths of close relatives versus no recent deaths as the control group. In contrast to experimental MS, recent deaths were associated with more ambivalent sexism towards women and men. Natural MS moderated the association between more explicit death acceptance and more ambivalent sexism towards women. Yet, explicit death acceptance and ambivalent sexism towards women were only associated in the control group without recent deaths, and not in the recent death condition. Natural MS was not associated with any other implicit or explicit gender-related stereotypes. In summary, findings contradict the TMT assumption of an experimental MS effect on gender-related

stereotypes.

3.5.4. Conclusion

Although none of the three QTMT hypotheses was entirely supported, results suggest an approach for radical intervention in gender-related stereotypes, as well as future research on QTMT, terror management, meaning management, applied queer theory, and personal well-being. In our results, most sex-, gender- and desire measures were associated. However, on a methodological level today's appropriateness of the 1960's approach to measure gender via agentic versus communal traits is to be revised. Nonetheless, results demonstrate the obsolescence of binary demographic data for sex, gender and desire.

Death acceptance was ambiguously associated with more implicit, but with less explicit gender stereotypes. Yet, the associations were weak. Instead of death acceptance, its assumed precursor of positive death valence was found to reduce stereotypes on sex, gender and desire. For the first time, death valence demonstrated its potential for intervention in gender-related stereotypes. By contrast, neither experimental MS nor stable death rejection showed the expected increase in stereotypes on sex, gender and desire. No consistent associations were found between MS-induced death denial and gender-related stereotypes. Results rather support the idea of a publication bias for the MS effect. However, death denial was associated with more fear of death and lower self-esteem. In turn, death acceptance was related to higher self-esteem, positive affect and life satisfaction as predicted by Wong (2008).

QTMT represents an innovative theoretical perspective for future research with queer gender measures and with a sample size that allows for factor analysis. This initial test of QTMT demonstrates that death attitudes beyond denial affect stereotypes on sex, gender and desire, as well as personal well-being. Therefore, death attitudes indicate radical intervention in gender-related stereotypes.

3.5.5. Limitations

To begin with, the quasi-experiment cannot be generalized beyond the given US sample of 75 mainly middle-class, Caucasian participants. Nonetheless, it provides indicators for future research towards a deeper understanding of gender stereotypes and for psychosocial intervention in them. Second, the present research is limited by the assumption of causal relations. Despite the study's theoretical grounding and the two points of measurement, the association between death attitudes in wave 1 and gender-related stereotypes in wave 2 cannot definitely be assumed as causal. Possibly, persons with less stereotypes value death as more positive. Yet, a theoretical reason for this opposite effect is outstanding.

In the third place, the present research is limited by the applied measures. On a technical level, the implicit measures for death attitudes and gender-related stereotypes included a loading message that may have created noise in the data. Therefore, implicit associations might have resulted as weaker than they can actually be expected. Moreover, neither experimental nor natural MS or the attitude of death rejection moderated the association between death acceptance and any stereotypes on sex, gender or desire. On the one hand, the lack of results may be the effect of a publication bias (Rodríguez-Ferreiro et al., 2019). On the other hand, experimental MS, natural MS and rejection of death do not represent the same qualities and therefore do not imply the same expectations. Experimental MS is asumed as light and situational (Greenberg et al., 1986). In turn, naturally occurring MS is assumed as more intense, yet transitional (Pyszczynski et al., 2015). Therefore, natural MS may result in contrary, less stereotyping effects (Pyszczynski et al., 2015). By contrast, results demonstrate a slight increase of ambivalent sexism towards women under natural MS, but no other association of natural MS with implicit or explicit stereotypes on sex, gender and desire. In opposition to natural and experimental MS, death rejection is assumed as a rather time-stable attitude (Wittkowski, 2001). Against the logic of TMT (Greenberg et al., 1986), death rejection was not associated with any of the gender-related stereotypes. The lack of results for

natural MS and death rejection cannot be equalled with the lack of an experimental MS effect. Nevertheless, they indicate the fallacy to take the MS effect for granted. Experimental MS effects may have been inhibited by previous measures for death attitudes in wave 1, or for self-esteem and life satisfaction in wave 2. The experimental MS manipulation is a well-known procedure that demonstrated effects throughout the past 30 years (Burke et al., 2009; Pyszczynski et al., 2015). In this study no manipulation check was applied after the distraction task.

Furthermore, existing measures for sex, gender and desire were applied in order to prioritize hints for intervention in gender stereotypes. Independent of people's central gender identities or desires, these measures only indicated whether people identified as more female or male, whether they valued the feminine over the masculine, and whether they held negative attitudes towards gay men or lesbian women. These measures were constructed upon hegemonic binaries of sex, gender and desire. Hence, their results only depict binarized tendencies towards the one or the other imaginary pole. They do not encompass the option to identify with a self-chosen sex, gender or desire versus with none or with various at a time.

3.5.6. Future Research

QTMT includes an interaction model for queer theory. A test of the model with a sufficient sample size and with adequate queer measures is open to future research. The corresponding measures for the factors of sex, gender, desire and for the processes between them still have to be created. Appropriate measures would not only account for the subjectivity of intersecting cultures (Hammack et al., 2013; Pyszczynski et al., 2015, p. 35), but for the strength of de-/identification with the personally most relevant sex, gender and desire. Adequate methods would hence base on a methodology that focusses on dissociations without disregarding the probabilities that indicate social influence.

Death acceptance revealed contradictory implicit and explicit effects. In order to better understand the process of death acceptance, the role of anger and scapegoating or other death-

related attitudes and emotions (Kübler-Ross, 1969) might indicate valuable hints for future research on death and gender. Furthermore, the stunning amount of results for ambivalent sexism towards women may further be investigated. Both death acceptance and natural MS were associated with ambivalent sexism towards women, but with barely any other gender-related measures. Most importantly, the present study calls for future research on death valence as a predictor for stereotypes on sex, gender and desire. Very few research has been carried out on death valence so far (e. g., Bassett & Dabbs, 2003; Hader, 1993). Death valence was assumed to predict death acceptance (Wong, 2008), yet the association between them was weak. Clearer explanations for death valence are necessary to understand the ontological process of terror management strategies, and to improve interventions in gender-related stereotypes.

In order to verify the observed effects of death attitudes on gender-related stereotypes, future research needs to replicate this study. To examine the strength of associations between death attitudes and gender stereotypes, noise in the data has to be avoided. Future tests of the MS effect without previous measures for death attitudes, self-esteem and life satisfaction, yet with a subsequent manipulation check would clarify the effect's extent. Replications of the present research would ideally encompass measures for personal well-being to ensure participants' integrity in prospective interventions and to indicate possibilities for counseling (Hader, 1993; Wong, 2008). The divergent assumptions about the relationship between personal well-being and death attitudes may be further clarified (Greenberg et al., 1986; Wong, 2008). Additionally, future research might address the relationship between death valence and other kinds of prejudice based on ethnicity, religion, mental and bodily functionalities, class or age. A relationship with prejudice was originally hypothesized for death acceptance (Maj & Kossowska, 2016; Wong, 2008), but had not been directly assumed for death valence.

In summary, results raise questions about how people understand death. If death created culture, then it would also create diverse cultural meanings of death. What reactions to mortality

salience do people show other than death denial? When people value death positively versus negatively, with which thoughts and feelings do they anticipate it? Understanding the meanings of death seems essential to understand the terror management strategies associated with gender-related stereotypes. Future research on the meaning of death would not only contribute to the understudied field of death, but promote possible intervention strategies against gender-related stereotypes.

CHAPTER 4

A REVISED ONTOLOGY OF TERROR MANAGEMENT STRATEGIES: THE POWER OF DEATH VALENCE IN THE CONTEXT OF GENDER-RELATED STEREOTYPES

4.1. Abstract

A prior study on the intersection between death attitudes and stereotypes on sex, gender and desire raised questions about people's emotional reactions to death reminders. Death attitudes had affected gender-related stereotypes and personal well-being. Psychosocial intervention in gender-related stereotypes requires a deeper understanding of the ontological process of terror management strategies. In a mixed method design, we analyzed essay answers to a question about death-related emotions. Emotional reactions, divided upon positive or negative death valence, were indicators for terror management strategies. Nesting the qualitative data of content analysis in quantitative data from correlations and regression analyses, we investigated the relationship between death anxiety, death valence, mortality salience, and terror management strategies such as denial or acceptance. Results demonstrated complex emotional reactions including general fear and general anxiety, sadness to miss out on life experiences, and an ambivalent calm between common death denial versus scarce peacefulness and gratitude. Few participants expressed positive emotions such as joy, curiosity and excitement. Positive death valence was associated with more conscious fear, but with less implicit death anxiety. By contrast, negative death valence was associated with increased death denial. In summary, we assume death anxiety as a distal precursor and death valence as a proximate precursor of plural terror management strategies that are triggered by mortality salience. The finding contributes to a broader vision of terror management and, more critically, it may facilitate psychosocial intervention in gender-related stereotypes and personal well-being.

Keywords: terror management, meaning management, death valence, death acceptance, death denial, gender stereotypes

4.2. Introduction

Death studies matter to more than scientists or dying people and their relatives. The way in which we manage the knowledge of our mortality may be crucial to social justice and personal well-being (Maj & Kossowksa, 2016; Wong, 2008). Prior theories on the management of death anxiety state that when reminded of their mortality, people can either deny or accept death (Greenberg et al., 1986; Wong, 2008). Terror management theory (TMT; Greenberg at al., 1986) assumes that paralyzing death anxiety (terror) is managed with denial. People are rationally conscious of their mortal bodies. To emotionally deny death, they strive for symbolic immortality by means of shared, lasting ideas (see Figure 2, chapter 1, p. 46). Hence, terror management is an emotional issue. Emotions are assumed to motivate immediate action in order to guarantee survival (Martí-García et al., 2017). Yet, emotional reactions towards death require further examination (Martí-García et al., 2017). If strategies are understood as action plans for goal pursuit (Strategy, 2020), then emotional reactions to death reminders indicate unconscious strategies to pursue the goal of survival against the threat of paralyzation. Beyond the strategy of death denial, meaning management theory (MMT; Wong, 2008) proposes death acceptance as an additional strategy to manage the terror of human death-awareness. MMT argues that death anxiety can also energize life and does not inevitably lead to life-threatening paralyzation (Wong, 2008).

Death acceptance and death denial are presented as antagonists (Bassett et al., 2004; Wong, 2008). Depending on whether death is denied or accepted, different cultures and personal identities are supposed to be created (Greenberg et al., 1986; Wong, 2008). Cultures and identities might either be constructed upon a negative, denying focus, or upon a positive, accepting one (Wong, 2008). Terror management strategies such as death denial or death acceptance would hence depend on positive or negative death valence (Wong, 2008). When constructing culture and identity upon death denial, stereotypes are reinforced (Greenberg et al., 1986) and self-actualization is limited (Wong, 2008). On the contrary, when death is accepted, the construction of more open-minded

cultures and more self-actualization are expected. That is, death acceptance was assumed as a core strategy to reduce gender stereotypes and to foster personal growth (Maj & Kossowska, 2016; Wong 2008). In a synthesis of terror and meaning management with a queer perspective, queer terror management theory (QTMT; Stiller & Di Masso, 2016) expected death acceptance to inhibit the activation of gender-related stereotypes about sex (social interpretation of hormones, chromosomes and anatomy), gender (trait ascription upon sexed bodies or social roles) and desire (socially expected sexual orientation) when controlled for mortality salience (MS). Furthermore, death acceptance is assumed to increase personal well-being (Wong, 2008).

In a prior study (Stiller & Di Masso, 2019), death acceptance was slightly less associated with gender stereotypes on an implicit level. Yet, on an explicit level, hostile sexism increased with higher death acceptance. This finding suggests a possible role of anger in the process of death acceptance. The role of anger was already discussed in Kübler-Ross' (1969) dying stages (denial, anger, bargaining, depression, and acceptance). More anger than fear was recently shown in reaction to death photographs (Martí-García et al., 2017). Anger and fear indicate a relationship between personal feelings and social prejudice. In a prior study (Stiller & Di Masso, 2019), terror management strategies affected personal well-being. Prior to MS manipulation, death acceptance was associated with higher self-esteem and life satisfaction. By contrast, death denial was associated with more fear of death and less self-esteem. In conclusion, the assumption that death acceptance would reduce gender stereotypes and promote personal growth (Maj & Kossowska, 2016; Wong 2008) was only partially supported. To explain this result, this article examines the ontology of terror management strategies.

4.2.1. A Lack of Mortality Salience Effects

MS is assumed to trigger terror management strategies (Greenberg et al., 1986; Pyszczynski et al., 2015; Wong, 2008). After MS, TMT would expect gender-related stereotypes to increase when the strategy of death denial is applied (Greenberg et al., 1986). Previously, the experimental

manipulation of MS had not globally affected gender-related stereotypes (Stiller & Di Masso, 2019). Variance within the MS group and the standard control group of dental pain exceeded the variance between groups. This result contradicts a large body of TMT research of the past 30 years (Pyszczynski et al., 2015). By contrast, it supports recent studies that question the time- and culture-dependent effect as a result of publication bias (Stiller & Di Masso, 2019; Rodríguez-Ferreiro et al., 2019). Consider the large in-group variances in the assumed MS effects on the one hand (e. g., on gender-related stereotypes in Stiller & Di Masso, 2019). Consider Kübler Ross' (1969) dying "stages" on the other hand: today, they are not assumed as sequential anymore, nor does each dying person experience every stage. Nonetheless, the kinds of experiences were supported (Samarel, 1995). As a consequence, it is conceivable that these stages are actually separate terror management strategies stratified upon death valence. Beyond cultural differences, the large in-group variances may indicate the existence of additional terror management strategies beyond death denial. The global lack of a MS effect in the previous study (Stiller & Di Masso, 2019) raises questions about the thoughts and feelings that people describe in reaction to reminders of their own mortality.

Terror management strategies are grounded on MS-triggered death anxiety (Greenberg et al., 1986; Wong, 2008). We found that, on an implicit level, less death anxiety was slightly associated with more death acceptance (Stiller & Di Masso, 2019). Death acceptance was conceptualized as inversely coded death denial (Bassett et al., 2004). As a consequence, less implicit death anxiety was also associated with more implicit death acceptance (Stiller & Di Masso, 2019). On an explicit level, more a priori death anxiety was strongly associated with more death denial and equally with less death acceptance (Stiller & Di Masso, 2019). We had investigated the effects of a MS manipulation on gender-related stereotypes. However, we had not yet investigated the emotional reactions to death reminders that indicate the terror management strategies towards these effects.

4.2.2. A Focus on Death Valence

Death anxiety is presumed as a distal precursor of terror management strategies (Greenberg et al., 1986), such as death acceptance (Wong, 2008). A positive focus on death is supposed to precede death acceptance (Wong, 2008). Nonetheless, MMT does not render importance to death valence (Wong, 2008; Wong & Tomer, 2011). Death valence in MMT is mentioned rather incidentally in the context of a positive focus towards life via death acceptance (Wong, 2008). Death valence in MMT is neither considered as an alternative explanation for the prominent MS effect. Yet, positive death valence was assumed to facilitate death acceptance, while negative death valence in theory predicted death denial (Wong, 2008). Therefore, positive death valence was expected to decrease stereotypes on sex, gender and desire (Stiller & Di Masso, 2019). In a prior test, positive death valence predicted less stereotypes on sexual identity, homosexuality, and gendered trait assignment (Stiller & Di Masso, 2019). The variance explained by death valence was superior to the variance explained by death acceptance. A possible explanation for this result might be the low level of death acceptance in current Northern/Western societies (Wong & Tomer, 2011). Lower death acceptance may rather show in a more positive death valence than in the resulting death acceptance measures. The low means of death acceptance, despite the variety of death workers in our sample, support this assumption (Stiller & Di Masso, 2019). However, there is not yet enough evidence for positive death valence to provoke death acceptance. Hence, our findings indicate death valence as a more proximate means for intervention in gender-related stereotypes. To facilitate intervention, it is necessary to clarify how or why people evaluate death as rather positive or as rather negative. In other words: why did some participants in the previous study (Stiller & Di Masso, 2019) click faster on *death* and *good* versus *death* and *bad* than others? As a first step to understand why people evaluate death as rather positive or negative, we explored what people stated to feel when they clicked faster on *death* and on *good* than others in a quantitative reaction time test. The relationships between death anxiety, death valence, death denial, death acceptance or

other terror management strategies under MS are further examined. Maybe hypotheses about denial and acceptance are rather about positive versus negative death valence. Hence, death valence in reaction to death anxiety would lead to different coping strategies, including acceptance and denial.

4.2.3. Research Objectives

The objective of this article is to illuminate the psychological strategies that are used to manage death anxiety, to examine their relationships and to thereby foster intervention methods against social prejudice and for personal well-being. We are especially interested in terror management strategies beyond the dualities of death denial or death acceptance, since terror management strategies precede gender-related stereotypes (Maj & Kossowska, 2016; Pyszczynski et al., 2015; Wong, 2008). In accordance with this aim, the following research questions are formulated:

R1.   Which thoughts and feelings do people describe in reaction to reminders of their own mortality? Which terror management strategies, indicated by emotional reactions, do people show after MS? Which strategies or reactions exist beyond death denial?

R2.   When people evaluate death as rather positive or negative, which thoughts and feelings do they experience in reaction to MS? Which terror management strategies do they use depending on death valence?

R3.   What is the relationship between death anxiety, death valence, MS, death denial, and death acceptance?

4.3. Method

4.3.1. Research Design

In order to tackle these research questions, quantitative and qualitative data have to be integrated. Quantitative and qualitative research is grounded on different epistemiologies. Yet, we prioritize a holistic understanding for better intervention strategies over philosophical unidimensionality. In the tradition of solution-oriented philosophical pragmatism, we apply a mixed

method design that nests qualitative data in a quantitative dataset (Leavy, 2017).

4.3.2. Procedure

Data of a prior study is revisited. In this prior study carried out in January – February 2019 (Stiller & Di Masso, 2019), 75 US residents were invited to an online quasi-experiment under the guise of a cover story. Participants were asked for informed study consent. In a first wave, an implicit reaction time measure and an explicit inventory on death attitudes were administered. One week later, a second wave was applied. Participants' self-esteem and life satisfaction was measured with short questionnaires before the experimental manipulation. The experimental manipulation consisted in answering two questions in short essays, followed by a distraction task on participants' recent affect state. The questions either reminded participants of their own mortality or of dental pain. After the experimental manipulation, a series of implicit and explicit tests on gender-related stereotypes was conducted. Finally, participants were debriefed.

4.3.3. Participants

Most of the theories and methods we relied on were developed in the US. To assure cultural fit and the highest possible validity, we have therefore restricted participation to US residents. Participants were recruited via Amazon' Mechanical Turk (MTurk; www.mturk.com). To guarantee variability in death attitudes, they were partly invited via email to death-related US organizations (fire departments, hospice workers and mortuary students) with a link to the platform. The other part was invited online via MTurk directly. In the cover story, participants were told that the study investigated how community factors affect emotional experience. After data verification and dropouts, 75 participants' data could be used for both points of measurement. Participants were remunerated with 2.80 USD for wave 1 (ca. 35 minutes), and with 3.51 USD for wave 2 (ca. 40 minutes). Qualitative data nested in this quantitative data was exclusively derived from the 37 persons in the MS condition of the quasi-experiment, since the dental pain control group ($N = 38$) was not asked about emotions towards death.

The entire sample's ($N = 75$) participant age ranged from 19 to 63 years ($M = 39$, $SD = 10$). Thirty-nine participants described their current gender identity as predominantly masculine, 35 as predominantly feminine, and 1 as non-binary. The sample comprised 59 persons of Caucasian ethnicity, 8 of Afroamerican, 6 of Asian, and 2 of Hispanic ethnicity. Participants' levels of studies and income extensively varied. The median level of studies was a Bachelor's degree. The median of participants had an income of 2-4,000 USD/month. Six participants' work or studies were related to death, five were giving terminal care at the time of measurement, and 16 had experienced the death of a close relative in the past six months.

The MS subsample's ($N = 37$) participant age equally ranged from 19 to 63 years ($M = 42$, $SD = 11$). Eighteen participants described their current gender identity as predominantly masculine, 18 as predominantly feminine, and 1 as non-binary. The sample comprised 31 persons of Caucasian ethnicity, 3 of Afroamerican, 2 of Asian, and 1 of Hispanic ethnicity. Participants' levels of studies and income varied. The median level of studies was a Bachelor's degree and the median income level was 2-4,000 USD/month. Five participants' work or studies were related to death, two were giving terminal care at the time of measurement, and 8 had experienced the death of a close relative in the past six months.

4.3.4. Instruments

The instruments of primary relevance for this article were an implicit reaction time test, an explicit inventory, and a short essay about death attitudes and emotions. The Death Attitude IAT (Bassett & Dabbs, 2003; Bassett et al., 2004) was used as a an Implicit Association Test that associated reaction times and error rates with the strength of associations between stimuli (IAT; Greenwald et al., 1998). Stronger associations represent stronger attitudes (Greenwald et al., 1998). IAT's are one of the most reliable, most valid, and most used implicit measure in social psychology (Bar-Anan & Nosek, 2014; Gawronski & De Houwer, 2014; Greenwald et al., 2009). The Death Attitude IAT tests the dimensions of anxiety (death, life versus anxious, calm), valence (death, life

versus good, bad), and acceptance (death, life versus self, other). The original subtest for death acceptance was denominated death denial (Bassett & Dabbs, 2003). Accordingly, death acceptance and death denial are assumed to be opposites of one continuum (Bassett et al., 2004).

Implicit measures address unconscious attitudes, while explicit measures are directed towards consciously accessible attitudes (Greenwald & Banaji, 1995). To contrast the implicit measure with an explicit one, we applied the Multidimensional Orientation toward Dying and Death Inventory (MODDI-F; Wittkowski, 2001). The MODDI-F comprises 47 items on the dimensions of fear of death, death acceptance, and rejection of one's own death (Wittkowski, 2001). We have used its adaptation for the US context (MacDougall & Farreras, 2016). Cronbach's Alpha for the MODDI-F total score in this sample demonstrated good internal consistency ($\alpha = .87$). In addition, participants were asked to write an essay of 50-1,000 words responding to the typical MS questions by Rosenblatt et al. (1989) in an adaptation of Birnbaum et al. (2010): "What do you think happens to you as you physically die and once you are physically dead?" and "Please briefly describe the emotions that the thought of your own death arouses in you". The essays were followed by a distraction task that allows death-awareness to trigger unconscious terror management strategies (Burke et al., 2009; Greenberg et al., 1986).

Stereotypes on sex, gender and desire were measured in a second wave containing IAT's on sexual identity (Greenwald et al., 2002), sexual prejudice (Greenwald et al., 2002), homonegativity (Banse et al., 2001 - modified by Stiller & Di Masso, 2019), gender identity (Greenwald & Farnham 2000), and gender prejudice (Rudman & Glick, 2001 - modified by Stiller & Di Masso, 2019). On an explicit level, inventories on ambivalent sexism towards women (Glick & Fiske, 1996) and towards men (Glick & Fiske, 1999) as well as a survey on modern homonegativity (Morrison & Morrison, 2002) were applied. Questionnaires on self-esteem (Robins et al., 2001), life satisfaction (Diener et al., 1985) and positive versus negative affect (Watson & Clark, 1994) were measured as possible explicit covariates.

4.3.5. Data Analyses and Interpretation

For quantitative data analysis of the entire sample ($N = 75$), we had applied correlative approaches and linear regression analyses (see Stiller & Di Masso, 2019). Qualitative data obtained from the subsample of 37 participants was interpreted by means of content analysis. Content analysis is a qualitative method that stems from communication research (Mayring, 2000). It was first used in US mass media analyses during the 1920's and was later applied to criticize superficial quantitative analyses that did not understand meanings beyond numbers (Mayring, 2000). Departing from different epistemiologies, quantitative data follows a probabilistic approach while qualitative data explores subjective meanings (Leavy, 2017). Combined in a mixed method design (Leavy, 2017), content analysis allows for the exploration of the meanings and antecedents of quantitative outcomes that would otherwise remain invisible (Krippendorff, 1989). In the present study, the mixed method design especially allowed for the exploration of meanings behind rather positive versus rather negative death valence. In other words, it enabled a deeper understanding of what people felt when they clicked faster on *death* and *good* than others.

To investigate the antecedents for intervention in gender-related stereotypes and to better understand people's views on death, we followed the procedure described by Krippendorff (1989). First, phrases of the MS essays were fractionated by meaning. These meaning units emerged in preliminary data analysis (Stemler, 2000). After preliminary data analysis by author 1, exclusive categories for each unit were created (Stemler, 2000). These categories were then arranged into 5 dimensions. Intra-rater reliability was tested one week later ($\kappa = .69$). At the same time, the initial essay answers were categorized by author 2 for inter-rater reliability ($\kappa = .66$). Intra- and inter-rater reliability were calculated with Cohen's Kappa (Cohen, 1960; McHugh, 2012). Both indicated moderate agreement (McHugh, 2012). Finally, the authors agreed on all of the given categories and dimensions. By means of quantitizing (Leavy, 2017), we then contrasted the codes derived from qualitative data with prior quantitative data on death attitudes (see Stiller & Di Masso, 2019).

4.4. Results

4.4.1. Reactions to Mortality Salience

MS was induced by questions about the physical sensations and emotions at the thought of their own death. The dental pain control condition as well as the MS question about physical sensations were excluded from content analysis. Participants' short essay answers to the question on their death-related thoughts and feelings were categorized in order to investigate their emotional reactions to a death reminder as indicators for terror management strategies. Categories for emotional reactions to MS were divided into 4 dimensions: fear/anxiety, sadness, calm, positivity, and irrelevant other. Results are displayed in Table 14, despite the last dimension of irrelevant other (3 answers: "determination", "Thoughts of my own death are not pleasant" and "but some were also asked two questions about death"). The irrelevant other dimension was excluded from further analysis.

The dimension of fear/anxiety contained eight categories: general anxiety (6), general fear (9), fear of nothingness (2), fear of the unknown/uncertainty (4), fear of pain in the dying process (2), fear of hell (1), worry (4), fear of what happens to loved ones left behind (4). With 32 answers it was the most prominent category. The dimension of calm consisted of six categories: contentment/peacefulness (5), emptiness (4), confidence (6), gratitude (1), lack of emotions (1), and avoidance (5). Calm represented the second most prominent category. The dimension of sadness contained three categories: unspecified sadness (3), sadness to miss out on life experiences (6), and sadness to leave loved ones behind (3). Sadness was the third most prominent answering dimension with a total of 12 answers. The dimension of positivity consisted of the categories joy for spiritual reasons (3), joy for the end of struggle (3), excitement (2), and curiosity (1). With a total of 9 answers it was the fourth most prominent answering dimension. Detailed answers are provided in Table 14 (see Appendix 2).

4.4.2. Reactions Divided by Death Valence

The second research question considered people's thoughts and feelings in reaction to MS after being divided upon positive versus negative death valence. To answer this question, random differences in death valence prior to group assignment were controlled for. An independent t-test between participants in the MS condition ($n = 37$, $M = -0.81$, $SD = 0.45$) versus participants in the dental pain condition ($n = 38$, $M = -0.68$, $SD = 0.40$) showed no statistically significant differences in death valence ($p = .389$). Hence, positive versus negative death valence were equally distributed between the MS condition and the dental pain condition.

In order to review death-related thoughts and feelings depending on positive versus negative death valence, categories were first coded and data was split at the mean value of death valence in the MS condition. Accordingly, 19 persons demonstrated a rather positive death valence and 18 persons a rather negative one. However, the negative total mean value of death valence ($n = 37$, $M = -0.81$, range -2 till +2) indicates that death is generally considered as more negative than positive. Hence, "positive death valence" more precisely refers to less negative death valence in most of the cases. The incidence of categories across positive versus negative death valence is demonstrated in Table 15. A table with the categories and statements divided upon death valence is provided in Table 16 (see Appendix 2). The biggest differences in reactions to MS divided upon positive versus negative death valence (3-4 answers) resulted from the categories of avoidance, confidence and general fear (see Table 15). While avoidance and confidence were related to negative death valence, more explicit general fear was related to more positive implicit death valence. Results further demonstrated slight differences (2 answers) in uncertainty, unspecific sadness, sadness to miss out on life experiences, and excitement. The remaining categories did not differ (0-1 answers) between positive and negative death valence in their reactions to MS. While unspecific sadness and excitement were related to positive death valence, uncertainty and sadness to miss out on life experiences were related to negative death valence. In more than three-fourths of the answers,

Table 15

Categories of Emotional Reactions to a Death Reminder Divided upon Death Valence

	Code	Category	DV+	DV-	Example answer
FEAR/ANXIETY	21a	general anxiety	2	2	The thought of death makes me quite [...] anxious.
	21b**	general fear	7	4	I feel spooked at the prospect of death.
	22	fear of nothingness	1	2	I feel some degree of fear because I am not fond of the idea of non-existence. [...]
	23*	fear of the unknown	1	3	I am deeply afraid of the unknown
	24	fear of pain	1	1	[…] worry over pain [...]
	25	fear of hell	1	0	A little scared because I'm not confident I have lived my life well enough to get into heaven.
	26	worry	2	2	[…] displeasure and worry [...]
	27	fear of what happens to loved ones left behind	2	1	[…] anxious. Not for the fear of dying but for leaving my kids behind without a mother.
SADNESS	31*	unspecified sadness	3	1	My own death makes me feel sad.
	32*	sadness to miss out on life experiences	2	4	A little dread, but more sadness that my time is too short to do everything I would like.
	33	sadness to leave loved ones behind	2	1	[I am sad at the thought of] not being able to interact with loved ones in physical form.
CALM	41	peacefulness	2	2	The emotions that my own death arouse in me are peacefulness, [...]
	42	emptiness	2	2	The emotions that my own death arouse in me are [...] numbness and emptiness.
	43**	confidence	2	6	In a way the idea of my death does not bother me.
	44	gratitude	1	0	[…] thoughts of death inspire gratitude [...]
	45	lack of emotions	0	1	There is not many emotions when thinking ab[o]ut such for me.
	11**	avoidance	1	4	I do not like to think of my death.
POSITIVITY	51	joy - spiritual reasons	1	2	I just want to be good with thinking there's a heaven.
	52	joy - end of struggle	1	2	I would be free of suffering from the woes of my daily life.
	53*	excitement	2	0	I am excited to enter the next stage of my development.
	54	curiosity	1	0	Curiosity, [...]

Note. Death valence was split at the sample's mean value ($n = 37$, $M = -0.81$). DV+ equals death valence above the mean value. DV- equals death valence below the mean value. ** represents a big difference with a discrepancy of 2-4 answers between DV+ and DV-. * represents a slight difference with a discrepancy of 2-4 answers between DV+ and DV-.

participants did not exclusively express one thought or emotion, but various interrelated thoughts and feelings.

4.4.3. Precursors of Terror Management Strategies

In order to explore the relationship between death anxiety, death valence, MS, death denial and acceptance, we have interrelated quantitative essay categories and contents with quantitative data from implicit and explicit tests(Stiller & Di Masso, 2019). MS is assumed to trigger death anxiety and thereby terror management strategies (Greenberg et al., 1986; Wong, 2008). Accordingly, we have controlled for prior differences in death anxiety in the MS- versus the dental pain condition. A priori implicit death anxiety was equally distributed between conditions.

In a previous study (Stiller & Di Masso, 2019), explicit death rejection before MS was associated with more explicit fear of death, $\rho(75) = .773, p < .001$. This result can be interpreted as evidence for TMT, by which anxiety precedes denial (Greenberg et al., 1986). Hence more anxiety would result in more denial. On an implicit level, less death anxiety was associated with less death denial, $\rho(73) = .273, p = .019$. This finding either indicates that the more death anxiety people felt, the more they denied death; or that the more people accepted death, the less death anxiety they felt. Since both data was retrieved from wave 1, the directions of the associations are unknown. On an explicit level, more fear of death was associated with less death acceptance in two-sided Spearman correlations, $\rho(74) = -.694, p < .001$ (Stiller & Di Masso, 2019).

Death valence is assumed to precede death acceptance or denial (Wong, 2008). Data of the previous study (Stiller & Di Masso, 2019) supported this assumption: prior to MS, positive death valence was associated with more implicit death acceptance, $\rho(73) = .271, p = .020$. We have therefore also controlled for a priori death valence as a more proximate precursor for the terror management strategy of death acceptance. Implicit death valence was equally distributed between groups before the MS manipulation. Death anxiety is assumed as a more distal precursor of terror management strategies than death valence (Wong, 2008). On an implicit level, positive death

134

valence was associated with less death anxiety prior to MS in two-sided Spearman correlations, $\rho(74) = .387$, $p = .001$ (Stiller & Di Masso, 2019). This finding confirms that there is an association between the assumed distal and the proximate precursors of terror management strategies.

After MS, participants stated more conscious death anxiety in their essay answers when they had previously evaluated death as positive. Furthermore, they described slightly more unspecific sadness and excitement. In turn, participants who had evaluated death as negative in wave 1 reacted with more avoidance and confidence to MS in wave 2. Additionally, they mentioned slightly more uncertainty and sadness to miss out on life experiences.

4.5. Discussion

4.5.1. Mortality Salience

Our first research question considered people's thoughts and feelings in reaction to MS. We were especially interested in emotional reactions to death reminders that indicate terror management strategies beyond death denial. Participants' essay answers indicated four relevant emotional dimensions: fear/anxiety, sadness, calm, and positivity. In contradiction to prior research (Kübler-Ross, 1969; Martí-García et al., 2017), participants surprisingly did not show anger. The most prominent dimension was fear/anxiety, accounting for the majority of answers. Answers were especially related to general fear (e. g., "I feel spooked at the prospect of death"). The second most prominent dimension was calm, with answers mainly related to the category of confidence (e. g., "In a way the idea of my death does not bother me"). The third most prominent dimension was sadness, with answers mainly related to missing out on life experiences (e. g., "I feel regret because I know I'll be missing out on so much and I will never do the things I love ever again"). In the fourth place, people also experienced positivity towards death, encompassing joy for spiritual reasons or joy for the end of struggle (e. g., "As I get older and begin to decline I feel almost relief when I think about the end to the stress and struggle of life [...]").

The present study was interested in emotional reactions to death reminders. Accordingly, emotional reactions to dental pain were not examined. This lack of a control group without a death reminder limits the results of our third research question in two ways. On the one hand, fear and denial might possibly have emerged in a similar way without a death reminder. Although explicit fear of death and death denial did not differ between groups before a MS question, there was no group that controlled for fear and denial without being reminded to one's own death. A visible difference in explicit fears of death and death denial after MS depended on death valence, but might theoretically also be attributed to a MS effect. Therefore, a differentiation between the effect of MS and the effect of death valence on worldview defense and self-perception is open to future research.

On the other hand, the third research question compared quantitative data of the entire sample of 75 participants before MS to qualitative data of a subsample of 37 participants after MS. Thereby, death anxiety, fears, valence, acceptance and denial before MS were compared to emotional reactions after MS. This comparison might be limited (Leavy, 2017) in the amount of emotional reactions. A bigger sample for content analysis would have enabled a broader variety of categories and dimensions of emotional reactions.

Both in TMT and MMT, death anxiety is considered as the cause of terror management strategies. However, TMT would not have suggested the variety of death fears to be clearly nameable, but to exclusively appear after a distraction period as diffuse, unconscious death anxiety (Greenberg et al., 1986). Our data though show that people can consciously access a significant part of their feelings about death instantaneously and precisely. This finding coincides with the various death fears differentiated in on a theoretical level (Wong, 2008) and on a methodological level (Wittkowski, 2001). In conclusion, our data indicate a more complex process between the trigger of death anxiety and MS effects than it was previously assumed (Pyszczynski et al., 2015; Wong, 2008).

Yet, the contrast between unconsciously expressed anxiety and consciously expressed fears may be grounded on a confusion of concepts. Previous literature used the terms death anxiety and fear of death synonymously or alternately (Becker, 1973; Lehto & Stein, 2009; Wong, 2008), suggesting anxiety as the physical antecedent of emotional fears (Wittkowski, 2001). It might be questioned whether fear and anxiety represent the same emotional quality, and whether implicit death anxiety can hence be compared to explicit fear of death. On an implicit level, we measured implicit anxiety with reactions to words like *anxious*, *upset*, *worried* (Bassett & Dabbs, 2003). In a review of the death anxiety concept, Lehto and Stein (2009) propose that death anxiety is an unconscious, diffuse physical and emotional state while fear of death is conscious and specific towards a rationally available point of reference. Accordingly, explicit fears were measured with a variety of more precise reactions, such as fear of one's own dying versus death, fear of another person's dying versus death or fear of corpses (Wittkowski, 2001). These fears have a more rational component, and therefore represent a different, conscious mode (Greenwald & Banaji, 1995). Although fear and anxiety may refer to different modes, both death fear and death anxiety are relevant for intervention (Wittkowski, 2001).

Beyond fear and anxiety, specific attention has to be drawn to the categories of avoidance, confidence and lack of emotions. All of these categories are characterized by unemotional or plain rational answers to the question about death-related feelings. TMT would consider these as straight-forward death denial (Pyszczynski et al., 1999). Participants' reactions in those categories exactly correspond with these unemotional answers, with statements like "[death] does not bother me", "Death happens to all, so I just accept it and move on. No more emotions than that for me" or "There is not too many emotions when thinking about [death]". In contrast to TMT, MMT suggests that death denial would also lead to a kind of calm towards death triggers that seems to be easily confused with death acceptance (Wong, 2008). Only with the results of interrelated qualitative and quantitative data can death denial and acceptance be better differentiated. Results for the

interrelated quantitative and qualitative data are discussed in the second research question.

Positivity was the fourth most mentioned emotional response to MS. It consisted of joy for spiritual reasons, joy for the end of struggle, excitement and curiosity. The dimension of positivity seemed to be conceptually related to positive death valence. We assume that positive death valence enables psychosocial intervention in gender-related stereotypes and personal well-being (Stiller & Di Masso, 2019). Although our sample is small and responses are short, the received essays may help to understand what can be evaluated positively about death. Despite positivity being the least mentioned dimension, frequency does not imply apropriateness. Death denial resulted as frequent, but can be detrimental to personal well-being and social justice. Therefore, detailed research on the reactions of the few participants who answered with neutral or positive emotions to death reminders were especially relevant for the present research, since they indicate possibilities for intervention. The categories of peacefulness and gratitude from the calm dimension might add up to the understanding of their positive connotation. The variety of reactions to death reminders in our study demonstrated the emotional complexity they go along with. Considering that feelings and actions are associated (Martí-García et al., 2017), it seems unlikely that MS is exclusively managed with death denial.

4.5.2. Death Valence

The second research question examined people's thoughts and feelings in reaction to MS depending on positive versus negative death valence. The objective was to figure out indicators for terror management strategies depending on death valence. The biggest differences in emotional reactions to death reminders divided by death valence were found in the categories of general fear, avoidance and confidence.

People in the positive death valence group expressed more fear of death after mortality was made salient. However, they had also expressed more explicit fear before MS, and less implicit death anxiety at the same time. Assuming that implicit death anxiety changed in proportion with

explicit fear after MS, this finding indicates that positive death valence allows people to consciously admit fear, while unconscious anxiety diminishes.

People in the negative death valence group expressed more avoidance and more confidence. Avoiding death-related thoughts and feelings directly equals death denial (Greenberg et al., 1986; Pyszczynski et al., 1999). The category of confidence, in turn, consists of essay answers like death "doesn't bother me", "does not distress me", or "does not cause any emotions in me". Although people might have simply been indifferent to whether they are dead or alive, this does not explain why this indifference especially appeared in the negative death valence group. Neither does it reflect the fear reactions to death threat that both TMT and MMT would expect (Greenberg et al., 1986; Wong, 2008). If people were not indifferent, but accepted death, they would still be expected to feel some kind of fear, and at the same time experience vitalization and gratitude towards life (Wong, 2008). Wong (2008) assumes that death acceptance can only be reached by means of conscious choice. Hence, people who accept death would be able to express their feelings towards death. By contrast, both TMT (Greenberg et al., 1986) and MMT (Wong, 2008) would understand this lack of emotional response under negative death valence as death denial. Therefore, the categories of avoidance, confidence and lack of emotions can be considered as death denial. With eleven denial responses in the negative death valence group, and only three in the positive death valence group, denial made the biggest difference between positive and negative death valence, followed by consciousness of death fear. As a consequence, the assumption that death denial is associated with negative death valence (Wong, 2008) is supported.

Smaller differences between positive and negative death valence were found in uncertainty, unspecific sadness, sadness to miss out on life experiences, and excitement. Unspecific sadness and excitement were related to positive death valence. Unspecific sadness may result from the variety of losses that death implies. Excitement may in turn speak of an indirect vitalization by means of death reminders. However, excitement might further indicate the thrill towards the last unknown life

experiences and towards the idea of an afterlife. Uncertainty and sadness to miss out on life experiences were related to negative death valence. Uncertainty as fear of the unknown refers to the anticipation of what cannot be anticipated, so the ambivalent expectation causes fear. This possible interpretation is partly corroborated by the finding that negative death valence was associated with more unconscious death anxiety.

On a general level, most participants did not exclusively express one emotion, but a variety of interrelated thoughts and feelings. This suggests that dealing with death is a complex emotional issue. Despite its emotional complexity, managing the terror of death is not only important at the end of life. Terror management strategies affected personal well-being and stereotypes on sex, gender and desire in life (Stiller & Di Masso, 2019). The more people denied death, the more conscious fear and the less self-esteem they stated to feel (Stiller & Di Masso, 2019). Death denial does hence not seem to foster personal well-being. Accepting death instead was associated with higher self-esteem and higher life satisfaction (Stiller & Di Masso, 2019). The more positive people were able to view death, the less stereotypes on sex, gender and desire they demonstrated. Accordingly, terror management strategies that foster personal well-being and social open-mindedness seem to base on a comparatively positive, conscious contemplation of one's own death.

4.5.3. The Interrelation of Precursors for Terror Management Strategies

In our third research question, we examined the relationship between death anxiety, death valence, MS, death denial and death acceptance. Both according to TMT and MMT, terror management strategies base on death anxiety (Greenberg et al., 1986; Wong, 2008). In addition to TMT, MMT assumes death anxiety as a distal precursor and death valence as a proximate precursor of terror management strategies. MS would in both theories be assumed as the direct trigger of terror management strategies. TMT assumes MS to cause death denial (Greenberg et al., 1986). In our data, explicit fear of death, explicit death denial, implicit death anxiety and implicit death valence did not differ between conditions before group assignment. Differences before the MS

manipulation were hence controlled for. Although explicit fear of death and death denial did not quantitatively differ between groups before MS, there was a visible difference in explicit fears of death and death denial after MS on a qualitative level. On a quantitative level, it was not tested whether explicit fears of death and death denial changed after MS. Nevertheless, the difference in death fears and denial was explained by death valence. MMT broadens the sole possibility to treat death with denial by the the binary option to treat death with either denial when death valence is negative, or with acceptance when death valence is positive. Nonetheless, options to deal with death according to MMT remain binary (Wong, 2008).

Our data support the view that both death anxiety and death valence affect terror management strategies and their psychosocial outcomes. Before MS, more implicit death anxiety was associated with more death denial and less death anxiety with more death acceptance. On an explicit level, more fear of death was highly associated with more death rejection and with less death acceptance. After MS, people with positive death valence were more conscious of their fear. Yet, this does not mean people would feel more fear or anxiety. In turn, when death is denied, people experienced more unconscious death anxiety, but expressed less fear.

MMT (Wong, 2008) assumes death valence as a proximate precursor of death acceptance, while death acceptance is conceptualized as inverted death denial (Bassett et al., 2004). As a consequence, death valence would precede terror management strategies such as death acceptance or death denial. Our results support the assumption of an association between death valence and terror management strategies. In our data, a priori death death acceptance and death denial were equally distributed between groups before MS. Under positive death valence, people recurred less to death denial and were more conscious of their death fears. In turn, under negative death valence, people rather recurred to the terror management strategy of denial. In regards to death denial, this finding supports the TMT meta-level assumption of a generally negative valuation of death for the positive purpose of survival (Greenberg et al., 1986).

MMT supposes death anxiety to precede death valence (Wong, 2008). We found that people with more death anxiety evaluated death as more negative and people with less death anxiety as more positive (Stiller & Di Masso, 2019). However, with the given research design, we cannot clarify whether unconscious death anxiety precedes death valence or vice versa. Despite the lack of a theoretical foundation for an effect of death valence on death anxiety, it is conceivable that people with less a priori death anxiety need less effort to evaluate death positively. If this was the case, it would be a bio-psycho-social precondition that would not serve itself for psychosocial intervention. The interesting point for intervention is that death valence can possibly be manipulated to acquire different terror management strategies. With these new terror management strategies, people might experience slightly less implicit anxiety, while conscious fear increases. However the goal is not to combat death anxiety, but to change death valence and to accept fears of death instead of denying them. In clinical contexts, the avoidance of a felt death threat is associated with persistent panic- and anxiety disorders (Thwaites & Freeston, 2005). Adaptive coping strategies in turn do not avoid a fictitious death threat and thereby reduce panic and anxiety (Thwaites & Freeston, 2005).

On a meta-level, TMT (Greenberg et al., 1986) supposes that death is always experienced as negative. Therefore, death valence would cause death anxiety. The association between death valence and death anxiety warrants future research to clarify directions and implications. In psychosocial interventions based on death attitudes, people with less initial death anxiety may be able to evaluate death as more positively. An a piori difference in death anxiety would only be relevant to intervention planning if the intensity of social and personal benefits disproportionally depended on prior death anxiety. On the contrary, it is also conceivable that higher initial death anxiety changes the entire process of terror management in a non-linear way. In this case, psychosocial intervention via death valence may demonstrate different results.

4.5.4. Conclusion

In conclusion, we assume that personal well-being and social justice partly depend on the strategies we use to deal with the terror of death. Fear of death and death anxiety are considered distal precursors of terror management strategies (Greenberg et al., 1986; Wong, 2008). This core anxiety neither needs to be changed as it serves survival, nor is it largely changeable. However, culturally added fears that built upon this core anxiety may be reducible. Anxiety is triggered by MS (Greenberg et al., 1986), yet MS does not result in one single terror management strategy, but in a possibly large variety of strategies, including death denial and death acceptance (Wong, 2008). The terror management strategies we use to deny death or to embrace life, to discriminate or live together, depend on death valence (Wong, 2008).

Death anxiety is triggered by MS, but depends on death valence. Hence, death valence may be an alternative theoretical explanation for the prominent MS effect and for the lack of such effect. If death must be denied in order to survive (Greenberg et al., 1986; Pyszczynski et al., 2015), then it would automatically be evaluated as negative (Wong, 2008). Although the MS effect departing from negative death valence has been well-evidenced throughout the past 30 years (Burke et al., 2009; Pyszczynski et al., 2015), empirical studies for the effects of positive death valence barely exists (Bassett & Dabbs, 2003; Hader, 1993). In accordance with this lack of studies, recent research questioned the MS effect as a possible result of publication bias (Rodríguez-Ferreiro et al., 2019). The explanation offered for the publication bias is cultural variety (Rodríguez-Ferreiro et al., 2019). We further specify that cultural variety is associated with variations in death valence and the resulting terror management strategies.

The underestimated power of death valence does not only indicate a theoretical sophistication of terror- and meaning management theories. On a practical level, death valence furthermore reveals indicators for psychosocial intervention in gender stereotypes and personal well-being. The alternative explanation of death valence for alterations in social open-mindedness

versus worldview defense is supported by a previous study (Stiller & Di Masso, 2019), in which death valence but not MS were associated with alterations in gender-related stereotypes and personal well-being. Gender stereotypes and personal well-being are assumed to depend on terror management strategies, such as death denial and death acceptance (Greenberg et al., 1986; Maj & Kossowska, 2016; Wong, 2008). Yet, the binary idea of death denial versus death acceptance may precisely trace back to death valence. Death valence as a proximate precursor of terror management strategies may therefore indicate a tangible clue for psychosocial intervention. A summary of conclusions is depicted in a revised ontological model of terror management strategies (Figure 7).

Figure 7

A Revised Ontological Model of Terror Management Strategies

---

death-awareness → anxiety → death valence → mortality salience → terror management strategies

---

Note. Death-awareness refers to universal consciousness about personal mortality. Anxiety refers to spontaneous death anxiety and is not necessarily equalled with rational fears that may be constructed upon culture-dependent death valence. Death valence reaches from negative to positive. Mortality salience refers to situational, external or internal triggers that remind people to their own death. Terror management strategies at least include death denial and death acceptance. The model is derived from Wong (2008).

4.5.5. Limitations

The main limitations of the present study are fourfold. In the first place, the reduced sample size does not allow for a generalization of the findings to a broader population. Furthermore, the sample's cultural restriction to mostly Caucasian, middle-class US participants between 19-63 years does not allow for generalization to other cultural contexts or across more stratified age groups. Nonetheless, results correspond with recent findings about fear, sadness, gratitude and curiosity in reaction to death reminders by a US sample of Caucasian, Christian, female participants in their 60s

(Wilkus-Stone, 2017). By contrast, Spanish university students in another recent study rather demonstrated sadness and anger than fear in reaction to death reminders (Martí-García et al., 2017).

Secondly, causalities can neither be guaranteed for MS reactions, nor for MS reactions divided upon death valence or for the individual relations in the revised ontological model of terror management strategies. Reactions to MS may theoretically have occurred in a similar way in the control group of dental pain or in self-expression without a previous death reminder. Since our a priori assumption was that MS reactions require a death reminder, no control group was set for content analysis. Moreover, death valence may have as well been the effect, the cause or independent of emotional reactions to MS. In addition to the question of causality, the revised ontological model of terror management strategies may lack of important aspects that have not yet been considered in prior research. Furthermore, the sequence of the assumed factors in the model is open to verification in future research. For example, a more positive implicit death valence was associated with less implicit death anxiety (Stiller & Di Masso, 2019). It is therefore conceivable that, against the logic of MMT (Wong, 2008), negative death valence precedes death anxiety instead of following it. Parallelly, neutral or positive death valence may each have different, so far unconsidered influences on affect.

Even under the assumption of the model's implied causalities, the intensity of effects may vary more than expected. Basing on TMT (Greenberg et al., 1986), MMT (2008) assumes that binary death attitudes are preconditioned by death anxiety, which in turn is preceded by death-awareness. However, death-awareness is assumed as universal in humans. If death-awareness was a rather time-stable, but variable trait instead of a universal constant, how would variations in death-awareness affect the ontological process of terror management strategies? The proposed model would hence be limited to an uncertain strength of effects if causality could be assumed.

In the third place, the indication of terror management strategies by emotional reactions to death reminders may be further specified on the conceptual level. Although action plans for the goal

145

of survival seem to be motivated by emotions (Martí-García et al., 2017; Strategy, 2020), the thoughts and feelings about death in the essay answers may represent either a cause or an effect of terror management strategies.

Finally, the applied measures are limited to the available response options. Response options were either restricted by the items of quantitative tests or by sample size in content analysis. The implicit test was limited to death anxiety, death valence and death acceptance versus denial. The explicit inventory for death attitudes comprised death acceptance, death rejection and various kinds of death fears. However, the inventory did not comprise death-related anger, sadness or joy. Essay responses included a broader variety of death-related emotions, such as various kinds of sadness or joy. Yet, the resulting categories can by far not be claimed to be exhaustive with a sample of 37 participants. Furthermore, the initial Kappa coefficient for intra- and inter-rater reliability only reached moderate values. Accordingly, different researchers may have interpreted the same essay answers and variable associations in a slightly different way.

4.5.6. Future Research

Future research needs to verify whether a manipulation of death valence serves psychosocial intervention against gender-related stereotypes and for personal well-being. To begin with, an amplification of the very scarce death valence literature would help to better understand the phenomenon. A more profound qualitative study with a bigger sample size may help to gain a deeper insight into why people evaluate death as more positively. In future intervention research departing from death valence, special attention on prior death anxiety is required to determine whether the effects of a death valence manipulation result in a similar rise in social and personal benefits under more or less prior death anxiety. Future intervention research may further include death fears and their interrelations with death anxiety in a clear conceptual framework.

In order to create psychosocial interventions based on death valence, the relationship between terror management strategies and stress coping has be revised. TMT (Greenberg et al.,

1986) understands terror management strategies as ways to deal with death anxiety that do not paralyze. In a very similar manner, stress-coping strategies are defined as "cognitive and behavioral efforts to [regulate] internal and external demands [...] exceeding the person's resources" (Folkman et al., 1986, p. 572). These efforts are assumed as plural. Yet, TMT does not define strategies or management efforts beyond death denial (Pyszczynski et al., 2015). Notwithstanding, prior terror management research on trauma implicitly equated terror management with coping (Chatard et al., 2011; Pyszczynski & Kesebir, 2011). If terror management equals death coping, prior literature reveals a variety of ways to deal with death anxiety beyond death denial (Wong, 2008) and death acceptance (Küber-Ross, 1969). Therefore, the resulting strategies would be expected to be plural. The plurality of terror management strategies may further explain a fallacy of TMT: MS does not always result in worldview defense (Rodríguez-Ferreiro et al., 2019). The understudied psychological routes between terror management strategies and emotional reactions may be elucidated by stress-coping literature in future research.

Furthermore, research on anger and sadness in the development of terror management strategies may contribute indicators for psychosocial intervention in gender-related stereotypes. TMT (Greenberg et al., 1986) and MMT (Wong, 2008) as well as common measures for death attitudes (Bassett & Dabbs, 2003; Wittkowski, 2001) contemplate death-related fear and anxiety, but neither sadness nor anger. This contradicts prior research, in which people who were confronted with different kinds of death reminders repeatedly expressed anger and sadness (Kübler-Ross, 1969; Martí-García et al., 2017). While sadness was one of the most explicitly expressed feelings in our sample, none of the essay answers were related to anger. Yet, prior results for this sample's hostile sexism indicate a rise of explicit anger in the process of death acceptance (Stiller & Di Masso, 2019). The role of anger and sadness in the ontology of terror management strategies remain an open stage for future research.

CHAPTER 5

CONCLUSIONS

Maybe now the challenge is to politicize [...] death; to claim the political potency of taking responsibility for our lives. (Coll-Planas, 2012, p. 64, translated by the author)

Guided by the value of equal opportunities, the central aim of the present research was to facilitate radical intervention in gender stereotypes. In the course of this thesis, possible precursors and dynamics of gender stereotypes were revised. A theory for the integration of death attitudes and gender stereotypes (understood as stereotypes on sex, gender and desire) was proposed and tested. Beyond the initial expectations for this thesis, the present research further explained the ontological process of terror management strategies and contributed to the understanding of terror management effects. Results provided indicators for radical psychosocial intervention in gender stereotypes. In conclusion, the contributions and implications for psychosocial intervention in gender stereotypes will be discussed. Limitations and directions for future research will be examined.

5.1. Contributions

The main contributions of the present research to social psychology comprise: 1) the clarification of the gender concept and its applications; 2) the discussion of death attitudes as possible precursors of gender stereotypes beyond psychoanalytic biases; 3) the proposal of a theory that integrates death attitudes and gender stereotypes, departing from the cross-fertilization of terror- and meaning management theories with queer theory; 4) the test of the corresponding theory and the interpretation of its results; 5) a further analysis of death attitudes to explain the previous findings; 6) methodological implications for future research; and 7) implications for psychosocial intervention in gender stereotypes. Implications for psychosocial intervention in gender stereotypes

will be presented in a separate section after the previous contributions.

5.1.2. A Queer Gender Concept

The current gender concept of social psychology was contrasted with its application in order to gain a deeper insight into the recent representations of gender stereotypes in the field. A first contribution to the discipline is the clarification of current confusions and omissions in the application of the gender stereotype concept. Trait ascription and self-categorization were previously confounded in sex and gender (Wood & Eagly, 2015). The confusion was disentangled with a queer approach (Butler, 1990). From a queer perspective, self-categorization is incorporated by the social environment's sex assignment. In turn, trait ascription seems to equal gender in the more restrictive sense of psychological trait ascription. Furthermore, the omitted relational part of gender stereotypes had barely been integrated into gender research beyond ambivalent sexism (Glick & Fiske, 1996). As a result, the need for an overarching framework for gender stereotypes emerged. A queer gender concept (Butler, 1990) includes the cultural ascription of bodily traits (sex), psychological traits (gender) and relational traits (desire). Queer theory (Butler, 1990) does not only reason sex, gender and desire as dimensions of one overarching concept. Moreover, it describes the dynamics between these dimensions.

In spite of the overarching analysis of gender, Butler (1990) has been criticized for a hardly understandable writing style (Birkenstein, 2010). In reply to this assertion, the queer gender concept in has been reduced to a more comprehensible model, which broadens the accessibility of QTMT to other branches of the social sciences. Thereby, queer theory has been made more coherent with its goals of transversality and intersectionality (Butler, 1990). The queer gender model further opposes the critique of queer theory as a mindset without practice implications (Jagose, 1996). Accordingly, the present research facilitates the claim for a queer revolution in social sciences (Mehta & Keener, 2017) and especially in psychology (Bem, 1995). Moreover, a queer gender concept allows for more precise research results and promotes the psychosocial intervention in gender stereotypes that

this dissertation aims at.

Unfortunately, the given sample size and measures in the present research resulted as insufficient to test the assumptions of the queer gender concept. Since the assumptions could not yet be tested exhaustively, the theory of a queer gender concept is maintained. Therefore, *gender stereotypes* in this final chapter refer to stereotypes on sex, gender and desire.

5.1.3. Queer Theory and Death Attitudes

A second contribution to social psychology comprises the revision of a possible precursor of gender stereotypes. Precursors that include and exceed cultural construction indicate possibilities for social change towards equal opportunities. The assumption of death attitudes as a precursor of gender stereotypes is not a novel one (Becker, 1973; Butler, 1990; Butler, 1997; Hirschberger et al., 2002; Hoyt et al., 2011; Hoyt et al., 2009; Maj & Kossowska, 2016; Rosenblatt et al., 1989; Roylance et al., 2017; Sáez, 2004; Schimel et al., 1999; Webster & Saucier, 2011; Wong, 2008). In the light of patriarchal history, a relationship between death attitudes and gender stereotypes make sense: Othering childbearers as women based on the argument of survival served to legitimize the sexual division of labour, spaces and the im-/possibilities to create culture (Lerner, 1986). However, death attitudes had not yet been focussed on as a foundation for intervention in gender stereotypes. Moreover, sex, gender and desire were confounded in pervious terror management research on gender stereotypes (e. g., Webster Saucier, 2011).

Previous intents to trace the psychologial roots of gender stereotypes to death attitudes based on psychoanalysis (Becker, 1973; Butler, 1990; Butler, 1997; Sáez, 2004). To begin with, Becker (1973) stated that stereotypes, prejudice and discrimination resulted from fear of death that was buffered with death denial. However, Becker (1973) departed from assumptions of hegemonic masculinity and heteronormativity that did not even imply the need to critically think about gender. By contrast, Butler (1990) departs from a critical perspective on gender.

Butler (1990) explained the roots of stereotypes on sex, gender and desire with psychoanalytical assumptions about a castration complex and an incest taboo. Yet, recent psychoanalysis does not explain the construction of culture and the self with sexuality anymore, but with death attitudes (Becker, 1973). Later on, Butler (1997) examined how power structures create psychological subjects, such as men and women. In order to understand the process of subjectivation and to indicate how to attenuate power, the role of conscience in the philosophical and psychoanalytical writings of Hegel, Nietzsche, Althusser, Freud and Foucault were discussed (Butler, 1997). Like TMT (Greenberg et al., 1986), Butler (1997) summarized that the child adheres to parental norms in order to survive. The adult subject is later formed by self-denial and repeated enactment of the given norms. "No individual becomes a subject without first being subjected" (Butler, 1997, p. 11). Nevertheless, a paradox seemed to emerge from the question of who is subjected if no subject exists before power (Butler, 1997).

Despite the constant references to death and mortality (Butler, 1997), philosophy and psychoanalysis were not connected with the social psychology of terror- and meaning management (Greenberg et al., 1986; Wong, 2008). As a result, the lack of connection hampered the quantitative test of the associations and the detection of intervention indicators. Interestingly though, Butler (1997) traced the concept of symbolic immortality back to Hegel's 250 year-old analysis of slaves and bondsmen. In conclusion of this analysis, Hegelian self-denial bases on the denial of death due to "absolute fear" (Hegel in Butler, 1997, p. 39) or "terror" (p. 42), which then creates cultures, normative power and subjects (Butler, 1997; Greenberg et al., 1986). From a terror management perspective, the keys to the creation of a self via culture are not conscience and self-denial, but self-consciousness and death denial (Greenberg et al., 1986). In the logic of TMT, conscience would only be a side-effect of self-consciousness. Self-consciousness is a bio-psychological condition that allows for the creation of sociocultural identities (Greenberg et al., 1986). By contrast, a self-conscious human being (a subject in Butler's relativist view) does not equal a sociocultural identity

(a subject in Butler's view, too). Neurobiological mechanisms enable most people to certain levels of self-consciousness (Pyszczynski et al., 2015). Self-conscious human beings are capable of constructing various sociocultural identities, depending on their contexts. Hence, there is no paradox between the subject before power and the subject constructed within culturally varying power contexts.

In order to answer the question of how power can be diminished by the subject, Butler (1997) revises the concept of agency. According to her, a person's agency does not represent own power, but a limited form of other-power that is incorporated into the self. On the other hand, the incorporation of power into the self can only be maintained when death is denied. In turn, the incorporation of power is expected to diminish with death acceptance (Wong, 2008) or positive death valence (Stiller & Di Masso, 2019; Wong, 2008). A change towards more positive death attitudes may hence open up to new possibilities in life (Kierkegaard in Becker, 1973) and attenuate power.

In a revision of queer theory and psychoanalysis, Sáez (2004) had already intended to synthesize both approaches. Indeed, queer theory partially refers to psychoanalysis (Butler, 1990; Butler, 1997). Psychoanalysis, in turn, achieved some progress against homonegativity in the past decades (Sáez, 2004). Nevertheless, even comparatively modern psychoanalysis such as Lacan's version remain heterosexist and are finally not compatible with queer theory (Sáez, 2004). In conclusion, previous intents to understand the psychological roots of gender stereotypes failed due to psychoanalytical explanations. By contrast, the transference of psychoanalytical literature to social psychology has been made compatible with queer theory in the present research. Their synthesis indicates future directions for theory and intervention practice in the context of gender stereotypes.

On the one hand, queer theorists' previous intents to detect the psychologial roots of gender stereotypes failed, since they were limited to untestable or refuted psychoanalytical assumptions

(Butler, 1990; Butler, 1997; Sáez, 2004). On the other hand, the subversive potential of queer theory is attenuated by the conceptual denial of bodily mortality (Coll-Planas, 2012). A theoretical deconstruction of the body that denies its mortality fails to criticize the foundation of the body concept. Accordingly, queer theory would benefit from a terror management perspective (Stiller & Di Masso, 2016). A terror management perspective on queer theory might pave the way towards an *existential queer theory*. With the transformation of psychoanalytical literature (Becker, 1973) into a social psychological theory, TMT (Greenberg et al., 1986) accounts for the political potential of death, while queer theory accounts for the political potential of gender. Vice versa, a queer perspective to terror management research on gender stereotypes is indispensable in order differentiate the confusions between sex, gender and desire in prior research (Hirschberger et al., 2002; Hoyt et al., 2011; Hoyt et al., 2009; Rosenblatt et al., 1989; Roylance et al., 2017; Schimel et al., 1999; Webster & Saucier, 2011). With a differentiation of these confusions, mortality salience (MS) effects can be clarifed. A queer perspective in terror management research on gender would enable more precise research results, reduce stereotype reification in science and protect people's dignity.

5.1.4. Queer Terror Management Theory

A third contribution to social psychology consists of the cross-fertilization and the synthesis of terror management-, meaning management- and queer theory. In agreement with the aims of research, a novel theoretical framework for gender stereotypes and its precursors has been presented in order to advance theoretical knowledge towards psychosocial intervention in gender stereotypes. Queer terror management theory (QTMT) proposes a framework that integrates the theories of terror- and meaning management with queer theory. QTMT hypothesized that death acceptance inhibits the activation of gender stereotypes when controlled for MS. QTMT includes a multidimentional, interrelated model of gender including sex and desire that explains gender beyond the previous confusions of trait ascription and self-categorization, and the omission of sexist

relational attitudes. Parallelly, it suggests the precursors of gender stereotypes to reside in death attitudes. Yet, more importantly, QTMT proposes alternatives for intervention in gender stereotypes from a queer perspective.

5.1.5. An Initial Test

In the fourth place, this dissertation contributes an initial test of QTMT to social psychology. The three QTMT hypotheses were not generally corroborated. Nevertheless, the results of the initial test suggest indicators for radical intervention in gender stereotypes as well as future research directions for QTMT, TMT, MMT, applied queer theory and for personal well-being.

The first QTMT hypothesis on sex, gender and desire as dimensions of a queer gender concept was not supported since it could not be tested exhaustively. On the one hand, the aspired sample size was not obtained despite the initial 165 participants. On the other hand, implicit data for sexual identity, sexual prejudice and homonegativity were associated, while implicit data for gender identity and gender prejudice was not related with either of them or with each other. Noise in the data due to a loading message as well as to an outdated approach on gendered traits may have reduced the strength of the implicit associations. On an explicit level, ambivalent sexism towards women and men was moderately till highly associated with modern homonegativity. Yet, the measures for ambivalent sexism do not sufficiently distinguish between sex, gender and desire. Accordingly, the possibility to support the hypothesis with the obtained data was restricted. Nevertheless, the dissertation contributes a theoretical model of queer theory and the indications to retest it with more appropriate measures and an adequate sample size. Furthermore, the results of the initial QTMT test demonstrated the obsolescence of binary demographic measures for sex, gender and desire.

The second hypothesis was partially corroborated on an implicit level and rejected on an explicit level. Results raised questions about the utility of death acceptance as an indicator for intervention in gender stereotypes. As predicted, death acceptance was associated with less implicit

death acceptance. By contrast, explicit death acceptance was related to increased ambivalent sexism towards women. Both associations were weak. Death acceptance was not related to any other stereotypes on sex, gender or desire in either explicit or implicit test. These initial test results rather contradict the theoretically implied association between death acceptance and gender stereotypes (Maj & Kossowska, 2016; Stiller & Di Masso, 2016; Wong, 2008). Nonetheless, the findings indicate future research on the process of death acceptance in relation to gender stereotypes. In accordance with MMT (Wong, 2008), implicit and explicit test results pointed at the existence of more than one terror management strategy. Covariate analyses indicated that death acceptance was associated with increased personal well-being, as expected by Wong (2008). People with higher explicit death acceptance demonstrated less fear of death, more self-esteem, more positive affect and higher life satisfaction. In turn, more rejection of death as an attitude of stable death denial was associated with more explicit fear of death and with less self-esteem. This finding further contradicts TMT (Greenberg et al., 1986), which predicts death denial to decrease fear and to increase self-esteem. Yet, it supports the assumption of clinical psychology, by which avoidance behavior is not necessarily adaptive (Helbig-Lang & Petermann, 2010; Thwaites & Freeston, 2005).

Since implicit death acceptance was conceptualized as inverted death denial (Bassett et al., 2004), explicit death acceptance and denial were expected to be highly associated. As expected, explicit death acceptance and denial were highly associated. Nevertheless, further factors may constitute death acceptance. Death acceptance was theorized to base on positive death valence, while death denial was related to negative death valence (Wong, 2008; Wong & Tomer, 2011). Death acceptance and death valence were slightly associated on an implicit level. However, death valence did not predict death acceptance to a large extent. Possibly, more positive death valences than in the given sample are required for a stronger association with death acceptance. The constitution of death acceptance as well as its effects on social justice and personal well-being warrant future research.

A central finding of this thesis is the unexpected influence of positive death valence on sexual identity, homonegativity and gender prejudice. Positive death valence predicted a higher identification with the female, a more positive attitude towards homosexuality, and a higher capacity to view women as agentic and men as communal. Positive death valence in wave 1 reduced patriarchal stereotypes in wave 2 after 7-10 days. Despite the noise in the implicit data and the improvable gender measures, positive death valence indicated comparatively time-stable effects in unconscious stereotypes on sex, gender and desire. Therefore, death valence seems to serve radical intervention in gender stereotypes. Explicit measures for death valence have not been applied since they do not yet exist. The finding of a death valence effect is especially interesting since research on death is scarce, but research on death valence barely exists. In the database of PsycInfo (status: 01/08/2020), the search for "death valence" yielded two results (Bassett & Dabbs, 2003; Hader, 1993). Both results were related to personal well-being and rather clinical contexts. More results (48) were found for "death ambivalence", but did neither result as conclusive (most contents related to murder or suicide and often departed from psychoanalysis). Death valence and social justice had so far not been associated beyond theory (Maj & Kossowksa, 2016; Wong, 2008). The findings of the initial test in the present research indicate more than an attitude of general positivity in death valence. If positive death valence was explained by general positivity, then results would have exclusively emerged for sexual prejudice and homonegativity, since these measures associated the concepts of good/bad with male and female or homo/straight words. Yet, results effected the precise indicators for a queer gender concept including intensity of self-categorization as male or female (sex), the ascription of traits to sexed roles (gender), and prescriptions on desire as implied by homonegativity (desire). However, the lack of an effect for sexual prejudice and gender identity is open to future research.

A further surprising result of the present research was the global lack of a MS effect. No effect was found on most of the applied implicit or explicit gender-related measures. When effects

were found, these effects contradicted the expected directions and exclusively tackled ambivalent sexism, mostly towards women and to a lesser extent against men. Against the predictions of TMT (Pyszczynski et al., 2015), the dental pain control condition as well as naturally occurring MS moderated the association between explicit death acceptance and ambivalent sexism towards women (Stiller & Di Masso, 2019). Overall, the suggestion of a publication bias for the MS effect (Rodríguez-Ferreiro et al., 2019) is supported. In addition it is assumed that MS effects do not only depend on time and cultures, but on the variety of terror management strategies they may trigger. In contrast to prior theories (Greenberg et al., 1986; Wong, 2008), our results indicate the possibility of plural terror management strategies beyond death denial and acceptance.

5.1.6. A Revised Terror Management Process

A fifth contribution of this thesis to social psychology consists of a deeper analysis of emotional reactions to death reminders, the role of death valence and the ontology of terror management strategies. A third study examined how people react to death reminders, which thoughts and feelings were associated with positive versus negative death valence, and which relationships might exist between death anxiety, death valence, and MS as possible precursors of terror management strategies. After a death reminder, a variety of complex emotional reactions upon the dimensions of fear/anxiety, sadness, calm and positivity was expressed (Stiller & Di Masso, 2020). These reactions depended on death valence. A more positive death valence was associated with more conscious fear but less unconscious death anxiety, while a more negative death valence was related to more death denial. In conlusion of previous quantitative and qualitative findings, a new ontological model for terror management strategies was proposed. According to this model, terror management strategies emerge on the basis of death-awareness, which result in implict death anxiety and explicit fears of death. This assumption coincides with TMT (Greenberg et al., 1986). Yet, depending on the valence attributed to death, MS is expected to trigger different kinds of terror management strategies. These terror management strategies are not necessarily death

denial or death acceptance, but can be represented by a variety of death attitudes and emotional reactions.

After the initial test of QTMT, its assumptions have to be revised. Revised assumptions include death valence as a precursor of terror management strategies rather than death acceptance or MS, and a decreasing effect of death valence on gender stereotypes. In summary of the thesis' findings on death valence and gender stereotypes, a revised model for QTMT is derived for future research (see Figure 8). Under the theoretical assumption of a not yet sufficiently tested queer gender construct, positive death valence would be expected to reduce the construct factors of sex, gender and desire.

Figure 8

A Revised Model of Queer Terror Management Theory
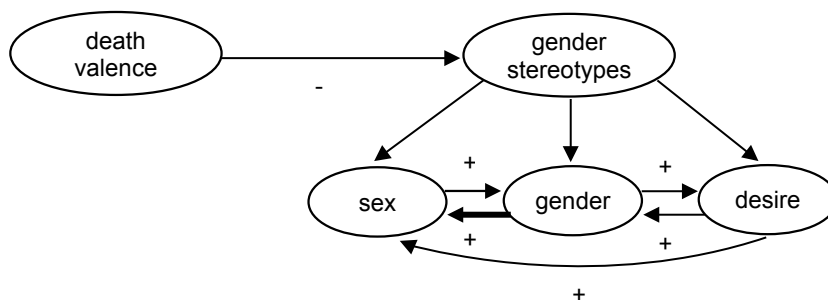
Note. Hypothesized model for the association between death valence and the activation of gender stereotypes from a queer perspective. Sex: the social interpretation of hormones, chromosomes, anatomy; gender: trait ascription along with social roles and/or sexed bodies; desire: socially expected sexual orientation; prescriptive heterosexuality.

The revised assumptions of the present research are indirectly supported by three recent studies (Boyd et al., 2017). In these studies, openness to death was found as a moderator between MS and worldview defense. People with higher openness to death showed to be more tolerant and less prejudiced (Boyd et al., 2017). In conclusion, the authors suggest that "ascribing positive

qualities to that which one is most fearful (death) can pave the way for greater tolerance and potentially decrease prejudice and discrimination, thus allowing for a more fulfilling life" (Boyd et al, 2017, p. 125). Openness to death was discussed as a predictor of terror management strategies (Boyd et al., 2017). Yet, death valence was not considered in the concept of openness to death beyond the previous quote. A lack of MS effects in other studies was not explained. Death valence might be a precursor of openness to death, as mentioned in the above stated citation. The assumption is corroborated by the relationship of curiosity with openness to death (Boyd et al., 2017) and death valence (Stiller & Di Masso, 2020).

5.1.7. Methodological Implications

The present research indicates a need for revised methods to measure death attitudes and gender stereotypes. The methods of social psychology have traditionally been eclectic in order to holistically examine complex social phenomena (Ross et al., 2010). In this methodological interdisciplinarity, different epistemiologies collide (Leavy, 2014). To increase interdisciplinarity, multi method research designs faciliate the discipline's aim of progress towards intervention in social discrimination and prejudice (Leavy, 2014). In turn, epistemiological rigidity may inhibit such progress with the prescription of quantititative methods for post-positivist hypotheses or qualitative methods for relativist or critical research questions. Quantitative research can be critically interpreted (Evans et al., 2019) and qualitative research can be quantified if needed (Leavy, 2014). First and foremost, the application of research methods depends on each research question.

Questions about an effect of death attitudes in gender stereotypes may be evaluated with a combination of qualitative and quantitative approaches in future research. In a first step, the death and gender attitudes of each culture and person may be identified via qualitative methods. Qualitative results may then be integrated into a quantitative measure. Beyond a revision of generalized ideas about femininity and masculinity, new technologies might allow participants to

160

fill in categories and contents before the measure of reaction times in stimuli categorization. Such methods would require qualitative and quantitative expert knowledge to interpret and compare the results. Research that allows for personalized categories and contents would align precise demographics on sex, gender and desire with each specific research question.

In conclusion of the findings on complex emotional reactions to death reminders and death valence, future research on death attitudes would benefit from theories and measures that include emotions beyond fear or anxiety. Especially, a stronger theoretical foundation for death valence as well as new implicit and explicit measures might reason why people value death as more positive or more negative.

5.2. Implications for Intervention in Gender Stereotypes

A seventh contribution of this dissertation to social psychology consists of its implications for intervention in gender stereotypes. The following section discusses possibilities for psychosocial intervention in gender stereotypes derived from the results of the present research. It is important to stress that the suggestions of this section rather represent questions in a brainstorming for initial ideas than answers or prescriptions for intervention. The section is divided into 1) a conceptual question, 2) intervention planning and process, 3) possible methods for psychosocial intervention with individuals, groups and towards public policies, as well as 4) strategies for the implementation of psychosocial intervention in gender stereotypes derived from palliative care and previous interventions in gender stereotypes.

5.2.1. A Conceptual Question

If death attitudes affect gender stereotypes, psychosocial intervention against gender discrimination may either exclusively base on death attitudes, or combine death positivity with gender deconstruction. As described in the introduction of this this thesis, current US-based interventions in gender stereotypes aim to increase rational and emotional consciousness about specific kinds of gender discrimination. In order to include a broader range of stereotypes on sex,

gender and desire, death-awareness must be addressed and extended to the transience of gender.

An intervention in death attitudes holds the theoretical potential to also diminish further kinds of prejudice (Boyd et al., 2017; Maj & Kossowska, 2016; Wong, 2008). However, it would not be specific to gender stereotypes and thereby possibly fail to develop the full potential of a more precise combination with gender deconstruction and the knowledge gained from prior interventions in gender stereotypes.

5.2.2. Intervention Planning and Process

A first step to plan an intervention process consists of a social diagnose (Lyon & Koerner, 2016). To gain more objective knowledge, specific communities instead of generalized populations have to be diagnosed (Haraway, 1988). The social diagnose is followed by the psychosocial intervention itself and complemented by an evaluation of the entire process (Lyon & Koerner, 2016). The findings of the present research imply an initial social diagnose. However, the needs and objectives for intervention depend on each specific community. In accordance with situated knowledges, interventions must be adapted the backgrounds and needs of the participants, their communities, spaces and bodies (Haraway, 1988). In addition, people's emotional and financial resources (Folkman et al., 1986) as well as their basic needs must be considered prior to intervention. Basic needs reach from physical and safety needs (Maslow, 1943) to psychological needs for competence, autonomy, and relatedness (Deci & Ryan, 2000). Since needs vary and translate into different goals, they have to be addressed from the perspective of each person or community to ensure participant motivation and adherence.

User-centered, evidence-based interventions (Lyon & Koerner, 2016) represent an approach to create psychosocial interventions together with its participants. Afterwards, quantitative evaluations analyze the intervention's perceived usefulness within the group. In contrast to other approaches, user-centered and evidence-based intervention does not aim to succeed at the first try. Instead, they aim to continuously improve by learning from previous errors (Lyon & Koerner,

2016). Participants and experts create the design and redesign, choose the methods and the kind of evaluation. This logic partially coincides with "the queer art of failure" (Halberstam, 2011). Conscious failure can be used as a creative form to find alternatives for imposed norms on success. Addressing a variety of failures promotes the visibilization of imposed norms for success that finally criticize the system from the angle of the oppressed (Halberstam, 2011). Finding alternatives hence requires failures and collective participation instead of normative expert power.

According to each target group, the resulting interventions may be manifold. Each collective may show different backgrounds and needs. Since the aim of the present research is to diminish patriarchal gender stereotypes, one obvious target group for intervention are normative men with rather traditional views. Traditional men often feel ashamed and fear to be attacked (Tremblay & L'Heureux, 2005). Despite a large variety of superficial, highly scripted relationships with other men, they have not learned to establish deeper affective bonds with people of any gender (Tremblay & L'Heureux, 2005). Psychosocial intervention with men would hence have to especially consider shame and threat, which seem closely related to a death threat against their gendered identities.

Creativity and frustration tolerance are required to create a new terrain for psychosocial interventions in gender stereotypes based on death attitudes. New strategies may incorporate palliative care perspectives with prior approaches to intervention in gender stereotypes, such as increasing gender awareness and empathy (De Lemus et al., 2014), role play (Kilmartin et al., 2015), and social support groups combined with media use (Pullen, 2014). The incorporation of previous knowledges and the users' new inventions hold the potential to amplify intervention results towards equal opportunities.

5.2.3. Methodological Propositions

In the following paragraphs, ideas for specific intervention methods will be summarized. These ideas depart from the concept of a psychosocial intervention that combines previous approaches to gender stereotypes with methods from palliative care. Methods address individuals,

groups and public policies. The direction of methods cannot be strictly separated upon individual, group or public policies, since, for example, media can be created by a group, with a political claim, and be consumed by another individual person. Activities like meditation or computer games can further be realized alone or in a group setting.

Methods that can be adapted to a group level, but depart from an individual focus comprise Narrative Exposure Therapy (Schauer et al., 2011; Nosè et al., 2017), work with genograms (McGoldrick & Gerson, 1985; McGoldrick, 2016), Stress Inoculation Training (Meichenbaum & Deffenbacher, 1988; Meichenbaum, 2007) and death mindfulness (Edou, 1996; Wangyal, 1998; Wilkus-Stone, 2017).

5.2.3.1. Narrative Exposure Therapy

Narrative Exposure Therapy (NET; Schauer et al., 2011) is an effective, short-term type of psychosocial intervention for personal re-integration after traumatizing life experiences with a felt or real death threat (Nosè et al., 2017). Especially PTSD is related to death anxiety (Chatard et al., 2011; Pyszczynski & Kesebir, 2011; Schauer et al., 2011). With the help of a symbolic lifeline (e. g., a cord) and very few additional material (e. g., stones, flowers, paper, a pen), the person expresses their biography including joyful and difficult moments (Schauer et al., 2011). In the process of self-expression and being heard, the person attains a more balanced, meaningful view on their biography. This view integrates traumatic events into the biographical narrative without narrowing life experience to them (Schauer et al., 2011). Thereby, the person obtains a feeling of personal integrity and self-esteem (Schauer et al., 2011). Based on the awareness of prior positive experiences and mastered challenges, the person recognizes where they come from and where they stand now.

NET stems from Germany, while this thesis mainly refers to the US context. A similar therapy in the US that centers on the biographical integration of threatening life experiences has been proposed with Lifespan Integration (Pace, 2003). However, lifespan integration therapy is

understudied and its usefulness seems geographically more restricted. By contrast, NET has proven as effective in various contexts around the world, such as various European countries, Sri Lanka, Sudan, Uganda and the US (Nosè et al., 2017; Schauer et al., 2011). It has repeatedly shown as helpful with refugee and non-refugee populations as well as with varying age groups (Nosè et al., 2017; Schauer et al., 2011). In addition to its broader applicability, NET takes a political stance (Schauer et al., 2011) in accordance with its roots in testimony therapy (Cienfuegos & Monelli, 1983; Schauer et al., 2011). Testimony therapy was used to restore the personal integrity of the Chilenean Pinochet regime's torture survivors. However, the aim of therapy went beyond the personal. People's testimonies served to publicly denounce the regime's human rights violations. Therefore, this kind of therapy involves the political goal of human rights preservation. Transferred to gender discrimination, personal experiences may be collected and – if consented – be explained in public to promote equal opportunities for people of all genders, sexes, and sexual orientations. NET can be used as a separate intervention strategy, or in combination with further strategies. If combined with other strategies, such as death mindfulness, NET may serve to stabilize before death confrontation.

5.2.3.2. Work with Genograms

Genograms are an intervention tool derived from systemic family therapy (McGoldrick & Gerson, 1985). In the work with genograms, relational, behavioral, cognitive and emotional patterns in people's personal contexts are analyzed (McGoldrick, 2016). Death attitudes and gender stereotypes consist of patterns that are constructed in relations. In the work with genograms, participants are asked about their basic concern, their genealogical tree, and central life events. Relationships associated with the basic concern and central life events are more closely examined. Work with genograms allows to recognize relational patterns and to understand their origins. Potential conflicts and resources are uncovered in order to discover future life directions (McGoldrick, 2016). The systemic approach of genograms fits with the supra-individual perspective

of social psychology (Allport, 1924), as well as with the relativist and critical approaches of queer theory (Scotland, 2012). On a methodological level, the binary sex and gender symbols used in genograms may be rethought (What do they in/visibilize? Which alternatives are possible?). Genograms go beyond the personal histories that NET addresses. An adaptation of work with genograms for psychosocial intervention in gender stereotypes does not exclusively have to focus on family members, but can be extended to other persons who shaped own beliefs on sex, gender and desire.

5.2.3.3. Stress Inoculation Training

The approach of Stress Inoculation Training (SIT; Meichenbaum & Deffenbacher, 1988) transferred to death attitudes departs from the idea that the human ability to anticipate death does not only represent a problem but forms part of the solution. Stress inoculation is a training that prepares for stressful, anxiety- and/or anger-provoking situations in three steps (Meichenbaum & Deffenbacher, 1988). It can be both used for prevention as well as for intervention (Meichenbaum, 2007). In a first step, a positive, trusting relationship has to be established (Meichenbaum & Deffenbacher, 1988). Second, resources to deal with stressors are identified and new skills against stressors are developed. These may include social support, relaxation techniques and the cognitive-affective restructuring of catastrophic beliefs (Meichenbaum & Deffenbacher, 1988; Meichenbaum, 2007). Finally, the resources are put into practice in stressful situations, for example in role plays (Meichenbaum & Deffenbacher, 1988).

Like NET or the genogram technique, SIT understands humans as creators of narratives that make meaning of what they have experienced themselves and what they have learned from others (Meichenbaum, 2007). These narratives are the basis of catastrophic beliefs (Meichenbaum, 2007). SIT as an intervention approach works like a psychological vaccine. Desensitization is reached through repeated exposure and through training the confrontation with the expected stressor (Meichenbaum, 2007). This approach is compatible with NET and genograms, but also with prior

166

approaches to intervention in gender stereotypes by means of role play (Kilmartin et al., 2015).

5.2.3.4. Death Mindfulness

The approach of SIT coincides with practicing death in Tibetan Buddhism (Edou, 1996; Wangyal, 1998; Wilkus-Stone, 2017). Meditation and mindfulness are Buddhist techniques against stress and anxiety (Wilkus-Stone, 2017). The health benefits of mindfulness as conscious, calm psychological states have been demonstrated throughout various studies (for a meta-analysis, see Grossman, Niemann, Schmidt, & Walach, 2004). These states can be reached without a religious connotation (Grossman et al., 2004). In a similar way, Machig Labdrön's Buddhist death meditation (Edou, 1996) may inspire measured confrontation with death anxiety in non-religious meditation. Machig Labdrön was one of the few female spiritual leaders in the 11th century Tibet (Edou, 1996). As the founder of the Chöd lineage, her objective was to cut off attachment to cultural identities, such as gender (Edou, 1996). In order to do so, Labdrön intentionally meditated on her own death in frightening places, such as cemeteries or sky burial sites. Labdrön's meditation based on the idea of practicing death in order to reduce death anxiety (Edou, 1996). This idea coincides with the foundation of stress inoculation training (Meichenbaum, 2007). For Labdrön, the reduction of death anxiety is directly related to the deconstruction of cultural identities (Edou, 1996). Labdrön's approach could possibly be extended with a simplified, culturally adapted version of the dream and sleep yogas of the Tibetan Bön tradition, in which death is practiced symbolically in everyday sleep, and reality is questioned in conscious dreaming (Wangyal, 1998).

A recent dissertation in clinical psychology (Wilkus-Stone, 2017) examined the effects of meditation induced by concentration on breath versus induced by MS. Like the present thesis, the dissertation departed from the questioning of death denial in TMT compared to posttraumatic growth research (Wilkus-Stone, 2017). Wilkus-Stone (2017) further wondered why mindfulness has effectively been extracted from Buddhism to counseling psychology, but the central question of Tibetan Buddhism on contemplating death in meditation has not. In interviews with 20 mostly

female, white, Christian, ca. 60 year-old participants from the US, emotional reactions to death reminders were complex, reaching from predominant fear to sadness, gratitude and curiosity. These results coincide with the findings of the present research in a more diverse group of participants (Stiller & Di Masso, 2020). Compared to breath-induced mindfulness, meditation on death was experienced as more challenging, but also as more beneficial (Wilkus-Stone, 2017). Death meditation increased self-awareness, awareness of personal relationships, and of passing time (Wilkus-Stone, 2017). Both kinds of meditations increased cognitive and emotional activity as well as body awareness (Wilkus-Stone, 2017).

The efficiency of MS meditation is mediated by the degree of abstraction of death (Wilkus-Stone, 2017). In prior literature, the beneficial effects of death confrontation emerged when death was not experienced as abstract, as indicated by research on posttraumatic growth (Tedeschi & Calhoun, 1996), near-death experiences (Cozzolino et al., 2004), as well as in studies with terminally ill people (Kübler-Ross, 1969) or older persons (Wilkus-Stone, 2017). Accordingly, the level of death abstraction has to be considered in planning interventions, possibly by a modulation of space as implied by Labdrön (Edou, 1996). Departing from the logic of stress inoculation training and death mindfulness, psychosocial intervention in gender stereotypes might address resources, skills and stressors in death and gender attitudes before practicing the skills and resources in meditation or role play. In correspondance with the findings of the present research (Stiller & Di Masso, 2019), these skills and resources should especially be directed towards positive death valence and the deconstruction of gendered identities. Guided death meditations may include breath techniques that connect with the mortal body. Furthermore, questions towards personal growth derived from posttraumatic growth factors, such as the appreciation of life or intimate relationships (Tedeschi & Calhoun, 1996), may be added.

5.2.3.5. A Target Group Example

The so far mentioned approaches to psychocial intervention may be promising. Yet, they will only motivate a restricted group of people. They may, for example, attract queer yoga practitioners, but not adolescent cis gamers. Accordingly, alternative approaches must be considered regarding each community. These must be developed together with the corresponding community as experts (Lyon & Koerner, 2016). Thrilling computer games may create experiences in utopian societies as virtual reality. In accordance with previous approaches to intervention in gender stereotypes that base on role play and empathy (Kilmartin et al., 2015; Zawadzki et al., 2014), these fictitious experiences hopefully permit to empathize with the intersecting realities of real people. Possible gambling addictions have to be considered prior to intervention. Beyond the effect of such computer games on the players, gamers may also help to advance societies. Gamers were able to solve a complex molecular problem without any previous knowledge by playing a computer game ("Foldit"; Khatib et al., 2011). The problem about antiretroviral drugs (for example against HIV) had concerned biochemists for years, while the gamers solved it in only three weeks (Khatib et al., 2011). Hence, why would gamers not be able to solve complex societal problems?

5.2.3.6. Group Activities

Group activities are assumed as especially beneficial, since social support has shown as an elementary factor for coping with death anxiety (Folkman et al., 1986; Ehlers & Clark, 2000; Samarel, 1995) and as a protective factor against mental or physical health problems (Heaney & Israel, 2008). Intervention groups ideally include contact with lesbian, gay, trans, intersex and/or non-binary role models to raise empathy and to reduce gender stereotypes. Contact with LGTIQ people in the present research (Stiller & Di Masso, 2019) was associated with less ambivalent sexism towards women and especially with less implicit and explicit homonegativity. This finding coincides with intergroup contact theory (Pettigrew & Tropp, 2006). Most of the mentioned individual interventions may be adapted to group settings. On a group level, discussion rounds can

be organized and accompanied by specific group dynamics, rituals, or media use. A possible dynamic might include rereading history in terms of the roles of death and gender (What can versus cannot be seen?). An insightful example for rereading history is given in the introduction of this thesis.

In the logic of fictitious realities that help to empathize, varying gender roles and death attitudes may be incorporated in live action role-playing games (LARP). Beyond the actors without a direct public in LARP, role play intervention can be extended to involve the audience. Boal's (2018) Theater of the Oppressed combines theater, education, therapy and activism for both the actors and for the participating audience (Fernández et al., 2019). Theater forum as an exercise of the theater of the oppressed has shown to empower individuals and communities – the actors and the participating audience - towards a critical analysis of their social environments and towards more control over the situations that oppress them (Fernández et al., 2019). In the US context, exercises of the theater of the oppressed, such as theater forum, have repeatedly been used to address gender issues at universities (Christensen, 2013).

5.2.3.7. *Interventions towards Public Policies*

The previously described individual and community interventions pave the way for activism towards public policies. They may help to raise awareness of political obstacles and goals in order to subsequently formulate political claims. These claims are to be decided by the people of each community. The awareness raised by psychosocial interventions may guide conferences, political assemblies, demonstrations, virtual encounters and media productions as much as these events may influence psychosocial intervention vice versa. Claims emerging from increased awareness and community support may address local policies as well as national laws.

People's potential to directly influence even on national politics is illustrated by the example of Iceland. In the aftermath of the 2008 financial crisis, Icelandic citizens rewrote their constitution via social media and gatherings of politically unaffiliated community representatives (Landemore,

2015). The resulting crowdsourced constitution draft was approved by the Icelandic cititzens in a national referendum. Finally, it did not pass through the Parliament. Nonetheless, the Icelandic constitution remains as an empowering example for people's direct influence in politics (Landemore, 2015).

On the contrary, politics also influence people. Accordingly, campaigns for the public good may not only address gender-based violence, racism and pro-environmental behavior, to mention some examples. Moreover, campaigns for the public good may participate in death education to reduce social prejudice. Death education ideally departs from an intersecting approach that comprises, for example, gender-based violence, racism and pro-environmental behavior. Such educational campaigns need to be facilitated by the according institutions.

5.2.4. Implementation Strategies

In the following paragraphs, indicators that facilitate the realization (the how) of psychosocial intervention via death attitudes will be provided. Since gender stereotypes are assumed to ground on death attitudes (Maj & Kossowska, 2016; Rosenblatt et al., 1989; Wong, 2008), hints for the implementation of interventions are mainly derived from psychosocial support in palliative care for dying people and their relatives. Further hints are derived from social psychology. The following paragraphs on implementation strategies are divided into three central points. A first point shortly describes a general perspective of palliative care. A second point considers settings for communication and ways to communicate with participants. Finally, possible obstacles and resourses for the caregivers are addressed.

5.2.4.1. A Palliative Care Perspective on Gender Sterotypes

In the present research, palliative care refers to care for dying people and more precisely to the symbolic death of incorporated gender stereotypes. Palliative care does not aim to avoid death or the psychological suffering that death reminders produce (Bild & Gómez, 2008; Strada, 2013). Rather, it understands the suffering that accompanies death as a chance for personal growth

(Kübler-Ross, 1969; Wong, 2008). This preparatory grief does not equal pathological depression, but the healthy process of psychological preparation for one's own death (Strada, 2013). In the context of gender stereotypes, a palliative care perspective on gender stereotypes has recently been adopted, but requires further extension.

Queer theory tried to trace gender stereotypes back to death attitudes (Butler, 1990; Butler, 1997) departing from refuted psychoanalytical theories (Becker, 1973). Accordingly, Butler (1997) did not derive consistent implications for intervention in gender stereotypes. Further feminist theory focussed on the socially restricted grief for othered, dehumanized people, whose exclusion continues in death as a threat to the white heteronorm (Athanasiou, 2005). While Butler (1997) approaches the roots of gender stereotypes without distinctive clues for intervention, Athanasiou (2005) states an important point for intervention in the effects, but not in the causes of gender stereotypes. Silent marches open up the possibility for public mourning as a psychosocial and as a political intervention (Athanasiou, 2005). The massive silent march "Black Trans Lives Matter" in New York, motivated by the violent deaths of three racialized trans women in June 2020, is one recent example for such events (Patil, 2020). Silent marches hold the potential to visibilize dehumanization, to posthumously re-humanize the deceased and to listen to the affected community. Furthermore, they facilitate social support between demonstrators, as well as personal reflection on one's own mortality and on the othering that caused the death of the mourned person (Athanasiou, 2005). Possibly, a palliative care perspective on gender stereotypes allows people to mourn their own mortality before othering and violent deaths occur. The palliative practices of preparatory (Strada, 2013) or anticipated (Bild & Gómez, 2008) grief may paradoxically enable the prevention of further deaths by intervention in gender stereotypes. Political activism and personal reflection on death combined with gender are possible (Athanasiou, 2005; Patil, 2020). However, they additionally need to orientate towards one's own death, not only to the death of the others. In the logic of TMT (Greenberg et al., 1986), the recognition of other people's death is a progressive,

indirect way to recognize one's own mortality. Yet, the other-focus preserves a partial denial of one's own death (Greenberg et al., 1986). Both, Butler (1997) and Athanasiou (2005) based their arguments towards intervention on Freudian ideas of mourning. However, the data of the present research (Stiller & Di Masso, 2019) suggest that emotional confrontation with one's mortality has to go beyond psychoanalytical ideas of mourning by addressing death attitudes.

5.2.4.2. Ambience and Communication

In the following paragraphs, strategies for the implementation of intervention in gender stereotypes via death attitudes will be derived from palliative care, social psychology and critical pedagogy. These approaches focus on ambience, comprehensibility for participants, empathetic listening, resistance management and empowerment.

Communication for intervention is recommended to be set in an intimate, egalitarian atmosphere that inspires confidence and calm (Rogers, 1942; Samarel, 1995; Strada, 2013). To increase the comprehensibility of emotionally difficult information (e. g., about death), it has to be shared with empathy instead of a cold rational briefing (Bild & Gómez, 2008). During the confrontation with death, clear, short sentences, stepwise disclosure and the repetition of central points may help participants to retain and process information (Bild & Gómez, 2008). The intervention has to be planned together with the participants (Lyon & Koerner, 2016) in order to promote adherence and effectiveness for the corresponding community. Planning an intervention together with its participants implies their voluntary collaboration. On the contrary, participants may perceive imposed interventions as invasive and threatening (Bild & Gómez, 2008).

Reactance to intervention is especially expected when threatening topics are tackled (Steindl et al., 2015). Questions about death and cultural identities such as gender are prone to reactance (Pyszczynski et al., 2015; Steindl et al, 2015). Reactance is understood as automatic resistance to social influence when people feel threatened in their freedom to think, decide and act (Brehm, 1966; Steindl et al., 2015). When people feel they are trying to be persuaded, they tend to produce even

more counterarguments that confirm their prior position, to experience anger and other kinds of negative affect and to potentially act aggressively in order to feel free again (Steindl et al., 2015). Reactance can either be used in paradoxical intervention or it can be mitigated (Steindl et al., 2015). Mitigation occurs a) when people are warned of potentially threatening messages; b) when messages are framed in terms of gain instead of loss, or c) when compassion with the threatening person or general compassion are encouraged (Steindl et al., 2015). In order to avoid counterproductive intervention effects, reactance has to be considered on a meta-level of communication.

Social norms are processes, not fixed states (Lewin, 1947). Their change can imply resistance, yet this resistance can be overcome with group decisions (Lewin, 1943; Lewin, 1947). In a famous experiment on food habits after World War II, the goal of a psychosocial intervention was to convince housewives in the US of preparing more meals with glandular meats. Glandular meats, such as hearts, brains and kidneys, were depreciated, but available, cheap and comparatively healthy. The use of glandular meats was either explained in a 30 minute lecture condition or discussed after a 10 minute expert introduction between participants in a moderated group that focussed on decision-making (Lewin, 1943). One week later, participants in the lecture condition prepared 10% more meals with glandular meats than before, while in the decision-focussed group discussion, meals with glandular meats increased by 52% (Lewin, 1943). Lewin (1943; Lewin, 1947) concluded that the group discussion was more persuasive because participants transferred the problem to their personal lives, and because societal norms are easier changed in social groups than in individuals. This conclusion coincides with the importance of mutual support and role models in groups as central factors for effective intervention in palliative care (Samarel, 1995). Regarding the previous findings on reactance and basic psychological needs (Deci & Ryan, 2000; Steindl et al., 2015), it is furthermore conceivable that participants in the group discussion felt more autonomous, competent, related and less persuaded than in the lecture condition.

Since reactance is motivated by a feeling of autonomy, empowerment may serve as a central component for the implementation of psychosocial intervention. Empowerment refers to a process of gaining freedom in situations that affect a person or a community (Empowerment, 2020; Perkins & Zimmerman, 1995). Empowerment complies with the basic psychological need of autonomy (Deci & Ryan, 2000), avoids reactance, promotes social change (Lewin, 1943; Perkins & Zimmerman, 1995; Steindl et al., 2015) and fosters personal well-being (Perkins & Zimmerman, 1995). Strategies for empowerment in Rogers' person-centered therapy (Rogers & Carmichael, 1942; Rogers, 1979) include active, empathetic listening to verbal and non-verbal conversation, an authentic, egalitarian positioning and the trust into the person's capacity to find solutions for their problems. A further strategy for empowerment is proposed by Freire's (1970) Pedagogy of the Oppressed. Freire assumed that critical pedagogy can be a form of liberation and empowerment (Cree, 2013). The pedagogy of the oppressed does not depart from the idea of a knowing, conscious teacher and an unconscious, dehumanized student who contains the teacher's static world vision. Instead, teachers and students reflect simultaneously on the challenge to solve a certain problem (Cree, 2013). Problem-solving education starts with understanding humans in relationships, with people understanding their own life narratives and their current state in the world (Cree, 2013). If problems are understood as a process related to the transformation of people and of the world, then critical thinking and the liberation from dehumanization by means of dialogue are fostered (Cree, 2013; Freire, 1970). As a possible framework for intervention, the pedagogy of the oppressed unites the non-static relationality of queer theory with the horizontal problem-solving approach of user-centered intervention (Lyon & Koerner, 2016). Moreover, the pedagogy of the oppressed is compatible with approaches that analyze life narratives (NET) and social contexts (genograms). These implementation strategies presuppose the interventionists' willingness to learn from participants.

175

5.2.4.3. Care for the Caring

Self-care for interventionists and mutual care between them is essential to sustainable intervention practice (Strada, 2013). In palliative care literature, interventionists are referred to as caregivers. Confronting death in accompaniment is a challenging experience for caregivers as well (Strada, 2013). Hence, social support within the team is indispensable (Samarel, 1995; Strada, 2013). Intervention groups would therefore ideally be organized by more than one person (Bild & Gómez, 2008). The caregivers' previous confrontation with their own mortality is indispensable to work with dying people (Strada, 2013). A sensation of chaos induced by MS may incite caregivers to controlling behaviors that disturb the intervention (Bild & Gómez, 2008). Caregivers are instructed to simply observe their sensations and to concentrate on the persons' needs (Bild & Gómez, 2008). Knowledge about death facilitates the management of death processes. Caregivers must hence know that the death process includes personal growth as well as possible regressions to prior developmental states (Kübler-Ross, 1969), and can hence not be described as linear (Samarel, 1995). It may furthermore help caregivers to know that dying persons sometimes transfer the anger about their unchangeable mortality to caregivers (Kübler-Ross, 1969). Moreover, interventions do not necessarily demonstrate the results that the caregivers hoped for. Knowing that own feelings of insecurity, frustration, anger or despair are frequent in this context may help caregivers to reduce dissonance (Bild & Gómez, 2008). Additionally, sharing these feelings with team members reduces personal stress and facilitates information for a detailed diagnose of the person's current state (Bild & Gómez, 2008).

5.3. Limitations and Future Research

In the following paragraphs, limitations of the present research and indications for future research will be summarized. A central restriction to the application of the current findings is their lack of replication. The present research is limited to a sample of 37-75 mainly Caucasian, middle-class US participants. Despite its indicators for future research towards intervention in gender

stereotypes, the results for this sample cannot be generalized to other contexts. Replications may take place in the US as well as in other countries and cultures to test the theory's applicability to further contexts. Their applicability to each context must be tested in cooperation with local experts (Christopher et al., 2014). In addition, future research shall verify the revised ontological model of terror management strategies and replicate the quasi-experiment using the revised QTMT model, either with the present measures or with new research methods.

The present research is further limited by its theoretically implied causal assumptions. On the level of measurment, the association between death attitudes in wave 1 and gender stereotypes in wave does not confirm certain causality, but the indication of possible effects by time priority. However, the association between gender stereotypes and death attitudes may be conceived as reverse or as confounded by an unconsidered third variable. Furthermore, reactions to MS may theoretically have occurred in a similar way in a control group. In the study about possible ontological processes of terror management strategies, no control group was set due to the a priori assumption of MS reactions requiring a death reminder. Future research on the ontological model is required to verify the sequence of factors. For example, death valence may have been the effect, the cause or independent of emotional reactions to MS.

In case MS is considered as a possible influence factor in gender stereotypes, the use of a manipulation check after MS, such as a wordstem completion task (Landau et al., 2004), is recommended to avoid doubts about the implementation of the experimental manipulation. Future theory and tests may examine the controversial effects of experimental versus natural MS against the predictions of TMT (Greenberg et al., 1986) and MMT (Wong, 2008). Furthermore, the conscious inaccessibility of death-related emotions after MS has to be revised. If MS is assumed to trigger death denial before emotions arise, then participants would logically only reply with evasive answers to the essay questions about death (Greenberg et al., 1986). In the present research, evasive answers existed, but were contrasted by a majority of positive and negative emotional answers

(author 3). In addition, a comparison of emotional reactions to MS versus dental pain would reveal inhowfar these reactions differ from emotions towards other fear triggers. A recent dissertation showed different affective responses to MS induction versus to a control condition (Wilkus-Stone, 2017, p. 125, 135).

A future replication of the present research may also clarify whether similar results occur without the measure of self-esteem and life satisfaction before MS. In turn, the associations between death valence with self-esteem and life satisfaction are still to be investigated. Prospective studies may explain the contradictory effects of death acceptance on increased explicit and decreased implicit gender stereotypes. Additionally, the role of death-related anger, bargaining, and depression in regards to gender stereotypes may be an interesting field for future research.

TMT and MMT expect death anxiety at the core of human behavior (Pyszczynski et al, 2015; Wong, 2008). The idea of a "worm at the core" existed since the beginnings of scientific psychology (James, 1902, p. 108) and even before (e. g., in Hegelian philosophy, see Butler, 1997). The idea's reflection in psychoanalysis (Becker, 1973) has been adapted to social psychology (Greenberg et al., 1986; Solomon et al., 2015; Pyszczynski et al., 2015) and to counseling psychology (Wong, 2008; Wong & Tomer, 2011). Basing on Becker (1973), TMT assumes repressed death anxiety (death denial) as the main cause of culture and character (Greenberg et al., 1986). In turn, MMT (Wong, 2008) suggests that other cultures and cultural identities would emerge with the acceptance of death and the anxiety it causes. From a constructivist perspective, the idea of death anxiety as a culturally invariant, evolutionary fact may be scrutinized. It is conceivable that death anxiety varies culturally depending on a feedback loop from cultural death valence to innate death anxiety. Therein, death anxiety can easily be increased, but hardly be decreased by cultural death valence.

With the assumptions of predetermined, irrefutable death anxiety, negative death valence and death denial, psychoanalytical thinking (Becker, 1973) tacitly remains in social psychological

TMT (Greenberg et al., 1986). By contrast, empirical social psychology requires falsifiable hypotheses. In the results of the present research (author 2), neither implicit death anxiety nor explicit fear of death were associated with stereotypes on sex, gender or desire. On an implicit level, more death anxiety was only related to a slight increase of death denial (as the counterpole of death acceptance). However, explicit fear of death was highly associated with more death rejection. Parallelly, more fear of death was related to lower self-esteem, not to higher self-esteem as TMT would expect (Greenberg et al., 1986). In this case, TMT could circularly argument that death was hence not denied properly (Chatard et al., 2011; Pyszczynski & Kesebir, 2010). A revision of the tacit psychoanalytical assumptions in TMT may strengthen its empirical value. Thereby, a distinction of implicit and explicit processes is especially required for the assumptions about consciousness in TMT.

In line with the psychoanalytical idea of predetermined death anxiety, TMT (Greenberg et al., 1986) and MMT (2008) assume universal death anxiety to be preceded by universal death-awareness. If death-awareness was a variable trait instead of a universal constant, variations in death-awareness might affect the ontological process of terror management strategies. Even if causality was assumed, the proposed model would hence be limited to an uncertain strength of associations between its factors.

If death anxiety and fear of death are included in future research, a clear definition of the constructs may result as helpful, given that anxiety seems to rather address unconscious processes, while fear of death seems to result from the conscious interpretation of death anxiety (Lehto & Stein, 2009). The varying concepts of death anxiety and fear of death (Lehto & Stein, 2009) obstruct research progress if they are not further explained. In the present research, fears of death were more conscious under positive death valence (author 3), while positive death valence was parallelly associated with less unconscious death anxiety (author 2). TMT states that death is emotionally, but not rationally denied in order to avoid death anxiety (Greenberg et al., 1986). Yet,

an MS effect on implicit death anxiety is open to future research. Moreover, future research may clarify the relationships and processes between death valence, death anxiety and fears of death to determine obstacles and facilitators for intervention.

In order to clarify these relationships, a broader theoretical foundation for the causes and effects of death valence is needed. The corresponding measures beyond one dimension of the Death Attitude IAT (Bassett & Dabbs, 2003) are still to be developed. Second, future research may clarify whether death valence is a more suitable, alternative explanation for the MS effect.

The effects of death valence on other forms of outgroup prejudice and personal well-being hold future research potential. Previous social psychological theories indicated an association between positive death attitudes and less outgroup prejudice (Maj & Kossowska, 2016; Wong, 2008). In its historical context, the association seems logical since othering may have emerged from existential anxiety (Lerner, 1986). Hence, death acceptance and openness to death were expected to decrease outgroup prejudice and to increase personal well-being (Boyd et al., 2017; Maj & Kossowska, 2016; Wong). By contrast, the results of the present research indicate that a reduction of outgroup prejudice and an increase of personal well-being may rather be implied by positive death valence (author 2).

MMT posits that more positive death valence (as a precursor of death acceptance) is associated with a more positive evaluation of life (Wong, 2008). In the present research, death acceptance was associated with more personal well-being (author 2). Nonetheless, findings further indicate that death in some cases is evaluated as more positive for the end of life struggles (author 3). Suicidality may hence be an important covariate for future research on death valence in order to consider personal well-being in- and outside of psychosocial intervention in gender stereotypes.

The ontological process of terror management strategies influenced by death anxiety, death valence and MS warrants future research. On the one hand, future research may differentiate whether emotional reactions to death reminders are a cause, an effect or independent of terror

management strategies. On the other hand, terror management strategies seem to be the social psychological equivalent of stress coping in the context of mortality (Chatard et al., 2011; Hader, 1993; Pyszczynski & Kesebir, 2010). Therefore, the relationship between stress coping and terror management strategies may further be examined. The variety of literature on diverse stress coping strategies may expand knowledge about terror management strategies. If terror management strategies reflect stress coping with mortality (Chatard et al., 2011; Hader, 1993; Pyszczynski & Kesebir, 2010), then death denial and death acceptance are not the only strategies to manage death anxiety. What other, plural terror management strategies exist beyond denial and acceptance? How do they influence social prejudice and personal well-being? Different strategies may lead to different processes that depend on each death threat at the foreseeable versus unforeseeable end of life. The question is hence whether terminally ill people manage death anxiety in vivo in the same way as participants of psychosocial intervention manage death anxiety in sensu by means of their imagined death.

For research towards psychosocial intervention in gender stereotypes, the understanding of terror management processes is as relevant as indicators for the dynamics of gender stereotypes. The dynamics of gender stereotypes were addressed from a queer perspective. The model for queer theory could not yet be verified on a quantitative level in the present research. The elaboration of an appropriate quantitative methodology for the measure of gender stereotypes from a queer perspective is outstanding. This methodology would ideally resolve the epistemiological controversies assumed behind quantitative and qualitative research. Replication may further strive to reduce noise in the data and to obtain the required sample size for factor analysis of the queer gender construct. Furthermore, the conceptualization of desire may be revised. In the present research, desire was equated with prescriptive heterosexuality for reasons of simplicity. However, prescriptions on desire include more extensive forms of heteronormativity, such as romantic love (Glick & Fiske, 1996) or rape-myth acceptance (Campbell et al., 2009).

For future research on the dynamics of gender stereotypes, other factors such as the salience of stereotypical beliefs, stereotype fit with the context or behavior control influence the emergence of discrimination (Ajzen, 1996; Fiske, 2000). These may be included and contrasted with death attitudes in prospective studies.

As soon as the mentioned research has been conducted, intervention pilot programs can be created in collaboration with the respective communities or individuals. Intervention pilot programs benefit from failures and rely on evidence (Lyon & Koerner, 2016) to avoid to drift into unapplicable theoretical circles (Jagose, 1996). Intervention practice is influenced by the current circumstances. With the Covid-19 pandemic that is rife all over the world as I finish this thesis, mortality is made salient unwillingly. This may increase death denial (Greenberg et al., 1986) or reflection on life goals (Wong, 2008), reactance (Steindl et al., 2015) and an increased stress level that limits cognition (Evans & Kim, 2013). The influence of current local circumstances has to be considered in prospective intervention practice. The present research terminates here, but hopefully marks the beginning of future research and an intervention practice under constant revision.

REFERENCES

Accini. J. (2019, January 20). Colau se reivindica de nuevo como primera alcaldesa bisexual [Colau claims to be the first female bisexual mayor again]. *El País*. Retrieved from https://elpais.com/ccaa/2019/01/19/catalunya/1547917210_240049.html

Ajzen, I. (1996). The directive influence of attitudes on behavior. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 385-403). The Guilford Press.

Allport, F. H. (1924). The group fallacy in relation to social science. *American Journal of Sociology*, *29*(6), 688-706. doi:10.1086/213647

American Psychological Association (2020). *Ethical principles of psychologists and code of conduct.* Retrieved from www.apa.org/ethics/code/

Ansara, Y. G. (2015a). Challenging cisgenderism in the ageing and aged care sector: Meeting the needs of older people of trans and/or non-binary experience. *Australasian Journal on Ageing*, *34*(S2), 14-18. doi:10.1111/ajag.12278

Ansara, Y. G. (2015b). Improving research methodology in adolescent sexual health research. *Journal of Adolescent Health*, *56*(4), 367-369. doi:10.1016/j.jadohealth.2015.01.013

Ansara, Y. G., & Hegarty, P. (2011). Cisgenderism in psychology: Pathologising and misgendering children from 1999 to 2008. *Psychology & Sexuality*, *3*(2), 137-160. doi:10.1080/19419899.2011.576696

Argüello, T. M. (2016). Fetishizing the health sciences: Queer theory as an intervention. *Journal of Gay & Lesbian Social Services*, *28*(3), 231-244. doi:10.1080/10538720.2016.1191407

Athanasiou, A. (2005). Reflections on the politics of mourning: Feminist ethics and politics in the age of empire. *Historein*, *5*, 40-57. doi:10.12681/historein.72

Auerbach, K. G. (1981). Induced lactation: A study of adoptive nursing by 240 women. *The American Journal of Diseases of Children, 135*(4), 340-343. doi:10.1001/archpedi.1981.02130280030011

Banse, R., Seise, J., & Zerbes, N. (2001). Implicit attitudes towards homosexuality: Reliability, validity, and controllability of the IAT. *Zeitschrift für Experimentelle Psychologie*, *48*(2), 145-160. doi:10.1026//0949-3946.48.2.145

Bar-Anan, Y., & Nosek, B. A. (2014). A comparative investigation of seven indirect attitude measures. *Behavior Research Methods*, *46*(3), 668-688. doi:10.3758/s13428-013-0410-6

Bassett, J. F., & Dabbs, J. M. (2003). Evaluating explicit and implicit death attitudes in funeral and university students. *Mortality*, *8*(4), 352-371. doi:10.1080/13576270310001604022

Bassett, J. F., Washburn, D. A., Vanman, E. J., & Dabbs, J. M. (2004). Assessing the Affective Simon Paradigm as a measure of individual differences in implicit social cognition about death. *Current Research in Social Psychology, 9*(17), 234-247.

BBC News (2016). Nikki Sincalire: 'I have this thing about injustice'. *BBC News*. Retrieved from https://www.bbc.com/news/uk-england-36611137

Becker, E. (1973). *The denial of death*. Simon and Schuster.

Bem, S. L. (1995). Dismantling gender polarization and compulsory heterosexuality: Should we turn the volume down or up? *Journal of Sex Research*, *32*(4), 329-334. doi:10.1080/00224499509551806

Berard, T. J. (1999). Michel Foucault, the history of sexuality, and the reformulation of social theory. *Journal for the Theory of Social Behaviour, 29*(3), 203-227. doi:10.1111/1468-5914.00099

Bersani, L. (1987). Is the rectum a grave? *October, 43*, 197-222.

Bild, R., & Gómez, I. (2008). Acompañamiento creativo [Creative accompaniment]. *Generalitat Valenciana: Conselleria de Sanitat*.

Birkenstein, C. (2010). We got the wrong gal: Rethining the 'bad' academic writing of Judith Butler. *College English, 72*(3), 269-283. doi:10.2307/25653028

Birnbaum, G., Hirschberger, G., & Goldenberg, J. (2010). Desire in the face of death: Terror management, attachment, and sexual motivation. *Personal Relationships, 18*, 1-19. doi:10.1111/j.1475-6811.2010.01298.x

Boal, A. (2018). *Teatro del Oprimido* [Theater of the oppressed]. Fondo Editorial Casa de las Américas.

Bonanno, G. A., Wortman, C. B., Lehman, D. R., Tweed, R. G., Haring, M., Sonnega, J., Carr, D., & Nesse, R. M. (2002). Resilience to loss and chronic grief: A prospective study from preloss to 18-months postloss. *Journal of Personality and Social Psychology, 83*(5), 1150-1164. doi:10.1037//0022-3514.83.5.1150

Boyd, P., Morris, K. L., & Goldenberg, J. L. (2017). Open to death: A moderating role of openness to experience in terror management. *Journal of Experimental Social Psychology, 71*, 117-127. doi:10.1016/j.jesp.2017.03.003

Brandstätter, V., Herrmann, M., & Schüler, J. (2013). The struggle of giving up personal goals affective, physiological, and cognitive consequences of an action crisis. *Personality and Social Psychology Bulletin*, 39(12), 1668-1682. doi:10.1177/0146167213500151

Brannon, L. (2017). The study of gender. In L. Brannon (Ed.), *Gender: Psychological perspectives* (pp. 1-21). New York, NY: Routledge.

Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality data? *Perspectives on Psychological Science, 6*(1), 3-5. doi:10.1177/1745691610393980

Burke, B. L., Martens, A., & Faucher, E. H. (2009). Two decades of terror management theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review, 14*(2), 155-195. doi:10.1177/1088868309352321

Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity.* Routledge.

Butler, J. (1997). *The psychic life of power: Theories in subjection.* Stanford University Press.

Campbell, R., Dworkin, E., & Cabral, G. (2009). An ecological model of the impact of sexual assault on women's mental health. *Trauma, Violence, & Abuse, 10*(3), 225-246. doi:10.1177/1524838009334456

Carpenter, T., Pogacar, R., Pullig, C., Kouril, M., LaBouff, J., Aguilar, S., & Chakroff, A. (2017). *Building and analyzing Implicit Association Tests for online surveys: A tutorial and open-source tool.* Retrieved from https://iatgen.wordpress.com/

Chatard, A., Pyszczynski, T., Arndt, J., Selimbegovic, L., N'Dri Konan, P., & Van der Linden, M. (2012). Extent of trauma exposure and PTSD symptom severity as predictors of anxiety-buffer functioning. *Psychological Trauma: Theory, Research, Practice, and Policy,4*(1), 47-55. doi:10.1037/a0021085

Christensen, M. C. (2013). Using theater of the oppressed to prevent sexual violence on college campuses. *Trauma, Violence, & Abuse, 14*(4), 282-294. doi:10.1177/1524838013495983

Christopher, J. C., Wendt, D. C., Marecek, J., & Goodman, D. M. (2014). Critical cultural awareness: Contributions to a globalizing psychology. *American Psychologist, 69*(7), 645-655. doi:10.1037/a0036851

Cienfuegos, A. J., & Monelli, C. (1983). The testimony of political repression as a therapeutic instrument. *American Journal of Orthopsychiatry, 53*(1), 43-51. doi:10.1111/j.1939-0025.1983.tb03348.x

Clarivate Analytics (2020a). *Sex Roles.* Clarivate Analytics.

Clarivate Analytics (2020b). *Psychosocial Intervention.* Clarivate Analytics.

Cochrane, K. (2013, December 10). The fourth wave of feminism: Meet the rebel women. *The Guardian*. Retrieved from https://www.theguardian.com/world/2013/dec/10/fourth-wave-feminism-rebel-women

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*(1), 37-46. doi:10.1177/001316446002000104

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Cohen, R., & Lange, L., & Slusser, W. (2002). A description of a male-focussed breast-feeding promotion corporate lactation program. *Journal of Human Lactation, 18*(1), 61-65. doi:10.1177/089033440201800111

Coll-Planas, G. (2012). *La carn i la metàfora. Una reflexió sobre el cos a la teoria queer* [Flesh and metaphor: A reflection about the body in queer theory]. Editorial UOC.

Cozzolino, P. J., Staples, A. D., Meyers, L. S., & Samboceti, J. (2004). Greed, death, and values: From terror management to transcendence management theory. *Personality and Social Psychology Bulletin, 30*(3), 278-292. doi:10.1177/0146167203260716

Cree, V. E. (2013). Pedagogy of the oppressed. In V. E. Cre (Ed.), *Social work: A reader* (pp. 114-120). Routledge.

Davies, M., Gilston, J., & Rogers, P. (2012). Examining the relationship between male rape myth acceptance, female rape myth acceptance, victim blame, homophobia, gender roles, and ambivalent sexism. *Journal of Interpersonal Violence, 27*(14), 2807-2823. doi:10.1177/0886260512438281

De Lemus, S., Navarro, L., Velásquez, M., Ryan, E., & Megías, J. L. (2014). From sex to gender: A university intervention to reduce sexism in Argentina, Spain, and El Salvador. *Journal of Social Issues, 70*, 741-762. doi:10.1111/josi.12089

De Saussure, F. (2004). Course in general linguistics. In J. Rivkin, & M. Ryan (Eds.), *Literary*

    theory: An anthology (2nd ed., pp. 59-71). Blackwell Publishing.

DeBarros, L. (2014, May 22). Exclusive: Meet Africa's first openly gay black MP. *Mamba Online*.

    Retrieved from https://www.mambaonline.com/2014/05/22/exclusive-meet-africas-first-

    openly-gay-black-mp/

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the

    self-determination of behavior. *Psychological Inquiry, 11*(4), 227-268.

    doi:10.1207/S15327965PLI1104_01

Diamond, J. (1995, January 19). Father's milk: Form goats to people, males can be mammary

    mammals, too. *Discover Magazine*. Retrieved from https://www.discovermagazine.com/-

    mind/fathers-milk

Diamond, L. M., & Butterworth, M. (2008). Questioning gender and sexual identity: Dynamic links

    over time. *Sex Roles*, *59*(5-6), 365-376. doi:10.1007/s11199-008-9425-3

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale.

    Journal of Personality Assessment, 49(1), 71-75.

Downing, L. & Gillett, R. (2011). Viewing critical psychology through the lens of queer.

    Psychology & Sexuality, 2(1), 4-15. doi:10.1080/19419899.2011.536310

Edou, J. (1996). *Machig Labdrön and the foundations of Chöd*. Snow Lion Publications.

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behavior*

    Research and Therapy, 38, 319-345. doi:10.1016/S0005-7967(99)00123-0

Empowerment (2020). In *Cambridge Dictionary online*. Retrieved from

    https://dictionary.cambridge.org/es/diccionario/ingles/empowerment

Encyclopedia Britannica (2020). Paleolithic Period. In *Encyclopedia Britannica online*.

    Retrieved from https://www.britannica.com/event/Paleolithic-Period

Evans, G. W., & Kim, P. (2013). Childhood poverty, chronic stress, self-regulation, and coping.

    Child Development Perspectives, *7*(1), 43-48. doi:10.1111/cdep.12013

Evans, J., Ruane, S., & Southall, H. (2019). Advancing social progress through critical statistical

    literacy. In J. Evans, S. Ruane, & H. Southall (Eds.), *Data in society: Challenging statistics*

    in an age of globalisation (pp. 303-374). Policy Press.

Farand, C. (2017, March 18). Japan becomes first country in the world to elect a transgender man to

    a public office. *The Independent*. Retrieved from https://www.independent.co.uk/news/-

    world/asia/japan-first-world-transgender-man-public-office-councillor-iruma-saitama-kanto-

    a7636641.html

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power

    analysis program for the social, behavioral, and biomedical sciences. *Behavior Research*

    Methods, *39*(2), 175-191. doi:10.3758/bf03193146

Fausto-Sterling, A. (1993). The five sexes. *The Sciences*, *33*(2), 20-24.

    doi:10.1002/j.2326-1951.1993.tb03081.x

Federal Bureau of Investigation (2011). *Hate Crime Statistics, 2010.*

    Retrieved from https://ucr.fbi.gov/hate-crime/2010

Fernández, R. D., Carmona, M., & Di Masso, A. (2019). El teatro foro como escenario de procesos

    de empoderamiento psicológico: Avances para la praxis en psicología comuniataria [Forum

    theater as a scene for psychological empowerment processes: Advances for psychological

    practice]. *Interamerican Journal of Psychology, 53*(3), 313-330.

Fiske, S. T. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries:

    Evolution, culture, mind, and brain. *European Journal of Social Psychology, 30*, 299-322.

    doi:10.1002/(SICI)1099-0992(200005/06)30:3<299::AID-EJSP2>3.0.CO;2-F

Folkman, S., Lazarus, R. S., Gruen, R. J. & De Longis, A. (1986). Appraisal, coping, health status and psychological symptoms. *Journal of Personality and Social Psychology, 50*(3), 571-579. doi:10.1037/0022-3514.50.3.571

Foshee, V. A., Bauman, K. E., Arriaga, X. B., Helms, R. W., Koch, G. G., & Linder, G. F. (1998). An evaluation of Safe Dates, an adolescent dating violence prevention program. *American Journal of Public Health*, *88*(1), 45-50. doi:10.2105/ajph.88.1.45

Freedman, E. B. (2007). No turning back: The history of feminism and the future of women. Random House.

Freire, P. (1970). *Pedagogía del oprimido* [Pedagogy of the oppressed]. Siglo XXI Editores.

Gailliot, M. T., Stillman, T. F., Schmeichel, B. J., Maner, J. K., & Plant, E. A. (2008). Mortality salience increases adherence to salient norms and values. *Personality and Social Psychology Bulletin*, *34*(7), 993-1003. doi:10.1177/0146167208316791

Gawronski, B., & De Houwer, J. (2014). Implicit measures in social and personality psychology. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (2nd ed., pp. 283-310). Cambridge University Press.

Gergen, K. J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, *26*(2), 309-320. doi:10.1037/h0034436

Gergen, K. J. (2010). The acculturated brain. *Theory & Psychology*, *20*(6), 795-816. doi:10.1177/0959354310370906

Glick, P. & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*(3), 491-512. doi:10.1037/0022-3514.70.3.491

Glick, P., & Fiske, S. T. (1999). The Ambivalence toward Men Inventory: Differentiating hostile and benevolent beliefs about men. *Psychology of Women Quarterly, 23*(3), 519-536. doi:10.1111/j.1471-6402.1999.tb00379.x

Glick, P., Fiske, S. T., Mladinic, A., Saiz, J., Abrams, D., Masser, B., Adetoun, B., Osagie, J. E., Akande, A., Alao, A., Brunner, A., Willemsen, T. M., Chipeta, K., Dardenne, B., Dijksterhuis, A., Wigboldus, D., Eckes, T., Six-Materna, I., Expósito, F., ... López López, W. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology, 79*(5), 763-775. doi: 10/1037//0022-3514.79.5.763

Glick, P., Lameiras, M., Fiske, S. T., Eckes, T., Masser, B., Volpato, C., Manganelli, A. M., Pek, J. C. X., Sakallı-Uğurlu, N., Rodríguez Castro, Y., D'Avila Pereira. M. L., Willemsen, T. M., Brunner, A., Six-Materna, I., & Wells, R. (2004). Bad but bold: Ambivalent attitudes toward men predict gender inequality in 16 nations. *Journal of Personality and Social Psychology, 86*(5), 713-728. doi:10.1037/0022-3514.86.5.713

Gold, M., & Piccoli, S. (2020, June 11). After a transgender woman's death at Rikers, call for justice and answers. *New York Times*. Retrieved from https://www.nytimes.com/2019/06/11/-nyregion/layleen-polanco-xtravaganza-death-rikers-island.html

Goldenberg, J. L., Cox, C. R., Pyszczynski, T., Greenberg, J., & Solomon, S. (2002). Understanding human ambivalence about sex: The effects of stripping sex of meaning. *Journal of Sex Research, 39*(4), 310-320. doi:10.1080/00224490209552155

Gough, B., McFadden, M., & McDonald, M. (2013). *Critical social psychology: An introduction* (2nd ed.). Red Globe Press.

Grace, A. P., & Hill, R. J. (2001). Using queer knowledges to build inclusionary pedagogy in adult education. *Proceedings of the 42nd Annual Adult Education Research Conference.* Michigan State University.

Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R. F. Baumeister, *Public self and private self* (pp. 189-212). Springer.

Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology, 58*(2), 308-318. doi:10.1037/0022-3514.58.2.308

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*(1), 4-27. doi:10.1037/0033-295X.102.1.4

Greenwald, A. G., Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Mellott, D. S. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept. *Psychological Review, 109*(1), 3-25. doi:10.1037//0033-295X.109.1.3

Greenwald, A. G., & Farnham, S. D. (2000). Using the implicit association test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology, 79*(6), 1022-1038. doi:10.1037//0022-3514.79.6.1022

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology, 74*(6), 1464-1480.

Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*(2), 197-216. doi:10.1037/0022-3514.85.2.197

Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Metaanalysis of predictive validity. *Journal of Personality and Social Psychology, 97*(1), 17-41. doi:10.1037/a0015575

Grossman, P., Niemann, L., Schmidt, S., Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research 2004, 57*(1), 35-43. doi:10.1016/S0022-3999(03)00573-7

Hader, R. T. (1993). *The relationship between coping strategies, timeliness of death, and the*

    valence of the death experience of adults whose parent has died and their level of

    depression. [Doctoral dissertation, Adelphi Univerity, New York]. Adelphi University.

Halberstam, J. (2011). *The queer art of failure*. Duke University Press.

Halperin, D. M. (2003). The normalization of queer theory. *Journal of Homosexuality, 45*(2-4),

    339-343. doi: 10.1300/J082v45n02_17

Halperin, D. M. (2004). *How to do the history of homosexuality.* University of Chicago Press.

Hammack, P. L. (2008). Narrative and the cultural psychology of identity. *Personality and Social*

    Psychology Review, 12(3), 222-247. doi:10.1177/1088868308316892

Hammack, P. L., Mayers, L., & Windell, E. P. (2013). Narrative, psychology and the politics of

    sexual identity in the United States: From 'sickness' to 'species' to 'subject'. *Psychology &*

    Sexuality, 4(3), 219-243. doi:10.1080/19419899.2011.621131

Heaney, C. A., & Israel, B. A. (2008). Social networks and social support. In K. Glanz, B. K. Rimer,

    & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and*

    practice (pp. 189–210). Jossey-Bass.

Hegarty, P., & Massey, S. (2006). Anti-homosexual prejudice… as opposed to what? Queer theory

    and the social psychology of anti-homosexual attitudes. *Journal of Homosexuality, 52*(1-2),

    47-71. doi:10.1300/J082v52n01_03

Hegarty, P., & Pratto, F. (2004). The differences that norms make: Empiricism, social

    constructionism, and the interpretation of group differences. *Sex Roles, 50*(7), 445-453.

    doi:10.1023/B:SERS.0000023065.56633.cb

Helbig-Lang, S., & Petermann, F. (2010). Tolerate or eliminate? A systematic review on the effects

    of safety behavior across anxiety disorders. *Clinical Psychology: Science and Practice,*

    17(3), 218-233. doi:10.1111/j.1468-2850.2010.01213.x

Helsel, P. (2019, April 3). Lori Lightfood elected Chicago mayor, will be 1st black women and 1st openly gay person to hold post. *NBC News*. Retrieved from https://www.nbcnews.com/-politics/elections/lori-lightfoot-elected-chicago-mayor-will-be-1st-black-woman-n990266

Hirschberger, G., Florian, V., & Mikulincer, M., Goldenberg, J. L., & Pyszczynski, T. (2002). Gender differences in the willingness to engage in risky behavior: A terror management perspective. *Death Studies, 26*(2), 117-141. doi:10.1080/074811802753455244

Hoyt, C. L., Simon, S., & Innella, A. N. (2011). Taking a turn toward the masculine: The impact of mortality salience on implicit leadership theories. *Basic and Applied Social Psychology, 33*, 374-381. doi:10.1080/01973533.2011.614173

Hoyt, C. L., Simon, S., & Reid, L. (2009). Choosing the best (wo)man for the job: The effects of mortality salience, sex, and gender stereotypes on leader evaluations. *The Leadership Quarterly, 20*, 233-246. doi:10.1016/j.leaqua.2009.01.016

Jagose, A. (1996). Queer theory. *Australian Humanities Review, 4*. Retrieved from http://australianhumanitiesreview.org/1996/12/01/queer-theory/

James, W. (1902). *The varieties of religious experience: A study in human nature.* Retrieved from http://ebooks.adelaide.edu.au/j/james/william/varieties/complete.html

Janoff-Bulman, R. (2006). Schema-change perspectives on posttraumatic growth. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of Posttraumatic Growth: Research and Practice* (pp. 81-99). Psychology Press.

Janoff-Bulman, R., & Yopyk, D. J. (2004). Random outcomes and valued commitments: Existential dilemmas and the paradox of meaning. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of Experimental Existential Psychology* (pp. 125-141). The Guilford Press.

Joel, D., Tarrasch, R., Berman, Z., Mukamel, M., & Ziv, E. (2014). Queering gender: Studying gender identity in 'normative' individuals. *Psychology & Sexuality*, *5*(4), 291-321. doi:10.1080/19419899.2013.830640

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14-26. doi:10.3102/0013189X033007014

Jost, J. T., & Hamilton, D. L. (2005). Stereotpyes in our culture. In J. F. Dovidio, P. E. Glick, & L. A. Rudman (Eds.), *On the nature of prejudice* (pp. 208-225). Blackwell Publishing.

Jost, J. T. & Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification. *Journal of Personality and Social Psychology, 88*(3), 498-509. doi:10.1037/0022-3514.88.3.498

Kashdan, T. B., DeWall, C. N., Schurtz, D. R., Deckman, T., Lykins, E. L., Evans, D. R., McKenzie, J., Segerstrom, S. C., Gailliot, M. T., & Brown, K. W. (2014). More than words: Contemplating death enhances positive emotional word use. *Personality and Individual Differences*, *71*, 171-175. doi:10.1016/j.paid.2014.07.035

Kessler, S. J., & McKenna, W. (1985). *Gender: An ethnomethodological approach*. University of Chicago Press.

Khatib, F., DiMaio, F., Foldit Contenders Group, Foldit Void Crushers Group, Cooper, S., Kazmierczyk, M., Gilski, M., Krzywda, S., Zabranska, H., Pichova, I., Thompson, J., Popovi, Z., Jaskolski, M., & Baker, D. (2011). Crystal structure of a monomeric retroviral protease solved by protein folding game players. *Nature Structural & Molecular Biology*, *18*(10), 1175-1177. doi:10.1038/nsmb.2119

Kilmartin, C., Semelsberger, R., Dye, S., Boggs, E., & Kolar, D. (2015). A behavior intervention to reduce sexism in college men. *Gender Issues, 32*, 97-110. doi:10.1007/s12147-014-9130-1

Krippendorff, K. (1989). Content analysis. In E. Barnouw, G. Gerbner, W. Schramm, T. L. Worth, & L. Gross (Eds.), *International encyclopedia of communication* (Vol. 1, pp. 403-407). Oxford University Press.

Kübler-Ross, E. (1969). *On death and dying.* Touchstone.

Kunz, T. H., & Hosken, D. J. (2009). Male lactation: Why, why not and is it care? *Trends in Ecology & Evolution*, *24*(2), 80-85. doi:10.1016/j.tree.2008.09.009

Kurtiş, T., & Adams, G. E. (2015). Decolonizing liberation: Toward a transnational feminist psychology. *Journal of Social and Political Psychology, 3*(1), 388-413. doi: 10.5964/jspp.v3i1.326

Landau, M. J., Johns, M., Greenberg, J., Pyszczynski, T., Martens, A., Goldenberg, J. L., & Solomon, S. (2004). A function of form: Terror management and structuring the social world. *Journal of Personality and Social Psychology*, *87*(2), 190. doi:10.1037/0022-3514.87.2.190

Landemore, H. (2015). Inclusive constitution-making: The Icelandic experiment. *Journal of Political Philosophy, 23*(2), 166-191. doi:10.1111/jopp.12032

Lane, K. A., Banaji, M. R., Nosek, B. A., & Greenwald, A. G. (2007). Understanding and using the Implicit Association Test: IV. In B. Wittenbrink, & N. Schwarz (Eds.), *Implicit measures of attitudes* (pp. 59-102). The Guilford Press.

Leap, W. L. (2015). Queer linguistics as critical discourse analysis: Discourse analysis. In D. Tannen, H. E. Hamilton, & Deborah Schiffrin (Eds.), *The handbook of discourse analysis* (2nd ed., pp. 661-680). Wiley Blackwell.

Leavy, P. (2017). Mixed mehtods research design. In P. Leavy (Ed.), *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches* (pp. 164-190). The Guilford Press.

Lehto, R. H., & Stein, K. F. (2009). Death anxiety: An analysis of an evolving concept. *Research and Theory for Nursing Practice: An International Journal, 23*(1), 23-41. doi:10.1891/1541-6577.23.1.23

Lerner, G. (1986). *The creation of patriarchy* (Vol. 1). Oxford University Press.

Leslie, A. M. (1987). Pretense and representation: The origins of theory of mind. *Psychological Review, 94*(4), 412-426. doi:10.1037/0033-295X.94.4.412

Lewin, K. (1943). Forces behind food habits and methods of change. *Bulletin of the National Research Council*, *108*(1043), 35-65.

Lewin, K. (1947). Group decision and social change. *Readings in Social Psychology*, *3*(1), 340-344.

Lombardi, E. L., Wilchins, R. A., Priesing, D., & Malouf, D. (2002). Gender violence: Transgender experiences with violence and discrimination. *Journal of Homosexuality*, *42*(1), 89-101. doi:10.1300/J082v42n01_05

Lyon, A. R., & Koerner, K. (2016). User-centered design for psychosocial intervention development and implementation. *Clinical Psychology: Science and Practice*, *23*(2), 180-200. doi:10.1111/cpsp.12154

Lyons, K. (2016, June 12). Orlando Pulse club attack: Gunman identified as police investigate motive. *The Guardian*. Retrieved from https://www.theguardian.com/us-news/2016/jun/-12/orlando-shooting-nightclub-pulse-gunman

MacDougall, E. E., & Farreras, I. G. (2016). The Multidimensional Orientation Toward Dying and Death Inventory (MODDI-F): Factorial validity and reliability in a US sample. *Journal of Pain and Symptom Management*, *51*(6), 1062-1069. doi:10.1016/j.jpainsymman.2015.12.322

Maj, M., & Kossowska, M. (2016). Prejudice toward outgroups as a strategy to deal with mortality threat: Simple reaction with complex foundation. *Theoria et Historia Scientiarum, 12*, 15-28. doi:10.12775/ths.2015.002

Marecek, J., Kimmel, E. B., Crawford, M., Hare-Mustin, R. T. (2003). Psychology of women and gender. In D. K. Freedheim & I. B. Weiner (Eds.), *Handbook of psychology* (pp. 249-264). John Wiley and Sons.

Martí-García, C., Fernández-Alcántara, M., Schmidt-Riovalle, J., Cruz-Quintana, F., García-Caro, M. P., & Pérez-García, M. (2017). Specific emotional schema of death-related images vs. unpleasant images. *Estudios de Psicología*, *38*(3), 689-706. doi:10.1080/02109395.2017.1336858

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396.

Mayring, P. (2000). Qualitative content analysis. *Forum: Qualitative Social Research*, *1*(2), Art. 20. Retrieved from http://nbnresolving.de/urn:nbn:de:0114-fqs0002204. doi:10.17169/fqs-1.2.1089

Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, *44*(1), 1-23. doi:10.3758/s13428-011-0124-6

McGoldrick, M. (2016). *The genogram casebook: A clinical companion to genograms: Assessment and intervention*. W. W. Norton and Company.

McGoldrick, M., & Gerson, R. (1985). *Genograms in family assessment*. Norton.

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, *22*(3), 276-282.

McNaughton Reyes, H. L., Foshee, V. A., Holditch Niolon, P., Reidy, D. E., & Hall, J. E. (2016). Gender role attitudes and male adolescent dating violence perpetration: Normative beliefs as moderators. *Journal of Youth and Adolescence, 45*(2), 350-360. doi:10.1007/s10964-015-0278-0

Mehta, C. M. & Keener, E. (2017). Oh the places we'll go! Where will Sandra Bem's work lead us next? *Sex Roles, 76*, 637-642. doi:10.1007/s11199-017-0735-1

Meichenbaum, D. (2007). Stress Inoculation Training: A preventative and treatment approach. In P. M. Lehrer, R. L. Woolfolk, & W. S. Sime (Eds.), *Principles and practice of stress management* (3rd ed.). The Guilford Press.

Meichenbaum, D. H., & Deffenbacher, J. L. (1988). Stress Inoculation Training. *The Counseling Psychologist, 16*(1), 69-90. doi:10.1177/0011000088161005

Mikulincer, M., Florian, V., & Hirschberger, G. (2003). The existential function of close relationships: Introducing death into the science of love. *Personality and Social Psychology Review, 7*(1), 20–40. doi:10.1207/S15327957PSPR0701_2

Minton, H. L. (1997). Queer theory: Historical roots and implications for psychology. *Theory & Psychology, 7*(3), 337-353. doi:10.1177/0959354397073003

Mishra, V., Gaigbe-Togbe, V. and Ferre, J. (2014). *Abortion policies and reproductive health around the world.* Retrieved from www.un.org

Miyake, A., Kost-Smith, L. E., Finkelstein, N. D., Pollock, S. J., Cohen, G. L., & Ito, T. A. (2010). Reducing the gender achievement gap in college science: A classroom study of values affirmation. *Science, 330*(6008), 1234-1237. doi:10.1126/science.1195996

Moorhead, J. (2005, June 15). Are the men of the African Aka tribe the best fathers in the world? *The Guardian.* Retrieved from https://www.theguardian.com/society/2005/jun/15/-childrensservices.familyandrelationships

Morrison, M. A., & Morrison, T. G. (2002). Development and validation of a scale measuring modern prejudice toward gay men and lesbian women. *Journal of Homosexuality, 43*(2), 15-37. doi:10.1300/J082v43n02_02

Nosè, M., Ballette, F., Bighelli, I., Turrini, G., Purgato, M., Tol, W., Priebe, S., & Barbui, C. (2017). Psychosocial interventions for post-traumatic stress disorder in refugees and asylum seekers resettled in high-income countries: Systematic review and meta-analysis. *PloS ONE, 12*(2), e0171030. doi:10.1371/journal.pone.0171030

Offen, K. M. (2000). *European feminisms 1700-1950: A political history*. Stanford University Press.

Organization for Economic Cooperation and Development (2012). *Indicators of gender equality in employment.* Retrieved from www.oecd.org/gender/data/

Organization for Economic Cooperation and Development (2019). *Gender wage gap*. Retrieved from https://data.oecd.org/earnwage/gender-wage-gap.htm

Patil, A. (2020, June 15). How a march for black trans lives became a huge event. *New York Times*. Retrieved from https://www.nytimes.com/2020/06/15/nyregion/brooklyn-black-trans-parade.html

Pavot, W., & Diener, E. (2009). Review of the Satisfaction With Life Scale. *Psychological Assessment, 5*(2), 164-172. doi:10.1037/1040-3590.5.2.164

Perez, V. M. (2014). Political participation of LGBT Americans. *Project Vote*. Retrieved from https://www.projectvote.org

Perkins, D. D., & M. A. Zimmerman (1995). Empowerment theory, research, and application. *American Journal of Community Psychology, 23*(5), 569-579. doi:10.1007/BF02506982

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*(5), 751. doi:10.1037/0022-3514.90.5.751

Prevention (2020). In *Merriam-Webster's online dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/prevention

Pullen, C. (2014). Introduction. In C. Pullen, *Queer youth and media cultures* (pp. 1-15). Macmillan.

Pyszczynski, T., Greenberg, J., & Solomon, S. (1999). A dual-process model of defense against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review, 106*(4), 835-845. doi:10.1037/0033-295X.106.4.835

Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need
self-esteem? A theoretical and empirical review. *Psychological Bulletin*, *130*(3), 435-468.
doi:0.1037/0033-2909.130.3.435

Pyszczynski, T., & Kesebir, P. (2011). Anxiety buffer disruption theory: A terror management
account of posttraumatic stress disorder. *Anxiety, Stress, & Coping*, *24*(1), 3-26.
doi:10.1080/10615806.2010.517524

Pyszczynski, T., Solomon, S., & Greenberg, J. (2015). Thirty years of terror management theory:
From genesis to revelation. *Advances in Experimental Social Psychology, 52*, 1-70.
doi:10.1016/bs.aesp.2015.03.001

Radical (2020). In *Merriam-Webster's online dictionary*. Retrieved from
https://www.merriam-webster.com/dictionary/radical

Reisman, T., & Goldstein, Z. (2018). Case report: Induced lactation in a transgender woman.
Transgender Health, *3*(1), 24-26. doi:10.1089/trgh.2017.0044

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem:
Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale.
Personality and Social Psychology Bulletin, 27(2), 151-161.
doi:10.1177/0146167201272002

Rodríguez-Ferreiro, J., Barberia, I., González-Guerra, J., & Vadillo, M. A. (2019). Are we truly
special and unique? A replication of Goldenberg et al. (2001). *Royal Society Open Science*,
6: 191114. doi:10.1098/rsos.191114

Roets, A., Van Hiel, A., & Dhont, K. (2012). Is sexism a gender issue? A motivated social cognition
perspective on men's and women's sexist attitudes toward own and other gender. *European
Journal of Personality*, *26*(3), 350-359. doi:10.1002/per.843

Rogers, C. R. (1979). The foundations of the person-centered approach. *Education*, *100*(2), 98-107.

Rogers, C. R., & Carmichael, L. (1942). *Counseling and psychotherapy: Newer concepts in practice*. Houghton Mifflin Company.

Rosenberg, M. (1965). *Society and the adolescent self-image* [Doctoral dissertation, Princeton University, New Jersey]. Princeton University Press.

Rosenblatt, A., Greenberg, J., Solomon, S., Pyszczynski, T., & Lyon, D. (1989). Evidence for terror management theory: I. The effects of mortality salience on reactions to those who violate or uphold cultural values. *Journal of Personality and Social Psychology*, *57*(4), 681-690. doi:10.1037/0022-3514.57.4.681

Ross, L., Lepper, M., & Ward, A. (2010). History of social psychology: Insights, challenges, and contributions to theory and application. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 3-50). John Wiley and Sons.

Roylance, C., Routledge, C., & Balas, B. (2017). Treating objects like women: The impact of terror management and objectification on the perception of women's faces. *Sex Roles*, *77*(9-10), 593-603. doi:10.1007/s11199-017-0747-x

Rubin, G. (1975). The traffic in women: Notes on the "political economy" of sex. In R. R. Reiter (Ed.), *Toward an anthropology of women* (pp. 157-210). Monthly Review Press.

Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues, 57*(4), 743-762. doi:10.1111/0022-4537.00239

Rudman, L. A., & Goodwin, S. A. (2004). Gender differences in automatic in-group bias: Why do women like women more than men like men? *Journal of Personality and Social Psychology*, *87*(4), 494-509. doi:10.1037/0022-3514.87.4.494

Sáez, J. (2004). *Teoria queer y psicoanálisis* [Queer theory and psychoanalysis]. Síntesis.

Samarel, N. (1995). The dying process. In H. Wass & R. A. Neimeyer (Eds.), *Dying: Facing the facts* (3rd ed., pp. 89-116). Taylor & Francis.

Saniah, A. R., & Zainal, N. Z. (2010). Anxiety, depression and coping strategies in breast cancer

    patients on chemotherapy. *Malaysian Journal of Psychiatry, 19*(2). Retrieved from

    www.mjpsychiatry.org

Schauer, M., Neuner, F., & Elbert, T. (2011). *Narrative Exposure Therapy: A short-term treatment*

    for traumatic stress disorders (2nd ed.). Hogrefe Publishing.

Schimel, J., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., Waxmonsky, J., & Arndt, J.

    (1999). Stereotypes and terror management: Evidence that mortality salience enhances

    stereotypic thinking and preferences. *Journal of Personality and Social Psychology, 77*(5),

    905-926. doi:10.1037/0022-3514775905

Schreiber, J. B. (2020). Issues and recommendations for exploratory factor analysis and principal

    component analysis. *Research in Social and Administrative Pharmacy.*

    doi:10.1016/j.sapharm.2020.07.027

Scopus (2020). *Journal of Social and Political Psychology.* Retrieved from

    https://www.scimagojr.com

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and

    epistemology to the methodology and methods of the scientific, interpretive, and critical

    research paradigms. *English Language Teaching*, *5*(9), 9-16. doi:10.5539/elt.v5n9p9

Sedgwick, E. K. (1993). Epistemology of the closet. In H. Abelove, M. A. Barale, & D. M.

    Halperin (Eds.), *The lesbian and gay studies reader* (pp. 45-61). Routledge.

Sequeira, A. (2017, September 23). Carlos Alvarado impulsa 'primer candidato a diputado

    abiertamente gay' en el PAC [Carlos Alvarado promotes the 'first openly gay candidate for

    deputy' in PAC]. *La Nación.* Retrieved from https://www.nacion.com/el-pais/carlos-

    alvarado-impulsa-primer-candidato-a-diputado-abiertamente-gay-en-el-

    pac/W6ODZLDHEFHVPGQWWO4TPWW2VM/story/

Solomon, S., Greenberg, J., & Pyszczynski, T. (2015). *The worm at the core: The role of death in life*. Random House.

Steindl, C., Jonas, E., Sittenthaler, S., Traut-Mattausch, E., & Greenberg, J. (2015). Understanding psychological reactance. *Zeitschrift für Psychologie, 223*(4), 205-214. doi:10.1027/2151-2604/a000222

Stemler, S. (2000). An overview of content analysis. *Practical Assessment, Research, and Evaluation*, *7*(17), 1-6. doi:10.7275/z6fm-2e34

Stiller, M. & Di Masso, A. (2016). *The transience of gender: A queer terror management theory.* Manuscript submitted for publication.

Stiller, M. & Di Masso, A. (2019). *Queer terror management theory on trial: An initial test for the effects of death attitudes on gender-related stereotypes.* Manuscript submitted for publication.

Stiller, M. & Di Masso, A. (2020). *A revised ontology of terror management strategies: The power of death valence in the context of gender-related stereotypes*. Manuscript submitted for publication.

Stotzer, R. L. (2009). Violence against transgender people: A review of United States data. *Aggression and Violent Behavior, 14*(3), 170-179. doi:10.1016/j.avb.2009.01.006

Strada, E. A. (2013). *The helping professional's guide to end-of-life care: Practical tools for emotional, social, and spiritual support for the dying*. New Harbinger Publications.

Strategy (2020). In *Merriam-Webster's online dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/strategy

Stryker, S. (2008). *Transgender history*. Seal Press.

Swaminathan, N. (2007, September 6). Strange but true: Males can lactate. *Scientific American*. Retrieved from https://www.scientificamerican.com/article/strange-but-true-males-can-lactate/

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Brooks/Cole Publishing Company.

Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, *9*(3), 455- 471. doi:10.1007/BF02103658

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1-18. doi:10.1207/s15327965pli1501_01

Thomson, M. (2011, May 24). Man-milk: My curious quest to breast-feed. *Slate*. Retrieved from https://slate.com/technology/2011/05/male-lactation-can-a-33-year-old-guy-learn-to-breast-feed.html

Thwaites, R. & Freeston, M. H. (2005). Safety-seeking behaviours: Fact or function? How can we clinically differentiate between safety behaviours and adaptive coping strategies across anxiety disorders? *Behavioral and Cognitive Psychotherapy, 33*, 177-188. doi:10.1017/S1352465804001985

Tremblay, G., & L'Heureux, P. (2005). Psychosocial Intervention with Men. *International Journal of Men's Health*, *4*(1), 55-71. doi:10.3149/jmh.0401.55

Triplett, K. N., Tedeschi, R. G., Cann, A., Calhoun, L. G., & Reeve, C. L. (2012). Posttraumatic growth, meaning in life, and life satisfaction in response to trauma. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(4), 400-410. doi:10.1037/a0024204

Trott, C. D. (2016). Constructing alternatives: Envisioning a critical psychology of prefigurative politics. *Journal of Social and Political Psychology*, *4*(1), 266-285. doi: 10.5964/jspp.v4i1.520

Ullman, S. E., Townsend, S. M., Filipas, H. H., & Starzynski, L. L. (2007). Structural models of the relations of assault severity, avoidance coping, self-blame, and PTSD among sexual assault survivors. *Psychology of Women Quarterly, 31*, 23-37. doi:10.1111/j.1471-6402.2007.00328.x

United Nations General Assembly (1948). *Universal declaration of human rights.* Retrieved from www.un.org

Vail, K. E., Juhl, J., Arndt, J., Vess, M., Routledge, C., & Rutjens, B. T. (2012). When death is good for life: Considering the positive trajectories of terror management. *Personality and Social Psychology Review, 16*(4), 303-329. doi:10.1177/1088868312440046

Wangyal, T. (1998). *The Tibetan yogas of dream and sleep.* Snow Lion Publications.

Watson, D., & Clark, L. A. (1994). *The Panas-X: Manual for the positive and negative affect schedule-expanded form.* The University of Iowa. doi:10.13072/midss.438

Webster, R. J., & Saucier, D. A. (2011). The effects of death reminders on sex differences in prejudice toward gay men and lesbians. *Journal of Homosexuality, 58*(3), 402-426. doi:10.1080/00918369.2011.546735

Wheeler, S. C., & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin, 127*(6), 797-826. doi:10.1037//0033-2909.127.6.797

Whitley, B. E. (2001). Gender-role variables and attitudes toward homosexuality. *Sex Roles, 45*(11-12), 691-721. doi:10.1023/A:1015640318045

Wilkus-Stone, A. (2017). *This mortal coil: The effects of a mindfulness of mortality induction as compared to a mindfulness of breath induction for older adults* (Document no. 10285845). [Doctoral dissertation, Alliant International University, San Francisco]. ProQuest Dissertations Publishing.

Willig, C. (2013). *Introducing qualitative research in psychology* (3rd ed.). Open University Press.

Wilson, S. (2001). *Simply the best baby name book*. Pan Books.

Wittkowski, J. (2001). The construction of the Multidimensional Orientation toward Dying and Death Inventory (MODDI-F). *Death Studies*, *25*(6), 479-495. doi:10.1080/07481180126858

Wong, P. T. P. (2008). Meaning management theory and death acceptance. In A. Tomer, E. Grafton, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 65-87). Erlbaum.

Wong, P. T. P. (2012). Toward a dual-systems model of what makes life worth living. In P. T. P. Wong (Ed.), *The human quest for meaning: Theories, research, and applications* (pp. 3-22). Routledge.

Wong, P. T. P., Reker, G. T., & Gesser, G. (1994). Death Attitude Profile-Revised: A multidimensional measure of attitudes toward death. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 121-148). Routledge.

Wong, P. T. P., & Tomer, A. (2011). Beyond terror and denial: The positive psychology of death acceptance. *Death Studies, 35*, 99-106. doi:10.1080/07481187.2011.535377

Wood, W., & Eagly, A. H. (2015). Two traditions of research on gender identity. *Sex Roles, 73*(11-12), 461-473. doi:10.1007/s11199-015-0480-2

World Health Organization (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence.* Retrieved from www.who.int/reproductivehealth/publications/violence/en/

Worldbank (2015). *Proportion of seats held by women in national parliaments.* Retrieved from http://data.worldbank.org/indicator/SG.GEN.PARL.ZS

Zawadzki, M. J., Shields, S. A., Danube, C. L., & Swim, J. K. (2014). Reducing the endorsement of sexism using experiential learning: The workshop activity for gender equity simulation (WAGES). *Psychology of Women Quarterly, 38*(1), 75-92. doi:10.1177/0361684313498573

Table 1

Shapiro-Wilk Normality Test Results for the Main Measures.

	W	df	p
Death Attitude Measures			
Death Anxiety IAT	.912**	74	< .001
Death Valence IAT	.984	74	.485
Death Acceptance IAT	.929*	73	.001
MODDI-F death acceptance	.956*	75	.011
MODDI-F death rejection	.956*	75	.011
MODDI-F death fear	.971	75	.087
Gender Stereotype Measures			
IAT for sexual identity	.969	74	.069
IAT for sexual prejudice	.971	74	.086
Homosexuality IAT	.993	74	.944
IAT for gender identity	.979	73	.276
IAT for gender prejudice	.967	69	.067
Ambivalent sexism (w) total score	.953*	75	.007
Benevolent sexism towards women	.924**	75	< .001
Hostile sexism towards women	.965*	75	.036
Ambivalent sexism (m) total score	.979	75	.240
Benevolent sexism towards men	.941*	75	.002
Hostile sexism towards men	.976	75	.163
Modern homonegativity total score	.955*	75	.010
Modern homonegativity (gay men)	.956*	75	.011
Modern homonegativity (lesbians)	.942*	75	.002
Covariates			
PANAS-X negative	.798**	75	< .001
PANAS-X positive	.979	75	.257
Single-Item Self-Esteem Scale	.819**	75	< .001
Satisfaction with Life Scale	.941*	75	.002

Note. ** Shapiro-Wilk Statistic with a value of $p < .001$, * $p < .05$. Ambivalent sexism (w) represents scores for ambivalent sexism towards women, Ambivalent sexism (m) scores for ambivalent sexism towards men. MODDI-F: Multidimensional Orientation toward Dying and Death Inventory (Wittkowski, 2001). PANAS-X: Positive and Negative Affect Scale (Watson & Clark, 1994).

Table 2

Spearman Correlations between Explicit and Implicit Death Attitudes

	Death Anxiety IAT			Death Valence IAT			Death Acceptance IAT		
	n	*Rho*	*p*	*n*	*Rho*	*p*	*n*	*Rho*	*p*
MODDI-F death rejection	74	.012	.918	74	.110	.350	73	.201	.088
MODDI-F death fear	74	-.093	.432	74	.135	.251	73	.144	.225
MODDI-F death acceptance	74	.007	.953	74	-.035	.766	73	-.113	.342

Note. All correlations were two-sided due to its exploratory purpose and resulted as not significant. MODDI-F represents scores for the corresponding factor of the Multidimensional Orientation toward Dying and Death Inventory (Wittkowski, 2001).

Table 3

Spearman Correlations between Ethnicity, Education, Income and the Main Variables.

	Ethnicity			Level of Education			Income Level		
	n	*Rho*	*p*	*n*	*Rho*	*p*	*n*	*Rho*	*p*
Death Acceptance IAT	73	-.028	.813	73	-.046	.697	73	.007	.955
MODDI-F death acceptance	75	.078	.507	75	.183	.116	75	.096	.411
IAT for Sexual Identity	74	.156	.185	74	-.084	.478	74	.154	.191
IAT for Sexual Prejudice	74	.006	.962	74	-.054	.646	74	.072	.541
Homosexuality IAT	74	.084	.476	74	-.005	.964	74	-.146	.214
IAT for Gender Identity	73	.115	.333	73	.021	.860	73	-.187	.112
IAT for Gender Prejudice	69	.210	.083	69	-.108	.377	69	.034	.782
Ambivalent sexism (w)	75	.034	.770	75	-.031	.793	75	.116	.321
Ambivalent sexism (m)	75	.064	.584	75	.087	.459	75	.052	.661
Modern homonegativity	75	.111	.342	75	-.002	.988	75	.084	.474

Note. All correlations were two-sided due to its exploratory purpose and resulted as not significant. Ambivalent sexism (w) represents scores for ambivalent sexism towards, Ambivalent sexism (m) the scores for ambivalent sexism towards men. MODDI-F represents scores for the corresponding factor of the Multidimensional Orientation toward Dying and Death Inventory (Wittkowski, 2001).

Table 4

Stereotypes on Sex, Gender and Desire Depending on Religion

	Not religious			Christian			Mann-Whitney U	
	n	*M*	*SD*	*n*	*M*	*SD*	*U*	*p*
IAT for sexual identity	36	0.18	0.72	32	0.29	0.69	506.50	.393
IAT for sexual prejudice	36	-0.23	0.55	32	-0.22	0.71	564.50	.888
Homosexuality IAT	36	-0.33	0.54	32	-0.54	0.52	568.50	.187
IAT for gender identity	36	0.09	0.42	31	0.07	0.59	538.50	.806
IAT for gender prejudice	34	0.19	0.43	29	0.15	0.40	443.50	.495
Ambivalent sexism (w)	36	2.13	0.67	33	2.87	0.62	240.00	< .001
Ambivalent sexism (m)	36	2.16	0.69	33	3.01	0.70	231.00	< .001
Modern homonegativity	36	60.72	15.77	33	76.09	13.47	275.00	< .001

Note. Stereotypes on sex, gender and desire are represented by ambivalent sexism and modern homonegativity. Ambivalent sexism (w) represents total scores for ambivalent sexism towards women, Ambivalent sexism (m) total scores for ambivalent sexism towards men. Religion in this sample is represented by Christian versus non-religious participants.

Table 5

Spearman Correlations between Intensity of Religiosness and Implicit Gender Measures

	Intensity of Religiousness		
	n	*Rho*	*p*
IAT for sexual identity	74	.085	.470
IAT for sexual prejudice	74	.056	.634
Homosexuality IAT	74	.135	.251
IAT for gender identity	73	.003	.982
IAT for gender prejudice	69	.095	.440

Note. All correlations were two-sided due to its exploratory

purpose and resulted as not significant.

Table 7

Explicit Stereotypes on Sex, Gender and Desire Depending on Sex Assigned at Birth

	Male			Female			Mann-Whitney U	
	n	*M*	*SD*	*n*	*M*	*SD*	*U*	*p*
Ambivalent sexism (w)	40	2.37	0.72	35	2.48	0.79	626.00	.432
Ambivalent sexism (m)	40	2.29	0.74	35	2.76	0.81	472.50	.016
Modern homonegativity	40	66.90	17.25	35	68.54	2.69	678.50	.819

Note. Male and female refer to the only sex assignments at birth in this sample. Explicit stereotypes on sex, gender and desire are represented by ambivalent sexism and by modern homonegativity. Ambivalent sexism (w) represents total scores for ambivalent sexism towards women, Ambivalent sexism (m) total scores for ambivalent sexism towards men.

Table 9

Sexual Attraction Depending on Sex Assigned at Birth

	Male					Female					Mann-Whitney U	
	n	*M*	*SD*	*W*	*p*	*n*	*M*	*SD*	*W*	*p*	*U*	*p*
Attraction to women	40	92.85	21.86	.357	< .001	35	15.14	29.80	.001	< .001	52.00	< .001
Attraction to men	40	14.03	31.81	.489	< .001	35	90.26	23.21	.490	< .001	87.00	< .001
Attraction to trans people	39	16.33	28.46	.615	< .001	35	14.03	28.58	.564	< .001	664.50	.815
Attraction to other	38	3.32	14.48	.245	< .001	33	5.88	20.35	.327	< .001	571.50	.327

Note. Male and female refer to sex assignments at birth in this sample. Attraction to (cis) women or men refers to sexual attraction to women or men whose sex assigned at birth coincides with their gender identity. Attraction to trans people refers to sexual attraction to women or men whose gender identity coincides with gender expectations for the opposite sex. Attraction to other refer to further persons or things. Attraction scales reach from 0-100. Multiple choices are possible. Significant Shapiro-Wilk test results indicated non-normal distributions for the attraction variables.

Table 11

Spearman Correlations for Explicit Gender Measures with Explicit Death Anxiety and Denial

	MODDI-F death anxiety			MODDI-F death denial		
	n	*Rho*	*p*	*n*	*Rho*	*p*
Ambivalent sexism (w)	75	-.087	.456	75	-.074	.529
Ambivalent sexism (m)	75	-.002	.984	75	.025	.830
Modern homonegativity	75	-.160	.171	75	-.069	.556
Intensity of feminine identification	72	.045	.709	72	-.073	.540
Intensity of masculine identification	72	.003	.978	72	.070	.557
Intensity of other gender identification	52	.095	.503	52	.044	.756

Note. None of the two-sided correlations resulted as significant. Ambivalent sexism (w) represents scores for ambivalent sexism towards women, Ambivalent sexism (m) the scores for ambivalent sexism towards men. MODDI-F represents scores for the corresponding factor of the Multidimensional Orientation toward Dying and Death Inventory (Wittkowski, 2001).

Table 12

Differences between Mortality Salience (MS) and Dental Pain (DP)

	Mann-Whitney U	
	U	*p*
Intensity of feminine identification	614.50	.691
Intensity of masculine identification	583.00	.436
Intensity of other gender identification	334.50	.921
Death Acceptance IAT	614.50	.570
MODDI-F death acceptance	577.00	.182
Death Anxiety IAT	608.00	.408
Single-Item Self-Esteem Scale	661.50	.645
Satisfaction with Life Scale	681.00	.815

Note. Sample sizes were n(MS) = 35, n(DP) = 37. MODDI-F represents scores for the corresponding factor of the Multidimensional Orientation toward Dying and Death Inventory (Wittkowski, 2001).

Table 13

Ambivalent Sexism towards Women Depending on Mortality Salience

	Mortality salience			Dental pain			Mann-Whitney U	
	n	*M*	*SD*	*n*	*M*	*SD*	*U*	*p*
Total score	37	2.22	0.69	38	2.62	0.76	479.50*	.018
Benevolent sexism	37	2.05	0.97	38	2.61	1.04	484.00*	.020
Hostile sexism	37	2.38	0.96	38	2.64	0.89	594.00	.248

Note. *p < .05. Mortality salience refers to the experimental manipulation. Dental pain was used as a control condition. The total score represents the total score for ambivalent sexism towards women. Benevolent and hostile sexism represent the subdimensions of ambivalent sexism towards women.

Table 14

Emotional Reactions to Death Reminders

	FEAR/ANXIETY
General anxiety	- general anxiety - [It] makes me a little bit anxious. - The idea that I will no longer be conscious to the world around me gives me anxiety from time to time. - The thought of death makes me quite [...] anxious. - Fear, [...] - [...] a slight unnerving question
General fear	- I feel spooked at the prospect of death - Absolute fucking terror. It scares me to death, so to speak. - the mind is full of fear and empty heart - it was simply fear; it was fear able was - It scares me to think about it. - The thought of my own death is pretty terrifying. - I would actually consider it one of my greatest fears. - The thought of death makes me quite fearful [...]. - It gives me some sense of fear, [...]
Fear of nothingness	- [...] thinking about the nothingness of death gives me a bit of anxiety. - I feel some degree of fear because I am not fond of the idea of non-existence. I am definitely apprehensive when I dwell on thoughts of my own death.
Fear of the unknown/ uncertainty	- I am deeply afraid of the unknown - Like how will I die, will it be painful, when will it happen or how long I have. - [...] as I am not afraid of an eternal life in hell; I am not certain I believe in an eternal life in heaven, either. - It is scary because it is unknown. The fear of not knowing, … and the stress of when and how it might happen.
Fear of pain in the dying process	- [...] pain, paranoid worried about how much pain I feel or go through what it will feel like [...] - .. worry over pain ...
Fear of hell	- A little scared because I'm not confident I have lived my life well enough to get into heaven.
Worry	- displeasure and worry - Lately there have been less than usual but I happen to think they will return and might not be that pleasant again. - It 's somewhat depressing to me and fair to see it frightens me a bit, causes some degree of worry - [...] worries me the most
Fear of what happens to loved ones left behind	- [My own death makes me feel] anxious. Not for the fear of dying but for leaving my kids behind without a mother. - fear [...] now we are thinking [of] our parents and our [loved ones] and [the] time to say the world [...] goodbye, [...] - I do fear other's [death] though. - The only hesitation for me is the temporary loss of my connection with my loved ones as they continue in the world without me.

SADNESS	
Unspecified sadness	- My own death makes me feel sad - sadness - [...] and a feeling of frustration
Sadness to miss out on life experiences	- It makes me a bit sad thinking about not experiencing any happy feelings or having positive events again [...] - I fear the things I will miss out on when I am gone. - I am sad at the thought of not being able to experience this earth on the physical level - A little dread, but more sadness that my time is too short to do everything I would like. - I get the feeling the I am running out of time. I feel regret because I know I'll be missing out on so much and I will never do the things I love ever again. - However, it scares me and makes me sad to think that when I die I might have no awareness of my life on earth or the wonderful memories I've created over the years, [...]
Sadness to leave loved ones behind	- [I am sad at the thought of] not being able to interact with loved ones in physical form. - [...] and that my loved ones that I leave behind will have no meaning for me at all. - I feel sorry for my son and loved ones, [...]

CALM	
Content- ment/ Peace- fulness	- The thought of my own death b[r]ings me happiness in some ways. - My emotions are mixed. I am calm and not crazed since I just experienced the death or parent and it was peaceful - The thought gives me pause. But as I get older I resolve the fact that it's inevitable, and I become a little less fearful - [...] but it also gives me a sense of contentment because i know there is no escaping death. It is something we all have to experience and without death there is no life. - The emotions that my own death arouse in me are peacefulness, [...]
Emptiness	- The emotions that my own death arouse in me are [...] numbness and emptiness. - [...] but when you are dead you are dead. - Death comes to everyone eventually so it is pointless to stress over it. - It is a stage we all must reach
Confidence	- When I get close to that moment I will probably have a better sense of my emotions but right now I'm not scared if that's what you're worried about. - Doesn't bother me. I have seen many people die in the course of my work and I believe the energy that humans identify as "me" or "I" changes but does not end. - It doesn't really cause any emotions in me to be honest. Strangely I am not afraid of my own death. - I suppose the emotions that happen would be just an acceptance and resignation. Death happens to all, so I just accept it and move on. No more emotions than that for me. - The thought of my death does not cause me any distress. - In a way the idea of my death does not bother me
Gratitude	- thoughts of death inspire gratitude
Lack of emotions	- There is not many emotions when thinking ab[o]ut such for me.
Avoidance	- need for avoidance - I do not like to think of my death. - I think death is something that eludes me. Because I am a young person, I don't spend a lot of time thin-king about it. So, it's like a mystical, out there kind of thing that I have not given a great deal of thought to.

Avoidance (continued)	- I don't think about this too often so this is hard to answer. - it does not arouse many thoughts in me currently, I don't think about it much

POSITIVITY	
Joy for spiritual reasons	- I just want to be good with thinking there's a heaven. - The thought of my own death arouses a feeling of acceptance at the fact that this version of life that I have become accustomed to will someday end and I will begin anew in another form - Instead, it fills me with the joy that God's plans will be fulfilled when those who believe in Yeshua will be with Him in Paradise.
Joy for the end of struggle	- I would be free of suffering from the woes of my daily life. - The thought of being old, in pain, and unable to do what I want makes death seem like a much more pleasurable experience. - As I get older and begin to decline I feel almost relief when I think about the end to the stress and struggle of life. My body and mind are declining and at some point death is preferable.
Excitement	- I am excited to enter the next stage of my development. - [...] and excited one.
Curiosity	- Curiosity, [...]

Note. Essay answers were split upon the deduced categories.

Table 16

Emotional Statements after a Death Reminder Divided upon Positve or Negative Death Valence

POSITIVE DEATH VALENCE			
Ps.	**DV+**	**Codes**	**Statement**
1	0.17	32	A little dread, but more sadness that my time is too short to do everything I would like.
2	0.15	21a, 11, 26	rot in the ground, end of consciousness, nothing really beyond that
3	-0.08	41	I think all your physical extremities shut down as well as your internal organs. You go to sleep never to awaken again.
4	-0.21	44, 61	thoughts of death inspire gratitude. .... but some were also asked two questions about death
5	-0.26	21b, 21a	[The thought of death makes me fearful and quite anxious] changed from capital letters
6	-0.28	51	I think that as I physically die I will feel my soul exiting my body. I will feel as if I am shedding an old skin and transitioning into a new stage of life. Once I am physically dead, I will exist as a spirit until the conditions are right for me to be reborn into this physical reality.
7	-0.41	42, 52	First my heart stops and my blood does not carry the oxygen my cells need. I soon lose consciousness and my brain is no longer a coherent being. My cells slowly die in a process that takes hours. Then decay sets in but it no longer matters to me since I no longer exist.
8	-.050	31, 27	My own death makes me feel sad and anxious. Not for the fear of dying but for leaving my kids behind without a mother.

217

9	-0.57	54, 31, 31, 61	Curiosity, determination, sadness, a slight unnerving questioning and a feeling of frustration.
10	-0.58	21b, 24, 26	Your body is over and the process of decomposition is starting already. Body becomes cold, the brain will still have sparks and send functions, but the rest of the body no longer has anything else.
11	-0.62	21b, 21b, 21b, 27, 53	it was fear able was, the mind is full of fear and empty heart, now we are thinking our parents and our lovable one and time to say the world to goodbye , it was simply fear and excited one
12	-0.65	21b, 23	Your breath becomes shallower and shallower until the death rattle. Then there's a bright light and then some part of you lives on -energy can't die, it only changes
13	-0.66	41	I believe the physical body dies, and very unsure if there is soul or life force that goes on.
14	-0.66	32, 33, 53	Your eternal spirit leaves the body and journeys to Locale II of the non-physical Universe. There you either stay for a while to deal with issues binding you to the physical, or you pass through to higher Locales where you recover and then prepare for a next incarnation.
15	-0.67	25	I believe your energy or "soul" goes to a heavenly place or a torturous place.
16	-0.67	21b, 41	I feel like when I physically die that my spirit or my soul leaves my body. I know the physical part of me will die, but I think my soul will go onto whatever spiritual realm lies ahead of this. We are conscious beings so I do think that energy never dies and neither does consciousness
17	-0.69	43	Doesn't bother me. I have seen many people die in the course of my work and I believe the energy that humans identify as "me" or "I" changes but does not end.
18	-0.76	33, 42	I feel sorry for my son and loved ones, but when you are dead you are dead.
19	-0.79	22	I do not think that anything happens after we die. Instead we just stop existing.

NEGATIVE DEATH VALENCE			
Ps.	DV-	Code	Statement
20	-0.86	32	I get the feeling the I am running out of time. I feel regret because I know I'll be missing out on so much and I will never do the things I love ever again.
21	-0.89	31, 43, 52	It makes me feel a little sad, but I realize that it's a natural part of life. We can't live forever, and I don't think that I really want to live forever either. The thought of being old, in pain, and unable to do what I want makes death seem like a much more pleasurable experience.
22	-0.90	41,52, 26, 51	As I physically die, my life would end and I would feel no pain. My Uncle said right before he passed on that there was no [pain] and he closed his eyes. That is exactly what I believe it will be when I die. Just shutting off my brain and everything else for good.
23	-0.91	43	I think I am aware that my body is shutting down and I feel sick and weak. Once dead, nothing happens. My nervous system has shut down, hence, I am gone.

24	-0.97	43, 23, 32, 33	Based on something my dad told me when he came very close to dying, I believe that as you are dying, outer stimuli such as lights and sounds fade and your senses focus on surreal things like the proverbial tunnel leading to a bright light. I have no real concept of what happens at the moment of death or beyond, but I like to believe that the spirit exits the body takes flight, either to a heavenly resting place or to just "be" in another dimension while being cognizant of what continues to happen on earth.
25	-1.03	11, 21b, 23	I do not like to think of my death. It scares me to think about it. Like how will I die, will it be painful, when will it happen or how long I have.
26	-1.03	32, 22	I think I will cease to exist. All thoughts and feelings will no longer exist, and there will simply be a void of nothing-ness I guess.
27	-1.04	11	When you die, you physical body decays and basically feeds back into the ecosystem. However, your soul transcends to heaven.
28	-1.08	43, 51, 27	I think that death dissociates the eternal soul from the body, so at the moment of death, consciousness ceases for the time being. However, there will be a time when the resurrection of the dead will take place, as taught in the Scriptures. At that time the body and soul will reunite.
29	-1.14	43	When I get close to that moment I will probably have a better sense of my emotions but right now I'm not scared if that's what you're worried about.
30	-1.16	23, 24	It is scary because it is unknown. The fear of not knowing, worry over pain and the stress of when and how it might happen.
31	-1.24	21b	Once I physically die, I would simply cease to exist. It would be just like before I was conceived - nothingness.
32	-1.27	45, 42	The biological processes stop, you now began chemically breaking down and to decay
33	-1.38	22, 26, 21a, 32, 61	I feel some degree of fear because I am not fond of the idea of non-existence. I am definitely apprehensive when I dwell on thoughts of my own death. It's somewhat depressing to me and fair to see it frightens me a bit, causes some degree of worry and makes me a little bit anxious. Thoughts of my own death are not pleasant. I fear the things I will miss out on when I am gone.
34	-1.46	11, 43	I don't think about this too often so this is hard to answer. I suppose the emotions that happen would be just an acceptance and resignation. Death happens to all, so I just accept it and move on. No more emotions than that for me.
35	-1.56	41, 42	The emotions that my own death arouse in me are peacefulness, numbness, and emptiness.
36	-1.58	11	it does not arouse many thoughts in me currently, I don't think about it much
37	-1.62	21b	I think your consciousness ceases to exist and you are now unconscious matter. Nothing else occurs, in my view.

Note. DV+: death valence above the mean value of $M = -0.81$. DV-: death valence below the mean value of $M = -0.81$. Codes for the categories of emotional reactions to death reminders: 21a: general anxiety, 21b: general fear, 22: fear of nothingness, 23: fear of the unknown, 24: fear of pain, 25: fear of hell, 26: worry, 27: fear of what happens to loved ones left behind, 31: unspecified sadness, 32: sadness to miss out on life experiences, 33: sadness to leave loved ones behind, 41: peacefulness, 42: emptiness, 43: confidence, 44: gratitude, 45: lack of emotions, 11: avoidance, 51: joy for spiritual reasons, 52: joy for the end of struggle, 53: excitement, 54: curiosity.