



**A CROSS-CULTURAL STUDY ON AGEISM WITH IMPLICIT AND EXPLICIT
MEASURES OF ATTITUDES**

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Doctoral Dissertation

Porto Alegre/RS, 2011

**A CROSS-CULTURAL STUDY ON AGEISM WITH IMPLICIT AND EXPLICIT
MEASURES OF ATTITUDES**

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A dissertation submitted to the
Graduate Program in Psychology (PPGPSICO)

Of the

Federal University of Rio Grande do Sul

In partial fulfillment of the requirements for the degree of

Doutor em Psicologia

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March, 2011.

ACKNOWLEDGEMENTS

The development of this Doctoral Dissertation has been a significant academic and personal challenge. Now that I am reaching the end of such an endeavor, I want to express my respect and gratitude to the following people without whose support and assistance this work would not have been completed:

My parents, Yamara and Cláudio, receive my deepest gratitude and love for their dedication and the many years of constant support and care. I would like to thank my sisters, Carolina and Isabel, and my brother, Cristiano for always being there for me. I am grateful to Alécio for his encouragement and patience during the last few years.

I am grateful to the National Council for Scientific and Technological Development (CNPq) for the support I have received since my undergraduate studies.

I want to thank the Graduate Program in Psychology and the Federal University of Rio Grande do Sul (UFRGS), where I have completed my undergraduate and graduate studies, and the Saarland University (UdS) where I have spent a fruitful year.

I want to give special, heartfelt thanks to my advisors: Dr. Sílvia Koller and Dr. Dirk Wentura. I started working with Sílvia six years ago. Ever since, she has been a very dedicated mentor. I am thankful to Sílvia for the faith she had in my work and for encouraging me to explore different topics along the years of work together. Sílvia has been motivating, encouraging and enlightening! Of course I could not have done this work without Dirk, who has been an exceptional advisor. I thank him for being patient and for being a constant source of ideas and support, and also for keeping me aware of important research questions.

I wish to thank the examination committee: Dr. Jerusa Fumagalli de Salles, Dr. Rochele Paz Fonseca, and Dr. Ronaldo Pilati Rodrigues. I am grateful for the effort they have put and the time they have spent to read this thesis and for their valuable feedbacks. I also thank Dr. Christian Haag Kristensen for his fruitful comments on the dissertation proposal.

I am very grateful to all my colleagues at CEP-Rua for their friendship and support during all my graduate studies. I have learned a lot from them. We have shared doubts and helped one another to find solutions along the years of collaborative work. I want to thank specially Airi Macias Sacco, Eva Diniz, Laíssa Eschiletti Prati, Lucas Neiva, and Normanda de Moraes with whom I had the opportunity (and the pleasure) to work more closely.

I also thank all my former colleagues at the Wentura's work group, who have helped me somehow during my Doctoral research. Their different points of view, wide range of interests and knowledge were very important to improve the level of my work. My particular

thanks go to Andrea Paulus, Birte Möller, Kalina Petrova, Melanie Schmitz, and Michaela Rohr. I am also grateful to Frau Grau who was always very helpful and friendly during my stay at UdS.

I must not forget the Brazilian and German students who have helped me on this endeavor: Lidiane Borba, Pedro Sanchez Soares, Christiane Syska, Daniela Ulrich, Heiko Röder, Jo Kilian, Sarah Klotz, and Tobias Debatin. Without them, this thesis would have taken longer to be finished!

For the past years I have had the opportunity to work with some people who were important on the development of my work. I want to mention and thank specially Dr. Rosa Novo from whom I have learned important things on the field of aging studies.

I want to say a big “thank you” to all my friends! I should not forget to mention Douglas Gatte Picchi and Maike Wiehmeier for their friendship during my stay in Germany. I would like to thank also Isabel Arantes, for her work on revising the dissertation respecting English and stylistic corrections.

Last, but not least, I would like to express my gratitude to all those people who participated on the studies conducted in the thesis. Their participation was very important and I am grateful for it!

CONTENTS

Resumo	10
Abstract.....	11
CHAPTER I.....	12
INTRODUCTION	
DEFINING ATTITUDES	14
AGEISM: PREJUDICE TOWARDS OLDER PERSONS	17
IMPLICIT AND EXPLICIT MEASURES OF ATTITUDES	19
AGEISM IN BRAZIL AND GERMANY	23
CHAPTER II	
STUDY 1: WARMTH AND COMPETENCE: MIXED STEREOTYPES OF THE ELDERLY AMONG YOUNG ADULTS AND OLDER PERSONS IN BRAZIL	26
Abstract.....	27
INTRODUCTION	28
AGEISM IN DIFFERENT CULTURES	32
ELDERLY STEREOTYPE AMONG YOUNGER AND OLDER PERSONS	32
METHOD	34
<i>Participants</i>	34
<i>Materials</i>	36
<i>Procedure</i>	37
RESULTS	37
DISCUSSION.....	39
REFERENCES.....	43
CHAPTER III	
STUDY 2: RATED PLEASANTNESS AND RELEVANCE OF 136 BRAZILIAN- PORTUGUESE ADJECTIVES	48
Abstract.....	49
INTRODUCTION	50
THE EXISTENCE OF DIFFERENT PREJUDICE TYPES: THE POSSESSOR- AND OTHER-RELEVANCE DISTINCTION	50
METHOD	54
<i>Participants</i>	54
<i>Materials</i>	54
<i>Procedure</i>	56
RESULTS	57
DISCUSSION.....	64
REFERENCES.....	65

CHAPTER IV

STUDY 3: IS THE TABBY DUCK ON THE CAMPUS? TESTING POLITICAL PREFERENCES OF SAARLANDIAN STUDENTS USING A GO/NO-GO VERSION OF AFFECTIVE PRIMING..... 68

Abstract.....	69
INTRODUCTION.....	70
METHOD.....	72
<i>Participants</i>	72
<i>Design</i>	72
<i>Materials</i>	73
<i>Procedure</i>	74
RESULTS.....	76
DISCUSSION.....	79
REFERENCES.....	81

CHAPTER V

STUDY 4: A CROSS-CULTURAL STUDY ON AGEISM WITH IMPLICIT AND EXPLICIT MEASURES OF ATTITUDES 84

Abstract.....	85
INTRODUCTION.....	86
EXPLICIT AND IMPLICIT AGEISM.....	87
MASKED AFFECTIVE PRIMING AS A TOOL FOR DIFFERENTIATING IMPLICIT PREJUDICE.....	90
IMPLICIT PREJUDICE DIFFERENTIATION.....	91
MALLEABILITY OF PREJUDICE.....	93
ASSESSMENT OF AGEISM IN GERMANY AND BRAZIL.....	95
METHOD.....	99
<i>Participants</i>	99
<i>Design</i>	99
<i>Materials</i>	100
<i>Procedure</i>	103
RESULTS.....	106
<i>Go/No-go version of Masked Affective Priming</i>	106
<i>Affective Misattribution Procedure</i>	109
<i>Explicit Measures</i>	111
<i>Relationship between Explicit and Implicit Measures</i>	113
<i>Prime awareness</i>	119
DISCUSSION.....	120
<i>The go/no-go version of masked affective priming</i>	121
<i>The existence of two types of implicit ageism</i>	121
<i>The possessor vs. other differentiation applied to ageism</i>	124
<i>Cross-cultural differences between Brazil and Germany</i>	126
REFERENCES.....	132

CHAPTER VI

FINAL REMARKS	144
References	147

APPENDICES

Appendix A. Aprovação do Comitê de Ética, Psicologia, UFRGS.....	155
Appendix B.....	156
Appendix C. Escalas de Afetividade e Competência	158
Appendix D.....	159
Appendix E. Fichas de Avaliação de Agradabilidade e Relevância de Adjetivos	165
Appendix F. Political primes	174
Appendix G. Standard negative and positive primes	175
Appendix H. The target items and their pleasantness norm values.....	176
Appendix I. Questionário sobre Preferências Políticas (alemão).....	177
Appendix J. Old negative, olde everyday and young primes	179
Appendix K. Standard positive and negative primes	180
Appendix L. Diferencial Semântico (português e alemão)	181
Appendix M. SES-17 (português e alemão).....	187
Appendix N. Questionário de Reconhecimento de <i>Primes</i> (português e alemão)	189
Appendix O. Means and standard deviations of standard affective priming effects by country	190
Appendix P. Means and standard deviations of affective priming effects for the prejudice condition by country.....	191
Appendix Q. Regression results predicting explicit prejudice from affective priming effects, AMP effects and country.....	192
Appendix R. Termo de Consentimento Livre e Esclarecido (Estudo 1).....	193
Appendix S. Termo de Consentimento Livre e Esclarecido (Estudo 2).....	194
Appendix T. Termo de Consentimento Livre e Esclarecido (Estudo 4, Brasil/Alemanha) ...	196

LIST OF TABLES

Table 2.1. German and Brazilian relevance norm values for the Wentura, Kulfanek, and Greve (2005) 20 items target set	61
Table 2.2. German and Brazilian pleasantness norm values for the Wentura, Kulfanek, and Greve (2005) 20 items target set.....	62
Table 2.3. Frequency of agreement among Brazilian participants with German norms of pleasantness (pleasant/unpleasant) and relevance (possessor/other-relevance) for the Wentura, Kulfanek, and Greve (2005) 20 items target set.....	63
Table 3.1. First and second vote cross-tabulation	78
Table 3.2. Correlation between implicit and explicit measures	79
Table 4.1. Brazilian and German context, facial expression, and arousal ratings (M [SD in parentheses]) for the old-everyday, old-negative, and young primes.....	101
Table 4.2. Correlations between standard affective priming effects and explicit ageism	118

LIST OF FIGURES

Figure 1.1. Four types of intergroup emotions as a function of warmth and competence according to the stereotype content model.	31
Figure 1.2. Competence and warmth means as a function of group membership.....	39
Figure 3.1. The go/no-go affective priming: An example of a trial.	76
Figure 3.2. Affective priming effect for the left- and right-wing subsamples.....	78
Figure 4.1. The go/no-go masked affective priming: An example of a trial.	104
Figure 4.2. The Affective Misattribution Procedure: An example of a trial.	105
Figure 4.3. Standard priming effects for possessor-relevant and other-relevant targets as a function of country.	107
Figure 4.4. Priming effects for the old-everyday priming condition (old-everyday/young) as a function of country.	108
Figure 4.5. Priming effects for the old-negative priming condition (old-negative/old-everyday) as a function of country.	109
Figure 4.6. Pleasant response proportions as a function of prime type and country.	110
Figure 4.7. SDO and SDY means as a function of country.	112
Figure 4.8. Country as a moderator in the relationship between the possessor-related old-negative priming effect and the semantic differential score.....	114
Figure 4.9. Social desirability as a moderator between explicit prejudice and the priming effect for the possessor old-negative condition within the German sample.....	116
Figure 4.10. Social desirability as a moderator between explicit measure and the amp effect for the old-everyday condition within the Brazilian sample.	118

Resumo

Esta é uma tese transcultural sobre *ageismo* avaliado com medidas explícitas e implícitas. Quatro estudos são apresentados. O primeiro investigou se entre brasileiros estereótipos do envelhecimento são mistos em afetividade e competência. No segundo, validou-se para o Português uma lista de adjetivos Alemães, e normas de valência e relevância foram geradas. Na sequência, a ativação automática de atitudes foi avaliada com uma versão *go/no-go* do *priming* afetivo. O *Affective Misattribution Procedure* também foi empregado. O terceiro estudo avaliou atitudes políticas entre alemães com *primes standard* e político. Encontraram-se efeitos de *priming* nas duas condições. O quarto estudo, realizado no Brasil e Alemanha, com *primes standard* e étário, forneceu evidências adicionais à versão *go/no-go* do *priming* afetivo. Efeitos de *priming* para a condição *standard* foram encontrados nos dois países. Relativamente ao *ageismo* implícito, efeitos de *priming* significativos foram encontrados somente na Alemanha. Exploraram-se também a diferenciação/heterogeneidade do preconceito e desejabilidade social.

Palavras-chave: *Ageismo*; preconceito implícito; *Priming* Afetivo; *Affective Misattribution*; estudo transcultural; tipos de valência.

Abstract

This cross-cultural dissertation on ageism presents four studies. Ageism was evaluated through explicit and implicit measures. The first one investigated if among Brazilians elderly stereotypes mix warmth and competence. The second study validated a list of German adjectives to Brazilian-Portuguese and generated norms of pleasantness and relevance. The automatic activation of attitudes was evaluated with a go/no-go version of Affective Priming. In the third study we tested political attitudes among Germans with standard and political primes; priming effects were found for both conditions. The fourth study, conducted in Brazil and Germany, provided further evidence in favor of the go/no-go version of Affective Priming with standard and age primes. The Affective Misattribution Procedure was further employed. We discovered standard priming effects in both countries, though only among Germans were there significant priming effects regarding implicit ageism. We also discussed the differentiation and heterogeneity of prejudice and social desirability.

Keywords: Ageism; implicit prejudice; Affective Priming; Affective Misattribution; cross-cultural study; types of valence.

CHAPTER I

INTRODUCTION

This Doctoral Dissertation explores prejudice against older persons, or ageism, by employing explicit and implicit measures in two cultural contexts.

Broadly speaking, ageism is prejudice against older persons (Butler, 1969; Palmore, 2001, 2004; Wilkinson & Ferraro, 2002). Through the perspective of social cognition, ageism is a memory association of negative traits with older adults (Perdue & Gurtman, 1990). Palmore (2003) writes that ageism may encompass other components such as stereotyping, negative behaviors, and discrimination. Moreover, as Palmore (1999) states, ageism can be positive, like the creation of social programs restricted to older people, or it can be negative, with behavior such as baby talk and discrimination in work environments. Ageism is often compared to other forms of prejudice such as racism and sexism (Bytheway, 1995; Palmore, 2004). However, ageism differs from these two because old age is something everyone will face should they live long enough. Aging is a part of the life cycle and thus, as the years pass by, people transition from the young social group to the old one (Bytheway, 1995; Palmore, 2003; Wentura & Brandstädter, 2003). At the same time, although old age is something most people will experience and is thus a pervasive social phenomenon, ageism, as compared to prejudice based on race and gender, is less discussed, receives less attention from politicians and academics, and is not as famous (Palmore, 2003). McMullin and Marshall (2001) highlight two related dimensions of ageism. One relies on ideology and includes negative stereotypes and attitudes towards older persons such as the elderly are conservative, lonely, and unlikeable. The other is known as age discrimination and includes practices such as exclusion and placing people in disadvantageous social positions solely because of their age.

Academics consider the origins of ageism to be the fear of becoming old and facing the aging process, as well as society's emphasis on youth (Helmes & Campbell, 2009; Palmore, 2003). Such fears are associated with the negative representations of age like physical decline, illness, and death. Tied with these is the prevalent notion that new equals good. Youth becomes synonymous with beauty, intelligence, activity, energy, and value. Consequently, becoming old, white-haired, and wrinkled must be avoided as much as possible. Some theories suggest possible origins of ageism. Three important ones are the Social Identity Theory (SIT; Tajfel & Turner, 1986), the Social Role Perspective (SRP; see Kite & Wagner, 2002), and the Terror Management Theory (TMT; see Greenberg, Schimel, & Mertens, 2002). The SIT posits that to maintain a positive self-identity, it is important to

value the social group to which a person belongs. Because self-identity is influenced by group-identity, people are motivated to feel positively about their group and its members (in-groups) as opposed to members of other groups (out-groups). Ageism would therefore be the result of younger individuals feeling more positive about their in-groups than out-groups like older people (see Kite & Wagner, 2002). The Social Role Perspective (Eagly, 1987; Hummert, Gartska, & Shaner, 1997; Kite, Stockdale, Whitley, & Johnson, 2005; Kite & Wagner, 2002) understands ageism through what beliefs and preferences people have for older adults based on the roles they are perceived to occupy. Older persons are generally seen as occupying devalued social roles leading to negative beliefs about them. Finally, as the Terror Management Theory proposes, ageism may derive from the reminders of mortality and death that old age can bring.

Another aspect of ageism is how it seems to be more easily accepted than racism and sexism. Patronizing speech, jokes about aging, and birthday cards mocking advanced age are accepted ageist practices (Palmore, 2001, 2003). Older adults themselves do not seem to notice such actions as prejudiced. Paula Couto, Koller, Novo, and Soares (2009) investigated ageism in a sample of Brazilian older persons. They asked the participants about the prevalence of different ageism episodes and their associated stress levels. Frequently reported events were being told jokes about older persons (47%) and being patronized (23%). However, older respondents did not find these to be stressful. Palmore (2001, 2003) points out that in his own study on the “Ageism Survey,” an instrument to investigate how prevalent different types of ageism are, the old adult participants did not regard jokes about the elderly as ageist. Other reported forms of ageism include elderspeak (simplified speech, exaggerated high pitches, baby talk, speaking slowly, low conversation quality; Bugental & Hehman, 2007; Nussbaum, Pitts, Huber, Raup Krieger, & Ohs, 2005; Palmore, 2003; Pasupathi & Löckenhoff, 2002); compassionate ageism (seeing older persons as needier or more disadvantaged than they really are; Wilkinson & Ferraro, 2002); benevolent ageism (“a concept that encompasses subjectively positive attitudes and protective paternalism to older adults in a dependent role;” Bugental & Hehman, 2007, p. 174); learned helplessness/self-induced dependence (in which an older person erroneously perceives personal incompetence from situational factors, see Golub, Filipowicz, & Langer, 2002); gerontophobia (fearing older persons because they elicit thoughts of vulnerability and mortality; Montepare & Zebrowitz, 2002); overgeneralization (erroneously assuming that someone has a certain trait based on characteristics that are similar to other people who actually have it); and halo effects (judging an older person negatively because they are expected to possess traits associated with unattractiveness and dependence; see Montepare & Zebrowitz, 2002). Especially in Western

societies, ageism often occurs within families and households, government agencies, health care systems, and waged labor markets (Palmore, 1999).

This dissertation emphasizes implicit and explicit ageism. Explicit ageism manifests openly in intergenerational interactions, everyday conversations about aging, social policies, and other contexts. A controlled process underlying explicit ageism allows people to edit negative beliefs and feelings towards older persons in situations in which it would not be appropriate to express them. Explicit ageism is usually assessed through conventional paper and pencil methods like surveys and questionnaires. As for implicit ageism, it is the thoughts, feelings, and behaviors towards older persons that operate outside conscious awareness without control or intention (Levy & Banaji, 2002; Levy 2001). Implicit ageism is reflected in memory associations between an object, like older adults, and a trait, like being sick. From a very early age people develop beliefs and preferences regarding the elderly (Isaacs & Bearison, 1986; Levy & Banaji, 2002; Miller, Blalock, & Ginsburg, 1985). The stronger these associations become, the more promptly they will be activated when encountering an older adult. So as to assess implicit prejudice, academics have developed implicit measures that provide a proxy for activating automatic memory associations. Such tests include evaluative priming and the Implicit Association Test, IAT (see Fazio, Jackson, Dunton, & Williams, 1995; Greenwald, McGhee, & Schwartz, 1998; Gawronski, LeBel, & Peters, 2007; Gawronski & Sritharan, 2010).

In the following sections of this introduction we will clarify and develop the topics of explicit and implicit prejudice as well as of implicit and explicit measures. Before presenting empirical data, we will integrate the concept of ageism into the psychology of attitudes and prejudice. We will cover these topics: attitudes and prejudice; ageism; explicit and implicit measures of attitudes; and models that explain the relationships between the two. The introduction ends with a brief description of this work's four empirical studies.

Defining attitudes

The concept of attitudes involves feelings, beliefs, and behaviors that can be either positive or negative towards objects. Such attitude objects are virtually any object that is the target of evaluation. They thus can be people; political ideologies like environmentalism and liberalism; social policies such as legalizing abortion and smoking cessation; concrete objects like cars, books, and furniture; and social groups like blacks, women, Latinos, and older persons. Zanna and Rempel (1988) proposed a tripartite approach to understanding attitudes. This model differentiates three aspects involved with attitudes: affect, cognition, and

behavior. An attitude would be a summary of those three aspects so that when evaluating an object, someone may have feelings, beliefs, or thoughts of past behaviors about it (Olson & Kendrick, 2008; Zanna & Rempel, 1988). Eagly and Chaiken (1993) wrote a broadly accepted definition of attitude, “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (p. 1). Accordingly, the process of judgment encompasses all classes of evaluative responding: overt or covert, cognitive, affective or behavioral.

The origins of attitudes are discussed in terms of cognitive, affective, behavioral, evolutionary, and genetic sources (Olson & Kendrick, 2008). Moreover, implicit (automatic, associative) and explicit (deliberative, propositional) processes may be involved in forming attitudes. Although genetic and evolutionary origins have been acknowledged (Cottrell & Neuberg, 2005; Schaller, Faulkner, Park, Neuberg, & Kenrick, 2004), researchers tend to agree that attitudes are socially acquired. Social background and experiences are integral when evaluating an object (Ajzen & Gilbert Cote, 2008). Socialization experiences and social contact may play an important role in forming attitude. Researchers in the social contact area have argued that intergroup contact can reduce the impact of early socialization experiences (Allport, 1954; Kenworthy, Turner, Hewstone, & Voci, 2005; Pettigrew & Tropp, 2005). Category membership may also influence attitude formation given that when someone recognizes themselves as a member of a group, their positivity towards the group increases (Biegler, Brown, & Markell, 2001; Brewer, 1999; Otten & Wentura; 1999). Related to cognitive sources of attitudes are beliefs people acquire during their lives. For example, people learn that cigarettes are harmful and that big cities are violent. They may learn these beliefs from their peers, like from friends and family, and from the mass media. The beliefs can be everlasting and strong, or weak and temporary. Affect origins of attitudes are associated with the types of emotions people experience when encountering an attitude object. These emotional experiences facilitate the creation of a link between a feeling and an object, like evaluative conditioning and self-anchoring. A positive affect linked to an attitude thus encourages positive feelings towards it (see Olson & Kendrick, 2008; Walther, Nagengast, & Trasselli, 2005). Finally, previous behaviors or experiences with an attitude object may provide information from which to form an attitude.

This dissertation explores the attitude of prejudice towards the elderly, or ageism. Attitude objects can be of many types. Prejudice is known as evaluations based on affect, with the attitude objects as social or minority groups. In his classic book “The nature of prejudice,” Allport (1954) defined prejudice as antipathy towards social groups based on inaccurate perceptions generalized to all its members. Allport’s original definition of prejudice has since

been debated. Currently many social psychologists accept a minimalist definition of prejudice as an overall negative attitude towards a group (Eagly & Dieckman, 2005). Although widely accepted, Allport's definition of prejudice as antipathy towards out-groups has been recently challenged. Some researchers note that prejudice is not one-dimensional and would be better defined as a complex social phenomenon encompassing a wide range of negative reactions towards out-groups (Degner, Wentura, Gniewosz, & Noack, 2007; Degner & Wentura, 2011; Eagly & Dieckman, 2005; Fiske, Cuddy, Glick, & Xu, 2002; Mackie, Devos, & Smith, 2000; Smith, Seger, & Mackie, 2007). Mackie and colleagues proposed the Intergroup Emotions Theory (IET) to explain why some out-groups are the target of affective behaviors based on fear while reactions to other out-groups are based on anger, envy or pity. According to the IET, prejudice reflects a wide range of emotions towards social groups, with discriminatory behavior resulting from emotions activated by cognitive appraisals. These cognitive appraisals that trigger intergroup emotions are acknowledged to be group-based rather than individual-based. Smith (1993, 1999) explained that intergroup emotions are directly related to social identification with in-group members. If in-group membership is indeed an important aspect of the self, any appraisal of harm or good related to an in-group will be connected to the individual. In turn, the individual will experience emotions on behalf of the in-group and negative emotions towards out-groups.

Another line of research on the differentiation of prejudice considers that beyond valence, negativity types may be activated at the automatic level (see Degner et al., 2007; Degner & Wentura, 2011). It follows that prejudice is not just overall antipathy towards out-groups but may be differentiated at the automatic level with regards to other- and possessor-relevance (see Degner et al., 2007; Degner & Wentura, 2011; Peeters, 1983; Peeters & Czapinski, 1990; and Wentura & Degner, 2010). For instance, certain social groups are associated with threat, eliciting a negative judgment related to the other-relevant domain. This is because other-relevance is related to traits that have an evident impact within the social relationship context; for example, aggressiveness and dishonesty. On the other hand, other social groups are associated with incompetence and dependence. Although the evaluations of these groups are also negative, these are connected to feelings of pity rather than of threat. Targets of such groups are seen as possessing traits that are bad for themselves but not for the social context. This kind of trait is called possessor-relevant and includes loneliness, depression, and feeling worthless. Studies reveal that attitudes towards older persons are of the possessor-relevant type (Degner & Wentura, 2011). The elderly are thus seen as lonely and worthless while also reflecting evaluations of warmth. This dissertation investigates

other- vs. possessor-relevance in relation to implicit ageism. We want to explore whether or not prejudice can be differentiated beyond valence at the automatic level.

Prejudice has been discussed as a bias type in the context of intergroup relationships (Dovidio & Gaertner, 2010). Prejudice would then be an intergroup bias reflected by evaluative and affective responses to groups and their members. Here intergroup bias is defined as “a comparative concept involving how one views one’s own group relative to other groups” (p.1084). Social Identity Theory (SIT; Tajfel & Turner, 1986) is important when conceiving prejudice in terms of intergroup bias, particularly its concepts of in-group favoritism and out-group derogation. According to SIT, prejudice results from valuing members of one’s own group (in-group favoritism) while devaluing other groups and its members (out-group derogation). Some authors questioned whether or not attachment to in-groups leads necessarily to out-group hostility. According to Brewer (1999), in-group favoritism and out-group prejudice are different phenomena that are not reciprocally related. The fact that one’s own in-group is primary and preferred does not imply hostility towards other groups. Instead, a range of out-group responses are possible, including mild positivity, indifference, and contempt. Aside from ageism (Perdue & Gurtman, 1990; Degner & Wentura 2011; Nosek, Greenwald, & Banaji, 2002), many other forms of prejudice have been reported: racism (Fazio et al., 1995; Livingston & Brewer, 2002; Lowery, Hardin, & Sinclair, 2001; Wittenbrick, Judd, & Park, 2001), sexism (Blair & Banaji, 1996; Macrae, Bodenhausen, Milne, Thorn, & Castelli, 1997; Macrae, Mitchell, & Pendry, 2002), prejudice against obesity (Degner & Wentura, 2009), and ethnic prejudice (such as against Turks living in Germany; Degner et al., 2007; Degner & Wentura, 2011).

Ageism: prejudice towards older persons

Butler (1969) introduced the term “ageism.” He defined it as a type of prejudice against age that is similar to racism or sexism. It refers to evaluative judgments towards persons based simply on their advanced age. As compared to younger people, older persons are generally seen as ill, slow, forgetful, lonely, and inflexible (Nussbaum et al., 2005). Schaie (1993) describes ageism as “a form of culturally based age bias that involves a cultural belief that age is a significant dimension and that it defines a person’s social position and psychological characteristics” (p. 49). Age is indeed a social category that affects attitudes towards people. By assuming that certain characteristics are associated with the elderly, a person’s age may influence evaluative judgments (Cuddy & Fiske, 2002).

Many situations in daily life bring forward explicit ageism, like the use of patronizing speech when communicating and interacting with the elderly (Nelson, 2005). Ageist language assumes many forms such as simplified speech, speaking slowly, and poor conversation quality (Nussbaum et al., 2005). Ageism also often appears in the health system; work environments; situations of physical abuse; psychological and financial neglect; and exploitation (Nelson, 2005). According to a study by Minichiello, Browne, and Kendig (2000), all forms of ageism can be harmful, but it is the interpersonal relationships that can have the strongest impact. In that case, an older person's self-perception and sense of safety in the community is threatened. Discrimination that occurs face-to-face may cause individuals to pejoratively evaluate themselves as old, causing potential positive aging to become negative.

Montepare and Zebrowitz (2002) proposed a social-developmental perspective so as to understand ageism. This approach supposes that social perceptions of age change as a child grows older. However, starting as early as infancy, children are sensitive to age cues in height, facial features, and vocal characteristics. They are able to make age-based categorizations. Maturation and socialization may shape people's perceptions of age.

As Kite and Wagner (2002) stated, ageist attitudes derive from cultural beliefs about what an older person is and what characterizes the aging process. As per social role theory (Eagly, 1987), the social roles people are perceived to occupy provide a basis for the type of beliefs held about their social group. So although older persons may be evaluated by their age, this view can be changed by the roles they are perceived to fill in society (Hummert et al., 1997). Hummert and colleagues (1997) discovered in a study that fewer positive traits and more memory problems were associated with older subtypes of the elderly. This implies that as one ages, less active social roles can be perceived, making age-based judgments even more negative. Furthermore, Kite and Johnson (1988) showed that as compared to young people, older persons were evaluated more positively when specific information about them was provided. Kite, Stockdale, Whitley, and Johnson (2005) suggested that, as consistent with the social role theory, the provided descriptor types about the target of evaluation may moderate age-related attitudes. It seems that other information like occupied social role is important when analyzing attitudes towards older persons.

In an updated meta-analysis about attitudes towards younger and older persons (see Kite & Johnson, 1988 for the first meta-analysis), Kite and colleagues (2005) investigated five categories: evaluation, age-related stereotypes, behavior/behavioral intention, competence, and attractiveness. Their findings indicated that, as compared to young people, older persons were evaluated more negatively in all five categories. They were rated more stereotypically and seen as less competent and attractive. Behavioral intentions towards them

were also less favorable. Researchers showed that some moderators influence age-based attitudes: provided information, target gender, and the respondent's age. In summary, this broad meta-analytic review demonstrated that attitudes towards older persons are complex and multifaceted.

Academics have so far explored ageism through both explicit (e.g., Neri & Jorge, 2006) and implicit (e.g., Perdue & Gurtman, 1990) measures of attitudes. Questions deriving from their work relate to the formation, change, and contextualization of attitudes. Another important discussion point is how and under what circumstances implicit and explicit measures associate or dissociate. We will now consider whether or not correlations exist between the two.

Implicit and explicit measures of attitudes

Many social psychologists have a great interest in prejudice, as demonstrated by their attempts to create ways to measure it. In the 1960s and 1970s, researchers employed self-report measures to evaluate prejudice. They asked people directly about their evaluations towards social groups through scales and questionnaires. However, social psychologists became skeptical of self-report measures because they revealed more about self-representation concerns to not appear prejudiced than about attitudes (Brauer, Wasel, & Niedenthal, 2000; Gawronski et al., 2007). Social desirability concerns affect direct measurement procedures like self-report scales/questionnaires. To overcome the methodological constraints of explicit measures, social psychologists have developed new ways to assess prejudice that are less sensitive to self-presentation concerns. The indirect, or "implicit," measures of attitudes have gained popularity. The social cognition perspective defines attitude as a mental association between an object and its evaluation in memory (Fazio, 2007). Indirect procedures assess mental associations through response latency measures that limit the time in which participants can answer. The most famous implicit measures of attitudes are the Implicit Association Test (IAT; Greenwald et al., 1998), the evaluative priming paradigm (Fazio et al., 1995; Fazio, Sanbonmatsu, Powell, & Kardes, 1986), and, more recently, the Affective Misattribution Procedure (AMP, Payne, Cheng, Govorun, & Stewart, 2005). Chapter V describes these tasks in detail. For now, we should mention some aspects related to the domain of implicit measures. First, under this approach, participants complete a task without knowing its real purpose. For the affective priming task the participants are instructed only to categorize as quickly as possible clearly positive and negative words as positive or negative. The tasks ask for good *performance* based on a

participant's speed or accuracy while completing it. Their *opinion* is not requested. However, before each word appears, another stimulus is very briefly or subliminally presented. Participants may therefore be unable to control the influence over their responses. For example, each trial can show the picture of either a young or older person before presenting the word to be evaluated. These stimuli are completely irrelevant to the task, which instead emphasizes correctly categorizing the word.

There does remain the question of whether or not automatic evaluations of the pictures interfere with the participants' word categorizations. Might participants respond more quickly if a negative word is preceded by the picture of an older person and a positive word by the picture of a young adult? De Houwer, Teige-Mocigemba, Spruyt, and Moors (2009) speculate that "a measure can be called an implicit measure of a psychological attribute if it is caused by that attribute even under conditions that are typically associated with automatic processes" (p. 356-357). The authors call attention to the following conditions as related to an automatic process: the presence of proximal and distal goals, awareness (or the lack thereof), processing resources, and time. The presence of a proximal goal is related to the process under study; a process is automatic if it can operate "independently of the proximal goal to engage in, stop, alter, or avoid the operation of that process" (p. 357). Distal goals, on the other hand, are not related to the process under study. Trying to perform well is an example of a distal goal. The awareness component of the automatic process is reflected in the participant's lack of awareness of the presented stimuli, given that they are shown so quickly, as well as in the participant's unawareness that the stimuli can activate attitudes. Processing resources refers to the possibility that a process can operate even when processing resources are scarce due to cognitive load. And, finally, time refers to temporal constraints. Chapter V presents the affective priming, the AMP, and the IAT in detail, so in this introduction we will focus on the relationship between explicit and implicit measures of attitudes. We employ implicit and explicit measures of attitudes as well as examine their relationship in Chapters IV and V. We investigate further in Chapter V social desirability as a potential moderator of that relationship.

At the time this dissertation was written, there were four models that discuss the formation, change, and contextualization of implicit attitudes (see Gawronski & Sritharan, 2010 for a recent, detailed discussion of these models). These models are: the MODE model (Motivation and Opportunity as Determinants; see Fazio, 2007; Olson & Fazio, 2009); the Dual Attitudes Model (Wilson, Lindsey, & Schooler, 2000); the Meta-Cognitive Model of Attitudes (Petty, Briñol, & DeMarree 2007); and the Associative-Propositional Evaluation

Model (Gawronski & Bodenhausen, 2006; Gawronski & Bodenhausen, 2007). They propose explanations as to how implicit and explicit measures relate or dissociate.

According to the MODE model, attitudes are mental associations between an object and an evaluation of it (Fazio, 2007; Olson & Fazio, 2009). These associations may vary in their memory strength. If the associations are strong, the automatic activation of an evaluation to an object may be triggered by mere exposure to it. Motivation and opportunity to engage in effortful processing are key elements in the relationship between explicit and implicit attitudes. The MODE model assumes that as long as the motivation and opportunity to engage in effortful processing are low, the implicit attitude will predict the explicit one. However, when motivation and opportunity are high, indirect attitudes will affect less overt behavior. In terms of the distinction between implicit and explicit measures, the MODE posits that the tasks' time constraints reduce the participants' chances of engaging in effortful processing. The same does not occur with explicit evaluations: participants have time to engage in effortful processing. Thus, when motivation and opportunity are low (i.e., the explicit attitude is not the processing target), explicit measures would demonstrate similar attitudes as the implicit measures. Explicit measures would reflect low correspondence with implicit measures when motivation and opportunity are high (i.e., the explicit attitude is the processing target).

The Dual Attitudes Model (Wilson et al., 2000) presupposes that different evaluations exist towards the same object: an implicit and an explicit attitude. In this model, implicit attitudes are strong memory structures resulting from long-term learning and experience with an attitude object. Conversely, explicit attitudes are recently-acquired memory structures (Gawronski & Sritharan, 2010). The Dual Attitudes Model assumes that explicit attitudes do not replace the old implicit ones, thus originating dual attitudes, which are stored separately. Implicit attitudes would then influence responses given in implicit tasks. Their influence on explicit measures cannot be taken for granted. The degree to which implicit attitudes affect responses in self-report measures depends on whether or not the person has the cognitive capacity and engages in effortful processes to retrieve the explicit attitude. If they do make an effort to retrieve explicit attitudes from memory, then implicit and explicit measures will be dissociated.

The Meta-Cognitive Model of Attitudes (MCM; Petty, Briñol, & DeMarree, 2007) holds that evaluations of an attitude object may be both positive and negative. Object-evaluation associations in memory may reflect two possible links: object-positive evaluation and object-negative evaluation. Which evaluation is endorsed first depends on factors that can affect memory such as the number of prior positive and negative experiences with the object;

how recent those experiences were; and the context in which they happened. Thus, as with the dual attitude model, two attitudes may coexist at the same time. One attitude may be older, and hence stronger, than the other. For example, I have a positive attitude towards Coke based on a number of positive experiences with it. However, I recently read that Coke is harmful to health. I then associate Coke with positive and negative evaluations. In this way, the new and negative attitude towards Coke challenged the validity of the old positive attitude that was then tagged as “false” with a negation tag. Which attitude will prevail? That depends on the presence or absence of motivation and ability to engage in processes that favor the retrieval of the negation tag from memory (Gawronski & Sritharan, 2010; Petty, Briñol, & DeMarree, 2007). Theoretically the object-evaluation link is stronger than the object-negation tag link so that the latter will only prevail in the presence of effortful processing to retrieve it. Another possibility is that both associations are equally strong and automatically activated. In this case, there are neutral evaluations. There are two implications of the MCM model to the distinction between direct and indirect measures of attitudes. First, the two attitudes will converge in one of three circumstances: 1) when all evaluative information has the same evaluative implication; 2) when the evaluations are conflicting but both the positive and negative evaluations are deemed accurate so that neither one is tagged as false; or 3) when evaluations conflict and one is tagged as false but there is no motivation to engage in effortful processes to retrieve the newly-formed negation tag. The second implication of the MCM model is that the two attitudes will dissociate when evaluations conflict and the person actively retrieves the new negation-tag rather than the old evaluative association. The implicit measure will tap the stronger object-evaluation association, which can be either the positive or the negative one, and the explicit measure will tap the newly-acquired association that tags the older one as false (i.e., the negation-tag).

The fourth model investigating distinctions between implicit and explicit measures is the Associative-Propositional Evaluation Model (APE, Gawronski & Bodenhausen, 2006, 2007). According to it, we should consider implicit and explicit models through their underlying processes that are, respectively, associative and propositional. Associative processes result in automatic affective reactions towards an object on the basis of activating memory mental associations. Associative processes do not depend on the subjective assignments of truth values. Those associations in memory will be activated whether or not the person believes them to be accurate. Conversely, propositional processes are related to the validation of automatic evaluations. Consistency between the proposition and the automatic association determines the validity process. However, differently from associative processes, propositional validation depends on the perceived validity of a proposition. An important

conceptual aspect of the APE model is that, differently from the MODE and MCM models, attitudes are not stable object-evaluation associations residing in long-term memory. On the contrary, they are created on the spot with propositional and associative processes guided by distinct operating principles (Gawronski & Bodenhausen, 2006; Gawronski & Sritharan, 2010). Automatic affective reactions resulting from associative processes depend on the momentary external input stimuli and on the preexisting structure of associations in memory. In other words, the same attitude object may be evaluated differently depending on which stimuli are available and which associative structure is activated. Propositional processes are active and based on logical consistency. The automatic affective reactions generated by associative processes must first be evaluated as either valid or invalid according to other propositions that are momentarily formed about the attitude object. If there is consistency between associative information and momentary propositions, automatic reactions are considered valid and are likely to be the basis for explicit judgments. If the opposite occurs, with associative information and momentary propositions as inconsistent, a cognitive dissonance occurs and must be solved. This can be done by denying the associative information as a valid basis for explicit judgments. Dissociation between implicit and explicit measures is thus driven by the inconsistency between associative information and momentarily considered propositions (Gawronski & Bodenhausen, 2006; Gawronski & Sritharan, 2010).

We employed both explicit and implicit measures in Chapters IV and V. By using the two we hoped to explore the validity of implicit measures. We wanted to know what it meant if indeed explicit and implicit measures do correlate. If interindividual differences in the explicit measure are also reflected in the implicit one, that could inform researchers about the implicit measure's validity. It may also be interesting to investigate if, should ageism be more likely accepted, the implicit measure predicts the explicit one.

Ageism in Brazil and Germany

This dissertation analyses attitudes towards older persons in two countries, Brazil and Germany. Both have experienced a rapid increase in the proportion of older persons in their population. At 11.1 % Brazil currently has the fourth highest relative number of older persons (IBGE, 2009) in South America, and Germany is the European country with the highest number of older persons in its population. 20% of the German population was of older persons in 2008 (Federal Statistical Office, 2009).

Although Brazil and Germany present similar demographic trends with its aging population, they also have cultural differences that may influence the way people relate and perceive others. Brazil is more collectivistic than Germany, a more individualistic society (Hofstede & Hofstede, 2005; Hofstede, Garibaldi de Hilal, Malvezzi, Tanure, & Vinken, 2010). Investigating social and cultural differences could reveal whether or not attitudes towards the elderly are different according to cultural context.

Based on the previously discussed theoretical and methodological issues as well as on the impact of cultural differences on attitudes, this dissertation is structured into four studies examining social and methodological aspects of attitudes, especially ageism. Chapter II reviews Study 1, in which we examined the existence of elderly stereotypes among younger and older persons in a Brazilian context. It draws from the Stereotype Content Model (SCM; Fiske et al., 2002) by hypothesizing that elderly stereotypes are mixed into the two dimensions of warmth and competence. According to the SCM, older persons tend to be rated as more warm than competent (Cuddy, Norton, & Fiske, 2005; Fiske et al., 2002) as part of a culturally pervasive phenomenon (Cuddy et al., 2005; Cuddy et al., 2009). We hypothesized in Study 1 that mixed elderly stereotypes would characterize young and older participants with warmth higher than competence. We also predicted that older persons would assign higher competence in their perceptions of the elderly.

We designed Study 2, as described in Chapter III, to generate Brazilian norms of pleasantness and relevance for a set of adjectives. The adjective list was generated in Germany and contained the target set of 20 adjectives used by Wentura and colleagues in their experiments on the differentiation of implicit prejudice. Study 2 created compatible materials for Study 4 in Chapter V, which made a cross-cultural comparison between Germany and Brazil.

For Study 3 in Chapter IV, we developed and tested a new format of the Affective Priming task, the go/no-go version. The typical Affective Priming task has a binary format. Two keys on the keyboard are arbitrary assigned as positive or negative. The participants must first identify the keys requested for the task and then decide in each trial which one to press. The evaluative task in the Affective Priming is possibly burdened by this response selection process. The error variance in reaction time tasks could be reduced by decreasing the response switching. For this we developed a go/no-go version of the Affective Priming task. The advantage of the go/no-go format is that participants use only one key throughout the task. We tested this new version in Study 3 with political and standard primes.

Having a set of compatible materials, the foundation for Study 4 in Chapter V was then ready. Our chosen experimental tasks, the go/no-go version of the affective priming and

the AMP, could be tested in the domain of age-attitudes for both Germany and Brazil. We had four goals for this study. First, we wanted to compare ageism in Brazil and Germany. Second, we experimented with the new task for measuring implicit attitudes, the go/no-go version of masked affective priming with both standard positive and negative primes and with attitude primes (i.e., aging preferences). Third, we tested for two types of ageism: one that is based on social categories (attitudes towards old people) and the other sensitive to aspects of old age (attitudes towards the negative traits of age). Our fourth goal was to check the hypothesis that ageism can still be differentiated as possessor-relevance (depreciation) and other-relevance (hostility) depending on the type of negativity associated with older persons.

CHAPTER II

STUDY 1: WARMTH AND COMPETENCE: MIXED STEREOTYPES OF THE ELDERLY AMONG YOUNG ADULTS AND OLDER PERSONS IN BRAZIL

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Sílvia Helena Koller

Abstract

The Stereotype Content Model posits that out-group stereotypes are mixed in dimensions of warmth and competence. This study investigates if stereotypes about the elderly are mixed among Brazilians such that they are perceived as more warm than competent. The participants were 121 younger and older individuals responding to items about society's perceptions of the elderly in terms of warmth and competence. As predicted, the participants regarded the elderly as more warm than competent. The elderly were seen as equally warm by younger and older adults. However, older individuals demonstrated more positive perceptions of the elderly while younger persons saw them as less competent. These results indicate that despite the mixed nature of elderly stereotypes among Brazilians, values change over a lifetime, allowing for a more positive view of aging as the years pass by.

Keywords: elderly stereotypes, warmth, competence, older persons, young adults

Introduction

Ever since Allport published *The Nature of Prejudice* (1954), many social psychologists have focused on stereotypes and prejudice. An important aspect of this discussion is the differentiation of stereotypes and prejudice. Researchers have tried to understand which processes are related to their activation and which are the effects of such activation on judgments and behaviors.

The distinction between stereotypes and prejudice is directly related to the one between cognition and affect (Amodio & Devine, 2006; Blair, 2002). Stereotypes here align with cognition and are defined as beliefs people hold about out-group members. In other words, stereotypes are cognitive representations of social groups existing within certain cultural contexts (Amodio & Devine, 2006; Blair, 2002; Mackie & Smith, 1998). Differently, prejudice is associated with affect and defined as an evaluation, positive or negative, of a social group. In terms of a social cognitive approach, prejudice would be a direct association in memory between an attribute (e.g., good vs. bad) and an attitude object (e.g., a certain social group) (Albarracín, Wang, Li, & Noguchi, 2008; Fazio, Jackson, Dunton, & Williams, 1995). The activation of stereotypes is mostly related to the formation of judgments, while the activation of prejudice is principally associated with phenomena like interpersonal preferences and social distance (Amodio & Devine, 2006).

Explicit and implicit measures of attitudes have been used to assess stereotypes and prejudice. Explicit measures of stereotypes and prejudice have been criticized for possibly impeding participants from revealing their beliefs and feelings due to social desirability concerns. To overcome this problem, researchers from the social cognition field developed implicit measures to discreetly assess mental representations of social groups and the feelings towards them (e.g., Bargh, 1999; Fazio et al., 1995). Implicit measures usually utilize response latency measures, checking how long it takes participants to link an attribute, a target, to an object, a prime (Albarracín et al., 2008). Prime-target pairs can be either

semantically related (or unrelated) or evaluatively congruent (or incongruent). Reaction times should be shorter when the attribute and the object have the same valence, that is, when they are congruent, or when they are semantically related. The sequential priming paradigm is widely used as an implicit measure of stereotypes and prejudice. In this task, a prime is quickly presented and followed by either an evaluative task or a lexical decision task. An example of the former is when participants decide if the target after the prime is positive or negative (i.e., the experimental manipulation is whether or not prime-target pairs are evaluatively congruent or incongruent), whereas in a lexical decision task, participants are asked if the target after the prime is a word or non-word (the experimental manipulation is whether or not prime-target pairs are semantically related or unrelated). Evaluative decisions are linked to the Affective Priming paradigm (Fazio et al., 1995) widely used in the domain of automatic prejudice activation (Degner, Wentura, Gniewosz, & Noack, 2007; Degner & Wentura, 2011; Fazio et al., 1995; Livingston & Brewer, 2002; Wittenbrinck, Judd, & Park, 2001a). Lexical decisions, on the other hand, are related to the semantic priming paradigm employed in studies about the automatic activation of stereotypes (Blair & Banaji, 1996; Perdue & Gurtman, 1990; Wittenbrink, Park, & Judd, 1997; Wittenbrink, Judd, & Park, 2001b).

Allport's definition of prejudice seems to rely mainly on uniform antipathy, a generalized negative attitude, towards out-groups. Academics debated this view of prejudice, remarking that its one-dimensionality fails to encompass the complexities related to the subject (Eagly & Diekmann, 2005).

This discussion led to new definitions of stereotypes and prejudice. Researchers offered definitions of prejudice and stereotypes that include ambivalent components. Prejudice would be thus considered not just uniform antipathy but formed by mixed evaluations from social groups. Prejudice could then be differentiated according to relative negativity at the level of automatic activation (see Degner et al., 2007; Degner & Wentura,

2011; Wentura & Degner, 2010). This differentiation is related to the distinction between the other- and possessor relevant traits first introduced by Peeters (1983; see also Peeters & Czapinski, 1990 and Peeters, Cornelissen, & Pandelaere, 2003). Peeters suggested that the evaluative meaning of a trait should not depend solely on its valence, such as positive vs. negative, but also on the trait's adaptive value for humans in general¹. Prejudice may then be characterized as a negative attitude in two domains: 1) the possessor-relevant domain (i.e., negativity associated to traits related to the target person themselves, like being depressive or lonely); and 2) the other-relevant domain (i.e., negativity associated to traits related to the target person that are harmful to others, like aggression and dishonesty). Prejudice against older persons is considered the possessor-relevant type because they are usually seen as weak but sociable and non-threatening (e.g., Degner & Wentura, 2011; Wentura & Brandtstädter, 2003). As for stereotypes, Fiske, Cuddy, Glick and Xu (2002) proposed the Stereotype Content Model (SCM) to explain the ambivalence related to stereotypes in an intergroup context. The authors posit that stereotypes often vary along two dimensions: warmth and competence. According to them, these two are central dimensions of social perception and social cognition that help promote survival and shape intergroup stereotypes, emotions and behavior (Fiske, Cuddy, & Glick, 2007). For example, when encountering an out-group member, one must first determine whether or not they represent a threat, like if the person is a friend or enemy, or if they have good intentions. Then one must decide if this out-group member is able to carry out his intentions. Warmth is associated with perceived intent (friendliness, sincerity, trustworthiness, etc.) and competence with perceived ability (intelligence, efficacy, etc.). Social structure is recognized as casually associated with stereotypes and prejudice. This means that competition predicts perceived warmth, such that competitors are perceived as lacking warmth, while social status predicts perceived

¹ Peeters (1983) originally defined possessor- *versus* other-relevance as possessor- *versus* other-profitability.

competence, with high-status groups perceived as highly competent (see Caprariello, Cuddy, & Fiske, 2009).

According to the SCM (Fiske et al., 2002), stereotypes are characterized not just by antipathy but also by a social group's mixed evaluations. The model proposes that some groups are rated as warm but incompetent (paternalistic stereotypes) and others as cold but competent (envious stereotypes). While high warmth and high competence (in-group favoritism) and low warmth and low competence (uniform hostility/derogation) may also occur, the model emphasizes mixed combinations. Four emotions derive from the four different combinations of warmth and competence: contempt (low warmth x low competence); admiration (high warmth x high competence); pity (high warmth x low competence); and envy (low warmth x high competence). Elderly stereotypes are often the paternalistic type, disrespect linked with pity (Figure 1.1). Older persons are regarded as warm, kind, and, at the same time, incompetent.

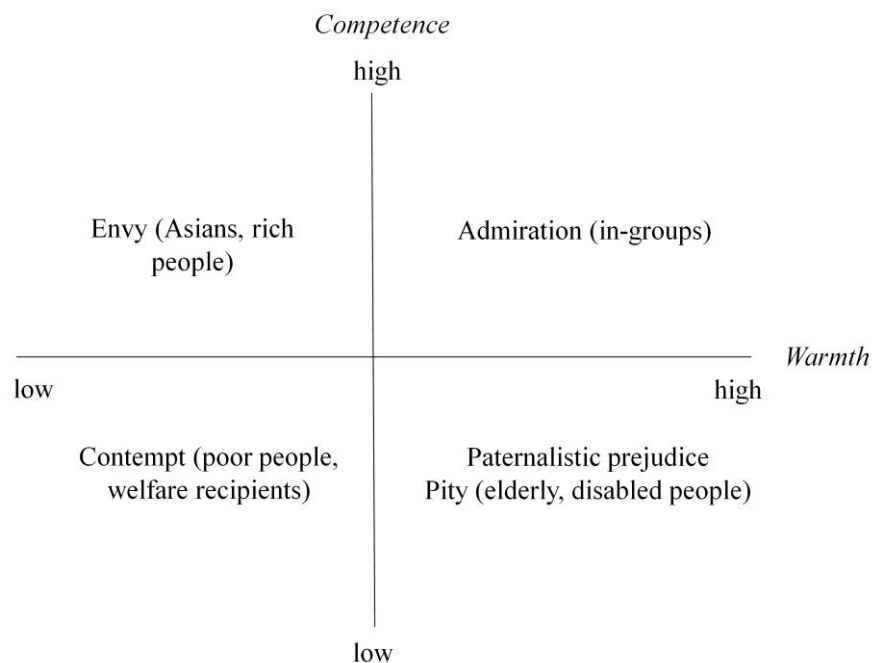


Figure 1.1. Four types of intergroup emotions as a function of warmth and competence according to the Stereotype Content Model.

Ageism in different cultures

Cuddy, Norton and Fiske (2005) conducted a cross-cultural study to investigate whether ageism was unique to American culture or if it was present in other cultures as well. They collected data from college students in six countries: the USA, Belgium, Costa Rica, Hong Kong, Japan, Israel and South Korea. The results confirmed that older persons were perceived in these six societies as being more warm than competent. The authors then argued that ageism can be characterized as a cross-cultural phenomenon. In Brazil, Paula Couto, Koller, Novo and Soares (2009) collected data using The Ageism Survey (Palmore, 2001) from a sample of older persons to examine the more prevalent types of perceived ageism and the stress levels associated with episodes of such. The results revealed that, in Brazil, the most frequent types of perceived ageism were related to social and health domains. The episodes evaluated by the participants as being more stressful were: victimization by criminals; difficulty obtaining loans; and being treated with less dignity and respect. The study emphasized the experiences of older persons facing discrimination. However, this investigation did not scrutinize the cultural stereotypes typical in Brazilian society across different samples such as young people, adults, older persons, etc. We then decided to apply the SCM in Brazil to verify if in this country older persons are socially perceived as warm yet incompetent. We tested two hypotheses:

1. Elderly stereotypes are evaluatively mixed. They vary along two dimensions: warmth and competence, with warmth usually higher;
2. Mixed elderly stereotypes exist in Brazil as well. Members of Brazilian culture consider older persons as more warm than competent.

Elderly stereotype among younger and older persons

Another issue related to ageism is that, differently from other social stereotypes like sexism and racism, elderly stereotypes are characterized by a social transition that occurs

during a lifetime. The young person who stereotypes will eventually become the older person who is stereotyped (Wentura & Brandstädter, 2003).

Elderly stereotypes originate as early as childhood (Isaacs & Bearison, 1986; Miller, Blalock, & Ginsburg, 1985). Familiar and cultural environments influence the process of internalizing stereotypes and prejudices (Allport, 1954). As an individual grows older, they receive the reinforcement of stereotypes through repeated exposure of predominantly negative stereotypes about the elderly, such as that they are sick and dependent. When the person transitions into old age, the negative stereotypes of aging may become a part of their self-concept. Levy (2003) argues that aging stereotypes become aging self-stereotypes that may affect an older person's cognitive and physical functions (Levy, 1996; Hausdorff, Levy, & Wei, 1999). The effects of negative aging stereotypes on an older person's self-appraisals are discussed in terms of assimilation and contrast effects (Rothermund & Brandstädter, 2003). Assimilation effects are predicted by the contamination hypothesis, which posits that a person will incorporate aging stereotypes into their self-view as they grow older. Contrast effects are noted by the comparison hypothesis, in which negative age stereotypes may enhance self-appraisals by providing a reference standard against which older persons compare themselves.

To protect their selves, older persons have to develop strategies against the burden of negative elderly stereotypes. Older persons may protect their self-views by shifting to more positive social attributes; changing the criteria used to recognize an attribute as a personal characteristic; and adjusting the importance given to such negative attributes (Rothermund & Brandstädter, 2003; Wentura & Brandstädter, 2003). The dual-process model of development explores such strategies (Brandstädter & Rothermund, 2002; Brandstädter, Wentura, & Rothermund, 1999). This model proposes two coping methods, assimilative and accommodative, to deal with the discrepancies between development aspirations and achievements. The assimilative mode presupposes that the individual may change his development course according to his personal goals. When assimilative coping fails, or if the

presented situation is unchangeable from the start, personal goals and standards are then adjusted to the constraints of development. This is known as accommodative coping and includes changes in personal values and beliefs that allow for a more positive and acceptable view of a given situation. The accommodative mode should prevail in old age. Studies show that persons who score higher on accommodative coping have a more positive attitude towards growing old and are more likely to ascribe positive meanings to age (Wentura & Brandstätder, 2003).

Given this theoretical background, we expected older persons to rate the elderly as more competent than young people do. We then tested a third hypothesis:

3. Within the sample there should be no age effect on the dimension of warmth. However, the dimension of competence associated with elderly stereotypes should be different among the evaluated groups. The elderly should be rated as less competent by younger groups than by the older ones.

We collected data from four social groups: college students, adults, older persons who participated in community groups and older persons who did not. We included these two groups of older persons so as to examine if participating in community groups would create a perceptible difference from the older persons who did not. These groups in Brazil discuss the aging process and the social roles older persons have in the society.

We asked participants to think about cultural beliefs instead of personal ones in order to avoid social desirability. However, we are aware that even by trying to disentangle personal beliefs from those of mainstream society, such as “as seen by society, older persons are incapable, but I do not think this is true,” individual attitudes still align with the ones of their culture (Banaji & Greenwald, 1994).

Method

Participants

The study sample included 121 participants (37 men, 84 women; median age = 54.0, ranging from 18 to 91) distributed into four groups: (1) college students; (2) adults; (3) older persons who participated in community groups; and (4) older persons who did not participate in community groups. In the college students group were 31 students from different graduation majors (12 men, 19 women; median age = 23, ranging from 18 to 35). The adult group consisted of 31 graduated persons (11 men, 20 women; median age = 29, ranging from 24 to 59). One group of older persons consisted of 25 participants active in community groups (2 men, 23 women; median age = 64, ranging from 54 to 79). The other group of older persons did not participate in community groups and had 34 participants (12 men, 22 women; median age = 68, ranging from 60 to 91).

All the participants came from Porto Alegre, Brazil. The college students ($M_{\text{age}} = 23.55$, $SD = 3.55$) were younger than adults ($M_{\text{age}} = 33.84$, $SD = 9.96$), $d = -1.52$, $t(60) = -5.42$, $p < .001$. Older persons who participated in community groups ($M_{\text{age}} = 65.50$, $SD = 6.15$) were also younger than those who did not ($M_{\text{age}} = 70.70$, $SD = 9.34$), $d = -.67$, $t(57) = -2.58$, $p < .05$.

In terms of education levels², we assessed the older person groups on a 6-point scale: 1 “0-4 school years”, 2 “5-8 school years”, 3 “9-11 school years”, 4 “incomplete university studies”, 5 “complete university studies” and 6 “other”. The educational level (on each category) and the older participants’ type of group were not associated, meaning that there was not a difference in education levels between the two groups, $\chi^2(5,59) = 2.90$, *ns*. Participants from both older groups were concentrated in categories 3 (9-11 school years: 28% older persons who participated in community groups vs. 23.5% older persons who did not participate in community groups) and 5 (completed university: 44% older persons who

² Because all the participants in the college students group and the adults group had studied at least in the undergraduate level, we did not ask about education in their questionnaires. Instead we asked in the questionnaire the college students about their major and the adults, their profession.

participated in community groups vs. 32% older persons who did not participate in community groups).

Materials

The Competence and Warmth Scales. Participants were asked to rate elderly people on two scales, one reflecting warmth and the other competence (Appendix C). The items were scrambled. Fiske et al. (2002) developed the scales, which contain 12 items evaluating warmth and competence. Six ask about warmth with questions such as “*As viewed by society, how friendly are older persons?*” and six about competence through questions like “*As viewed by society, how capable are older persons?*” Because these scales have not yet been validated in Brazil, we translated the items to Portuguese.

Before applying the scales we conducted a pilot study to verify if the translation of the items were clear to the samples we intended to investigate. We had 10 individuals complete the scales (two men and eight women; median age = 40.5 years, ranging from 20 to 67). We divided the participants into two groups: adults (6 women; median age = 28.5, ranging from 20 to 49) and older persons (2 men, 2 women; median age = 64, ranging from 62 to 67). Participants used a 5-point rating scale (1 = not at all and 5 = extremely). Aiming to reduce social desirability and to investigate cultural stereotypes, we asked the participants to complete the scales according to how Brazilian society views the elderly. The participants were instructed to not respond based on their personal beliefs. We performed a repeated measures ANOVA with scale types (warmth vs. competence) as a within-participants factor and group as a between-participants factor. The results showed that the mean of warmth ($M = 4.03$, $SD = .56$) was higher than that of competence ($M = 2.43$, $SD = .55$), $F(1,8) = 197.10$, $p < .001$. No interaction was found between scale type and group, $F(1,8) = 2.84$, ns . We received suggestions on how to change the items and we adjusted them accordingly to be clearer to the participants.

The Competence and Warmth Scales were within the expected range of internal consistency, with Cronbachs' $\alpha = .76$ for the Competence scale and $\alpha = .74$ for the Warmth scale.

We also collected sociodemographic data from the participants (Appendix B).

Procedure

We contacted college students and adults via e-mail and invited them to access an external website where the Sociodemographic Questionnaire and the Warmth and Competence Scales were available. The older persons who participated in community groups answered the instruments in small groups of up to ten in a quiet room indicated by the group's coordinator. At least two researchers were present and participants could contact them if they had any questions. We contacted individually the older persons who did not participate in community groups and asked them to indicate a friend who would be willing to participate. They answered the instruments at home and were instructed to do it by themselves. One researcher was always present and could be contacted if the participant had any questions.

The Federal University of Rio Grande do Sul Ethics Committee (Institutional Review Board) approved this study (Appendix A). Participants provided written informed consent before the data was collected (Appendix R).

Results

Our main goal with this study was to verify if mixed elderly stereotypes exist in Brazil as it does in other countries such as the USA, Belgium, Japan, etc. (see Cuddy et al., 2005 and Cuddy et al., 2009). We considered mixed stereotypes to be a mixed ascription of competence and warmth, with elderly stereotypes usually higher in warmth than competence. Given that the four participant groups grew up in Brazil, we hypothesized that the participants, regardless of their age, would be familiar with the most prevalent elderly

stereotypes held by Brazilian society. Thus mixed elderly stereotypes should characterize all the participant groups, with warmth higher than competence. We further hypothesized that older persons would ascribe higher competence in their perception of the elderly.

To address these hypotheses we submitted the means of warmth and competence to a repeated measures ANOVA with group as a between-participants factor and scale type (warmth vs. competence) as a within-participants factor. Results indicated a main effect of scale type, $F(1,117) = 280.90, p < .001$, with the mean of warmth ($M = 3.81, SD = .53$) higher than that of competence ($M = 2.77, SD = .62$). Moreover, we found an interaction between scale type (warmth vs. competence) and group, $F(3,117) = 6.88, p < .001$ (Figure 1.2). When we compared the four groups in terms of the mean of warmth, we found no age affect, $F(3,17) = 2.30, ns$. This signifies that college students, adults and both groups of older persons presented similar means of warmth. However, we found an age effect in the mean of competence, $F(3,117) = 9.00, p < .001$. Older persons who participated in community groups ($M = 2.96, SD = .64$) and older persons who did not ($M = 3.11, SD = .52$) presented higher means of competence than both college students ($M = 2.52, SD = .55$) and adults ($M = 2.51, SD = .57$). We also compared the means of warmth and competence between the two groups of older persons and the younger groups of college students and adults. Older persons ($M = 3.81, SD = .50$) and young people ($M = 3.81, SD = .56$) did not differ in the means of warmth, $F(1,119) < 1, ns$. However, the mean of competence was higher among older persons ($M = 3.04, SD = .57$) than in the young group ($M = 2.51, SD = .56$), $F(1,119) = 26.36, p < .001$. Finally, we compared the two young groups and the two old groups in terms of the means of warmth and competence. College students and adults did not differ in their means of warmth or competence, $F(1,60) < 1, ns$ and $F(1,60) < 1, ns$, respectively. While there was not a difference in the means of competence between the two older groups, $F(1,57) < 1, ns$, there was one in the means of warmth, $F(1,57) = 8.10, p < .01$. Older persons who did not

participate in community groups presented a higher mean of warmth ($M = 3.96$, $SD = .52$) than the ones who did ($M = 3.60$, $SD = .42$).

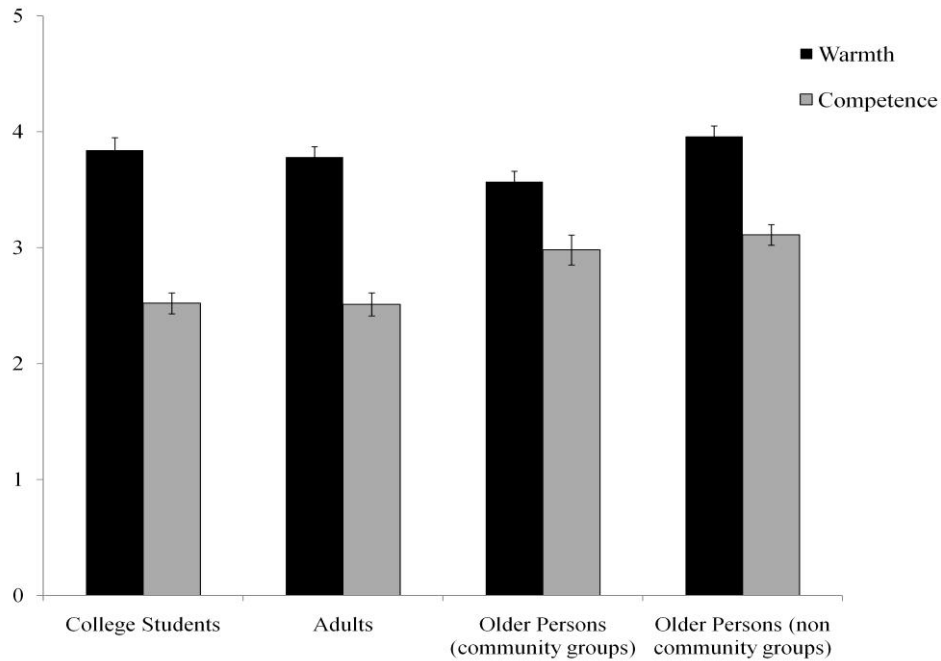


Figure 1.2. Competence and warmth means as a function of group membership.

Discussion

As we hypothesized, elderly stereotypes are evaluatively mixed in Brazil, varying along warmth and competence. Older persons are seen as more warm than competent. A recent study (Cuddy et al., 2009) compared ten countries, seven of them individualistic and three collectivist, in terms of the SCM. The authors found three similarities: social groups can be differentiated according to their perceived warmth and competence; out-group stereotypes are ambivalent or mixed; and high status groups are perceived as competent while competitive groups are seen as lacking warmth. They also discovered that, differently from the individualistic countries, the collectivist ones do not place in-groups in the most positive cluster. This study indicates that the SCM is useful for predicting group stereotypes and comparing societies.

We evaluated four groups: college students, adults, older persons who participated in community groups and older persons who did not. We found no significant differences within the domain of warmth, with all four groups perceiving older persons as equally warm. However, we found that older participants rated older persons as more competent than did the young groups. Additionally, participating in community groups did not make a difference. Older persons who did not participate in community groups evaluated the elderly in the same way as those who did participate.

These results reinforce other studies that have investigated aging stereotypes among young and older adults. Hummert, Garstka, Shaner and Strahm (1994) examined elderly stereotypes held by young, middle-aged and older adults. Their results revealed that older adults took into consideration more complex representations of aging than the younger participants, and that middle-aged participants took into consideration more complex representations than the young ones. At the same time, the three groups had similar knowledge of elderly stereotypes. The trait list produced by the three groups displayed a significant correlation. This demonstrates that although stereotypes are pervasive, as one grows older, more traits are needed to explain the aging process which possibly allows for a more balanced understanding of what it means to become old. In another study, Erber, Szuchman and Rothberg (1990) examined age differences in memory failure appraisals and attributions. They tested young and older adults and asked them to judge memory failures by young and older adults. Both young and older participants judged memory failures by older targets as indicating greater mental difficulty and need for memory training when compared to young targets. However, the appraisals by older adults were generally milder than the ones by younger participants. Wentura and Brandstädter (2003) used a sentence-priming technique to examine if older women view aging more positively than younger ones. The prime stimuli were sentences with old and young characters, and the targets were either positive or negative words (related vs. unrelated). The authors evaluated relatedness beforehand through a sample

of young persons who rated how related or unrelated the sentence-target pairings were. This showed that positive material regarding older persons (i.e., positive targets) was available for young participants given that they related it to the sentences with older characters. The results indicated a priming effect for the positive material only among the older participants. The older participants responded faster to positivity related words after an old sentence than to a young sentence. In addition, the authors found a significant affective priming effect in the older group: older women responded faster to semantically unrelated positive words following a sentence about an older person. The authors discussed these findings within the context of the dual-process model of development. They remarked that in later years, accommodative changes occur and make the concept of aging more positive. The authors comment that some might interpret the results as reflecting life experiences rather than accommodative processes, and that therefore the elderly simply realize that aging is not so terrible after all. However, the authors state that this is an erroneous assumption. As mentioned before, the positive aspects related to aging were available to younger participants who rated the sentence-target pair relatedness. Nevertheless, the priming task measured that the accessibility of those positive aspects was different for the younger and older participants. Thus, the young tend to view aging in terms of losses rather than gains, whereas older persons, due to accommodative changes, tend to have more balanced opinions. The negative stereotypes held by older persons are countered by positive ones.

Altogether, the results indicate that, as predicted, the four investigated groups are familiar with Brazilian stereotypes about the elderly as being more warm than competent. The perceptions of the elderly are more positive among older individuals than younger ones, who perceive the elderly as less competent. A change of values does seem to occur over a lifetime allowing for a more positive view of aging as the years pass by.

The data collection presented a limitation for this study. We were aware that collecting data for the groups in different manners was a methodological confound that could affect the

results. However, our findings of a null age effect for warmth and a significant age effect for competence indicate that this confound may not have been severe.

Our results support the need for further research on elderly stereotypes and prejudice against older persons in Brazil. As explained previously, stereotypes are known as the cognitive component of ageism while prejudice is related to intergroup emotions. Paternalistic prejudice applies to older persons. This means that the elderly are seen as warm and incompetent, and are a social group towards which society feels pity. All this affects the behavioural component. Mixed stereotypes and paternalistic prejudice are commonly related to behaviours towards the elderly such as helping (because they are friendly and thus it is okay) and excluding (because they are incompetent and should stay in places more suitable for them; Cuddy et al., 2005). This study emphasized the mixed nature of elderly stereotypes. Future studies should focus on intergroup emotions, or prejudice, and how they affect intergroup behaviour.

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CHAPTER III

STUDY 2: RATED PLEASANTNESS AND RELEVANCE OF 136 BRAZILIAN- PORTUGUESE ADJECTIVES

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Abstract

It has been recently argued that prejudice is not simply a general antipathy towards out-groups but is instead best understood as a multifaceted social phenomenon. Researchers have tested the differentiation of prejudice in terms of the other- vs. possessor-relevance distinction. Towards this end, Wentura, Kulfanek, and Greve (2005) developed a target set of 20 adjectives rated for pleasantness and relevance. No such catalog exists in Brazil for researchers working in the field of prejudice. This study sought to establish Brazilian norms of pleasantness and relevance for a sample of German adjectives that include the target set created by Wentura et al. (2005). Three judges validated to Brazilian-Portuguese a preliminary list of 186 German adjectives. A coefficient of content validity (CCV) served to evaluate the degree of agreement among the judges in the two dimensions of compatibility and clearness. In both dimensions, the cut-off point to select valid adjectives was .80. The final list contained 136 items. The CCV for the aggregate of the 136 adjectives was .90 for compatibility and .91 for clearness. These adjectives were subsequently rated for pleasantness and relevance by 385 participants ($M_{age} = 25$ years; ranging from 17 to 68). The Brazilian norms were compatible with the original German ones: the agreement frequency was 73%-99% for pleasantness and 44%-96% for relevance. The results indicate that the Brazilian norms are appropriate for the study of prejudice and its differentiation in both national and cross-cultural studies between Germany and Brazil.

Keywords: prejudice; pleasantness; relevance; word lists; Brazil; Germany.

Introduction

In his classic book “The nature of prejudice,” Allport (1954) defined prejudice as antipathy towards a social group that is based on an inaccurate perception generalized to all its group members. Allport’s definition has since been debated. Currently social psychologists widely accept the minimalist definition of prejudice as an overall negative attitude towards a group (Eagly & Diekmann, 2005). Although largely accepted, Allport’s definition of prejudice as antipathy, or generalized negative attitudes, towards out-groups has been challenged in the last few years. Some researchers remarked that prejudice is not one-dimensional and would be better defined as a complex social phenomenon encompassing a wide range of negative reactions towards out-groups (Degner, Wentura, Gnievosz, & Noack, 2007; Degner & Wentura, 2011; Eagly & Diekmann, 2005; Fiske, Cuddy, Glick, & Xu, 2002; Mackie, Devos, & Smith, 2000; Smith, Seger, & Mackie, 2007). An important line of research on the differentiation of prejudice considers that beyond valence, different negativity types may be activated at the automatic level (see Degner et al., 2007; Degner & Wentura, 2011). So, as opposed to a one-dimensional perspective that places prejudice at two extreme poles (positive vs. negative; I like it vs. I do not like it), some researchers favor definitions that include a distinctive component. Wentura and colleagues (Degner et al., 2007; Degner & Wentura, 2011; Wentura & Degner, 2010) have proposed a differentiation known as the possessor- vs. other-relevance distinction. This differentiation is based on the distinction between other vs. self profitability first introduced by Peeters (1983; see also Peeters & Czapinski, 1990; and Peeters, Cornelissen, & Pandelaere, 2003).

The existence of different prejudice types: the possessor- and other-relevance distinction

The differentiation of prejudice into possessor- and other-relevance is rooted in the work of Peeters (1983; see also Peeters & Czapinski, 1990, and Peeters et al., 2003). Peeters theorized that a trait’s evaluative meaning does not depend solely on its valence (i.e., positive

vs. negative) but also on the trait's adaptive value for humans in general. A trait can be considered positive or negative while having an adaptive value for the trait holder or for the social context. Under this perspective, prejudice is characterized as a negative attitude in two domains: (1) the possessor-relevant domain (i.e., negativity associated with traits that are related to the target person, like being depressive and lonely) and (2) the other-relevant domain (i.e., negativity associated with traits that are related to the target person and that are harmful to others dealing with such a person, like aggression and dishonesty). Other-relevance is related to derogation and hostility towards social groups that are negatively perceived as threatening to the social context; for example, Turkish people in Germany. Possessor-relevance is associated with feelings of pity towards social groups, like older persons, that are perceived as worthless, weak, or incompetent.

The possessor- vs. other-relevance distinction has been tested in studies assessing the differentiation of implicit prejudice by employing the Affective Priming paradigm (Fazio, Jackson, Dunton, & Williams, 1995). The affective (or evaluative) priming is a reaction time task developed to be an implicit measure of attitudes based on an evaluation task. In it, a prime stimulus is presented to the participant and is followed by a target (e.g., words) that is to be evaluated according to its valence as either positive or negative. Although the prime valence is not of primary importance to the task, it should influence the target's evaluation so that if both the prime and target are congruent (incongruent), a facilitation (an interference) occurs. Reaction times would be faster in congruent trials, with both the prime and target having the same valence, than in incongruent ones, when the prime and target have different valences. In Germany, for example, prejudice towards Turks, the elderly, and homeless people has been assessed through the evaluative priming task. The main goal was to discover if the attitudes towards these social groups were negative and, if so, what relevance type is automatically activated in response to group exemplars (Degner & Wentura, 2011). The findings confirmed negativity associated with the elderly. Importantly, they demonstrated that

this negativity was reflected in the priming effects based on possessor-relevant targets. This means that as assessed implicitly, age attitudes match how the elderly are socially perceived: weak, lonely, worthless, and non-threatening. In another study using masked affective priming to assess ethnic out-group prejudice against Turks, Degner et al. (2007) found that explicit prejudice and priming effects for other-relevant targets, but not for possessor-relevant targets, were positively correlated. This supported the possessor- vs. other-relevance differentiation of automatic attitudes. This is plausible given that Turks living in Germany are socially perceived as hostile and threatening, traits that are associated with other-relevance.

The studies by Degner and Wentura (2011) and Degner et al. (2007) used the evaluative priming task as a measure to assess automatic prejudice. Their materials included frontal portraits as primes (portraits of older people vs. portraits of young people) and words as targets. The words in these studies' target sets are positive and negative adjectives that can be further classified as either possessor- or other-relevant. Wentura, Kulfanek, and Greve (2005) developed the original target set, which contained 20 German adjectives with five to eight letters. They selected the adjectives from a norm list of 908 adjectives (Hager, Mecklenbräuker, Möller, & Westermann, 1985, and Möller & Hager, 1991) based on their pleasantness values. The absolute values were of 50 or more on a scale ranging from -100 to +100. They later generated norm data (Wentura, Rothermund, & Bak, 1998) establishing that besides being positive and negative, the adjectives have possessor- and other-relevant meanings.

In Brazil, words for which norms have been obtained have been rated in semantic association among children (Salles, Holderbaum, & Machado, 2009) and college students (Salles et al., 2008). Semantic association refers to the association strength and number of words generated for each target word previously presented. Norm data have also been generated for concreteness with words evaluated according to levels of abstraction or concreteness (Janczura, Castilho, Rocha, van Erven, & Huang, 2007). These norms are

especially important for researchers working with memory and language. Concrete words are theoretically more easily retrieved and recognized in lexical decision tasks (see Janczura et al., 2007). At the same time, semantic association norms are useful when working with the semantic priming paradigm, in which processing the target is facilitated by the prime when both are semantically related. However, Brazil still lacks norms of pleasantness and relevance. Given this, it is impossible to conduct studies on the assessment of implicit prejudice and its differentiation comparable to those performed in Germany. There is a clear need to establish Brazilian norms of pleasantness and relevance for the words, specifically adjectives, that have been used in German experiments (Degner et al., 2007; Degner & Wentura, 2011; Wentura & Degner, 2010; Wentura, Kulfanek, & Greve, 2005). Then experiments on prejudice and its differentiation can be executed in Brazil, allowing for comparisons between Germany and Brazil.

This study aimed to (a) generate a valid list of Brazilian-Portuguese adjectives (based on the German list by Wentura, Rothermund, & Bak, 1998) and (b) establish Brazilian norms of pleasantness and relevance for the generated list of valid Brazilian-Portuguese adjectives. We will include the target set of Wentura et al. (2005) in the final list of Brazilian-Portuguese adjectives.

Overview

In this study we sought to establish Brazilian norms for ratings of pleasantness and relevance for a sample of adjectives. These adjectives compose an existing German list that includes the target set by Wentura and colleagues (2005). The final norms were generated in two phases. In Phase 1, we translated and validated to Brazilian-Portuguese an existing list of 186 German adjectives. In Phase 2, we generated the Brazilian norms of pleasantness and relevance.

Method

Participants

The sample included 385 participants. Because we were interested in college students and adults, we decided on three criteria to calculate the sample size. The participants should come from Porto Alegre (Rio Grande do Sul, Brazil) and have studied between 11 to 14 years or 15 years or more. We considered a 5% error rate³. The participants consisted of 270 women and 111 men (four missing cases) with a median age of 25 years (ranging from 17 to 68). They were either college students (from different faculties: Psychology, Nutrition, Nursing, Dentistry, Publicity, Journalism, Public Relations, Linguistics, Philosophy, Sports, Law, Sociology, and Agronomy) or adults with at least an undergraduate level of study (psychologists, engineers, journalists, historians, biologists, and nurses). The participants' median number of schooling years was 16, ranging from 11 to 24.

Materials

In Phase 1 we used a list of 186 German adjectives elaborated by Wentura and colleagues (1998), based on the 908 norm list by Hager et al. (1985) and Möller and Hager (1991). The list contained the 20 adjectives of the Wentura et al. (2005) target set. We initially translated the adjective list to Brazilian-Portuguese. We presented the translated list to be evaluated so that the German adjective was paired with its Brazilian-Portuguese translation (Appendix D). For example, *schön* – *bonito*. Each adjective was to be rated on a five-point scale according to two criteria, compatibility and clearness (see Cassepp-Borges, Balbinotti, & Teodoro, 2010). Compatibility refers to the precision of the translation from German to Brazilian-Portuguese: i.e., the adjective is precisely translated from German to Brazilian-

³ According to the data provided by the Brazilian Institute of Geography and Statistics (IBGE) – Results of the Demographic Census, 2000 - *Malha municipal digital do Brasil: 2001* (available at the website Cidades@IBGE - www.ibge.gov.br/cidadesat), in Porto Alegre there are 303,476 inhabitants who are more than 10 years old and have studied between 11 and 14 years. There are also 164,151 inhabitants who are 10 years old or more and have studied for 15 years or more.

Portuguese. Clearness is how clear the adjective is when translated to Brazilian-Portuguese: i.e., the translated adjective is clear and adequate for the study's population. The higher the adjective was rated, the higher its compatibility to the German version and the clearer its translation into Brazilian-Portuguese. We provided space at the end of the list for the judges to write suggestions.

Three bilingual judges⁴ rated the translated adjectives on a five-point scale according to the two aforementioned criteria, compatibility and clearness. The judges evaluated the list in two rounds. They first rated all of the 186 translated adjectives. Their evaluations were then analyzed and suggestions were made for 40 listed adjectives. Based on those suggestions, a second list containing only those 40 adjectives was generated, which the judges then evaluated.

In order to validate the German list of adjectives to Brazilian-Portuguese, we followed the procedure suggested by Hernández-Nieto (2002) and described by Cassepp-Borges et al. (2010). These authors recommend using a coefficient of content validity (*CCV*) which evaluates the amount of agreement among the judges. To calculate the *CCV* there should be at least three and no more than five judges. The judges must rate a series of items on a five-point scale in three areas: language clearness, item adequacy, and theoretical relevance. These recommendations best suit validating psychological instruments such as scales and questionnaires. However, since the aim of this study was to validate a list of words, we opted for the two areas of compatibility and clearness. The judges thus did not rate the adjective list according to theoretical relevance.

To calculate the *CCV*, we first found the mean of each rated item (M_x). For this, we summed up all the grades given to the item, from 1 to 5, and then divided the result by the number of judges who evaluated the item. After that, we calculated the initial item *CCV*

⁴ The judges were three (2 men and 1 woman) bilingual Brazilians fluent in German and Brazilian-Portuguese. They were 25, 39, and 60 years old. They all had graduated and studied for at least 17 years. Two of them were German teachers and one was a native speaker of German.

(CCV_i) by dividing the M_x by five, the highest value that could be assigned to the item. To avoid evaluation bias, we also calculated an error (Pe_i)⁵. We considered acceptable items that obtained a $CCV_f > .80$ in the evaluated areas.

After completing the analysis of the CCV , we eliminated thirty adjectives because their CCV_f did not reach .80 in either compatibility or clearness. We excluded another five adjectives, three of them because they were missing responses from one of the three judges and the other two because they lacked a proper translation into Brazilian-Portuguese. The list then consisted of 151 adjectives. After controlling for synonyms, the final list for Phase 2 contained 136 valid Brazilian-Portuguese adjectives. The CCV for the aggregate of the 136 adjectives (CCV_f) was .90 for compatibility and .91 for clearness.

Procedure

We used the list of 136 adjectives validated to Brazilian-Portuguese from Phase 1 in Phase 2 (Appendix E). Each listed adjective was rated according to its pleasantness and relevance. There was a seven-point scale for pleasantness, from -3 for “very negative” to +3 for “very positive.” Relevance was evaluated according to three categories: “possessor-relevant,” “0,” and “other-relevant.” The option “0” was for when the participants could not decide between possessor- versus other-relevance. However, we instructed the participants to avoid as much as possible answering with “0” and to label each adjective as either possessor- or other-relevant. We included in the list questions asking for demographic information like gender, age, years of study, faculty, and profession. We randomized the final list of 136 adjectives four times to create four different test forms.

⁵ The error is calculated with the following formula, where J represents the number of judges who evaluated the item (Cassepp-Borges et al., 2010):

$$Pe = \left(\frac{1}{J}\right)^2$$

The calculated error was of .04 (i.e., $1/27$). We then calculated the final item CCV (CCV_f) by subtracting the error from the initial item CCV (CCV_i). We obtained the CCV for the aggregate of the items (CCV) by subtracting the mean of the items' errors (Mpe_i) from the mean of the items' coefficient of content validity (Mcv_i).

In groups, the participants rated the list of 136 Brazilian-Portuguese adjectives in two steps. First they rated the adjectives according to their pleasantness. We instructed them to read each adjective and then to decide if it was negative or positive. Once they finished this step, they rated the list according to the relevance associated with the adjectives. For this, we told the participants to think first about the pleasantness of each adjective. If the adjective was positive, they should consider which would be better: if they had the trait or if someone with whom they have a relationship had it. For example, with intelligence, which is best for you: that you yourself are intelligent or that someone with whom you have a relationship is intelligent? If the adjective was negative, the participants should think of what would be worse for them: that they had the trait or that someone with whom they have a relationship had it. With aggression, for example, which is worse for you: that you yourself are aggressive or that someone with whom you have a relationship is aggressive towards you? If they thought that it would be better/worse to have the trait, they should rate the adjective as possessor-relevant. If instead they thought it would be better/worse that someone with whom they have a relationship had the trait, then they should rate the adjective as other-relevant.

The Federal University of Rio Grande do Sul Ethics Committee (Institutional Review Board) approved this study (Appendix A). Participants provided written informed consent before the data was collected (Appendix S).

Results

We first calculated the means for pleasantness and relevance for each of the 136 adjectives on the list. For this we recoded the answer categories for the items' relevance into "-1" for possessor-relevance, "0" for neither, and "1" for other-relevance.

Then, based on the Signal Detection Theory (SDT), we calculated an estimate index of sensitivity separately for pleasantness and relevance. This index indicates the proportion of correct answers the participants gave when evaluating the adjectives on the list. To do that, we

created a new variable for each of the 136 adjectives and assigned them the following values taking into account the German norms for pleasantness. “-1” was for negative adjectives and “1” for positive adjectives. We then created the following conditions:

- If according to the German norms the adjective was positive and the participant also evaluated it as positive, then we considered this answer a hit and assigned it a value of 1 (we assigned a value of 1 to each hit associated with positive adjectives);
- If according to the German norms the adjective was negative and the participant evaluated it instead as positive, then we considered this answer a false alarm and assigned it a value of 1 (we assigned a value of 1 to each false alarm associated with negative adjectives).

To calculate the sensitivity index, we divided the number of hits the participant had by the total number of positive adjectives on the list. In this way we calculated a hit rate for the positive adjectives. We did the same for the negative adjectives: the participant’s number of false alarms was divided by the total number of negative adjectives on the list, giving us a false alarm rate. We then subtracted the false alarm rate from the hit rate so that sensitivity index = (hit rate) - (false alarm rate). The index varies from -1 (100% of errors) to 1 (100% of hits). A higher value indicates a higher proportion of hits.

For the adjective relevance, we used the same procedure we applied to pleasantness. We created a new variable for each of the 136 adjectives, assigning values of “-1” (possessor relevance) or “1” (other relevance) to each while taking into account the German norms for their relevance. We then created the following conditions:

- If according to the German norms the adjective was other-relevant and the participant evaluated it as other-relevant, then we considered this answer a hit and assigned it a value of 1 (we assigned a value of 1 to each hit associated with other-relevant adjectives);

- If according to the German norms the adjective was possessor-relevant and the participant evaluated it as other-relevant, then we considered this answer a false alarm and assigned it a value of 1 (we assigned a value of 1 to each false alarm associated with possessor-relevant adjectives).

To calculate the sensitivity index, we divided the number of hits the participant had by the total number of other-relevant adjectives on the list. In this way we calculated a hit rate for the other-relevant adjectives. We did the same for the possessor-relevant adjectives: we divided the participant's number of false alarms by the total number of possessor-relevant adjectives on the list, giving us a false alarm rate. We then subtracted the false alarm rate from the hit rate so that sensitivity index = (hit rate) - (false alarm rate). The index varies from -1 (100% of errors) to 1 (100% of hits). A higher value indicates a higher proportion of hits.

We expected the sensitivity index to be lower for the relevance domain. Pleasantness is a clear-cut domain to evaluate. However, we assumed that relevance would not be so clear a domain for the participants to evaluate, since it is possible that they had never heard before of relevance associated with adjectives. For this reason we established a cut-off point of .20 for selecting participants respecting the relevance domain. We thought that given the difficulty associated with this domain that the participants with less than 20% of correct answers probably did not fully understand the instructions. Once we selected the individuals who answered at least 20% of the items correctly, the final sample for the relevance domain consisted of 210 participants. We did not employ such a cut-off point for the pleasantness domain and thus its final sample included 385 participants. The mean of the sensitivity index for pleasantness was .86 ($SD = .10$) and for relevance, .42 ($SD = .16$).

Our next step was to compare the German norms for the 20 adjectives on the Wentura et al. (2005) target set with the Brazilian norms of the same target set. In Germany, valence norm values vary from -100 (very negative) to 100 (very positive) and relevance norm values, from 1 (other-relevance) to 2 (possessor-relevance). The Brazilian norms for valence vary

from -3 (very negative) to 3 (very positive) and for relevance, from -1 (possessor-relevance) to 1 (other-relevance). Two adjectives from the German target set, “human” and “slow,” were evaluated differently in Brazil in terms of their relevance. “Human” was evaluated as other-relevant in Germany (1) and as possessor-relevant in Brazil (-.09). “Slow” was evaluated as possessor-relevant in Germany (1.85) and as other-relevant in Brazil (.18). Because of such incompatibilities, we chose two other adjectives to include in the target set: “faithful” (other-relevant - Germany: 1.05; Brazil: .46) and “depressed” (possessor-relevant - Germany: 1.98; Brazil: -.32). Despite the incompatibility in the evaluation of “just” (*gerecht/justo*) between the German and Brazilian samples, we opted to keep this word because we believe it is an example of a prototypical other-relevant item. Table 2.1 presents the German and Brazilian relevance norm values for the Wentura et al. (2005) 20 item target set and Table 2.2, the German and Brazilian pleasantness norm values for the same target set. Table 2.3 shows the frequency of agreement of Brazilians with the German norms of pleasantness and relevance⁶. As the data demonstrates, the values for the Brazilian and German norms were compatible. The pleasantness and relevance means for all the adjectives, with only the exception of “just,” were within our expected range, with positive values for other-relevant and positive items and negative values for possessor-relevant and negative items. The agreement frequencies were also within our expected range, 44% to 99%.

⁶ The complete rating set for the 136 words can be obtained from Maria Clara P. de Paula Couto (mariaclara.ppc@gmail.com).

Table 2.1

German and Brazilian relevance norm values for the Wentura, Kulfanek, and Greve (2005) 20 items target set

Other Relevant Items	Possessor Relevant Items			
	Germany ^a	Brazil ^b	Germany	Brazil
gütig/bondoso (kind)	1.06	.15	begabt/talentoso (talented) ^c	-.79
treu/fiel (faithful)	1.04	.46	heiter/alegre (serene) ^c	-.64
gerecht/justo (just)	1.04	-.10	aktiv/ativo (active)	1.83 -.75
ehrlich/honesto (honest)	1.23	.12	schön/bonito (beautiful)	1.90 -.62
zärtlich/carinhoso (affectionate)	1.14	.27	gesund/saudável (healthy)	2.00 -.93
grausam/cruel (cruel)	1.00	.81	einsam/solitário (lonely)	1.99 -.43
boshaft/malicioso (malicious)	1.01	.55	lustlos/apático (listless)	1.94 -.02
gemein/malvado (mean)	1.01	.76	leblo/apagado (lifeless)	2.00 -.11
geizig/avarento (miserly)	1.15	.60	unfähig/incapaz (incapable)	1.75 -.37
gierig/ganancioso (greedy)	1.40	.50	deprimiert/deprimido (depressed)	1.98 -.32
Mean	1.10	.41	Mean	1.92 -.50
(SD)	(.10)	(.30)	(SD)	(.10) (.30)

Note. a. Values ranging from 1 (other-relevance) to 2 (self-relevance) with 1.5 as the midpoint; b. Values ranging from -1 (possessor-relevance) to 1 (other-relevance) with 0.00 as the midpoint. c. The words talented (*begabt/talentoso*) and serene (*heiter/alegre*) were not included in the norm values of Wentura, Rothermund, & Bak (1998) used as the standard for comparison for the Brazilian norm values.

Table 2.2

German and Brazilian pleasantness norm values for the Wentura, Kulfanek, and Greve (2005) 20 items target set

Positive	Germany ^a	Brazil ^b	Negative	Germany	Brazil
gütig/bondoso (kind)	51	2.25	grausam/cruel (cruel)	-84	-2.88
treu/fiel (faithful)	62	2.51	boshaft/malicioso (malicious)	-72	-1.78
gerecht/justo (just)	60	2.58	gemein/malvado (mean)	-66	-2.66
ehrlich/honesto (honest)	74	2.69	geizig/avarento (miserly)	-61	-2.36
zärtlich/carinhoso (affectionate)	80	2.35	gierig/ganancioso (greedy)	-60	-2.23
begabt/talentoso (talented)	49	2.19	einsam/solitário (lonely)	-60	-1.40
heiter/alegre (serene)	56	2.37	lustlos/apático (listless)	-52	-1.66
aktiv/ativo (active)	60	2.02	leblo/apagado (lifeless)	-52	-1.17
schön/bonito (beautiful)	77	1.64	unfähig/incapaz (incapable)	-50	-2.27
gesund/saudável (healthy)	79	2.46	deprimiert/deprimido (depressed)	-59	-1.99
Mean	65	2.31	Mean	-62	-2.04
(SD)	(12)	(.40)	(SD)	(10)	(.50)

Note. a. According to Hager, Mecklenbräuker, Möller, & Westermann (1985), Möller & Hager (1991). Values ranging from -100 (very negative) to 100 (very positive). b. values ranging from -3 (very negative) to 3 (very positive).

Table 2.3

Frequency of agreement among Brazilian participants with German norms of pleasantness (pleasant/unpleasant) and relevance (possessor/other-relevance) for the Wentura, Kulfanek, and Greve (2005) 20 items target set

Positive	<i>N</i> ^a	<i>f</i> (%) ^b	Negative	<i>N</i>	<i>f</i> (%)
gütig/bondoso (kind)	377	98	grausam/cruel (cruel)	382	99
treu/fiel (faithful)	365	95	boshaft/malicioso (malicious)	364	86
gerecht/justo (just)	383	98	gemein/malvado (mean)	373	99
ehrlich/honesto (honest)	376	99	geizig/avarento (miserly)	368	97
zärtlich/carinhoso (affectionate)	383	98	gierig/ganancioso (greedy)	375	92
begabt/talentoso (talented)	383	96	einsam/solitário (lonely)	378	79
heiter/alegre (serene)	383	98	lustlos/apático (listless)	381	88
aktiv/ativo (active)	378	94	lemblos/apagado (lifeless)	379	73
schön/bonito (beautiful)	376	87	unfähig/incapaz (incapable)	378	94
gesund/saudável (healthy)	382	97	deprimiert/deprimido (depressed)	378	95
Possessor	<i>N</i>	<i>f</i> (%)	Other	<i>N</i>	<i>f</i> (%)
begabt/talentoso (talented)	210	88	gütig/bondoso (kind)	210	56
heiter/alegre (serene)	210	81	treu/fiel (faithful)	197	72
aktiv/ativo (active)	210	87	gerecht/justo (just)	209	44
schön/bonito (beautiful)	210	78	ehrlich/honesto (honest)	210	55
gesund/saudável (healthy)	210	96	zärtlich/carinhoso (affectionate)	209	63
einsam/solitário (lonely)	204	70	grausam/cruel (cruel)	210	90
lustlos/apático (listless)	207	47	boshaft/malicioso (malicious)	196	73
lemblos/apagado (lifeless)	204	52	gemein/malvado (mean)	209	87
unfähig/incapaz (incapable)	206	66	geizig/avarento (miserly)	198	79
deprimiert/deprimido (depressed)	208	64	gierig/ganancioso (greedy)	210	74

Note. a. Total number of participants who rated the item. b. Percentage of participants who rated the item in agreement with the German norms.

Discussion

We structured this study into two phases. The main goal of Phase 1 was to develop a valid list of Brazilian adjectives based on an existing list of 186 German adjectives. For this, three bilingual judges evaluated each of the German adjectives as they were translated into Brazilian-Portuguese according to two criteria, compatibility and clearness. From the original list of 186 German adjectives, 136 were correctly validated and thus composed the final list of Brazilian-Portuguese adjectives to be evaluated in Phase 2. Phase 2 aimed to establish the Brazilian norms for two dimensions associated with the adjectives: their pleasantness (positive vs. negative) and their relevance (possessor- vs. other-relevance).

In Phase 2, we made available the pleasantness and relevance norms for the list of 136 German adjectives validated to Brazilian-Portuguese during Phase 1. These norms were also presented for the 20 adjectives of the investigated German target set (Wentura et al., 2005). Compared to the original target set, we kept 18 adjectives and modified two, “slow” and “human,” due to incompatibilities in their relevance evaluation by Brazilians and Germans. The two adjectives added to the target set, “faithful” and “depressed,” obtained the same evaluation by the participants.

We created this study to provide the Brazilian norms for a list of German adjectives. Importantly, we included in this list the target set developed by Wentura et al. (2005). We needed this standardization in order to test the differentiation of prejudice into possessor- vs. other-relevance in Brazil and cross-culturally between Brazil and Germany. The provided list of 136 Brazilian-Portuguese adjectives and their Brazilian norms of pleasantness and relevance may be useful to future Brazilian researchers who, for example, conduct priming studies in which the targets are positive/negative adjectives. Within the field of automatic prejudice, the list offers targets suited for investigating the other- vs. possessor distinction.

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CHAPTER IV

STUDY 3: IS THE TABBY DUCK ON THE CAMPUS? TESTING POLITICAL PREFERENCES OF SAARLANDIAN STUDENTS USING A GO/NO-GO VERSION OF AFFECTIVE PRIMING

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Abstract

Response selection process on the Affective Priming evaluative task has been criticized for it is said to distort priming effects. Decreasing response switching could reduce error variance in reaction time tasks. Hence, this study aimed to test a go/no-go version of the Affective Priming task on political attitudes. The participants were 60 undergraduate students from various Saarland University faculties (25 men, 35 women; aged 18 to 29). Prime stimuli of politicians from different parties were presented together with standardized prime stimuli. Results indicated a robust affective priming effect for the standard condition as well as a significant priming effect regarding political attitudes. The go/no-go version thus did indeed demonstrate the typical effect for congruent prime/target pairs. Furthermore the political priming effect predicted the participants' voting behavior. These results support the go/no-go version of affective priming, implying that it may be a good alternative to the task's traditional two-choice format.

Keywords: political attitudes; attitude; implicit; Affective Priming; go/no-go.

Introduction

The Affective Priming task (Fazio, Jackson, Dunton, & Williams, 1995) is a widely used implicit measure of social attitudes (Blair & Banaji, 1996; Degner, Wentura, Gniewoz, & Noack, 2007; Degner & Wentura, 2009, 2010; Gawronski, Cunningham, LeBel, & Deutsch, 2010; Livingston & Brewer, 2002; Lowery, Hardin, & Sinclair, 2001; Macrae, Bodenhausen, Milne, Thorn, & Castelli, 1997; Macrae, Mitchell, & Pendry, 2002; Maddux, Barden, Brewer, & Petty, 2005; Wittenbrink, Judd, & Park, 2001). In it, participants evaluate as quickly and accurately as possible if a target word is positive or negative. Preceding the target is either a positive or negative prime stimulus. If the prime and target have the same valence, they are congruent; if not, they are incongruent. The main dependent variable of the Affective Priming task is the difference in reaction times between congruent and incongruent prime/target pairs. Reaction times are typically faster for the congruent prime/target pairs.

The typical Affective Priming task has a binary format. Two keys on a keyboard are arbitrarily assigned as positive and negative. The participants first identify the keys requested for the task and then decide in each trial which is the right one to press. Some academics criticize this response selection process, saying that it distorts the Affective Priming evaluative task. For instance, the variation in reaction times may be due to the participants deciding which key to press, a process not relevant to the main task of assessing whether a target word is positive or negative. Moreover, error rates may increase if participants press the wrong key after classifying the target word correctly (Borkenau, & Mauer, 2007; Perea, Rosa, & Gómez, 2002). Decreasing response switching would reduce error variance in reaction time tasks. What has been proposed is a go/no-go version of reaction time tasks, e.g., the lexical decision task. The go/no-go format's advantage is that the participants use only one key throughout the task. They, for example, press the space bar when a positive word is presented and withhold when it is negative.

Perea et al. (2002) compared the two-choice (yes/no) and the go/no-go versions of the lexical decision task. Their conducted study had four comparison criteria: 1) the number of errors; 2) the reaction speed time; 3) the data variability based on mean square errors; and 4) the task demands. They assessed the word frequency effect through a between participants design (two-choice task vs. go/no-go). They evaluated associating priming (i.e., related primes facilitate the target processing) in a within participants design (two-choice vs. go/no-go). With the associating priming, the researchers assigned different orders to the participants: some completed the go/no-go before the two-choice task, others worked first on the two-choice task. Their results showed that the magnitude of the word frequency and associating priming effects was not different in the lexical decision tasks of either the two-choice or the go/no-go. In other words, there was no interaction between word frequency and task type or between the associative priming effect and task type. The go/no-go task did present some advantages: faster reaction times, greater accuracy (fewer errors), and fewer processing demands. However, the go/no-go task did not present less variability than the two-choice task. The authors concluded that the go/no-go task is an excellent and promising alternative to the traditional two-choice task.

Borkenau and Mauer (2007) also examined the go/no-go lexical decision task by exploring the trait-congruency hypothesis, which posits that positive affect is related to greater pleasant stimuli accessibility. They correlated personality and affect measures with a lexical decision task. They employed a two-choice format in Study 1 and a go/no-go format in Study 2. The go/no-go format presented fewer latencies and errors than the yes/no lexical decision task. These results match those of Perea et al. (2002) showing that the go/no-go lexical decision task requires fewer processing demands than the yes/no task. The authors write that because of the less complex response selection in the go/no-go task, shorter reaction times may indeed reflect task-relevant stimulus identification processes.

We do not know of any previous studies that used a go/no-go version of the Affective Priming task in the area of attitudes. We thus decided to experiment with an unmasked affective priming task on political preferences. Our main goal was to test the go/no-go version of affective priming with standard positive and negative primes as well as with attitude primes. By implementing a standard control condition, we checked if the go/no-go version of the affective priming could be used to research attitudes. We hypothesized that the go/no-go format would show the typical facilitation effect for congruent standard prime/target pairs. We predicted less variance in the incongruent/congruent difference scores and face-valid priming effects that would correspond with the participants' political preferences. We collected the data less than a month after Germany's main election. Five political parties were considered in the main task: *CDU*, *FDP* (middle to moderate right-wing parties), *SPD*, *Die Grüne* (middle to moderate left-wing parties), and *Die Linke* (considered separately for being more leftist than *SPD*).

Method

Participants

The participants were 60 undergraduate students from various Saarland University faculties (25 men, 35 women; median age = 22, ranging from 18 to 29). We analyzed the mean error rate to check for outliers and excluded the four participants with mean error rates higher than 15%. We excluded two other participants because they apparently did not fully understand the task. Our final sample consisted of 54 participants. All the participants were native German speakers and had normal or corrected to normal vision. We paid them 5 EUR for participating.

Design

For the experiment we employed a 2 (Go: positive vs. negative) x 7 (prime: *SPD*, *Die Grüne*, *CDU*, *FDP*, *Die Linke*, standard positive, standard negative) x 2 (target: positive vs. negative) within subjects design.

Materials

Go/no-go version of Affective Priming. We used 20 pictures depicting German politicians for the political-related primes with a set of four pictures for each of the five parties. We selected these pictures from a pool of 59 items. So as to have images that were as genuine as possible, such as pictures of real politicians used in campaigns, we took the material from the German Parliament website (<http://www.bundestag.de>). This had two advantages: the depicted politicians were thus real ones and the images had a uniform presentation pattern. We decided that for the final picture set each party should include one old man, one old woman, one young man, and one young woman (see Appendix F). We also wanted all the pictures to be frontal portraits against a light background. Because we wanted the participants to evaluate the parties and not the politicians, we chose people who were not famous. We randomly added the logo of the five parties at the bottom of the pictures so that the depicted politicians did not necessarily belong to the party assigned to the image. The pictures were in color and approximately 250 x 290 pixels.

We included pictures from the International Affective Picture System (IAPS, Lang, Bradley, & Cuthbert, 2008) as additional primes so as to obtain a reference priming effect with standardized stimuli. The standard primes set consisted of four positive and four negative pictures (see Appendix G). For the political-related primes, the standard prime images were in color and approximately 250 x 290 pixels. The positive primes had a mean valence of $M = 7.98$ ($SD = .36$) and the negative primes a mean valence of $M = 3.39$ ($SD = .51$).

The priming task target set consisted of 14 German nouns (see Appendix H for the target list items and norms) selected from a larger pool of 120 nouns (Wentura, 1998) with

pleasantness ratings varying from 1 (very unpleasant) to 7 (very pleasant). The targets varied from four to seven letters with a mean size of five letters. Half the set (seven nouns) had a positive valence while the other half had a negative valence. The target words appeared in black on a white background in 33 pt Arial font.

Explicit Measures. We used a questionnaire with six items to assess the participants' evaluations of the five political parties (see Appendix I). These items were: "*My feelings towards the party are warm and positive*"; "*I like the party*"; "*The politicians representing the party are competent*"; "*With some exceptions, the party and its politicians are morally correct*"; "*I share the party's position on important issues*"; and "*I support the party's politicians*". The participants answered these questions with a 5-point scale for each of the five parties. We also asked the participants which party they selected in the first and second vote during the last German election. In the German political system, people vote twice in the election in a process known as the first and second vote. The first vote refers to the election of politicians in the single-member districts while the second one is for the nationwide proportional vote. In the first vote citizens tend to select strategically candidates who have a chance at winning. The second vote is usually more important because people use their vote to signal what direction they want policy to take and thus elect the party they want ruling. We also collected the participants' demographic data.

Procedure

We tested the participants in small groups of up to six. They sat individually in front of a personal computer, were separated by partition walls, and wore a noise protector to avoid distraction. The participants completed the experiment in two steps. They first completed the go/no-go affective priming task. To maintain confidentiality, we handed the participants a small box and told them to pick a paper. On the paper was a number they should type twice into the computer, the second time being to verify if they pressed in the right figure. From that

moment onward the participants were identified by the confidential number they had received. We gave them the explicit measures and demographic questionnaire. The experiment lasted about 30 minutes and ran on 100 Hz monitors controlled by standard personal computers using *Inquisit* 1.33 software (inquisit, 2002).

For the affective priming, we told the participants that pictures and words would appear on the computer screen and that their task was to evaluate the words as quickly and accurately as possible using the cue presented before the prime. The cue was either a + or a – sign. We instructed them to press the space bar (Go) when the word and cue had the same valence and to not press the space bar (No-go) when their valence differed. The participants completed two practice blocks of 28 trials each. We inserted practice blocks to help the participants familiarize themselves with the task. They received error feedback after each trial during the practice and experimental blocks. They also received at the end of each block feedback on their correct answer percentage and mean reaction times. The experimental section consisted of twelve blocks with 28 trials each for a total of 336 trials. We employed a Latin-Square design for the experimental blocks so that each of the 28 experimental conditions was presented twelve times, once per block, with one of the 28 primes. Throughout the task, each prime was presented twelve times, three times with each of its conditions.

Each trial of the practice and experimental blocks started with a cue that remained on screen for 500 ms and then a fixation cross for 200 ms. The prime then appeared for 100 ms, after which the screen was blank for 100 ms. The target immediately followed the blank screen (i.e., a SOA⁷ of 200 ms) and remained on screen for 850 ms, which was the response deadline (Figure 3.1). If the participant did not respond to the target within the target deadline, the target disappeared and the next trial started. The prime was a bit above the center of the screen (50, 37) so that the party's logo at the lower part of the picture coincided with the

⁷ Stimulus-Onset Asynchrony (SOA) refers to the amount of time between the start of one stimulus and the start of another stimulus. When the stimuli are a prime and a target, the SOA is measured from the beginning of the prime until the beginning of the target.

target's location, leading the participants to focus their gaze on the party's logo rather than on the depicted face.

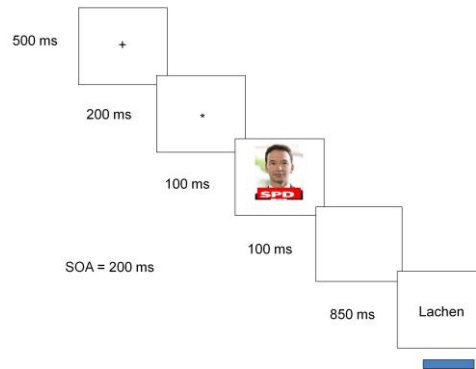


Figure 3.1. The go/no-go affective priming: An example of a trial.

Results

Before the analysis, we removed the no-go trials and error data (2.94% for the political primes and 3.56% for the standard primes). In this way we used only the correct responses in the go trials. In order to correct for anticipatory responses, we excluded from the analysis trials with response latencies below 200 ms (.03%). There were no response time outliers at the right tail of the distribution because of the response deadline (i.e., 850 ms).

We first computed a priming effect for the standard priming condition by subtracting the congruent trials' mean latency from that of the incongruent trials. We defined congruence as positive/positive prime-target pairs and negative/negative prime-target pairs. The standard priming condition yielded a significant effect, $d = 1.10$, $t(53) = 8.09$, $p < .001$, meaning that the reaction times in congruent trials were faster than in incongruent ones. Therefore facilitation (inhibition) through congruent (incongruent) primes did occur in the standard condition.

For the political-related priming condition we calculated one priming effect. We computed this by considering primes of four political parties⁸ (the two middle to right-wing parties, *CDU* and *FDP*, and the two middle to left-wing parties, *SPD* and *Die Grüne*) and by subtracting the congruent trials' mean latency from that of the incongruent ones. We defined congruence arbitrarily by *SPD/positive* and *Die Grüne/positive* prime-target pairs and *CDU/negative* and *FDP/negative* prime-target pairs. Faster response latencies to congruent as opposed to incongruent prime-target pairs (a positive priming effect) revealed a positive attitude towards the middle to left-wing parties *SPD* and *Die Grüne*.

We cross-tabulated the first and second vote to have two subsamples, right-wing and left-wing. The right-wing subsample consisted of participants who chose *CDU* or *FDP* in the first or second vote and did not vote for any leftist parties, $n = 20$. Our left-wing subsample were the participants who selected *SPD*, *Die Grüne* or *Die Linke* in the first or second vote and did not vote for any right-wing parties, $n = 26$ (see Table 3.1). We compared the two subsamples' means of the political-related priming effect, $d = .62$, $F(1,44) = 4.39$, $p < .05$. The left-wing subsample tended towards a higher priming effect mean ($M = 6.91$, $SD = 15.21$) than the right-wing subsample ($M = -3.30$, $SD = 17.82$). Further, the priming effect was significant for the left-wing subsample, $d = .45$, $t(25) = 2.32$, $p < .05$, but not the right-wing subsample, $d = -.18$, $t(19) = -.83$, ns (Figure 3.2).

⁸ DIE LINKE is more left-wing than SPD. For this reason we considered it separately. Since the 1980s (west-) Germany had two clear political spheres: conservative as represented by CDU and FDP and leftist as represented by SPD and GRÜNE. DIE LINKE is a new leftist party branched from SPD, formed partially by disappointed former SPD members and former PDS members, the successor of the East Germany SED. For reasons beyond this text's scope, we had to give differentiated approaches. In terms of stimulus, DIE LINKE primes could not be included in the left-wing set together with SPD and GRÜNE because it is a negative stimulus for at least traditional SPD voters. It might be different on the participants' side. The cross-tabulation table shows that participants whose second vote went to SPD or GRÜNE did not use their first vote for DIE LINKE. However, those whose second vote was for DIE LINKE used their first vote for SPD and GRÜNE. Lastly, in terms of priming effects, it is an empirical matter whether or not DIE LINKE voters are distinguishable from other left-wing voters.

Table 3.1

First and second vote cross-tabulation

		Second vote					Total
		CDU	FDP	SPD	Linke	Grüne	
First vote	CDU	2	12	2	0	2	18
	FDP	3	3	1	0	0	7
	SPD	1	1	9	4	5	20
	Linke	0	0	0	2	0	2
	Grüne	1	0	2	1	3	7
Total		7	16	14	7	10	54

Note. In bold, right- and left-wing voters.

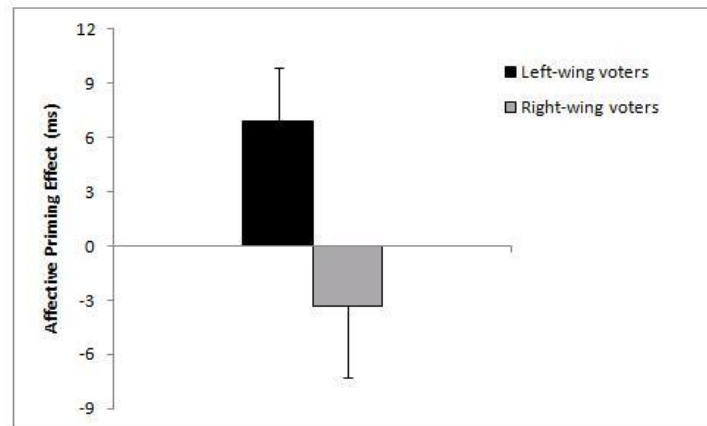


Figure 3.2. Affective priming effect for the left- and right-wing subsamples.

Relationship between Implicit and Explicit Attitudes. In order to discover how the implicit and explicit attitudes are related, we computed the mean values for each political party in the explicit measure. We additionally computed a mean value by subtracting the mean for the right-wing parties *CDU* and *FDP* from the mean of the left-wing parties *SPD* and *Die Grüne*. Here higher values indicated an explicit preference for left-wing parties.

For the left- and right-wing participants ($n = 46$) we found a significant correlation between the explicit preference for *SPD* and the priming effect ($r = .31, p < .05$). The more the participants liked *SPD* explicitly, the more they liked it implicitly. The explicit measure of

(*SPD, Die Grüne*) – (*CDU, FDP*) did not correlate significantly with the priming effect ($r = .25, p = .09$; Table 3.2).

Table 3.2
Correlation between implicit and explicit measures

	CDU	FDP	SPD	Grüne	Linke	Explicit	<i>n</i>
AP	-.13	-.07	.31*	.22	.26	.25 ⁺	46

Note. AP: Affective Priming Effect, Explicit: Explicit measure ($[SPD, Die Grüne] - [CDU, FDP]$), ** $p < .05$, + $p = .09$

We conducted a logistic regression to verify if the affective priming effect predicted voting behavior. We recoded right- and left-wing voters into 0 (non-leftist voters) and 1 (leftist voters). The affective priming effect did significantly predict whether or not a participant voted for a left-wing party, $\chi^2 = 4.34, df = 1, N = 46, p < .05$. Our results suggest that the odds of voting for a left-wing party are increasingly greater as the affective priming effect increases, $B = .04, SE = .02, Odds\ ratio = 1.04, p < .05$.

Discussion

Two things we would like to highlight within the results: the standard priming effect and the attitude priming effect. For the standard priming effect, we found a robust affective priming effect with the task's go/no-go version. The go/no-go version thus did indeed demonstrate the typical effect for congruent standard prime/target pairs.

As predicted, we discovered that the affective priming effect for the political condition was significant among the left-wing voters. This means that the left-wing voters more easily associated positive nouns with the left-wing parties *SPD* and *Die Grüne*. We also found that the priming effect predicted the participants' voting behavior. The likelihood of having voted

for a left-wing party increased if the priming effect was higher. Furthermore, there was a positive correlation between the priming effect and the explicit preference for *SPD*. These results support the go/no-go version of affective priming, implying that it may be a good alternative to the task's traditional two-choice format.

There were limitations to our study. We did not compare the go/no-go format with the two-choice format. From this research we know that the go/no-go task works in the expected direction but we cannot assume it is better than yes/no affective priming. It would be interesting to make such a comparison with a within-participants design in which task type were balanced through blocks.

This was, to our knowledge, the first test of the go/no-go version of the affective priming task within the attitude domain. More studies are needed to clarify whether or not go/no-go tasks can assess attitudes. With this in mind, we designed Study 4 to test a masked go/no-go version of the affective priming task with regard to prejudice against the elderly. We also employed the Affective Misattribution Procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005) as a second implicit measure of ageism.

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CHAPTER V

STUDY 4: A CROSS-CULTURAL STUDY ON AGEISM WITH IMPLICIT AND EXPLICIT MEASURES OF ATTITUDES

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Abstract

This study investigates ageism in the cultural contexts of Brazil and Germany with implicit and explicit measures. The sample included 77 participants from Brazil ($n = 39$, aged 17 to 28) and Germany ($n = 38$, aged from 18 to 31). A semantic differential was used together with two implicit measures of attitudes: a go/no-go version of the masked affective priming task, and the Affective Misattribution Procedure. For both tasks prime stimuli of younger persons; older persons in everyday contexts; and older persons in negative contexts were presented. Findings suggest a difference in implicit ageism between Brazil and Germany. Although country did not significantly moderate priming and AMP effects, significant priming effects were found only among the German participants. Importantly, Brazil and Germany presented the same pattern for the standard priming effects. There was, however, quite a difference in explicit ageism. Two types of implicit ageism became evident. One based on social category ageism, with the between-age contrast young vs. old, and the other dependent on the emphasis of aging, with the within-age contrast old vs. old. These results are complex given that prejudice effects manifested only in the German sample. We discuss in detail the possible meaning of this.

Keywords: Ageism; implicit prejudice; Affective Priming; Affective Misattribution; cross-cultural study

Introduction

Population aging is a global phenomenon resulting from declining fertility rates and increasing life expectancies. The aging of populations is currently one of the most important demographic trends affecting the whole world. However, the pace of change differs greatly from country to country. In many industrialized nations the population aging progresses quickly. Developing countries, with their decrease in fertility and mortality rates in recent years, are also experiencing increases in their percentage of older persons. With the greater number of older persons in the population, adjustments must be made in the domains of health, economy, and social development. Study 4 emphasizes the social component by examining prejudice against older persons in Brazil and Germany.

The proportion of older persons in Brazil and Germany increased at a fast rate. In all of South America, Brazil has the fourth highest relative number of older persons. The World Health Organization (WHO) stated that in developing countries, the transition to old age occurs at 60. The proportion of older persons in Brazil was 11.1% in 2008 (IBGE, 2009) whereas in 1970 it was only 5%. Contributing factors to this rapid growth are the declining fertility rate, which was 1.85 in 2008, and the increasing life expectancy of around 72.9 years (69.1 for men and 76.7 for women, IBGE, 2009). In Germany the aging population is at a more advanced stage. Of the European countries, Germany has the highest relative number of older persons within the population by the WHO's standards of 65 years and over. In 2008, 20% of Germany's population consisted of older persons (Federal Statistical Office, 2009). The fertility rate is around 1.38 and life expectancy is high, with 77.2 years for men and 82.4 for women (Federal Statistical Office, 2009).

Although Brazil and Germany present similar demographic trends in population aging, there are also cultural differences in the ways people relate to one another. Brazil is recognized as more collectivistic than Germany, which is characterized as an individualistic society (Hofstede & Hofstede, 2005; Oyserman, Coon, & Kimmelmeier, 2002). Family

relationships and intergenerational ties tend to be more prominent in collectivistic cultures (Triandis, 1990). It is thus possible that attitudes towards the elderly are different in Brazil and Germany.

There is no question that greater longevity is an advantage. Despite this, the idea that becoming older should be avoided still prevails within society. Youth is associated with beauty, health, and strength, traits that are especially valued by Western societies. Aging, on the other hand, is connected to loss and decline. Researchers have emphasized that aging is a heterogeneous process involving many variables. It is important to consider the cultural context in which one grows old, the quality of maintained relationships, and biological and psychological characteristics. Unfortunately, the socially-held assumptions of a homogeneous aging process help maintain stereotypes and prejudice against older persons.

Explicit and implicit ageism

The measurement of prejudice and stereotypes has been debated. Assessing prejudice became a difficult task after the seventies, especially in the United States. Social pressures against discrimination helped build a social context in which prejudice was not easily tolerated or accepted. The use of self-report instruments of prejudice thus declined in the U.S. However, researchers began to wonder if such a decline actually represented a more subtle form of prejudice, one harder to detect through explicit measures (Brauer, Wasel, & Niedenthal, 2000). Prejudice would then be explicitly decreasing because explicit attitudes are deliberate and controllable. They are subject to social and self-presentation concerns (Brauer et al., 2000; De Houwer, 2003; Fazio, Jackson, Dunton, & Williams, 1995; Greenwald & Banaji, 1995).

Researchers began to develop implicit measures of attitudes in the eighties so as to overcome the limitations of explicit measures. As opposed to explicit attitudes, implicit ones are automatic and uncontrollable (Fazio & Olson, 2003; Olson & Fazio, 2009; Sritharan &

Gawronski, 2010). They are usually assessed through reaction time paradigms in the tradition of cognitive psychology. Implicit measures of attitudes are meant to reveal automatic and not necessarily conscious evaluations of target groups. The most used implicit measures of attitudes are the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) and the Affective Priming task (Fazio et al., 1995). As with other measures used in cognitive psychology, the traditional Affective Priming task and the IAT use as their main dependent variable the difference in reaction times between incongruent and congruent trials. Reaction times are typically faster in congruent trials. The IAT assesses the associations between a target-concept (like a flower) and an attribute dimension (such as “good”). The participants must categorize the stimuli of two target-concepts (or target categories, e.g. flower vs. insects) and two attribute dimensions (e.g., good vs. bad). They do this through two keys on a keyboard, one on the left and the other on the right. In the compatible block of the task, target and attribute categories of the same assumed valence (e.g., flower and good; insect and bad) are assigned to the same response key. In the incompatible block, target and attribute categories of different assumed valence (e.g., flower and bad; insect and good) are mapped on to the same response key. The IAT effect is based on the idea that it is easier, or that reaction times are faster, to respond to stimuli in the compatible block as opposed to the incompatible one (Greenwald et al., 1998; Rothermund, Teige-Mocigemba, Gast, & Wentura, 2009). It is beyond the scope of this study to examine the IAT in detail. There is, however, much debate about the underlying IAT processes, such as how maybe the IAT compatibility effects are confused with recoding processes (see Rothermund et al., 2009; Wentura & Rothermund, 2007). As for the Affective Priming task, its priming effects come from response interference. In Fazio et al.’s (1995) task, participants must evaluate a target that is either positive or negative. Such a target follows the presentation of a prime stimulus that can be positively or negatively valenced. The prime’s valence interferes with the target’s evaluation: if the prime and target share the same valence, a facilitation process occurs. If, however, they share a

different valence, an interference process transpires (De Houwer, Teige-Mocigemba, Spruyt, & Moors, 2009; Hermans, De Houwer, & Eelen, 1996; Klauer, Roßnagel, & Musch, 1997; Wentura, 1999). A new implicit measure was recently released and tested: the Affective Misattribution Procedure (AMP, Payne, Cheng, Govorun, & Stewart, 2005). In the AMP, the participants evaluate a neutral Chinese pictograph as more or less pleasant than the average. The evaluation task follows the presentation of a prime stimulus that is said to influence the target evaluation. Assimilation effects may explain the affective priming effects such that when preceded by a positive (negative) prime, the target is more easily evaluated as positive (negative). Thus, participants tend to misattribute the affect elicited by the prime to evaluate the Chinese pictograph (Gawronski, Cunningham, LeBel, & Deutsch, 2010). The AMP and Affective Priming task (Fazio et al., 1995) differ mainly in the mechanisms driving the priming effects. Misattribution explains the AMP effects and response interference the Affective Priming effects. We employed in Study 4 the AMP as a second implicit measure to explore the Affective Priming task specificities.

The convergence of implicit and explicit evaluations is also widely debated. Three models attempt to address the relationship between explicit and implicit attitudes. The first one states that explicit and implicit attitudes are two different attitudes (Greenwald & Banaji, 1995; Wilson, Lindsey, & Schooler, 2000). The second model theorizes that implicit and explicit attitudes are not different attitudes but reflect distinct processing levels (Fazio & Olson, 2003, Fazio, 2007; Olson & Fazio 2009). Finally, the third model postures that explicit and implicit attitudes result from two different processes, propositional and associative, and interact and influence each other reciprocally (Gawronski & Bodenhausen, 2006, 2007). The relationship between explicit and implicit attitudes is not yet clear. Correlations between explicit and implicit attitudes are said to be low. Researchers have investigated the moderating roles of social desirability, opportunity, and motivation in controlling reactions

towards an object (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Maddux, Barden, Brewer, & Petty, 2005; Payne et al., 2005; Sherman, Rose, Koch, Presson, & Chassin, 2003).

Masked affective priming as a tool for differentiating implicit prejudice

The Affective Priming task (Fazio et al., 1995) was developed as an implicit attitude measure based on evaluation tasks. Its underlying mechanism, or response interference, is one of its main methodological aspects (De Houwer et al., 2009; Hermans et al., 1996; Klauer et al., 1997; Wentura, 1999). Also important is the fact that priming effects reflect associations made at an individual level (De Houwer et al., 2009; Olson & Fazio, 2003; Gawronski et al., 2010; Livingston & Brewer, 2002). Differently from the IAT, the participants' responses are not driven by a need to categorize the presented stimuli such Black vs. White and Young vs. Old. Because of this, priming effects are determined by individual exemplars presented as primes instead of the general exemplar categories.

Social psychologists have used affective priming to assess attitudes towards race (Fazio et al., 1995; Livingston & Brewer, 2002; Lowery, Hardin, & Sinclair, 2001; Wittenbrink, Judd, & Park, 2001), gender (Blair & Banaji, 1996; Macrae, Bodenhausen, Milne, Thorn, & Castelli, 1997; Macrae, Mitchell, & Pendry, 2002), ethnicity (Degner, Wentura, Gniewoz, & Noack, 2007; Degner & Wentura, 2011; Degner & Wentura, 2010), and age-based attitudes (Perdue & Gurtman, 1990; Degner & Wentura, 2011). Masked versions of Affective Priming have also been successfully employed (Degner et al., 2007; Degner & Wentura, 2009, 2010; Draine & Greenwald, 1998; Frings & Wentura, 2003, Otten & Wentura, 1999; Perdue & Gurtman, 1990; Perdue, Dovidio, Gurtman, & Tyler, 1990; Wentura, Kulfanek, & Greve, 2005). "Masked" means that even when participants are unaware of the prime stimuli, priming effects are found. Masked affective priming can be an unobtrusive and non-reactive task (Degner et al., 2007).

We tested in Study 4 a masked, go/no-go version of affective priming (see Study 3). Normally reaction time tasks require a response selection, which contributes towards error variance in the affective priming paradigm. Because they are built in a binary format (yes/no, positive/negative), participants must first identify the keys requested for the task and then decide which key to press for each trial. Borkenau and Mauer (2007) noted that reducing the response-selection component would decrease error variance because while it does contribute to the participants' response latencies, it is not relevant to the research question. The potential advantage of a go/no-go format is that it may decrease error variance due to response switching.

Implicit prejudice differentiation

Another virtue of masked affective priming especially suitable for the present study is how it allows for a differentiation of other- *versus* possessor-relevance (Degner et al., 2007; Wentura & Degner, 2010; Wentura et al., 2005). Peeters (1983) introduced the distinction between other- and possessor relevant traits (see also Peeters & Czapinski, 1990 and Peeters, Cornelissen, & Pandelaere, 2003). He proposed an evaluative meaning theory that approaches traits as intrinsic features of the perceived target person. For example, “honesty” can be evaluated positively whereas “aggressive” is seen negatively. However, the evaluative meaning of a trait depends not just on its valence (positive vs. negative) but also on the trait's adaptive value for humans in general. Two perspectives can define this adaptive value⁹. The first is through the *possessor* of the trait with unconditionally positive (*versus* negative) adaptive consequences for the trait holder him or herself. Examples include being intelligent (*versus* stupid) or competent (*versus* incompetent). The second perspective is through the *other* who must deal with the trait's possessor with unconditionally positive (*versus* negative)

⁹ Peeters (1983) originally called it “possessor- *versus* other-profitability” instead of “possessor- *versus* other-relevance.”

adaptive consequences for the person who deals with the trait's holder. For example, it is good (bad) to deal with someone who is honest (dishonest) and tolerant (intolerant).

Wentura, Rothermund, and Bak (2000) associated possessor- vs. other-relevance with automatic information processing. By using the Emotional Stroop-task the authors found greater interference effects, or longer reaction time means, for other-relevant traits than for possessor-relevant traits. Further, a go/no-go lexical decision task demonstrated that an avoidance condition facilitated processing negative other-relevant traits (e.g., brutal), whereas an approach condition aided processing positive other-relevant traits (e.g., generous).

This study supported the differentiation between possessor- vs. other-relevance. It was then followed by other studies examining the differentiation applied to automatic social judgment. Wentura and Degner (2010) conducted a series of studies exploring the moderation of masked affective priming through valence relevance types. Their results confirmed moderation through valence relevance types. They found priming effects only when prime and target stimuli shared the same relevance type, that is, when they were both possessor- or other-relevant. If prime and target stimuli did not match, however, priming effects became non-significant. Similarly, Wentura et al. (2005) investigated if interindividual differences in explicit self-esteem are related to either other-relevant or possessor-relevant priming effects (i.e., implicit self-esteem). The results indicated that the priming effect for the other-relevant target was positive (e.g., I am seen as friendly by others) but had no correlation with explicit self-esteem. Explicit self-esteem was positively correlated with the possessor-relevant priming effect. Thus, positive self-evaluation (e.g., I am a person of worth) was related to implicit evaluations encompassing possessor-relevant traits such as beauty, health, and intelligence. Likewise, the authors predicted that those who reported explicitly low self-esteem would display negative implicit attitudes towards themselves. Degner et al. (2007) executed another study utilizing masked affective priming to assess ethnic out-group prejudice towards Turks. They found that explicit prejudice and priming effects for other-

relevant targets are positively correlated while possessor-relevant ones are not. This confirms the possessor- vs. other-relevance differentiation of automatic attitudes. The result is plausible given that Turks living in Germany are socially perceived as hostile and threatening, traits associated with other-relevance. As for age attitude, Degner and Wentura (2011) showed that prejudice against older persons was related to a priming effect based on possessor-relevant targets. This matches the social perception of the elderly: weak, lonely, worthless, and non-threatening. The aforementioned studies are important because they establish that automatic distinctions between possessor- and other-relevance involuntarily take place upon the presentation of stimuli. We structured Study 4 to emphasize the evidence of the possessor- vs. other-relevance distinction in terms of age attitudes. Possessor-relevance should characterize the prejudice against older persons.

Malleability of prejudice

Implicit measures were developed because they were said to be less reactive and more covert than explicit measures. This assumption is based on the fact that explicit attitude measures depend on controlled and strategic processes while implicit measures are driven by automatic ones (Bargh, 1999; Fazio et al., 1995). Because of this automatic component, academics accepted that implicit measures captured people's "true" attitudes towards an object. Such feelings free of editing were considered a constant, unchangeable, and context-independent evaluation of an object. They reflected the automatic, uncontrollable activation of well-learned associations developed and reinforced in memory over the time (Devine, 1989; Greenwald & Banaji, 1995).

Researchers have recently challenged the notion that implicit attitudes are unchangeable and context-independent. Evidence has recently appeared suggesting that implicit attitudes are malleable and may vary according to many factors (Blair, 2002; Ferguson & Bargh, 2007). One such factor is the context in which the object of evaluation is

encountered. Wittenbrink, Judd, and Park (2001) revealed that changing the context in which a black person was depicted affected the reaction towards them. The reaction to seeing a black person in a church was more positive than against a graffiti wall. Maddux et al. (2005) demonstrated that the motivation to control prejudice also influenced implicit racial prejudice. The automatic responses of highly and little motivated individuals differ depending on the presented context. Goal pursuit too may shape implicit attitudes. Fergusson and Bargh (2004) showed that people pursuing a goal with an objective relevant to the stimuli were more likely to give a positive evaluation than those without such a goal. In line with this study, Sherman et al. (2003) discovered that implicit attitudes towards smoking-related objects were more positive among participants who had not recently smoked (i.e., smoke deprivation) as compared to those who had.

Livingston and Brewer (2002) investigated whether or not different characteristics of category members elicit the same attitudes. They examined if negative attitudes towards the faces of black people were more connected to physical characteristics than to category membership. Their results indicated that highly prototypical black faces, with features such as darker skin and fuller lips, elicited more negativity than less prototypical black faces. The category contrast (i.e., blacks vs. whites) was not significant. This suggests that stimuli features played an important role. It seems that certain group characteristics convey more negativity than others. The fact that these characteristics are made salient may affect attitudes towards the group (Fergusson & Bargh, 2007).

In Study 4 we wanted to explore whether or not ageism had a multifaceted nature. We tested attitudes towards older persons based on social categories, that is, the between-age contrast of young vs. old. Both were depicted in everyday life contexts so that only the object's age category was relevant. We also tested attitudes dependent on the emphasized aspects of aging through the within-age contrast of old vs. old. In one case older persons were

depicted in everyday life contexts and in the other, in situations that made explicit the disadvantages of growing old.

Assessment of ageism in Germany and Brazil

Because our goal in Study 4 is to compare the intercultural differences in explicit and implicit prejudice against older persons in Brazil and Germany, we will now discuss studies about ageism published in both countries.

Some studies in Brazil examined the social representations of aging within the Brazilian context. Neri (2003) studied attitudes and beliefs about aging in newspapers, specifically *O Estado de São Paulo* from 1995 to 2002. Successful aging was portrayed as an individual responsibility based on fitness, a healthy lifestyle, optimism, and activity. The texts depicted longevity as positive so long as the person was still active and did not represent a burden to their family or social system. According to Neri, most texts took into consideration the heterogeneity of the aging process and approached it in a realistic way, showing both the negative and positive aspects. However, the most common view of old age was still predominantly negative, encompassing illness, decline, loneliness, poverty, etc.

Lima Lopes and Park (2007) investigated how Brazilian children consider older persons. They asked children about why people grow old and what an older person is like. The children mentioned physical characteristics such as wrinkles and white hair, physical limitations, and diseases. Children associated older persons with their grandparents and said that they can be seen in many places and doing many things. They said that a person gets older because of the passage of time. Veloz, Nascimento-Schulze, and Camargo (1999) examined social representations of old age held by adults and older persons. Three aspects were emphasized: older persons are mainly women who have lost contact with their family; daily activities and work power decrease with age; and physical decline occurs.

Fonseca, Trentini, Valli, and Neves (2008) researched the social representations of aging held by public health professionals and how such representations are reflected in the care provided to the elderly. Their sample included community agents and nursing professionals. The results indicated that the most cited words referring to the aging process were “retirement” (76%) and “rest” (76%). The type of care given to older persons focused mainly on biological aspects (55%). The participants mentioned family support, good health, and effective medical aid as important factors to an older person’s well-being.

The Ageism Survey (Palmore, 2001) investigated older persons’ experiences of discrimination within the Brazilian context. Their study examined the more prevalent types of perceived ageism and the stress levels associated with episodes of ageism (Paula Couto, Koller, Novo, & Soarez, 2009). The results showed that in Brazil the most frequent types of perceived ageism were related to the social and health domains. The episodes of ageism the participants evaluated as the most stressful were: victimization by criminals; difficulty obtaining loans; and being treated with less dignity and respect.

Neri and Jorge (2006) assessed explicit prejudice against older persons among Brazilian college students. Participants answered a semantic differential with 30 bi-polar items divided into four factors: agency, cognition, social relations, and social images. They also included a question about contact with older persons. Their results indicated a general positive attitude towards the elderly, especially women who had contact with older persons. The most negative attitudes were held by men of an older age (≥ 23 years) that did not have any contact with older persons. Thus, affective contact may shape attitudes towards older persons.

The studies conducted in Brazil have emphasized social representations of the aging process among different groups. They used explicit measures like self-report instruments. We found no studies evaluating prejudice against older persons through implicit measures.

Studies in Germany have also examined the social representations of older persons and depictions of the elderly in the mass media. Kessler, Rakoczy, and Staudinger (2004) examined the portrayal of elderly characteristics in German prime-time television series and compared them with empirical evidence from gerontological research. The authors hypothesized that the image spread by the media would not coincide with the one in gerontological research. Their results revealed that the elderly, mainly old women and very old persons, were underrepresented. Their representations were also homogeneous. Socio-economic and health characteristics were gender biased and more positively portrayed in television series than in empirical research.

Some research in Germany approached the question of implicit ageism. Degner and Wentura (2011) used the Affective Priming task to examine implicit prejudice against older persons. They checked whether or not ageism could be differentiated according to the valence type that older persons convey (i.e., either other-relevance or possessor-relevance; see below). The authors predicted that ageism would be related to possessor-relevance because older persons are perceived as frail, ill, and incompetent. They used pictures of older and younger persons as primes. For their targets, they utilized positive and negative adjectives conveying either possessor- or other relevance. The results showed that affective priming is a useful tool for measuring ageism and discovering differences in automatic prejudice. Negativity for old primes as compared to young primes was found only for possessor-relevant target words

Implicit ageism has been also evaluated through the IAT in Germany. Jelenec and Steffens (2002) examined automatic age bias in different elderly subgroups and for male and female targets. They analyzed if presenting older persons in different kinds of light influences automatic prejudice. These lights were: neutral (old man/old woman), positive (i.e., good grandpa/good granny), and negative (i.e., old curmudgeon/old shrew). Young people were implicitly evaluated more positively as compared to the three subgroups of older persons. The authors also found that a positive valence associated with older persons led to a lesser degree

of negativity. No gender effects appeared: young people were equally preferred as compared to old women and old men.

In both Brazilian and German cultures people seem to explicitly know how the elderly are socially perceived. Researchers have investigated implicit ageism in Germany and shown that young people display negativity towards older persons. So far, no studies emphasizing implicit prejudice have been conducted in Brazil. Because of this, it is impossible to compare Brazil and Germany in terms of implicit ageism. Study 4 tries to fill this gap by comparing implicit and explicit prejudice against older persons in both countries through a cross-cultural approach.

Overview

In Study 4 we investigated ageism in the cultural contexts of Brazil and Germany. We tested two implicit attitude measures, a go/no-go version of masked affective priming, and the Affective Misattribution Procedure (AMP; Payne et al., 2005). For both tasks we used as primes pictures of: younger persons; older persons in everyday contexts like being with grandchildren; and older persons in negative contexts like being in the hospital. The primes were masked for the affective priming task. Based on the results from Study 3, we decided to test in Study 4 a go/no-go version of masked affective priming on aging preferences. Again we included positive and negative standard primes as a control condition. Our first goal for Study 4 was to compare Brazil and Germany in terms of ageism. Our second goal was to experiment further with the go/no-go version of masked affective priming with both standard positive and negative primes and with attitude primes, that is, aging preferences. We also wanted to test for two types of ageism. With the first type of ageism, based on social categories or attitudes towards older persons, we wanted to verify if negativity towards old persons appears when participants were shown depictions of old and young people in everyday life contexts. The other kind of ageism we wanted to test for was based on other

aging aspects or an attitude towards the negative facets of being old. If contrasted with depictions of older persons in everyday situations, do older persons who present the negative aspects of aging elicit negativity? Finally, we wanted to confirm our hypothesis that ageism can be differentiated as possessor-relevance (depreciation) and other-relevance (hostility) depending on the type of negativity associated with older persons.

Method

Participants

The participants were 77 undergraduate students in Brazil ($n = 39$, 15 men, 24 women; median age = 20.5, ranging from 17 to 28) and Germany ($n = 38$, 11 men, 27 women; median age = 21, ranging from 18 to 31). The German data was collected at the Saarland University in Saarbrücken and in Brazil, at the Federal University of Rio Grande do Sul in Porto Alegre. The participants for the German sample were native speakers of German and for the Brazilian sample, of Portuguese. All the participants had normal or corrected to normal vision. The German participants received 8 EUR while the Brazilian ones agreed to take part without remuneration.¹⁰

Three participants were excluded from the analysis of the affective priming task due to the high number of errors above 20%. The final analysis sample, including the masked affective priming, consisted of 74 participants, 37 Brazilian, and 37 German. Five of the initial 77 participants were excluded from the AMP analysis because they pressed the same key on 80% or more of the trials. The final AMP sample was of 72 participants.

Design

¹⁰ Due to ethical constraints, in Brazil it is not common practice to pay participants. In Germany, the sample included students who were not studying psychology and it would have been impossible to receive their participation without remuneration. The Brazilian sample included students of psychology. They were all first-year students and the data was collected during the second and third weeks after their classes had started. They thus had no knowledge of study-relevant methods or theories.

Go/no-go version of Masked Affective Priming. We employed for the priming task a 2 (Go: positive vs. negative) x 5 (prime type: old everyday vs. old negative vs. young vs. standard positive vs. standard negative) x 2 (target type: other vs. self) x 2 (target valence: positive vs. negative) x 2 (country: Brazil vs. Germany) design. There was within-participant variation for the first four factors and the last factor varied between participants.

Affective Misattribution Procedure (AMP). The AMP had a 4 (prime type: old everyday vs. old negative vs. young vs. neutral) x 2 (country: Brazil vs. Germany) design with prime type manipulated within participants and country between participants.

Materials

Go/no-go version of Masked Affective Priming. For the prejudice-related primes, we used eight pictures for each of the following kinds of depictions: old persons in everyday contexts; negatives aspects of old age; and young people (Appendix J). We selected these picture sets from a pool of 77 items. We pretested the images with university students from Germany ($N=13$, five men and eight women; median age = 28, ranging from 24 to 37) and Brazil ($N=10$, three men and seven women; median age = 27, ranging from 20 to 35). The students rated the pictures according to the valence of the depicted context, the facial expressions in the images, and arousal. They classified the pictures in a 7-point scale ranging from -3 to +3, with high values indicating respectively positive context, positive facial expression, and low arousal. Table 4.1 presents the Brazilian and German prime ratings. All the pictures were black and white and approximately 250 x 250 pixels.

Table 4.1

Brazilian (BR) and German (DE) context, facial expression, and arousal ratings (M [SD in parentheses]) for the old-everyday, old-negative, and young primes

	Context ^a		Facial Expression ^b		Arousal ^c	
	BR	DE	BR	DE	BR	DE
Old- Everyday Primes	2.41 (.26)	2.11 (.33)	1.10 (.81)	.85 (.56)	1.75 (.31)	-2.00 (.43)
Old-Negative Primes	-1.87 (.28)	-2.27 (.22)	-1.05 (.50)	-1.10 (.30)	-1.50 (.60)	.05 (.40)
Young Primes	1.06 (.73)	.93 (.62)	.35 (.84)	.32 (.75)	.45 (.92)	-1.20 (.60)

Note: ^a For the context evaluation, participants were asked to evaluate the depicted context without considering the characters or their facial expressions. ^b In evaluating facial expressions the participants were meant to disregard the characters' context and age. ^c We asked the participants to evaluate how arousing were the depicted pictures. ^{ab} Scale ranges from -3 (very negative) to +3 (very positive). ^c Scale ranges from -3 (not arousing) to +3 (very very arousing).

We included pictures from the International Affective Picture System (IAPS, Lang, Bradley, & Cuthbert, 2008) as additional primes so as to obtain a reference priming effect with standardized stimuli and because of discriminant validity. The standard primes set consisted of eight positive and eight negative pictures (see Appendix K). As with the prejudice-related primes, the standard primes were black and white and approximately 250 x 250 pixels. Positive primes were characterized by a mean valence of $M = 7.75$ ($SD = .49$) and a mean arousal value of $M = 4.52$ ($SD = .80$). Negative primes had a mean valence of $M = 3.22$ ($SD = .64$) and a mean arousal value of $M = 5.62$ ($SD = 1.01$).

We used a monochrome fractal picture as a forward mask for the primes. We created a backward mask with a grey square. Both the forward and backward masks equaled the pictures in size, around 250 x 250 pixels.

The target set used for the priming task consisted of 20 adjectives (see Study 2 for a detailed description of the target list norms and the complete list of items). Half the set had a positive valence while the other half had a negative one. Each valence set included five

possessor-relevant adjectives and five other-relevant adjectives. We set the target words in black 33 point Arial font on a white background.

Affective Misattribution Procedure (AMP). The prime picture set consisted of the same prejudice-related set used for the priming task. Eight pictures depicted each of the following situations: old persons in everyday contexts, negative aspects of old age, and young people. The neutral prime was a grey square with the same size as the prejudice-related primes, approximately 250 x 250 pixels. We used additional sets for the practice and warm-up trials, one with eight pictures of flowers and the other of insects. Here as well we presented all the pictures in the center of the computer screen against a white background. The pictures were in black and white and approximately 250 x 250 pixels. The targets were Chinese characters that we selected randomly from a pool of 200 items. We exhibited them in black and white and at the same size as the primes, approximately 250 x 250 pixels. A mask consisting of black and white “noise” appeared after the prime and remained on the screen until the participant responded.

Explicit measures. We used a semantic differential developed by Rothermund and Brandstädter (2003) to assess the participants’ evaluations of both older and younger persons (Appendix L). The semantic differential contains 32 pairs of antonyms with a positive and negative attribute describing personality traits such as “attractive – unattractive” and “healthy – sick.” We evaluated each of the 32 pairs on an 11-point scale ranging from 5 (the word on the left totally applies) to 5 (the word on the right totally applies) with 0 as the midpoint (neither word applies). We later recoded this scale to range from 1 to 11. We included as well a scale to measure social desirability with items like “*I always face my mistakes openly and face the consequences*” (Social Desirability Scale – 17, SDS-17, Stöber, 2001; Appendix M). The scale has 16 items with the answer categories of “true” (1) and “false” (0). In order to use the semantic differential and the Social Desirability Scale in Brazil, two people translated both instruments from German to Portuguese. We created a final version in Portuguese of the

two instruments based on the translation and then a third person retranslated it back to German. We revised some of the items after the retranslation so as to be more faithful to the instruments' original versions.

The internal consistencies of the semantic differential were within our expected range with Cronbachs' $\alpha = .87$ and $\alpha = .79$ for the semantic differential of older persons and young people respectively. The internal consistencies for the German and Brazilian samples were also within the expected range: Cronbachs' $\alpha = .77$ and $.89$ for the semantic differential of older persons (Germany and Brazil, respectively) and $\alpha = .80$ and $.70$ for the semantic differential of young people (Germany and Brazil, respectively). The internal SDS-17 consistency decreased, $\alpha = .60$. This value was $.61$ for the German sample and $.54$ for the Brazilian one. We also collected demographic data from the participants.

Procedure

We tested the participants in small groups of up to six. We seated them individually in front of a personal computer, separated them with partition walls, and made them wear a noise protector to prevent distraction. The participants performed the experiment in five steps. To give them an overview, we started them with the go/no-go version of masked affective priming. Once they finished, they answered questions that would let us check if they were capable of recognizing the primes during the task (Appendix N). The participants then completed the AMP. After that we handed them the semantic differential, the SDS-17, and the demographic questionnaire. The experiment lasted approximately 45 minutes and was run on 75 Hz monitors and standard personal computers with *Inquisit* 1.33 software (inquisit, 2002).

For the affective priming we informed the participants that pictures and words would appear on the computer screen and that their task was to evaluate the words as quickly and accurately as possible according to the + or – cue shown before the prime. We instructed them to press the spacebar (Go) every time the word and cue had the same valence and to not press

the spacebar (No-go) when their valence differed. The participants completed two practice blocks with 40 trials each. We inserted the practice blocks to familiarize participants with the task. They received error feedback after each trial during the practice and experimental blocks. At the end of each block they received their correct percentage score and mean reaction times. The experimental blocks consisted of eight blocks, each with 40 trials for a total of 320. Each trial for both the practice and experimental blocks started with the appearance of a cue which remained on the screen for 500 ms and was followed by a forward mask presented for 80 ms. The prime was shown for 27 ms and then a backward mask remained on the screen for 13 ms. The target immediately followed the mask (i.e., SOA = 40 ms) and stayed on the screen for 850 ms, which was the response deadline (Figure 4.1). If the participant did not respond to the target within the time limit, the target disappeared and the next trial started automatically. We employed a balanced design for the experimental blocks so that each of the 40 experimental conditions was presented eight times, once per block, with a different prime throughout the task.

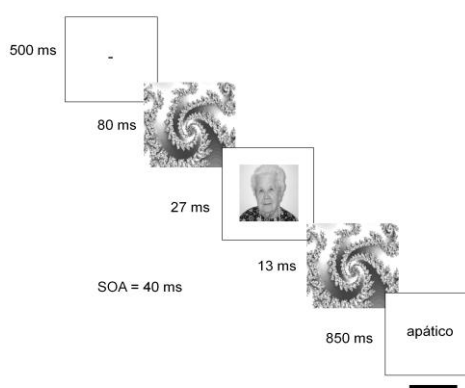


Figure 4.1. The go/no-go masked affective priming: An example of a trial.

After the priming procedure and the interview about subjective unawareness, the computer executed a direct measure of prime recognition. Participants were informed that the flickers they had seen before consisted of a mask picture and that they should now try to recognize it. We presented the recognition task in two blocks. In the first block the standard

primes appeared in flickers. We instructed the participants to try to identify and categorize them according to their valence, positive vs. negative. In the second block test we told the participants that they would see pictures of old and young people. We asked them to categorize the pictures according to the person's age, old vs. young. During the two test blocks each prime was presented three times for a total of 120 trials.

The AMP was completed in two blocks. The first one was a practice block with ten trials. The main block had 101 trials, five warm-up trials, and 96 experimental trials. We presented each prejudice-related prime three times with a different target. We informed the participants that they would see pictures followed by Chinese characters and that they should categorize them according to their pleasantness by pressing one of two keys, with “E” for unpleasant and “I” for pleasant. Each trial started with the presentation of a prime for 75 ms and was followed by a blank screen for 125 ms. We then showed the target for approximately 100 ms (i.e. SOA = 200 ms) and after that a mask remained on the screen until the participant responded (Figure 4.2). Once they completed the AMP we asked the participants to answer the semantic differential, the SDS-17, and the demographic questionnaire. We then fully debriefed them and thanked them for their participation.

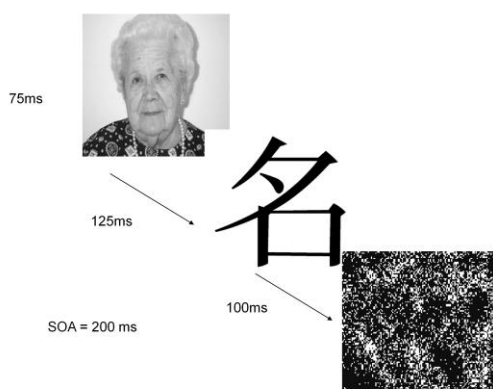


Figure 4.2. The Affective Misattribution Procedure: An example of a trial.

The Federal University of Rio Grande do Sul Ethics Committee (Institutional Review Board) approved this study (Appendix A). Brazilian and German participants provided

written informed consent before the data was collected (Appendix T). In Germany, there was no need for the study to be approved by an ethics committee.

Results

Go/No-go version of Masked Affective Priming. We removed from the analysis the no-go trials and the error data, which was 5.14% for the prejudice primes and 5.15% for the standard primes. We used only the correct responses to the go trials.¹¹

We calculated four priming effects. Two were for the old-negative priming condition (old-negative primes contrasted with old-everyday primes) for possessor- and other-relevant targets, respectively. The other two were for the old-everyday priming condition (old everyday primes contrasted with young primes), again for possessor- and other relevant targets, respectively. We reached the priming effects by subtracting the mean latency of the congruent trials from the mean latency of the incongruent ones. For the old-negative condition, we defined congruence through old-everyday/positive prime-target pairs and old-negative/negative prime-target pairs. For the old-everyday condition, we identified congruence through young/positive prime-target pairs and old-everyday/negative prime-target pairs. The faster response latencies to congruent prime-target pairs as compared to incongruent ones revealed a negative attitude towards older persons depicted in everyday contexts and in terms of the negative aspects of aging. We computed the priming effects for the standard priming condition, separately for possessor- and other-relevant targets, again by subtracting the mean latency of the congruent trials from the mean latency of the incongruent ones. We defined congruence through positive/positive prime-target pairs and negative/negative prime-target pairs. See Appendix O, for the standard priming effect means and Appendix P, for the prejudice priming effects means.

¹¹ There were no RT outliers at the right tail of the distribution because of the response deadline (see above). We exclude trials with response latencies below 100 ms so as to correct anticipatory responses, but that was the case for only one standard trial.

Because of outliers we analyzed the standard priming effects with the Wilcoxon matched-pairs, signed rank test. The standard priming effect for the other-relevant targets deviated significantly from zero, $z = -2.70$, $p < .05$, but the standard priming effect for the possessor-relevant targets did not, $z = -.38$, ns ($z = -2.01$, $p < .05$ for their difference; see Figure 4.3). We did not find a target type effect among Brazilians and Germans: Brazil ($z_{other} = -1.97$, $p < .05$; $z_{possessor} = -.41$, ns , and $z = -1.40$, ns for their comparison) and Germany ($z_{other} = -2.09$, $p < .05$, $z_{possessor} = -.89$, ns , and $z = -1.46$, ns for their comparison). It is important to note that country did not affect the standard priming effect for the other-relevant targets, ($M_{Brazil} = 12$ ms, $SD = 38$; $M_{Germany} = 8$ ms, $SD = 29$, $U = 620.0$, $z = -.70$, ns). Therefore prime valence systematically influenced other-relevant target evaluations regardless of the participants' nationality.

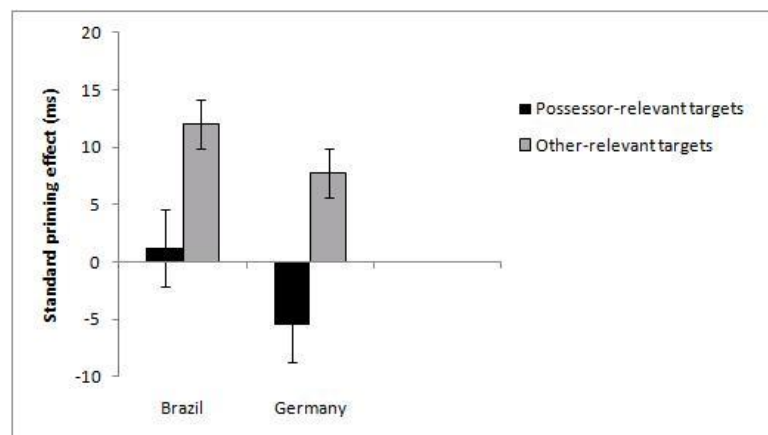


Figure 4.3. Standard priming effects for possessor-relevant and other-relevant targets as a function of country.

We analyzed separately the priming indices for the old-everyday (old-everyday in contrast with young) and the old-negative (old-negative in contrast with old-everyday). We will give first the results for the old-everyday condition and then for the old-negative.

We submitted the priming indices for the old-young contrast to a 2 (target type: possessor- vs. other-relevant) by 2 (country: Brazil vs. Germany) within participants analysis of variance and with country as a between participants factor. The analysis revealed no

significant main effects for target type, $F(1,72) < 1$, *ns*, or for country, $F(1,72) < 1$, *ns*. Nor was there a significant target type by country interaction, $F(1,72) = 2.15$, *ns*. However, the priming effects (see Figure 4.4) indicate some asymmetries despite the non-significant interaction. The priming effect for the possessor-relevant condition was significant for the German sample, $d_{possessor} = .34$, $t(36) = 2.07$, $p < .05$, but not for the Brazilian sample, $d_{possessor} = .05$, $t(36) = -.34$, *ns*, with $t(72) = -1.47$, *ns* for the difference. The priming effect for the other-relevant condition was not significant among the Germans, $d_{other} = -.07$, $t(36) = -.46$, *ns* or the Brazilians, $d_{other} = .06$, with $t(36) = .38$, *ns*, $t(72) = .60$, *ns* for the difference. The difference between priming effects for other- and possessor-relevant conditions was not significant for the Brazilian sample, $d = .01$, $t(36) = -.45$, *ns*. It was, however, significant for the German sample, $d = .25$, $t(36) = 1.88$, $p < .05$ (one-tailed).

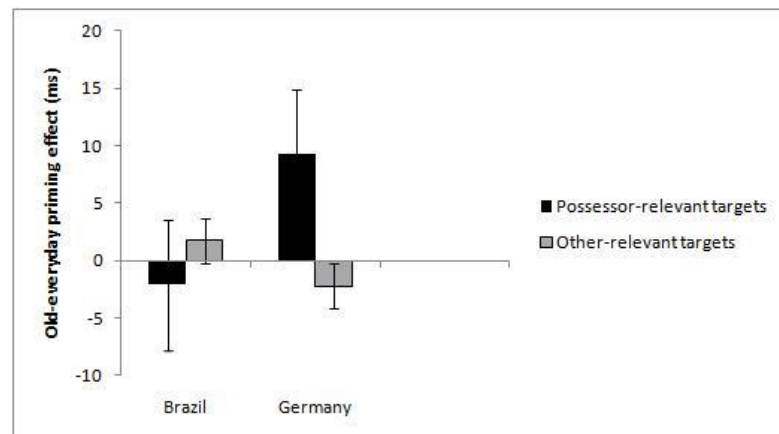


Figure 4.4. Priming effects for the old-everyday priming condition (old-everyday/young) as a function of country.

We submitted the priming indices for the old-old contrast (depicting old persons in negative or everyday life contexts) to a 2 (target type: possessor- vs. other-relevant) by 2 (country: Brazil vs. Germany) within participants analysis of variance analysis and with country as between participants factor. Our analysis revealed no significant main effects for target type, $F(1,72) < 1$, *ns* or for country, $F(1,72) < 1$, *ns*. Nor did it show a significant target type by country interaction, $F(1,72) = 2.38$, $p = .13$. Once more, however, the priming effects

(see Figure 4.5) indicate some asymmetries despite the non-significant interaction. The priming effect for the other-relevant condition was significant for only the German sample, $d_{other} = .45$, $t(36) = 2.73$, $p < .05$ and not for the Brazilian one, $d_{other} = .03$, $t(36) = .21$, ns , with $t(72) = -1.43$, ns for the difference. The priming effect for the possessor-relevant condition was not significant among Germans, $d_{possessor} = .23$, $t(36) = -1.38$, ns or Brazilians, $d_{possessor} = .02$, $t(36) = .12$, ns , with $t(72) = .94$, ns for the difference. While the priming effects for other- and possessor-relevant conditions were significantly different within the German sample, $d = .65$, $t(36) = -2.81$, $p < .01$, that was not the case for the Brazilian one, $d = .05$, $t(36) = -.05$, ns .

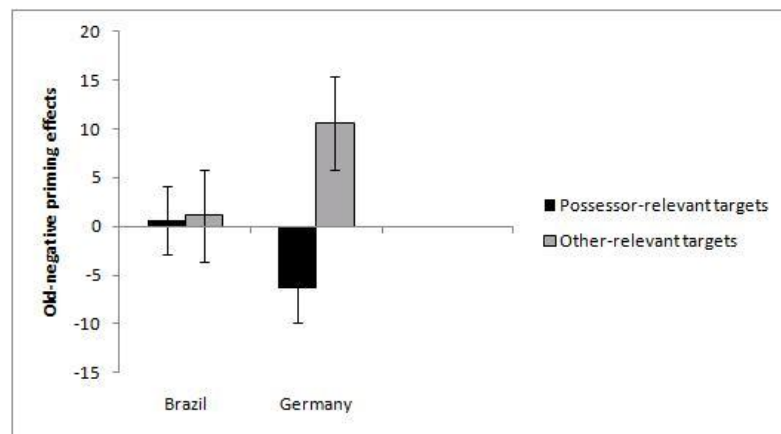


Figure 4.5. Priming effects for the old-negative priming condition (old-negative/old-everyday) as a function of country.

Affective Misattribution Procedure. We analyzed the results using a 4 (prime type: neutral primes vs. young vs. old-everyday vs. old-negative) x 2 (country: Brazil vs. Germany) analysis of variance. The dependent variables were the proportion of pleasant responses after each prime type. We found a main effect of country, $F(1,70) = 8.19$, $p < .01$. The proportion of pleasant responses to targets was higher among Brazilian participants ($M = .58$, $SD = .08$) than among German ones ($M = .53$, $SD = .09$). We also found a main effect of prime type, $F(3,210) = 3.01$, $p < .05$. This was not moderated by country, $F(3,210) = 1.23$, ns , for the interaction effect prime type by country. To explore further the main effect of prime type, we performed planned contrasts: young vs. old-everyday, old-everyday vs. old-negative, neutral

vs. young, and neutral vs. old-everyday. Participants evaluated the Chinese pictographs, which were the targets, as equally pleasant when they followed either a young or an old-everyday prime. This implies that there was no preference for young primes over the old-everyday ones, $F(1,70) < 1$, *ns*. The participants, however, evaluated the Chinese pictographs as more pleasant when they followed an old-everyday prime than an old-negative prime (see Figure 4.6). This indicates a preference for older persons portrayed in everyday contexts over older persons depicting the negative aspects of aging, $F(1,70) = 7.05$, $p < .01$. Compared to neutral primes, young primes did not convey more positivity, $F(1,70) < 1$, *ns*, and the old-everyday prime did not convey more negativity, $F(1,70) < 1$, *ns*. The targets that followed these prime types were evaluated as equally pleasant.

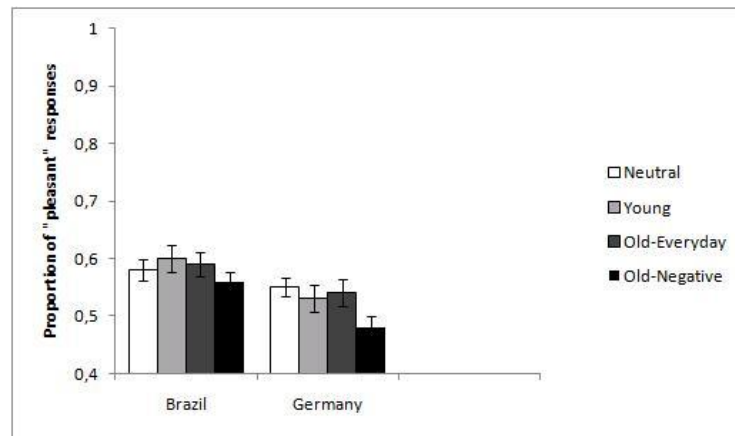


Figure 4.6. Pleasant response proportions as a function of prime type and country.

In order to later examine individual differences, we calculated two AMP effects. One contrasted the old-everyday primes with the young primes and the other contrasted old-negative primes with the old-everyday primes. We computed the AMP effects through subtractions. In the first one, we subtracted the proportion of pleasant responses after old-everyday primes from the number of pleasant responses after young primes. Higher values for this calculation indicate a preference for young people over older persons. We also subtracted the number of pleasant responses after old-negative primes from the number of pleasant

responses after old-everyday primes. Here higher values signify a preference for older persons shown in everyday contexts over older persons depicting the negative aspects of aging.

Explicit Measures. We computed differentials for old persons (SDO) and young people (SDY) as a mean of the 32 antonyms pairs. We reverted 10 of the 32 semantic differential items because they were presented as negative-positive pairs instead of positive-negative like the other 22 pairs. Higher values for the SDO semantic differential indicate negative explicit attitudes towards the elderly. Lower SDY values imply positive attitudes towards young people. So as to have a global indicator of the participant's explicit attitudes towards old people, we calculated a semantic differential score by subtracting the semantic differentials, $SDO - SDY$. High values for the difference indicate negative attitudes towards old people. We submitted the SDO and SDY means to a 2 (semantic differential type: SDO vs. SDY) by 2 (country: Brazil vs. Germany) repeated measures ANOVA. We used country as a between-participants factor and semantic differential type as a within-participants factor. Our results showed a significant effect of semantic differential type. The SDO mean was higher than the SDY mean, $F(1,75) = 23.04, p < .001$. We found an interaction between semantic differential type (SDO vs. SDY) and country, $F(1,75) = 30.60, p < .001$. Further analyses revealed that the SDO was higher than the SDY for the German sample ($M_{SDO} = 6.31, SD = .74, M_{SDY} = 4.89, SD = .70$ and $t(37) = 7.15, p < .001$ for the difference) but not for the Brazilian one ($M_{SDO} = 5.48, SD = 1.08, M_{SDY} = 5.58, SD = .61$ and $t(37) = -.53, ns.$ for the difference) (see Figure 4.7). With the semantic differential score there was a country effect, $t(75) = -5.50, p < .001$. The mean was $M = 1.43 (SD = 1.23)$ for the German sample and $M = -.10 (SD = 1.19)$ for the Brazilian one.

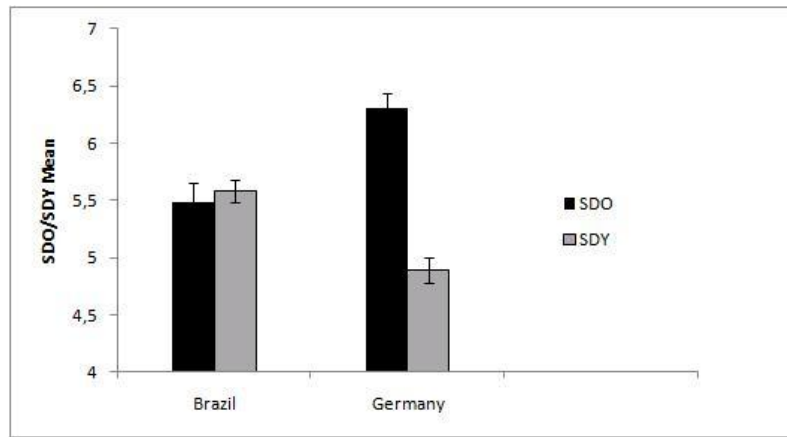


Figure 4.7. SDO and SDY means as a function of country.

We computed the Social Desirability Scale (SDS-17) as a sum of the 16 items. The answer categories were “true” (1) or “false” (0). Six of the 16 items were reverted: 1, 5, 6, 10, 14, and 16. The SDS-17 score ranged from 0 to 16 with high values indicating greater social desirability. The sample’s mean social desirability score was $M = 8.08$ ($SD = 2.86$). German participants ($M = 8.79$, $SD = 2.85$) scored higher than Brazilians ($M = 7.38$, $SD = 2.74$) in social desirability, $F(1,75) = 4.86$, $p < .01$.

To explore the relationship between the semantic differential score (SDO – SDY) and the social desirability score we correlated the two variables separately for Germans and Brazilians. Within the two samples, social desirability and explicit prejudice did not correlate significantly with $r = -.28$, ns , for Brazilians and $r = .02$, ns , for Germans. We then performed a moderator analysis with country as a moderator variable to check if country moderated the relationship between social desirability and explicit prejudice. Before the analysis we centered the social desirability score, which was the independent variable. We recoded country as a dummy variable with 0 equaling Brazil and 1, Germany. We created an interaction variable by multiplying the social desirability score by the country variable. We entered the social desirability score first together with the presumed moderator (country) and then the product term. There was no moderation by country, $B = .38$, $t(76) = 1.32$, ns . The social desirability

score did not predict explicit prejudice, the semantic differential score, with $B = -.16$, $t(76) = -1.11$, *ns*. ($B = 1.60$, $t(76) = 5.64$, $p < .001$ for country).

Relationship between Explicit and Implicit Measures

So as to conduct the following analyses, we centered all the independent variables of interest, namely the affective priming and AMP effects. For the two tested moderators we recoded country as a dummy variable (0 = Brazil and 1 = Germany) and centered the social desirability score. All the results respecting these analyses are presented in Appendix Q as well.

Go/No-go version of Masked Affective Priming. In order to investigate the relationship between explicit and implicit measures, we performed four moderated regressions with the semantic differential score of SDO – SDY as the dependent variable. We used the affective priming scores as predictors and country as a moderator variable. We focused on the priming effects of the two old-everyday and the two old-negative conditions, separately in each case for possessor- and other-relevance. We created an interaction variable for each of the performed regressions by multiplying the effects of interest by the country variable.

We performed the first regression with the affective priming effect for the possessor-related old-everyday priming condition entered together with the presumed moderator (country). We then entered the product term. The possessor-related old-everyday priming effect did not predict explicit prejudice, the semantic differential score, with $B = -.16$, $t(73) = -1.07$, *ns* ($B = 1.60$, $t(73) = 5.53$, $p < .001$ for country). Country was not a significant moderator, $B = -.21$, $t(73) = -.68$, *ns*.

We calculated the second regression with the affective priming effect for the other-related old-everyday priming condition, which we entered together with the presumed moderator (country). We then entered the product term. The other-related old-everyday priming effect did not predict explicit prejudice, the semantic differential score, with $B = .05$,

$t(73) = .34$, *ns* ($B = 1.56$, $t(73) = 5.39$, $p < .001$ for country). Country was a not significant moderator, $B = .14$, $t(73) = .47$, *ns*.

We performed the third regression with the affective priming effect for the possessor-related old-negative priming condition entered together with the presumed moderator (country). We then entered the product term. The possessor-related old-negative priming effect did not predict explicit prejudice, the semantic differential score, with $B = .02$, $t(73) = .14$, *ns* ($B = 1.63$, $t(73) = 5.94$, $p < .001$ for country). Country was a significant moderator with $B = .65$, $t(73) = 2.31$, $p < .05$. The possessor-relevant old priming effect significantly predicted the semantic differential in the German sample, $B = .68$, $t(36) = 3.21$, $p < .01$, but not in the Brazilian one, $B = .02$, $t(36) = .13$, *ns* (see Figure 4.8).

We performed the fourth regression with the affective priming effect for the other-related old-negative priming condition entered together with the presumed moderator (country). We then entered the product term. The other-related old-negative priming effect did not predict explicit prejudice, the semantic differential score, with $B = -.09$, $t(73) = -.63$, *ns* ($B = 1.58$, $t(73) = 5.42$, $p < .001$ for country). Country was not a significant moderator, $B = .13$, $t(73) = .42$, *ns*.

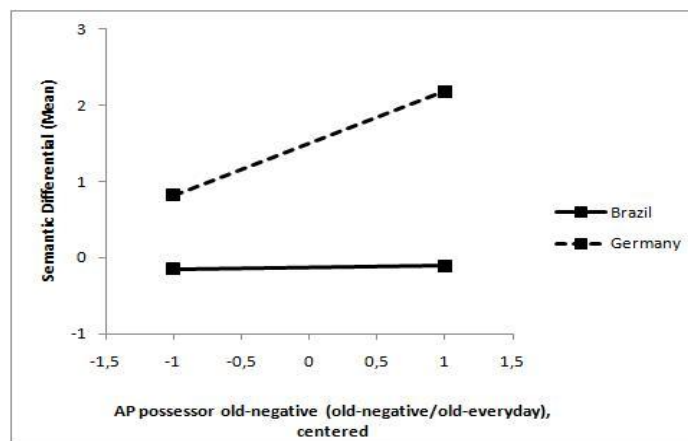


Figure 4.8. Country as a moderator in the relationship between the possessor-related old-negative priming effect and the semantic differential score.

So as to check if social desirability further moderated the two-way interaction priming effect by country, we performed a moderated regression analysis. Country, priming effect, and social desirability were predictors in step 1, all the two-way product terms in step 2, and the triple interaction in step 3.

The triple interaction was not significant, $B = .44$, $t(73) = 1.41$, *ns*. Thus, social desirability did not moderate the two-way interaction priming effect by country. In step 2, only two interactions were significant and remained so when we removed the one non-significant term. The two interactions were priming effect by social desirability, $B = .25$, $t(73) = 2.00$, $p < .05$, and priming effect by country, $B = .70$, $t(73) = 2.50$, $p < .05$.

We ran two regressions to study the moderation role of social desirability in the relationship between the semantic differential score and the priming effect. We checked if the slopes of the semantic differential score/priming effect regression lines were significantly different from zero for the social desirability values one standard deviation above and below the mean. Before the analyses we centered the country by recoding it into -1 and +1. We centered the social desirability and then subtracted (high social desirability) or added (low social desirability) one standard deviation. We calculated the product terms with these variables. The relationship between the semantic differential score and the priming effect was not significant for the values one standard deviation below the social desirability mean, $B = .16$, $t(73) = .88$, *ns*. However, this relationship was significant for the values one standard deviation above the social desirability mean, $B = .67$, $t(73) = 3.51$, $p < .01$. Unexpectedly, high social desirability was associated with a positive relationship between explicit and implicit prejudice.

Despite the non-significant triple interaction, the relationship between the semantic differential and the priming effect was different for Germany and Brazil, with null regression for Brazil and the expected positive relationship in Germany. Because of this, we examined separately for Germans and Brazilians the priming effect by social desirability interaction

through a moderated analysis. We performed in each case a moderated regression, entering in step 1 the priming effect and the social desirability score and in step 2, the two-way product. In the Brazilian case, social desirability did not moderate the relationship between implicit and explicit prejudice, $B = .20$, $t(36) = 1.24$, *ns*. As for the Germans, this moderation was significant, $B = .64$, $t(36) = 2.57$, $p < .05$. High social desirability was associated with a positive relationship between implicit and explicit prejudice, $B = 1.24$, $t(36) = 4.44$, $p < .001$ (see Figure 4.9).

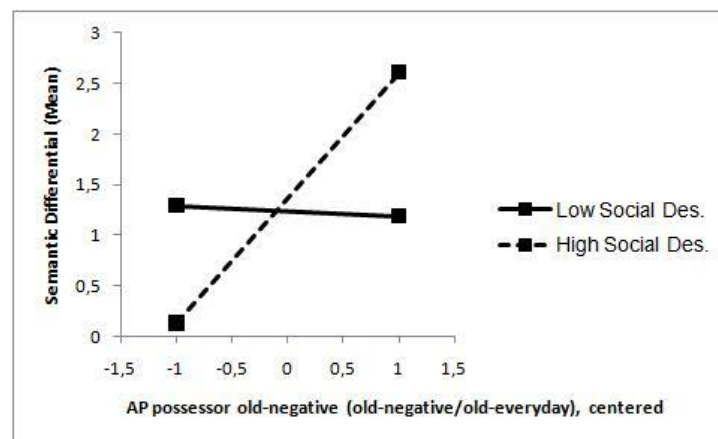


Figure 4.9. Social desirability as a moderator between explicit prejudice and the priming effect for the possessor old-negative condition within the German sample.

Affective Misattribution Procedure. For the AMP we applied the same procedure as with the affective priming effects: hierarchical regressions of the semantic differential score for AMP effects with country as a moderator. We performed two regressions, one with the AMP effect for the old-everyday priming condition and the other with the AMP effect for the old-negative condition.

We performed the first regression with the AMP effect for the old-everyday condition, entering it together with the presumed moderator (country). We then entered the product term. The old-everyday condition AMP effect was a significant predictor of explicit prejudice, the semantic differential score, with $B = .29$, $t(71) = 2.03$, $p < .05$ ($B = 1.55$, $t(71) = 5.37$, $p < .001$ for country). There was no moderation by country, $B = -.03$, $t(71) = -.11$, *ns*.

We performed the second regression with the AMP effect for the old-negative condition, entering it together with the presumed moderator (country). We then entered the product term. The old-negative condition AMP effect did not predict explicit prejudice, the semantic differential score, with $B = -.03$, $t(71) = -.19$, *ns* ($B = 1.51$, $t(71) = 5.01$, $p < .001$ for country). There was no moderation by country, $B = .01$, $t(71) = .05$, *ns*.

Given that the AMP effect for the old-everyday condition predicted the explicit measure, we examined if social desirability moderated this relationship. We performed a three-step hierarchical regression to test the moderation role of social desirability on the relationship between the semantic differential and the AMP effect. We entered AMP effect, country, and the social desirability score as predictors in step 1; all the two-way product terms in step 2; and the triple interaction term in step 3.

The triple interaction was significant, $B = .32$, $t(71) = 2.19$, $p < .05$. It decomposed into a second order interaction, or AMP effect by social desirability, separately for Brazil and Germany. The interaction in the Brazilian sample of the social desirability and the AMP effect was significant, $B = -.53$, $t(37) = -2.59$, $p < .05$. However, this interaction was not significant for the German sample, $B = .11$, $t(34) = .55$, *ns*.

To explore the moderation role of social desirability on the relationship between explicit and implicit prejudice within the Brazilian sample, we analyzed the slopes of the semantic differential score/AMP effect regression lines. We verified if these slopes were significantly different from zero for social desirability values one standard deviation both above and below the mean. We ran hierarchical regressions for each of the two values corresponding to low and high social desirability. We centered social desirability and then subtracted (high social desirability) or added (low social desirability) one standard deviation. With these variables we calculated the product term. The relationship between the semantic differential score and the AMP effect was significant for the participants one standard deviation below the social desirability mean, $B = .64$, $t(37) = 2.87$, $p < .05$. However, this

relationship was not significant for those one standard deviation above the social desirability mean, $B = -.43$, $t(36) = -1.24$, *ns*. In this way, low social desirability was associated with a positive relationship between explicit and implicit prejudice (see Figure 4.10).

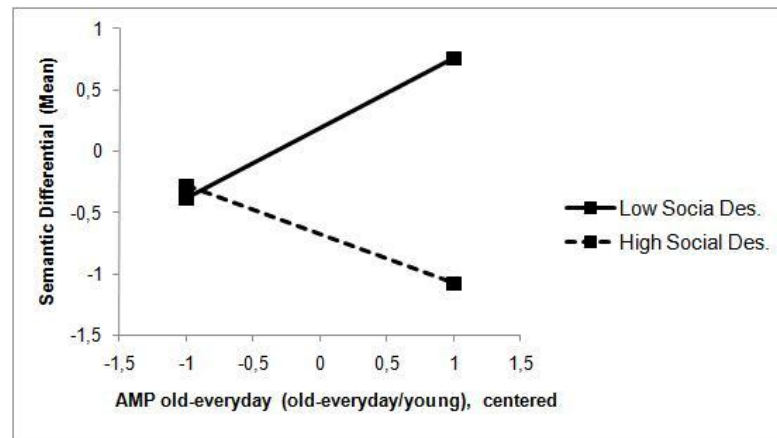


Figure 4.10. Social desirability as a moderator between explicit measure and the AMP effect for the old-everyday condition within the Brazilian sample.

The analyses of the implicit and explicit measures indicated the existence of relationships between them. This was especially the case between the possessor-related old-negative priming effect and the semantic differential score. The AMP for the old-everyday priming condition and the semantic differential score also exhibited having a connection. As proof of discriminant validity, neither one of the standard priming effects correlated significantly with explicit measure (Table 4.2).

Table 4.2

Correlations between Standard Affective Priming Effects and Explicit Ageism

	Explicit Ageism (Semantic Differential Score)		
	Total sample ($N = 74$)	Brazil ($n = 37$)	Germany ($n = 37$)
Standard priming effect – possessor	-.03	-.02	.06
Standard priming effect - other	-.13	-.10	-.15

Prime awareness. We asked the participants after the affective priming task if they recognized any of the presented pictures, that is, the primes. They reported not having recognized the pictures. With the direct test data we computed the non-parametric signal detection sensitivity index A' ¹² (Pollack, 1970) for categorizing the masked primes. Hits were correctly identified pictures and false alarms were incorrectly identified pictures. Mean A' was $M = .63$ ($SD = .18$), $t(73) = 6.54$, $p < .001$ for the deviation from 0.5, for the standard primes and $M = .74$ ($SD = .14$), $t(73) = 14.74$, $p < .001$ for the deviation from 0.5, for the old/young primes. These results indicate that the prime identification was above chance. However, the direct categorization indices for both the standard and old/young primes did not correlate with the priming effects ($-.06 \leq rs \leq .24$, *ns*). The German ($M = .65$, $SD = .19$) and Brazilian ($M = .62$, $SD = .16$) participants did not differ in terms of the mean A' for the standard primes, $t(72) = -.70$, *ns*. They did differ in the mean A' for the old/young primes: Germany was $M = .69$, $SD = .16$ and Brazil, $M = .79$, $SD = .09$, $t(72) = 3.22$, $p < 0.01$. However, the old/young direct categorization index did not correlate with none of the priming effects neither in Brazil nor in Germany ($-.002 \leq rs \leq .24$, *ns*). We performed a moderator analysis with country and the old/young direct categorization index as moderators to check if they moderated the relationship between the priming effect for the possessor-related old-negative condition and explicit prejudice. Country was recoded as a dummy variable with 0 equaling Brazil and Germany 1. The direct index and the priming effect were centered. We created two interaction variables: one by multiplying the priming effect by the country variable and the other by multiplying the priming effect by the old/young direct categorization index. We entered the priming effect first together with the presumed moderators (country and the direct index) and then the product terms. The priming effect did not predict explicit prejudice, with $B = .003$, $t(73) = .02$, *ns*. ($B = 1.75$, $t(73) = 5.73$, $p < .001$ for country and $B =$

¹² A' is the non-parametric signal detection sensitivity index typically used when the observation numbers are very small or when some of the participants' hit rates are perfect. Chance performances yield an A' of 0.5 whereas a perfect performance has an A' of 1.0.

.14, $t(73) = .89$, *ns* for the direct index). There was a moderation by country, $B = .79$, $t(73) = 2.33$, $p < .05$. As previously discussed, the possessor-relevant old priming effect significantly predicted the semantic differential in the German sample, $B = .02$, $t(36) = 3.21$, $p < .01$, but not in the Brazilian one, $B = .001$, $t(36) = .13$, *ns*. Importantly, there was no moderation by the old/young direct categorization index, $B = .09$, $t(73) = .59$, *ns*, implying that the degree to which the participants did recognize the primes was not accountable for the results. The differences in age-related priming between the German and Brazilian samples cannot be explained by the slight difference in recognition performance.

Discussion

The Study 4 data suggests a difference in implicit ageism between Brazil and Germany. Although the country variable did not significantly moderate priming and AMP effects, we found significant priming effects only among the German participants. Moreover, only in the German sample did affective priming predict explicit prejudice. These results are complex given that prejudice effects manifested only in the German sample. We will discuss in detail the possible meaning of this. Also important is that Brazil and Germany presented the same pattern for the standard effects. There was, however, quite a difference in explicit ageism. As compared to young persons, the Germans evaluated the elderly more negatively than the Brazilians did. Two types of implicit ageism became evident. One is based on social category ageism, with the between-age contrast young vs. old, and the other depends on the emphasis of aging, with the within-age contrast old vs. old. The traditional social category based ageism was related to the possessor-relevance domain, or depreciation. The other type of ageism was connected to the other-relevance domain. Finally, we discovered standard effects for other-relevant targets not moderated by country through the use of the go/no-go version of masked affective priming. Neither of the standard effects correlated with explicit prejudice. These created proof of the task's discriminant validity.

The go/no-go version of masked affective priming

In Study 3 we first provided evidence of the use of the go/no-go version of the Affective Priming task on the attitude domain, that is, political preferences. We found significant priming effects for both the standard and the political condition. Moreover, the priming effect for the political condition predicted vote behavior. The study thus suggested that the go/no-go format is a potential alternative to the traditional Affective Priming task.

To find more evidence in favor of this new format, we tested in Study 4 the go/no-go version of the Affective Priming task with both standard and prejudice primes. Some evidence supported the go/no-go version. First of all, there were significant standard priming effects for other-relevant targets in both Brazil and Germany. Second, the standard priming effects for both possessor- and other-relevant targets did not correlate with the explicit measure of ageism. Third, the prejudice condition priming effects for the old-negative, possessor-relevant targets predicted the explicit measure of ageism. The prediction of the explicit measure validates the go/no-go version of the Affective Priming task. It showed that interindividual differences in explicit prejudice were reflected in the priming effects for only the prejudice condition.

The existence of two types of implicit ageism: heterogeneous attitudes towards older persons

Butler (1969) coined the term “ageism.” He defined it as a type of prejudice against age similar to that of racism and sexism. It involves stereotyping and discriminating against people because they are old. Schaie (1993) further discusses ageism as “a form of culturally based age bias that involves a cultural belief that age is a significant dimension and that it defines a person’s social position and psychological characteristics” (p. 49). Age, like skin color and gender, is a social category that affects attitudes. The age of a person can influence how others evaluate and perceive them, given that certain characteristics are socially associated with being young or old (Cuddy & Fiske, 2002). Compared to younger people, the

elderly are generally described as ill, slow, forgetful, lonely, and inflexible (Nussbaum, Pitts, Huber, Krieger, & Ohs, 2005).

Many social psychologists have discussed ageism as based on the conventional between-age contrast of young vs. old. Perdue and Gurtman (1990) first provided evidence for the automaticity of ageism. They showed “old” and “young” labels as masked primes and positive and negative traits as targets. The “old” primes facilitated deciding if a trait was good or bad, whereas the “young” prime made easier processing the positive traits. Nosek, Banaji, and Greenwald (2002) measured attitudes towards the aged through the IAT. Their research demonstrated that the respondents preferred young people over old persons. In a similar vein, Degner and Wentura (2011) discovered a preference for the young over the old through an affective priming task.

Dasgupta and Greenwald (2001) and Jelenec and Steffens (2002) provided the first evidence that subgroups of older persons convey different degrees of age bias. Dasgupta and Greenwald (2001) used the IAT to test if ageism varied according to the type of old and young exemplars. Old and young exemplars were either admired or disliked individuals. The authors assigned to the participants either the pro-young condition (admired young, disliked old) or the pro-elderly one (disliked young, admired old). The overall IAT effect indicated faster reaction times for the young/pleasant combination. However, the IAT effect was significantly reduced in comparison to the pro-young condition among the pro-elderly condition participants. In another study about automatic age bias, Jelenec and Steffens (2002) demonstrated that when compared with young people, the perfect grandmother category yielded less age bias than the general category (the elderly) or the negative one (old curmudgeon).

The Study 4 results pointed out two types of implicit ageism among the German participants. The first was the conventional social category based ageism shown by a preference for the young over the old. The other type is sensitive to the aspects emphasizing

age, namely the old vs. old contrast. Our results for the conventional ageism are supported by the existing literature. However, there are many comments to make about the second type of implicit ageism.

Richeson and Shelton (2006) mention that although negative attitudes are usually reported against the elderly, some studies emphasize that older persons are not always perceived as a homogeneous group. Aging attitudes may vary according to the considered representation. Hummert (1994) researched the heterogeneity of perceptions and stereotypes associated with three age ranges made evident by physiognomic cues. The three age ranges were young-old (55-64 years), middle-old (65-74 years), and old-old (75 years and over). Hummert's results indicated that the participants assigned more negative stereotypes to the oldest age range and more positive ones to the young-old category. Therefore, as an individual approaches the old-old subgroup, perceptions about them become more negative. Our results revealed a similar pattern. When analyzing the within-category age contrast of old vs. old, the pictures depicting the negative aspects of aging elicited more negative attitudes. Younger people may indeed not see older persons as a homogenous category but as a social group containing different types of elderly people. This in turn confers to the category heterogeneous features.

Livingston and Brewer's (2002) findings about the within-race contrast of blacks vs. blacks showed that highly prototypical black faces elicited more negativity than less prototypical ones. This may shed light on our results. Livingston and Brewer (2002) state that familiarity may create distinct affective reactions towards different exemplars of the same category. Accordingly, greater prejudice against people showing the frail aspects of aging may reflect a lack of knowledge about the subject "with unfamiliarity eliciting strong anxiety and discomfort" (Livingston & Brewer, 2002, p. 17). This fits with the fact that the kind of elderly person most people have contact with are those related to our old-everyday primes such as the old person who continues doing daily tasks, keeps contact with grandchildren and

friends, etc. Young people may have more contact with older persons reflecting the more positive aspects of age as opposed to individuals demonstrating the negative ones. Greenberg, Schimel, and Martens (2002) suggest that the connection between old age and mortality is a potential source of ageism. In this case, ageism would derive from how perceptions of the old elicit thoughts of death, thus arousing the threat of mortality (Greenberg et al., 2002; Martens, Goldenberg, & Greenberg, 2005). In order to defend themselves against the threat of mortality posed by the elderly, people may engage in proximal defenses such as physical and psychological distancing as well as distal defenses like increasing their own self-esteem and reacting negatively to those who challenge their worldview. Elderly characteristics might moderate the relationship between the perceived threat of mortality and the defensive responses. Although the elderly generally provoke awareness of mortality, prejudice against older persons may also depend on their perceived characteristics. For example, older persons perceived as healthy and emotionally fulfilled might be viewed positively given that they are proof that one may age well, thus reducing the fear of mortality and decay. On the other hand, negative characteristics associated with aging such as disease, physical difficulties, and lack of personal meaning may emphasize mortality the most. In this case, defensive responses are more likely to be used. To further discuss how different perceptions of the elderly lead to assorted ageism types, we will now address the distinction between possessor- and other-relevance applied to the domain of prejudice.

The possessor vs. other differentiation applied to ageism

Degner et al. (2007) were the first to provide evidence of the possessor- vs. other-differentiation applied to the prejudice domain. They employed implicit, explicit, and behavioural measures of attitudes toward Turks living in Germany. Their implicit measure results, or the priming indices, demonstrated a positive correlation with the explicit and the behavioural measures. This correlation pattern emerged for only the priming indices related to

the other-relevant dimension. These findings thus revealed that prejudice could be distinguished as depreciation (possessor-relevant) and hostility (other-relevant) with ethnic bias towards the Turks associated with hostility. For example, Turks living in Germany are seen as threatening.

Degner and Wentura (2011) executed another study exploring the possessor- vs. other-relevance as related to prejudice towards Turks, the elderly, and homeless people. The authors hypothesized that the other-relevant dimension would preponderate for the Turks because in Germany they are socially perceived as hostile and threatening. The authors also predicted that the possessor-relevant dimension would preponderate for the elderly because they are usually seen as weak and worthless. Finally, Degner and Wentura (2011) conjectured that attitudes towards homeless people would be biased in both possessor- and other-relevant dimensions because the homeless are perceived not just as asocial and aggressive but also as weak and contemptible. All three of these hypotheses were confirmed. The study revealed that prejudice encompasses multidimensional components that influence attitudes towards social groups. We are especially concerned with the second hypothesis that the elderly convey relative negativity of possessor-relevant type. As compared to young people with the between-age contrast, the elderly elicited negative feelings of pity but not of threat.

The two implicit ageism types found among Germans in Study 4 are connected to the possessor- vs. other-differentiation in two ways. First, the social category based ageism reflects a negative attitude towards older persons mainly of the possessor-relevant type. Second, the ageism sensitive to differences within the old category signals a negative attitude towards older persons depicting the negative aspects of age and is usually the other-relevant type. Degner and Wentura's work (2011) supports the former case. Young people may feel pity when evaluating the elderly with a social category contrast in mind. Perhaps this occurs because in comparing the young and the old, the elderly are judged as lacking in attributes typical of youth.

With regards to the second type of ageism, the other-relevant dimension refers to the evaluation of traits in terms of their valence and adaptive value. It considers the perspective of the individual in a relationship with the trait holder. Negative attitudes towards older persons depicting the negative aspects of aging may be of the other-relevant type simply because they make explicit their frailty and dependence. Such traits may not have an adaptive value for the people in contact with the older person bearing these traits given that this type of elderly person may demand care, implying responsibility and duty for younger generations. The threat of mortality may also explain the more negative attitudes towards older persons depicting aspects of aging. Our results support previous findings related to possessor-relevance ageism. We also give the first evidence of possessor- vs. other differentiation for within-age contrast. We therefore see the possessor- vs. other-differentiation as important to understanding how the various facets of aging influence intergroup attitudes.

Study 4 yielded complex results for the German/Brazil comparison. Prejudice effects were found in the German sample but not in the Brazilian one. We will now discuss some potential reasons why we found a prejudice pattern among Germans but not Brazilians.

Cross-cultural differences between Brazil and Germany

Hofstede (1980) was the first to investigate cultural contrasts based on differences in individualism-collectivism. In *Cultures' Consequences* (1980/2001) he compared fifty countries in terms of work goals. His cultural-level factor analyses indicated that the participants' answers could be grouped into four dimensions: individualism, power distance, masculinity, and uncertainty avoidance. The individualism-collectivism dimension then gained much popularity (Kagitçibasi, 1996). Triandis (1988) stated that individualism-collectivism as applied to cross-cultural psychology is important in understanding differences in social behavior across various cultures. In fact, it was the research conducted by Triandis and his work group that made the individualism-collectivism dimension so popular in cross-

cultural psychology. He also introduced the distinction between the cultural- and the individual-level (Triandis et al., 1986). In an attempt to replicate Hofstede's work, Triandis and his colleagues discovered four factors to explain individualism-collectivism: family integrity and interdependence (collectivism) and self-reliance and separation from in-groups (individualism). The family integrity and distance from in-groups are related to the cultural level whereas the other two factors represent the individual level. Triandis theorizes that individualism is characterized by attributes such as distance from in-groups, emotional detachment, and competition. Differently, collectivism is marked by family integrity and solidarity (Triandis, 1990). Individualism and collectivism are generally defined as being opposed to each other, with this contrast stronger in industrialized western nations and traditional societies in developing countries (Oyserman et al., 2002). However, Kagitçibasi (1997) highlights the fact that more than just opposites, individualism-collectivism are worldviews that differ according to which aspect they emphasize.

We consider Brazil and Germany as respectively collectivist and individualistic cultures. Oyserman et al. (2002) meta-analysis of empirical studies on individualism-collectivism investigate if European-Americans were more individualistic and less collectivistic than people from other societies. As compared to European-Americans, Brazilians were considered equally individualistic and more collectivistic whereas Germans were seen as equally individualistic and collectivistic. According to a cross-national comparison of 74 countries using Hofstede's individualism scale, Germany is an individualistic nation with a score of 67 as compared to Brazil with a score of 38 (Hofstede & Hofstede, 2005; Hofstede et al., 2010). Pearson and Stephan (1998) examined the differences in style negotiation preferences among Brazilians and Americans. They found that Brazilians preferred styles reflecting a concern for the effects on others while Americans favored styles focusing on their own outcome. Brazilians also preferred in-groups over out-groups and

avoided conflict more with in-groups than with out-groups. These results suggest that collectivism is indeed important within Brazilian society.

Brown and Zagefka (2005) mention that prejudice tends to be more present in collectivistic cultures due to their more prominent in-group factor. Social Identity Theory (Tajfel & Turner, 1986) proposes in-group identification and in-group favoritism, according to which people will prefer members from groups with which they identify. This raises the question as to whether or not in-group favoritism predicts out-group hostility. Brewer (1999) argues that preference for in-groups and prejudice towards out-groups are separate phenomena. She writes that “identification and attachment to ingroups is independent of intergroup conflict” (p. 430). However, she also offers some conditions under which in-group favoritism may indeed predict out-group derogation, pointing out cultural aspects such as intense in-group attachment that can cause in-group/out-group differentiation.

So far we have considered Brazil as potentially more collectivist than Germany as well as the possibility that the in-group factor associated with collectivism contributes to out-group derogation. Nevertheless, our results reveal an asymmetric implicit/explicit ageism more present among German participants. What explains this?

Allport (1954) proposed the “contact hypothesis” to explain the maintenance of stereotypes and prejudice. The lack of contact with other social groups would contribute to negative beliefs and attitudes. At the same time, intergroup contact would play a positive role in reducing prejudice. Neri and Jorge’s (2006) research conducted with Brazilian college students made clear that contact with older persons played an important role in explicit attitudes. The 62% that had contact with the elderly held more positive attitudes towards them than those without contact. The contact quality also affects the reduction of prejudice. Schwarz and Simmons (2001) discovered a significant relationship between contact quality and positive attitudes towards older persons among college students. Similarly, Hale (1998) found that people with quality social contact with the elderly had more knowledge about

aging and fewer negative stereotypes. Further, affective outcomes of intergroup contact facilitate generalizing contact effects like from one specific out-group to the out-group as a whole. The generalizing of contact effects also depends on the out-group member with whom one keeps contact being seen as a member of the out-group as a whole (i.e., group salience) (Tropp & Pettigrew, 2004).

As a collectivist country, Brazil prioritizes family relations and integrity. Contact among family members tends to occur often. Moreover, the Brazilian government emphasizes the role family plays in caring for their members (Serapioni, 2005). Germany, on the other hand, has a strong social system providing protection in areas such as health, pension, long-term care, and family support. Family values also differ among Germans and Brazilians. Gallup (1997) conducted a Global Study of Family Values and revealed many differences in family values across a sample of sixteen countries. Germans tended to prefer smaller families with zero to two children and, exceptionally, did not think that having children is important to self-fulfillment. Grundy (2010) showed that in the southern European countries of Greece, Spain, and Portugal, fewer older persons live alone as compared to northern and western European countries (Denmark, Finland, Norway, Sweden, Austria, Belgium, Germany, The Netherlands, and the UK). Even though living alone does not mean less family contact, the frequency of contact was still higher in southern than in western and northern European countries.

The roles that families play in collectivistic and individualistic cultures might explain the differences among the German and Brazilian samples in prejudice effects. Intergroup contact has been investigated in outside family contexts. However, families do present an important paper in ageism due to their intergenerational nature. Harwood, Hewstone, Paolini, and Voci (2005) assert that the intergenerational contact offered by family context may favorably affect prejudice against the elderly. The researchers conducted two studies about contact with older persons within the family and its beneficial factors on attitudes. First they

showed that group salience moderated the contact-attitude relationship only in the more frequent grandparent-grandchild relationships. They then indicated that contact shapes attitudes via the following mediators: perspective taking, anxiety, and accommodation (i.e., adaptations on the communication with a partner). Age salience further moderated the relationship between contact and mediators. In this way, perspective taking, anxiety reduction, and accommodation derived from contact and affected attitudes only when the person with whom contact was kept was clearly recognized as old.

Social desirability moderated differently for Brazilians and Germans the relationship of the implicit-explicit attitudes. Within the Brazilian sample, the AMP effect for the old-everyday condition predicted the explicit measure for only the participants with low social desirability. Among these participants, higher explicit measure values were associated with higher values on the implicit one. However, those with higher social desirability demonstrated an association between lower explicit measure values and higher implicit values. This pattern is in accordance with studies pointing out that when measured explicitly, attitudes may be subject to control and social concerns. Different patterns emerge in the German sample. The affective priming effect for the old-negative condition (possessor-relevant targets) unexpectedly predicted explicit measure scores for only participants with high social desirability. One possible interpretation for these results is within the perspective of morality and moral development (Kohlberg, 1969, 1971). Brazil and Germany are at different stages of moral development. According to Husted (2001), individuals in collectivistic cultures like Brazil are more likely to use the third stage of moral reasoning: interpersonal conformity. This stage assumes that good behaviour conforms to society's or peers' expectations. Individuals thus act to gain the approval of others. In contrast, individualistic cultures such as Germany are more likely to use stage 5 moral reasoning. In this stage known as prior rights and social contract, individuals strive to define moral values and principles that have separate validity and application from the group authority and from the individual's own identification with the

group. The different moral stages of the analyzed countries might explain the distinct effects social desirability had on individual behaviour.

Societal and contextual aspects should be considered when interpreting social phenomena such as prejudice. We analyzed in Study 4 ageism in Brazil and Germany. The result patterns we found in this country comparison are not completely clear. However, a lack of ageism effects characterized the Brazilian sample and we offered a possible explanation based on individualism/collectivism and on family relationships.

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CHAPTER VI

FINAL REMARKS

This Doctoral Dissertation sought to investigate mainly implicit ageism by employing a new version of the Affective Priming task (Fazio et al., 1995), i.e., the go/no-go version and the Affective Misattribution Procedure (AMP, Payne et al., 2005). We also used an explicit measure of ageism, i.e., a Semantic Differential (Rothermund & Brandstädter, 2003). The focus was on the cultural contexts of Brazil and Germany.

Ageism has often been compared to other forms of prejudice such as racism and sexism. With prejudice based on advanced age, however, everyone has the potential to become its target; all they have to do is live long enough to become old and socially recognized as such. Thus ageism can reach more people than racism or sexism. And yet, as compared to race and gender, ageism is less discussed; receives less attention from policy makers and researchers; and is not as famous. Perhaps this is why ageist practices are more easily accepted. For example, the use of patronizing speech, jokes about aging, and birthday cards mocking advanced age are widely accepted ageist practices. Older adults themselves do not seem to perceive such practices as prejudiced. Hence there is a clear need for studies to bring the topic of ageism to public debates and academic research. This dissertation aimed to contribute to the understanding of ageism and to increase knowledge about it. For this purpose we conducted four studies. Studies 2 and 3 provided the methodological basis for the main study, a cross-cultural investigation (Study 4). Study 1 explored the theoretical perspective of the Stereotype Content Model so as to investigate stereotypes about the elderly held by Brazilian society, thus providing evidence for more research on ageism in Brazil.

Study 1 explored the hypothesis that elderly stereotypes are evaluatively mixed in Brazil so that older adults are perceived as more warm than competent. We evaluated four groups: college students, adults, older persons who participated in community groups and older persons who did not. The results showed that, as predicted, the four groups were familiar with Brazilian stereotypes of the elderly being more warm than competent. Perceptions of the elderly were more positive among the older individuals than the younger ones, who saw the elderly as less competent. We included this study in the dissertation to provide the first evidence of the negative views Brazilians have of the elderly, thus justifying more studies on ageism in Brazil.

In Study 2 we generated valid materials for conducting the cross-cultural study. It consisted of two phases and resulted in a list of 136 adjectives validated to Brazilian-

Portuguese and in their pleasantness and relevance norm values. In Germany, recent studies have explored automatic prejudice not as one-dimensional but as a differentiated phenomena. Towards this end, the possessor- vs. other relevance has been tested in the domain of prejudice (Degner et al., 2007; Degner & Wentura, 2011; Peeters, 1983; Peeters & Czapinski, 1990; Peeters, Cornelissen, & Pandelaere, 2003). Because we aimed to conduct a cross-cultural comparison between Brazil and Germany in terms of implicit ageism and its differentiation, we first had to provide a comparable set of materials. Study 2 emphasized the validation of the Wentura, Kulfanek, and Greve (2005) target set, which contains 20 German adjectives. Half the set had a positive valence and the other half a negative one. Each valence set included five possessor-relevant adjectives and five other-relevant adjectives. The 136 Brazilian-Portuguese adjectives, including the 20 from the Wentura et al. (2005) target set, may be useful to Brazilian researchers conducting, for example, priming studies on automatic prejudice. The material is especially suited, within the prejudice differentiation field, for investigating the possessor vs. other distinction in Brazil.

Study 3 was methodological. It was based on the idea that the response selection process related to the binary format of the Affective Priming task can distort the priming effects generated in the task. For instance, the variation in reaction times may be due to the participants deciding which key to press, a process not relevant to the main task of assessing whether a target word is positive or negative. Moreover, error rates may increase if participants press the wrong key after correctly classifying the target word (Borkenau, & Mauer, 2007; Perea, Rosa, & Gómez, 2002). As for semantic priming, go/no-go versions have been proposed as a way to reduce response switching and thus reduce error variance. In Study 3, we developed a go/no-go version of the Affective Priming task and tested it within the domain of political attitudes. Two especially interesting phenomenon manifested in the results. First, there were significant standard priming effects and attitude priming effects, signaling that the go/no-go version did indeed demonstrate the typical effect for congruent prime/target pairs. Second, the participants' voting behavior was predicted by the priming effect for the political condition. We concluded from Study 3 that the go/no-go version of Affective Priming may be a good alternative to the task's traditional two-choice format.

In Study 4 we investigated ageism in the cultural contexts of Brazil and Germany. We tested two implicit measures of attitude: a go/no-go version of masked affective priming and the AMP. The prime stimuli were pictures of younger persons; older persons in everyday contexts; and older persons in negative contexts. The primes were masked for the affective priming task. The Study 4 results were complex, with implicit ageism manifesting only in the German sample. There was, however, quite a difference in explicit ageism. As compared to

young persons, the Germans evaluated the elderly more negatively than the Brazilians did. Importantly, Brazil and Germany presented the same pattern for the standard effects. Two types of implicit ageism became evident. One is based on social category, i.e., the between-age contrast of young vs. old. The other depends on the features of aging being made salient, i.e., the within-age contrast of old vs. old. The traditional social category based ageism was of the possessor-relevant type, or depreciation. The other ageism type was connected to the other-relevant domain.

This dissertation offers important contributions. In methodology, it created materials that can be used in Brazil for experimental studies within the domain of prejudice and its differentiation. Furthermore, to the best of our knowledge, ours was the first empirical study employing the Affective Priming task and the Affective Misattribution Procedure to evaluate implicit ageism in Brazilian society. Importantly, we developed a go/no-go version of the Affective Priming task and tested it first on political (unmasked) and aging attitudes (masked). As for ageing studies, this dissertation gives the first empirical support for the Stereotype Content Model among younger and older adults in Brazil. Interestingly, although there was a general perception of the elderly as being more warm than competent, older adults evaluated the elderly as more competent than the younger adults did. It seems that values do indeed change over a lifetime, allowing for a more positive view of aging as the years pass by. The cross-cultural study supported the prejudice differentiation and demonstrated the existence of two implicit ageism types that deserve to be investigated further. Altogether these findings may help researchers develop future studies exploring implicit ageism and its possible facets. It would be interesting to test the go/no-go version of the Affective Priming in other attitude domains. Finally, it would be fruitful for future cross-cultural comparisons about ageism to focus on cultural variables such as interpersonal contact as a source of differentiation between societies. It is possible that implicit ageism is reduced in cultures that value intergenerational contact more strongly. This still needs to be investigated.

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APPENDIX A

Aprovação do Comitê de Ética, Psicologia, UFRGS



Instituto de Psicologia

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COMITÊ DE ÉTICA EM PESQUISA

REGISTRO NUMERO: 25000.089325/2006-58

PROTOCOLO DE PESQUISA Nº 087/2008

Título do Projeto:

Preconceito contra idosos: um estudo transcultural com uma tarefa de Priming Afetivo.

Pesquisador(es):

Silvia Helena Koller
Maria Clara Pinheiro de Paula Couto

O projeto atende aos requisitos necessários. Está **aprovado** pelo CEP-Psicologia por estar adequado ética e metodologicamente e de acordo com a Resolução nº196/96 e complementares do CONEP e Resolução 016/2000 do Conselho Federal de Psicologia. Eventos adversos e eventuais ementas ou modificações no protocolo de pesquisa devem ser comunicadas a este Comitê. Devem também ser apresentados anualmente relatórios ao Comitê, inicialmente em 03/11/2009, bem como ao término do estudo.

Aprovado, em 03.11.2008.

APPENDIX B

Número do participante: _____

Identificação Inicial
(por favor, preencha as informações abaixo)

Sexo: () F () M

Data de Nascimento: ____/____/____

Idade: ____ anos

É estudante de graduação? () Sim () Não

Se sim, em que curso?

Se não, qual a sua profissão?

Em que país cresceu (passou a maior parte de sua infância)?

Identificação Inicial
(por favor, preencha as informações abaixo)

1. Sexo: () F () M
2. Idade: _____ anos
4. Nível de Escolaridade:
 - () 0 – 4 anos
 - () 5 – 8 anos
 - () 9 – 11 anos
 - () Superior incompleto
 - () Superior completo
 - () Outro
5. Situação atual face ao trabalho:
 - () Ativa
 - () Ativa em tempo parcial
 - () Desempregado/a
 - () Ocupa-se das tarefas do lar
 - () Aposentado/a
6. Local de habitação:
 - () Casa própria ou alugada
 - () Casa de familiares ou amigos
 - () Lar residencial
 - () Outra
7. Com quem vive?
 - () Sozinho/a
 - () Cônjuge ou companheiro/a
 - () Familiares ou amigos
 - () Outra opção
8. Participa de algum grupo de atividades para idosos? () Sim () Não
9. Se sim, há quanto tempo?
10. Em que país cresceu (passou a maior parte de sua infância)?

APPENDIX C

Escala de Afetividade e Competência

Questionário

Gostaríamos que refletisse sobre como as pessoas idosas são vistas pela sociedade brasileira. Não estamos interessados em suas crenças pessoais, mas em como você acha que este grupo é visto pelos outros. Por favor, leia com atenção cada uma das afirmações e em seguida marque com um X a opção que melhor representa a sua resposta.

	Nada					Extremamente				
	1	2	3	4	5					
Vistas pela sociedade, quão confiantes (em si próprias) são as pessoas idosas?										
Vistas pela sociedade, quão amigáveis são as pessoas idosas?										
Vistas pela sociedade, quão capazes são as pessoas idosas?										
Vistas pela sociedade, quão confiáveis são as pessoas idosas?										
Vistas pela sociedade, quão inteligentes são as pessoas idosas?										
Vistas pela sociedade quão afetuosas são as pessoas idosas?										
Vistas pela sociedade, quão competentes são as pessoas idosas?										
Vistas pela sociedade, quão bem intencionadas são as pessoas idosas?										
Vistas pela sociedade, quão habilidosas são as pessoas idosas?										
Vistas pela sociedade, o quanto as pessoas idosas têm um bom caráter?										
Vistas pela sociedade, quão eficientes são as pessoas idosas?										
Vistas pela sociedade, quão sinceras são as pessoas idosas?										

Muito obrigada pela sua participação!

APPENDIX D

Juiz (a):

Data:

Prezado (a) juiz (a),

Você é convidado (a) a participar de um estudo que busca validar uma lista de palavras, originalmente alemãs, para o contexto brasileiro. As palavras são adjetivos que foram traduzidos do Alemão para o Português. Portanto, a sua tarefa será avaliar os adjetivos listados abaixo em duas dimensões conforme descritas a seguir:

1. Compatibilidade: refere-se a quão precisa (fiel) é a tradução feita do Alemão para o Português, ou seja, *o adjetivo foi traduzido com precisão (é compatível) do Alemão para o Português?* Em que nível?

1 | 2 | 3 | 4 | 5

2. Clareza: refere-se à clareza de cada adjetivo traduzido, ou seja, *o adjetivo é suficientemente claro, compreensível e adequado para a população do estudo (Universitários e Enfermeiros de Porto Alegre)?* Em que nível?

1 | 2 | 3 | 4 | 5

Para cada adjetivo marque na escala de 1 a 5 o nível de concordância referente a cada uma das dimensões. Quanto maior o valor atribuído, maior o seu nível de concordância.

Muito obrigada pela sua participação!

	Compatibilidade	Clareza
1. entgegenkommend: cooperativo	1 2 3 4 5	1 2 3 4 5
2. kooperativ: cooperativo	1 2 3 4 5	1 2 3 4 5
3. hilfsbereit: solícito	1 2 3 4 5	1 2 3 4 5
4. fair: justo	1 2 3 4 5	1 2 3 4 5
5. gerecht: correto	1 2 3 4 5	1 2 3 4 5
6. friedliebend: pacifista	1 2 3 4 5	1 2 3 4 5
7. gastfreundlich: hospitaleiro	1 2 3 4 5	1 2 3 4 5
8. kameradschaftlich: camarada	1 2 3 4 5	1 2 3 4 5
9. lieb: querido	1 2 3 4 5	1 2 3 4 5
10. liebevoll: afável	1 2 3 4 5	1 2 3 4 5

	Compatibilidade	Clareza
11. warmherzig: afetuoso	1 2 3 4 5	1 2 3 4 5
12. mitfühlend: compassivo (com compaixão)	1 2 3 4 5	1 2 3 4 5
13. rücksichtsvoll: com consideração	1 2 3 4 5	1 2 3 4 5
14. solidarisch: solidário	1 2 3 4 5	1 2 3 4 5
15. tolerant: tolerante	1 2 3 4 5	1 2 3 4 5
16. treu: leal	1 2 3 4 5	1 2 3 4 5
17. verlässlich: confiável	1 2 3 4 5	1 2 3 4 5
18. zuverlässig: confiável	1 2 3 4 5	1 2 3 4 5
19. vertrauenswürdig: confiável	1 2 3 4 5	1 2 3 4 5
20. verständnisvoll: compreensivo	1 2 3 4 5	1 2 3 4 5
21. einfühlsam: empático	1 2 3 4 5	1 2 3 4 5
22. gütig: bondoso	1 2 3 4 5	1 2 3 4 5
23. menschlich: humano	1 2 3 4 5	1 2 3 4 5
24. human: humano	1 2 3 4 5	1 2 3 4 5
25. friedlich: pacífico	1 2 3 4 5	1 2 3 4 5
26. großzügig: generoso	1 2 3 4 5	1 2 3 4 5
27. herzlich: cordial	1 2 3 4 5	1 2 3 4 5
28. offenherzig: sincero	1 2 3 4 5	1 2 3 4 5
29. verantwortungsbewußt: responsável	1 2 3 4 5	1 2 3 4 5
30. zärtlich: carinhoso	1 2 3 4 5	1 2 3 4 5
31. aufrichtig: franco	1 2 3 4 5	1 2 3 4 5
32. ehrlich: honesto	1 2 3 4 5	1 2 3 4 5
33. freundlich: gentil	1 2 3 4 5	1 2 3 4 5
34. angenehm: agradável	1 2 3 4 5	1 2 3 4 5
35. temperamentvoll: vivaz	1 2 3 4 5	1 2 3 4 5
38. aufgeweckt: vivaz	1 2 3 4 5	1 2 3 4 5
36. sanft: meigo	1 2 3 4 5	1 2 3 4 5
37. liebenswürdig: benquisto	1 2 3 4 5	1 2 3 4 5
39. aktiv: ativo	1 2 3 4 5	1 2 3 4 5
40. heiter: alegre	1 2 3 4 5	1 2 3 4 5
41. fröhlich: alegre	1 2 3 4 5	1 2 3 4 5
42. vergnügt: alegre	1 2 3 4 5	1 2 3 4 5
43. begabt: talentoso	1 2 3 4 5	1 2 3 4 5
44. kreativ: criativo	1 2 3 4 5	1 2 3 4 5
45. einfallsreich: inventivo	1 2 3 4 5	1 2 3 4 5

	Compatibilidade	Clareza
46. phantasievoll: imaginoso	1 2 3 4 5	1 2 3 4 5
47. lebhaft: animado	1 2 3 4 5	1 2 3 4 5
48. optimistisch: otimista	1 2 3 4 5	1 2 3 4 5
49. sympathisch: simpático	1 2 3 4 5	1 2 3 4 5
50. unabhängig: independente	1 2 3 4 5	1 2 3 4 5
51. selbständig: autônomo	1 2 3 4 5	1 2 3 4 5
52. vielseitig: versátil	1 2 3 4 5	1 2 3 4 5
53. willensstark: determinado	1 2 3 4 5	1 2 3 4 5
54. entschlußkräftig: decidido	1 2 3 4 5	1 2 3 4 5
55. frei: livre	1 2 3 4 5	1 2 3 4 5
56. glücklich: feliz	1 2 3 4 5	1 2 3 4 5
57. ausdauernd: persistente	1 2 3 4 5	1 2 3 4 5
58. ausgeglichen: equilibrado	1 2 3 4 5	1 2 3 4 5
59. entschlossen: decidido	1 2 3 4 5	1 2 3 4 5
60. entspannt: descontraído	1 2 3 4 5	1 2 3 4 5
61. flexibel: flexível	1 2 3 4 5	1 2 3 4 5
62. froh: contente	1 2 3 4 5	1 2 3 4 5
63. zufrieden: satisfeito	1 2 3 4 5	1 2 3 4 5
64. geschickt: hábil	1 2 3 4 5	1 2 3 4 5
65. gesund: saudável	1 2 3 4 5	1 2 3 4 5
66. intelligent: inteligente	1 2 3 4 5	1 2 3 4 5
67. klug: esperto	1 2 3 4 5	1 2 3 4 5
68. scharfsinnig: perspicaz	1 2 3 4 5	1 2 3 4 5
69. selbstbewußt: com boa auto-estima	1 2 3 4 5	1 2 3 4 5
70. selbstsicher: seguro de si	1 2 3 4 5	1 2 3 4 5
71. unbeschwert: despreocupado	1 2 3 4 5	1 2 3 4 5
72. abweisend: avesso (rejeitante)	1 2 3 4 5	1 2 3 4 5
73. aggressiv: agressivo	1 2 3 4 5	1 2 3 4 5
74. aufdringlich: chato	1 2 3 4 5	1 2 3 4 5
75. ausbeuterisch: explorador	1 2 3 4 5	1 2 3 4 5
76. beleidigend: ofensivo	1 2 3 4 5	1 2 3 4 5
77. betrügerisch: fraudulent	1 2 3 4 5	1 2 3 4 5
78. böseartig: perigoso	1 2 3 4 5	1 2 3 4 5
79. böse: mau	1 2 3 4 5	1 2 3 4 5
80. boshaft: perverso	1 2 3 4 5	1 2 3 4 5
81. böswillig: malévol	1 2 3 4 5	1 2 3 4 5

	Compatibilidade	Clareza
82. brutal: brutal	1 2 3 4 5	1 2 3 4 5
83. erbarmungslos: impiedoso	1 2 3 4 5	1 2 3 4 5
84. falsch: falso	1 2 3 4 5	1 2 3 4 5
85. feindselig: hostil	1 2 3 4 5	1 2 3 4 5
86. fies: desagradável	1 2 3 4 5	1 2 3 4 5
87. gehässig: cheio de ódio	1 2 3 4 5	1 2 3 4 5
88. nachtragend: rancoroso	1 2 3 4 5	1 2 3 4 5
89. geizig: avarento	1 2 3 4 5	1 2 3 4 5
90. gemein: malvado	1 2 3 4 5	1 2 3 4 5
91. gewalttätig: violento	1 2 3 4 5	1 2 3 4 5
92. grausam: cruel	1 2 3 4 5	1 2 3 4 5
93. heimtückisch: traiçoeiro	1 2 3 4 5	1 2 3 4 5
94. hinterhältig: traiçoeiro	1 2 3 4 5	1 2 3 4 5
95. herablassend: arrogante	1 2 3 4 5	1 2 3 4 5
96. heuchlerisch: hipócrita	1 2 3 4 5	1 2 3 4 5
97. intolerant: intolerante	1 2 3 4 5	1 2 3 4 5
98. jähzornig: colérico	1 2 3 4 5	1 2 3 4 5
99. rabiät: raivoso	1 2 3 4 5	1 2 3 4 5
100. herzlos: frio	1 2 3 4 5	1 2 3 4 5
101. kaltblütig: impassível	1 2 3 4 5	1 2 3 4 5
103. lügnerisch: mentiroso	1 2 3 4 5	1 2 3 4 5
104. verlogen: enganador	1 2 3 4 5	1 2 3 4 5
105. mißgünstig: invejoso	1 2 3 4 5	1 2 3 4 5
106. neidisch: invejoso	1 2 3 4 5	1 2 3 4 5
107. mitleidslos: impiedoso	1 2 3 4 5	1 2 3 4 5
108. unbarmherzig: impiedoso	1 2 3 4 5	1 2 3 4 5
109. niederträchtig: infame	1 2 3 4 5	1 2 3 4 5
111. rücksichtslos: sem consideração	1 2 3 4 5	1 2 3 4 5
112. sadistisch: sádico	1 2 3 4 5	1 2 3 4 5
113. skrupellos: inescrupuloso	1 2 3 4 5	1 2 3 4 5
114. gewissenlos: inescrupuloso	1 2 3 4 5	1 2 3 4 5
115. streitsüchtig: brigão	1 2 3 4 5	1 2 3 4 5
102. kriegerisch: briguento	1 2 3 4 5	1 2 3 4 5
116. unaufrichtig: dissimulado	1 2 3 4 5	1 2 3 4 5
117. unfair: injusto	1 2 3 4 5	1 2 3 4 5
118. ungerecht: incorreto	1 2 3 4 5	1 2 3 4 5

	Compatibilidade	Clareza
119. unfreundlich: antipático	1 2 3 4 5	1 2 3 4 5
120. unkollegial: individualista	1 2 3 4 5	1 2 3 4 5
121. unsozial: de caráter não social	1 2 3 4 5	1 2 3 4 5
122. unversöhnlich: irreconciliável	1 2 3 4 5	1 2 3 4 5
123. unzuverlässig: não confiável	1 2 3 4 5	1 2 3 4 5
124. verantwortungslos: irresponsável	1 2 3 4 5	1 2 3 4 5
125. egoistisch: egoísta	1 2 3 4 5	1 2 3 4 5
126. unehrlich: desonesto	1 2 3 4 5	1 2 3 4 5
127. kriminell: criminoso	1 2 3 4 5	1 2 3 4 5
128. treulos: desleal	1 2 3 4 5	1 2 3 4 5
129. unmenschlich: desumano	1 2 3 4 5	1 2 3 4 5
130. eingebildet: convencido	1 2 3 4 5	1 2 3 4 5
131. gierig: insaciável	1 2 3 4 5	1 2 3 4 5
132. habgierig: ganancioso	1 2 3 4 5	1 2 3 4 5
133. apathisch: apático	1 2 3 4 5	1 2 3 4 5
134. teilnahmslos: desinteressado	1 2 3 4 5	1 2 3 4 5
135. kontaktarm: não comunicativo	1 2 3 4 5	1 2 3 4 5
136. unbelehrbar: incorrigível	1 2 3 4 5	1 2 3 4 5
137. unfähig: incapaz	1 2 3 4 5	1 2 3 4 5
138. verkommen: decadente	1 2 3 4 5	1 2 3 4 5
139. abhängig: dependente	1 2 3 4 5	1 2 3 4 5
140. depressiv: depressivo	1 2 3 4 5	1 2 3 4 5
141. einseitig: unilateral	1 2 3 4 5	1 2 3 4 5
142. träge: devagar	1 2 3 4 5	1 2 3 4 5
143. lahm: letárgico	1 2 3 4 5	1 2 3 4 5
144. verbittert: amargurado	1 2 3 4 5	1 2 3 4 5
145. willenlos: sem vontade própria	1 2 3 4 5	1 2 3 4 5
146. ohnmächtig: impotente	1 2 3 4 5	1 2 3 4 5
147. unzufrieden: descontente	1 2 3 4 5	1 2 3 4 5
148. deprimiert: deprimido	1 2 3 4 5	1 2 3 4 5
149. einfallslos: inimaginativo	1 2 3 4 5	1 2 3 4 5
150. phantasielos: sem criatividade	1 2 3 4 5	1 2 3 4 5
151. einsam: solitário	1 2 3 4 5	1 2 3 4 5
152. entmutigt: desmotivado	1 2 3 4 5	1 2 3 4 5
153. feige: covarde	1 2 3 4 5	1 2 3 4 5
154. frustriert: frustrado	1 2 3 4 5	1 2 3 4 5

	Compatibilidade	Clareza
155. gelangweilt: entediado	1 2 3 4 5	1 2 3 4 5
156. lustlos: apático	1 2 3 4 5	1 2 3 4 5
157. unglücklich: infeliz	1 2 3 4 5	1 2 3 4 5
158. unselbständig: dependente	1 2 3 4 5	1 2 3 4 5
159. verzweifelt: desesperado	1 2 3 4 5	1 2 3 4 5
160. zwanghaft: impositivo	1 2 3 4 5	1 2 3 4 5
161. begeisternd: empolgante	1 2 3 4 5	1 2 3 4 5
162. geduldig: paciente	1 2 3 4 5	1 2 3 4 5
163. interessant: interessante	1 2 3 4 5	1 2 3 4 5
164. gefühlvoll: sentimental	1 2 3 4 5	1 2 3 4 5
165. empfindsam: sensível	1 2 3 4 5	1 2 3 4 5
166. humorvoll: bem-humorado	1 2 3 4 5	1 2 3 4 5
167. beliebt: estimado	1 2 3 4 5	1 2 3 4 5
168. natürlich: natural	1 2 3 4 5	1 2 3 4 5
169. gemütlich: tranquilo	1 2 3 4 5	1 2 3 4 5
170. verliebt: apaixonado	1 2 3 4 5	1 2 3 4 5
171. weise: sábio	1 2 3 4 5	1 2 3 4 5
172. reif: maduro	1 2 3 4 5	1 2 3 4 5
173. schön: bonito	1 2 3 4 5	1 2 3 4 5
174. autoritär: autoritário	1 2 3 4 5	1 2 3 4 5
175. herrisch: mandão	1 2 3 4 5	1 2 3 4 5
176. widerlich: asqueroso	1 2 3 4 5	1 2 3 4 5
177. bestechlich: subornável	1 2 3 4 5	1 2 3 4 5
178. eisig: gelado	1 2 3 4 5	1 2 3 4 5
179. ekelhaft: nojento	1 2 3 4 5	1 2 3 4 5
180. giftig: venenoso	1 2 3 4 5	1 2 3 4 5
181. fanatisch: fanático	1 2 3 4 5	1 2 3 4 5
182. verhasst: odiado	1 2 3 4 5	1 2 3 4 5
183. humorlos: sem senso de humor	1 2 3 4 5	1 2 3 4 5
184. unbeliebt: malquisto	1 2 3 4 5	1 2 3 4 5
185. leblos: morto	1 2 3 4 5	1 2 3 4 5
186. unkritisch: leviano	1 2 3 4 5	1 2 3 4 5

Sugestões: _____

APPENDIX E

Fichas de Avaliação de Agradabilidade e Relevância de Adjetivos

Participante Nº: _____

Anos de estudo: _____ anos

Se estudante, curso/Universidade: _____

Se graduado, profissão: _____

Idade: _____ anos

Sexo: () Masculino () Feminino

Muito obrigada por sua participação nesta pesquisa!

Trata-se de um estudo no qual diferentes palavras devem ser avaliadas. Para isso, essas palavras lhe serão apresentadas em sequência aleatória. Você então poderá dar o seu parecer em uma escala simples. Primeiramente, no entanto, você receberá instruções detalhadas.

Na primeira parte da pesquisa, nos interessa se as palavras despertam em você reações positivas ou negativas ou se elas descrevem contextos ou objetos positivos ou negativos. Por isso, pedimos a você para que avalie cada palavra relativamente à sua positividade vs. negatividade. Por favor, marque, na escala ao lado de cada palavra, o número que reflete melhor a sua avaliação.

- ⇒ se você avaliar uma palavra como positiva ou agradável, então marque um número à direita do meio da escala [1 a 3], tanto mais à direita quanto mais positivamente você avaliar a palavra.
- ⇒ se você avaliar uma palavra negativamente ou como desagradável, então por favor marque um número à esquerda do meio [-1 até -3], tanto mais à esquerda quanto mais negativamente você avaliar a palavra.
- ⇒ se você avaliar uma palavra como sendo nem positiva nem negativa, então marque o valor do meio [0].

Por favor, leve em conta, em suas avaliações, que não existem respostas corretas ou erradas, mas sim que nos interessa a sua reação pessoal. Por isso, também é relevante que, se possível, você faça a sua avaliação espontaneamente, sem refletir longamente...

Em caso de dúvidas, por favor, dirija-se à experimentadora.

Caso contrário, por favor, inicie a tarefa na página a seguir.

Itens	Muito negativo						Muito positivo
	- 3	- 2	- 1	0	1	2	3
1. cooperativo							
2. com consideração							
3. incorrigível							
4. incapaz							
5. decadente							
6. dependente							
7. depressivo							
8. preguiçoso							
9. letárgico							
10. amargurado							
11. sem vontade							
12. deprimido							
13. solidário							
14. sem criatividade							
15. solitário							
16. desencorajado							
17. covarde							
18. frustrado							
19. entediado							
20. apático							
21. infeliz							
22. empolgante							
23. paciente							
24. tolerante							
25. interessante							
26. sensível							
27. com senso de humor							
28. estimado							
29. natural							
30. bonachão							
31. sábio							
32. maduro							
33. bonito							
34. autoritário							
35. fiel							
36. mandão							
37. repulsivo							
38. subornável							
39. nojento							
40. venenoso							
41. fanático							
42. odiado							
43. sem senso de humor							
44. malquisto							
45. confiável							

Itens	Muito Negativo						Muito Positivo
	- 3	- 2	- 1	0	1	2	3
46. apagado							
47. sem senso crítico (acrítico)							
48. compreensivo							
49. bondoso							
50. humano							
51. generoso							
52. sincero							
53. solícito							
54. responsável							
55. carinhoso							
56. franco							
57. honesto							
58. agradável							
59. delicado							
60. adorável							
61. ativo							
62. alegre							
63. contente							
64. justo							
65. talentoso							
66. criativo							
67. vivaz							
68. otimista							
69. simpático							
70. independente							
71. autônomo							
72. determinado							
73. decidido							
74. livre							
75. hospitaleiro							
76. feliz							
77. persistente							
78. equilibrado							
79. descontraído							
80. flexível							
81. satisfeito							
82. hábil							
83. saudável							
84. inteligente							
85. camarada							
86. perspicaz							
87. com boa auto-estima							
88. autoconfiante							
89. despreocupado							
92. explorador							

Itens	Muito Negativo						Muito Positivo
	- 3	- 2	- 1	0	1	2	3
93. ofensivo							
94. trapaceiro							
95. maldoso							
96. querido							
97. mau							
98. malicioso							
99. perverso							
100. brutal							
101. dissimulado							
102. hostil							
103. rancoroso							
104. avarento							
105. malvado							
106. amoroso							
107. violento							
108. cruel							
109. traiçoeiro							
110. arrogante							
111. hipócrita							
112. intolerante							
113. colérico							
114. raivoso							
115. frio							
116. belicoso							
117. afetuoso							
118. mentiroso							
119. invejoso							
120. racista							
121. sem consideração							
122. sádico							
123. inescrupuloso							
124. brigão							
125. injusto							
126. compassivo (com compaixão)							
127. irreconciliável							
128. não confiável							
129. irresponsável							
130. egoísta							
131. desonesto							
132. criminoso							
133. infiel							
134. desumano							
135. ganancioso							
136. impiedoso							

Agora que você já avaliou as palavras segundo sua positividade ou negatividade, importa avaliar sua relevância. Nisto distinguimos entre RELEVÂNCIA-PARA-SI E RELEVÂNCIA-PARA-O-OUTRO. O tipo de relevância depende de qual perspectiva a positividade ou negatividade de uma característica é resultante: da perspectiva da pessoa, que possui uma determinada característica ou da perspectiva daquele que se relaciona com aquela pessoa.

Vamos esclarecer através de exemplos:

Uma característica é RELEVANTE-PARA-SI quando sua positividade ou negatividade direta atinge principalmente a pessoa que possui tal característica.

Assim, por exemplo, é claramente positivo, para uma pessoa, ser INTELIGENTE e claramente negativo ser DESESPERADA. Para alguém que tem contato com uma pessoa inteligente ou desesperada, o significado, entretanto, é ambíguo e dependente da situação. Por exemplo, pode ser positivo, para outros, o fato de alguém ajudar, através de sua inteligência, a alcançar um objetivo. Mas também pode ser negativo a pessoa utilizar a sua inteligência para prejudicar a outros. Igualmente, pode ser negativo ficar triste através do desespero de uma pessoa, mas também pode ser vivenciado como positivo ajudar esta pessoa a sair de seu desespero.

Uma característica é RELEVANTE-PARA-O-OUTRO quando sua positividade ou negatividade se refere diretamente a outras pessoas, que têm contato com alguém que possua essa característica.

Assim, é nitidamente positivo relacionar-se com uma pessoa SOLÍCITA e nitidamente negativo relacionar-se com uma pessoa AGRESSIVA. Para alguém que possua uma dessas características, no entanto, o significado é claro, mas dependente da situação. Pode ser positivo, por exemplo, quando nos é agradecido pela nossa solicitude, mas negativo quando há abuso de nossa solicitude. Também pode ser negativo, quando outros reagem negativamente à nossa agressividade, mas também pode ser positivo quando se atinge determinados objetivos para proveito próprio através da agressividade.

Agora todas as palavras lhe serão apresentadas mais uma vez. Sua tarefa é avaliar as palavras relativamente à sua relevância-para-si e relevância-para-o-outro. O mais simples é questionar-se, para cada palavra, se ela é positiva ou negativa. Assim lhe parecerá mais claro da perspectiva de quem essa avaliação provém.

Diante de palavras como INTELIGENTE e SOLÍCITO lhe parecerá bem fácil decidir que se tratam de palavras com significado positivo. Igualmente, palavras como DESESPERADO e AGRESSIVO estão nitidamente relacionadas a uma avaliação negativa. No entanto, chamará sua atenção o fato de que essas avaliações provêm de diferentes

perspectivas. A positividade de inteligência provém da perspectiva da pessoa inteligente. A positividade de solicitude provém principalmente da perspectiva de pessoas que se relacionam com pessoas solícitas. Igualmente, a negatividade de desespero provém da perspectiva da pessoa desesperada, enquanto que a negatividade de agressividade provém, principalmente, de pessoas que se relacionam com pessoas agressivas.

Por favor, esteja atento, nas avaliações, ao fato de que não existem respostas corretas ou erradas. Tente deixar sua primeira impressão decidir e marque, a cada vez, sobre o número que melhor reflete sua avaliação.

- ⇒ se você avaliar uma palavra como relevante-para-si, marque na coluna [Relevante-para-Si].
- ⇒ se você avaliar uma palavra como relevante-para-o-outro, marque na coluna [Relevante-para-o-Outro].
- ⇒ se você avaliar uma palavra como sendo nem relevante- para - si nem relevante-para-o-outro, então marque sobre[0].

Estamos cientes de que o conceito de relevância para si e para o outro não é usual. Se você não estiver 100% seguro do que se trata, dirija-se à examinadora e ela lhe explicará. Caso contrário, inicie a tarefa.

Itens	Relevante-para-Si	0	Relevante-para-o-Outro
1. cooperativo			
2. com consideração			
3. incorrigível			
4. incapaz			
5. decadente			
6. dependente			
7. depressivo			
8. preguiçoso			
9. letárgico			
10. amargurado			
11. sem vontade			
12. deprimido			
13. solidário			
14. sem criatividade			
15. solitário			
16. desencorajado			
17. covarde			
18. frustrado			
19. entediado			
20. apático			
21. infeliz			

	Relevante-para-Si	0	Relevante-para-o-Outro
22. empolgante			
23. paciente			
24. tolerante			
25. interessante			
26. sensível			
27. com senso de humor			
28. estimado			
29. natural			
30. bonachão			
31. sábio			
32. maduro			
33. bonito			
34. autoritário			
35. fiel			
36. mandão			
37. repulsivo			
38. subornável			
39. nojento			
40. venenoso			
41. fanático			
42. odiado			
43. sem senso de humor			
44. malquisto			
45. confiável			
46. apagado			
47. sem senso crítico (acrítico)			
48. compreensivo			
49. bondoso			
50. humano			
51. generoso			
52. sincero			
53. solícito			
54. responsável			
55. carinhoso			
56. franco			
57. honesto			
58. agradável			
59. delicado			
60. adorável			
61. ativo			
62. alegre			
63. contente			
64. justo			
65. talentoso			
66. criativo			

	Relevante-para-Si	0	Relevante-para-o-Outro
67. vivaz			
68. otimista			
69. simpático			
70. independente			
71. autônomo			
72. determinado			
73. decidido			
74. livre			
75. hospitaleiro			
76. feliz			
77. persistente			
78. equilibrado			
79. descontraído			
80. flexível			
81. satisfeito			
82. hábil			
83. saudável			
84. inteligente			
85. camarada			
86. perspicaz			
87. com boa auto-estima			
88. autoconfiante			
89. despreocupado			
90. agressivo			
91. insistente (chato)			
92. explorador			
93. ofensivo			
94. trapaceiro			
95. maldoso			
96. querido			
97. mau			
98. malicioso			
99. perverso			
100. brutal			
101. dissimulado			
102. hostil			
103. rancoroso			
104. avarento			
105. malvado			
106. amoroso			
107. violento			
108. cruel			
109. traiçoeiro			
110. arrogante			
111. hipócrita			

	Relevante-para-Si	0	Relevante-para-o-Outro
112. intolerante			
113. colérico			
114. raivoso			
115. frio			
116. belicoso			
117. afetuoso			
118. mentiroso			
119. invejoso			
120. racista			
121. sem consideração			
122. sádico			
123. inescrupuloso			
124. brigão			
125. injusto			
126. compassivo (com compaixão)			
127. irreconciliável			
128. não confiável			
129. irresponsável			
130. egoísta			
131. desonesto			
132. criminoso			
133. infiel			
134. desumano			
135. ganancioso			
136. impiedoso			

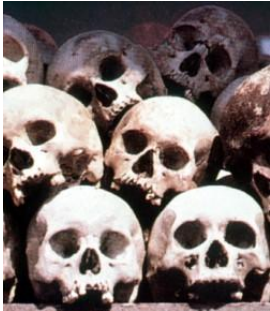
APPENDIX F

Political primes:



APPENDIX G

Standard negative and positive primes:



APPENDIX H

The target items and their pleasantness norm values^a

Negative		Positive	
Folter (torture)	1.07 (.05)	Lachen (laugh)	6.82 (.07)
Mord (murder)	1.18 (.06)	Liebe (love)	6.78 (.09)
Krieg (war)	1.22 (.10)	Sommer (summer)	6.64 (.07)
Unfall (accident)	1.47 (.13)	Frieden (peace)	6.62 (.11)
Hass (hate)	1.49 (.11)	Leben (life)	6.60 (.12)
Gewalt (violence)	1.56 (.11)	Sonne (sun)	6.58 (.10)
Gift (poison)	1.60 (.11)	Urlaub (vacation)	6.51 (.11)
Mean	1.37		6.65

^aaccording to Wentura (1998).

APPENDIX I






QUESTIONÁRIO SOBRE PREFERÊNCIAS POLÍTICAS

FRAGEBOGEN ZUR POLITISCHEN PRÄFERENZ






In dieser Untersuchung wollen wir etwas über die Meinung von Studenten bezüglich der großen politischen Parteien in Deutschland erfahren. Vor Ihnen liegt ein Fragebogen mit 6 Aussagen. Bitte geben Sie für jede Aussage an, wie sehr diese Aussage Ihrer persönlichen Meinung über jede Partei entspricht. Bitte machen Sie für jede Aussage und jede Partei eine Angabe und lassen Sie keine Aussage unbeantwortet. Benutzen Sie bitte die jeweils angegebene Skala (1–2–3–4–5) um das Ausmaß Ihrer Zustimmung bzw. Ablehnung zu der jeweiligen Aussage zu kennzeichnen. Wenn Sie der Aussage überhaupt nicht zustimmen, dann markieren Sie bitte die 1. Wenn Sie der Aussage voll und ganz zustimmen, dann markieren Sie bitte die 5. Geben Sie für *jede Partei* an, inwieweit Sie der Aussage zustimmen oder nicht. Versuchen Sie, Ihre Entscheidung spontan zu treffen und ohne lange darüber nachzudenken. Bitte beantworten Sie alle folgenden Fragen sorgfältig. Es gibt keine guten oder schlechten, richtigen oder falschen Antworten. Ihre Antworten bleiben völlig anonym. Zögern Sie deshalb nicht, die einzelnen Fragen ehrlich zu beantworten.

Vp-Nr

1 – 2 – 3 – 4 – 5
 Stimme gar nicht zu Stimme voll und ganz zu

					
1. Meine Gefühle bezüglich der Partei sind warm und positiv.	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5
2. Ich mag die Partei.	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5
3. Die Politiker der Partei sind kompetent.	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5
4. Von Ausnahmen abgesehen sind die Partei und ihre Politiker moralisch einwandfrei.	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5
5. Ich teile die Position der Partei in wichtigen Themen.	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5
6. Ich unterstütze die Politik der Partei.	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5	1-2-3-4-5

Welche Partei haben Sie bei der letzten Bundestagswahl gewählt?

					
Erststimme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zweitstimme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX J

Old negative primes:



Old Everyday Primes:



Young Primes:



APPENDIX K

Standard positive primes:



Standard Negative Primes:



APPENDIX L

DIFERENCIAL SEMÂNTICO (PORTUGUÊS E ALEMÃO)

Cada pessoa compartilha características específicas com membros de grupos sociais definidos (por exemplo, médicos compartilham certas características com outros médicos – trabalham em hospitais, usam branco, atendem pacientes, etc.). Por favor, indique a seguir que idéias você tem a respeito de como são pessoas idosas em geral (pessoas idosas, no Brasil, são aquelas com 60 anos ou mais).

Abaixo, você encontra 32 pares de características. Faça um X para cada par de características marcando na escala numérica aquele valor que melhor corresponde à sua avaliação.

Aqui você encontra um exemplo

corajoso	⑤ - ④ - ③ - ② - ① - ① - ② - ③ - ④ - ⑤	medroso
----------	---------------------------------------	---------

Quando você, por exemplo, achar que as pessoas idosas são corajosas, marque um X em um número à esquerda do zero. Marque um número mais à esquerda, quanto mais forte for a sua idéia de que os idosos são corajosos. Se, ao contrário, você achar que os idosos são medrosos, marque um X à direita do zero (faça o X mais à direita da escala, quanto mais você achar que os idosos são medrosos). Por favor, use os dois valores extremos da escala somente em casos extremos. Escolha o zero somente quando você estiver completamente indeciso quanto à questão.

Na segunda página, nós pediremos a você para dar a sua avaliação sobre pessoas jovens (neste caso, pessoas com 25 anos ou menos). Você vai encontrar os mesmos 32 pares de características. Faça um X para cada par de características marcando na escala numérica aquele valor que melhor corresponde à sua avaliação sobre pessoas jovens.

Assim são os idosos em geral ...

1	flexível	⑤-④-③-②-①-①-②-③-④-⑤	rígido
2	disperso	⑤-④-③-②-①-①-②-③-④-⑤	concentrado
3	enérgico	⑤-④-③-②-①-①-②-③-④-⑤	hesitante
4	paciente	⑤-④-③-②-①-①-②-③-④-⑤	impaciente
5	persuasivo	⑤-④-③-②-①-①-②-③-④-⑤	fraco, sem poder
6	mesquinho	⑤-④-③-②-①-①-②-③-④-⑤	generoso
7	medroso	⑤-④-③-②-①-①-②-③-④-⑤	corajoso
8	otimista	⑤-④-③-②-①-①-②-③-④-⑤	pessimista
9	inquieto	⑤-④-③-②-①-①-②-③-④-⑤	tranquilo
10	autoconfiante	⑤-④-③-②-①-①-②-③-④-⑤	inseguro
11	assertivo	⑤-④-③-②-①-①-②-③-④-⑤	indeciso
12	aventureiro, esportivo	⑤-④-③-②-①-①-②-③-④-⑤	inerte
13	esquecido	⑤-④-③-②-①-①-②-③-④-⑤	com boa memória
14	discreto	⑤-④-③-②-①-①-②-③-④-⑤	invasivo
15	insensato	⑤-④-③-②-①-①-②-③-④-⑤	sensato
16	compreensivo	⑤-④-③-②-①-①-②-③-④-⑤	incompreensivo
17	cauteloso	⑤-④-③-②-①-①-②-③-④-⑤	imprudente
18	experiente	⑤-④-③-②-①-①-②-③-④-⑤	ingênuo
19	ativo	⑤-④-③-②-①-①-②-③-④-⑤	apático
20	fraco, sem vida	⑤-④-③-②-①-①-②-③-④-⑤	cheio de energia
21	calmo	⑤-④-③-②-①-①-②-③-④-⑤	agitado
22	resistente, resiliente	⑤-④-③-②-①-①-②-③-④-⑤	não resistente (ao stress)
23	querido, amado	⑤-④-③-②-①-①-②-③-④-⑤	não amado
24	esperto, atento	⑤-④-③-②-①-①-②-③-④-⑤	devagar
25	frágil	⑤-④-③-②-①-①-②-③-④-⑤	robusto
26	maduro	⑤-④-③-②-①-①-②-③-④-⑤	imaturo
27	jovem	⑤-④-③-②-①-①-②-③-④-⑤	velho
28	solitário	⑤-④-③-②-①-①-②-③-④-⑤	integrado (socialmente)
29	doente	⑤-④-③-②-①-①-②-③-④-⑤	saudável
30	perspicaz	⑤-④-③-②-①-①-②-③-④-⑤	concreto (pensamento)
31	tolerante	⑤-④-③-②-①-①-②-③-④-⑤	severo, rigoroso
32	atraente	⑤-④-③-②-①-①-②-③-④-⑤	não atraente

Assim são os jovens em geral ...

1	flexível	⑤-④-③-②-①-①-②-③-④-⑤	rígido
2	disperso	⑤-④-③-②-①-①-②-③-④-⑤	concentrado
3	enérgico	⑤-④-③-②-①-①-②-③-④-⑤	hesitante
4	paciente	⑤-④-③-②-①-①-②-③-④-⑤	impaciente
5	persuasivo	⑤-④-③-②-①-①-②-③-④-⑤	fraco, sem poder
6	mesquinho	⑤-④-③-②-①-①-②-③-④-⑤	generoso
7	medroso	⑤-④-③-②-①-①-②-③-④-⑤	corajoso
8	otimista	⑤-④-③-②-①-①-②-③-④-⑤	pessimista
9	inquieto	⑤-④-③-②-①-①-②-③-④-⑤	tranquilo
10	autoconfiante	⑤-④-③-②-①-①-②-③-④-⑤	inseguro
11	assertivo	⑤-④-③-②-①-①-②-③-④-⑤	indeciso
12	aventureiro, esportivo	⑤-④-③-②-①-①-②-③-④-⑤	inerte
13	esquecido	⑤-④-③-②-①-①-②-③-④-⑤	com boa memória
14	discreto	⑤-④-③-②-①-①-②-③-④-⑤	invasivo
15	insensato	⑤-④-③-②-①-①-②-③-④-⑤	sensato
16	compreensivo	⑤-④-③-②-①-①-②-③-④-⑤	incompreensivo
17	cauteloso	⑤-④-③-②-①-①-②-③-④-⑤	imprudente
18	experiente	⑤-④-③-②-①-①-②-③-④-⑤	ingênuo
19	ativo	⑤-④-③-②-①-①-②-③-④-⑤	apático
20	fraco, sem vida	⑤-④-③-②-①-①-②-③-④-⑤	cheio de energia
21	calmo	⑤-④-③-②-①-①-②-③-④-⑤	agitado
22	resistente, resiliente	⑤-④-③-②-①-①-②-③-④-⑤	não resistente (ao stress)
23	querido, amado	⑤-④-③-②-①-①-②-③-④-⑤	não amado
24	esperto, atento	⑤-④-③-②-①-①-②-③-④-⑤	devagar
25	frágil	⑤-④-③-②-①-①-②-③-④-⑤	robusto
26	maduro	⑤-④-③-②-①-①-②-③-④-⑤	imaturo
27	jovem	⑤-④-③-②-①-①-②-③-④-⑤	velho
28	solitário	⑤-④-③-②-①-①-②-③-④-⑤	integrado (socialmente)
29	doente	⑤-④-③-②-①-①-②-③-④-⑤	saudável
30	perspicaz	⑤-④-③-②-①-①-②-③-④-⑤	concreto (pensamento)
31	tolerante	⑤-④-③-②-①-①-②-③-④-⑤	severo, rigoroso
32	atraente	⑤-④-③-②-①-①-②-③-④-⑤	não atraente

Jeder Mensch verbindet bestimmte Eigenschaften mit den typischen Mitgliedern bestimmter sozialer Gruppen. Bitte geben Sie im Folgenden an, wie Ihrer Meinung nach ältere Menschen im Allgemeinen sind (mit älteren Menschen soll hier etwa gemeint sein: Menschen im Alter von 70 Jahren und darüber).

Nachstehend finden Sie 36 Eigenschaftspaare. Kreuzen Sie für jede der vorgegebenen Eigenschaften den Wert auf der entsprechenden Zahlenreihe an, der Ihre Einschätzung am besten wiedergibt.

Hierzu ein Beispiel

mutig	⑤ - ④ - ③ - ② - ① - ① - ② - ③ - ④ - ⑤	ängstlich
-------	---------------------------------------	-----------

Wie Sie z.B. alte Menschen eher als **mutig** einschätzen, kreuzen Sie bitte eine Zahl links von der Null an, und zwar umso weiter links, je stärker ihrer Meinung nach diese Eigenschaft bei alten Menschen ausgeprägt ist. Wenn Sie alte Menschen im Gegenteil eher als **ängstlich** einschätzen, kreuzen Sie bitte eine Zahl rechts von der Null an. Bitte nutzen Sie die beiden **äußersten Punkte** der Skala nur in **extremen Fällen**. Wählen Sie die **Null** bitte nur, wenn Sie in der Frage ganz **unentschieden** sind.

Auf der zweiten Seite bitten wir Sie Ihre Einschätzung von jungen Menschen anzugeben (mit jungen Menschen soll hier gemeint sein: Menschen im Alter von 25 Jahren und darunter). Sie finden die gleichen 36 Eigenschaftspaare. Kreuzen Sie für jede der vorgegebenen Eigenschaften den Wert auf der entsprechenden Zahlenreihe an, der Ihre Einschätzung junger Menschen am besten wiedergibt.

So sind ältere Menschen im allgemeinen...

1	anpassungsfähig	⑤-④-③-②-①-①-②-③-④-⑤	starr, unflexibel
2	zerstreut	⑤-④-③-②-①-①-②-③-④-⑤	konzentriert
3	energisch	⑤-④-③-②-①-①-②-③-④-⑤	zögernd
4	geduldig	⑤-④-③-②-①-①-②-③-④-⑤	ungeduldig
5	einflussreich	⑤-④-③-②-①-①-②-③-④-⑤	machtlos
6	kleinlich, pedantisch	⑤-④-③-②-①-①-②-③-④-⑤	großzügig
7	ängstlich	⑤-④-③-②-①-①-②-③-④-⑤	mutig
8	optimistisch	⑤-④-③-②-①-①-②-③-④-⑤	pessimistisch
9	unruhig	⑤-④-③-②-①-①-②-③-④-⑤	ruhig
10	selbstsicher	⑤-④-③-②-①-①-②-③-④-⑤	unsicher
11	tatkräftig	⑤-④-③-②-①-①-②-③-④-⑤	unentschlossen
12	unternehmungslustig	⑤-④-③-②-①-①-②-③-④-⑤	träge
13	vergesslich	⑤-④-③-②-①-①-②-③-④-⑤	gedächtnisstark
14	zurückhaltend	⑤-④-③-②-①-①-②-③-④-⑤	aufdringlich
15	unvernünftig	⑤-④-③-②-①-①-②-③-④-⑤	vernünftig
16	verständnisvoll	⑤-④-③-②-①-①-②-③-④-⑤	verständnislos
17	vorsichtig	⑤-④-③-②-①-①-②-③-④-⑤	unvorsichtig
18	lebensklug, weise	⑤-④-③-②-①-①-②-③-④-⑤	naiv
19	zuversichtlich	⑤-④-③-②-①-①-②-③-④-⑤	verzagt
20	kraftlos, erschöpft	⑤-④-③-②-①-①-②-③-④-⑤	kraftvoll
21	gelassen	⑤-④-③-②-①-①-②-③-④-⑤	aufgeregt
22	belastbar	⑤-④-③-②-①-①-②-③-④-⑤	nicht belastbar
23	beliebt	⑤-④-③-②-①-①-②-③-④-⑤	unbeliebt
24	geistesgegenwärtig	⑤-④-③-②-①-①-②-③-④-⑤	langsam
25	gebrechlich	⑤-④-③-②-①-①-②-③-④-⑤	robust
26	reif	⑤-④-③-②-①-①-②-③-④-⑤	unreif
27	jugendlich, frisch	⑤-④-③-②-①-①-②-③-④-⑤	alt, verbraucht
28	einsam, abgesondert	⑤-④-③-②-①-①-②-③-④-⑤	integriert
29	hinfällig, krank	⑤-④-③-②-①-①-②-③-④-⑤	gesund
30	scharfsinnig	⑤-④-③-②-①-①-②-③-④-⑤	geistig unbeweglich
31	tolerant	⑤-④-③-②-①-①-②-③-④-⑤	streng
32	attraktiv, anziehend	⑤-④-③-②-①-①-②-③-④-⑤	unattraktiv

So sind junge Menschen im allgemeinen...

1	anpassungsfähig	⑤-④-③-②-①-①-②-③-④-⑤	starr, unflexibel
2	zerstreut	⑤-④-③-②-①-①-②-③-④-⑤	konzentriert
3	energisch	⑤-④-③-②-①-①-②-③-④-⑤	zögernd
4	geduldig	⑤-④-③-②-①-①-②-③-④-⑤	ungeduldig
5	einflussreich	⑤-④-③-②-①-①-②-③-④-⑤	machtlos
6	kleinlich, pedantisch	⑤-④-③-②-①-①-②-③-④-⑤	großzügig
7	ängstlich	⑤-④-③-②-①-①-②-③-④-⑤	mutig
8	optimistisch	⑤-④-③-②-①-①-②-③-④-⑤	pessimistisch
9	unruhig	⑤-④-③-②-①-①-②-③-④-⑤	ruhig
10	selbstsicher	⑤-④-③-②-①-①-②-③-④-⑤	unsicher
11	tatkräftig	⑤-④-③-②-①-①-②-③-④-⑤	unentschlossen
12	unternehmungslustig	⑤-④-③-②-①-①-②-③-④-⑤	träge
13	vergesslich	⑤-④-③-②-①-①-②-③-④-⑤	gedächtnisstark
14	zurückhaltend	⑤-④-③-②-①-①-②-③-④-⑤	aufdringlich
15	unvernünftig	⑤-④-③-②-①-①-②-③-④-⑤	vernünftig
16	verständnisvoll	⑤-④-③-②-①-①-②-③-④-⑤	verständnislos
17	vorsichtig	⑤-④-③-②-①-①-②-③-④-⑤	unvorsichtig
18	lebensklug, weise	⑤-④-③-②-①-①-②-③-④-⑤	naiv
19	zuversichtlich	⑤-④-③-②-①-①-②-③-④-⑤	verzagt
20	kraftlos, erschöpft	⑤-④-③-②-①-①-②-③-④-⑤	kraftvoll
21	gelassen	⑤-④-③-②-①-①-②-③-④-⑤	aufgeregt
22	belastbar	⑤-④-③-②-①-①-②-③-④-⑤	nicht belastbar
23	beliebt	⑤-④-③-②-①-①-②-③-④-⑤	unbeliebt
24	geistesgegenwärtig	⑤-④-③-②-①-①-②-③-④-⑤	langsam
25	gebrechlich	⑤-④-③-②-①-①-②-③-④-⑤	robust
26	reif	⑤-④-③-②-①-①-②-③-④-⑤	unreif
27	jugendlich, frisch	⑤-④-③-②-①-①-②-③-④-⑤	alt, verbraucht
28	einsam, abgesondert	⑤-④-③-②-①-①-②-③-④-⑤	integriert
29	hinfällig, krank	⑤-④-③-②-①-①-②-③-④-⑤	gesund
30	scharfsinnig	⑤-④-③-②-①-①-②-③-④-⑤	geistig unbeweglich
31	tolerant	⑤-④-③-②-①-①-②-③-④-⑤	streng
32	attraktiv, anziehend	⑤-④-③-②-①-①-②-③-④-⑤	unattraktiv

APPENDIX M

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SES-17

Instruções. A seguir, você encontra uma lista de frases. Leia, por favor, cada frase e determine se ela se aplica ou não a você. Caso a frase se aplique a você, faça um círculo em “*verdadeiro*”, caso contrário, em “*falso*”.

- | | | |
|--|------------|-------|
| 1. Às vezes, eu jogo lixo na rodovia ou na rua. | verdadeiro | falso |
| 2. Eu sempre admito abertamente meus erros e acato com resignação as eventuais conseqüências negativas. | verdadeiro | falso |
| 3. No trânsito, eu sou sempre educado e ajo com consideração em relação aos outros (pedestres, motoristas, ciclistas, etc.). | verdadeiro | falso |
| 4. Eu sempre aceito a opinião dos outros, mesmo quando não está de acordo com a minha. | verdadeiro | falso |
| 5. De vez em quando, eu descarrego minha raiva e meu mau humor em pessoas inocentes ou mais fracas. | verdadeiro | falso |
| 6. Já houve situações em que eu enganei ou tirei proveito de alguém. | verdadeiro | falso |
| 7. Em conversas, eu sempre escuto atentamente e deixo que os outros exponham totalmente o seu ponto de vista. | verdadeiro | falso |
| 8. Eu nunca hesito em ajudar alguém em caso de emergência. | verdadeiro | falso |
| 9. Quando eu faço uma promessa, eu a mantenho “sem mais nem porque”. | verdadeiro | falso |
| 10. Eu às vezes falo mal das pessoas pelas suas costas. | verdadeiro | falso |
| 11. Eu jamais viveria à custa da Sociedade. | verdadeiro | falso |
| 12. Eu sempre sou simpático e cortês com outras pessoas, mesmo quando estou estressado. | verdadeiro | falso |
| 13. Em uma discussão, sempre me mantenho direto e objetivo. | verdadeiro | falso |
| 14. Pelo menos uma vez eu não devolvi alguma coisa que me foi emprestada. | verdadeiro | falso |
| 15. Eu sempre me alimento de forma saudável. | verdadeiro | falso |
| 16. Às vezes eu só ajudo porque espero algo em retribuição. | verdadeiro | falso |

SES-17

Anleitung. Im Folgenden finden Sie eine Liste von Aussagen. Lesen Sie bitte jeden Satz und bestimmen Sie, ob die jeweilige Aussage auf Sie zutrifft oder nicht. Trifft sie zu, machen Sie bitte einen Kreis um „richtig“, ansonsten um „falsch“.

- | | | |
|--|---------|--------|
| 1. Manchmal werfe ich Müll einfach in die Landschaft oder auf die Straße. | richtig | falsch |
| 2. Eigene Fehler gebe ich stets offen zu und ertrage gelassen etwaige negative Konsequenzen. | richtig | falsch |
| 3. Im Straßenverkehr nehme ich stets Rücksicht auf die anderen Verkehrsteilnehmer. | richtig | falsch |
| 4. Ich akzeptiere alle anderen Meinungen, auch wenn sie mit meiner eigenen nicht übereinstimmen. | richtig | falsch |
| 5. Meine Wut oder schlechte Laune lasse ich hin und wiederan unschuldigen oder schwächeren Leuten aus. | richtig | falsch |
| 6. Ich habe schon einmal jemanden ausgenutzt oder übers Ohr gehauen. | richtig | falsch |
| 7. In einem Gespräch lasse ich den anderen stets ausreden und höre ihm aufmerksam zu. | richtig | falsch |
| 8. Ich zögere niemals, jemandem in einer Notlage beizustehen. | richtig | falsch |
| 9. Wenn ich etwas versprochen habe, halte ich es ohne Wenn und Aber. | richtig | falsch |
| 10. Ich lästere gelegentlich über andere hinter deren Rücken. | richtig | falsch |
| 11. Ich würde niemals auf Kosten der Allgemeinheit leben. | richtig | falsch |
| 12. Ich bleibe immer freundlich und zuvorkommend anderen Leuten gegenüber, auch wenn ich selbst gestresst bin. | richtig | falsch |
| 13. Im Streit bleibe ich stets sachlich und objektiv. | richtig | falsch |
| 14. Ich habe schon einmal geliehene Sachen nicht zurück gegeben. | richtig | falsch |
| 15. Ich ernähre mich stets gesund. | richtig | falsch |
| 16. Manchmal helfe ich nur, weil ich eine Gegenleistung erwarte. | richtig | falsch |

APPENDIX N

QUESTIONÁRIO DE RECONHECIMENTO DE PRIMES (PORTUGUÊS E ALEMÃO)

PTE N°:

Por favor, responda as seguintes perguntas! Assegure-se de que respondeu a todas as perguntas!

1. Na tarefa, que você acabou de fazer, algo aparecia muito rapidamente antes de cada palavra. Você conseguiu reconhecer alguma coisa disso que apareceu?
2. Se você conseguiu reconhecer alguma coisa destas que apareciam rapidamente, poderia dizer o que foi que reconheceu?
3. Você conseguiu reconhecer mais alguma coisa?
4. Você viu fotos?
5. De que fotos você se lembra?

Vp-Nr

Bitte beantworten Sie die folgenden Fragen! Stellen Sie sicher, dass Sie alle Fragen beantwortet...

1. In der Aufgabe, die Sie gerade gemacht haben, war vor jedem Zielreiz ein Geflacker zu sehen. Konnten Sie etwas in diesem Geflacker erkennen?
2. Wenn Sie etwas in diesem Geflacker erkennen konnten: Was konnten Sie erkennen?
3. Konnten Sie noch etwas erkennen?
4. Haben Sie Bilder gesehen?
5. Welche Bilder erinnern Sie?

APPENDIX O

Means and standard deviations of standard affective priming effects by country

	Country	<i>N</i>	<i>M</i>	<i>SD</i>
AP_ST	BR	37	6	22
	DE	37	1	20
	Total	74	3	21
AP_ST_P	BR	37	1	30
	DE	37	-5	37
	Total	74	-2	34
AP_ST_O	BR	37	12	38
	DE	37	8	29
	Total	74	10	34

Note. AP_ST: Standard priming effects. AP_ST_S: Standard priming effects for possessor-relevant targets. AP_ST_O: Standard priming effects for other-relevant targets.

APPENDIX P

Means and standard deviations of affective priming effects for the prejudice condition by country

	Country	<i>N</i>	<i>M</i>	<i>SD</i>
AP_ONO	BR	37	1	33
	DE	37	11	24
	Total	74	6	29
AP_ONP	BR	37	1	36
	DE	37	-6	28
	Total	74	-3	32
AP_OEO	BR	37	2	27
	DE	37	-2	29
	Total	74	-.25	28
AP_OEP	BR	37	-2	38
	DE	37	9	27
	Total	74	4	33

Note. AP_ONO: Priming effects for the old-negative condition and other-relevant targets. AP_ONP: Priming effects for the old-negative condition and possessor-relevant targets. AP_OEO: Priming effects for the old-everyday condition and other-relevant targets. AP_OEP: Priming effects for the old-everyday condition and possessor-relevant targets.

APPENDIX Q

Regression results predicting explicit prejudice from affective priming effects, amp effects and country

Independent variable	<i>B</i>	<i>SE</i>	<i>t</i> (73)	<i>p</i> <
AP_OEP	-.16	.20	-1.07	.29
Country	1.60	.15	5.53	.001
AP_OEP x Country	-.21	.31	-.68	.63
AP_OEO	.05	.14	.34	.73
Country	1.56	.29	5.39	.001
AP_OEO x Country	.14	.29	.47	.64
AP_ONP	.02	.17	.14	.88
Country	1.63	.27	5.94	.001
AP_ONP x Country	.65	.28	2.31	.05
AP_ONO	-.09	.14	-.63	.53
Country	1.58	.29	5.42	.001
AP_ONO x Country	.13	.31	.42	.67
Independent variable	<i>B</i>	<i>SE</i>	<i>t</i> (68)	<i>p</i> <
AMP_OE	.29	.14	2.03	.05
Country	1.55	.29	5.37	.001
AMP_OE x Country	-.03	.29	-.11	.91
AMP_ON	-.03	.16	-.19	.85
Country	1.51	.30	5.05	.001
AMP_ON x Country	.01	.32	.05	.96

Note. AP_ONO: Priming effects for the old-negative condition and other-relevant targets. AP_ONP: Priming effects for the old-negative condition and possessor-relevant targets. AP_OEO: Priming effects for the old-everyday condition and other-relevant targets. AP_OEP: Priming effects for the old-everyday condition and possessor-relevant targets. AMP_OE: AMP effect for the old-everyday condition. AMP_ON: AMP effect for the old-negative condition.

APPENDIX R

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO (ESTUDO 1)

- Pesquisadora responsável pela pesquisa: Sílvia Koller e Coordenadora da pesquisa: Maria Clara de Paula Couto

Você é convidado(a) a participar desta pesquisa, que visa a investigar como a sociedade brasileira vê as pessoas idosas. Participarão 120 brasileiros(as) com 18 anos ou mais. Ao participar deste estudo você deve permitir que um(a) pesquisador(a) deste grupo o(a) entreviste. As entrevistas podem ser realizadas pessoalmente em local determinado ou via internet (para os participantes com menos de 60 anos). É previsto um único contato com cada participante. Você tem a liberdade de se recusar a participar e pode se recusar a continuar participando em qualquer fase da pesquisa, sem qualquer prejuízo para você. No entanto, solicitamos sua colaboração em completar com atenção o roteiro de perguntas que lhe será solicitado. Sempre que quiser, poderá pedir mais informações sobre a pesquisa através do telefone (51) 33085150 (com Maria Clara de Paula Couto ou Sílvia Koller). Nas entrevistas, será pedido que você forneça algumas informações básicas e que responda a um roteiro de perguntas de múltipla escolha sobre alguns aspectos de sua vida. Para os participantes que necessitarem, será oferecido suporte psicológico (garantia de encaminhamento a serviços psicológicos).

A participação nesta pesquisa não traz complicações legais. Os procedimentos utilizados nesta pesquisa obedecem aos Critérios da Ética na Pesquisa com Seres Humanos conforme a Resolução nº 196/96 do Conselho Nacional de Saúde. Nenhum dos procedimentos utilizados oferece riscos à sua dignidade. Apenas os membros do grupo de pesquisa terão conhecimento dos dados individuais (de cada participante). Sempre que houver divulgação dos resultados (em publicações, palestras, etc.) esta será realizada de maneira coletiva. Todo material desta pesquisa ficará sob responsabilidade das coordenadoras do projeto e será armazenado durante cinco anos no centro de pesquisas/ CEP-Rua que fica na Universidade Federal do Rio Grande do Sul.

Ao participar desta pesquisa você não deverá ter nenhum benefício direto. Entretanto, esperamos que este estudo traga informações importantes sobre as questões relativas às vivências de pessoas brasileiras com mais de 60 anos. No futuro, essas informações poderão ser usadas em benefício de outras pessoas. Você não terá nenhum tipo de despesa por participar desta pesquisa, bem como nada será pago por sua participação. Este projeto de pesquisa foi submetido à avaliação do Comitê de Ética em Pesquisa do Instituto de Psicologia da UFRGS, tel: 33085441.

Após estes esclarecimentos, solicitamos o seu consentimento para participar desta pesquisa. Portanto, preencha os itens que seguem: Tendo em vista os itens acima apresentados, eu declaro, de forma livre e esclarecida, que fui informado/a dos objetivos e procedimentos desta pesquisa e manifesto meu interesse em participar da mesma.

Porto Alegre, ____/____/____

Assinatura do participante da pesquisa

APPENDIX S

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO (ESTUDO 2)

- Pesquisadora responsável pela pesquisa: Sílvia H. Koller
Coordenadora da pesquisa: Maria Clara de Paula Couto

Muito obrigada pela participação nesta pesquisa. Você é convidado(a) a participar de uma tarefa em que terá de classificar uma lista de adjetivos. Participarão 385 brasileiros(as) com 18 anos ou mais e com mais de 11 anos de estudo.

Ao participar desta investigação você deve concordar em realizar a avaliação da lista de adjetivos que lhe será entregue. A tarefa será aplicada por um(a) pesquisador(a) deste grupo e será realizada pessoalmente em local determinado. É previsto um único contato com cada participante. Você tem a liberdade de se recusar a participar e pode se recusar a continuar participando em qualquer fase da pesquisa, sem qualquer prejuízo para você. Sempre que quiser, poderá pedir mais informações através do telefone (51) 33085150 (com Maria Clara de Paula Couto ou Sílvia H. Koller).

A sua participação não traz complicações legais. Os procedimentos utilizados nesta pesquisa obedecem aos Critérios da Ética na Pesquisa com Seres Humanos conforme a Resolução nº 196/96 do Conselho Nacional de Saúde. Nenhum dos procedimentos utilizados oferece riscos à sua dignidade. Apenas os membros do grupo de pesquisa terão conhecimento dos dados individuais (de cada participante). Sempre que houver divulgação dos resultados (em publicações, palestras, etc.) esta será realizada de maneira coletiva. Todo material desta pesquisa ficará sob responsabilidade das coordenadoras do projeto e será armazenado durante cinco anos no centro de pesquisas/ CEP-Rua que fica na Universidade Federal do Rio Grande do Sul.

Ao participar desta pesquisa você não deverá ter nenhum benefício direto. Você não terá nenhum tipo de despesa por participar desta pesquisa, bem como nada será pago por sua participação. Este projeto foi submetido à avaliação do Comitê de Ética em Pesquisa do Instituto de Psicologia da UFRGS, tel: 33085441.

Após estes esclarecimentos, solicitamos o seu consentimento para participar desta pesquisa. Portanto, preencha os itens que seguem: Tendo em vista os itens acima apresentados, eu declaro, de forma livre e esclarecida, que fui informado/a dos objetivos e procedimentos desta pesquisa e manifesto meu interesse em participar da mesma.

Porto Alegre, ____/____/____

Assinatura do participante da pesquisa

APPENDIX T

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO (ESTUDO 4, Brasil)

- Pesquisadora responsável pela pesquisa: Sílvia Koller e Coordenadora da pesquisa: Maria Clara de Paula Couto

Você é convidado(a) a participar desta pesquisa, que visa a investigar o processamento de fotos e de palavras. Participarão 50 brasileiros/as com 18 anos ou mais. Ao participar deste estudo você concorda em realizar a tarefa prevista a qual será realizada individualmente, em laboratório, com o auxílio de um(a) pesquisador(a) deste grupo. A tarefa inclui duas atividades no computador e dois questionários. É previsto um único contato com cada participante. Você tem a liberdade de se recusar a participar e pode se recusar a continuar participando em qualquer fase da pesquisa, sem qualquer prejuízo para você. No entanto, solicitamos sua colaboração em completar com atenção a tarefa que lhe será solicitada. Sempre que quiser, poderá pedir mais informações sobre a pesquisa através do telefone (51) 33085150 (com Maria Clara de Paula Couto ou Sílvia Koller). Para os participantes que necessitarem, será oferecido suporte psicológico (garantia de encaminhamento a serviços psicológicos).

A participação nesta pesquisa não traz complicações legais. Os procedimentos utilizados nesta pesquisa obedecem aos Critérios da Ética na Pesquisa com Seres Humanos conforme a Resolução nº 196/96 do Conselho Nacional de Saúde. Nenhum dos procedimentos utilizados oferece riscos à sua dignidade. Apenas os membros do grupo de pesquisa terão conhecimento dos dados individuais (de cada participante). Sempre que houver divulgação dos resultados (em publicações, palestras, etc.) esta será realizada de maneira coletiva. Todo material desta pesquisa ficará sob responsabilidade das coordenadoras do projeto e será armazenado durante cinco anos no centro de pesquisas/ CEP-Rua que fica na Universidade Federal do Rio Grande do Sul.

Ao participar desta pesquisa você não deverá ter nenhum benefício direto. Entretanto, esperamos que este estudo traga informações importantes que possam contribuir científica e socialmente. No futuro, essas informações poderão ser usadas em benefício de outras pessoas. Você não terá nenhum tipo de despesa por participar desta pesquisa, bem como nada será pago por sua participação. Este projeto de pesquisa foi submetido à avaliação do Comitê de Ética em Pesquisa do Instituto de Psicologia da UFRGS, tel: 33085441.

Após estes esclarecimentos, solicitamos o seu consentimento para participar desta pesquisa. Portanto, preencha os itens que seguem: Tendo em vista os itens acima apresentados, eu declaro, de forma livre e esclarecida, que fui informado/a dos objetivos e procedimentos desta pesquisa e manifesto meu interesse em participar da mesma.

Porto Alegre, ____/____/____

Assinatura do participante da pesquisa

