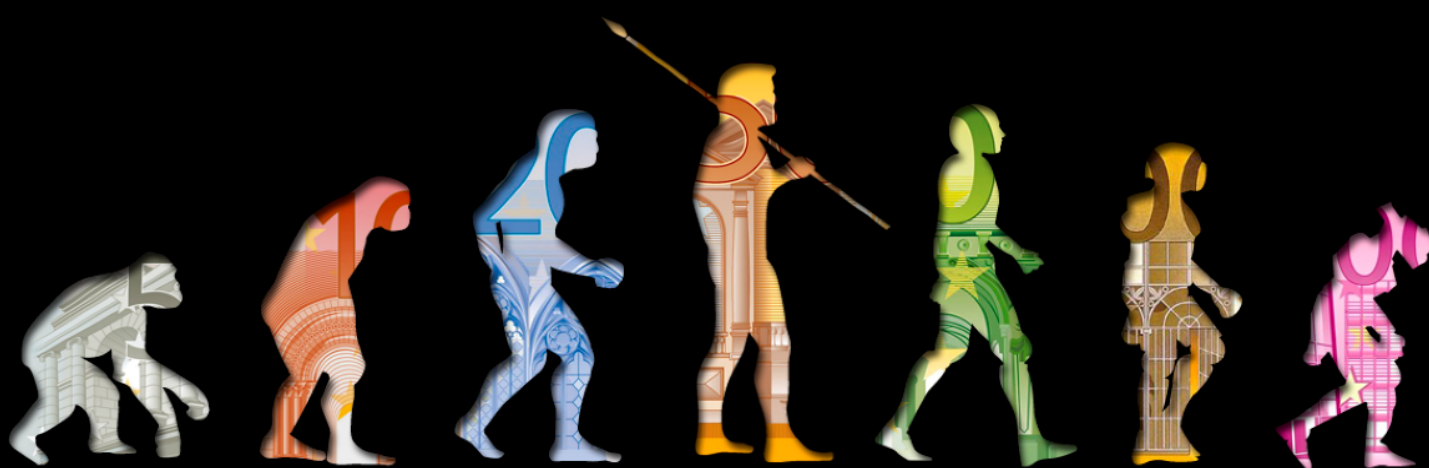# CONSEQUENCES OF ANIMALIZING THE POOR AND MECHANIZING THE WEALTHY IN THE MAINTENANCE OF SOCIOECONOMIC DIFFERENCES

CONSECUENCIAS DE LA ANIMALIZACIÓN DE LOS POBRES Y LA MECANIZACIÓN DE LOS RICOS EN EL MANTENIMIENTO DE LAS DIFERENCIAS SOCIOECONÓMICAS

Doctorado en Psicología

MARIO SAINZ MARTÍNEZ

UNIVERSIDAD DE GRANADA

Tesis Doctoral

Consecuencias de la Animalización de los Pobres y la Mecanización de los Ricos en el Mantenimiento de las Diferencias Socioeconómicas

Consequences of Animalizing the Poor and Mechanizing the Wealthy in the Maintenance of Socioeconomic Differences
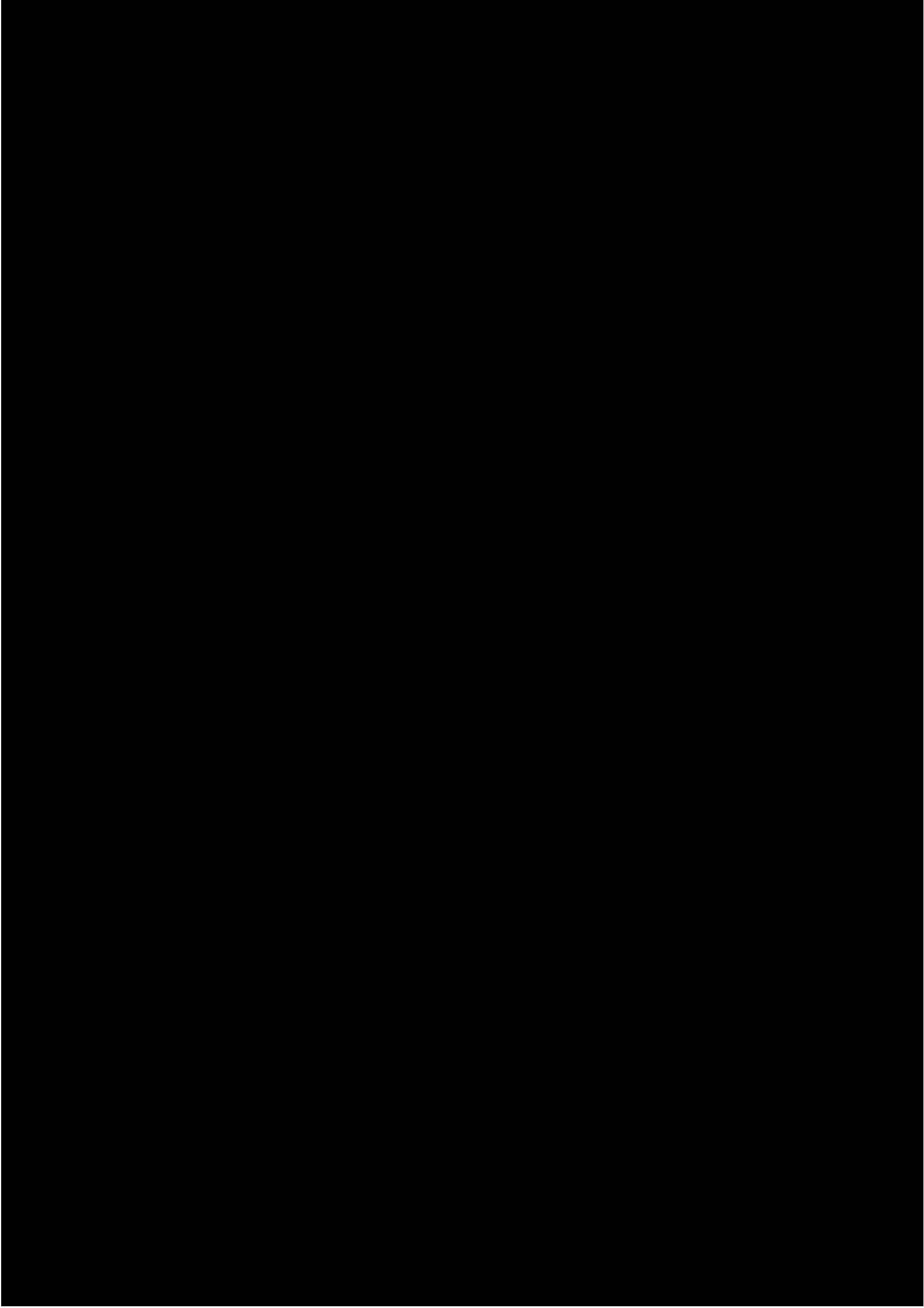
Mario Sainz Martínez

Directores

Rosa Rodríguez-Bailón

Miguel C. Moya Morales

UNIVERSIDAD DE GRANADA

Granada, Mayo 2018

Universidad de Granada
Programa de Doctorado en Psicología
Centro de Investigación, Mente, Cerebro, y Comportamiento (CIMCyC)
Departamento de Psicología Social
Facultad de Psicología

El doctorando Mario Sainz Martínez, la directora Rosa Rodríguez-Bailón y el director Miguel C. Moya Morales garantizamos al firmar esta tesis doctoral, que el trabajo ha sido realizado por el doctorando bajo la supervisión de los directores de la tesis y hasta donde nuestro conocimiento alcanza, en la realización del trabajo se han respetado los derechos de otros autores a ser citados, cuando se han utilizado sus resultados o publicaciones.

Granada, Mayo de 2018

Directores de la Tesis   **Doctorando**

Fdo.: Rosa Rodríguez-Bailón.

Fdo.: Miguel C. Moya Morales   Fdo.: Mario Sainz Martínez

"Demonizing people at the bottom has been a convenient way of justifying an unequal society throughout the ages"

Jones, O. (2011). *Chavs: The demonization of the working class,* UK: Verso.

"Alpha children wear grey. They work much harder than we do, because they're so frightfully clever. I'm awfully glad I'm a Beta, because I don't work so hard. And then we are much better than the Gammas and Deltas. Gammas are stupid. They all wear green, and Delta children wear khaki. Oh no, I don't want to play with Delta children. And Epsilons are still worse. They're too stupid to be able to read or write. Besides they wear black, which is such a beastly color. I'm so glad I'm a Beta"

Huxley, A. (1998). *Brave New World*, UK: Harper Perennial.

"There's class warfare, all right," Mr. Buffett said, *"but it's my class, the rich class, that's making war, and we're winning"*

Stein, B. (2006, November 26). In Class Warfare, Guess Which Class Is Winning. *The New York Times.*

Acknowledgments

Agradecimientos

Recuerdo que comencé a escribir estas líneas en Rovereto. En esos momentos me encontraba inmerso en un mar de correcciones, experimentos y preparaciones que darían paso a una nueva etapa. El inicio de nuevos proyectos siempre ilusiona, pero cerrar un capítulo de tu vida nunca resulta fácil. Dicha situación se complica todavía más cuando al mirar hacia atrás encuentras a las personas y los buenos momentos que han estado presentes a lo largo de estos años. Por ello, quiero darles mis más sinceros agradecimientos a todas y cada una de estas personas que me han permitido crecer a nivel personal y profesional:

En primer lugar, a mis padres por darlo todo por mi bienestar. La mejor forma de compensaros por ayudarme a llegar hasta aquí es seguir vuestro ejemplo personal e intentar algún día ser tan buen padre como vosotros lo habéis sido conmigo.

En segundo lugar, quiero agradecer a mi otra familia. La que nos encontramos por el camino. Y como no podía ser de otra forma, mi más sincero agradecimiento recae en mis directores/as: Miguel, Rocío y Rosa. No solo por formarme como investigador durante estos años, sino por vuestro compromiso, paciencia y dedicación conmigo.

Miguel, quiero darte las gracias por estos años. Por tu admirable capacidad de integrar y ver la salida a los problemas cuando el resto estábamos perdidos/as. Pero sobre todo por enseñarnos, no solamente a mí sino a todas las personas dentro de la Academia, que se puede ser un gran referente dentro de una disciplina y a la vez ser una persona cercana. Tu actitud como persona e investigador es, inequívocamente, un ejemplo de lo que me gustaría llegar a ser algún día.

A Rocío, ¡qué te voy a decir que no sepas ya Martínez! Desde la clase de deshumanización en el Máster (en la que casi nos haces llorar a todos de pena) y nuestra primera charla en la "happy" sobre deshumanización, pasando por todos los momentos buenos (y no tan buenos) de estos años, siempre has estado ahí cuando te he necesitado. Por estar, no solo como tutora sino también como amiga junto a mí a lo largo de estos años, ¡gracias! Pero también por sentirte orgullosa de mi camino, por hacerme sentir orgulloso de lo que hago y por la pasión que trasmites en todo lo que haces. Mil gracias.

Rosa. Nunca olvidaré el congreso de Sevilla, no por ser mi primera presentación en un congreso, sino por las horas de carretera que hiciste para poder venir a verme. Por confiar más en mi capacidad que yo mismo. Por ser la persona que, desde el principio,

más ha apostado por esta tesis y por el esfuerzo inconmensurable que has realizado para que hoy pueda llegar hasta aquí (¡te confieso que en el laboratorio me dicen que soy el ojito derecho de Rosa!). Pero también por ser un gran referente como investigadora y un ejemplo a seguir como directora. No puedo estar más agradecido. Gracias a ti he crecido como investigador y como persona. Espero poder contar con tu consejo y seguir aprendiendo de ti en la nueva etapa que estoy por comenzar.

En fin, a los tres, porque la elección de los directores/as es una de las decisiones más importantes que se toman en una tesis doctoral y, sin lugar a dudas, la mía fue acertada. Finalmente, me gustaría agradecer el esfuerzo económico que habéis realizado desde los proyectos de investigación para ayudarme a llegar hasta aquí. Se agradece enormemente que apostéis y cuidéis de la gente que tiene la motivación necesaria, pero quizás no los recursos, para poder dedicarse a esto y hacer posible que cumplan sus sueños.

I would also like to mention all the international people that I have come across over these years. Firstly, I want to thank the professors that kindly welcomed me into their respective universities:

To Steve Loughnan, with whom I did my first international stay, I am deeply grateful. I will always remember the day I first met you, and the wonderful months I spent working in Scotland. For your patience, your advice, and your support when I was just starting to take the first steps into the field, thank you so much.

I also appreciate the support of Robbie Sutton when I was in Canterbury. I want to thank you for your closeness, your gentleness, and the way of looking at research you taught me.

Finally, I would like to express my gratitude to Jeroen Vaes, with whom I have recently had the pleasure to work in the beautiful Rovereto. It is a pleasure to remember the period of time that I spent in Italy. I really appreciate the knowledge about dehumanization that I acquired from your vast experience, but I also thank you for sharing your time, your family, and even your *"trekking"* energy during the time I was there.

I hope to continue working with you all.

In addition, I have a few words for my friends and professors from the Summer School. An event that initially terrified me became one of the most beautiful experiences that I have had during my short career due to your closeness. For the moments we spent on Exeter, I am truly grateful to Professors Manuela Barreto, Paola Paladino, and Teri

Kirby, but also to many of the students that I now can count among my friends. All my gratitude to Alba, Antonella, Bengianni, Cristina, Federica, Julia, Sarah, and Tessa, among others.

Asimismo, me gustaría agradecer no solo a los profesores/as con los que he trabajado a lo largo de la tesis, sino a todos/as los/las docentes que me han motivado en los diferentes momentos de mi vida como Marian y María Soledad, pero también a los/las que me desalentaron, porque gracias a ambos estoy aquí.

Gracias a Ángel, Javi, Moldes y Roberto (¡qué paciencia has tenido Rober!) por compartir estos años de formación juntos. Al resto de personas del CIMCYC, los/las compañeros/as del laboratorio y a todos/as los/as miembros del grupo de investigación HUM-289 que, día a día, han formado una red de apoyo que me ha sostenido a lo largo de estos años. ¡Muchas gracias!

A Héctor, Alejandro, Raquel, Urko, Sara, Vicente, Daniel, Louisa y a otras muchas personas que fuera de la Universidad me han enseñado mucho de lo que hoy en día sé y con los que he compartido tantas cosas, estoy enormemente agradecido.

Y como no, a Cristina por todos estos años. Por acompañarme en los momentos buenos y malos, por aguantar las distancias y las múltiples estancias. Por ilusionarte con mis éxitos y animarme cuando hacía falta. GRACIAS.

In addition, thanks also to all the members of the committee and the external reviewers who kindly agreed to review this dissertation.

Desde que me embarqué en esta aventura no he parado de dar vueltas. Si bien escribí las primeras líneas de estos agradecimientos en Italia, escribo las últimas desde otro continente, desde otro país, desde una nueva Universidad. Los cambios son duros pero su impacto se aminora cuando encuentras gente en la que apoyarte. A todos/as mis nuevos/as compañeros/as en México, gracias por acogerme con los brazos abiertos (¡y a Guille por recomendarme!). Finalmente, a mi alumnado en la UDEM, gracias por permitirme aprender con vosotros/as.

En definitiva, a todas y cada una de las personas que a lo largo de estos años han hecho posible, con su ayuda y su consejo, que me pueda dedicar a hacer lo que realmente me gusta.

Sinceramente, muchas gracias

Mario Sainz Martínez

Table of Contents

Índice de contenidos

Chapter 0

Overview

Humanness and dehumanization are important features in intergroup relations (for reviews, see Haslam & Loughnan, 2014; Vaes, Leyens, Paladino, & Miranda, 2012). Dehumanization can be defined as the act of perceiving or treating a person or a group as if they are not fully human beings (Haslam & Stratemeyer, 2016). Based on the dual model of dehumanization (Haslam, 2006), two forms of dehumanization have been proposed: animalistic (i.e., denial of *Human Uniqueness* traits) and mechanistic (i.e., denial of *Human Nature* traits) dehumanization. Previous empirical evidence concluded that both forms of dehumanization have a negative impact on people's lives, and serve to maintain and promote inequalities based on social categories such as race, ethnicity, or gender.

In this doctoral dissertation, we focused on one form of inequality that deeply affects people's well-being: the increasing income gap between low and high socioeconomic-status (SES) groups. Specifically, the aim of the dissertation was to explore the consequences of (de)humanization on the socioeconomic hierarchy by analyzing how this process might influence the maintenance of the income gap. In order to do so, we approached this task by firstly analyzing whether low and high-SES groups are dehumanized, and then exploring its consequences in the maintenance of socioeconomic differences.

This doctoral dissertation is organized into five chapters. The first chapter discusses the dehumanization theory and its relationship with factors such as SES and income inequality. Chapters two through four report the empirical evidence, as follows:

In the second chapter, we present a series of studies in which we identified the animalistic and mechanistic dehumanization of both low and high-SES groups using

different methodologies. Additionally, we included two studies that allowed us to understand the relationship between the (de)humanization of a disadvantaged and an advantaged group, as well as the interpretation of the economic conflict inside the European Union after the Greek referendum in 2015. This chapter provides empirical evidence that shows how groups at both extremes of the socioeconomic ladder are dehumanized, and how this dehumanization seems to be related to the understanding of the economic conflict.

In the third chapter, we analyze the link between animalizing (vs. humanizing low SES groups in terms of *Human Uniqueness* traits) and the support for social policies through two mechanisms: the use of internal attributions to explain poverty and the perception of low-SES groups as wasting their income on unnecessary items. This empirical chapter allowed us to understand how animalizing vs. humanizing groups at the bottom of the socioeconomic hierarchy influences the maintenance of their unfavorable position.

In chapter four, we focus on analyzing the consequences of mechanizing (vs. humanizing in terms of *Human Nature* traits) high-SES groups in relation to the justification of their advantageous position and the support for equality-based policies (i.e., income redistribution, progressive taxation). Results from this chapter showed a negative effect of humanizing high-SES groups. When humanizing high-SES groups, participants rejected equality-based policies ascribing wealth to fairly and internally caused factors (e.g., ambition or personal effort). This finding highlighted the undesirable effect of humanizing high-SES groups on the maintenance of the status quo.

Finally, in chapter five, we discuss the implications of our findings on the maintenance of economic inequality. Additionally, we point out some future studies and

possible practical interventions. It should be noted that the empirical chapters were written as individual papers with the intention of being submitted for publication. Therefore, we understand that readers may find some redundancy in the arguments we have made across this doctoral dissertation.

La percepción de humanidad y la deshumanización de los grupos son procesos importantes en las relaciones intergrupales (para una revisión ver Haslam y Loughnan, 2014; Vaes, Leyens, Paladino y Miranda, 2012). La deshumanización se define como el acto de percibir o tratar a una persona o grupo como si no fuera completamente humano (Haslam y Stratemeyer, 2016). De acuerdo al modelo de las dos formas de deshumanización de Haslam (2006), una persona o grupo deshumanizado será percibido bien como animal (i.e., animalización, a través de la negación de los rasgos *Únicamente Humanos*) o bien como máquina (i.e., mecanización, a través de la negación de los rasgos propios de la *Naturaleza Humana*). En los últimos años, la evidencia empírica en este campo ha permitido concluir que ambas formas de deshumanización tienen un impacto negativo en la vida de las personas y sirven para mantener y promover desigualdades basadas en categorías sociales como la raza, la etnia o el género.

En esta tesis doctoral, nos centramos en un tipo de desigualdad que afecta profundamente al bienestar de las personas: la creciente brecha económica entre los grupos con un estatus-socioeconómico (ESE) bajo y alto. Específicamente, el objetivo de este trabajo fue explorar las consecuencias de la (des)humanización en la jerarquía basada en el nivel socioeconómico de los individuos, esto es, analizar cómo la deshumanización puede influir en el mantenimiento de la brecha económica. Para llevar a cabo este propósito, nuestro enfoque ha sido analizar, en primer lugar, si los grupos de bajo y alto-ESE son deshumanizados y, en segundo lugar, explorar las consecuencias de la deshumanización en el mantenimiento de las diferencias socioeconómicas.

La presente tesis doctoral está organizada en cinco capítulos. En el primero se expone la teoría sobre la deshumanización y su relación con el ESE y la desigualdad de

ingresos. En los capítulos del dos al cuatro se reportan los estudios empíricos llevados a cabo:

En el segundo capítulo presentamos una serie de estudios en los que identificamos la animalización y la mecanización de los grupos con bajo y alto-ESE, respectivamente, mediante el uso de diferentes metodologías. Además, incluimos dos estudios que nos permitieron analizar la relación entre la (des)humanización de los grupos desaventajados y aventajados, y la interpretación del conflicto económico dentro de la Unión Europea después del referéndum griego de 2015. Este capítulo nos proporcionó evidencias empíricas que muestran cómo los grupos en los extremos de la jerarquía socioeconómica son deshumanizados y cómo esa deshumanización parece estar relacionada con la interpretación del conflicto económico.

En el tercer capítulo, analizamos el vínculo entre la animalización de grupos de bajo-ESE (frente a la humanización a través de los rasgos *Únicamente Humanos*) y el apoyo a las políticas sociales/redistributivas a través de dos mecanismos: el uso de atribuciones internas para explicar la pobreza y la percepción de los grupos de bajo-ESE como derrochadores de sus ingresos. Estos resultados nos permitieron comprender cómo animalizar vs. humanizar a los grupos que se encuentran en la parte inferior de la jerarquía socioeconómica influye en la justificación de la posición desfavorecida de dichos grupos.

En el capítulo cuatro, nos enfocamos en analizar las consecuencias de mecanizar (vs. humanizar utilizando los rasgos de la *Naturaleza Humana*) a los grupos de alto-ESE, en relación con la justificación de la posición aventajada de los grupos y el apoyo a políticas basadas en la igualdad (es decir, redistribución de ingresos e impuestos progresivos). Los resultados de este capítulo mostraron un efecto negativo de la humanización de los grupos de alto-ESE. La humanización de grupos de alto ESE contribuye al rechazo de políticas

que promueven la igualdad al considerar la riqueza como justa y adquirida a través del esfuerzo personal y la ambición de los grupos con alto-ESE. Este hallazgo nos permitió identificar un efecto desfavorable de la humanización de los grupos de alto-SES en el mantenimiento del *statu quo*.

Finalmente, en el capítulo 5 discutimos las implicaciones de nuestros resultados en relación al mantenimiento de la desigualdad económica. Asimismo, sugerimos algunos estudios futuros y las posibles intervenciones prácticas que se derivan de nuestros resultados. Cabe señalar que los capítulos empíricos se escribieron como documentos individuales con la intención de ser enviados para su publicación de manera independiente. Por lo tanto, entendemos que los lectores pueden encontrar cierta redundancia en los argumentos que hemos utilizado a lo largo del presente trabajo.

Chapter

Theoretical Introduction

1

Socioeconomic Differences and Maintaining the Unequal Status Quo

Rates of global income inequality are increasing in many countries around the world (Stiglitz, 2016). Meanwhile, a small percentage of the global population (1%) has increased their wealth from 16% to 22% of the world's total wealth in the last decades, the total income of the vast majority of the world population (50%) has remained stable at around 9% of the world's total wealth (World Inequality Report, 2018). This implies that there is a substantial amount of individuals and families under the poverty line (i.e., half the median household income of the total population) that are not able to meet their basic needs (e.g., keeping their houses warm or buying enough food to live; OECD, 2017). Additionally, poverty rates are closely tied to wealth being gathered in the hands of a few. Current data shows that, at a global level, 62 individuals own the same amount of wealth as 3.6 billion people around the world (Oxfam International, 2016).

Given the increasing rates of income inequality, some scholars have started to pay attention to the way inequality affects people's lives (Ansell, 2017). For instance, previous research has shown the negative impact of income inequality on health conditions (such as lower life expectancy, higher rates of obesity, or increasing rates of mental illness; Burns, Tomita, & Kapadia, 2013; Messias, Eaton, & Grooms, 2011; Pickett, Kelly, Brunner, Lobstein, & Wilkinson, 2005; Pickett & Wilkinson, 2015); on different social indicators (lower levels of trust, higher crime rates, or greater rates of educational failure; Elgar & Aitken, 2011; Pickett & Vanderbloemen, 2015; Rufrancos, Power, Pickett, & Wilkinson, 2013); or on subjective psychological well-being (Buttrick & Oishi, 2017; Roth, Hahn, & Spinath, 2016; but see Kelley & Evans, 2017a, 2017b).

Nevertheless, disparities in living conditions (i.e., poverty vs. wealth) not only have an effect on the well-being of the population (Wilkinson & Pickett, 2006, 2009, 2017), but can also help to make certain social categories more salient. This is the case with the socioeconomic status (SES) or the social class of a person or group that becomes more salient in daily interactions as inequality grows (Fiske & Markus, 2012). Ultimately, this saliency might favor that people use this social category to divide people and groups, especially when differences in SES are considered as reflecting a natural order of groups being placed where they deserve to be (Kerbo, 2005). In the current dissertation, we will focus on how social class differences might be used to legitimate the maintenance of the unequal status quo by analyzing the influence of (de)humanization of low- and high-SES groups.

Salience of Socioeconomic Differences

Social scientists have used measures of income (e.g., net earnings, home ownership), years of schooling, or occupational status as proxies of social class. In general, these dimensions tend to be related to each other. For instance, being born in a wealthy family almost guarantees access to higher levels of education, and the opposite can be said for those living in a less advantageous family. Traditionally, the study of social class has been focused on analyzing how differences in these indicators lead to cultural differences, the so-called *class culture gap* (Williams, 2012), and how this ultimately contributes to reproducing income inequality across generations (DiMaggio, 2012). In this regard, the French sociologist Pierre Bourdieu (1977, 1984, 2005) developed a detailed sociological theory of *social class dynamics*, which highlights the importance of the *cultural capital* (i.e., the prestigious knowledge from which groups derive honor) or the *habitus* associated with

a specific class (i.e., life experiences or ways of behaving) as factors that contribute to what he called *social reproduction* (i.e., maintenance of the status quo).

The legacy of Bourdieu's theory has been used as a starting point for the psychological study of social class. Nevertheless, social psychologists' understanding of social class goes beyond material resources. Nowadays, social class is considered as a broad sociocultural process that influences not only the many daily domains of life (e.g., the music we listen to, the food we eat, or the places where we socialize), but also how psychological tendencies are built and maintained (e.g., self-definition, identity, decision-making, personal perception; Kraus, Callaghan, & Ondish, 2018; Markus & Fiske, 2012). Research has shown that these psychological differences, based on SES, ultimately modulate the way we interact with others or the way we behave in different institutions (e.g., the educational system). However, differences based on SES not only affect how people behave or the psychological tendencies they develop, but they also influence how social classes are perceived (Kraus & Keltner, 2013; Kraus, Rheinschmidt, & Piff, 2012).

Differences apply when comparing people at the top and the bottom of the socioeconomic hierarchy, especially in the current context of increasing rates of income inequality, when differences in social class are more salient in our daily interactions. Research has recently shown that people are not only aware of class differences, but they are also able to make accurate judgments of individuals' SES after brief social interactions with them (Kraus & Keltner, 2009). This seems to be due to people using clues that help them to infer someone's SES (Becker, Kraus, & Rheinschmidt, 2017). As a consequence of social class symbols (economic and cultural signs) being rapidly observable and easy to categorize, it is not difficult to think that these symbols might be used to point out the boundaries among the rich and the poor (Kraus et al., 2012). In this context,

socioeconomic signals (such as the clothes people wear, the leisure activities they practice, or the language they use) might not be uniquely used to classify people into one social class or another, but also to justify economic inequality (Kraus, Park, & Tan, 2017). This justification will occur when signals of social class are considered as innate qualities of one class or another, as Kraus et al. (2012) suggested:

> Social-class inequality may come to be viewed as legitimate when signals of social class are tough to represent essentialist or innate qualities of upper- and lower-class individuals (p. 162).

Poor (vs. rich) groups are usually considered as having less refined cultural preferences (e.g., football and cars vs. books and classical music) or leisure activities (e.g., partying vs. going to the theater). They also express themselves in a different way (e.g., strong accents and street language vs. a clear voice and rich vocabulary) and behave differently (e.g., collectivistic, focus on others vs. individualistic, focus on themselves). Additionally, poor people's taste is sometimes considered as more vulgar (e.g., the music they listen to, the clothes they wear, the food they prefer, or the places where they socialize) compared to more privileged groups' taste. Taken together, these signals of social class seem to be used to reinforce a stereotypical perception of the poor as incompetent without self-restraints and less evolved than people in rich groups (Durante, Tablante, & Fiske, 2017; Jones, 2011; Loughnan, Haslam, Sutton, & Spencer, 2014). More importantly, this stereotypical perception might lead people to consider that the traits and features of each social class are stable and unchangeable (i.e., the essentialization process). A possible consequence of this process is a misrepresentation of poverty caused uniquely by the lack of virtues of the poor, but also the ascription of wealth sorely to the perseverance and capability of the rich (i.e., internal attributions of poverty and wealth).

Ultimately, these beliefs about the deservingness of the SES of each group could promote an active support for income inequality by, for example, rejecting social policies or opposing income redistribution measures. Put simply, the increasing rates of inequality trigger a vicious circle that promotes an essentialized perception of class differences that ultimately reinforces and perpetuates the unequal distribution of income. As previous studies have shown, income inequality not only makes us more insensible to the unfair distribution of incomes, but also more likely to blame others for their deprived situation (Heiserman & Simpson, 2017; Schröder, 2017).

Maintaining Socioeconomic Differences

The process by which the socioeconomic hierarchy is legitimized and income inequality justified is complex and multi-determined (see, for example, Markus & Stephens, 2017; or Moya & Fiske, 2017). Previous literature has shown that macro-structural or contextual variables, such as the existence of an economic conflict or the rates of income inequality within a society, could shape the attitudes toward hierarchies and social policies (Andersen & Curtis, 2012; Heiserman, & Simpson, 2017; Kuivalainen & Erola, 2017; Sands, 2017). On a more individual level, variables such as the ideology of the perceiver, their social class, or their self-interest might also contribute to misrepresenting the income gap (Brown-Iannuzzi, Lundberg, Kay, & Payne, 2015; Curtis & Andersen, 2015; Ho et al., 2015; Jaime-Castillo & Sáez-Lozano, 2014; Kteily, Sheehy-Skeffington, & Ho, 2017). More specifically, variables related to the perception that people hold about poor and rich groups, such as positive or negative attitudes, stereotypes or even the dehumanization of people in these groups, also fuel a justification of socioeconomic differences (Bullock & Fernald, 2005; Durante et al., 2017; Lindqvist, Björklund, & Bäckström, 2017; Loughnan et al., 2014; Tagler & Cozzarelli, 2013). Next,

we briefly review some of the variables that contribute to justifying the socioeconomic hierarchy and, thus, favor the maintenance of inequality among low- and high-SES groups.

Understanding poverty and the perception of the poor. As previously mentioned, poor people and poor groups are considered as being inferior to wealthier groups, their lifestyle is seen as vulgar or less sophisticated, and their consumption practices are considered to be inefficient (e.g., they buy luxury or unnecessary stuff; Hayward & Yar, 2006; Raisborough, Frith, & Klein, 2012). This depiction of poverty is sometimes reinforced by a media that satirizes poor people as spending money on alcohol, tobacco, or flashy jewelry while living on social welfare (Bullock, Wyche, & Williams, 2001). For instance, the television series *Shameless* shows dysfunctional families with substance abuse problems involved in violent or sexually promiscuous behavior while living in a council estate house (Jones, 2011). In general, this representation of poor people strengthens a negative perception of them as lacking competence or being dishonest about their needs so that they can ask to stay on welfare without working (Bullock, 1999; Henry, Reyna, & Weiner, 2004; Lindqvist et al., 2017). This might favor the consideration of low-SES groups such as the "Chavs" in the United Kingdom or the "White trash" in the United States as an *underclass* in their respective societies (Loughnan et al., 2014). Lastly, the depicted representation of poor individuals and groups might influence the beliefs that people hold about what factors drive and maintain poverty.

Attributions about the causes of poverty. Despite poverty being a complex and multi-determined process, it is more often attributed to the personal failures of those who live in poverty than to the influence of external and uncontrollable factors such as the existence of an unfair economic system (Cozzarelli, Wilkinson, & Tagler, 2001). In this sense,

previous literature has identified that people ascribe poverty to a full variety of motives ranging from internal factors (e.g., laziness, lack of effort) to external factors (e.g., economic crisis, high taxation on the poor) or even fatalistic events (e.g., sickness, bad luck; Tagler & Cozzarelli, 2013). There are many dimensions that characterize the attributions of poverty and that define them not only based on the source (internal vs. external), but also on the stability (capability to change over time) and controllability (responsibility or deservedness) of each of them (Weiner, Osborne, & Rudolph, 2010). For instance, having a low IQ is considered a stable and uncontrollable factor (i.e., unlikely to change over time and without direct responsibility), whereas other factors might be unstable and uncontrollable (e.g., seasonal variations in the job market) or unstable and controllable (e.g., low wages that might vary based on governmental policies). The kind of attributions of poverty that people make has a direct effect on the attitudes toward deprived groups (Cozzarelli et al., 2001). In general, more internal and controllable attributions compared to external and uncontrollable ones lead to a process of blaming the poor for their unfavorable situation. Ultimately, the process of placing the responsibility on the poor rather than on the influence of external factors contributes to the so-called *culture of poverty hypothesis*, which refers to a consideration of poverty as a fixed and unmodifiable situation (Lewis, 1969).

Perceived wastefulness of the poor. One of the most common internal attributions about poverty is the perceived wasteful consumption practices of the poor (Hayward & Yar, 2006). In general, people blame poor people for how they deal with their disadvantaged position by considering that they have dysfunctional or even *pathological* consumption practices (Jones, 2011). This is due to the belief that the consumption practices of the poor are driven more by a lack of self-restraint and irrational decision-

making processes than by the result of a cautious and planned budget (Southerton, 2002). Such is the case with substance consumption, where poor people are thought to consume alcohol or tobacco in an unhealthy way, or with other compulsive activities in which poor people are thought to engage, such as gambling. Additionally, this unpremeditated behavior is also associated with the acquisition of items such as electronic devices and expensive clothes or cars that poor people are believed to purchase without considering the limitations of their allowance. In short, poor people are blamed for how they deal with their disadvantaged position because of the assumption that they spend their monthly budget on unnecessary things (e.g., luxury items, partying) instead of saving or investing the little money they have on more basic items or on long-term investment (e.g., paying mortgage, education).

Rejecting income redistribution and welfare policies. On the whole, poor groups are blamed for their financial decisions or their consumption practices. This is especially true considering the fact that poor people are considered a drain on the welfare system (Petersen, Slothuus, Stubager, & Togeby, 2011). This inaccurate picture of poverty might have serious consequences on how people understand and justify the unequal status quo. Altogether, the ascription of poverty to internal causes (e.g., laziness, wasteful perception) promotes negative attitudes toward welfare policies such as unemployment salaries or housing benefits (Weiner et al., 2010). In this line, welfare money is believed to reinforce the laziness of a group of people that lack self-control in their economic decision-making process and make bad use of the public money they receive. Therefore, when poverty is attributed to these internal and stable factors, caused by the personal traits of those who live in poverty, any investment on public policies is considered as useless and as a waste of resources.

In short, the portrayal of the poor as irrational individuals who spend their budget on unnecessary items while living on welfare encourages the maintenance of the status quo. Nevertheless, poverty rates are uniquely half of the income inequality problem. Nowadays, the concentration of wealth in the hands of a few, at the cost of general impoverishment, is a major problem in some modern societies as income inequality grows (Wilkinson & Pickett, 2009). Next, we address how people understand the concentration of wealth and the perception of wealthy individuals and groups.

Understanding wealth and the perception of the wealthy. The political corruption that favors the personal interest of wealthy individuals is one of the main issues citizens are concerned about, based on the *Global Corruption Barometer* (Transparency International, 2016). Despite this popular concern, the perception and attitudes toward high-SES groups has been addressed in a limited number of papers. The few papers that have analyzed the social perception of wealthy groups have shown that the wealthy are stereotyped as more competent than poor groups, but also as lacking warmth (Durante et al., 2017). This might be due to the fact that the traits associated with higher-SES groups (e.g., caring less about others' emotions or being more independent) lead people to stereotype these people as cold and heartless individuals. This coldness ascribed to wealthy individuals could even lead to depict them as unemotional robots (e.g., Angela Merkel as a cyborg; New Statesman, 2012).

Attitudes about wealthy groups and affluence cues. Attitudes toward wealthy groups are also complex and probably multi-determined. For instance, in a series of four studies, Van Doesum, Tybur, and Van Lange (2017) compared the prosociality that people showed with targets that come from low-, middle-, or high-SES background. Results showed that the social class of the target influenced the prosociality tendency, with high-

SES targets eliciting a lower level of prosociality than targets who belonged to lower social classes. Thus, participants cared less about the needs or wishes of wealthy groups. This lack of concern toward advantaged groups was also found by Brian and Kteily (2017), but only for participants who showed a tendency to have anti-egalitarianism attitudes. Additionally, attitudes toward the rich were also found to vary based on the explicitness of the measure (i.e., explicit vs. implicit; Horwitz & Dovidio, 2017). Results seemed to indicate that people favor rich targets on an implicit level, but not when using explicit procedures. As the authors suggested, people might be explicitly depicting wealthy groups negatively as a result of perceiving them as having earned their riches by illegitimate means, but positive attitudes could arise on a more implicit level due to meritocracy beliefs (Horwitz & Dovidio, 2017).

Moreover, it seems that not all wealthy groups are perceived equally and that the perceived source of the group's wealth might also influence the traits ascribed to the group. For instance, Sussman, Dubofsky, Levitan, and Swidan (2014) compared how people perceived different wealthy groups such as executives, entrepreneurs, or people who inherit their money. Results showed that people had more positive attitudes toward entrepreneurs and perceived them as more competent than groups who had inherited their income. Additionally, Christopher et al. (2005) found that cues that informed about the way wealth was acquired influenced the traits ascribed to the group. For example, rich groups who acquired their wealth by internal means (e.g., financial success) were considered as more open to experience or more conscientious than rich groups who acquired their wealth by external means (e.g., heritage). These results highlight that there is not a homogeneous perception of wealth and that traits attributed to wealthy individuals or groups vary based on the ascribed sources of wealth.

Attributions about wealth and progressive taxation policies. The causal attributions about wealth seem to follow the same structure as the perceptions held about poverty through the differentiation among more internal vs. external factors that influence the advantaged position of the group (Bullock & Fernald, 2005; Bullock, Williams, & Limbert, 2008; Furnham, 1983). In the case of wealth attributions, studies have differentiated between factors such as the ambition or perseverance of the group (e.g., hard work, personal drive), the pull or corruption (e.g., lobbying institutions, dishonesty), the luck (e.g., winning the lottery), or the privilege (e.g., inherited wealth). As in the case of the attributions concerning poverty, it can be expected that more external attributions of wealth will lead people to consider the wealth of the groups as unfairly acquired; but also believing that their wealth is a result of internal causes may lead to a perception that the situation of wealthy people and groups is fair and legitimate.

Put simply, wealthy groups are not perceived in a homogeneous way: It seems that traits that are ascribed to wealthy individuals and groups influence how people evaluate the source of the groups' wealth, which in turn could impact the attitude that people hold about the implementation of certain redistributive policies. In this regard, previous research has shown that the perceptions and attributions people hold about the sources of wealth have an impact on the economic policies that people are willing to support. For instance, studies have shown that warm feelings (vs. cold feelings) toward wealthy groups along with the attribution of wealth to the personal initiative (vs. privilege) of rich people leads to a lower demand of taxation of wealthy groups (Bullock & Fernald, 2005). Thus, support for social policies that favor income equality, such as the implementation of a progressive taxation system or the application of inheritance taxation on those who have a big fortune, seems to be triggered by attitudes and attributions toward wealth.

In summary, the increasing rates of income inequality promote the influence of socioeconomic differences in our daily lives. In this context, when class differences are understood as fixed traits and characteristics of each social class, people develop naïve theories about class divisions. The consequences of this process might be severe: Income inequality is maintained and social policies are rejected as a consequence of misrepresenting poverty and wealth. Former evidences have shown that attitudes or stereotypes about low- and high-SES groups trigger the understanding of socioeconomic differences (Cozzarelli et al., 2001; Durante et al., 2017). However, other variables might play a role on the maintenance of class differences, such as in the case of dehumanization. Even though humanness and dehumanization have been deeply explored in relation to race, ethnic, or gender differences (Bain, Vaes, & Leyens, 2014), less is known about the role of (de)humanization of low- and high-SES as a trigger of the maintenance of class differences.

Dehumanization: Theoretical Framework, Functionalities, and Its Relation to Socioeconomic Differences

There is a growing body of research about humanness and dehumanization within social psychology. The recent interest in the field has led to the development of different theoretical approaches, conceptualizations, and definitions of what it means to be human (for a detailed revision of the field, see Haslam, 2006; Haslam & Loughnan, 2014; Haslam, Loughnan, Kashima, & Bain, 2008; or Vaes, Leyens, Paladino, & Miranda, 2012).

Nowadays, *dehumanization* can be defined as the act of perceiving or treating a person or a group as if they are not fully human beings (Haslam & Stratemeyer, 2016). However, the approach to the study of dehumanization has been modified since the beginning of the field's existence: Early researchers on dehumanization focused their attention on the role of blatant dehumanization of others embedded in extreme intergroup conflicts (i.e., war or violent intergroup conflicts). In these contexts, dehumanization appears to be an absolute and explicit process that involves a conscious and absolute denial of humanness (Haslam & Loughnan, 2014). This blatant dehumanization acts as a delegitimizing belief (Bar-Tal, 1989) that contributes to the moral exclusion of (Opotow, 1990) and moral disengagement from (Bandura, 1999) others, which ultimately contributes to the perpetration of violent acts (see, for example, Kelman, 1976; or Staub, 1989).

It was not until the appearance of the theory of *infrahumanization* (Leyens et al., 2001) that researchers considered that this process was not only applied to blatant conflicts. These authors consolidated the modern study of dehumanization by showing

that a) dehumanization is a common process in our daily lives; b) it can appear in subtle (vs. explicit) and relative (vs. blatant) forms, by ascribing fewer uniquely human emotions and traits to out-groups compared to in-groups; and more importantly, c) it occurs even in the absence of out-group derogation (Leyens et al., 2000). Moreover, this approach offered an interesting methodological advancement (e.g., new forms of measuring infrahumanization) that favored the consolidation of dehumanization as a topic of interest for social psychologists (Paladino et al., 2002; or Viki et al., 2006).

In addition, other conceptualizations of humanity have proposed that humanity is composed of more than one dimension, such as Haslam's dual model of humanity (2006). This author proposed that humanity has two senses: *Human Uniqueness* (HU), a dimension that includes traits that only human beings but no other animals have, such as rationality or culture; and *Human Nature* (HN), which captures traits such as emotionality or cognitive openness that are not present in inanimate objects or machines (Haslam, 2006). The importance of this proposal is that it adds to the established distinction of human-animals (i.e., animalistic dehumanization), the human-machines differences (i.e., mechanistic dehumanization).

Two Forms of Dehumanization: Animalistic and Mechanistic

The development of new theories that analyze different dimensions of (de)humanization allows researchers to study the unique role of each dimension of humanity on the interpersonal and intergroup dimensions. In this regard, the dual model of humanity (Haslam, 2006) highlighted the need to differentiate the functionalities, possible consequences, and contexts in which both animalistic and mechanistic dehumanization operate. Although the literature has explored the role of animalistic dehumanization more in depth than the role of mechanistic dehumanization, we know

that each form of dehumanization has a unique contribution on interpersonal and intergroup relations.

Animalistic Dehumanization. Animalistic dehumanization has received more attention in the literature in the field than mechanistic dehumanization. This has been due in part to the fact that this form of dehumanization is the one that most commonly applies to violent intergroup conflicts, and it is also the main dimension captured by the infrahumanization theory (Bruneau & Kteily, 2017; Haslam, 2014). Animalizing others implies the denial of those traits that are considered as *Uniquely Human* (i.e., HU traits such as rationality, culture, or maturity) and thus implies the perception of others as being closer to animals (e.g., irrational, lacking culture, or behaving in a childlike way). One of the main functionalities of animalizing others is to create vertical or hierarchical differentiation between persons or groups in which the others are placed below one's own or group position (Haslam & Loughnan, 2014). As a consequence of HU being understood as a vertical dimension of comparison, this form of dehumanization has usually been applied to groups that have a disadvantaged position within societies. For instance, previous research has shown that ethnic and racial minorities, groups based on non-dominant religions, sexual minorities, low-status or powerless groups, and asylum seekers and immigrants are considered animal-like (Bruneau, Kteily, & Laustsen, 2017; Capozza, Andrighetto, Di Berdano, & Falvo, 2011; Esses, Veenvliet, Hodson, & Mihic, 2008; Fasoli et al., 2016; Goff, Eberhardt, Williams, & Jackson, 2008; Iatridis, 2013; Kteily & Bruneau, 2017; Prati, Moscatelli, Pratto, & Rubini, 2016).

This form of dehumanization is triggered by many factors (Waytz & Schroeder, 2014). It might be caused, for example, by the existence of intergroup conflict, by negative emotions such as intergroup disgust, or by the desire to humiliate others (Bruneau &

Kteily, 2017; Buckels & Trapnell, 2013; Dalsklev & Kunst, 2015). Animalization might also be promoted by a paternalistic view of groups. This is especially true with groups such as indigenous communities that are considered as less evolved than other groups or as child-like (Saminaden, Loughnan, & Haslam, 2010). Ultimately, the consequences of this animalization might range from actively harming (e.g., support for military interventions or support for immigrants' deportation) or more passively harming those patronized groups, which ultimately favors the maintenance of the status quo (e.g., dependent-oriented help; Nadler, 2002).

Mechanistic Dehumanization. The denial of *Human Nature* traits (i.e., mechanistic dehumanization), which includes a sense of emotionality, interpersonal warmth, and cognitive openness, has been identified in many areas such as in the medical context or in the economic and sexual objectification spheres (Andrighetto, Baldissarri, & Volpato, 2017; Harris, Lee, Capestany, & Cohen, 2014; Trifiletti, Di Bernardo, Falvo, & Capozza, 2014; Vaes, Loughnan, & Puvia, 2014). The denial of the HN factor has been associated with the desire to disconnect from others in a more horizontal manner (Haslam, 2006) as a way of avoiding emotional contagion. For instance, doctors dehumanize patients in order to avoid professional burnout, or people tend to dehumanize help recipients as a way to prevent the excessive affective cost in a charitable situation (Cameron, Harris, & Payne, 2015; Vaes & Muratore, 2013). In addition, the denial of HN has also been identified on selection process when people evaluate candidates (Harris et al., 2014).

In general, mechanistic dehumanization has been associated with a failure to recognize other's mental states, triggered by an omission process that facilitates social disconnection and disengagement (Haslam, 2006). This passive neglect could lead to a

passive harm of others when, for example, people deny the need of breaks for their employees or the suffering that someone experiences while living on the street. However, mechanistic dehumanization does not manifest uniquely as a passive process, neither does it apply specifically to groups in need or in disadvantaged positions. Based on Waytz and Schroeder's (2014) suggestions, people might also neglect the needs of groups with power and resources, possibly due to their mechanization. This might be caused by the perception of advantageous groups as lacking concern for others (Kraus, Piff, & Keltner, 2009). In addition, the perceived heartlessness of people in these groups might also promote active harm to these groups, especially if this perception is associated with the commission of immoral behaviors (e.g., a leader committing atrocities against the population), as Hodson, Kteily, and Hoffarth (2014) suggested.

Overall, the two forms of dehumanization described by Haslam (2006) are applied to different groups and seem to be triggered by different motives. Previous research has shown that animalistic dehumanization seems to be a key issue in intergroup vertical comparisons driven by an active desire to subjugate others (Haslam & Loughnan, 2014). Meanwhile, mechanistic dehumanization has been commonly associated with a passive attitude and disregard of or indifference toward others in the context of interpersonal horizontal relations (Haslam, 2006). Nevertheless, despite the differences among both forms of dehumanization, it is clear that dehumanization, with its diverse manifestations, is a process that highly contributes to the justification of inequalities based on social categories such as race, ethnicity, or gender, among others (for a revision, see Vaes et al., 2012). Additionally, certain psychosocial variables facilitate the appearance of (de)humanization dynamics. This is the case, for instance, with ideologies or contextual factors (Delgado, Rodríguez, Vaes, Betancor, & Leyens, 2012; Hodson & Costello,

2007), but it is also the case with variables that serve to create social hierarchical differences such as with power or status. Next, we briefly review the contribution of certain variables that create differences among groups in relation to the dehumanization theory.

Dehumanization and Hierarchically Distributed Groups

There are many social dynamics that constrain our daily social interactions (Fiske, 2010). People, for instance, tend to act differently when they interact with their boss compared to their fellow employees (i.e., power dynamics; Guinote, 2017; objectification process; Andrighetto et al., 2017) or when they talk with a professor vs. a student (i.e., status dynamics; Fiske, Dupree, Nicolas, & Swencionis, 2016), and people do not regard someone who is wealthy in the same way they might regard someone who is begging on the street (i.e., class dynamics; Fiske & Markus, 2012). Previous literature has shown that these types of variables, such as power (Gwinn, Judd, & Park, 2013; Yang, Jin, He, Fan, & Zhu, 2015), economic objectification (Baldissarri, Andrighetto, Gabbiadini, & Volpato, 2017; Volpato, Andrighetto, & Baldissarri, 2017), status, or social class, facilitate (de)humanization. On the following pages we review the role of two specific variables.

Status and dehumanization. The infrahumanization theory proposed by Leyens et al. (2001) suggests that infrahumanization could be applied to groups with both low and high status. This premise was supported by empirical evidence gathered from a series of studies related to national groups (e.g., Spanish-Canarians vs. Spanish-Mainlanders or Belgians vs. Flemish). These studies showed how the status of the perceiver did not influence the perceiver's tendency to infrahumanize others (Demoulin et al., 2005; Rodríguez, Delgado, Betancor, Leyens, & Vaes, 2011). However, additional evidence

suggested that dehumanization also occurs asymmetrically: low-status groups do not dehumanize high-status groups, but the latter do dehumanize low-status individuals. In this line, results from Capozza et al. (2011) comparing national groups (Northern vs. Southern Italians) showed that high-status groups perceived the in-groups as more human, a pattern of results that low-status groups did not show. Moreover, a paper published by Iatridis (2013) revealed the same results when examining how high occupational-status groups (e.g., white-collar or lawyers) infrahumanized low occupational-status groups (e.g., blue-collar or shopkeepers). Again, the reverse pattern was not found. In this set of studies, there even appeared a tendency of low occupational-status groups to humanize (attributing more secondary emotions) to high occupational-status members compared to the in-group (Iatridis, 2013). Further research clarified this controversy by showing that a minimal sense of power is necessary for low-status groups to dehumanize high-status groups (Miranda, Gouveia-Pereira, & Vaes, 2014).

Social class and dehumanization. The study of how the socioeconomic status of a person shapes perceptions and interactions has received a lot of attention in recent years (Fiske & Markus, 2012). However, in the dehumanization field, less attention has been paid to the (de)humanization of groups based on their social class. In this regard, we are only aware of a series of correlational studies carried out by Loughnan et al. (2014), who analyzed the perception of low-SES groups in several countries such as the "Chavs" in the United Kingdom, the "White trash" in the United States, and the "Bogans" in Australia. Within their respective countries, these groups are usually depicted as stupid, coarse, crude, violent, feckless, sexually unrestrained, or even less evolved than others groups (Hayward & Yar, 2006):

Humanoid in appearance, but primitive and animalistic in nature, Chavs are fast becoming the bane of humanity. Now all but classified as a completely separate species, Chavs took the left of the fork on the road of evolution when everybody else went right (p. 17).

Over three studies, Loughnan et al. (2014) explored the relationship between the stereotypes of these low-SES groups and the traits associated with a variety of animals (e.g., apes, dogs). The authors of these studies found an overlap between the traits ascribed to low-SES groups and these animals, revealing that there was a widespread consideration of low-SES groups as more close to animals than to human beings (i.e., animalistic dehumanization; see Figure 1). The results from these studies also indicated that this association was independent of the SES of the participants and could not be reduced to a simple depiction of the poor (i.e., valence caused) or could not be completely explained by the competence or warmth (Stereotype Content Model; Fiske, Cuddy, Glick, & Xu, 2012) ascribed to the poor. In short, Loughnan et al. (2014) concluded that poor groups not only lack wealth, but are also considered as lacking humanity and being more primitive and less evolved than other groups. Undoubtedly, these results highlight the importance of studying how the animalistic dehumanization of the poor influences how people understand and justify the deprived situation of the groups. In the present dissertation, we considered that animalistic dehumanization of poor groups might have severe consequences for these groups, for instance, on the support for redistribution of wealth or for welfare policies. People might reject welfare policies because they perceive the poor as irrational and less evolved living beings than others, which renders them incapable of managing their budget. Poverty, then, is considered to be a fair outcome of poor groups' way of living.
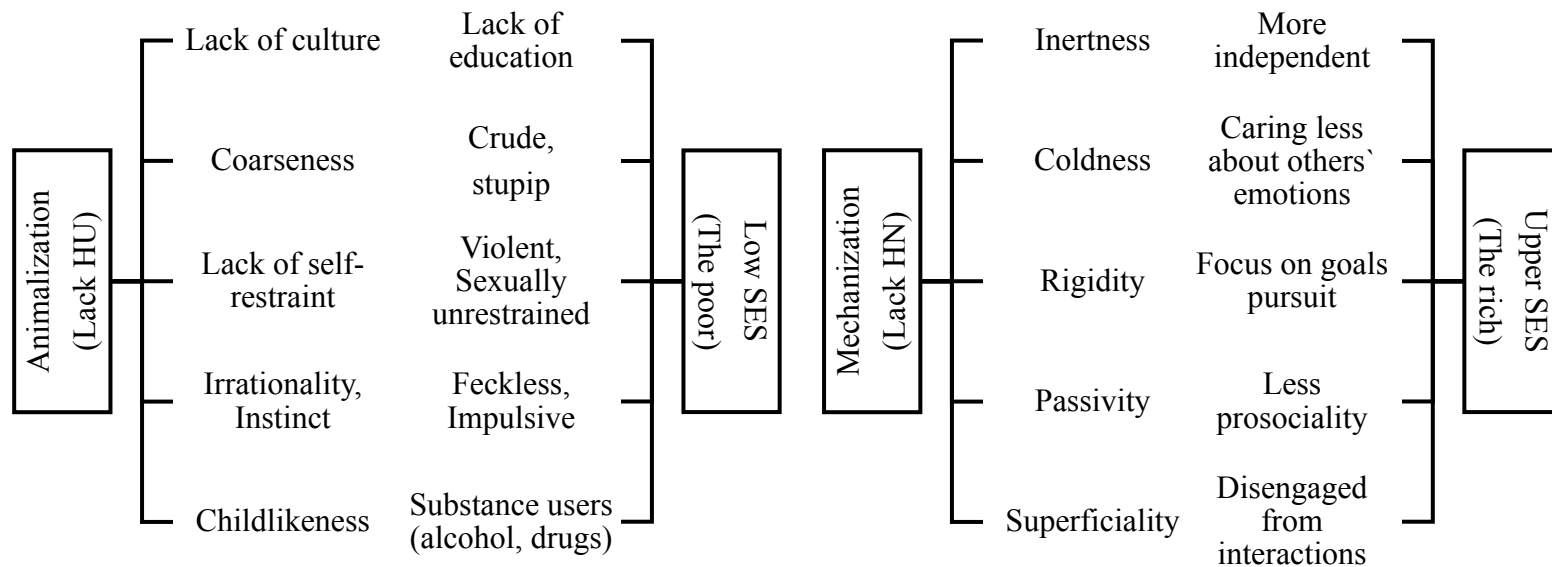
Figure 1. Overview of the most common traits associated with both forms of dehumanization (i.e., animalistic and mechanistic) and with groups with opposite social class (i.e., low- and high-SES groups).

There is an extended body of research that has analyzed how dehumanization facilitates hierarchical distribution of disadvantaged groups. However, less is known about the reasons that drive the possible dehumanization of those who do not belong to disadvantaged groups. Previous research suggested that more attention should be paid to analyze how wealthy groups and wealth concentration is perceived and justified (Bullock et al., 2008). It might be possible that the justification of the status quo might be triggered by (de)humanizing both low- or high-SES groups. In this regard, as far as we know, there is not research that explores the dehumanization of rich groups. However, previous evidence has shown that high-SES groups are considered as competent but cold groups that focus on themselves, care less about others, have a more independent self-construal, engage in less prosocial behaviors, and have a tendency to be more disengaged during social interactions (Durante et al., 2017; Kraus, Côté, & Keltner, 2010; Kraus et al., 2009; Piff, Kraus, Côté, Cheng, & Keltner, 2010; Piff, Stancato, Côté, Mendoza-Denton, & Keltner, 2012). These traits and behaviors that characterize those who have a wealthy position in society seem to overlap with the traits that represent mechanization based on the dual model of dehumanization (see Figure 1). In this regard, we considered that there could be a mechanized perception of high-SES groups, as suggested by Hodson et al. (2014). More importantly, we considered that mechanization (vs. humanization in terms of HN) of high-SES groups might also have an influence on the attributions that people make about the causes of wealth and on the economic measures to reduce economic inequality that people are willing to support.

Overall, we considered that (de)humanization of both poor and rich groups might influence how legitimate perceived socioeconomic differences are, while at the same time shape people's preferences for income redistribution. However, as previously explained,

we considered that poor and rich groups are perceived differently in terms of their humanity: poor groups will be perceived as lacking HU (i.e., animalistic dehumanization), as Loughnan et al. (2014) pointed out, whereas rich groups will be considered as lacking HN (i.e., mechanistic dehumanization). Given that animalistic and mechanistic dehumanization have been found to lead to different outcomes on intergroup relations (see Vaes et al., 2012), it is unlikely that both forms of dehumanization will impact the perception of income inequality to the same extent. Taking into consideration the severe consequences of (de)humanization, this dissertation addresses the animalistic dehumanization of the poor and the mechanistic dehumanization of the rich in order to broaden the insights obtained in previous research and to understand the consequences of dehumanization on income inequality.

Research Questions, General Aim, and Specific Goals of the Dissertation

In the current context of increasing rates of income inequality, it is important to provide empirical evidence that enables us to get a better understanding of how class differences are perceived and justified. Many questions may arise regarding the role of a variable such as (de)humanization on the understanding and justification of the socioeconomic hierarchy: Are low- and high-SES groups perceived equally in terms of their humanity? Are groups placed in both extremes of the socioeconomic hierarchy dehumanized? If this is the case, does the dehumanization of these groups justify their different positions on the social ladder?

In the present research, we try to provide empirical evidence regarding these issues. The main goal of the dissertation is to analyze the consequences of animalizing the poor and mechanizing the wealthy in the maintenance of socioeconomic differences. Specifically, we aim to provide evidence about the influence of the animalization of the low-SES groups (vs. the humanization of them in terms of HU) and the mechanization of the high-SES groups (vs. the humanization of them in terms of HN) on the legitimization of the social class hierarchy and, ultimately, their relation with income redistribution policies (see Figure 2).

	Mechanistic Dehumanization	Lower legitimation	More redistribution / taxation
High-SES			
	Humanization (High HN)	Higher legitimation	Less redistribution / taxation

(De)humanization ⇨ **Legitimation of wealth/poverty** ⇨ **Support for income redistribution**

	Animalistic Dehumanization	Higher legitimation	Less redistribution / welfare policies
Low-SES			
	Humanization (High HU)	Lower legitimation	More redistribution / welfare policies

Figure 2. Predictions of the influence of dehumanization (vs. humanization) of low- and high-SES groups on the legitimation of socioeconomic differences and the support for income redistribution.

In short, our main goal is to analyze how (de)humanization influences the maintenance on income inequality by highlighting that dehumanizing vs. humanizing low- and high-SES groups might trigger how people understand socioeconomic differences. In order to overcome our main goal, we propose a series of specific goals that correspond to the empirical chapters in this dissertation:

1. To identify the animalistic dehumanization of poor groups and the mechanistic dehumanization of wealthy groups (Article 1).

2. To analyze the relationship between (de)humanizing disadvantaged and advantaged groups and the interpretation of the causes, consequences, and possible solutions of an economic conflict (Article 2).

3. To analyze the consequences of animalizing (vs. humanizing) poor groups in the maintenance of income inequality via the attributions about poverty (Article 3) and the perceived financial recklessness of poor groups (Article 4).

4. To analyze the consequences of the mechanization (vs. humanization) of wealthy groups in the maintenance of income inequality (Article 5).

In the following chapters, we present the empirical evidence that tries to overcome these specific goals of the present dissertation. We end the dissertation by providing some thoughts about the implications of the empirical studies and future research lines that might arise from this doctoral dissertation.

References

Andersen, R., & Curtis, J. (2012). The polarizing effect of economic inequality on class identification: Evidence from 44 countries. *Research in Social Stratification and Mobility, 30*, 129-141. doi:10.1016/j.rssm.2012.01.002

Andrighetto, L., Baldissarri, C., & Volpato, C. (2017). (Still) Modern times: Objectification at work. *European Journal of Social Psychology, 47*, 25-35. doi:10.1002/ejsp.2190

Ansell, D. A. (2017). *The death gap: How inequality kills*. US: University of Chicago Press.

Bain., P., Vaes, J., & Leyens, J. Ph. (2014). *Humanness and dehumanization*, New York: Psychology Press.

Baldissarri, C., Andrighetto, L., Gabbiadini, A., & Volpato, C. (2017). Work and freedom? Working self-objectification and belief in personal free will. *British Journal of Social Psychology, 56*, 250-269. doi:10.1111/bjso.12172

Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, *3*, 193-209. doi:10.1207/s15327957pspr0303_3

Bar-Tal, D. (1989). Delegitimization: The extreme case of stereotyping. In D. Bar-Tal, C. F. Grauman, A. Kruglanski, & W. Stroebe (Eds.), *Stereotyping and prejudice: Changing conceptions* (pp. 169–182). New York: Springer.

Becker, J. C., Kraus, M. W., & Rheinschmidt, M. L. (2017). Cultural expressions of social class and their implications for group-related beliefs and behaviors. *Journal of Social Issues, 73*, 158–174. doi:10.1111/josi.12209

Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel & H. Halsey (Eds.), *Power and Ideology in education* (pp. 56-68). New York: Oxford University Press.

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge: Harvard University Press.

Bourdieu, P. (2005). *Capital cultural, escuela y espacio social.* México D.F.: Siglo XXI.

Brian, L. & Kteily, N. (2017). (Anti-)egalitarianism differentially predicts empathy for members of advantaged versus disadvantaged groups. *Journal of Personality and Social Psychology, 114*, 665-692. doi: 10.1037/pspa0000112

Brown-Iannuzzi, J. L., Lundberg, K. B., Kay, A. C., & Payne, B. K. (2015). Subjective status shapes political preferences. *Psychological Science, 26*, 15–26. doi: 0956797614553947

Bruneau, E., & Kteily, N. (2017). The enemy as animal: Symmetric dehumanization during asymmetric warfare. *PLoS ONE, 12*, 1-20. doi: 10.1371/journal.pone.0181422

Bruneau, E., Kteily, N., & Laustsen, L. (2017). The unique effects of blatant dehumanization on attitudes and behavior towards Muslim refugees during the European 'Refugee Crisis' across four countries. *European Journal of Social Psychology.* doi: 10.1002/ejsp.2357.

Buckels, E. E., & Trapnell, P. D. (2013). Disgust facilitates outgroup dehumanization. *Group Processes & Intergroup Relations, 16*, 771–780. doi: 10.1177/1368430212471738

Bullock, H. E. (1999). Attributions for poverty: A comparison of middle-class and welfare recipient attitudes. *Journal of Applied Social Psychology, 29, 2059-2082.* doi: 10.1111/j.1559-1816.1999.tb02295.x

Bullock, H. E., & Fernald, J. L. (2005). Predicting support for eliminating the dividend tax: The role of framing and attributions for wealth. *Analyses of Social Issues and Public Policy, 5*, 49–66. doi: 10.1111/j.1530-2415.2005.00055.x

Bullock, H. E., Williams, W. R., & Limbert, W. M. (2008). Predicting support for welfare policies: The impact of attributions and beliefs about inequality. *Journal of Poverty, 7*, 35-56, doi:10.1300/J134v07n03_03

Bullock, H. E., Wyche, K. F., & Williams, W. R. (2001). Media images of the poor. *Journal of Social Issues, 57*, 229-246. doi: 10.1111/0022-4537.00210

Burns, J. K., Tomita, A., & Kapadia, A. S. (2013). Income inequality and schizophrenia: Increased schizophrenia incidence in countries with high levels of income inequality. *International Journal of Social Psychiatry, 60*, 185–196. doi:10.1177/0020764013481426

Buttrick, N. R., & Oishi, S. (2017). The psychological consequences of income inequality. *Social and Personality Psychology Compass*, 11, e12304. doi: 10.1111/spc3.12304

Cameron, C. D., Harris L., T., & Payne, K. (2015). The emotional cost of humanity: Anticipated exhaustion motivates dehumanization of stigmatized targets. *Social Psychological and Personality Science, 7*, 105-112. doi:10.1177/1948550615604453

Capozza, D., Andrighetto, L., Di Bernardo, G. A., & Falvo, R. (2011). Does status affect intergroup perceptions of humanity? *Group Processes & Intergroup Relations*, *15*, 363–377. doi:10.1177/1368430211426733

Christopher, A. N., Morgan, R. D., Marek, P., Troisi, J. D., Jones, J. R., & Reinhart, D. F. (2005). Affluence cues and first impressions: Does it matter how the affluence was acquired? *Journal of Economic Psychology, 26*, 187–200. doi:10.1016/j.joep.2004.02.002

Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues, 57*, 207–227. doi:10.1111/0022-4537.00209

Curtis, J., & Andersen, R. (2015). How social class shapes attitudes on economic inequality: The competing forces of self-interest and legitimation. *International Review of Social Research*, *5*, 4-19. doi:10.1515/irsr-2015-0002

Dalsklev M., & Kunst J. R. (2015). The effect of disgust-eliciting media portrayals on outgroup dehumanization and support of deportation in a Norwegian sample. *International Journal of Intercultural Relations, 47*, 28-40. doi:10.1016/j.ijintrel.2015.03.028

Delgado, N., Rodríguez-Pérez, A., Vaes, J., Betancor, V., & Leyens, J. Ph. (2012). Contextual variations of infra-humanization: The role of physical context and territoriality. *Basic and Applied Social Psychology, 34*, 456-466. doi:10.1080/01973533.2012.712020

Demoulin, S., Leyens, J. Ph., Rodríguez-Torres, R., Rodríguez-Pérez, A., Paladino, P, & Fiske, S. (2005). Motivation to support a desired conclusion versus motivation to avoid an undesirable conclusion: The case of infra-humanization. *International Journal of Psychology, 40*, 416-428. doi:10.1080/00207590500184495

DiMaggio, P. (2012). Sociological perspectives on the face-to-face enactment of class distinction. In S. T. Fiske & R. H. Markus (Eds.), *Facing social class: How societal rank influences interaction* (pp. 15-38). New York: Russell Sage Foundation.

Durante, F., Tablante, C. B., & Fiske, S. T. (2017). Poor but warm, rich but cold (and competent): Social classes in the Stereotype Content Model. *Journal of Social Issues, 73*, 138–157. doi:10.1111/josi.12208

Elgar, F. J., & Aitken, N. (2011). Income inequality, trust and homicide in 33 countries. *European Journal of Public Health, 21*, 241–246. doi:10.1093/eurpub/ckq068

Esses, V. M., Veenvliet, S., Hodson, G., & Mihic, L. (2008). Justice, morality, and the dehumanization of refugees. *Social Justice Research, 21*, 4-25. doi:10.1007/s11211-007-0058-4

Fasoli, F., Paladino, M.P., Carnaghi, A., Jetten, J., Bastian, B., & Bain, P. G. (2016). Not just words: Exposure to homophobic epithets leads to dehumanizing and physically distancing homosexuals. *European Journal of Social Psychology, 46*, 237-248. doi:10.1002/ejsp.2148

Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, G. Lindzey, & D. T. Gilbert (Eds.), *Handbook of Social Psychology* (pp. 941-982). New Jersey: John Wiley.

Fiske, S. T., & Markus, H. R. (2012). *Facing social class: How societal rank influences interaction*. New York: Russell Sage Foundation.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878-902. doi:10.1037/0022-3514.82.6.878

Fiske, S. T., Dupree, C. H., Nicolas, G., & Swencionis, J. K. (2016). Status, power, and intergroup relations: The personal is the societal. *Current Opinion in Psychology, 11,* 44-48. doi:10.1016/j.copsyc.2016.05.012

Furnham, A. F. (1983). Attributions for affluence. *Personality and Individual Differences, 4*, 31–40. doi:10.1016/0191-8869(83)90050-8

Goff, P. A., Eberhardt, J. L., Williams, M. J., & Jackson, M. C. (2008). Not yet human: Implicit knowledge, historical dehumanization, and contemporary consequences. *Journal of Personality and Social Psychology, 94*, 292–306. doi:10.1037/0022-3514.94.2.292

Guinote, A. (2017). How power affects people: Activating, wanting and goal seeking. *Annual Review of Psychology, 68,* 353-381. doi:10.1146/annurev-psych-010416-044153.

Gwinn, J. D., Judd C. M., & Park, B. (2013). Less power = less human? Effects of power differentials on dehumanization. *Journal of Experimental Social Psychology, 49*, 464–70. doi:10.1016/j.jesp.2013.01.005

Harris, L. T., Lee, V. K., Capestany, B. H., & Cohen, A. O. (2014). Assigning economic value to people results in dehumanization brain response. *Journal of Neuroscience, Psychology and Economics, 7*, 151-163. doi:10.1037/npe0000020

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review, 10*, 252-254. doi:10.1207/s15327957pspr1003_4

Haslam, N. (2014). What is dehumanization? In P. G. Bain, J. Vaes, & J. Ph. Leyens (Eds.), *Humanness and dehumanisation* (pp. 34-48). New York: Psychology Press.

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology, 65*, 399-423. doi:10.1146/annurev-psych-010213-115045

Haslam, N., & Stratemeyer, M. (2016). Recent research on dehumanization. *Current Opinion in Psychology, 11,* 25-29. doi:10.1016/j.copsyc.2016.03.009

Haslam, N., Loughnan, S., Kashima, Y., & Bain, P. (2008). Attributing and denying humanness to others. *European Review of Social Psychology, 19*, 55–85. doi:10.1080/10463280801981645

Hayward, K., & Yar, M. (2006). The '*Chav*' phenomenon: Consumption, media and the construction of a new underclass. *Crime Media Culture*, 2, 9-28. doi:10.1177/174165900606170

Heiserman, N., & Simpson, B. (2017). Higher inequality increases the gap in the perceived merit of the rich and poor. *Social Psychology Quarterly*, *80*, 243-253. doi:0190272517711919

Henry, P. J., Reyna, C., & Weiner, B. (2004). Hate welfare but help the poor: How the attributional content of stereotypes explains the paradox of reactions to the destitute in America. *Journal of Applied Social Psychology, 34*, 34-58. doi:10.1111/j.1559-1816.2004.tb02536.x

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Foels, R., & Stewart, A. (2015). The nature of Social Dominance Orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO7 scale. *Journal of Personality and Social Psychology*, *109,* 1003-1028. doi:10.1037/pspi0000033

Hodson, G., & Costello, K. (2007). Interpersonal disgust, ideological orientations, and dehumanization as predictors of intergroup attitudes, *Psychological Science, 18*, 691–698. doi:10.1111/j.1467–9280.2007.01962.x

Hodson, G., Kteily, N., & Hoffarth, M. (2014). Of filthy pigs and subhuman mongrels: Dehumanization, disgust, and intergroup prejudice. *Testing, Psychometrics, Methodology in Applied Psychology*, *21*, 267-284. doi:10.4473/TPM21.3.3

Horwitz, S. R., & Dovidio, J. F. (2017). The rich-love them or hate them? Divergent implicit and explicit attitudes toward the wealthy. *Group Processes & Intergroup Relations, 20*, 3-31. doi:1368430215596075

Iatridis, T. (2013). Occupational status differences in attributions of uniquely human emotions. *The British Journal of Social Psychology, 52*, 431–49. doi:10.1111/j.2044-8309.2011.02094.x

Jaime-Castillo, A. M., & Sáez-Lozano, J. L. (2014). Preferences for tax schemes in OECD countries, self-interest and ideology. *International Political Science Review, 37*, 81-98. doi:10.1177/0192512114539716

Jones, O. (2011). *Chavs: The demonization of the working class*. London, UK: Verso.

Kelley J., & Evans, M. D. (2017a). Societal Inequality and individual subjective well-being: Results from 68 societies and over 200,000 individuals, 1981-2008. *Social Sciences research, 62*, 1-23. doi:10.1016/j.ssresearch.2016.04.020

Kelley J., & Evans, M. D. (2017b). The new income inequality and well-being paradigm: Inequality has no effect on happiness in rich nations and normal times, varied effects in extraordinary circumstances, increases happiness in poor nations, and interacts with individuals' perceptions, attitudes, politics, and expectations for the future. *Social Sciences research, 62*, 39-74. doi:10.1016/j.ssresearch.2016.12.007

Kelman, H. C. (1976). Violence without restraint: Reflections on the dehumanization of victims and victimizers. In G. M. Kren & L. H. Rappoport (Eds.), *Varieties of psychohistory* (pp. 282–314). New York: Springer.

Kerbo, H. (2005). *Social stratification and inequality: Class conflict in historical, comparative, and global perspective*. New York: McGraw-Hill.

Kraus, M. W., & Keltner, D. (2009). Signs of socioeconomic status: A thin-slicing approach. *Psychological Science*, *20*, 99–106. doi:10.1111/j.1467-9280.2008.02251.x

Kraus, M. W., & Keltner, D. (2013). Social class rank, essentialism, and punitive judgment. *Journal of Personality and Social Psychology, 105*, 247-261. doi: 10.1037/a0032895

Kraus, M. W., Callaghan, B., & Ondish, P. (2018). Social class as culture. In S. Kitayama & D. Cohen (Eds.), *Handbook of Cultural Psychology* (2nd edition). New York: Guilford Press.

Kraus, M. W., Côté, S., Keltner, D. (2010). Social class, contextualism, and empathic accuracy. *Psychological Science, 21*, 1716-1723. doi:10.1177/0956797610387613

Kraus, M. W., Park, J. W., & Tan J. (2017). Signs of social class: The experience of economic inequality in everyday life. *Perspectives on Psychological Science, 12*, 422-435. doi:10.1177/1745691616673192

Kraus, M. W., Piff, P. K., & Keltner, D. (2009). Social class, sense of control, and social explanation. *Journal of Personality and Social Psychology, 97*, 992-1004. doi:10.1037/a0016357

Kraus, M. W., Rheinschmidt, M. L., & Piff, P. K. (2012). The intersection of rank and resources: Signalling social class in face-to-face encounters. In S. T. Fiske & H. R. Markus (Eds.), *Facing social class: How societal rank influences interaction* (pp. 152-172). New York: Russell Sage.

Kteily, N. & Bruneau, E. (2017). Backlash: The politics and real-world consequences of minority group dehumanisation. *Journal of Personality and Social Psychology Bulletin, 43,* 87-104. doi:10.1177/0146167216675334

Kteily, N., Sheehy-Skeffington, J., & Ho, A. K. (2017). Hierarchy in the eye of the beholder: (Anti-)egalitarianism shapes perceived levels of social inequality. *Journal of Personality and Social Psychology, 2*, 136-159. doi:10.1037/pspp0000097

Kuivalainen, S., & Erola, J. (2017). Swinging support? Economic cycles and changes in the public attitudes towards welfare recipients in Finland 1995–2010. *European Societies, 19*, 419-439. doi:10.1080/14616696.2017.1320566

Lewis, O. (1969). The culture of poverty. In D. P. Moynihan (Ed.), On *Understanding poverty: Perspectives from the social sciences*. New York: Basic Books.

Leyens, J. Ph., Paladino, P. M., Rodríguez, R. T., Vaes, J., Demoulin, S., Rodríguez, A. P., & Gaunt, R. (2000). The emotional side of prejudice: The role of secondary emotions. *Personality and Social Psychology Review, 4*, 186–197. doi:10.1207/S15327957PSPR0402_06

Leyens, J. Ph., Rodríguez, A. P., Rodríguez, R. T., Gaunt, R., Paladino, M. P., Vaes, J., & Demoulin, S. (2001). Psychological essentialism and the differential attribution of uniquely human emotions to ingroups and outgroups. *European Journal of Social Psychology, 31*, 395–411. doi:10.1002/ejsp.50

Lindqvist, A., Björklund, F., & Bäckström, M. (2017). The perception of the poor: Capturing stereotype content with different measures. *Nordic Psychology, 69*, 231-247. doi:10.1080/19012276.2016.1270774

Loughnan, S., Haslam, N., Sutton, R. M., & Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White trash," "Chavs," and "Bogans". *Social Psychology, 45*, 54–61. doi:10.1027/1864-9335/a000159

Markus, H., & Stephens, N. (2017). Inequality and social class. *Current Opinion in Psychology, 18*, 1-152. doi:10.1016/S2352-250X(17)30271-3

Markus, R., & Fiske, S. (2012). Introduction: A wide-angle lens on the psychology of social class. In S. T. Fiske & R. Markus (Eds.), *Facing social class: How societal rank influences interaction* (pp. 1-11). New York: Russell Sage Foundation

Messias, E., Eaton, W. W., & Grooms, A. N. (2011). Economic grand rounds: Income inequality and depression prevalence across the United States: An ecological study. *Psychiatric Services, 62*, 710–712. doi:10.1176/appi.ps.62.7.710

Miranda, M., Gouveia-Pereira, M., & Vaes, J. (2014). When in Rome… Identification and acculturation strategies among minority members moderate the dehumanisation of the majority outgroup. *European Journal of Social Psychology, 44*, 327–336. doi:10.1002/ejsp.2025

Moya, M., & Fiske, S. T. (2017). The Social Psychology of the Great Recession and social class divides. *Journal of Social Issues, 73*, 8–22. doi:10.1111/josi.1220

Nadler, A. (2002). Inter-group helping relations as power relations: Maintaining or challenging social dominance between groups through helping. *Journal of Social Issues, 58*, 487–502. doi:10. 1111/1540-4560.00272

New Statesman (2012, June 25). *Europe´s most dangerous leader.* Retrieved from http://www.newstatesman.com/blogs/staggers/2012/06/new-statesman-cover-25-june

OECD (2017). *Poverty rate (indicator).* Retrieved from OECD: https://data.oecd.org/inequality/poverty-rate.htm

Opotow, S. (1990). Moral exclusion and injustice: An introduction. *Journal of Social Issues*, *46*, 173–182. doi:10.1111/j.1540-4560.1990.tb00268.x

Oxfam International (2016). *An economy for the 1%: How privilege and power in the economy drive extreme inequality and how this can be stopped.* Retrieved from https://oxf.am/2t80Crr

Paladino, P. M., Leyens, J. Ph., Rodríguez, R. T., Rodríguez, A. P., Gaunt, R., & Demoulin, S. (2002). Differential association of uniquely and non-uniquely human emotions to the ingroup and the outgroups. *Group Processes and Intergroup Relations, 5*, 105–117. doi:10.1177/1368430202005002539

Petersen, M. B., Slothuus, R., Stubager, R., & Togeby, L. (2011). Deservingness versus values in public opinion on welfare: the automaticity of the deservingness heuristic. *European Journal of Political Research, 50,* 24–52. doi:10.1111/j.1475-6765.2010.01923.x

Pickett, K., & Vanderbloemen, L. (2015). *Mind the gap: Tackling social and educational inequality 2015*. UK: Cambridge Primary Review Trust.

Pickett, K., & Wilkinson, R. (2015). Income inequality and health: A causal review. *Social Science & Medicine, 128*, 316–326. doi:10.1016/j.socscimed.2015.11.013

Pickett, K., Kelly, S., Brunner, E., Lobstein, T., & Wilkinson, R. (2005). Wider income gaps, wider waistbands? An ecological study of obesity and income inequality. *Journal of Epidemiology & Community Health, 59*, 670–674. doi:10.1136/jech.2004.028795

Piff, P. K., Kraus M. W., Côté, S., Cheng, B. H., Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal of Personality and Social Psychology, 99*, 771–784. doi:10.1037/a0020092

Piff, P. K., Stancato, D. M., Côté, S., Mendoza-Denton, R., & Keltner, D. (2012). Higher social class predicts increased unethical behavior. *Proceedings of the National Academy of Sciences of the United States of America, 109*, 4086-4091. doi:10.1073/pnas.1118373109

Prati, F., Moscatelli, S., Pratto, F., & Rubini, M. (2016). Predicting support for Arabs' autonomy from social dominance: The role of identity complexity and dehumanization. *Political Psychology, 37,* 293–301. doi:10.1111/pops.12274

Raisborough, J., Frith, H., & Klein, O. (2012). Media and class-making: What lessons are learnt when a celebrity chav dies? *Sociology, 47,* 251-266. doi:10.1177/0038038512444813

Rodríguez, A., Delgado, N., Betancor, V., Leyens, J. Ph., & Vaes, J. (2011). Infra-humanization of outgroups throughout the world. The role of similarity, intergroup friendship, knowledge of the outgroup, and status. *Anales de Psicología, 27,* 679–687. Retrieved from: http://revistas.um.es/analesps/article/view/135271

Roth, B., Hahn. E., & Spinath, F. M. (2016). Income inequality, life satisfaction, and economic worries. *Social Psychology and Personality Science, 8,* 133-141. doi:10.1177/1948550616664955

Rufrancos, H., Power, M., Pickett, K., & Wilkinson, R. (2013). Income inequality and crime: A review and explanation of the time–series evidence. *Sociology and Criminology, 1,* 103. doi:10.4172/2375-4435.1000103

Saminaden, A., Loughnan, S., & Haslam, N. (2010), Afterimages of savages: Implicit associations between primitives, animals and children. *British Journal of Social Psychology, 49,* 91–105. doi:10.1348/014466609X415293

Sands, M. L. (2017). Exposure to inequality affects support for redistribution. *Proceedings of the National Academy of Sciences, 114,* 663-668. doi:10.1073/pnas.1615010113

Schröder, M. (2017). Is income inequality related to tolerance for inequality? *Social Justice Research, 30,* 23-37. doi:10.1007/s11211-016-0276-8

Southerton, D. (2002). Boundaries of '*us*' and '*them*': Class, mobility, and identification in a new town. *Sociology, 36,* 171-193. doi:10.1177/0038038502036001009

Staub, E. (1989). *The roots of evil: The origins of genocide and other group violence.* Cambridge, England: Cambridge University Press.

Stiglitz, J. E. (2016). *The great divide: Unequal societies and what we can do about them.* New York: Norton & Company.

Sussman, L., Dubofsky, D., Levitan, A. S., & Swidan, H. (2014). Good rich, bad rich: Perceptions about the extremely wealthy and their sources of wealth. *International Journal of Business and Social Research, 4,* 44–58. Retrieved from http://thejournalofbusiness.org/index.php/site/article/view/585

Tagler, M. J., & Cozzarelli, C. (2013). Feelings toward the poor and beliefs about the causes of poverty: The role of affective-cognitive consistency in help-giving. *The Journal of Psychology: Interdisciplinary and Applied, 147,* 517–539. doi:10.1080/00223980.2012.718721

Transparency International (2016). Report of the global corruption barometer 2015/2016. Retrieved from https://www.transparency.org/research/gcb/gcb_2015_16

Trifiletti, E., Di Bernardo, G. A., Falvo, R., & Capozza, D. (2014). Patients are not fully human: A nurse's coping response to stress. *Journal of Applied Social Psychology, 44,* 768–777. doi:10.1111/jasp.12267

Vaes, J., & Muratore, M. (2013). Defensive dehumanization in the medical practice: A cross-sectional study from a health care worker`s perspective. *British Journal of Social Psychology, 52,* 180-190. doi:10.1111/bjso.1200

Vaes, J., Leyens, J. Ph., Paladino, M. P., & Pires-Miranda, M. (2012). We are human, they are not: Driving forces behind outgroup dehumanisation and the humanisation of the ingroup. *European Review of Social Psychology*, *23*, 64-106. doi:10.1080/10463283.2012.665250

Vaes, J., Loughnan, S., & Puvia, E. (2014). The inhuman body: When objectification becomes dehumanizing. In P. G. Bain, J. Vaes, & J. Ph. Leyens (Eds.), *Humanness and Dehumanisation.* (pp. 186-204). New York: Psychology Press.

Van Doesum, N. J., Tybur, J. M., & Van Lange, P. A. M. (2017). Class impressions: Higher social class elicits lower prosociality. *Journal of Experimental Social Psychology, 68*, 11–20. doi:10.1016/j.jesp.2016.06.001

Viki, G. T., Winchester, L., Titshall, L., Chisango, T., Pina, A., & Russell, R. (2006). Beyond secondary emotions: the infrahumanization of outgroups using human-related and animal-related words. *Social Cognition, 24*, 753–775. doi:10.1521/soco.2006.24.6.753

Volpato, C., Andrighetto, L., & Baldissarri, C. (2017). Perceptions of low-status workers and the maintenance of the social class status quo. *Journal of Social Issues, 73*, 192–210. doi:10.1111/josi.12211

Waytz, A., & Schroeder, J. (2014). Overlooking others: Dehumanization by commission and omission. *Testing Psychometrics Methodology in Applied Psychology, 21*, 251-266. doi:10.4473/TPM21.3.2

Weiner, B., Osborne, D., & Rudolph, U. (2010). An attributional analysis of reactions to poverty: The political ideology of the giver and the perceived morality of the receiver. *Personality and Social Psychology Review, 15*, 199-213. doi:1088868310387615

Wilkinson, R., & Pickett, K. (2006). Income inequality and population health: A review and explanation of the evidence. *Social Science & Medicine, 62*, 1768–1784. doi:10.1016/j.socscimed.2005.08.036

Wilkinson, R., & Pickett, K. (2009). *The spirit level: Why greater equality makes societies stronger*. London: Allen Lane.

Wilkinson, R., & Pickett, K. (2017). The enemy between us: The psychological and social costs of inequality. *European Journal of Social Psychology, 47,* 11-24. doi:10.1002/ejsp.2275.

Williams, J. C. (2012). The class culture gap. In S. T. Fiske & R. H. Markus (Eds.), *Facing social class: How societal rank influences interaction* (pp. 39-57). New York: Russell Sage Foundation.

World Inequality Report (2018). *World inequality report, 2018*. Retrieved from World Inequality Lab: http://wir2018.wid.world/files/download/wir2018-full-report-english.pdf

Yang, W., Jin, S., He, S., Fan, Q., & Zhu, Y. (2015). The impact of power on humanity: Self-Dehumanisation in powerlessness. *PLoS ONE, 10*, e0125721. doi:10.1371/journal.pone.0125721

Chapter 2

Animalizing the Disadvantaged, Mechanizing the Wealthy: Identifying the Effect and Exploring Some Consequences

Article 1

Animalizing the Disadvantaged, Mechanizing the Wealthy: The Convergence of Socioeconomic Status and Attribution of Humanity

Mario Sainz

Rocío Martínez

Miguel Moya

Rosa Rodríguez-Bailón

Centro de Investigación, Mente, Cerebro y Comportamiento (CIMCyC),
Departamento de Psicología Social, Facultad de Psicología,
Universidad de Granada

Abstract

Differences between groups in socioeconomic status (SES) are becoming more salient nowadays. In this context, we examined the animalistic and mechanistic dehumanization that both low and high-SES groups may experience respectively by conducting three studies. In study 1, we manipulated the SES of two fictitious groups (low vs. high-SES) and measured the humanity ascribed to them. Results showed that the low-SES group was animalized in comparison with the high-SES group, which was mechanized. In study 2, we manipulated the humanity of two fictitious groups by describing them as animals or machines and measured the perceived SES of the groups. Participants tended to attribute lower SES to the group described as animals and higher SES to the group described as machines. Finally, in study 3, we used an Implicit Association Test to replicate the results of studies 1 and 2. Taken together, these studies show that low-SES groups are considered as animal-like whereas high-SES groups are seen as robot-like. We discuss the implications of these findings in relation to the justification of income inequality within our society.

Keywords: dehumanization, animalization, mechanization, socioeconomic status, income inequality.

Income inequality is rising in many countries according to Wilkinson and Picket (2010). This means that the differences between groups that have low socioeconomic status (SES) and those that have higher-SES are becoming salient. In this context, we wondered how groups at both ends of the socioeconomic hierarchy are perceived. Specifically, we considered that low-SES groups are depicted as inferior and less evolved animals due to their less sophisticated lifestyle (Jones, 2011), while members of high-SES groups are considered as unemotional and heartless machines, as suggested by Hodson, Kteily, and Hoffarth (2014). Importantly, the dehumanization of both low- and high-SES groups may not only have serious consequences for dehumanized groups, but may also damage inter-class relations reinforcing the idea that the class structure represents some kind of natural order where each group is placed where it deserves, as Loughnan, Haslam, Sutton, and Spencer (2014) pointed out.

Dehumanization and Socioeconomic Status

The study of humanness and dehumanization has been growing in recent years (for some reviews, see Haslam & Loughnan, 2014; Vaes, Leyens, Paladino, & Pires-Miranda, 2012). One of the main contributions to the field of dehumanization is Haslam's dual model of humanity (2006). According to this author, there are two dimensions of humanity that can be denied to different groups: The *Human Uniqueness* (HU) factor, which includes traits such civility and rationality, and the *Human Nature* (HN) factor, which includes traits such as emotionality, cognitive openness, and depth. When HU is denied to groups, they are seen as animal-like (i.e., animalistic-dehumanization); by contrast, when HN is denied, groups are perceived as robot-like (i.e., mechanistic-dehumanization). Both forms of dehumanization have been applied to different groups.

Animalistic dehumanization has usually been associated with disadvantaged groups (Esses, Veenvliet, Hodson, & Mihic, 2008; Goff, Eberhardt, Williams, & Jackson, 2008), while mechanistic dehumanization has been associated with some occupations such as law enforcement (Vasiljevic & Viki, 2014) and has also been used to portray members of high-SES groups (Hodson et al., 2014).

Previous studies addressing the dehumanization of groups with different status have mainly focused on how lower and higher status groups perceive each other (mutual dehumanization). These studies have typically found that members of high-status groups tend to dehumanize low-status groups, while members of low-status groups do not dehumanize high-status group members and sometimes even show a tendency to humanize them in comparison to their ingroup (Capozza, Andrighetto, Di Bernardo, & Falvo, 2012; Iatridis, 2013). Less attention has been given to dehumanization of high- and low-SES groups from an external perspective (i.e., independently of the observer's own SES). External perceptions of poverty and wealth have a considerable influence on people's general understanding and legitimation of income inequality (e.g., support for welfare policies, income redistribution). For this reason, we considered that the analysis of the dehumanization of both ends of the social ladder would provide us with valuable information about how the class structure is understood and justified. In this regard, we are only aware of a series of correlational studies carried out by Loughnan et al. (2014), who analyzed the perception of low-SES groups in several countries such as the United Kingdom, the United States, and Australia. The results of these studies showed that low-SES groups and some animals such as apes were considered to have similar personality traits. Importantly, the authors showed that the tendency to associate low-SES groups

with animals was independent of the SES of the participants, that is, of how rich or poor participants were.

These previous findings highlight the importance of considering the animalization of low-SES groups as a process that may facilitate the analysis of poverty. Such animalization may contribute to justifying income inequality by considering poverty as a natural outcome of poor people being less evolved. Thus, the perception of low-SES groups as animals adds the distress associated with being dehumanized to the negative consequences of poverty (Bastian & Haslam, 2011). However, although the perception of low-SES groups is a key issue in the study of income inequality, poverty is only one aspect of the problem. As Bullock, Williams, and Limbert (2008) suggested, more attention should be paid to how wealthy groups are perceived. Previous studies have shown that people explicitly hold a negative attitude (Horwitz & Dovidio, 2017) and usually exhibit less prosocial behaviors toward high-SES groups (Van Doesum, Tybur, & Van Lange, 2017). The representation of high-SES individuals as cold, unemotional and inflexible (i.e., as a mechanized group, Hodson et al., 2014) may currently be influencing how wealth is perceived and legitimated. The mechanization of wealthy groups could be a mechanism that allows people to cope with upwards comparisons by distancing themselves from the wealthy (e.g., they may be rich but they are not human beings). This mechanization may in turn justify their wealth by considering that machine-like groups deserve their position (e.g., they work hard) or may even trigger some attitudes about income redistribution (e.g., higher taxation to the rich) as a way of punishing cold and heartless wealthy groups. Considering the importance of these possible outcomes, in the present research we experimentally addressed the dehumanization of low- and high-SES

groups in order to broaden the insight obtained by the previous literature and clarify how dehumanization and SES influence each other.

Overview of the Studies

The present research was aimed at exploring the animalistic dehumanization (by denying HU) and mechanistic dehumanization (by denying HN) of groups at both ends of the socioeconomic hierarchy, that is, low- and high-SES groups. We conducted three studies using explicit and implicit methodologies to analyze the dehumanization of these groups. In the first study, we analyzed the dehumanization of low- and high-SES groups using different measures. In the second study, we reversed the experimental design by presenting descriptions of fictitious groups as animals or machines and measured the SES attributed to them in order to analyze the possible bidirectional relationship between SES and dehumanization. Finally, in our third study we performed an Implicit Association Test (IAT) in order to analyze the automatic attribution of animal and machine-related words to both low- and high-SES groups. All the materials used in the present studies can be found online (osf.io/r2pn6).

Study 1

The goal of this study was to analyze the dehumanization of groups with low and high SES. We predicted that participants would attribute less HU to low-SES groups compared to high-SES groups (H1) given that groups with a low status or subordinate positions are considered to lack this dimension of humanity (Haslam & Loughnan, 2014). Additionally, we expected to find a lower attribution of HN to high-SES groups compared to low-SES groups (H2) because wealthy people are perceived as cold and rigid, with no concern for others (Hodson et al., 2014). Furthermore, we measured participants'

own SES to explore its relationship with the dehumanization of high- and low-SES groups.

Method

Participants and Procedure

The sample was composed of 91 volunteers (65 females, M_{age}= 20.75, SD = 2.61) who answered a questionnaire in public libraries of a city in southern Spain; they were asked to participate in a study about the social perception of groups. The study had a between-subject design with two conditions (i.e., evaluation of a low- and a high-SES group). Participants rated the described group on two dehumanization scales and also reported the SES of their own family.

Social class manipulation. Participants were asked to think about a low-SES group (described as being worst off, having the least money, the lowest education level, and the least respected jobs or no jobs), or about a high-SES group (described as being the best off, having a lot of money, the highest education level, and the most respected jobs). These descriptions were complemented with a picture of a ladder and an arrow pointing to the bottom (low-SES) or the top (high-SES) of the ladder to refer to both groups. After reading the description of the group, participants completed the following measures:

Dehumanization scales. We used two dehumanization measures. First, we included a measure of dehumanization that assesses the attribution of HU and HN traits, adapted by Martínez, Rodríguez-Bailón, and Moya (2012) to the Spanish context. This measure was composed of 8 traits associated with HU (e.g., rational, civilized, α = .71) and 8 traits associated with HN (e.g., active, emotional, α = .68). Both trait sets included the same amount of positive and negative traits and the valence was controlled for HU and HN

traits (equal valence in both trait sets). Next, we included a new measure which included positive and negative behaviors related to both HU (e.g., taking decisions in an impulsive way, reversed, α = .79) and HN (e.g., remaining indifferent to a surprise, reversed, α = .61). The final selection of HU and HN behaviors was equal in valence (Supplementary information). Answers to these measures were provided on a 7-point scale from 1 "Not at all representative" to 7 "Very much representative of the group".

Manipulation check and open questions. Participants answered a manipulation check question ("In which step of the ladder is the group that you have been asked about?") to ensure that they answered thinking about the respective condition (answers ranged from 1 "At the bottom" to 10 "At the top"). Additionally, participants were asked to provide examples of real groups when reading low- and high-SES group descriptions (Supplementary information).

Participants' socioeconomic status (SES). First, given that most participants were students who were economically dependent on their parents, we asked them to rate the subjective SES of their family using the 10-step MacArthur ladder adapted from Adler, Epel, Castellazzo, and Ickovics (2000). Second, participants reported objective SES indicators such as monthly family income (6-point scale from "Less than 500 €" to "More than 4,000 €") and education level of both parents separately (6-point scale from "Primary studies" to "University degree"). An overall measure of participants' objective SES was created by standardizing responses in income and parental education level and averaging them (α = .72, Kraus & Keltner, 2009). Finally, participants reported demographic data and were thanked and debriefed for participating.

Results

The manipulation checks about perception of the target groups on the ladder confirmed differences in the SES of the described groups between conditions. In the low-SES condition participants were thinking of low-SES groups (M = 2.45, SD = 1.18); in the high-SES condition, they were thinking of high-SES groups (M = 8.79, SD = 1.99), $t_{(88)}$ = 18.56, $p \le .001$, effect size Hedges' g_s = 3.88.

Differences in the attribution of humanity between the low- and high-SES groups were calculated by using several repeated-measure ANOVAs with Humanity (HU vs. HN) as a within-participants factor, Group (Low- vs. High-SES) as a between-participants factor, and Participants' SES (Subjective and Objective SES) as a covariate. Results regarding the traits measure showed a main effect of Humanity, $F_{(1, 84)}$ = 4.11 p = .046, η^2_p = .05, with a lower attribution of HU (M = 4.49, SD = .91) than HN (M = 4.77, SD = .73), $t_{(90)}$ = 2.62, p = .010, Hedges' g_{av} = .34. Results also revealed an unexpected interaction between Humanity and Participants' SES only for Objective SES, $F_{(1, 84)}$ = 5.75, p = .019, η^2_p = .06, not for Subjective SES, $F_{(1, 84)}$ = 2.41, p = .147. Importantly for the main goal of our study, we also found a significant interaction between Humanity and Group, $F_{(1, 84)}$ = 75.49 $p \le .001$, η^2_p = .47. As predicted by Hypothesis 1, results showed a lower attribution of HU traits to low-SES groups compared to high-SES groups. Moreover, participants attributed fewer HN traits to high-SES groups than to low-SES groups, supporting Hypothesis 2 (Table 1).

Regarding the attribution of behaviors measure, results did not show an effect of Humanity, $F_{(1, 84)}$ = .16, p = .698, or an interaction between Humanity and Participants' SES (participants' Objective SES, $F_{(1, 84)}$ = .91, p = .343; participants' Subjective SES, $F_{(1, 84)}$ = .08, p = .83). However, we found a significant interaction between Humanity and

Group, $F_{(1, 84)}$ = 62.72, $p \leq .001$, η^2_p = .43. In line with Hypothesis 1 and similarly to the measure of traits, the analysis showed that participants attributed fewer behaviors related to HU to low-SES groups than to high-SES groups. Additionally, results also showed a lower attribution of HN behaviors to high-SES groups than to low-SES groups, in line with Hypothesis 2.

Table 1. Statistical analysis of the comparison between low- and high-SES groups in the attribution of humanity scales (Study 1)

	Low-SES Mean *(SD)*	High-SES Mean *(SD)*	$t_{(89)}$	*p*	Hedges' g_s
Traits:					
HU	4.03 *(.83)*	4.98 *(.72)*	5.77	≤ .001	1.21
HN	4.96 *(.65)*	4.56 *(.76)*	2.71	.008	.56
Behaviors:					
HU	4.18 *(1.04)*	4.65 *(.77)*	2.43	.017	.51
HN	4.71 (.66)	4.01 *(.66)*	5.05	≤ .001	1.05

Discussion

In this study we analyzed the animalistic dehumanization (i.e., perceived lack of HU) of low-SES groups compared to the mechanistic dehumanization (i.e., perceived lack of HN) of high-SES groups. This pattern of results was obtained using a measure of dehumanization (traits) that is well established in the literature but also using a new measure proposed in this study (behaviors). Additionally, in line with previous studies (Loughnan et al., 2014), the dehumanization of high- and low-SES groups seems to be independent of participants' SES. As pointed out by these previous studies, the lack of interactions between participants' SES and the perceived dehumanization of high- and low-SES groups may indicate that people assume that there is a widespread and normalized association between the traits associated with low-SES and animals on one side and the traits associated with high-SES and machines on the other. In the following

study, we tried to replicate the association between low-SES/animals and high-SES/machines by analyzing which SES is ascribed to dehumanized groups and its position on the scale compared to participants' own SES.

Study 2

Study 1 provided evidence about how groups with SES on both ends of the spectrum are dehumanized in a different way. In Study 2, we intended to explore the reverse process by verifying whether presenting clues about the humanity of a group (i.e., describing a group as animals or machines) leads to a different attribution of SES. We applied this procedure to analyze the bidirectional relationship between SES and humanity following a similar procedure to that used by Loughnan, Haslam, and Kashima (2009). Bearing in mind the results of Study 1, we predicted that presenting the group with few HU traits (i.e., animalistic-dehumanization) would lead to an attribution of lower SES to its members in comparison to the members of groups presented as lacking HN (i.e., mechanistic-dehumanization), who would be considered as having higher SES (H1). Moreover, we explore where dehumanized groups are placed in the socioeconomic hierarchy compared to participants' own SES (middle-SES). We hypothesized that participants will be motivated to distance themselves from dehumanized groups. On the one hand, they will try to be further apart from animalized groups ascribing them a lower-SES (H2) given that animals are regarded as phylogenetically inferior to human beings. On the other hand, we hypothesized that mechanized groups would be considered as having higher-SES compared to participants (H3). Participants will be also motivated to distance from cold and rigid (i.e., mechanized) groups, but given that machines are associated with economic progress and even considered as better than humans on certain tasks they will be posited higher in the socioeconomic ladder. In short, we anticipated

that participants will distant themselves from animal and machine-like groups by placing them on opposite extremes of the socioeconomic ladder.

Method

Participants and Procedure

The sample included 100 university students (70 females, M_{age} = 22.68, SD = 1.99) of a university in southern Spain, who received course credit for participating in the study. Participants received a written questionnaire with the following sections:

Humanity manipulation. Participants were asked to read two brief descriptions of fictitious groups (Supplementary Information). One group was described as animal-like (low HU) and the other was depicted as machine-like (low HN) following the same procedure used in Martínez, Rodríguez-Bailón, Moya, and Vaes (2015). We used a within-participants design: each participant was presented with two descriptions of fictitious groups in a counterbalanced order. After reading the description of each group, participants were asked to provide information about the following questions:

SES of dehumanized groups and participants' SES. We asked participants to rate the SES of the fictitious groups using 1) a modified version of the subjective social ladder by Adler et al. (2000), along with 2) the monthly income, and 3) the education level ascribed to the group, using the same scales as in Study 1. Participants were also asked to report their own family SES at the end of the questionnaire, by using the same scales than the ones used to evaluate dehumanized groups.

Manipulation check and open questions. Participants were asked if the descriptions of the groups had characteristics associated with "Animals" or "Machines" (from 1 "Not at all" to 5 "Completely"). In addition, participants provided examples of real groups that

matched the description they had read (supplementary information). Demographic data were provided and participants were debriefed and thanked for participating in the study.

Results

First, as expected, the manipulation check confirmed that the group lacking HU was perceived as being more animal-like (M = 3.41, SD = 1.22) than the group lacking HN (M = 2.46, SD = 1.16), $t_{(98)}$ = 6.24, $p \leq$ .001, Hedges' g_{av} = .79. By contrast, the group lacking HN was perceived as being more machine-like (M = 3.68, SD = 1.14) than the group lacking HU (M = 1.98, SD = 1.19), $t_{(99)}$ = 12.11, $p \leq$ .001, Hedges' g_{av} = 1.45.

Second, we performed three repeated-measures ANOVAs of the attributed SES (socioeconomic ladder, income and education level) assigned to the Group (animal, machine, and participants' own SES) as a within-participants factor, and questionnaire Order as a between-participants factor. As expected, we found a main effect of Group on the position on the social ladder, $F_{(2, 97)}$ = 57.27, $p \leq$ .001, η^2_p = .54, on income level, $F_{(2, 94)}$ = 55.84, $p \leq$ .001, η^2_p = .54, and on education level, $F_{(2, 92)}$ = 71.34, $p \leq$ .001, η^2_p = .61. No order effects were found in the dependent measures (social ladder, $F_{(2, 97)}$ = .27, p = .764; income level, $F_{(2, 94)}$ = .18, p = .834, and education level, $F_{(2, 92)}$ = .43, p = .652). Supporting hypotheses 1 and 2, simple results (Table 2) indicated that the animal group was attributed a lower position in the three SES measures compared to the machine group (social ladder, $t_{(99)}$ = 9.18, $p \leq$ .001, Hedges' g_{av} = 1.26; income level, $t_{(96)}$ = 9.54, $p \leq$ .001, Hedges' g_{av} = 1.35; and education level, $t_{(95)}$ = 9.81, $p \leq$ .001, Hedges' g_{av} = 1.41).

Finally, we compared dehumanized groups and participants' own SES ratings. Results indicated that the animal group was considered as having a lower score compared to participants' own SES in the three indicators of SES (social ladder, $t_{(99)}$ = 10.22, $p \leq$ .001, Hedges' g_{av} = 1.48; income level, $t_{(96)}$ = 8.34, $p \leq$ .001, Hedges' g_{av} = 1.24; and

education level, $t_{(95)}$ = 10.93, $p \leq$ .001, Hedges' g_{av} = 1.51). Results of the comparison between the machine group and participants' own SES ratings did not show any differences on the social ladder, $t_{(99)}$ = 1.57, p = .120, or on education level, $t_{(95)}$ = .52, p = .604. However, we found significant differences between the machine group and participants' own SES in income level, $t_{(96)}$ = 3.66, $p \leq$ .001, Hedges' g_{av} = .50, partially supporting Hypothesis 3.

Table 2. Means *(SD)* of the measures of socioeconomic status attributed to the animal group, the machine group, and participants' own SES (Study 2)

	Socioeconomic ladder	Income level	Education level
Animal group	3.49 *(2.23)* [a]	1.85 *(.97)* [a]	2.03 *(1.39)* [a]
Machine group	6.57 *(2.62)* [b]	3.73 *(1.69)* [b]	4.32 *(1.82)* [b]
Participants' own SES	6.14 *(1.17)* [b]	3.04 *(.95)* [c]	4.20 *(1.45)* [b]

Note. Values with different superscripts across columns are significantly different from each other.

Discussion

In this study we analyzed the differences in inferred SES attributed to fictitious groups described as animal and machine-like. Results showed that the group perceived as lacking HU (i.e., animal-like) was considered as having lower SES (in all the measures) when it was compared to both the group lacking HN (i.e., machine-like) and participants' own SES. Additionally, the mechanized group (i.e., lacking HN) was considered as having an equal position on the social ladder and the same education level as our participants, but a higher income level compared to participants' income level. Overall, these results replicated the previous explicit association between low-SES/animals and high-SES/machines, providing valuable insight about the differences between both forms of dehumanization in terms of ascribed SES. Furthermore, these results also indicate that

there is a bidirectional relationship between SES and humanity, as has been found in previous studies (Loughnan et al., 2009).

Additionally, the tendency of our participants to differentiate themselves (i.e., their families) from mechanized groups only in income level but not in education level or on the social ladder may indicate the following: participants did not perceive wealthy groups as being superior to them or having better qualifications but only as having more money. Mechanistic dehumanization serves to distance and differentiate oneself from others (Haslam & Loughnan, 2014). Thus, in this context, mechanizing wealthy groups may serve as a mechanism to cope with the economic upwards comparison avoiding negative consequences for oneself. In short, people may rationalize that other groups can be richer than themselves but it is because they have become cold and heartless machines in order to reach their advantageous position. However, given that several explicit process might influence the associations we were studying, we decided to implement an implicit procedure that would allow us to confirm the existence of these previous associations at an unconscious level.

Study 3

In order to provide more evidence supporting the link between SES and different forms of dehumanization, we decided to conduct a conceptual replication by using an implicit measure (the Implicit Association Test, IAT, Nosek, Greenwald, & Banaji, 2007) to test the automatic nature of the associations between low-SES/animals and high-SES/machines. Our predictions (H1) were that participants would be faster at responding simultaneously to congruent categories (low-SES/animals, and high-SES/machines) than to incongruent ones (low-SES/machines, and high-SES/animals), revealing that these associations are automatic.

Participants and Procedure

Participants were asked to participate in an experiment about word perception in order not to reveal the aim of the research. The final sample included 80 students from a university in southern Spain (69 females, M_{age}= 20.07, SD = 1.37), who participated in the experiment in exchange for course credits (we excluded six participants from the analyses because they were not fluent Spanish speakers and they were unable to understand the instructions of the task).

We used an IAT procedure that consisted of categorizing each word presented in the center of the screen by pressing a key on the left or the right on the keyboard, depending on the categories that appeared in the top corners of the screen. Participants were presented with words related to the four categories of interest of our study: animal vs. machine and low vs. high-SES. For example, if "owner" appeared in the center of the screen and the categories "low-SES" and "high-SES" appeared in the top left and top right corners of the screen, respectively, participants had to press the right key on the keyboard. As usual in the standard IAT, the task was composed of seven blocks. Participants started with practice trial blocks in which only one category appeared in the top corners of the screen and they had to categorize the words in the center into that single category. In the experimental trial blocks, participants were asked to categorize the words simultaneously into two categories (animals vs. machines, and low-SES vs. high-SES) at the same time. Two types of blocks were presented in the experimental trials: congruent blocks (i.e., animals and low-SES or machines and high-SES) and incongruent blocks (i.e., animals and high-SES, or machines and low-SES).

Selection of words. We conducted a pilot study (N = 22, 14 females, M_{age} = 20.86, SD = 2.55) to select words related to the four categories of interest (i.e., animal, machine,

low-SES and high-SES). In this study, participants were presented a total of 100 words (25 of each category) taken from the Spanish dictionary. They were asked to rate the extent to which each word was representative of each category ("To what extent is the following word related to animals/machines/low-SES/high-SES?" from 1 "Not at all related" to 5 "Very related") as well as the valence of the word ("To what extent do you think that the following word is positive or negative when it is applied to a group of people?" from 1 "Negative" to 5 "Positive"). We finally selected six words that were strongly associated with each category, that is, animals (e.g., ape), machines (e.g., engine), low-SES (e.g., servant), and high-SES (e.g., affluent), and had a similar valence (Supplementary information).

Results and Discussion

Data Analysis

Following Nosek et al. (2007), we eliminated trials whose reaction times (RTs) were higher than 10,000 milliseconds (ms) and data from participants with more than 10% of RTs lower than 300 ms. In addition, trials incorrectly answered (5.72% of all trials) were replaced by the mean of the respective trial series plus 600 ms. RT differences between congruent and incongruent blocks were analyzed using Algorithm D_6.

Implicit Association

According to Nosek et al. (2007), an algorithm D different from 0 indicated that participants responded faster to congruent than to incongruent categories. A t-test confirmed that algorithm D ($M = 0.12$, $SD = 0.26$, $t_{(79)} = 4.19$, $p \leq .001$, Cohen's $d_z = .47$) was significantly different from zero. Therefore, results confirmed that participants required less time to classify the words when they were presented with a congruent association (animal and low-SES or machines and high-SES, $M = 922.93$, $SD = 159.25$)

than when they were presented with an incongruent association (animals and high-SES or machines and low-SES, M = 994.68, SD = 179.65). The results of this study indicated that participants implicitly associated low-SES with animals and high-SES with machines, supporting results from previous explicit studies.

General Discussion

In the present research we analyzed the interplay between SES and dehumanization in a series of studies using different methodologies. The reciprocal and pervasive association between animalization/low-SES and mechanization/high-SES was repeatedly found in the three studies conducted. Indeed, results regarding the animalization of low-SES groups support the idea that HU is a hierarchical dimension of comparison that reinforces the class-based structure by equating the lack of SES with the lack of humanity (Loughnan et al., 2014). In addition, the mechanistic dehumanization of high-SES groups identified in our studies may help to understand, for instance, why people hold a negative explicit attitude towards wealthy groups (Horwitz & Dovidio, 2017). As has been pointed out before in the literature, mechanization has been associated with the desire to distance oneself from others in order to avoid negative consequences for oneself (Haslam & Loughnan, 2014). Therefore, people might consider that the wealthy position of the groups also made them less human and more machine-like, as a way to distance themselves from cold and unemotional advantaged groups. In short, these results reveal that poor and rich groups are perceived differently. People seem to distance themselves from the poor and the rich by considering low-SES groups as being phylogenetically inferior and high-SES groups as heartless machines.

The present work also extends the results of previous studies about a complementary attribution of humanity (i.e., groups highlighting a dimension of

humanity that it is denied to the outgroup, and vice versa) to groups, as Bain, Park, Knowk, and Haslam (2009) found with ethnic groups (Australians denying HN to Asians, and Asians denying HU to Australians). Unlike these studies, we found this symmetrical pattern of results by using an external evaluation of groups instead of having members of groups evaluate each other. Therefore, it seems that complementary dehumanization can happen without the need of mutual dehumanization. This complementary perception has also been shown when stereotyping the low-SES groups (warm but incompetent) and high-SES groups (cold but competent), as Durante, Tablante, and Fiske (2017) reported. Along these lines, previous studies (Loughnan et al., 2014) have shown that animalizing low-SES groups is an independent process from stereotyping the poor and that mechanization is not necessary associated with high competence (e.g., mechanized groups lack flexibility or agency, Martínez et al., 2015). However, further research is needed to identify the specific role of dehumanization above and beyond the stereotype of low- and high-SES groups.

In addition, even though our findings suggest that dehumanization of low- and high-SES groups is not influenced by the perceiver's SES, in line with Loughnan et al. (2014), we did not consider participants' identification with a given social class. Future studies could address this limitation by analyzing how participants' identification with a given social class may influence their attribution of HU/HN traits to low- and high-SES groups. Additionally, including an identification scale will also help us to understand if identification plays a role when the mechanized group is considered equal to our participants in some aspects. Considering that mechanization serves to disconnect oneself from outgroups, it is hard to believe that our participants identified themselves with a mechanized group. Instead, this could be a reflection of participants' consideration that

only money distinguishes mechanized groups from them instead of other signs of social class. As we pointed out above, mechanizing high-SES groups may be a process that contributes to solving potential conflicts of the self by considering that wealthy groups may have more money but also have less humanity.

Furthermore, our results highlight the importance of studying the consequences of both kinds of dehumanization not only on the perception of income inequalities, but also on the potential personal consequences for those who are dehumanized. First, it can be expected that animalizing low-SES groups will have only negative consequences for such groups. For instance, people may oppose welfare policies because they infer that these groups cannot control their primitive impulses. This animal-like perception is likely to contribute to directly blaming low-SES groups for their deprived position. In addition, mechanizing high-SES groups is also likely to have negative consequences for these groups. Mechanization can trigger the punishment of these groups without any moral concern for them (Bastian & Haslam, 2011). In the economic sphere, mechanizing high-SES groups may encourage people to demand a high taxation for these groups as a way to punish them for being cold and heartless; yet, mechanization may also contribute to justifying the wealthy position of the group by considering that their advantageous position is the result of their hard work (i.e., working like machines). Future studies should explore the consequences of mechanizing high-SES groups on the justification of their wealthy position to highlight what are the consequences of mechanizing vs. humanizing high-SES groups. In addition, the consequences of dehumanization may not be the same for low- and high-SES groups. Specifically, dehumanization is likely to generate greater distress in low-SES than in high-SES groups. Future studies should

address the potentially different outcomes depending on the group's SES, particularly focusing on whether an advantageous position helps groups to cope with dehumanization.

In conclusion, the results of the current research provide new insight about how people who are at the very top of the social ladder are considered as unemotional and heartless machines, whereas those who are at the bottom are perceived as less evolved animals. These findings add valuable information about how people perceive the class divide, highlighting that dehumanizing poor and rich groups may have serious consequences, not only for those who are dehumanized. They also provided us with information about how the rising income gap is justified and legitimized in many societies around the world.

References

Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology, 19*(6), 586-592. doi:10.1037/0278-6133.19.6.586

Bain, P. G., Park, J., Kwok, C., & Haslam, N. (2009). Attributing human uniqueness and human nature to cultural groups: Distinct forms of subtle dehumanization. *Group Processes & Intergroup Relations, 12*, 789-805. doi:1368430209340415

Bastian, B., & Haslam, N. (2011). Experiencing dehumanization: Cognitive and emotional effects of everyday dehumanization. *Basic and Applied Social Psychology, 33*, 295-303. doi:10.1080/01973533.2011.614132

Bullock, H. E., Williams, Williams, W. R., & Limbert, W. M. (2008). Predicting support for welfare policies: The impact of attributions and beliefs about inequality, *Journal of Poverty, 7*(3), 35-56, doi:10.1300/ J134v07n03_03

Capozza, D., Andrighetto, L., Di Bernardo, G. A., & Falvo, R. (2012). Does status affect intergroup perceptions of humanity? *Group Processes & Intergroup Relations*, *15*(3), 363–377. doi:10.1177/1368430211426733

Durante, F., Tablante, C. B., & Fiske, S. T. (2017). Poor but warm, rich but cold (and competent): Social classes in the Stereotype Content Model. *Journal of Social Issues*, *73*. 138–157.doi:10.1111/josi.12208

Esses, V. M., Veenvliet, S., Hodson, G., & Mihic, L. (2008). Justice, morality, and the dehumanization of Refugees. *Social Justice Research*, *21*(1), 4–25. doi:10.1007/s11211-007-0058-4

Goff, P. A., Eberhardt, J. L., Williams, M. J., & Jackson, M. C. (2008). Not yet human: Implicit knowledge, historical dehumanization, and contemporary consequences. *Journal of Personality and Social Psychology, 94*(2), 292–306. doi:10.1037/0022-3514.94.2.292

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, *10*(3), 252-254. doi:10.1207/s15327957pspr1003_4

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology*, *65*, 399-423. doi:10.1146/annurev-psych-010213-115045

Hodson, G., Kteily, N.S., & Hoffarth, M. R. (2014). Of filthy pigs and subhuman mongrels: Dehumanization, disgust, and intergroup prejudice. *TPM: Testing Psychometrics Methodology in Applied Psychology, 21(3)*, 267-284. doi:10.4473/TPM21.3.3

Horwitz, S. R., & Dovidio, J. F. (2017). The rich-love them or hate them? Divergent implicit and explicit attitudes toward the wealthy. *Group Processes & Intergroup Relations*, *20*(1), 3-31. doi:10.1177/1368430215596075

Iatridis, T. (2013). Occupational status differences in attributions of uniquely human emotions. *The British Journal of Social Psychology, 52*(3), 431–49. doi:10.1111/j.2044-8309.2011.02094.x

Jones, O. (2011). *Chavs: The demonization of the working class*. London: Verso.

Kraus, M. W., & Keltner, D. (2009). Signs of socioeconomic status: A thin-slicing approach. *Psychological Science*, *20*(1), 99–106. doi:10.1111/ j.1467-9280.2008.02251.x

Loughnan, S., Haslam, N., & Kashima, Y. (2009). Understanding the relationship between attribute-based and metaphor-based dehumanization. *Group Processes & Intergroup Relations*, *12*, 747–762. doi:1368430209347726

Loughnan, S., Haslam, N., Sutton, R. M., & Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White Trash", "Chavs", and "Bogans". *Social Psychology*, *45*(1), 54–61. doi:10.1027/1864-9335/a000159

Martínez, R., Rodríguez-Bailón, R., & Moya, M. (2012). Are they animals or machines? Measuring dehumanization. *The Spanish Journal of Psychology, 15*(3), 1110–22. doi:http://www.ncbi.nlm.nih.gov/pubmed/23156919

Martínez, R., Rodríguez-bailón, R., Moya, M., & Vaes, J. (2015). Interacting with dehumanized others? Only if they are objectified. *Group Processes & Intergroup Relations*, *15*, 1-18. doi:10.1177/1368430215612219

Nosek, B.A., Greenwald, A. G., & Banaji, M. R. (2007). The Implicit Association Test ad age 7: A methodological and conceptual review. In J. A. Bargh (Ed.). *Automatic processes in social thinking and behavior* (pp. 265-292). New York: Psychology Press.

Vaes, J., Leyens, J-Ph., Paladino, M. P., & Pires-Miranda, M. (2012). We are human, they are not: Driving forces behind outgroup dehumanisation and the humanisation of the ingroup. *European Review of Social Psychology*, *23*(1), 64-106. doi:10.1080/10463283.2012.665250

Van Doesum, N. J., Tybur, J. M., & Van Lange, P. A. M. (2017). Class impressions: Higher social class elicits lower prosociality. *Journal of Experimental Social Psychology, 68*, 11–20. doi:10.1016/j.jesp.2016.06.001

Vasiljevic, M., & Viki, G. T. (2014). Dehumanization, moral disengagement, and public attitudes to crime and punishment. In Bain P., Vaes, J., & Leyens, J. Ph. (Eds.), *Humanness and Dehumanization* (pp. 127- 146). New York: Psychology Press.

Wilkinson, R. G., & Pickett, K. (2010). *The spirit level: Why greater equality makes societies stronger*. New York: Bloomsbury Press

Article 2

We Share the Euro, but Not our Humanity: Humanity Attributions are Associated with the Perceived Causes, Consequences, and Solution to the Greek Financial Crisis

Mario Sainz [1]

Steve Loughnan [2]

Friederike Eyssel [3]

Afroditi Pina [4]

[1] Centro de Investigación, Mente, Cerebro y Comportamiento (CIMCyC),
Departamento de Psicología Social, Facultad de Psicología,
Universidad de Granada

[2] School of Philosophy, Psychology and Language Sciences,
University of Edinburgh

[3] Department of Psychology, Center of Excellence Cognitive Interaction Technology,
University of Bielefeld

[4] School of Psychology, Keynes College, University of Kent

Abstract

The European Union (EU) faced an economic conflict between Germany and Greece catalyzed by a Greek referendum in 2015. In this context, wealthy nations such as Germany have advocated rigid economic reforms which are not unilaterally endorsed by poorer nations, such as Greece. This has resulted in a cycle of blame between countries. To understand the psychology behind this economic conflict, we assessed the extent of mutual ingroup and outgroup (de)humanization between citizens of both nations and analyzed the respective interpretations of the causes, consequences and possible solutions to this economic conflict. Data were collected shortly after the Euro-Crisis (a.k.a. Grexit) referendum in 2015. Our results showed a mutual and complementary dehumanization between citizens of both nations, with Greeks considering Germans to be robot-like and Germans perceiving Greeks as animal-like. For Germans, dehumanizing the Greeks was linked to the perception that the Greeks' financial administration capability was lacking, and minimizing the perception of the Greeks' suffering, while humanizing the ingroup was associated with more outgroup responsibility. For Greeks, dehumanizing the Germans was associated with a desire to avoid German financial control of the Greek economy, while ingroup humanization was associated with a better financial administration, less responsibility, and a higher perception of suffering within the Greek population. In short, ingroup and outgroup humanity shape the understanding of the economic conflict, manifest as barriers to a mutual agreement, and promote opposite solutions from the perspective of both nations.

Keywords: dehumanization, economic conflict, intergroup relations, European Union.

For almost a decade, the European Union (EU) has faced a financial crisis. Since 2008, the world economy has been in recession, and EU nations have been suffering the consequences. This suffering, however, is spread unequally: There has been great disparity between EU nations in dealing with these economic consequences, for instance, when comparing Germany and Greece. In this context, Germany, as one of the wealthy EU nations, has advocated deep economic reforms which are not unilaterally endorsed by poorer nations, such as Greece. This has resulted in a cycle of blame between these countries, with the German Chancellor Angela Merkel being portrayed as an unemotional, robotic `terminator´ (New Statesman, 2012) and the Greek citizens being portrayed as lazy and greedy (BILD Zeitung, 2015). This paper examines perceptions pertaining to the causes, consequences, and possible solutions to the economic conflict inside the EU held by people from both Germany and Greece. Specifically, we move beyond intergroup attitudes to explore whether attribution of humanity to the ingroup and outgroup dehumanization could play a role in this intergroup conflict (Haslam & Loughnan, 2014). In short, we considered that (de)humanization feeds the conflict from the perspective of the main nations involved and influences the perception of potential consequences and possible solutions.

Humanness and Dehumanization

Viewing the ingroup as more human than an outgroup is a common process in the context of intergroup relations (for reviews, see Haslam & Loughnan, 2014; Haslam & Stratemeyer, 2016; Vaes, Leyens, Paladino, & Miranda, 2012). Dehumanization is understood as the process of differentially attributing and denying humanity to others (Haslam, 2006), typically finding that people consider their ingroup to be more human

than the outgroup. Based on Haslam's (2006) dual model of dehumanization, two dimensions are at the core of dehumanization: The first dimension is human uniqueness (HU), which reflects aspects of humanity that distinguish humans from animals, such as civility, rationality, and refinement. The denial of these characteristics to groups facilitates the perception that these groups are closer to animals than to human beings (i.e., animalistic dehumanization). This form of dehumanization has usually been applied to low status (Capozza, Andrighetto, Di Berdano & Falvo, 2011, Iatridis, 2013) or poor groups (Loughnan, Haslam, Sutton, & Spencer, 2014; Sainz, Martínez, Moya, & Rodríguez-Bailón, 2018). As pointed out by previous authors, animalizing disadvantaged groups might trigger a justification of inequality by considering that these groups are placed where they deserve.

The second dimension proposed in Haslam's (2006) dual model of dehumanization focuses on what is considered "core" or "essential" to being human: The human nature (HN) dimension encompasses traits such emotionality, cognitive openness, or depth that are present in human beings. The denial of HN characteristics leads to a mechanistic dehumanization, where others are considered cold and unemotional like robots or machines. This dehumanization form has been shown to be applied in many areas such as the medial context (Vaes & Muratore, 2013) or in the economic objectification sphere (Andrighetto, Baldissarri, & Volpato, 2017). More recently, a paper published by Sainz et al. (2018) has also demonstrated that wealthy groups are sometimes mechanized. This perception of advantaged groups as unemotional machines without any concern for others, could influence what people expect from these groups or how people interact with them.

Although previous work has focused mainly on denial of humanity (Leyens, Rodríguez, Rodríguez, Gaunt, Paladino, & Vaes, 2001) or on the differential attribution of particular forms of dehumanization to different social groups (Haslam & Loughnan, 2014), further studies have also shown that complementary attribution of HU and HN among groups is possible. That is, people sometimes attribute one form of humanity to the ingroup and another form to the outgroup. For example, Bain, Park, Kwok, & Haslam (2009) examined how Australians and the Chinese viewed each other in terms of humanness. They found that both agreed that Australians had higher levels of HN and Chinese people had higher levels of HU. These findings reflect a consensual attribution of HN and HU, whereby both groups emphasize the humanness dimension that is more salient, and probably more important to their respective cultures, for the ingroup. At the same time, the other dimension is attributed to a higher degree to the outgroup, thus showing that the ingroup is not necessarily considered superior on both dimensions of humanity. Another set of studies published by Leidner, Castano, and Ginges (2013) discovered a similar finding in the context of the conflict between Israelis and Palestinians. These authors showed that complementary dehumanization between Israelis and Palestinians fueled the conflict and led to a support for a direct punishment of the outgroup. Based on both studies, we can conclude that the attribution and denial of humanity to the ingroup and the outgroup are two processes that can influence intergroup relations.

However, as Vaes et al. (2012) pointed out, the role of ingroup and outgroup humanity should be discussed separately. This is because they could be influenced by separate variables and could also be associated with different consequences for intergroup relations. On one hand, it can be expected that a higher attribution of humanity to the

ingroup will lead to a glorification of one's own group, which might also minimize the ascribed ingroup responsibility for certain issues (Koval, Laham, Haslam, Bastian, & Whelan, 2011; Leidner, Castano, Zaiser, & Giner-Sorolla, 2010). On the other hand, outgroup dehumanization might shape the interpretation of a conflict by placing responsibility on the dehumanized others (Bastian, Laham, Wilson, Haslam, & Koval, 2011). To date, the influence of both processes has not yet been examined jointly to explain economic conflicts, such as the one triggered by the economic recession in the EU. In this context, we hypothesize that both processes will be associated with differential outcomes. Humanizing the ingroup would be associated with a tendency to perceive the ingroup as a victim of the economic conflict, whereas dehumanizing the outgroup would be linked to blaming others for the current economic recession.

(De)humanization and Economic Conflicts

Even though previous authors highlighted the role of dehumanization as a factor that might help to trigger economic conflicts (Kraus, Park, & Tan, 2017), dehumanization has been predominantly studied in the context of violent conflicts (Bandura, 1999; Kelman, 1976; Opotow, 1990; Staub, 1989), whereas political and economic conflicts are still relatively underresearched. In the context of our study, it might be possible that the existence of a dehumanized perception between Germans and Greeks, contributes to shape the perception of the economic conflict among members of the EU.

Further, researchers have examined the role of dehumanization before a conflict (Bar-Tal, 1989) or after it. For example, Castano and Giner-Sorolla (2006) found that White Americans dehumanized Native Americans more when reminded of white atrocities. In the European context, Cehajic, Brown, and Gonzalez (2009) reported that Serbians dehumanized Bosnians when reminded of the Bosnian genocide. Finally, other

studies have focused on conflicts such as the Israeli-Palestinian dispute and how mutual dehumanization can play a role in a longstanding conflict (Leidner, Castano, & Ginges, 2013). However, to our knowledge, no research has yet examined the role of dehumanization during the peak of an economic and political conflict. We considered that a developing economic conflict could facilitate the appearance of a mutual dehumanization, to a greater extent than longstanding conflicts. Therefore, our aim in this present project was to focus on whether ingroup and outgroup (de)humanization among the Germans and the Greeks was linked to the public perception of the causes, consequences and solutions to the economic conflict inside the EU, which has led to an explicit clash between countries when one called for a referendum to leave the EU (i.e., Greece). Aditionally, we considered that the conflict between Greece and Germany was most likely associated with both dehumanization and ingroup attitudes (i.e., outgroup antipathy or ingroup glorification). In line with previous studies (Andrighetto, Baldissarri, Lattanzio, Loughnan, & Volpato, 2014; Kteily, Hodson, & Bruneau, 2016), we expected that dehumanization may be an important barrier in the ongoing international conflict resolution above and beyond intergroup attitudes.

The Present Research

In the economic conflict context studied in this present research, mutual dehumanization of the outgroup and a tendency to emphasise ingroup humanity may feed the ongoing conflict by shaping perceptions of the crisis and inhibiting coordinated solutions. Thus, we conducted two exploratory online studies in Germany and Greece during the conflict and we hypothesized processes of mutual dehumanization: Firstly, regarding outgroup (de)humanization, we expected that in this context, Greece – one of the EU`s less economically stable countries, popularly described in the press with the

derogatory acronym PIIGS (Portugal, Italy, Ireland, Spain, Greece; BBC News, 2010) – would be viewed by the Germans as lacking HU. Specifically, in line with previous studies about poor groups (Loughnan et al, 2014; Sainz et al., 2018), we expected that the Greeks would be considered as lacking HU compared to HN (Hypothesis 1). We further expected that the Germans would be viewed by the Greeks as lacking HN, while having high levels of HU instead (Hypothesis 2) in line with Martínez, Rodríguez-Bailón, & Moya (2012). Secondly, regarding ingroup humanity we expected that the Germans would consider themselves as having more HU than HN (Hypothesis 3), whereas the Greeks would see themselves as having higher HN than HU (Hypothesis 4). This pattern of results would highlight that groups tend to ascribe to themselves the dimension of humanity that is denied to the other target involved in the conflict (i.e., complementary attribution of humanity; Bain et al., 2009). In short, we expected a mutual dehumanization (i.e., outgroup evaluation) with the Germans animalizing the Greek population, and the Greeks mechanizing the German population, along with a complementary atribution of humanity (i.e., ingroup evaluation). Furthermore, we reasoned that both mutual and complementary dehumanization would exert an effect on the interpretation of the different aspects of the crisis. We hypothesized that humanizing the ingroup and dehumanizing the outgroup would be linked to seeing the ingroup as victims and, at the same time, blaming the outgroup for the current economic situation (see Table 1):

Ingroup Humanity Hypothesis

We expected that for the Germans, the ascription of HU to the ingroup would predict a lack of ability to manage the economic recession on the part of the Greeks (i.e., worse administration, more responsibility and higher desire to control the Greek

Table 1. Summary of hypothesis for predictions of ingroup and outgroup (de)humanization (both HU and HN) on the perceived causes, consequences and solutions to the economic conflict included on the German and the Greek study

German study hypothesis		Support for hypothesis	
Ingroup humanity			
H5	German HU traits (compared to HN) will predict a worse administration of Greeks during the economic recession	≠	(attitudes)
H6	German HU traits (compared to HN) will predict higher responsibility to Greeks for the economic recession	=	
H7	German HN traits (compared to HU) will predict a minimization of the consequences of the economic recession for Greeks	≠	(attitudes)
H8	German HN traits (compared to HU) will predict lower support for debt relief	≠	(attitudes)
H9	German HU traits (compared to HN) will predict higher desire to control Greek economy	≠	(attitudes)
Outgroup humanity			
H10	Greeks HU traits (compared to HN) will predict a worse administration of Greeks during the economic recession	=	
H11	Greeks HU traits (compared to HN) will predict higher responsibility to Greeks for the economic recession	≠	(attitudes)
H12	Greeks HN traits (compared to HU) will predict a minimization of the consequences of the economic recession for Greeks	≠	(HU dimension)
H13	Greeks HN traits (compared to HU) will predict lower support for debt relief	≠	(attitudes)
H14	Greeks HU traits (compared to HN) will predict higher desire to control Greek economy	≠	(any)
Greek study hypothesis			
Ingroup Humanity			
H15	Greek HU traits (compared to HN) will predict a better administration of Greeks during the economic recession	≠	(HN dimension)
H16	Greek HU traits (compared to HN) will predict lower responsibility to Greeks for the economic recession	≠	(HN dimension)
H17	Greek HN traits (compared to HU) will predict a maximization of the consequences of the economic recession for Greeks	≠	(HU dimension)
H18	Greek HN traits (compared to HU) will predict higher support for debt relief	≠	(any)
H19	Greek HN traits (compared to HU) will predict lower desire to be controlled by Germans	=	
Outgroup humanity			
H20	German HU traits (compared to HN) will predict a worse administration of Greeks during the economic recession	≠	(HN dimension)
H21	German HU traits (compared to HN) will predict higher responsibility to Greeks for the economic recession	=	
H22	German HN traits (compared to HU) will predict a minimization of the consequences of the economic recession for Greeks	=	
H23	German HN traits (compared to HU) will predict lower support for debt relief	≠	(HU dimension)
H24	German HN traits (compared to HU) will predict lower desire to be controlled by Germans	=	

Note. Symbols on the final column of the table resume if data supported our hypothesis (i.e., =) or if the outcomes were predicted by other variables (i.e., ≠). In brackets the alternative factors that significally predicted the outcome.

economy). Also, the ascription of HN to the ingroup would minimize the German´s concern about the Greeks (i.e., minimization of the consequences and lower debt relief). On the contrary, in the case of the Greeks, we expected that ingroup HU would predict that the Greeks would be perceived as capable of managing their economy (i.e., proper administration, and less responsibility). Additionally, ingroup HN would predict consequences of the crisis and the desire to receive autonomous aid from the EU (i.e., higher recognition of the level of suffering, debt relief and the desire to avoid control over their economy). In short, we expected that German ingroup humanity would contribute to more blaming of Greeks for the economic recession, whereas Greek ingroup humanity would contribute to minimized ingroup responsibility for their economic situation.

Outgroup Humanity Hypothesis

Regarding the outgroup humanity, we expected that for Germans the lack of HU in the outgroup (i.e., their perception that the Greeks are animal like), would predict that the Greeks have a poorer ability to deal with the economic recession, more Greek responsibility for the crisis, and a greater desire to control Greek economy. In addition, the ascription of HN to the outgroup would minimize the Greeks' perceived capability to suffer (i.e., minimization of the consequences and lower debt relief). On the contrary for Greeks, the lack of HN (or the Greeks mechanizing the Germans) would result in the perception that Germans do not care about the well-being of Greeks (i.e., minimization of consequences, lower debt relief and lower desire for Germans control). In addition, the ascription of HU to the Germans would lower the perceived capability of economic administration of Greeks, but might also predict more ingroup responsibility for the economic recession in the case of the Greeks (i.e., Greeks assuming that Germans have higher HU, and thus, are better in dealing with their economy). In short, for Germans,

denial of HU to the Greek population might be associated with the Greeks' lack of ability to deal with the economic recession, while denial of HN would be associated with a minimization of the suffering caused by the economic recession. For Greeks, the denial of HN to the German population would be associated with the desire to be independent from German control or the idea that the Germans do not appreciate/perceive the suffering of the Greek population. Finally, we expected that the above pattern of results would be presented even when controlling by outgroup derogation (i.e., negative attitudes) and ingroup glorification (i.e., positive attitudes).

Overall, in the present project we explored if both ingroup humanization and outgroup dehumanization, as separate processes, would manifest as barriers to a mutual agreement between the Germans and the Greeks. Materials can be found online (osf.io/97v3s).

Method

Participants

We conducted two online studies, one in Germany *(n* = 83, 41 women, 42 men, M_{age} = 32.19, *SD* = 11.64) and the other in Greece (*n* = 69, 48 women, 21 men, M_{age} = 35.53, *SD* = 8.42). Participants from both nations, drawn from the general population, volunteered to complete an online questionnaire in the days following the Greek referendum (July 5th, 2015). The studies were active for one week (July 16th -23rd, 2015) when the conflict was at its peak, as Greek voters had rejected the German brokered bailout. Power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) indicated that for a multiple regression analysis (three predictors, medium effect size f^2 = .15, α = .05, 80% Power, required sample = 77) the study would have benefitted from a bigger sample size. However, data collection was deliberately scheduled specifically for the days after the

referendum, in order to be able to analyze the influence of dehumanization during the peak of the economic conflict. As a result, the size of the data sample was constricted by the limited time available for data collection.

Materials and Procedure

Participants volunteered to take part in a study about the economic situation in Greece. The content of both surveys was the same, the survey was originally created in English and translated into German and Greek by native speakers. This project obtained ethical approval from the lead author`s institution. Responses were made on a 7-point Likert scale with high scores reflecting strong endorsement of the statements or a high attribution of traits to the target. The order of the questions relating to the Germans and the Greeks was counterbalanced. Participants required around 10 minutes to complete the questionnaire.

Mutual dehumanization. Participants in both studies rated the ingroup's and the outgroup`s humanity using an 8-item scale from Bastian, Jetten, and Radke (2012). Participants rated the level of HN (e.g., `Germans/Greeks are mechanical and cold, like robots´ (reversed), Cronbach's α ranged from .55 to .72) and the level of HU (e.g., `Germans/Greeks are rational and logical´, two items were excluded due to low reliability, final α ranged from .71 to .75).

Perceived causes of the crisis. To assess the perceived origins of the Greek crisis, participants completed three items related to the financial administration of the Greek economy (e.g., `Greeks have been wasting the money that the EU gave to them´ (reversed), α = .64), and three items regarding the responsibility of Greeks (e.g., `The Greeks are mostly responsible for the current economic crisis´, α = .71).

Consequences of the crisis. To assess people's beliefs about the harm being caused by the crisis, we asked both the Germans and the Greeks to report the extent to which the crisis was causing hardship and suffering in Greece with six statements (e.g., `To what extent are the Greeks suffering because of the current economic crisis?´, `Greeks are complaining too much about the austerity measures?´ (reversed), α = .77).

Attitudes towards crisis solutions. The potential debt relief solution to the crisis was measured by having the Germans and the Greeks report the amount of Greek debt that should be paid by the EU using a slider (from 0 to 100% of the debt). In addition, participants were asked about the specific conditions of debt relief. Participants responded to three questions about possible financial control/freedom of the Greek economy (e.g., `The Greeks need the Germans to direct their financial policy´; `Greeks are able to solve the economic problems by making their own decisions´ (reversed), α = .69).

Other measures. Basic demographics including age and gender were asked at the beginning of the questionnaire. In order to measure attitudes toward the ingroup and the outgroup, participants answered an attitude thermometer about Germans and Greeks. Ratings ranged from 0 (extremely unfavorable) to 100 (extremely favorable).

Results

Firstly, simple statistics were calculated (see Supplementary Information 1). Secondly, we examined mutual attribution of humanity before turning to the association between in/outgroup (de)humanization, and the interpretation of the economic recession.

Mutual Dehumanization

We calculated a repeated-measures ANOVA with Humanity (HU vs. HN) and Group (Ingroup vs. outgroup) as within-subjects factors, and Nationality (Germans vs. Greeks) as a between-subjects factor. Results showed a main effect of Humanity, $F_{(1, 150)}$

= 60.01, $p \leq .01$, $\eta^2_p = .29$, and Group, $F_{(1, 150)} = 4.65$, $p = 0.03$, $\eta^2_p = .03$. Importantly, there were significant interactions between Humanity and Nationality $F_{(1, 150)} = 47.88$, $p < .001$, $\eta^2_p = .24$, and between Group and Nationality $F_{(1, 150)} = 11.07$, $p < .001$, $\eta^2_p = .07$. Further, these results were qualified by a significant three-way interaction between Humanity, Group, and Nationality, $F_{(1, 150)} = 16.83$, $p \leq .001$, $\eta^2_p = .10$. Regarding the outgroup evaluation, simple effects revealed that the Germans attributed a lower level of HU to the Greeks ($M = 4.08$, $SD = .92$) than to themselves ($M = 4.61$, $SD = .94$, $t_{(82)} = 4.19$, $p \leq .001$, 95% CI [-.78, -.28], Hedges's $g_{av} = 0.56$), whereas Greeks attributed a lower level of HN to the Germans ($M = 2.96$, $SD = 1.17$) than to themselves ($M = 5.41$, $SD = .70$, $t_{(68)} = 13.27$, $p \leq .001$, 95% CI [2.08, 2.82], Hedges's $g_{av} = 2.54$). Therefore, these results reflect mutual dehumanization with the Germans viewing the Greeks as relatively lacking in HU (i.e., animal-like) and Greeks considering the Germans as lacking in HN (i.e., machine-like), supporting our Hypotheses 1 and 2 (Table 2).

Table 2. Means and *SD* of ingroup and outgroup humanity (both HU and HN) as a function of group membership (German and Greek study)

	German Study		Greek Study	
	Outgroup	Ingroup	Outgroup	Ingroup
HU	4.08 (*.92*) [a1]	4.61 (*.94*) [a2]	4.09 (*1.06*) [a1]	4.42 (*1.07*) [a1]
HN	5.02 (*.77*) [b1]	4.33 (*.78*) [b2]	2.96 (*1.17*) [b1]	5.41 (*.70*) [b2]

Note. Values with different superscripts across columns (i.e., letters) and files (i.e., numbers) are significantly different from each other.

Regarding the ingroup evaluation, simple effects revealed that the Germans considered themselves as having more HU ($M = 4.61$, $SD = .94$) than HN ($M = 4.33$, $SD = .78$, $t_{(82)} = 2.35$, $p = .02$, 95% CI [.04, .51], Hedges's $g_{av} = .32$), whereas Greeks perceived themselves as having more HN ($M = 5.41$, $SD = .70$) than HU ($M = 4.42$, $SD = 1.07$, t

$_{(68)}$ = 8.84, $p \leq .001$, 95% CI [.77, 1.22], Hedges's g$_{av}$= 1.09). Additionally, attributions of humanity also revealed that the Germans perceived the Greeks as having more HN (M = 5.02, SD = .77) than HU (M = 4.08, SD = .92, $t_{(82)}$ = 10.81, $p \leq .001$, 95% CI [.77, 1.11], Hedges's g$_{av}$= 1.10). Whereas the Greeks perceived the Germans as having more HU (M = 4.09, SD = 1.06) than HN (M = 2.96, SD = .1.17, $t_{(68)}$ = 7.80, $p \leq .001$, 95% CI [.84, 1.42], Hedges's g$_{av}$= 1.01). In short, these results support our Hypotheses 3 and 4, regarding the complementary attribution of humanity.

Dehumanization and Interpretation of the Conflict

To analyze the role of outgroup dehumanization, ingroup humanization, and attitudes between countries, we ran simultaneous multiple regression analyses using humanity attributions (HU/HN) and attitudes as predictors of the causes, consequences and solutions of the economic crisis for both the Germans and the Greeks. In order to provide a clear exposition of our results, we split the results to show the interpretation of the conflict from the point of view of the Germans and the Greeks, sequentially.

Germans interpretation of the conflict. Multiple regression analysis using humanity attributions (HU/HN) for the ingroup (i.e., Germans) and for the outgroup (i.e., Greeks) and using ingroup/outgroup attitudes as predictors of the causes, consequences and solutions of the economic crisis for the German sample (Table 3) were run. Result are summarized in the following:

Dehumanization and perceived causes of the crisis. Regarding the perceived causes of the crisis, results for the German sample showed that ingroup attitudes predicted both administration errors (β = -.02, SE = .01, p = .01) and Greek responsibility for the crisis (β = .02, SE = .01, p = .02). In addition, the attribution of HU to the ingroup also predicted higher Greek responsibility during the crisis (β = .52, SE = .17, $p \leq .001$). The

same analysis using humanity and attitudes about the outgroup (i.e., Greeks) was conducted. Results indicated that for the Germans, the level of Greek HU (β = .42, *SE* = .18, p = .02) and negative attitudes about the outgroup (β = .03, *SE* = .01, p ≤ .001) were associated with negative appraisals of the Greeks' financial administration. It seems that the Germans view the ingroup as especially positive and rational, but also perceive the Greeks as animals – this was associated with a higher tendency to blame the Greeks for their situation.

Specifically, results highlighted that humanization of the Germans by means of HU attribution predicted outgroup responsibility (Hypothesis 6). Also Greek lack of HU predicted a worse administration of the Greek economy above outgroup negative attitudes (Hypothesis 10). However, German humanity does not seem to play a role in Greek administration (opposite to Hypothesis 5). Additionally, Greek humanity does not predict responsibility for the economic recession to the Greeks (opposite to Hypothesis 11). Finally, a positive perception of the ingroup led to the conclusion that the Greek's administration of its economy was inferior to that of the German's, and a negative perception of the Greeks resulted in the view that the Greeks had a higher level of responsibility for the crisis.

Dehumanization and consequences of the austerity policies. Regarding the perception of the consequences of the economic recession, results for the Germans indicated that for the Germans ingroup attitudes negatively predict perceived suffering of the Greeks (β = -.02, *SE* = .00, p ≤ .001). The more positive attitudes about the ingroup, the more Germans reported that Greeks would be complaining too much about the crisis, against our Hypothesis 7. Also the animalization of Greeks was associated with the notion that Greeks are complaining to much about the crisis (β = .34, *SE* = .14, p = .01), in opposition

Table 3. Multiple regression analysis using ingroup/outgroup humanity (both HU and HN) and attitudes as the predictors of the causes, consequences and solutions included on the German study

Predictors	Administration			Responsibility			Consequences			Debt relief			Financial control		
	β (SE)	95% CI	p	β (SE)	95% CI	p	β (SE)	95% CI	p	β (SE)	95% CI	p	β (SE)	95% CI	p
Ingroup	$F_{(3,82)} = 4.12, R^2 = .13, p = .01$			$F_{(3,82)} = 8.94, R^2 = .25, p \leq .001$			$F_{(3,82)} = 13.98, R^2 = .34, p \leq .001$			$F_{(3,82)} = 4.90, R^2 = .16, p = .004$			$F_{(3,82)} = 4.03, R^2 = .13, p = .010$		
HU	-.16 (.16)	[-.48, .15]	.30	.52 (.17)	[.19, .85]	.00	-.02 (.10)	[-.21, .18]	.87	-5.97 (3.31)	[-12.60, .62]	.07	.03 (.15)	[-.28, .33]	.87
HN	-.12 (.19)	[-.51, .26]	.52	.19 (.20)	[-.22, .59]	.36	-.17 (.12)	[-.41, .06]	.14	.62 (4.04)	[-7.42, 8.65]	.88	.06 (.19)	[-.32, .44]	.75
Attitudes	-.02 (.01)	[-.03, -.01]	.01	.02 (.01)	[.00, .03]	.02	-.02 (.00)	[-.03, -.01]	.00	-.39 (.15)	[-.68, -.10]	.01	.02 (.01)	[.01, .03]	.00
Outgroup	$F_{(3,82)} = 7.49, R^2 = .22, p \leq .001$			$F_{(3,82)} = 2.09, R^2 = .07, p = .108$			$F_{(3,82)} = 2.64, R^2 = .09, p = .055$			$F_{(3,82)} = 3.63, R^2 = .12, p = .016$			$F_{(3,82)} = 1.85, R^2 = .07, p = .144$		
HU	.42 (.18)	[.07, .78]	.02	-.18 (.22)	[-.61, .26]	.41	.34 (.14)	[.07, .61]	.01	1.99 (4.01)	[-5.99, 9.96]	.62	-.29 (.19)	[-.67, .09]	.14
HN	-.19 (.23)	[-.66, .27]	.41	.08 (.29)	[-.49, .65]	.78	-.20 (.18)	[-.55, .16]	.27	2.53 (5.24)	[-7.90, 12.96]	.63	.24 (.25)	[-.25, .74]	.33
Attitudes	.03 (.01)	[.01, .04]	.00	-.02 (.01)	[-.04, .00]	.06	.01 (.01)	[-.01, .02]	.41	.41 (.18)	[.04, .78]	.03	-.01 (.01)	[-.03, .00]	.12

to our Hypothesis 12. It seems that Germans minimized the suffering among Greek population by maintaining a positive perception of themselves while considering that Greeks are animal-like.

Dehumanization and solutions. Results regarding the possible solutions indicated that in the German sample, debt relief was mainly predicted by attitudes towards the ingroup (β = -.39, *SE* = .15, *p* = .01), and the outgroup (β = 41, *SE* = .18, *p* = .03). Also more positive ingroup attitudes were linked to a perceived desire to control Greek finances (β = .02, *SE* = .01, *p* $\leq$ .001). In short, the role of positive ingroup attitudes and negative outgroup attitudes seems to have driven the solution that German participants were willing to endorse. However, humanity attributions do not seem to play a main role for the Germans in the present study (Hypothesis 8, 9, 13, 14).

Greek interpretation of the conflict. Multiple regression analysis using humanity attributions (HU/HN) for the ingroup (i.e., Greeks) and the outgroup (i.e., Germans) and ingroup/outgroup attitudes as predictors of the causes, consequences and solutions of the economic crisis for the German sample (Table 4), were computed. Result are summarized in the following:

Dehumanization and perceived causes of the crisis. Regarding the perceived causes of the crisis, results for the Greek sample showed that the attribution of HN to the ingroup predicted a competent financial administration of the Greek economy (β = 57, *SE* = .24, *p* = .02) and lower levels of responsibility for their economic situation (β = -.70, *SE* = .24, *p* $\leq$ .001). In short, ingroup humanity for the Greeks seems to lower the responsibility placed on the Greek population for the economic recession. However, the Greeks highlighted that it was their HN and not their ascribed level of HU, as was previously predicted (Hypothesis 15-16), the dimension that lowered ingroup responsibility.

Regarding the humanity and attitudes about the outgroup, results indicated that Greeks considering Germans as machine-like (i.e., low HN) was the predictor of judgements of error in the Greek financial administration (β = -.48, SE = .15, $p \leq$ .001), in opposition to our Hypothesis 20. While the attribution of HU to the Germans predicts Greek responsibility during the economic recession (β = .40, SE = .15, p = .01) in line with our Hypothesis 21. Therefore, it seems that viewing the Germans as lacking HN was associated with a tendency to believe that Greeks have not been wasting EU money. At the same time perceiving Germans as rational and civilized was associated with a tendency to attribute more responsibility for the current situation to the ingroup.

Dehumanization and consequences of the austerity policies. Results regarding the consequences of the economic crisis showed that Greek ingroup attribution of HU was linked to the belief that the ingroup suffers greatly (β = .25, SE = .11, p = .03); the more Greeks humanized the ingroup by distancing themselves from animals, the more they reported suffering as a consequences of the austerity policies (opposite to Hypothesis 17). On the contrary, dehumanizing the Germans on both dimensions, and disliking them, were not significant predictors of the Greeks' suffering caused by the consequences of the economic crisis on a simultaneous multiple regression analysis. However, when running the regression analysis only with German HU and HN as the predictors of the negatives consequences of the austerity policies for the Greeks, results showed that the denial of HN to the Germans negatively predicted the Greeks' suffering during the economic recession ($F_{(1, 68)}$ = 9.44, β = -.271, SE = .088, p = .003, R^2 = .124). The more the Germans were considered as unemotional machines, the more the Greek participants thought that Germans did not care about the suffering of the Greek population, in line with Hypothesis 22.

Table 4. Multiple regression analysis using ingroup/outgroup humanity (both HU and HN) and attitudes as the predictors of the causes, consequences and solutions included on the Greek study

Predictors	Administration β (SE)	95% CI	p	Responsibility β (SE)	95% CI	p	Consequences β (SE)	95% CI	p	Debt relief β (SE)	95% CI	p	Financial control β (SE)	95% CI	p
Ingroup	$F_{(3, 68)}$ = 5.58, R^2 = .20, p = .002			$F_{(3, 68)}$ = 6.24, R^2 = .22, p = .001			$F_{(3, 68)}$ = 3.89, R^2 = .15, p = .013			$F_{(3, 68)}$ = 2.06, R^2 = .09, p = .114			$F_{(3, 68)}$ = 5.84, R^2 = .21, p = .001		
HU	.18 (.16)	[−.13, .50]	.25	−.16 (.16)	[−50, .09]	.32	.25 (.11)	[.02, .47]	.03	4.52 (2.93)	[−1.34, 10.39]	.13	−.14 (.15)	[−.44, 16]	.36
HN	.57 (.24)	[.09, 1.05]	.02	−.70 (.24)	[−1.06, −1.6]	.00	.19 (.17)	[−.15, .53]	.28	3.96 (4.45)	[−4.92, 12.86]	.38	−.62 (.23)	[−1.08, −.16]	.01
Attitudes	−.01 (.01)	[−.03, −.00]	.04	−.01 (.01)	[−.02, .01]	.28	.00 (.00)	[−.01, .01]	.99	−.01 (.12)	[−.24, .22]	.92	−.01 (.01)	.[−.02, .00]	.14
Outgroup	$F_{(3, 67)}$ = 7.54, R^2 = .26, p < .001			$F_{(3, 67)}$ = 6.69, R^2 = .24, p = .001			$F_{(3, 67)}$ = 4.24, R^2 = .17, p = .009			$F_{(3, 67)}$ = 6.28, R^2 = .23, p < .001			$F_{(3, 67)}$ = 6.22, R^2 = .23, p = .001		
HU	−.18 (.14)	[−.47, .11]	.21	.40 (.15)	[.11, .70]	.01	−.14 (.11)	[−.36, .07]	.18	−7.98 (2.59)	[−13.14, −2.81]	.00	.19 (.14)	[−.10, .47]	.20
HN	−.48 (.15)	[−.77, −.18]	.00	.20 (.15)	[−.10, .51]	.19	−.15 (.11)	[−.37, .06]	.16	−2.37 (2.65)	[−7.66, 2.92]	.37	.41 (.15)	[.12, 70]	.01
Attitudes	.01 (.01)	[−.01, .01]	.99	.00 (.01)	[−.01, .02]	.37	.00 (.00)	[−.01, 00]	.25	−.07 (.10)	[−.28, .14]	.49	.00 (.01)	[−.01, .01]	.99

Dehumanization and solutions. Results regarding the Greek sample showed that debt relief was not predicted by ingroup humanity or attitudes (Hypothesis 18), while ingroup HN negatively predicted the German control over the Greek economy (β = -.62, SE = .23, p = .01). The more the Greeks considered themselves as being human in terms of their warmth or cognitive flexibility the more they rejected Germans control, in line with Hypothesis 19. Regarding outgroup humanity and attitudes, results indicated that the attribution of HU (not the attribution of HN as expected by the Hypothesis 23) to the Germans negatively predicted the support for debt forgiveness (β = -7.98, SE = 2.58, $p \leq$ .001). Also, considering the Germans as machine-like predicted the Greeks' desire to avoid German financial control over the Greek economy (β = .41, SE = .15, p = .01) in line with Hypothesis 24. In short, the Greek HN predicted the desire to make their own decisions, while German HN predicted the Greeks' desire to avoid German financial control over their economy.

Discussion

The economic and political situation in the EU at the time of the conflict was critical. This was because the conflict had reached the breaking point of the EU, and the idea of countries exiting the union was actively discussed. For instance, the United Kingdom's decision to exit the EU (Brexit) is seen by some as a byproduct of their discontentedness with the EU's handling of the financial crisis. Two studies examined the role of (de)humanization in the economic conflict inside the EU, particularly from the perspective of the Germans and the Greeks, offering insights into the importance of humanizing the ingroup, along with outgroup dehumanization, on the interpretation of the causes and consequences of the economic conflict and its possible solutions.

Previous work linking dehumanization and conflict (Castano & Giner-Sorolla, 216; Cehajic et al., 2009; Leidner et al, 2013) has typically focused only on outgroup dehumanization or ingroup humanization, whilst neglecting the effect of both processes occurring simultaneously and influencing the interpretation of the same economic situation. Our results addressed the limitations of that approach by including both ingroup humanity and outgroup dehumanization, along with the inclusion of ingroup and outgroup attitudes. This approach has allowed us to compare the different effects of both ingroup humanization and outgroup dehumanization (as suggested in the review by Vaes et al., 2012). Our findings suggest that the picture is complex and that situational context is also very important: humanity attributions between citizens of each country could be driving and perpetuating the contradicting opinions about what measures the EU should have been taking in order to solve this situation.

Results indicated that for the Germans, the Greeks lacked HU (i.e., are perceived as animal-like), while they assume that their ingroup scores higher in this dimension (compared to HN). This higher ascription of HU to the ingroup predicts the perception that the Greeks are solely responsible for their economic recession. Additionally, animalizing the Greeks was linked to the perception that the Greeks did not properly manage their economy, and that the Greek population was not struggling from the economic recession. This later finding is opposed to the general assumption that HN and perceived suffering are tied to each other. However, previous research has also highlighted that the suffering of animalized groups is considered to be at a lower extent than humanized groups. Specially, this might happen if the Germans considered that the suffering caused by the crisis is related to social pain (e.g., exclusion from EU policies, not being taken in consideration as a member of the EU) more than physical pain (e.g.,

austerity, or being attacked/gassed during strikes) as Riva and Andrighetto (2012) have pointed out.

Despite these relations, we assume that for the Germans, the perception of the conflict was not closely tied to ingroup/outgroup humanity, but to a general tendency to perceive the ingroup positively while derogating Greeks. Previous studies have demonstrated that dehumanization is a process that has consequences over and above the simple negativity towards outgroups (Andrighetto et al., 2014). However, it might be possible that in the present results, valence might have explained the interpretaton of the conflict. This might be as a consequences of the dehumanization measure (Bastian et al., 2012) capturing not only dehumanization, but also featuring a valence component. Another posible explanation to the present results migh be due to a moderation of dehumanization based on group status. Previous research has found that dehumanization migh be triggered by the perception that the other is dehumanizing the ingroup (i.e., meta-dehumanization; Kteily et al., 2016). However, it might also be possible that this process does not equally apply to low vs. high status groups. In the context of our study, Germans were considered as one of the wealthiest nations of the EU, and thus, as a high status nation. This might render a minimization of the negative outcomes of being dehumanized by a low status group (i.e., the Greeks). Further studies should address this issue by investigating how high vs. low status groups react when they are dehumanized.

Regarding the Greek sample, results highlight that the Greeks maintained a dehumanizing perception of the Germans as machine-like, while assuming that their ingroup had higher levels of HN than HU. As in the case of the Germans, these results can be interpreted as a complementary attribution of humanity among members of the EU (Bain et al., 2009). Additionally, results for the Greeks indicated that humanity plays

a more prominent role on the interpretation of the economic conflict compared to the Germans. However, data seems to indicate that we underestimated the role of Greek HN as a predictor of a more efficient administration or as a variable that lowers the responsibility attributed to the ingroup for the economic recession. It seems that for the Greeks, their warmth, flexibility or their cognitive openness (all traits associated with HN), more than their culture or their civic behavior, influences their understanding of the perceived causes of the crisis, and the desire to avoid German control over the Greek economy. Additionally, the ascribed level of HU to the ingroup was, contrary to our predictions, the variable that predicted the maximization of the consequences derivate from the economic recession. This result was in line with the evaluation that the Germans made of the Greeks regarding the consequences derived from the economic recession (i.e., Greek HU predicted the consequences on the German sample). As previously mentioned, outgroup animalization (the German study), or ingroup ascription of HU (the Greek study) might be related with suffering to the extent that animals are considered to suffer less compared to humans. Therefore, it can be expected that for the Greeks, highlighting that they are not inferior to other citizens in the EU (i.e., they also have HU traits to the same extent as the Germans) might be associated with the idea that the austerity policies, the denigration of Greek politicians in the EU assemblies, or not taking into consideration the Greeks' opinions on EU policies, have a negative impact on the wellbeing of the Greek population (i.e., more social pain; Riva & Andrighetto, 2012).

Complementing these findings, outgroup humanity (i.e., Germans) seemed to affect the interpretation of the conflict. A possible explanation is that the Greeks, perceiving the Germans as cold and unemotional, might trigger the perception that Germans are actively damaging the Greeks' economy by supporting austerity measures in

the EU parliament. This lack of emotionality also seems to trigger the desire to avoid any economic control by the EU. Finally, results also showed an interesting association between the Germans attribution of HU traits and the responsibility of the Greeks during the economic recession or the support for debt relief. These results seem to indicate that the Greeks assume some responsibility for the economic recession. But also, the Germans' HU was associated with the perception that the Germans were not willing to forgive part of the Greek national debt. This indicated that humanizing others might lead to assume certain ingroup responsibility. In short, we can conclude that our results indicated that for the Greeks, their own humanity as well as the dehumanization of Germans contributed to shaping the interpretation of the economic conflict inside the EU.

In general, both processes of mutual outgroup dehumanization and emphasizing ingroup humanity seemed to be associated with the sentiments and interactions between these EU partners locked in conflict. These results showed the different functionally of ingroup and outgroup humanity, along with group attitudes, on the interpretation of the conflict. On the one hand, it seems that ingroup humanity served as a defense mechanism that allowed the group to preserve an upstanding perception of themselves as not responsible or even as the victim of the situation. This might serve to mitigate ingroup flaws (Koval et al., 2012) on the part of the Greeks. On the other hand, results regarding outgroup dehumanization showed the opposite patter of results. Outgroup dehumanization contributes to highlight the responsibility of the other and blame them for the current economic situation. In short, these exploratory results give us some information about the different functionality of ingroup and outgroup humanity on the interpretation of the same economic issue: Both process seems to contribute to undermine conflict resolution by following different paths. Therefore, as Vaes et al., 2012 pointed

out, both perspectives should be taken into consideration when analyzing the interpretation of one single issue, by different agents involved in a conflict.

However, results also pointed out some discrepancies on the extent dehumanization influences the interpretation of the conflict. Interestingly, results seem to indicated that humanity predicts, to a greater extent, the outcomes during the conflict from the perspective of the group experiencing austerity (i.e., the Greeks) rather than from the point of view of the group demanding that these measures are enforced (i.e., the Germans). As previously mentioned, we hypothesized that these differences might be driven by the asymmetry reflected in the conflict. It is possible that the perceptions that the Greeks have about being dehumanized by the Germans, was not comparable with the perception that the Germans have about being dehumanized by the Greek population. At least, in terms of the influence of dehumanization on the conflict resolution strategies (e.g., leaving the EU or not), the consequences of one or another resolution might more directly affect the well-being of the group experiencing austerity (the Greeks) rather than the other nation involved in the conflict. Future studies might address this issue by analyzing how asymmetries in conflicts shape the attribution of humanity to both the ingroup and the outgroup. Furthermore, the possible influence on the strength (how extreme or mild) of meta-dehumanization (Kteily et al., 2016) based on the conflict asymmetry may trigger further research. Based on our exploratory results, we can expect that for advantaged groups the meta-dehumanization reaction will be mild compared to the reaction of the disadvantage groups when they perceive that the other is dehumanizing them. Additionally, these studies provide insight into dehumanization processes in an ongoing economic conflict. However, it is difficult to determine whether dehumanization fuels the conflict, conflict fuels the dehumanization, or both. Based on

previous literature, both possibilities seem likely (Leidner et al, 2013; Castano & Giner-Sorolla, 216; Cehajic et al., 2009). Most importantly, this work has shown that dehumanization works *during* conflict, not only before and after it. It might be possible that the present pattern of results may vary when comparing conflicts whose origin is several years before, or incipient conflicts that are just arising. Future studies could compare the role of both ingroup and outgroup (de)humanization on different states of the conflict, comparing how levels of (de)humanization changes during pre/post situations with the level of mutual (de)humanization during the peak of the conflict. Lastly, although the present project would have benefitted for a bigger sample size, our aim of studying the conflict during its peak meant that data collection was only undertaken during the week after the referendum. This posed a limitation to the sample size.

The present results highlight that the current economic conflict might perpetuate the perceived division among members of the EU. This mutual dehumanization along with negative attitudes between the Germans and the Greeks favour the internal division of the union. Therefore, it seems necessary to design interventions that could be implemented in order to address this dehumanization process amongst EU members. For instance, promoting a general identity (Albarello & Rubini, 2012) of Europeans by focusing on the traits that we share, more than on the traits that distinguish one nation from other, might shape a more collective identification that can lead to less blame, more aid and a more efficient resolutions of future EU economic crises.

In conclusion, the EU reflects a union of nations facing shared problems and seeking shared solutions. Unfortunately, the division caused by the economic recession and countries leaving the union seems to be undermining the European project. Nowadays,

the European project has changed drastically since its conception and the problems inside the EU are not perceived as shared. Consequently, blame is attributed to one party alone, and therefore, the solutions to problems seem harder to apply. This paper suggests that for some people in EU nations, humanity is not an attribute they believe they share. Its seems that dehumanizing the other members of the EU contributes to the neglect of the problems inside the EU, whereas humanizing their own nationality seems to reinforce the perception of the ingroup as not responsible for the problems that may have arisen as a consequence of the economic recession. Most importantly, this has serious and negative consequences when crises and conflicts arise inside the EU. Sharing humanity, as well as currencies, favors common causes and common solutions. Perhaps conflict resolution should not only involve acceptance of a common responsibility, but also the recognition that citizens on different countries inside the EU are equally human.

References

Albarello, F., & Rubini, M. (2012), Reducing dehumanization outcomes towards Blacks: The role of multiple categorization and of human identity. *European Journal of Social Psychology, 42*(7). 875-882. doi:10.1002/ejsp.1902

Andrighetto, L., Baldissarri, C., Lattanzio, S., Loughnan, S., & Volpato, C. (2014). Human-itarian aid? Two forms of dehumanization and willingness to help after natural disasters. *British Journal of Social Psychology*, *53*(3), 573-84. doi: 10.1111/bjso.12066

Andrighetto, L., Baldissarri, C., & Volpato, C. (2017). (Still) Modern Times: Objectification at work. *European Journal of Social Psychology, 47(1)*, 25-35. doi:10.1002/ejsp.2190

Bain, P., Park, J., Kwok, C., & Haslam, N. (2009). Attributing human uniqueness and human nature to cultural groups: Distinct forms of subtle dehumanization. *Group Processes & Intergroup Relations*, *12*(6), 789–805. doi:10.1177/1368430209340415

Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, *3*(3), 193-209. doi:10.1207/s15327957pspr0303_3

Bar-Tal, D. (1989). Delegitimization: The extreme case of stereotyping. In D. Bar-Tal, C. F. Grauman, A. Kruglanski, & W. Stroebe (Eds.), *Stereotyping and prejudice: Changing conceptions* (pp. 169–182). New York: Springer.

Bastian, B., Jetten, J., & Radke, H. R. M. (2012). Cyber-dehumanization: Violent video game play diminishes our humanity. *Journal of Experimental Social Psychology*, *48*(2), 486–491. doi:10.1016/j.jesp.2011.10.009

Bastian, B., Laham, S. M., Wilson, S., Haslam, N., & Koval, P. (2011). Blaming, praising, and protecting our humanity: The implications of everyday dehumanization for judgments of moral status. *The British Journal of Social Psychology, 50*(3), 469–83. doi:10.1348/014466610X521383

Capozza, D., Andrighetto, L., Di Bernardo, G. A., & Falvo, R. (2011). Does status affect intergroup perceptions of humanity? *Group Processes & Intergroup Relations*, *15*(3), 363–377. doi:10.1177/1368430211426733

Castano, E., & Giner-Sorolla, R. (2006). Not quite human: infrahumanization in response to collective responsibility for intergroup killing. *Journal of Personality and Social Psychology*, *90*(5), 804–818. doi:10.1037/0022-3514.90.5.804

Cehajic, S., Brown, R., & Gonzalez, R. (2009). What do I care? Perceived ingroup responsibility and dehumanization as predictors of empathy felt for the victim group. *Group Processes & Intergroup Relations*, *12*(6), 715–729. doi:10.1177/1368430209347727

BBC News (2010, February 11). *Europe`s PIGS: Country by country.* Retrieved from: http://news.bbc.co.uk/2/hi/8510603.stm

Faul, F., Erdfelder, E., Buchner, A. & Lang, A.G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160. doi:10.3758/BRM.41.4.1149

New Statesman (2012, June 25). *Europe´s most dangerous leader.* Retrieved from http://www.newstatesman.com/blogs/staggers/2012/06/new-statesman-cover-25-june

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, *10*(3), 252-254. doi:10.1207/s15327957pspr1003_4

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology*, *65*(1), 399-423. doi:10.1146/annurev-psych-010213-115045

Haslam, N., & Stratemeyer, M. (2016). Recent research on dehumanization. *Current Opinion in Psychology*, *11*, 25–29. doi:10.1016/j.copsyc.2016.03.009

Iatridis, T. (2013). Occupational status differences in attributions of uniquely human emotions. *The British Journal of Social Psychology, 52*, 431–49. doi:10.1111/j.2044-8309.2011.02094.x

Kelman, H. C. (1976). Violence without restraint: Reflections on the dehumanization of victims and victimizers. In G. M. Kren & L. H. Rappoport (Eds.), *Varieties of psychohistory* (pp. 282–314). New York: Springer.

Koval, P., Laham, S. M., Haslam, N., Bastian, B., & Whelan, J. A. (2011). Our flaws are more human than yours: Ingroup bias in humanizing negative characteristics. *Personality & Social Psychology Bulletin*, *38*(3), 283–95. doi:10.1177/0146167211423777

Kraus, M. W., Park, J. W., & Tan J. (2017). Signs of social class: The experience of economic inequality in everyday life. *Perspectives on Psychological Science, 12*(3), 422-435. doi:10.1177/1745691616673192

Kteily, N., Hodson, G., & Bruneau, E. (2016). They see us as less than human: Meta-dehumanization predicts intergroup conflict via reciprocal dehumanization. *Journal of Personality and Social Psychology*, *110*(3), 343-70. doi:10.1037/pspa0000044

Leidner, B., Castano, E., & Ginges, J. (2013). Dehumanization, retributive and restorative justice, and aggressive versus diplomatic intergroup conflict resolution strategies. *Personality & Social Psychology Bulletin*, *39*(2), 181–92. doi:10.1177/0146167212472208

Leidner, B., Castano, E., Zaiser, E., & Giner-Sorolla, R. (2010). Ingroup glorification, moral disengagement, and justice in the context of collective violence. *Personality and Social Psychology Bulletin*, *36*(8), 1115-1129. doi:10.1177/0146167210376391

Leyens, J. Ph., Rodriguez, A. P., Rodriguez, R. T., Gaunt, R., Paladino, M. P., Vaes, J., & Demoulin, S. (2001). Psychological essentialism and the differential attribution of uniquely human emotions to ingroups and outgroups. *European Journal of Social Psychology*, *31*, 395–411. doi:10.1002/ejsp.50

Loughnan, S., Haslam, N., Sutton, R. M., & Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White trash," "Chavs," and "Bogans". *Social Psychology*, *45*(1), 54–61. doi:10.1027/1864-9335/a000159

Martínez, R., Rodríguez-Bailón, R., & Moya, M. (2012). Are they animals or machines? Measuring dehumanization. *The Spanish Journal of Psychology, 15*(3), 1110-22. doi:10.5209/rev_SJOP.2012.v15.n3.39401

BILD Zeitung (2015, February 26). *No! No more billions for the greedy Greeks.* Retrieved from http://www.bild.de/politik/inland/griechenland-krise/keine-weiteren-milliarden-fuer-die-gierigen-griechen-39925224.bild.html

Opotow, S. (1990). Moral exclusion and injustice: An introduction. *Journal of Social Issues*, *46*(1), 173–182. doi:10.1111/j.1540-4560.1990.tb00268.x

Riva, P., & Andrighetto, L. (2012). "Everybody feels a broken bone, but only we can feel a broken heart": Group membership influences the perception of targets' suffering. *European Journal of Social Psychology, 42*(7), 801-806. doi:10.1002/ejsp.1918

Sainz, M., Martínez, R., Moya, M., & Rodríguez-Bailón, R. (2018). Animalizing the disadvantaged, mechanizing the wealthy: The convergence of socioeconomic status and humanity attributions. *International Journal of Psychology.* doi:10.1002/ijop.12485

Staub, E. (1989). *The roots of evil: The origins of genocide and other group violence.* Cambridge, England: Cambridge University Press.

Vaes, J., & Muratore, M. (2013). Defensive dehumanization in the medical practice: A cross-sectional study from a health care worker`s perspective. *British Journal of Social Psychology, 52*(1), 180-190. doi:10.1111/bjso.1200

Vaes, J., Leyens, J.-P., Paladino, M. P., & Miranda, M. P. (2012). We are human, they are not: Driving forces behind outgroup dehumanisation and the humanisation of the ingroup. *European Review of Social Psychology*, *23*(1), 64-106. doi:10.1080/10463283.2012.665250

Supplementary information 1.

Means, *SD* and correlations among the variables related to the causes, consequences and solutions to the economic conflict included on the German and the Greek study.

Table 1. Means, *SD* and correlations among the variables related to the causes, consequences and solutions included on the German study

	Mean	*SD*	1	2	3	4	5
1. Administration	3.55	*1.35*	-	-.74**	.60**	.62**	-.52**
2. Responsibility	4.27	*1.52*		-	-.62**	-.63**	.38**
3. Consequences	4.91	*.96*			-	.38**	-.45**
4. Debt relief	42.42	*28.60*				-	-.34**
5. Financial control	3.94	*1.32*					-

Note. ** p < .001

Table 2. Means, *SD* and correlations among the variables related to the causes, consequences and solutions included on the Greek study

	Mean	*SD*	1	2	3	4	5
1. Administration	4.36	*1.30*	-	-.39**	.41**	.33**	-.461**
2. Responsibility	3.84	*1.31*		-	-.35**	-.31*	.61**
3. Consequences	5.99	*.90*			-	.28*	-.48**
4. Debt relief	66.67	*22.57*				-	-.26**
5. Financial control	2.51	*1.25*					-

Note. ** p < .001; * p < .05

Chapter 3

Animalistic Dehumanization of Low-SES Groups Contributes to the Justification of Income Inequality

Article 3

Less Human, More to Blame: How Animalizing Poor People Increases Blame and Decreases Support for Wealth Redistribution

Mario Sainz [1]

Rocío Martínez [1]

Robbie Sutton [2]

Rosa Rodríguez-Bailón [1]

Miguel Moya [1]

[1] Centro de Investigación, Mente, Cerebro y Comportamiento (CIMCyC),
Departamento de Psicología Social, Facultad de Psicología,
Universidad de Granada

[2] School of Psychology, Keynes College, University of Kent

Abstract

Groups with low socioeconomic status (low-SES) are being affected adversely by increasing economic inequality. However, many people are opposed to policies designed to redistribute wealth. In this context we examined how dehumanization of low-SES groups influenced the rejection of redistribution policies. In the first study (N = 303), opposition to redistribution was related to denying the human uniqueness (intelligence and rationality), more than denying the human nature (emotionality and capacity to suffer), of low-SES groups. Mediation analyses indicated that this effect occurred via attribution of blame on low-SES groups (more internal than external attributions) for their plight. In the second study (N = 220), we manipulated the human uniqueness of a fictitious low-SES group and found that this affected support for redistribution attitudes via blame of these groups. These results indicate that animalizing low-SES groups reduces support for redistribution via the placement of blame on low-SES groups for their situation.

Keywords: dehumanization, poverty, income inequality, income redistribution, low-SES.

Increasing rates of economic inequality are affecting the wellbeing of many people around the world (Buttrick & Oishi, 2017; Wilkinson & Pickett, 2017). Nowadays, the increasing gap among groups with different socioeconomic status (SES), the concentration of wealth in the hands of a few, or the high rates of poverty rates in many countries are only a few examples of the social issues that this situation raises (Hardoon, 2017). However, there is widespread popular opposition to policies designed to redistribute wealth and, therefore, to reduce the negative impact of income inequality (Ashok, Kuziemko, & Washington, 2015). The main aim of the present work is to analyze some ways in which people come to resist redistribution policies. Specifically, we focus on how dehumanizing low-SES groups (Loughnan, Haslam, Sutton, & Spencer, 2014; Sainz, Martínez, Moya, & Rodríguez-Bailón, 2018), may influence the rejection of redistribution policies through internal attributions for poverty (Bullock, Williams, & Limbert, 2003).

Opposition to Redistribution Policies

Previous studies have analyzed how different factors contribute to the legitimation and maintenance of the unequal status quo after the Great Recession (Moya & Fiske, 2017; Willis, Rodríguez-Bailón, López-Rodríguez, & García-Sánchez, 2015). In this context, redistribution preferences seem to be shaped by a multitude of variables such as the status of the perceiver (Brown-Iannuzzi, Lundberg, Kay, & Payne, 2015;), their ideological preferences (Jaime-Castillo, & Sáez-Lozano, 2014; Rodríguez-Bailón, Bratanova, Willis, López-Rodríguez, Sturrock, & Loughnan, 2017), structural variables such as inequality within a society (Heiserman & Simpson, 2017; Sands, 2017), and by various combinations of these factors (Dawtry, Sutton & Sibley, 2015). In addition, one

of the factors that contributes to the rejection of the redistribution of income is the causal understanding of poverty. Poverty is a complex and multi-determined process that is sometimes misrepresented as a simple consequence of an inadequate decision making process of low-SES groups (e.g., not saving money, being lazy), without considering how contextual or cultural factors (e.g., low wages, poor education, the loss of social values among the poor) are, in fact, influencing the economic situation of these groups (Tagler & Cozzarelli, 2013). This serves to justify income inequality by placing the responsibility for low-SES groups' situation on them, rather than on social and economic systems. In short, blaming low-SES groups for their situation promotes economic inequality by underpinning opposition to wealth redistribution (e.g., Bullock et al., 2003). We propose that this process is fueled by the dehumanization of low-SES group.

Dehumanization of Low-SES Groups

Dehumanizing groups has been considered a pervasive process that serves to legitimate different types of inequalities (for reviews see Haslam & Loughnan, 2014; Haslam, & Stratemeyer, 2016; Vaes, Leyens, Paladino, & Miranda, 2012). One of the main contributions to the study of dehumanization is Haslam`s (2006) dual model of humanity. According to this author there are two related dimensions of humanity: The first dimension is Human Nature (HN), which involves a sense of emotionality or interpersonal warmth that is denied to objects or machines. The denial of this dimension leads to the perception of others as machine-like (mechanistic dehumanization), without the ability to experience any suffering or other emotional states. The second dimension of Haslam`s (2006) model is Human Uniqueness (HU), which refers to intelligence, agency or self-control and serves to differentiate humans from other animals. Groups lacking this dimension are dehumanized in an animalistic way and, therefore, considered

as "inferior" or "less evolved" animals. The denial of this dimension has been considered as a process that contributes to create and sustain hierarchical differences among groups (Haslam & Loughnan, 2014).

Even though these dimensions of humanity (HU and HN) are related to each other, previous studies have found that the denial of each dimension has distinct outcomes. For example, denying HN to patients helps doctors to cope with burnout (Vaes & Muratore, 2013), and to administer painful but beneficial procedures to patients (Haque & Waytz, 2012). In contrast, the denial of HU, although itself relatively subtle (involving lowered perceptions of traits such as rationality and civility), is also associated with blatant forms of dehumanization including seeing racial/ethnic minorities as closer to apes than *Homo Sapiens* on an evolutionary continuum (Kteily, Bruneau, Waytz, & Cotterill, 2015). The denial of HU has been associated with a tendency to reduce helping behaviors (Andrighetto, Baldissarri, Lattanzio, Loughnan, & Volpato, 2014), with perceptions that groups are less capable of improving themselves (Viki, Fullerton, Ragett, Tait, & Wiltshire, 2012) or with a higher tendency to exclude groups in certain contexts (Martínez, Rodríguez-Bailón, Moya, & Vaes, 2015), among other possible negative consequences for those who are animalized (for a revision see Haslam & Loughnan, 2014).

Although early research focused on analyzing the role of dehumanization on the maintenance of racial, ethnics, or gender inequalities, more recent research has begun to examine the relation between dehumanization and social class. This research shows that there is a widespread tendency for people low in SES to be considered animal-like (Sainz et al., 2018): that is, to deny them HU traits. For example, Loughnan et al. (2014) showed

that low-SES groups such as "Chavs" in UK and "White trash" in US, were regarded as less uniquely human and more animal-like.

These findings indicate that the denial of HU may be an important feature pertaining to the perception of low-SES groups and, more generally, reactions to economic inequality. However, these findings also leave salient questions ripe for further investigation. For example, the finding that denial of HU rather than HN might characterize perceptions of low-SES groups is in need of replication, given that there are good theoretical grounds to suspect that denial of HN may allow people to come to terms with the existence of inequality and poverty in their society. Specifically, denial of HN implies that a group has a limited capacity to suffer, and so makes observers feel less distressed and guilty about their situation (Castano & Giner-Sorolla, 2006; Zebel, Zimmermann, Viki, & Doosje, 2008). Regarding denial of HU to low-SES groups, previous studies have found that people are less likely to help groups they consider to be animal-like (Andrighetto et al., 2014). Thus, it is plausible, though not yet established, that denial of HU to low-SES groups results in decreased support for redistribution. Further, the psychological mechanisms that might be responsible for this effect have also not been identified.

Overview of the Present Research

In summary, the animalistic dehumanization of low-SES groups might be influencing how poverty is perceived and responded to. However, whether this happens, and what mechanisms are responsible, has not been determined. Research indicates that low-SES groups are dehumanized, and that this might contribute to the justification and maintenance of economic inequalities, just as dehumanization serves to maintain racial and other intergroup hierarchies (for a review see Vaes et al., 2012).

Although there are grounds to believe that the mechanistic dehumanization (denial of HN) of low-SES groups might contribute to economic inequality, research showed that these groups tend instead to be the subject to animalistic dehumanization (denial of HU). Little research attention has been paid to how this denial of HU may shape attitudes and responses to poverty and economic inequality. In this article we propose that the dehumanization of low-SES groups (Loughnan et al., 2014) may play a key role in organizing attributions about poverty and redistribution policies. The animalistic dehumanization of low-SES groups implies that the group is perceived as irrational and impulsive, without control over their behavior. This animalization may lead to a process where society blames low-SES groups for their situation: that is, ascribing their poverty to internal causes (e.g., making wrong decisions) more than to the influence of external factors (e.g., economic recession). Since attributions for poverty are an important proximal influence on attitudes toward wealth redistribution (Tagler & Cozzarelli, 2013), we therefore propose that they mediate between denial of HU and reduced support for redistribution.

We conducted two studies to address the unexplored relation between dehumanization of low-SES groups and support for redistribution policies designed to improve their economic situation. The first study was correlational and examined the relation between both facets of dehumanization, animalistic (i.e., lacking HU) and mechanistic (i.e., lacking HN), attributions of poverty, and attitudes to redistribution. The second study was experimental and sought to examine the causal influence of denial of HU on attitudes to redistribution. Both studies examined whether the link between animalistic dehumanization and attributions might be mediated by placing the blame on

low-SES groups for their situation. Data and materials for these studies can be found online (osf.io/eakq6).

Study 1

The main goal of this study was to explore the relation between dehumanizing low-SES groups and inequality engagement variables, such as attributions about the causes of poverty, and support for redistribution policies. We expected that denial of humanity will be associated with higher blame of low-SES groups (more internal than external attributions) for their disadvantaged situation (Hypothesis 1), and lower support for redistribution policies (Hypothesis 2). Specifically, when doing this analysis, we wanted to explore whether each dimension of humanity (i.e., HU and/or HN) is associated with these outcomes. Finally, we also explored a possible mediational analysis using a Blaming Index of attributions (internal less external) about poverty as the mediator for the relation between dehumanization (HU and HN) and redistribution policies (Hypothesis 3). In order to analyze the unique role of humanity above and beyond negative attitudes about poverty (Cozzarelli et al., 2001), the mediation analysis adjusted for negative attitudes.

Method

Participants and Procedure

Participants were recruited through Amazon's Mechanical Turk (Mturk) and were paid for their participation in a study about income distribution and economic attitudes. The sample was composed of 303 US participants (140 women, 161 men, 2 other, M_{age} = 36.78, SD = 13.05). Post hoc G-Power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) showed that we reached 90% Power on the study (correlation between HU and income redistribution controlling for HN, r = .186, α = .05, n = 300). Once participants

agreed to participate in the study (approved by the ethics committee of the University), they were presented with the following measures:

Dehumanization measures. We included two different measures of dehumanization. Participants completed an 8-item scale from Bastian, Jetten, and Radke (2012) which included four items associated with HU (e.g., "People from lower classes lack self-restraint, like animals" (reverse), α = .764) and four items associated with HN (e.g., "People from lower classes are superficial, they have no depth" (reverse), α = .741). Responses were given from 1 ("Not at all") to 7 ("Very much so"). In addition, we used the "Ascent of Man" measure developed by Kteily et al. (2015). Participants were presented with three sliders, one for each target class, in a random order, to test how "evolved" they considered the average member of low, middle and upper-SES groups to be. Responses ranged from 0 ("Least evolved") to 100 ("Most evolved"). A Low-SES humanity score was calculated subtracting upper/middle-SES rating from low-SES rating (higher scores means that low-SES are more evolved), following the procedure of Kteily et al. (2015).

Attributions about poverty. To assess the attribution of the causes of poverty for the low-SES groups we included the scale developed by Cozzarelli, Wilkinson, and Tagler (2001). Participants rated 18 possible causes of poverty. Answers were given from 1 ("Not at all important as a cause of their poverty") to 5 ("Extremely important as a cause of their poverty"). The original structure of the measure distinguished between internal (e.g., "lack of effort and laziness by the poor"), external (e.g., "prejudice and discrimination in hiring"), and cultural (e.g., "being born into poverty") causes of poverty. However, as the author of the scale pointed out, the cultural dimension is empirically less consistent when doing a factorial analysis and sometimes reflects a mix of internal and

external attributions. Therefore, we computed an exploratory factor analysis (varimax rotation, principal components extraction). Results showed one factor explaining 33.35% of the variance, and a second factor explaining 19.99%. The first factor included mainly external attributions (α = .89), while the second included mainly internal attributions (α = .87). Items related to cultural attributions were distributed among both factors. Finally, in order to have a measure that reflects a process of "blaming" members of low-SES groups for their situation, we created a "blaming index" (Blaming the poor = internal − external attributions). Higher scores on this index reflect more blaming to low-SES groups for their plight.

Redistribution attitudes. We included four items of income redistribution (e.g., "The government should redistribute wealth by heavily taxing the rich", α = .86) adapted from Dawtry et al. (2015), and five items adapted from Kteily, Sheehy-Skeffington, and Ho (2017), to measure support for egalitarian policies (e.g., "There is a need to flatten the hierarchy in this society", α = .89). Responses for both measures were given from 1 ("Strongly Disagree") to 6 ("Strongly Agree"). A factorial exploratory analysis (varimax rotation, principal components extraction) showed only one factor explaining 66.42% of the variance, therefore, we decided to merge both scales into one single scale (α = .94).

Negative attitudes about low-SES groups and demographics. We measured attitudes about low-SES using a 6 item (α = .89) scale with positive (e.g., "I generally like low-SES groups") and negative items (e.g., "I don't like low-SES groups very much") adapted from Cozzarelli et al. (2001). Responses for both measures were given on a scale from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Finally, participants reported their demographics details (gender, age) and were thanked for their participation in the study.

Results

Dehumanization of Low-SES

Attributions of humanity to low-SES group were calculated. Results from the Bastian et al. (2012) measure showed that low-SES groups were ascribed with more HN (M = 5.26, SD = 1.04) than HU traits (M = 4.62, SD = 1.09), $t_{(302)}$ = -14.83, p < .001, Hedges g_{av} = .60. Regarding the Ascent of men measure, results showed differences between low-SES (M = 80.54, SD = 22.60) and both, middle-SES (M = 85.04, SD = 17.58, $t_{(302)}$ = -5.44, p ≤ .001, Hedges g_{av} = .22) and upper-SES (M = 86.00, SD = 18.70, $t_{(302)}$ = -4.26, p < .001, Hedges g_{av} = .26). No differences were found between middle and upper-SES, $t_{(302)}$ = -1.07, p = .284. Therefore, we decided to create the index of Ascent of Man subtracting the low-SES rating from the mean of the humanity scores from upper/middle-SES.

Regression Analysis

We calculated simultaneous multiple regressions using the measures of humanity as predictors of the income engagement variables (Table 1). Results indicated that the ascribed level of HU and the Ascent of man score negatively predicted the blaming index, whereas these measures positively predicted the support for redistribution policies[1]. So, the more participants considered low-SES groups as animals, the more they blamed them for their disadvantaged situation, and the more they rejected the redistribution of income, supporting our Hypothesis 1 and 2. As expected, results regarding the adscription of HN showed that this dimension (compared with HU) was a less powerful predictor of the income inequality variables included in the study.

Table 1. Simultaneous multiple regression analysis of dehumanization (HU, HN and Ascent of Man measure) on the inequality engagement variables (attributions about poverty and preferences for redistribution attitudes) included on Study1

	Internal attributions $F_{(3, 302)} = 47.61^{***}$, $R^2 = .316$		External attributions $F_{(3, 302)} = 12.12^{***}$, $R^2 = .099$		Blaming Low-SES $F_{(3, 302)} = 48.47^{***}$, $R^2 = .322$		Redistribution attitudes $F_{(3, 302)} = 15.80^{***}$, $R^2 = .128$	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI
HU	-.324***	[-.376, -.142]	.100	[-.052, .207]	-.273***	[-.516, -.157]	.238**	[.097, .535]
HN	-.129°	[-.230, .013]	.165°	[-.001, .269]	-.187*	[-.429, -.056]	.071	[-.129, .327]
Ascent of Man	-.232***	[-.017, -.007]	.134*	[.001, .012]	-.234***	[-.027, -.010]	.131*	[.001, .021]

Note. *** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$; ° $\leq .08$

Mediation Analysis

After calculating the regression analysis, we implemented a mediation analysis (PROCESS model 4, bootstrapping 20,000 samples, 95% CI; Hayes, 2013) in order to explore a possible mediation of the blaming low-SES index on the relation between dehumanization and redistribution policies (Figure 1). Based on the regression results, we decided to include HU as the predictor of attitudes about redistribution policies. Results showed a significant indirect effect of blaming low-SES (*Indirect Effect* = .49, *SE* = .06, *p* < .001) on the relation between HU and the attitudes towards redistribution policies. Additionally, we decided to calculate the same mediational analysis controlled by the residuals of HN and negative attitudes about low-SES. This allowed us to analyze the independent effect of HN and attitudes (i.e., not correlated with HU) as covariates in the mediational analysis. Results after controlling by both HN and attitudes showed that the indirect effect remains significant (*Indirect Effect* = .78, *SE* = .09, *p* < .001): the effect of HU prevails above and beyond the effect of HN and negatively against low-SES. In summary, these results support our hypotheses 3, indicating that there is a negative relation between dehumanization and the rejection of redistribution policies, mediated by blaming low-SES groups.

Discussion

This study analyzed the relation between dehumanizing low-SES groups and economic engagement variables such as attributions about poverty (placing blame on low-SES for their current situation), and attitudes towards redistribution policies. Results indicated that the more people dehumanize low-SES groups the more they blame these low-SES groups for their poverty, and the less they are in favor of supporting income redistribution policies. In short, these results suggest that dehumanizing low-SES groups
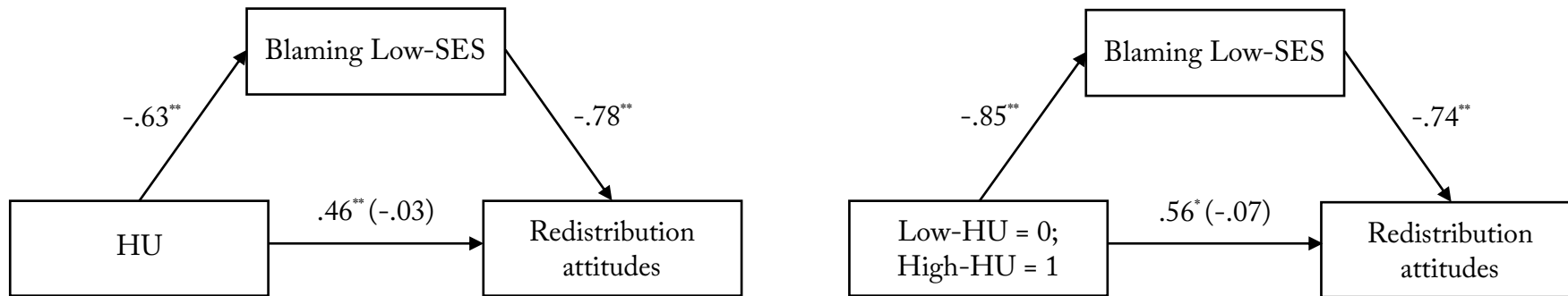
Figure 1. Mediational analysis of the blame placed on low-SES in relation between dehumanization of low-SES (measured on Study 1, manipulated on Study 2) and attitudes towards redistribution policies. Direct effects after including the mediators are in brackets. $^{**}p \leq .001$; $^{*}p \leq .05$

contributes to justifying income inequality. However, the dimensions of humanity (HU, HN) seem to have a different influence on the support for redistribution policies. It seems that the differences between human and animals, captured mainly by HU, was a better predictor of the attitudes towards redistribution in comparison with HN, which did not show a direct influence on the attitudes towards redistribution. Therefore, it seems that considering individuals from low-SESs as animal-like is associated with the rejection of redistributive policies via blame the low-SES groups for their poverty situation rather than considering that low-SES groups are incapable of suffering when living in poverty (i.e., denial of HN). Based on this preliminary result, we carried out a second study in order to focus on how the attribution or the denial of HU to low-SES groups influenced the support for income redistribution through blaming low-SES groups for their poverty situation.

Study 2

In this study, we manipulated the HU ascribed to low-SES groups to determine whether it exerts a causal influence on support for redistribution policies via attributing blame on low-SES groups for their plight. We decided to manipulate the attribution of humanity in terms of HU rather than HN given that in Study 1 participants were more inclined to deny these traits (see also Loughnan et al., 2014) and that denial of these traits were more strongly related to blame and redistribution. We expected differences between the humanized (high HU) and the animalized (low HU) low-SES groups. Specifically, we hypothesized that there would be higher attributions of internal causes of poverty for the low-HU group in comparison with the high-HU group (Hypothesis 1). Additionally, we predicted higher attributions of external causes of poverty when presented with a high-HU group in comparison with the low-HU group (Hypothesis 2). We also expected that

participants presented with low-HU group would show less positive attitudes towards redistribution than participants who were asked to imagine a group described with high-HU traits (Hypothesis 3). Finally, we anticipated a mediation of the blaming index on the relation between the humanity manipulation and the support for redistribution policies, after controlling by the ascribed HN (Hypothesis 4). All hypotheses were preregistered and can be found online on osf (osf.io/7gwmp).

Method

Participants and Procedure

Sample size was calculated by using G-power analysis (Faul et al., 2009) for an independent t-test (two independent groups) based on the partial correlation between HU and redistribution, controlling by HN from Study 1 (effect size $d = .38$, $\alpha = .05$, 80% Power). Results revealed that a minimum of 220 participants were required. We recruited slightly more participants in order to be sure that we would reach the minimum. The final sample was composed of 257 US participants (140 men, 115 women, 2 others, $M_{age} = 36.62$, $SD = 11.67$) recruited through Prolific Academic services and paid for their participation in the study. Participants were asked to take part in a study about groups relations and economic attitudes (approved by the ethics committee of the University from the first author). Once they provided their consent to participate, participants were presented with the following measures:

Humanity manipulation. Participants were required to read a fictitious scientific article published on a well-known scientific journal about "the personality of groups". A short abstract of the article described the socioeconomic details and the personality traits of a group that is supposed to live in our society. In both conditions participants were told that the described group was considered as having low-SES in their society (few resources,

lower level of education and the low respected job). Once participants read this information they were presented with the manipulation of HU (low vs. high adscription of HU traits) following the same procedure as Martínez et al. (2015). In one condition the group was described as being irrational, lacking culture or behaving like a child (low-HU condition), and in the other condition the group was described as being rational, having culture and behaving in a mature way (high-HU condition)[2]. Participants answered manipulation checks about the SES of the group ("What is the socioeconomic status of the group?", from 1 "Low-SES" to 3 "Upper-SES"), its ascribed HU traits ("To what extent do you think that the group lacks culture, it is irrational, childlike, coarseness, and immoral? (reversed) from 1"Not at all" to 7 "Completely", α = .93), and finally its ascribed HN traits ("To what extent do you think that the group is emotional, warm, open minded, active and have depth? from 1 "Not at all", to 7 "Completely").

Attributions about poverty and redistributions attitudes. We included the same measure of attributions about poverty as in the Study 1. As preregistered, we calculated the index of blaming: internal attributions (8 items, α =.88) less external attributions (10 items, α = .88). Regarding the redistributions preferences, we shortened and adapted the scale used in Study 1. In this study we presented 4 items measuring preferences for redistribution (e.g., "Support should be given for the low socioeconomic status group described above to receive more money", from 1 "Strongly Disagree" to 7 "Strongly Agree", α = .90). Finally, participants reported their demographics details (e.g., gender, age) and were thanked for their participation in the study.

Results

Manipulation Checks

Results confirmed the effectiveness of the manipulation. Participants reported lower attribution of HU traits to the group described in the low-HU condition (M = 2.15, SD = 1.30) than in the high-HU condition (M = 5.87, SD = 1.40), $t_{(255)}$ = -22.07, $p \leq$ .001, Hedges's g_s = 2.74. Additionally, no differences were found regarding the SES of the low-HU (M = 1.14, SD = .88) vs. the high-HU group (M = 1.02, SD = .15), $t_{(255)}$ = 1.42, p = .716, as both were described having low-SES.

Attributions and Redistribution for Low and High-HU Groups

Results regarding the attributions for poverty showed a higher attribution of internal causes to the group lacking HU (M = 3.05, SD = .85) in comparison with the high-HU group (M = 2.46, SD = .94), $t_{(255)}$ = 5.26, p < .001, Hedges's g_s = .66. The opposite pattern of results was found regarding the external attributions, with less external attribution being associated with the low-HU group (M = 3.34, SD = .84) compared to the high-HU group (M = 3.60, SD = .81), $t_{(255)}$ = -2.53, p = .012, Hedges's g_s = .31. Additionally, the Blaming Index showed the expected differences between the low and high-HU groups with the low-HU group (M = -.29, SD = 1.44) being considered as more responsible for their poverty than the high-HU group (M = -1.14, SD = 1.48), $t_{(255)}$ = 4.64, p < .001, Hedges's g_s = .58. In general, these results support our hypotheses 1-2 regarding how dehumanization of low-SES has an effect on the minimization of the external causes and the attribution of more responsibility to the group for their situation. In relation to the attitudes towards income redistribution policies, the results also confirmed hypothesis 3, showing that participants supported less redistribution policies

when presented with the low-HU group (M = 4.74, SD = 1.56) than with the high-HU group (M = 5.30, SD = 1.46), $t_{(255)}$ = -2.97, p = .003, Hedges's g_s = .37.

Mediational Analysis

We computed a mediational analysis (PROCESS model 4, bootstrapping 20,000 samples, 95% CI; Hayes, 2013) of the blaming index on the relation between (de)humanization (low and high HU) and redistribution attitudes in order to verify our hypothesis 4 (Figure 1). Results showed a significant indirect effect of attributing blame on the relation between dehumanization and the attitudes towards redistribution (*Indirect Effect* = .63, *SE* = .14, *p* < .001). Additionally, we computed mediational analysis controlling by the adjusted residual of HN. Due to the correlation between HU and HN we regressed the observed HN on the manipulation check of HU and used the residuals of the regression as a covariate in the mediational analysis. This allowed us to control by a measure of HN that is uncorrelated with HU. Results after this adjustment showed that the indirect effect remains significant (*Indirect effect of the blaming index* = .54, *SE* = .18, *p* = .002). This suggests that HN does not explain the relation between HU and the support for redistribution.

Discussion

In this second study we analyzed how (de)humanizing low-SES groups, through the ascription or the denial of HU traits, affects the justification of income inequality. Results confirmed that dehumanizing low-SES groups influences the minimization of the external factors along with the maximization of the internal causes relating to their economic struggle. Additionally, results showed that the dehumanization of these groups also lead to a lower support for redistribution of income measures, that in the end, favor a decrease in inequality within our societies. In general, we can conclude that

dehumanizing low-SES groups has serious consequences on how people perceived and legitimated the current levels of income inequality within our societies.

General Discussion

The present research extends previous findings regarding the association between SES and dehumanization (Loughnan et al., 2014; Sainz et al., 2018) by exploring the consequences of dehumanizing low-SES groups on the justification of income inequality. The results from these two studies indicated that dehumanizing low-SES groups contributed to justifying income inequality because the low-SES groups were considered to be responsible for their own disadvantaged situation. The animalistic dehumanization of low-SES groups led participants to attribute the economic struggle of low-SES groups on their own wrong doings or failures which in turn led the participants to consider social policies, such as welfare or income redistribution, as useless efforts without any impact on the eradication of poverty. In short, dehumanization contributes to justifying poverty rates and decreases the tendency for people to help those who have less in our society which in turn perpetuates the status quo.

Even when the consequences of dehumanization have been clearly established in the literature, the study of the relation between SES and dehumanization has been underexplored. In this context, dehumanization contributes to justifying and legitimizing differences in the socioeconomic hierarchy by acting as a barrier that blinds people to the evidence about how the socioeconomic system perpetuates an unequal access to resources, goods and services. These results highlight how dehumanization is an important factor in the study of attitudes about inequality and income redistribution (Bullock et al., 2003; Cozzarelli et al., 2001; Rodríguez-Bailón et al., 2017) by denying the surrounding day to day conditions that are not controllable by low-SES groups. From this perspective, any

social policies such welfare or income redistribution, are rejected given that the problem is perceived to be internally caused by those who suffer from it and a change in their behavior or in their way of life could improve their situation. However, based on previous evidence (Bastian, Laham, Wilson, Haslam, & Koval, 2011) we know that animalized groups are considered as unable to change their behavior by themselves, due to their primitive nature. Therefore, dehumanizing low-SES groups contributes to the perception that poverty is a stable and permanent state that cannot be solved by improving the budget of poor families. Its seems that a dehumanized look of poverty is a process that feeds itself, the more people dehumanize low-SES, the less they help poor people, and this contributes to maintaining the unequal economic distribution of income through time.

So far we know that a higher adscription of internal rather than external attributions of poverty has led to a process of attributing blame to low-SES groups for their poverty situation. However, we have not taken in consideration other possible categorizations of the causes of poverty. Future studies should address this limitation by analyzing how different types of internal attributions may change the pattern of results found in the current studies. Previous studies established different categories of attributions about poverty based on the capability of control (Weiner, Osborne, & Rudolph, 2011), differentiating among internal and controllable (e.g., wasting their money) vs. internal and incontrollable (e.g., having a low IQ) causes of poverty. This controllability seems to be a key issue on the adscription of humanity to a target (Testé, 2017). Therefore, we could hypothesize that the ascription of more internal and controllable causes of poverty will lead to even lower support for redistribution policies, in comparison with an internal but incontrollable cause of poverty. These predictions are in line with a previous study from Bastian et al. (2010) which showed that after committing an immoral action (i.e.,

internal), animalized groups are not punished given that they are considered as unable to control themselves (i.e., incontrollable); instead participants seemed to exhibit a paternalistic attitude toward such groups.

Along with these findings, previous studies have also highlighted the negative consequences of being dehumanized (e.g., Bastian & Haslam, 2011) that could also be contributing to worsening the negative consequences of those who live on poverty. In addition to the lay theories about different causes of internal attributions that people may have, previous studies have found that living in economic scarcity has a negative impact on the people's cognitive resources that the person has (Shah, Mullainathan, & Shafir, 2012), which lastly influences how people deal with their economic decisions. All these findings point out that poverty is a misunderstood situation and all those factors that are considered as internal (i.e., under the responsibility of those who live in poverty) might be, in fact, an outcome of living in a deprived situation (i.e., not controllable), further highlighting the lack of responsibility of their disadvantaged situation.

Moreover, future studies could also analyze how income inequality on each society moderates the dehumanization of low-SES groups. Previous studies have identified how levels of inequality influence attitudes about redistribution (Heiserman & Simpson, 2017) and we would expect that societies with higher levels of income inequality would more likely dehumanize the groups at the very bottom of their society. Whereas societies with lower levels of inequality would be less likely to dehumanize these groups given that the differences among groups with different SES would be less salient (Wilkinson & Pickett, 2010). Finally, we consider that researchers should put future efforts into understanding how poverty is perceived with the ulterior goal of reversing the dehumanized perception of low-SES groups. In addition, effort should also be placed regarding how wealthy and

high-SES groups are perceived. The concentration of income in the hands of a few people is a major issue in the same extent that poverty is. Therefore, more research is needed in order to understand how the mechanistic dehumanization of high-SES groups previously identified by Sainz et al. (2018), influences the type of attributions that people make about the type of attributions that people make about the wealthy and the people opinion about the redistribution of the income from those groups who have more within our societies.

In conclusion, dehumanizing low-SES groups seems to be a pervasive process that contributes not only to legitimate an unequal distribution of wealth within our societies, but also constitutes as a barrier to interclass relations that feeds an economic conflict perpetuating the suffering of those who have less in our societies. These results highlight the humanizing the poor contributes to support a more equal society that favors all groups and individuals equally.

References

Andrighetto, L., Baldissarri, C., Lattanzio, S., Loughnan, S., & Volpato, C. (2014). Human-itarian aid? Two forms of dehumanization and willingness to help after natural disasters. *British Journal of Social Psychology*, *53*, 573-584.doi:10.1111/bjso.12066

Ashok, V., Kuziemko, I., & Washington, E. (2015). Support for redistribution in an Age of rising inequality: New stylized facts and some tentative explanations. *Brookings Papers on Economic Activity, 2015*, 367-405. doi:10.3386/w21529

Bastian, B., & Haslam, N. (2011). Experiencing dehumanization: Cognitive and emotional effects of everyday dehumanization. *Basic and Applied Social Psychology*, *33*, 295-303. doi:10.1080/01973533.2011.614132

Bastian, B., Jetten, J., & Radke, H. R. M. (2012). Cyber-dehumanization: Violent video game play diminishes our humanity. *Journal of Experimental Social Psychology, 48*, 486–491. doi:10.1016/j.jesp.2011.10.009

Bastian, B., Laham, S. M., Wilson, S., Haslam, N., & Koval, P. (2011). Blaming, praising, and protecting our humanity: the implications of everyday dehumanization for judgments of moral status. *The British Journal of Social Psychology, 50*, 469–83. doi:014466610X521383

Brown-Iannuzzi, J. L., Lundberg, K. B., Kay, A. C., & Payne, B. K. (2015). Subjective status shapes political preferences. *Psychological Science, 26*, 15–26. doi: 0956797614553947

Bullock, H. E., Williams, W. R., & Limbert, W. M. (2003). Predicting support for welfare policies: The impact of attributions and beliefs about inequality. *Journal of Poverty, 7*, 35-56. doi:10.1300/J134v07n03_03

Buttrick, N. R., & Oishi, S. (2017). The psychological consequences of income inequality. *Social Personality Psychology Compass, 11*, 1-12. doi:10.1111/spc3.12304

Castano, E., & Giner-Sorolla, R. (2006). Not quite human: Infrahumanization as a response to collective responsibility for intergroup killing. *Journal of Personality and Social Psychology, 90*, 804–818. doi:10.1037/0022-3514.90.5.804

Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues, 57*, 207–227. doi:10.1111/0022-4537.00209

Dawtry, R. J., Sutton, R. M., & Sibley C. G. (2015). Why wealthier people think people are wealthier, and why it matters: From social sampling to attitudes to redistribution. *Psychological Science, 26*, 1389-1400. doi:10.1177/0956797615586560.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160. doi:10.3758/BRM.41.4.1149

Haque, O. S., & Waytz, A. (2012). Dehumanization in Medicine: Causes, solutions, and functions. *Perspectives on Psychological Science, 7*, 176–186. doi:10.1177/1745691611429706

Hardoon, D. (2017). *An economy for the 99%*. Retrieved from Oxfam International https://www.oxfam.org/en/research/economy-99

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review, 10*, 252-264. doi:10.1207/s15327957pspr1003_4

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology, 65*, 399–423. doi:10.1146/annurev-psych-010213-115045

Haslam, N., & Stratemeyer, M. (2016). Recent research on dehumanization. *Current Opinion in Psychology, 11,* 25-29. doi:10.1016/j.copsyc.2016.03.009

Hayes, A. F. (2013). *Introduction to Mediation, Moderation and Conditional Process Analysis*. New York: Guilford Press.

Heiserman, N., & Simpson, B. (2017). Higher inequality increases the gap in the perceived merit of the rich and poor. *Social Psychology Quarterly, 80*, 243-253. doi:0190272517711919

Jaime-Castillo, A. M., & Sáez-Lozano, J. L. (2014). Preferences for tax schemes in OECD countries, self-interest and ideology. *International Political Science Review*, 37, 81-98. doi:10.1177/0192512114539716

Kteily, N. S., Bruneau, E., Waytz, A., & Cotterill, S. (2015). The Ascent of Man: Theoretical and empirical evidence for blatant dehumanization. *Journal of Personality and Social Psychology, 109*, 901-931. doi:10.1037/pspp0000048.

Kteily, N. S., Sheehy-Skeffington, J., & Ho, A. K. (2017). (Anti-)egalitarianism shapes perceived levels of social inequality. *Journal of Personality and Social Psychology, 112*, 136-159. doi:10.1037/pspp0000097

Loughnan, S., Haslam, N., Sutton, R. M., & Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White Trash," "Chavs," and "Bogans". *Social Psychology*, *45*, 54–61. doi:10.1027/1864-9335/a000159

Martínez, R., Rodríguez-Bailón, R., Moya, M., & Vaes, J. (2015). Interacting with dehumanized others? Only if they are objectified. *Group Processes & Intergroup Relations, 10*, 1-18. doi:10.1177/1368430215612219

Moya, M. & Fiske, S. T. (2017). The social psychology of the Great Recession and social class divides. *Journal of Social Issues, 73*, 8–22. doi:10.1111/josi.1220

Rodríguez-Bailón, R., Bratanova, B. A., Willis, G., López-Rodríguez, L., Sturrock, A., & Loughnan, S. (2017). Social class and ideologies of inequality: How they uphold unequal societies. *Journal of Social Issues*, *73*, 99-116. doi:10.1111/josi.12206

Sainz, M., Martínez, R., Moya, M., & Rodríguez-Bailón, R. (2018). Animalizing the disadvantaged, mechanizing the wealthy: The convergence of socioeconomic

status and humanity attributions. *International Journal of Psychology*.

doi:10.1002/ijop.12485

Sands, M. L. (2017). Exposure to inequality affects support for redistribution.

Proceedings of the National Academy of Sciences, 114, 663-668.

doi:10.1073/pnas.1615010113

Shah, A. K, Mullainathan, S., & Shafir, E. (2012). Some consequences of having too

little. *Science, 338*, 682–685. doi:10.1126/science.1222426

Tagler, M. J., & Cozzarelli, C. (2013). Feelings toward the poor and beliefs about the

causes of poverty: The role of affective-cognitive consistency in help-giving. *The

Journal of Psychology: Interdisciplinary and Applied, 147*, 517–539.

doi:10.1080/00223980.2012.718721

Testé, B. (2017). Control beliefs and dehumanization: Targets with an internal locus of

control are perceived as being more human than external targets. *Swiss Journal of

Psychology, 76*, 81–86. doi:10.1024/1421-0185/a000194

Vaes, J., & Muratore, M. (2013). Defensive dehumanization in the medical practice: A

cross-sectional study from a health care worker`s perspective. *British Journal of

Social Psychology, 52,* 180-190. doi:10.1111/bjso.12008

Vaes, J., Leyens, J-P., Paladino, M. P., & Miranda, M. P. (2012). We are human, they

are not: Driving forces behind outgroup dehumanisation and the humanisation of

the ingroup. *European Review of Social Psychology, 23*, 64-106.

doi:10.1080/10463283.2012.665250

Viki, G., T., Fullerton I, Ragett, H., Tait, F., & Wiltshire, S. (2012). The role of

dehumanization in attitudes toward the social exclusion and rehabilitation of sex

offenders. *Journal of Applied Social Psychology, 42*, 2349–2367.

doi:10.1111/j.1559-1816.2012.00944.x

Weiner, B., Osborne, D., & Rudolph, U. (2011). An attributional analysis of reactions
to poverty: the political ideology of the giver and the perceived morality of the
receiver. *Personality and Social Psychology Review, 15*, 199–213.
doi:10.1177/1088868310387615

Wilkinson, R. G., & Pickett, K. E. (2010). *The spirit level: Why greater equality makes
societies stronger*. New York: Bloomsbury Press

Wilkinson, R. G., & Pickett, K. E. (2017). The enemy between us: The psychological
and social costs of inequality. *European Journal of Social Psychology*, *47*, 11–24.
doi:10.1002/ejsp.2275

Willis, G. B., Rodríguez-Bailón, R., López-Rodríguez, L., & García-Sánchez, E.
(2015). Legitimacy moderates the relation between perceived and ideal economic
inequalities. *Social Justice Research*, *28*, 493-508. doi:10.1007/s11211-015-0253-7

Zebel, S., Zimmermann, A., Viki, G. T., & Doosje, B. (2008), Dehumanization and
guilt as distinct but related predictors of support for reparation policies.
International Journal of Political Psychology, 29, 193–219. doi:10.1111/j.1467-
9221.2008.00623.x

Notes.

[1] The adscription of HU (Bastian et al., 2012) and the score on the Ascent of man measure (Kteily et al., 2015) are considered as two different approaches to capture the animalistic dehumanization of a group, therefore a similar pattern of results in both measures were expected. We conducted supplementary analysis in order to compare the power of prediction of each measure above each other (supplementary online material 1).

[2] The full manipulation of humanity (Low-HU vs. High-HU) that we implement on the Study 2 can be found online (supplementary online material 2).

Supplementary material 1:

Comparing the predictive power of both, HU and the Ascent of man measure, on the variables included on Study 1.

In order to compare how the denial of HU and the score on the Ascent of man measure of low-SES groups affect the variables included in the study, we carried out simultaneous multiple regression analysis using both measures as predictors (Table 2). As expected, given that both measures reflect the same construct, findings showed the same tendency. However, it seems that in this context and with this group, the denial of HU (Bastian et al., 2012) better explains the variables included on the study. The Ascent of man measure has been proven to be a useful tool to capture the dehumanization of different groups in the context of extremes conflicts or after violence episodes. However, in the context of the current research the denial of HU to low-SES measured by Bastian et al. (2012) seems to be more adequate to our goals.

Table 2. Simultaneous multiple regression analysis of dehumanization (HU vs. Ascent of Man) on the inequality engagement variables (attributions about poverty and preferences for redistribution attitudes) included in Study 1

	Internal attributions $F_{(2, 302)} = 69.41^{**}$, $R^2 = .312$		External attributions $F_{(2, 302)} = 16.12^{*}$, $R^2 = .091$		Blaming Low-SES $F_{(2, 302)} = 68.59^{*}$, $R^2 = .309$		Redistribution attitudes $F_{(2, 302)} = 23.36^{**}$, $R^2 = .129$	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI
HU	-.417**	[-.415, -.251]	.218**	[.078, .260]	-.407**	[-.629, -.375]	.289**	[.230, .537]
Ascent of Man	-.245**	[-.018, -.007]	.150*	[.002, .013]	-.253**	[-.027, -.012]	.138*	[.002, .022]

Note. $^{**} p \leq .001$; $^{*} p \leq .010$.

Supplementary material 2:

Manipulation of humanity (Low-HU vs. High-HU) implemented on the Study 2.

Low HU condition (animal-like):

A scientific article recently published has managed to evaluate the traits and characteristics that define different groups within society. These results are important for our own research. Thus, we are using some of the data presented in this article in order to analyze how people perceive groups (below you can see a screenshot of the article).

On the following screen, you are going to be presented with a short description of a group and their personality traits based on the results from the article. Please, read the information on the following screen carefully:

Based on the results from the recently published article, members of this group have few resources, lower level of education and the least respected jobs. Due to this reason they are considered as having a low socioeconomic status within our society. Moreover, results presented in the paper have shown that the members of this group are usually

guided by their instincts, both good and bad. They are not considered a rational group and their actions are guided by their instincts without any control over their behavior. Their irrationality and their lack of culture are their main characteristics according to the results of the study. Additionally, their tendency to be impulsive leads to the perception that the group is immature and childish in many aspects of their lives, along with the perception of being coarse and lacking moral sensibility due to their lack of refinement.

FIGURE 1. PERSONALITY TRAITS FOR LOW SOCIOECONOMIC STATUS GROUPS
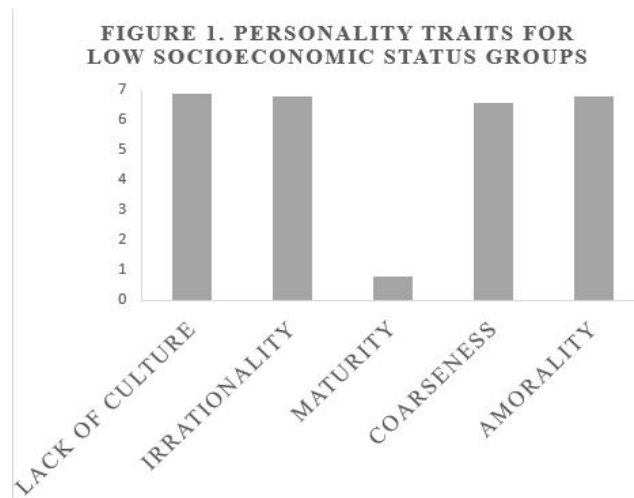
High HU condition (human-like):

A scientific article recently published has managed to evaluate the traits and characteristics that define different groups within society. These results are important for our own research. Thus, we are using some of the data presented in this article in order to analyze how people perceive groups (below you can see a screenshot of the article).


On the following screen, you are going to be presented with a short description of a group and their personality traits based on the results from the article. Please, read the information on the following screen carefully:

Based on the results from the recently published article, members of this group have few resources, lower levels of education and the least respected jobs. They are considered as having a low socioeconomic status within our society. Moreover, results presented in the paper have shown that the members of this group are usually guided by their rational thoughts. They are considered a civic group and their actions are guided by their common sense with full control over their behavior. Their civic behavior and their rationality are their main characteristics according to the results of the study.

Additionally, their tendency to have auto-control leads to the perception that the group is mature in many aspects of their lives, along with the perception of being refined and having moral sensibility.

FIGURE 1. PERSONALITY TRAITS FOR LOW SOCIOECONOMIC STATUS GROUPS
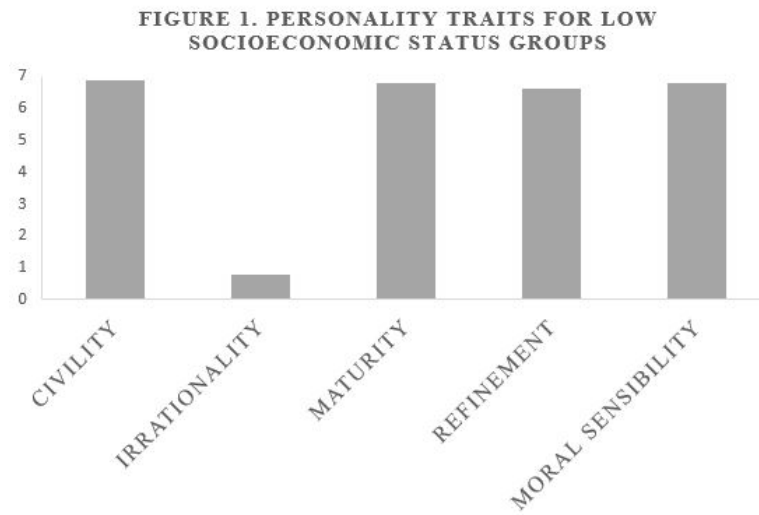
Article 4

Dehumanization of Poor People Predicts Lower Support for Welfare Policies via perceived Wastefulness

Mario Sainz [1]

Steve Loughnan [2]

Rocío Martínez [1]

Rosa Rodríguez-Bailón [1]

Miguel Moya [1]

[1] Centro de Investigación, Mente, Cerebro y Comportamiento (CIMCyC), Departamento de Psicología Social, Facultad de Psicología, Universidad de Granada

[2] School of Philosophy, Psychology and Language Sciences, University of Edinburgh

Abstract

Poor people (those with low socioeconomic status) are sometimes depicted as money wasters who live on welfare. Previous studies have found that, in many countries, poor people are also dehumanized and treated as animals. Across six studies, we examined the consequences that this animalization has on support for social-welfare policies and governmental control. We explored the mediating role that perceived financial management plays in the relationships between (de)humanization and support for both welfare policies and governmental control. In Studies 1-3, we examined these relationships in three countries (the United Kingdom, the United States and Spain). In Study 4, we examined, in the context of a natural disaster, how differences in socioeconomic status (poor vs. middle class) relate to differences in dehumanization that subsequently impact perceptions of consumption practices. Finally, in Studies 5 and 6, we directly manipulated the humanization of a poor group (animalized vs. humanized) and measured the effect that each condition had on perceptions of this group's financial management, as well as on support for social-welfare policies and governmental control. Overall, the results consistently showed that dehumanizing poor people reduced support for social welfare and increased support for governmental control by activating the impression that low socioeconomic groups were poor financial managers. We discuss the role of dehumanization in justifying economic inequality.

Keywords: dehumanization, socioeconomic status, welfare, poverty, income inequality.

Growing economic inequality affects many people's well-being (Buttrick & Oishi, 2017). This is especially true for those who live in poverty. Today, the poverty rate is around 13% in the United States (US Census Bureau, 2017) and 8% in the European Union (Eurostat, 2017), with some countries having around one fifth of the population living in poverty (e.g., 22% in Spain and 20% in the United Kingdom; Institute for Fiscal Studies, 2017; Instituto Nacional de Estadística, 2017). Around one out of 10 people in the United Kingdom rely on government support for food, heat, and accommodation (e.g., 6.8 million working-age British citizens receive benefits; National Statistics, 2017). Despite the devastating consequences that poverty has in people's lives (Mood & Jonsson, 2016), many citizens oppose social-welfare policies that seek to alleviate the consequences of living in deprived conditions (Ashok, Kuziemko, & Washington, 2015). Although this opposition likely has multiple causes, one potentially important explanatory factor is the social impressions that individuals form about poor people.

In addition to being disliked (Cozzarelli, Wilkinson, & Tagler, 2001), poor people are also often considered to be less evolved and more animal-like than wealthier people (Loughnan, Haslam, Sutton, & Spencer, 2014). Moreover, poor people sometimes are depicted as having wasteful consumption practices that supposedly stem from irrational economic decisions or a dysfunctional lifestyle (Jones, 2011); put simply, the belief is that poor people spend their money on electronics or expensive clothes instead of on essential goods (Bullock, Wyche, & Williams, 2001; Hayward & Yar, 2006). The present work combines these threads. As Jones (2011) suggested, we consider that dehumanizing poor people can reduce support for social-welfare programs by portraying the recipients of such programs as economically irresponsible.

Dehumanizing Poor People

The denial of people's humanity is an important feature in intergroup relations (for reviews, see Haslam & Loughnan, 2014; Haslam & Stratemeyer, 2016; or Vaes, Leyens, Paladino, & Miranda, 2012). Haslam (2006) proposed two dimensions of humanity: *Human Nature* (HN) and *Human Uniqueness* (HU). The former includes traits such as emotionality, cognitive openness, and depth. The denial of these traits leads to perceptions of others as unemotional objects (i.e., mechanistic dehumanization). The latter involves traits such as rationality and civility, which serve to differentiate humans from animals; the denial of these traits leads to animalistic dehumanization. Based on the previous literature, HU is the dimension that is traditionally denied to groups that occupy a subordinate position in society, such as immigrants, refugees, and minority ethnic groups such as Afro-American people (DeLuca-McLean & Castano, 2009; Goff; Eberhardt, Williams, & Jackson, 2008; Esses, Veenvliet, Hodson, & Mihic, 2008; Louis, Esses, & Lalonde, 2013). Although there has been limited work that directly pairs social class and dehumanization, there is evidence that poor people are viewed as not fully human (Loughnan et al., 2014). In many countries, such as Australia, the United Kingdom, and the United States, people have robustly associated poorer people with animals such as apes, rats, and dogs.

Welfare Policies and Poor People's Consumption Practices

Aside from being viewed as not fully human, poor people are also sometimes seen as lazy, stupid, violent, and sexually promiscuous (Garland, Chakraborti, & Hardy, 2015; Jones, 2011; Spencer & Castano, 2007; Spencer, 2016). In terms of economics, these groups are also seen as being poor resource managers and as having wasteful consumption practices (Jones, 2011). The media reinforces these perceptions by depicting poor people

as spending money on alcohol, tobacco, or fashionable jewelry even as they rely on social welfare (Raisborough, Frith, & Klein, 2012). This image of poor people as wasteful consumers reinforces lay theories in which poverty is seen as internally caused (by laziness or immorality), rather than caused by external (e.g., lower wages or educational levels) or contextual (e.g., an economic crisis) factors (Cozzarelli et al., 2001). Additionally, the perception that poverty is internally caused can undermine the perceived utility of welfare programs that are aimed at helping poor groups, causing opposition to governmental social spending (Bullock, Williams, & Limbert, 2003). Moreover, this rejection of welfare policies is related to the perception that deprived groups not only lack personal control but also engage in dishonesty (e.g., by hiding information so that they can receive more benefits), which in turn leads to the perception that poor groups lack trustworthiness (Bullock, 1999). Poor people are sometimes viewed as exploiting the welfare system by wasting its resources or by demanding more resources than they need. This perception can reduce support for welfare spending or increase the desire to control poor people's spending.

In brief, opposition to welfare policies can be the result of the views that poor people are unable to properly manage their incomes and that they illegitimately profit from the welfare system. Importantly, we suggest that dehumanization is one of the mechanisms that links the perception that low socioeconomic group are wasteful consumers to reduced support for welfare measures. The view that poor people are animal-like could feed into the notion they are incorrigible, wasteful, and indulgent.

Overview of the Present Studies

We conducted three correlational studies and three experimental studies to analyze how dehumanization affects support for welfare policies through the ascription of

wasteful consumption practices to poor people. In Studies 1-3, we tested (in separate context) the relationships among the dehumanization of poor people, their ascribed consumption practices, and the overall support for welfare policies. In Study 4, we examined how differences in socioeconomic status or social class (poor vs. middle class) can lead to differences in (de)humanization, which, in turn, can influence the consumption practices ascribed to each group. Finally, in Studies 5 and 6, we extended the previous results by manipulating the (de)humanization of a poor group (animal vs. human) to examine the effect that humanization has on the financial management ascribed to that group and on the participants' support for welfare programs. All the materials used in the present studies, and all the data produced for them, can be found online (sf.io/9p7uq).

Studies 1-3

We conducted studies in three countries (the United Kingdom, the United States, and Spain) to explore whether the dehumanization of poor people predicts support for welfare policies by creating the view that such people have wasteful consumption practices. Our hypothesis was that dehumanization of a group, especially the denial of HU, leads to perceptions that the group has poor financial management (H1), thus reducing overall support for welfare policies (H2) but increasing overall support for governmental measures that control how poor people manage their welfare money (H3). Additionally, we explored whether perceptions of poor people's financial management mediated possible links between dehumanization and support for welfare policies (H4) and between dehumanization and support for governmental control (H5).

Method

Participants and Procedure

We recruited 735 participants (418 females, M_{age} = 31.30, SD = 11.63; UK = 205, US = 214, Spain = 316). The UK and US samples were from the general population and were recruited online (from Prolific Academic and Mturk, respectively); we paid them for their participation. The Spanish sample was a mix of people from the general population and students who participated in exchange for entry in a raffle. We developed the questionnaires in English, and a native speaker translated them into Spanish. The participants completed the following measures.

Dehumanization. We included a measure of dehumanization (Bastian, Jetten, & Radke, 2012) that included four items associated with HU (e.g., "People from lower classes are refined and cultured," α = .77) and four associated with HN (e.g., "People from lower classes are superficial; they have no depth" (reverse), α = .69). In addition, in the Spanish study, we included a measure of dehumanization different from Bastian et al. (2012). By developing this measure in Spanish, we ensured that we would have data comparable with the results of Bastian et al. (2012) measure that had not previously been used with Spanish speakers. This measure included 20 positive and negative behaviors related to HU (e.g., "To act in an intuitive way, not thinking first" (reverse), α = .83) and HN (e.g., "To remain indifferent to a surprise" (reverse), α = .68; see Sainz, Martínez, Moya, & Rodríguez-Bailón, 2018). The answers used a 7-point scale from 1 ("Not at all") to 7 ("Completely characteristic of poor people").

Poor people's consumption practices. The participants rated poor people's spending on various categories from 1 ("They waste their money") to 7 ("They spend money wisely"). An exploratory factorial analysis (using varimax rotation and principal

component extraction) showed three factors: basic items (food, housing, or bills, α = .86; 49.17% of the variance), luxury items (jewelry, fashionable clothes, or electronic devices, α = .89; 18.86% of the variance), and leisure items (alcohol, cigarettes, and gambling or the lottery, α = .91; 9.17% of the variance). Furthermore, the participants answered two items about their perceptions of poor people's financial efficacy (e.g., "People from poor groups waste the money that they have" (reversed), r = .73, p ≤ .001). The participants indicated how much they agreed with each item from 1 ("Strongly disagree") to 7 ("Strongly agree"). Finally, we computed a mean of the scores for consumption practices and financial efficacy to indicate the perceptions of poor people's overall financial management (α = .92; higher scores mean lower wastefulness).

Support for welfare policies. We included a measure of the support for welfare policies similar to the one used in Henry, Reyna, and Weiner (2004). The participants stated how much the government should spend on six benefits (health care, education, housing, food stamp or bank programs, utilities assistance, and unemployment, α = .90). We asked the participants how much their respective governments should invest in these benefits on a scale from -100% ("less money") to +100% ("more money"), with 0 representing the current spending level.

Attitudes toward government control. To measure support for government control of poor people's spending, we included four items (e.g., "If governments give poor people money, they should control how those people spend it," α = .91) on a scale from 1 ("Strongly disagree") to 7 ("Strongly agree").

In addition, the participants answered questions on their own subjective socioeconomic status (the 10-step MacArthur ladder; adapted from Adler, Epel, Castellazzo, & Ickovics, 2000) and provided objective indicators such as their annual

pretax income ranges (7-point scale from 1, "Below 5,000£," to 7, "Above 30,000£") and education level (7-point scale from 1, "Less than a high school degree," to 7, "Doctoral degree"). As in previous research (e.g., Kraus & Keltner, 2009), we standardized these objective indicators to create a general measure of objective socioeconomic status ($r = .46$, $p \leq .001$). Finally, the participants reported some sociodemographic information (e.g., age and gender). We closed by thanking them for and debriefed them on their participation.

Results

The three studies' descriptive statistics and the correlations (Appendix 1) between the measures of humanity (HU and HN) and the economic variables are shown in Table 1. The results showed that, across all samples, the participants believed that poor people waste their incomes on luxury and leisure items instead of saving money to spend on more basic items. In addition, across-country differences appeared regarding support for welfare policies; there was higher support for welfare policies in Spain than in the United Kingdom or the United States. Furthermore, the participants expressed different views depending on the policy. For instance, participants in the UK sample indicated that governments should spend less on unemployment benefits, but participants in all the samples stated that governments should spend more on education and health care. Additionally, the results showed that the study's economic measures (e.g., support for welfare and financial efficacy) was related to the level of humanity ascribed to poor people in the samples (Table 1). The correlations were stronger between HU and the other measures than for HN and the same measures. However, in the Spanish sample, the items related to the poor groups' consumption practices and financial management from the Bastian et al. (2012) scale were significantly correlated with both dimensions of humanity.

Table 1. Means, *SD* and partial correlations between the humanity attributed to poor people (HU and HN, controlling by the effect of one dimension of humanity above the other) and financial management, support for welfare policies and support for governmental measures of control, included on Studies 1 to 3

	UK Study			US Study			Spanish Study				
								Traits		Behaviors	
	M (SD)	HU	HN	*M (SD)*	HU	HN	*M (SD)*	HU	HN	HU	HN
Overall management of the poor	*3.95 (1.06)*	.403**	.161*	*3.81 (1.15)*	.443**	-.023	*4.25 (1.22)*	.206**	.246**	.377	-.010
Financial efficacy	*4.36 (1.49)*	.456**	.214*	*4.17 (1.54)*	.501**	.063	*4.83 (1.44)*	.240**	.270**	.411**	.022
Basic items	*4.93 (1.18)*	.124†	.273**	*4.77 (1.32)*	.212*	.184*	*5.25 (1.36)*	.144*	.267**	.274**	.055
Luxury items	*3.76 (1.34)*	.247**	.124†	*3.57 (1.49)*	.299**	-.009	*3.84 (1.83)*	.128*	.175*	.271**	-.035
Leisure items	*2.98 (1.47)*	.412**	-.068	*2.91 (1.53)*	.415**	-.220*	*3.34 (1.56)*	.161*	.095†	.274**	-.036
Overall support for welfare policies	17.47 *(25.34)*	.249**	.041	22.47 *(37.63)*	.275**	.003	47.07 *(29.71)*	.197**	.079	.108†	.090
Healthcare benefits	37.50 *(33.06)*	.086	.047	30.85 *(40.42)*	.215*	.067	51.71 *(38.66)*	.178*	.059	.088	.089
Education benefits	36.26 *(32.95)*	.173*	.029	39.69 *(43.08)*	.114†	.110	62.75 *(36.22)*	.120*	.019	.035	.027
Housing benefits	5.22 *(36.98)*	.273**	.033	17.56 *(43.49)*	.280**	-.001	41.44 *(36.00)*	.146*	.141	.095†	.087
Food stamp benefits	18.55 *(37.19)*	.090	.034	15.59 *(48.22)*	.281**	-.012	55.34 *(34.90)*	.115*	.065	.079	.091
Utilities benefits	10.93 *(33.67)*	.198*	.039	16.34 *(42.29)*	.272**	-.008	33.90 *(36.27)*	.150*	.048	.092	.075
Unemployment benefits	-3.63 *(38.46)*	.227**	-.008	14.77 *(43.11)*	.244**	.005	37.29 *(40.91)*	.216**	.047	.122*	.060
Support for governmental control	3.77 *(1.72)*	-.232**	-.079	4.19 *(1.85)*	-2.14*	-.059	4.59 *(1.60)*	-.164*	-.015	-.232**	.083

Note. * *p* < .05. ** *p* ≤ .001. † *p* ≤ .091.

To test H1-H2, we computed a multiple regression analysis of both dimensions of humanity (HU and HN) on the overall financial management, support for welfare policies, and support for governmental control (Table 2). The result for the overall sample showed that the humanity attributed to the group—that of HU more so than that of HN—positively predicts both the perceptions of that group's financial management and the participants' support for spending money on welfare policies while also negatively predicting their support for governmental control. Therefore, when people dehumanize poor groups and treat them as animals, they are more likely to see those groups as financially wasteful, undeserving of help, and in need of governmental control, supporting H1-H3. Looking at the differences between samples, we found that the pattern of results described above for the overall sample was shown in the UK and US samples. However, the Spanish sample's results indicated that both the HU and HN dimensions of humanity (Bastian et al., 2012) significantly predicted the perceptions of the poor groups' overall financial management.

Finally, to test H4 and H5, we calculated two mediational analyses relating dehumanization to welfare policies and governmental control through overall financial wastefulness (Table 3). We used Hayes' (2013) PROCESS (bootstrapping 10,000 interactions with 95% confidence intervals) to calculate a simple mediational analysis using Model 4; we controlled for the type of humanity that we were not using as a predictor (e.g., when HN was predicting, HU was controlled), as well as for the participants' socioeconomic status (see Appendix 2 for an alternative mediational analysis). The results for the overall sample showed that perceptions regarding poor people's financial management mediated the relationship between the ascription of HU to those people and the participants' support for both welfare policies (*effect* = 3.27,

Table 2. Multiple regression coefficients and standards error (in brackets) of humanity (HU and HN) on the overall financial management, support for welfare policies and governmental measure of control of poor people, included on Studies 1 to 3

Predictors	Overall financial management		Support for welfare policies		Support for governmental control	
	β	SE	β	SE	β	SE
Overall sample	$F_{(2, 732)} = 117.32^{**}, R^2 = .243$		$F_{(2, 732)} = 33.59^{**}, R^2 = .084$		$F_{(2, 732)} = 41.34^{**}, R^2 = .104$	
HU	.39 **	(.04)	8.37 **	(1.40)	-.40**	(.07)
HN	.17**	(.05)	.30	(1.62)	-.13	(.08)
UK	$F_{(2, 202)} = 59.15^{**}, R^2 = .369$		$F_{(2, 202)} = 15.29^{**}, R^2 = .131$		$F_{(2, 202)} = 16.48^{***}, R^2 = .375$	
HU	.43 **	(.07)	6.99 **	(1.91)	-.44**	(.13)
HN	.20 *	(.08)	1.38	(2.37)	-.18	(.16)
US	$F_{(2, 210)} = 52.35^{**}, R^2 = .332$		$F_{(2, 211)} = 22.08^{**}, R^2 = .173$		$F_{(2, 211)} = 16.21^{**}, R^2 = .365$	
HU	.55**	(.07)	11.65 **	(2.80)	-.45 *	(.14)
HN	-.03	(.09)	1.49	(3.30)	-.14	(.17)
Spain	$F_{(2, 313)} = 41.95^{**}, R^2 = .211$		$F_{(2, 313)} = 54.25^{**}, R^2 = .093$		$F_{(2, 313)} = 7.52^{**}, R^2 = .046$	
HU	.27 **	(.07)	6.72 **	(1.89)	-.31 *	(.10)
HN	.36 **	(.08)	2.93	(2.08)	-.03	(.11)
	$F_{(2, 313)} = 53,18^{**}, R^2 = .225$		$F_{(2, 313)} = 9.30^{**}, R^2 = .056$		$F_{(2, 313)} = 10.50^{**}, R^2 = .063$	
Behaviors HU	.56**	(.08)	4.04 †	(2.09)	-.47 **	(.11)
Behaviors HN	-.02	(.10)	4.33	(2.72)	-.21	(.15)

Note. ** $p < .05.$ ** $p \le .001.$ † $p \le .055$

Table 3. Indirect effects of overall financial management on the relation between humanity (HU and HN, controlling by the effect of one dimension of humanity above other, and both subjective/objective social class of the participants), support for welfare policies (mediation 1) and governmental measures of control (mediation 2), for the Studies 1 to 3

| | Indirect effects of overall financial management on | | | |
| | Welfare policies | | Governmental control | |
	Effect *(SE)*	CI$_{95\%}$	Effect *(SE)*	CI$_{95\%}$
Overall Sample				
HU	3.27 *(.63)*	[2.14, 4.58]	-.15 *(.03)*	[-.21, -.10]
HN	1.46 *(.49)*	[.59, 2.49]	-.07 *(.02)*	[-.11, -.03]
UK				
HU	4.24 *(1.07)*	[2.27, 6.5]	-.29 *(.06)*	[-.43, -.17]
HN	1.86 *(.96)*	[.33, 4.04]	-.13 *(.06)*	[-.27, -.02]
US				
HU	3.95 *(1.70)*	[.67, 7.60]	-.27 *(.08)*	[-.44, -.12]
HN	-.33 *(.76)*	[-2.04, 1.04]	.02 *(.05)*	[-.07, .13]
Spain				
HU	.85 *(.51)*	[-.02, 1.99]	-.09 *(.03)*	[-.16, -.03]
HN	1.12 *(.66)*	[-.01, 2.59]	-.12 *(.04)*	[-.21, -.06]
Behaviors HU	2.36 *(1.15)*	[.17, 4.68]	-.18 *(.05)*	[-.29, -.08]
Behaviors HN	-.07 *(.45)*	[-1.06, .83]	.00 *(.03)*	[-.05, .07]

SE = .63, 95% CI [2.14, 4.58]) and governmental control (*effect* = -.15, *SE* = .03, 95% CI [-.21, -.10]); this validated H4 and H5 (Figure 1). In addition, the mediational effect of financial management was smaller in the case of the relationships between HN and support for both welfare policies (*effect* = 1.46, *SE* = .49, 95% CI [.59, 2.49]) and governmental control (*effect* = -.07, *SE* = .02, 95% CI [-.11, -.03]); this validates the prediction that HU is more important than HN in determining how much help poor groups are perceived as needing. The relative importance of HU (above HN) is also revealed when considering the differences among the samples without a significant effect (United State sample, and measure of behaviors on the Spanish sample) or with only a small indirect effect (United Kingdom sample) in comparisons from the mediational analysis, using HN as the predictor and controlling for HU (Table 3).
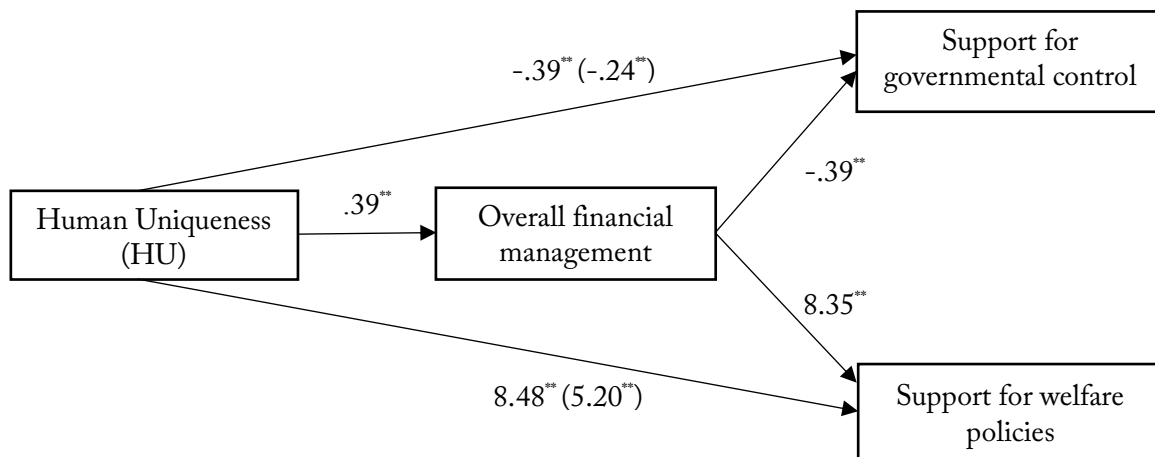
Figure 1. Mediational analysis of HU on support for welfare policies (mediation 1) and governmental control (mediation 2) via overall financial management, controlling by HN and subjective/objective social class of the participants, for Studies 1-3 (overall score). ** *p* ≤ .001.

Furthermore, in the Spanish sample, the results showed a slightly different pattern than in the other samples, per the Bastian et al. (2012) scale. The indirect effects that financial management has on the relationship between humanity (HU and HN) and

welfare policies were not significant. The results also showed significant indirect effects of financial management on the relationship between humanity (both HU and HN) and governmental control. In short, in the Spanish study, the results for the Bastian et al. (2012) scale seem to be different from those for the other measure of dehumanization.

Discussion

Studies 1-3 examined the relationships in three countries between the dehumanization of poor people, perceived financial management, and support for both welfare policies and governmental control. The results showed that seeing poor people as animal-like was associated with perceptions that those people were financially wasteful, with low support for welfare policies, and with a strong desire for government control. In addition, the results showed that the relationship between dehumanization and support for welfare policies and governmental control was mediated by perceptions of poor people's financial management. That is, the perceptions of poor people as being primitive and not fully evolved individuals (low HU) correlates with the rejection of the social policies that were created to help those people due to the perception that they will waste the money. These results highlight the role that HU plays (rather than the other dimension of humanity, HN) as the trigger of wasteful perceptions and in both reducing support for welfare and increasing support for control.

However, the results also revealed some differences among the samples. For instance, there were discrepancies regarding the support for welfare policies, not just across countries (e.g., the UK sample showed lower support than the Spanish sample) but also between benefits (e.g., unemployment help was less supported than educational benefits). Moreover, significant differences arise when comparing Bastian et al.'s (2012) measure of humanity in the Spanish sample with that measure in the other samples, as

well as with the behavioral measure of humanity (Sainz et al., 2018) in the Spanish sample. Even though cultural differences can be assumed in comparisons of samples from across countries (as countries might highlight different dimensions of humanity; Bain et al., 2009), the somewhat inconsistent results for two measures in the same sample seems to indicate that this is a measurement problem. As previously mentioned, as far as we know, Bastian et al. (2012) measure has not previously been used in Spanish samples, but the other measure (Sainz et al., 2018) was developed specifically for the Spanish context. Additionally, the consistency of the results for the behavioral measure (Sainz et al., 2018) with all the samples leads us to argue that a proper adaptation of Bastian et al.'s (2012) measure is needed when using this scale in a Spanish sample—and perhaps in other samples—to shed light on this issue.

In short, the present results showed that dehumanizing poor people seems to trigger the rejection of public policies via a perception that poor people are unable to manage their finances. This result emphasizes the idea that dehumanization acts as a blindfold that undermines people's impressions about how poor people deal with their deprived positions. However, all these conclusions are based only on three correlational studies. To address this limitation, we conducted experimental studies as well. In Study 4, we compared the humanity attributed to groups with different socioeconomic statuses or social classes to determine how the target social class shapes participants' attributions of humanity, attitudes about wastefulness, and support for aid. In Studies 5 and 6, we manipulated the humanity of poor groups (i.e., humanization vs. animalization) to confirm the role of dehumanization as the trigger for the perception that these groups are wasteful and for the desire to control the amount of money spent on welfare policies.

Study 4

The aim of this study was to experimentally confirm the pattern of results that we found in the previous studies. Specifically, in this study, we wanted to capture how differences in socioeconomic status or social class (i.e., poor vs. middle class) could trigger differences regarding attributions of humanity, perceptions of financial management, support for financial aid, and attitudes toward governmental control. Based on the previous research, we know that poor people are sometimes considered to be less sophisticated or to have a more dysfunctional lifestyle than middle-class people (Jones, 2011). Therefore, we decided to manipulate the socioeconomic status of a fictitious group so that we could capture how people perceived and responded to the needs of poor (vs. middle-class) groups. Additionally, for this study, we used the paradigm of a fictitious natural disaster (e.g., flooding) that negatively affected a poor or middle-class residential area. By doing this, we were able to control for the differences in income between the poor and middle-class groups (i.e., despite the groups having different incomes, they were both affected by the natural disaster and needed help to the same extent). This allowed us to analyze how the characteristics ascribed to both groups influenced how the participants' perceptions of how they were going to behave after receiving governmental money after a natural disaster.

We expected to find differences in how poor and middle-class groups were perceived. Specifically, we hypothesized that poor people (as opposed to middle-class people) would be seen as having a lower level of HU (H1), replicating the results of Studies 1-3. In addition, we predicted that poor people would be perceived as having worse financial management than middle-class people (H2). We also predicted that, compared to middle-class people, poor people would be helped (i.e., provided with

reparations after a natural disaster) to a lesser extent (H3) and would be perceived as needing more control from the government (H4). Finally, we hypothesized that humanity (HU) and perceived financial management would have sequential mediational effects on the relationship between the group's socioeconomic status (low = 0, middle class = 1) and the support for that group receiving financial aid (H5); as well as on the relationship between the group's socioeconomic status and the need for governmental control of that group (H6). The data and the preregistration of the hypothesis can be found online (osf.io/u6wzj).

Participants and Procedure

We asked the participants to complete a survey about the consequences of a natural disaster for a group of people living in the United Kingdom. We recruited them through Prolific Academic and paid them for their participation. We calculated the sample size using G-power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) and conducted an independent t-test based on the correlation that we found between HU and welfare policies (r = .25) in the UK sample from Study 1 (effect size d = .51, α = .05, 80% power). The analysis revealed that a minimum of 124 participants was required. The final sample included 213 participants (147 women, 66 men, M_{age} = 39.41, SD = 13.21). Once the participants agreed to participate, we applied the following measures.

Manipulation of social class. We presented the participants with one of two possible short descriptions of a group that lives in the United Kingdom (see the online material). We created these descriptions to manipulate the fictitious group's socioeconomic status (i.e., whether it was low or middle-class). These descriptions provided details about the group's educational level (not finishing high school vs. university degree or higher), income level (low income vs. middle income), and

employment situation (high vs. low rates of unemployment and blue-collar vs. white-collar jobs). Finally, we included a description of the residential area where the group supposedly lived (deprived vs. wealthy) to reinforce the manipulation. We also included an attention check at the end of the survey ("What is the social class of the group that was described at the beginning?" from 1, "Poor," to 10, "Rich").

Humanity attribution, consumption practices, financial help, and government control in the context of a natural disaster. Once participants had read the description of the group, they rated the group's humanity using the same measures used in the previous studies (HU, α = .85 and .75; HN α = .67). After they rated the group's humanity, the participants read the front page of a British newspaper that included a fictitious news story describing the damage that the area had suffered due to flooding caused by torrential rains. We measured the participants' attributions of humanity to the group before giving them information about the natural disaster and the difficulty of the situation for the group; we used this order to avoid influencing the participants' evaluation of the group.

After reading the news about the flooding, the participants learned that a local government had activated an emergency budget to help the families who had suffered damage to their properties. We told the participants that each family could make a claim to the government and receive £1000 to spend as they wished. Then, the participants answered some questions about how the group would deal with this emergency budget. We created a general score for the group's financial management (α = .68) after computing a mean of the two items regarding the group's financial efficiency and its spending on basic, leisure, and luxury items; the participants reported the percentage of money that they thought the group would spend on each category, as well as the amount they thought that the group should spend on each.

To measure the participants' support for government aid, we adapted the measure of support for welfare policies from the previous studies to the context of the natural disaster. We included two questions. The first was a slider item in which participants reported how much of the emergency budget the government should spend for each family, on a scale from -100% to +100%. Additionally, we asked the participants about the degree to which they would be willing to sign an official petition supporting the government's plan to provide such an emergency budget to people in need (from 1, "Not at all," to 7, "Completely"). We averaged the two measures to form a single measure of financial aid ($r = .55$, $p \leq .001$). We measured government control as in the previous studies ($\alpha = .94$). Finally, the participants reported their socioeconomic status (also measured as in the previous studies) and some demographic information (e.g., sex and age). We closed by thanking them for and debriefing them on their participation.

Results

First, we computed the differences in the attentional check. As expected, the results seemed to indicate that the participants reported the poor group ($M = .73$, $SD = .94$) and the middle-class group ($M = 5.34$, $SD = .91$, $t_{(211)} = -36.08$, $p \leq .001$, Hedges' $g_s = 4.97$) as having different socioeconomic statuses.

Second, we compared the participants' humanity attributions for the poor and middle-class groups. We ran a repeated-measures ANOVA with social class (poor or middle class) and humanity (HU and HN) as within factors. The results showed that humanity had a main effect, $F_{(1, 211)} = 8.94$, $p = .003$, $\eta_p^2 = .04$, with more attributed HN than HU traits ($M = 4.71$, $SD = .07$ and $M = 4.53$, $SD = .06$). Importantly, a significant interaction emerged between social class and humanity, $F_{(1, 211)} = 216.49$, $p \leq .001$, $\eta_p^2 = .51$. The analysis revealed that poor people ($M = 3.60$, $SD = 1.08$) were attributed as.

Table 4. Means, standard deviations (in brackets) and *t–test* comparisons among conditions for the Studies 4 to 6

Study 4	Poor group	Middle-class	$t_{(211)}$	p	Hedges' g_s
Overall financial management	-4.00 *(4.07)*	-1.19 *(3.87)*	-5.16	≤ .001	.70
Financial efficacy	3.82 *(1.53)*	5.25 *(1.61)*	-6.65	≤ .001	.91
Basic items	7.94 *(6.92)*	3.40 *(6.45)*	4.96	≤ .001	.68
Luxury items	-3.16 *(3.85)*	-1.56 *(3.64)*	-3.10	.002	.42
Leisure items	-4.86 *(4.36)*	-1.87 *(4.04)*	-5.19	≤ .001	.71
Support for financial aid	7.00 *(23.74)*	6.06 *(24.92)*	.28	.778	.04
Support for governmental control	3.57 *(.80)*	3.81 *(.87)*	-2.14	.033	.28

Study 5	Animal-like	Human-like	$t_{(203)}$	p	Hedges' g_s
Overall financial management	-2.29 *(2.67)*	.98 *(1.92)*	-10.04	≤ .001,	1.61
Financial efficacy	2.85 *(1.18)*	4.78 *(1.51)*	-10.21	≤ .001,	1.42
Basic items	-9.12 *(6.24)*	-2.53 *(4.01)*	-8.96,	≤ .001,	1.24
Luxury items	-3.44 *(4.86)*	-.79 *(2.38)*	4.92	≤ .001	0.69
Leisure items	-4.63 *(3.52)*	-1.30 *(2.36)*	7.92	≤ .001	1.10
Support for welfare policies	33.89 *(28.29)*	43.24 *(30.52)*	-2.28	.024	0.32
Support for governmental control	5.07 *(1.38)*	4.06 *(1.51)*	4.99	≤ .001	0.69

Study 6	Animal-like	Human-like	$t_{(208)}$	p	Hedges' g_s
Overall financial management	-.23 *(2.29)*	-.92 *(2.01)*	-3.85	≤ .001	0.53
Financial efficacy	3.64 *(1.38)*	4.72 *(1.30)*	-5.84	≤ .001	0.80
Basic items	5.17 *(4.73)*	3.15 *(4.40)*	3.20	.002	0.44
Luxury items	-1.20 *(2.62)*	-.32 *(2.13)*	-2.57	.011	0.37
Leisure items	-2.99 *(3.37)*	-1.86 *(2.85)*	-2.49	.014	0.60
Support for welfare policies	44.20 *(19.38)*	50.38 *(21.76)*	-2.17	.031	0.28
Support for governmental control	4.53 *(1.24)*	4.11 *(1.36)*	2.35	.019	0.32

having less HU than middle-class people (M = 5.47, SD = .75), $t_{(211)}$ = -14.73, $p \leq$ .001, Hedges's g_s = 2.03; however, there was no difference in HN (M = 4.64, SD = .95 for the poor group; M = 4.78, SD = .96, the middle-class group), $t_{(211)}$ = -1.03, p = .305. Therefore, these results supported H1, showing that poor and middle-class groups are different in terms of their ascribed HU.

Third, we computed differences in the financial management measures: support for aid and support for government control (Table 4). The results seemed to support H2 regarding the perceived differences on financial management of groups. Poor groups were considered to be wasting a greater proportion of the emergency money than the middle-class group. Furthermore, the results also indicated that, contrary to H3, there were no differences in the extent to which people were willing to support the groups. This result seemed to indicate, that in the case of an emergency, the participants were willing to equally help both groups, independent of social class. However, even when the groups received equally help, the participants reported that a certain level of governmental control was necessary when providing emergency aid, particularly for poor groups (in line with H4).

Finally, we calculated parallel mediational analyses using HU (Mediator 1) and overall financial management (Mediator 2) to explain the relationships among socioeconomic status (low = 0, middle-class = 1) and support for both financial aid and governmental control (Figure 2). The results, using Hayes' (2013) PROCESS (bootstrapping 10,000 interactions with 95% confidence intervals, Model 6), showed a significant indirect effect uniquely when using both mediators (parallel mediator of HU and overall financial management) on the relation between socioeconomic status and financial aid (*effect* = 6.14, SE = 2.40, 95% CI [2.40, 10.29]), but also on the relation
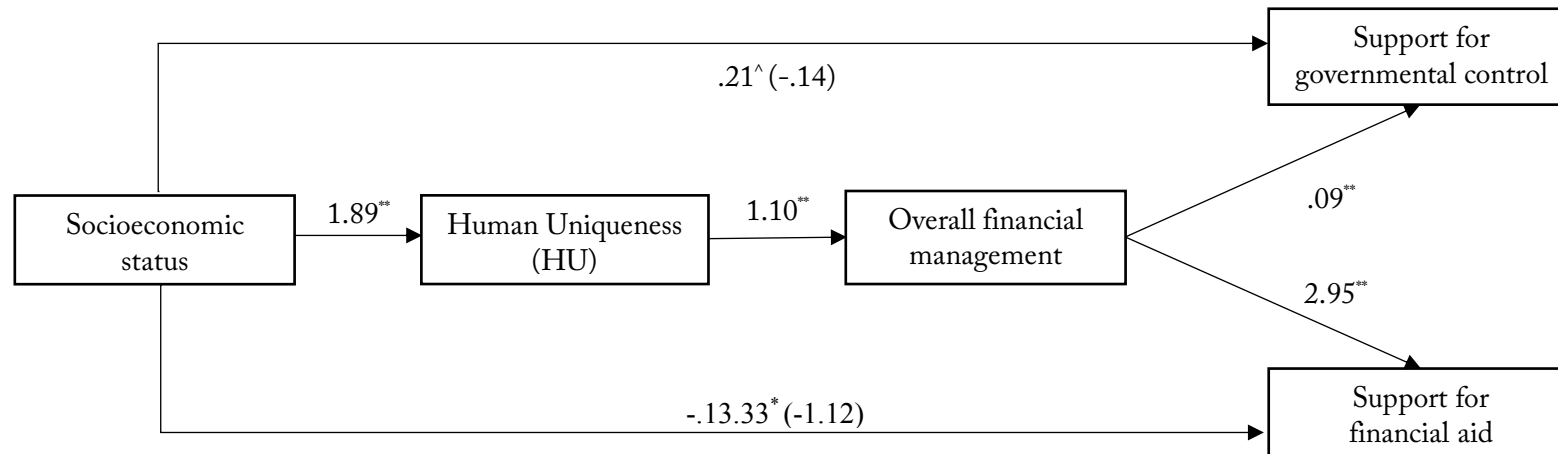
Figure 2. Parallel mediational analysis of HU (mediator 1) and overall financial management (mediator 2) on the relation between socioeconomic status (Poor = 0; Middle class = 1) and the support for financial aid after the natural disaster (parallel mediation 1); and the support for governmental control (parallel mediation 2), controlling by subjective/objective social class of the participants, for Study 4. $^* p \leq .05$; $^{**} p \leq .001$; $^\wedge = .066$.

Table 5. Indirect effects of HU and overall financial management on the relation between socioeconomic status and support for financial aid (parallel mediation1) and support for governmental control (parallel mediation 2), controlling by subjective/objective social class of the participants, for the Study 4

	Support for financial aid		Support for governmental control	
	IE (*SE*)	95% CI	IE (*SE*)	95% CI
Total effect				
	-1.12 *(.3.40)*	[-7.81, 5.58]	.21 *(.11)*	[-.01, .44]
Direct effect of socioeconomic status				
	-13.33 *(4.18)*	[-21.59, -5.08]	-.14 *(.15)*	[-.44, .16]
Indirect effect of HU (single indirect effect)				
	3.86 *(.3.15)*	[-2.29, 1.01]	.11 *(.11)*	[-.10, .31]
Indirect effect of financial management (single indirect effect)				
	2.22 *(.2.20)*	[-2.11, 6.60]	.06 *(.07)*	[-.06, .20]
Indirect effect of HU and financial management (parallel indirect effect)				
	6.14 *(2.04)*	[2.40, 10.29]	.18 *(.06)*	[.07, .30]

between socioeconomic status and governmental control (*effect* = .18, *SE* = .06, 95% CI [.07, .30]). Additionally, the results indicated that neither perceived financial management nor dehumanization alone seem to be significant mediators of the relationship between socioeconomic status and support for aid and governmental control (Table 5). In short, these results supported H5 and H6, highlighting that groups' socioeconomic status (poor vs. middle class) leads people to perceive those groups differently in terms of humanity, which in turn influences the perceptions of the groups' wastefulness and the amount and type of aid that participants are willing to give to the groups.

Discussion

In this study, we compared poor and middle-class groups in terms of the humanity participants attributed to them, the participants' perceptions of their financial management, and the participants' attitudes toward both measures that support them economically (in this case, by providing an emergency budget and those that provide governmental control). As expected, participants considered the middle-class groups as having more HU than the poor groups, confirming that HU seems to differentiate groups based on their positions in the socioeconomic hierarchy (cf. Haslam & Loughnan, 2014). Additionally, the results showed that poor people were perceived as being bad at managing their income because they were wasting their money on unnecessary (luxury or leisure) items, unlike the more rational consumption practices and financial management that were attributed to middle-class groups.

Overall, these results supported the hypothesis that socioeconomic status drives the perceptions of poor groups as animal-like and having a worrying lifestyle, as compared to the perceptions of middle-class groups as being focused and situationally adjusted.

However, the results also indicated that people were willing to provide the same financial aid to both groups. This unexpected finding contradicts our hypothesis, and it might be due to the manipulation that we used in Study 4. Although the natural-disaster paradigm fulfills the intention to compare how groups are helped when they are equally in need (i.e., when they are affected by an uncontrollable disaster), it is possible that, by placing the responsibility on an external cause (e.g., flooding) instead of on an internal one (e.g., being lazy), we influenced the study's results. Specifically, it might be that, because the participants considered neither group to be responsible for the natural disaster, they were prone to help both groups to the same extent, but using a different type of help (i.e., controlled vs. free spending).

Finally, the results of the mediational analyses indicated that differences in status drive differences in humanity, which, in turn, influence perceptions regarding groups' efficiency or wastefulness in spending the budgets they receive. This leads to a willingness to control how groups spend the public money that they receive. Importantly, these results reveal the importance of humanity attributions and financial-management perceptions as mediators, highlighting that dehumanization lowered support for welfare and increased governmental control through the impression that poor people were wasting their monthly budgets. In the final studies, we experimentally addressing the role that dehumanization (vs. humanization, in terms of HU) played in the previous results.

Studies 5 and 6

In these studies, we went beyond measures of dehumanization for poor groups to manipulate it and examine its effect on perceptions of financial judgements. We carried out two studies in which we implemented manipulations of dehumanization (vs. humanization). For these studies, we hypothesized that, when presented with an

animalized group, participants would attribute worse financial management to that group's members (H1), would express less support for welfare policies (H2) and more support for governmental control (H3), as compared to the same participants when presented with a humanized group. Additionally, we expected that the perceptions of the group's financial management would mediate two relationships: the one between animalistic dehumanization (vs. humanization) of poor people and support for welfare policies (H4); and the one between animalistic dehumanization (vs. humanization) and support for governmental control (H5). The data and the preregistration of the hypothesis can be found online (osf.io/bby95).

Method

Participants and Procedure

The sample for the studies comprised students from a Spanish university. We asked the participants to volunteer for an online study about group perception in exchange for participation in a raffle or course credits. We calculated the sample size using G-power analysis for an independent t-test based on the overall correlation between HU and welfare policies in the Spanish sample from Study 3 (effect size d = .40, α = .05, 80% power). This analysis revealed that a minimum of 200 participants was required. The final sample included a combined 415 participants (Study 5: 205 participants, 147 women, M_{age} = 23.17, SD = 5.67; Study 6: 210, participants, 179 women, M_{age} = 21.30, SD = 3.46). Once the participants agreed to participate, they were presented with the following procedure.

Humanity manipulations. To manipulate the humanity of the poor group, we showed the participants a fake newspaper article that included information about a trending scientific article published in a well-known journal of social psychology (see the

online material). We implemented two manipulations. In Study 5, we told participants that the authors of this paper had intended to map the personality traits of various groups and that the intention of this study was to analyze how people perceive the groups that were evaluated in the article. This cover story was used to increase the credibility of the manipulation (cf. Martínez, Rodríguez-Bailón, Moya, & Vaes, 2015). In Study 6, we told the participants that the authors of the paper developed an index of humanity ("Ascent of man" scale) to characterize the evolution of groups based on their lifestyles and behaviors. We also told the participants that we intended to analyze how people perceived these groups.

After providing the cover history, we randomly assigned the participants to one of the two experimental conditions. In both conditions, the participants read some information about the group's socioeconomic status (they were described as having few resources, a low level of education, etc.). The participants also learned about the humanity of the groups presented. In Study 5, the participants read the information about the personality traits of the group that was evaluated in the article. The participants were randomly assigned to the condition in which the group was described as lacking HU (e.g., irrational and without any control of their behavior) or to the condition in which the group was described as having HU traits (e.g., rational and in control of their behaviors). In Study 6, the participants also randomly read the information for one group. In one condition, participants learned that the target group scored lower on the "Ascent of Man" scale than did other groups (i.e., the group was less human and less evolved); meanwhile, in the other condition, the participants were told that the target group was more human and more evolved (relative to other groups) on the Ascent of Man scale. In both cases, this included a picture of the scale (Kteily, Bruneau, Waytz, & Cotterill, 2015), with the

scores for each group below the picture. We added the picture and the scores for the other groups to reinforce the perception that the group in question was more or less human than the other groups. Following the description of the group in the respective study, the participants answered some questions regarding the group.

Financial management and support for both welfare policies and governmental control. As in the previous studies. the participants answered questions about their consumption practices (i.e., the difference between the actual amount spent and the amount that should be spent for basic, luxury, and leisure items, as well as overall efficiency); we averaged the scores to create a general index of financial management (α from .79 to .81). Additionally, we measured support for welfare policies (α from .83 to .91) and for governmental control (α from .73 to .80), as in Study 3.

Manipulation checks. Two questions were presented to test the effectiveness of the manipulation. The first comprised two items on the group's humanity, including the extent to which the described group was considered to be like animals (irrational, non-civic, and less evolved) or like humans (rational, civic, and more evolved), from 1, "Not at all," to 7, "Completely" (r = .87 to .89, p ≤ .001). The second was one item on the group's socioeconomic status ("Following the description that you just read, what is the socioeconomic status of the group?" from 1, "Poor," to 7, "Rich"). Finally, the participants reported their socioeconomic status (measured as in the previous studies) and some demographic information (e.g., sex and age). We then thanked them for and debriefed them on their participation.

Results

The manipulation was successful, as the participants perceived the dehumanized group (lacking HU and not fully evolved) as being more animal-like (Study 5: M = 2.85,

SD = 1.52; Study 6: *M* = 2.26, *SD* = .96) than the humanized group (having HU and fully evolved; Study 5: *M* = 5.80, *SD* = 1.41, $t_{(191)}$ = -14.32, *p* ≤ .001, Hedges's g_s = 2.00; Study 6: *M* = 5.93, *SD* = 1.26, $t_{(208)}$ = -23.85, *p* ≤ .001, Hedges's g_s = 3.27). Furthermore, there were no differences regarding attributions of socioeconomic status for the dehumanized group (Study 5: *M* = 2.41, *SD* = 1.28; Study 6: *M* = 1.66, *SD* = .61) and humanized group (Study 5: *M* = 2.62, *SD* = 1.03, $t_{(203)}$ = -1.29, *p* = .197, Study 6: *M* = 1.75, *SD* = .75, $t_{(208)}$ = -.89, *p* = .375). This confirmed that the participants saw both groups as being equally poor.

We also calculated the differences between the animalized and humanized groups regarding the variables included in the study (Table 4). The results of both studies seemed to support H1-H3. The participants considered the animalized groups as having worse financial management than the humanized groups. Additionally, the results showed that the participants had less favorable attitudes toward welfare policies for the animalized group than for the humanized group. The participants also considered the animalized group to need more control than the humanized group did.

Finally, we ran a multiple mediational analysis to test H4 and H5 from both studies (Figure 3) using PROCESS (bootstrapping 10,000 with 95% confidence intervals). The results showed that financial management has a significant indirect effect on the relationship between dehumanization (0 = animal, 1 = human) and support for welfare policies (Study 5: *effect* = 7.15, *SE* = 3.94, 95% CI [.17, 15.49]; Study 6: *effect* = 2.17, *SE* = .95, 95% CI [.56, 4.31]; Table 6). Moreover, financial management also mediated the relationship between dehumanization (0 = animal, 1 = human) and support for
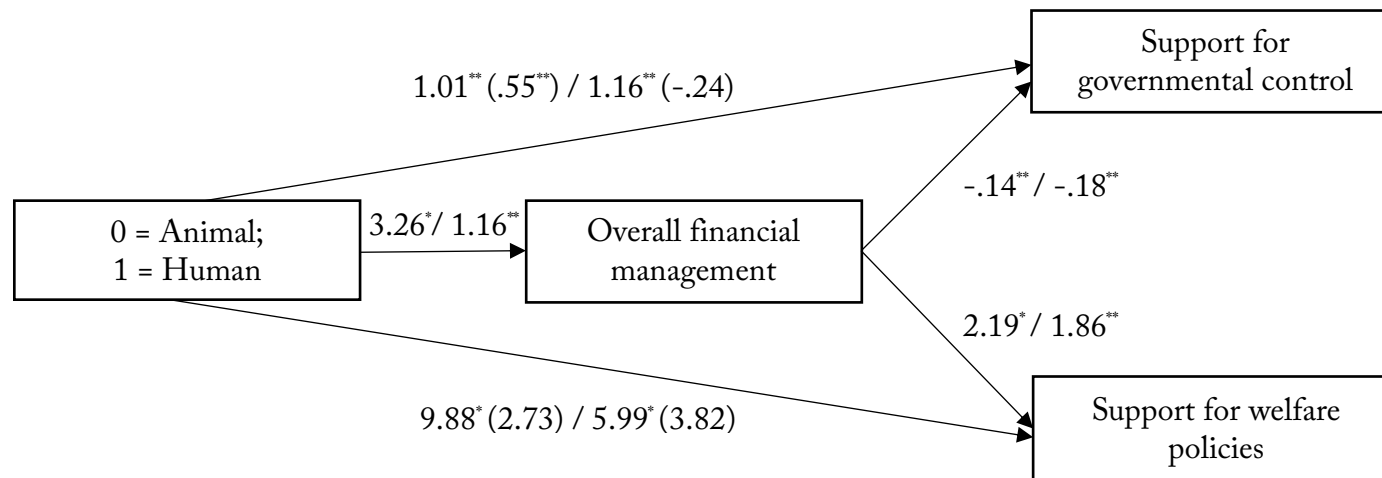
Figure 3. Mediational analysis of overall financial management on the relation between (de)humanization (0 = animal, 1 = human) and support for welfare policies (simple mediation 1) and support for governmental control (simple mediation 2), controlling by the subjective/objective social class of the participants, for the Study 5 / 6. * $p < .05$; ** $p < .001$.

Table 6. Indirect effects of overall financial management on the relation between (de)humanization (0 = animal, 1 = human) and support for welfare policies (simple mediation 1) and support for governmental control (simple mediation 2), controlling by subjective/objective social class of the participants, for the Study 5-6

	Support for welfare policies		Support for governmental control	
	IE (*SE*)	95% *CI*	IE (*SE*)	95% *CI*
Total effect				
Study 5	9.88 *(4.11)*	[1.78, 17.98]	-1.01 *(.20)*	[-1.41, -.61]
Study 6	5.99 *(2.86)*	[.36, 11.62]	-.45 *(.18)*	[-.80, -.10]
Direct effect of (de)humanization.				
Study 5	2.73 *(4.95)*	[-7.03, 12.49]	-.55 *(.24)*	[-1.02, -.07]
Study 6	3.82 *(2.91)*	[-1.91, 9.56]	-.24 *(.18)*	[-.59, .10]
Indirect effect of overall financial management				
Study 5	7.15 *(3.94)*	[.17, 15.49]	-.47 *(.13)*	[-.75, -21]
Study 6	2.17 *(.95)*	[.56, 4.31]	-.21 *(.07)*	[-.36, -.09]

governmental control (Study 5: *effect* = -.47, *SE* = .13, 95% CI [-.75, .22]; Study 6: *effect* = -.21, *SE* = .07, 95% CI [-.36, -.09]). Therefore, the results of Studies 5 and 6 support H4 and H5 regarding financial management's mediating role.

Discussion

These studies examined the effect that animalistic dehumanization (vs. humanization) had on support for welfare policies and for governmental control in the provision of welfare policies to poor groups. We implemented two conceptually distinct forms of manipulating humanity: an attribution of personality traits and scores on the Ascent of Man measure. This allowed us to test the influence of dehumanization using not only an experimental design (in which we provided the group's traits; Study 5) but also a manipulation (in which participants inferred the group's traits based on an Ascent of Man score; Study 6). The results supported the hypotheses; dehumanization lowered

participants' support for welfare policies and caused participants to perceive poor people as financially wasteful and in need of control. Finally, the mediation effects found in the previous studies were replicated. Dehumanization decreased support for welfare and increased support for control via the group's perceived financial wastefulness. In short, these results provided confirmatory, experimental evidence that dehumanization can reduce support for social policies and increase control by creating perceptions that poor groups waste their monthly budgets.

General Discussion

The present paper examines the role that dehumanization plays in the support for welfare policies and governmental control via perceptions that poor people waste their budgets. In Studies 1-3, we found that, in certain countries, participants considered poor people to be less evolved and more animal-like and thus not deserving of welfare policies and requiring government control; this was fundamentally because of the perception that poor people waste the resources they receive from the public policies that they benefit from. In Study 4, we compared perceptions of poor and middle-class people. The results highlighted that poor people are seen as inferior in terms of HU and managing their income. However, the results also indicated that both poor and middle class groups are equally helped by government aid, even when the results indicated that poor people were perceived as being more in need of control (to prevent them from wasting that aid). Finally, in Studies 5 and 6, we confirmed that (de)humanization is causally related to the rejection of welfare policies and to support for increased control via the impression that poor people are unable to manage their monthly incomes.

Our results have broad implications for studies of poverty and economic inequality. The animalistic dehumanization of poor people, as Loughnan et al. (2014) previously

identified, seems to have a direct impact on how poverty is perceived and inequality is justified. The results indicated that dehumanizing poor people leads others to blame them and that neglect of external constraints may explain their deprived situations. Therefore, the present work highlights that dehumanization is a key variable in understanding why people take stances against social policies that help poor people; it also adds valuable information about how poor people and poverty are perceived and justified (Bullock et al., 2003; Cozzarelli et al., 2001). These findings imply that dehumanization biases people's perceptions of poor people and poverty toward being internally caused, causing people to blame poor people for their own disadvantage. Following previous research, which showed that hierarchy-maintenance orientation shapes perceptions of the income gap (Kteily, Sheehy-Skeffington, & Ho, 2017), this research shows that the tendency to dehumanize poor people biases the perceptions of low-socioeconomic-status groups' financial management abilities and causes participants to perceive welfare policies as useless efforts that are mainly used to buy unnecessary or luxury items. Given these results, one way to overcome societal rejection of social policies that benefit low-socioeconomic-status groups is to promote a humanized perception of those groups that, in turn, would eliminate the perception that these groups are money wasters.

Despite this evidence, the present research does have some limitations that need to be considered. The present studies cannot completely explain either the cross-cultural differences regarding perceptions of poor people or the support for welfare policies within countries. For instance, the UK sample had lower support for welfare policies than in the US or Spanish samples, both of which indicated that the participants supported most social policies. Future studies could focus on the cross-cultural differences by analyzing which variables, beyond dehumanization, influence support for welfare policies. The

current level of income inequality within a society might even influence participants' support for redistribution policies (Heiserman & Simpson, 2017). Moreover, the results also showed differences in support among individual types of welfare policies, with education and health policies receiving stronger support than unemployment or housing benefits. Future studies could explore the factors that explain why these welfare programs are differentially supported and could determine whether those differences are related to perceptions of the group's humanity. We expect that some benefits, such as the ones related to education and health care, would be considered basic for all citizens but that others, such as unemployment would be closely related to the group's perceived effort (i.e., receiving unemployment benefits reinforces laziness among poor people). Finally, future studies should also provide a deep analysis of the divergence among the measures in the Spanish sample of the correlational studies. It seems that, a proper adaptation of Bastian et al. (2012) measure will be needed.

In conclusion, the results of the present studies shed light on the roles of dehumanization and poverty. Animalizing poor people led to lower support for welfare policies, primarily due to the belief that the animalized groups were money wasters. In short, the bottom of the social ladder is viewed as also being the bottom of the phylogenic ladder, and this belief serves as a justification of the *statu quo*.

References

Ashok, V., Kuziemko, I., & Washington, E. (2015). Support for redistribution in an Age of rising inequality: New stylized facts and some tentative explanations. *Brookings Papers on Economic Activity, 2015*, 367-405. doi:10.3386/w21529

Bain, P., Park, J., Kwok, C., & Haslam, N. (2009). Attributing human uniqueness and human nature to cultural groups: Distinct forms of subtle dehumanization. *Group Processes & Intergroup Relations*, *12*(6), 789–805. doi:10.1177/1368430209340415

Bastian, B., Jetten, J., & Radke, H. R. M. (2012). Cyber-dehumanization: Violent video game play diminishes our humanity. *Journal of Experimental Social Psychology*, *48*, 486–491. doi:10.1016/j.jesp.2011.10.009

Bullock, H. E. (1999). Attributions for poverty: A comparison of middle-class and welfare recipient attitudes. *Journal of Applied Social Psychology, 29*, 2059-2082. doi:10.1111/j.1559-1816.1999.tb02295.x

Bullock, H. E., Williams, W. R., & Limbert, W. M. (2003). Predicting support for welfare policies: The impact of attributions and beliefs about inequality. *Journal of Poverty, 7*, 35-56. doi:10.1300/J134v07n03_03

Bullock, H. E., Wyche, K. F., & Williams, W. R. (2001). Media images of the poor. *Journal of Social Issues, 57*, 229-246. doi:10.1111/0022-4537.00210

Buttrick, N. R., & Oishi, S. (2017). The psychological consequences of income inequality. *Social Personality Psychology Compass*, *11*, 1-12. doi:10.1111/spc3.12304

Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues, 57*, 207–227. doi:10.1111/0022-4537.00209

DeLuca-McLean, D., & Castano, E. (2009). Infra-humanization of ethnic minorities: The moderating role of ideology. *Basic and Applied Social Psychology*, *31*, 102–108. doi:10.1080/01973530902880258

Esses, V. M., Veenvliet, S., Hodson, G., & Mihic, L. (2008). Justice, morality, and the dehumanization of refugees. *Social Justice Research*, *21*, 4–25. doi:10.1007/s11211-007-0058-4

Eurostad (2017). Downward trend in the share of persons at risk of poverty or social exclusion in the EU. But still over 115 million people in this situation. Retrieved from: http://ec.europa.eu/eurostat/en/web/products-press-releases/-/3-16102017-BP

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149-1160. doi:10.3758/BRM.41.4.1149

Garland, J., Chakraborti, N., & Hardy, S. J. (2015). 'It felt like a little war': Reflections on violence against alternative subcultures. *Sociology, 49*, 1065-1080. doi:10.1177/0038038515578992

Goff, P. A., Eberhardt, J. L., Williams, M. J., & Jackson, M. C. (2008). Not yet human: implicit knowledge, historical dehumanization, and contemporary consequences. *Journal of Personality and Social Psychology*, *94*, 292–306. doi:10.1037/0022-3514.94.2.292

Haslam, N. & Stratemeyer, M. (2016). Recent research on dehumanization. *Current Opinion in Psychology*, *11,* 25-29. doi:10.1016/j.copsyc.2016.03.009

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review, 11,* 25-29. doi:10.1207/s15327957pspr1003

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology*, *65*, 399–423. doi:10.1146/annurev-psych-010213-115045

Hayes, A. F. (2013). *Introduction to Mediation, Moderation and Conditional Process Analysis*. New York: Guilford Press.

Hayward, K., & Yar, M. (2006). The 'chav' phenomenon: Consumption, media and the construction of a new underclass. *Crime Media Culture*, 2, 9-28. doi:10.1177/174165900606170

Heiserman, N., & Simpson, B. (2017). Higher inequality increases the gap in the perceived merit of the rich and poor. *Social Psychology Quarterly*, *80*, 243-253. doi:0190272517711919

Henry, P. J., Reyna, C., & Weiner, B. (2004). Hate welfare but help the poor: How the attributional content of stereotypes explains the paradox of reactions to the destitute in America. *Journal of Applied Social Psychology, 34*, 34-58. doi:10.1111/j.1559-1816.2004.tb02536.x

Institute for Fiscal Studies (2017). *Living standards, poverty and inequality in the UK: 2017*. Retrieved from: https://www.ifs.org.uk/publications/9539

Instituto Nacional de Estadística (2017, November 8). *Tasa de riesgo de pobreza por comunidades autónomas*. Retrieved from: http://www.ine.es/jaxiT3/Datos.htm?t=9963

Jones, O. (2011). *Chavs: The demonization of the working class*. London, UK: Verso

Kteil, N. S., Bruneau, E., Waytz, A., & Cotterill, S. (2015). The Ascent of Man: Theoretical and empirical evidence for blatant dehumanization. *Journal of Personality and Social Psychology, 109*, 901-931. doi:10.1037/pspp0000048.

Kteily, N., Sheehy-Skeffington, Jennifer and Ho, Arnold K. (2017). Hierarchy in the eye of the beholder: (anti-)egalitarianism shapes perceived levels of social inequality. *Journal of Personality and Social Psychology, 112*(1), *136–159*. doi:10.1037/pspp0000097

Loughnan, S., Haslam, N., Sutton, R. M., & Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White Trash," "Chavs," and "Bogans". *Social Psychology*, *45*, 54–61. doi:10.1027/1864-9335/a000159

Louis, W. R., Esses, V. M., & Lalonde, R. N. (2013). National identification, perceived threat, and dehumanization as antecedents of negative attitudes toward immigrants in Australia and Canada. *Journal of Applied Social Psychology*, *43*, 156–165. doi:10.1111/jasp.12044

Martinez, R., Rodríguez-Bailón, R., Moya, M., & Vaes, J. (2015). Interacting with dehumanized others? Only if they are objectified. *Group Processes & Intergroup Relations, 10*, 1-18. doi:10.1177/1368430215612219

Mood, C., & Jonsson, J. O. (2016). The social consequences of poverty: An empirical test on longitudinal data. *Social Indicators Research*, *127*, 633–652. doi:10.1007/s11205-015-0983-9

National Statistics (2017). *Quarterly Benefits Summary: August 2017*. Retrieved from: *https://www.gov.uk/government/statistics/dwp-statistical-summaries-2017*

Raisborough, J., Frith, H., & Klein, O. (2012). Media and class-making: What lessons are learnt when a celebrity chav dies?. *Sociology, 47*, 251-266. doi:10.1177/0038038512444813

Sainz, M., Martínez, R., Moya, M., & Rodríguez-Bailón, R. (2018). Animalizing the

disadvantaged, mechanizing the wealthy: The convergence of socioeconomic

status and humanity attributions. *International Journal of Psychology*.

doi:10.1002/ijop.12485

Shah, A. K, Mullainathan, S., & Shafir, E. (2012). Some consequences of having too

little. *Science, 338*, 682–685. doi:10.1126/science.1222426

Spencer, B. (2016). The impact of class and sexuality-based stereotyping on rape blame.

Sexualization, Media, & Society, 2, 1-8. doi:10.1177/2374623816643282

Spencer, B., & Castano, E. (2007). Social class is dead, long live social class! Stereotype

threat among low socioeconomic status individuals. *Social Justice Research, 20*,

418–432. doi:10.1007/s11211-007-0047-7

U.S. Census Bureau (2017). *Income and poverty in the United States: 2016* (Report No. P60-

259). Retrieved from: https://www.census.gov/library/publications/2017/demo/p60-

259.html

Vaes, J., Leyens, J-P., Paladino, M. P., & Miranda, M. P. (2012). We are human, they

are not: Driving forces behind outgroup dehumanization and the humanization of

the ingroup. *European Review of Social Psychology, 23*, 64-106.

doi:10.1080/10463283.2012.665250

Appendix 1.

Correlation among the financial measure included on the Studies 1-3 (overall score).

Table 1. Overall bivariate correlations among the financial measures included on the Studies 1-3

	1	1.1	1.2	1.3	1.4	2	3
1. Overall management of the poor	-	.746[*]	.697[*]	.855[*]	.813[*]	.366[*]	-.351[*]
1.1 Financial efficacy		-	.623[*]	.484[*]	.464[*]	.395[*]	-.377[*]
1.2 Basic items			-	.393[*]	.291[*]	.286[*]	-.240[*]
1.3 Luxury items				-	.664[*]	.228	-.264[*]
1.4 Leisure items					-	.299[**]	-.271[*]
2. Welfare policies						-	-.236[*]
3. Governmental control							-

Note. [*] $p < .001$

Appendix 2.

Alternative mediational analysis.

We also carry out alternative mediational analysis by using humanity HU as the mediator on the relation between overall financial management on the support for welfare policies/governmental control (see Figure 1). Analysis revealed that the mediational effect of HU on the relation between financial management and welfare policies (*effect* = 1.29, *SE* = .39, 95% CI [.56, 2.11]), but also between financial management and support for governmental control (*effect* = -.06, *SE* = .02, 95% CI [-.10, -.02]) were significant. However, this indirect effect was smaller than when using financial management as a mediation, settling that dehumanization seems to be more suitable predictor and the overall financial management the indirect effect.
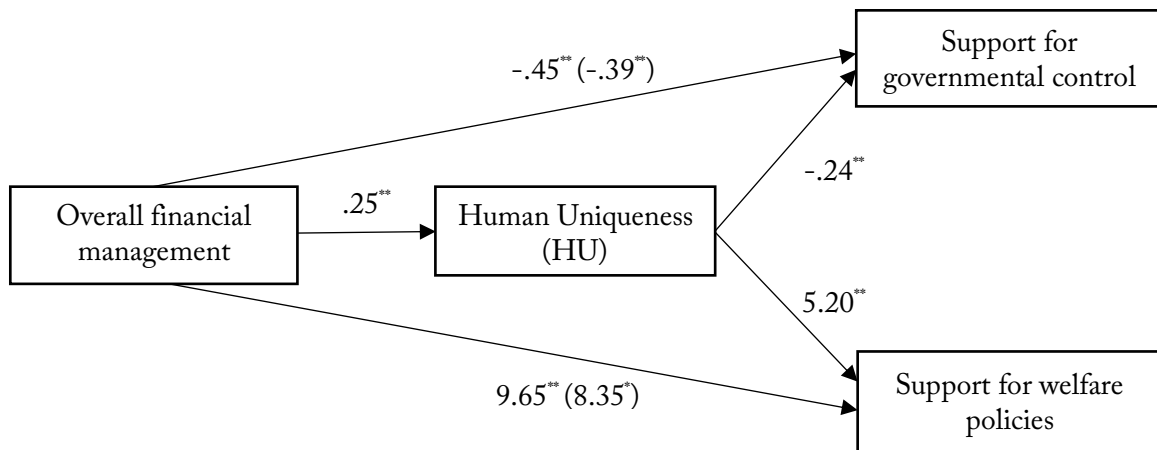
Figure 1. Alternative mediational analysis of overall financial management on support for welfare policies (mediation 1) and governmental control (mediation 2) via HU, controlling by HN, and subjective/objective social class of the participants, for Study 1-3 (overall score). $p < .001$.

Chapter 4

Mechanistic Dehumanization of High-SES and Wealth Perception

Article 5

Where Does the Money come from? Humanizing High Socioeconomic Status Groups promotes Income Inequality

Mario Sainz

Rocío Martínez

Rosa Rodríguez-Bailón

Miguel Moya

Centro de Investigación, Mente, Cerebro y Comportamiento (CIMCyC),
Departamento de Psicología Social, Facultad de Psicología,
Universidad de Granada

Abstract

Citizens in many countries have concerns about wealthy groups lobbying institutions and engaging in corrupt practices to the detriment of the rest of the population. Additionally, previous studies have found that high socioeconomic status (SES) groups are considered as unemotional machines without any concern for others. The aim of this research was to analyze how humanizing high-SES groups influences the perception of the group's wealth and the preferences for income redistribution that people hold. Results of two studies showed that humanizing (vs. mechanizing) high-SES groups led to a lower support for income redistribution/taxation of wealthy groups, through considering that the income distribution is fair and that the group's wealth comes from internal sources (e.g., ambition) rather than external ones (e.g., corruption). These results were independent of the likeability and perceived competence/warmth of the group. The present research provides valuable insight on the dark side of humanizing high-SES groups, as a process that contributes to the maintenance of the status quo and the legitimation of income inequality within our societies.

Keywords: humanization, mechanization, high socioeconomic status groups, attributions of wealth, income redistribution.

The concentration of wealth in the hands of a few at the expense of general impoverishment is a major problem in some modern societies (Wilkinson & Pickett, 2010). Moreover, political corruption and wealthy individuals lobbying institutions for their self-interest are some of the major issues that concern citizens around the world (Global Corruption Barometer, 2016). Despite the importance of these social issues, previous research has barely addressed how groups at the top of the socioeconomic hierarchy are perceived, or people's attitudes about the factors that contribute to the wealth concentration of such groups. In this regard, it is known that high socioeconomic status (SES) groups are sometimes dehumanized in a mechanistic way and therefore perceived as cold, superficial, and unemotional (Sainz, Martínez, Moya, & Rodríguez-Bailón, 2018). We consider that mechanizing high-SES groups might promote a negative perception of the group's wealth, which in turn may have negative consequences for those who are dehumanized. Furthermore, humanizing those who have more resources may also have negative consequences (i.e., the justification of the status quo and a reduction of support for income redistribution within our societies). In the present research we intended to experimentally analyze the influence of humanizing (vs. mechanizing) high-SES groups on the legitimation of the group's wealth and the attitudes about redistribution that people hold regarding this unequal distribution of wealth.

Perception of High-SES Groups: Are they (De)humanized?

Research has focused much less on the perception of and attitudes toward high-SES groups than on these issues regarding low-SES groups. Recent research has explored attitudes toward rich people, in comparison with other socioeconomic status groups such as middle- or lower-SES groups. For example, a paper published by Horwitz and Dovidio

(2017) analyzed the implicit and explicit attitudes of middle-SES participants toward high-SES groups. Results showed that middle-SES participants favored wealthy groups over middle-SES groups when implicit measures were used. However, participants did not openly favor wealthy groups when explicit means were used to assess attitudes about the group. In another set of studies, Van Doesum, Tybur, and Van Lange (2017) compared prosociality toward low-, middle-, and high-SES groups. They found that high-SES groups elicited lower levels of prosociality compared to middle- or even low-SES groups. In other words, participants cared less about the needs or wishes of wealthy groups. Some studies have also compared how subtypes of wealthy groups (e.g., entrepreneurs, executives, people who inherit a lot of money) are perceived (Christopher et al., 2005; Sussman, Dubofsky, Levitan, & Swidan, 2014). This line of research suggests the existence of a link between the perception of a group and the sources of the group's wealth. In this vein, the perceived source of the group's wealth, such as inheritance or entrepreneurial success, influences the inference of traits of the target (e.g., entrepreneurs are perceived as being more open to experience or more competent than people who inherited their wealth; Christopher et al., 2005; Sussman et al., 2014).

Moreover, the SES of groups not only influences the ascription of some personality or competence traits, but also the humanized or dehumanized perception that people hold about a group (for a review, see Haslam & Loughnan, 2014; Vaes, Leyens, Paladino, & Pires-Miranda, 2012). Among the few studies that have analyzed the perception of groups differing in SES, research conducted by Loughnan, Haslam, Sutton, and Spencer (2014) showed that low-SES groups are considered as lacking human uniqueness (HU) traits (e.g., rationality, self-restraint) and are therefore dehumanized in an animalistic way. However, another set of studies reported that high-SES groups are considered to

have these HU traits but to lack human nature (HN) traits, such as emotionality or interpersonal warmth (Sainz et al., 2018). These results indicate that high-SES groups are considered as unemotional machines with a rigid behavior and without any ability to care about others. Indeed, we know that mechanizing (vs. humanizing) groups deeply influences the way people behave toward them. For instance, Bastian, Laham, Wilson, Haslam, and Koval (2010) demonstrated that groups perceived as having HN traits are considered to have more moral worth. By contrast, denying HN to a group leads to the perception that it is less deserving of moral treatment or less capable of rehabilitation after engaging in immoral behavior. This pattern of results highlights that humanity plays an important role in attributions about the behavior of a group and its consequences, with human (i.e., high HN) groups being punished to a lower extent than mechanized (i.e., low HN) groups after engaging in the same immoral behavior. Therefore, humanizing groups is likely to lead to a more permissive attitude toward outgroups by forgiving their undesirable behaviors through applying more relaxed moral standards. In the context of the current study, we propose that humanizing (vs. mechanizing) high-SES groups may also influence people's perception of the group's wealth and their attitudes about its redistribution.

Wealth Legitimation and Attitudes about Redistribution

We know that poverty is sometimes justified by considering that it is internally caused (e.g., "the poor are lazy"), as Tagler and Cozzarelli (2013) pointed out. Similarly, the perception of high-SES groups (humanized vs. mechanized) can be expected to also influence the way the sources of the group's wealth are perceived as being legitimated. Traditionally, lay theories about the causes of poverty or wealth typically differentiated between categories of factors (e.g., internal or external, controllable or incontrollable

factors) used to explain the situation of the group (Bullock & Fernald, 2005; Cozzarelli, Wilkinson, & Tagler, 2001; Weiner, Osborne, & Rudolph, 2010). Regarding the sources of wealth, Bullock and Fernald (2005) differentiated between internal causes (e.g., ambition or perseverance) and more external causes such as pull (e.g., corruption, lobbying institutions), luck (e.g., winning the lottery), or inheriting from relatives, among others. More external attributions of wealth tend to lead people to consider the wealth of the groups as unfairly acquired; however, considering that the wealth is the product of internal rather than external causes is likely to lead to a perception that the situation of wealthy people and groups is fair and legitimate. Additionally, the type of attributions that people make about the wealth of a group have a great impact on the attitudes they hold about social policies (e.g., Alesina & La Ferrara, 2005; Bullock & Fernald, 2005). For example, thinking about wealth as having an internal cause leads people to show less support for income redistribution or taxation; by contrast, considering that the wealth results from corruption or from being born in a wealthy family (i.e., an external cause) leads to a more positive attitude toward progressive taxation or other policies to redistribute wealth.

Overall, based on previous evidence, we expected the attribution of humanity (humanizing vs. mechanizing) to high-SES groups to influence how legitimate or illegitimate people perceive the process of becoming wealthy and also people's attitudes toward wealth redistribution. Specifically, we predicted that people's attributions about the causes of wealth would be influenced by their perception of wealthy groups. For instance, Cozzarelli et al. (2001) showed that a negative perception of poverty is associated with a higher endorsement of internal attributions of poverty. Similarly, but regarding rich people, we proposed that humanizing high-SES groups would lead people to consider that they acquired their wealth by internal means (e.g., effort, perseverance)

rather than from external sources (e.g., corruption, dishonesty). This process of attributing wealth to internal causes (e.g., hard work, ambition) implies that the wealth of the groups is fair and deserved. By contrast, we expected the mechanization of high-SES groups to lead to attributing their wealth to external rather than internal means. Specifically, we expected people to consider that machine-like groups do not care about others and lack a sense of morality, which is likely to make them more willing to use any kind of strategy to reach a wealthier position. This ultimately implies that the position of the group is unfair and less deserved.

Furthermore, Bullock and Fernald (2005) also reported that a positive perception of wealthy groups led to a lower demand for taxation of high-SES groups. Thus, it can also be inferred that a human perception of wealthy groups decreases supports for economic redistribution and progressive taxation. This is consistent with the idea that humanized groups (i.e., those with high HN) are considered as having a higher standard of moral responsibility (Bastian et al.; 2010). Such groups are considered as being unable to engage in immoral behaviors (e.g., corrupt practices or lobbying institutions for their self-interest); by contrast, mechanized groups are seen as likely not to restrain from engaging in these types of illegitimate behaviors that led them to their wealthy position. Along the same lines, we hypothesized that humanizing (vs. mechanizing) high-SES groups would lead to a legitimate perception of wealth (e.g., internally caused and fairly perceived) and consequently to a lower demand for income redistribution. In short, we proposed that, in the context of our study, the humanization of wealthy groups would have a paradoxical negative effect by promoting perceptions and attitudes that contribute to favoring a more unequal society. We conducted two experimental studies to analyze how humanization can encourage the maintenance of unequal distribution.

Study 1

The main goal of this study was to test whether humanizing (vs. mechanizing) high-SES groups affects the legitimation of the wealth of the group (i.e., the fairness attributed to of the source of the group's wealth) and people's attitudes toward redistribution (i.e., redistribution preferences and progressive taxation). Specifically, we expected the wealth of high-SES groups that were humanized (i.e., high in HN) to be attributed to internal rather than external causes (Hypothesis 1a) and the social standing of such groups to be perceived as fairer (Hypothesis 1b) than that of high-SES groups seen as mechanized (i.e., low in HN). Regarding attitudes toward income redistribution, we expected the fact of humanizing high-SES groups to lead to a lower support for both income redistribution (Hypothesis 2a) and taxation of the wealthiest groups (Hypothesis 2b) compared to the mechanization of high-SES groups. Additionally, we expected wealth legitimation to mediate the relationship between (de)humanization of the group and attitudes toward economic redistribution (Hypothesis 3). All the materials used in the studies and the corresponding data can be found online (osf.io/es84x).

Participants and Procedure

Participants were students who attended university libraries in a city in southern Spain. They were asked to participate in a study about the perception of groups. Sample sized was calculated using G-power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) for an independent t-test (two tails, α = .05, 80% power, medium-small effect size d = .40, required minimum n = 200). The final sample was composed of 274 participants (140 women, 129 men, M_{age}= 23.94, SD = 4.84). Once participants agreed to participate voluntarily in the study they were presented with a questionnaire that included the following sections:

Manipulation of high-SES humanity. In order to manipulate the humanity of a high-SES target, participants were presented with a fictitious news about a scientific article published in a well-known journal of social psychology (Martínez, Rodríguez-Bailón, Moya, & Vaes, 2015). Participants read that the authors of the article had analyzed the traits associated to different groups of society. Next, they were told that the aim of our research was to analyze how people perceived the group that appeared in the article. Participants were assigned randomly to one of the two conditions. In both conditions, they read a short description of a high-SES group. After reading this information, the description of the group varied regarding the ascription of HN traits in order to manipulate its humanity (i.e., mechanized vs. humanized). In the mechanized condition, the group was described as being machine-like/lacking HN (e.g., with a passive and superficial attitude regarding things that happen around it, and with a rigid and cold behavior); in the humanized condition the group was described as being human/having HN traits (e.g., an active and reflexive attitude and a flexible and warm behavior). After reading the description of the group, participants answered some manipulation check questions on the SES of the group ("What is the SES of the group described in the text?"; single Likert item from 1 – Poor – to 10 – Rich) and a manipulation check on HN level (e.g., "To what extent is the group 'emotional, flexible and open-minded'?"; α = .96, two Likert items from 1 – Not at all – to 7 – Completely). Additionally, we measured the HU attributed to the group (e.g., "To what extent is the group 'rational, civic-minded and educated'?"; α = .75, two Likert items from 1 – Not at all – to 7 – Completely) to control for this dimension of humanity.

Legitimation of the wealth of high-SES groups. We included two measures to measure how participants perceived the wealth of the groups. The first one included 22

items that differentiated between four dimensions or causes of wealth: Perseverance/ambition (e.g., ability, hard work; 8 items, α = .81); corruption/pull (e.g., ruthlessness, networking; 6 items, α = .72); fatalism/luck (e.g., winning the lottery; 4 items, α = .41); and privilege/inheritance (e.g., attending elite universities; 4 items, α = .67). As in the original paper (Bullock & Fernald, 2005), the last two factors were less consistent and showed lower reliability. Therefore, we decided to run a confirmatory factor analysis to simplify the structure of the scale. Results showed that a first factor explained 22.49% of the variance and included mainly items related to internal causes (e.g., ambition; 9 items, α = .82); the second factor explained 15.71% of the variance and included items related to external causes (e.g., having the right contacts; 13 items, α = .77). This two-factor structure allowed us to analyze how legitimate the wealth of the groups was perceived to be by comparing the amount of internal vs. external attributions that participants made. We computed an index of the legitimation of wealth source by subtracting internal from external causes; lower scores indicated that the wealth of the group was perceived as having been acquired by external means. Additionally, we included a single item adapted from Willis, Rodríguez-Bailón, López-Rodríguez, and García-Sánchez (2015) about the perceived fairness of the group's wealth ("To what extent do you think that the wealth of this group is fair or unfair?"; from 1 – Completely unfair – to 7 – Completely fair). Given the high correlation between these two indices, we computed an index of wealth legitimation (higher scores indicated greater perceived legitimation) by averaging the two previous measures for the mediation analysis (r = .53, p ≤ .001).

Attitudes toward redistribution. To analyze to what extent people were prone to support the redistribution of the wealth of this group, we included two items (e.g., "The

government should redistribute wealth through heavily taxing this group"; from 1 – Totally disagree – to 7 – Completely agree, α = .86) adapted from Dawtry, Sutton, and Sibley (2015). Additionally, we included a single item on taxation adapted from Gross, Lorek, and Richter (2017). Participants were asked what percentage of taxes the group should pay from 0 (no taxes) to 100 (the full amount of the group's income per month). Given the high correlations between these last two measures, we computed an index of support for redistribution (higher scores indicated greater support for redistribution) by averaging the scores on these two items for the mediation analysis (r = .50, p ≤ .001). Finally, participants reported some demographic information (e.g., age, gender) and were thanked for participating in the study and debriefed.

Results

First, we analyzed the results of the manipulation check questions. Regarding the SES of the group, we calculated a one-sample t-test to verify that participants ascribed high SES to the groups described in both conditions. Result indicated that the groups were perceived as having high SES (M = 8.29, SD = 1.41, significantly above the mean of the scale, $t_{(273)}$ = 15.08, p ≤ .001). Additionally, participants assigned to the mechanized condition reported that the group described had lower HN levels (M = 1.90, SD = .98) than did participants assigned to the humanized condition (M = 5.39, SD = 1.34, $t_{(272)}$ = -24.3, p ≤ .001, 95% CI [-3.77, -3.21], Hedges' g_s = 2.95), confirming the effectiveness of the manipulation.

Second, we computed simple differences regarding the ideas on both wealth legitimation (i.e., index of wealth source and fairness perception) and support for redistribution/taxation that people hold as a function of the condition (see Table 1). Additionally, we computed results for the index of wealth legitimation, which showed

Table 1. Differences between conditions (mechanized vs. humanized group) in legitimation of wealth (i.e., attributions about the causes of wealth and fairness perception of income distribution) and the support for redistribution (i.e., support for income redistribution and support for higher taxation of high-SES groups) variables included in studies 1 and 2

	Mechanized Mean *(SD)*	Humanized Mean *(SD)*	*t*	*p*	95% CI	Hedges' g$_s$
Index of wealth source						
Study 1	-.70 (*1.36*)	.09 (*1.32*)	*t* (272) = 4.91	≤ .001	[.48, 1.12]	.59
Study 2	-.36 (*1.29*)	.29 (*1.25*)	*t* (337) = 4.70	≤ .001	[.38, .92]	.51
Internal attributions						
Study 1	4.02 (*1.03*)	4.47 (*.90*)	*t* (272) = -3.82	≤ .001	[-.68, -.22]	.46
Study 2	4.18 (*.92*)	4.52 (*.74*)	*t* (337) = -3.77	≤ .001	[-.52, -.12]	.41
External attributions						
Study 1	4.72 (*.79*)	4.37 (*.92*)	*t* (272) = 3.37	≤ .001	[.14, .15]	.41
Study 2	4.54 (*.81*)	4.24 (*.93*)	*t* (337) = 3.24	≤ .001	[.15, .49]	.34
Fairness perception of group wealth						
Study 1	3.88 (*1.38*)	4.48 (*1.24*)	*t* (269) = -3.77	≤ .001	[-.91, -.29]	.46
Study 2	3.53 (*1.50*)	4.14 (*1.25*)	*t* (332) = -4.05	≤ .001	[-.91, -.31]	.44
Support for redistribution						
Study 1	5.07 (*1.62*)	4.70 (*1.73*)	*t* (271) = 1.82	.07	[-.03, .77]	.22
Study 2	5.14 (*1.37*)	4.85 (*1.35*)	*t* (337) = 1.94	.05	[-.00, .58]	.21
Support for higher taxation						
Study 1	50.53 (*13.99*)	46.53 (*16.37*)	*t* (261) = 2.13	.03	[.30, 7.71]	.26
Study 2 (index)	18.94 (*15.52*)	15.20 (*16.40*)	*t* (297) = 2.02	.04	[.10, 7.37]	.23

that the wealth of the mechanized group was perceived as more illegitimate (M = -.26, SD = .86) than that of the humanized group (M = .25, SD = .82, $t_{(272)}$ = -5.05, $p \leq$ .001, 95% CI [-.71, -.31], Hedges' g_s = .61). Moreover, results for the index of support for redistribution showed that people were more willing to redistribute the wealth of the mechanized group (M = .13, SD = 80) than that of the humanized group (M = -.11, SD = .92, $t_{(271)}$ = 2.29, p = .023, 95% CI [.03, .45], Hedges' g_s = .27). These results supported our hypotheses 1a to 2b.

Finally, we conducted mediation analyses with humanity (machine = 0, human = 1) as the predictor of the index of support for redistribution through wealth legitimation using the PROCESS macro (bootstrapping 10,000 interactions, 95% confident intervals) by Hayes (2013). Results indicated that wealth legitimation was a significant mediator of the relationship between humanity and preferences for redistribution (see Table 2). This indirect effect remained significant while performing the same analysis with separate measures and even after controlling for HU (Appendices S1 and 2). In short, we found empirical evidence that humanizing high-SES groups leads to the legitimation of the group's wealth, which in turn decreases people's support for redistributing wealth, in line with our exploratory Hypothesis 3.

Discussion

In this study we analyzed how the humanization of high-SES groups, compared to their mechanistic dehumanization, influences the perception of the sources of their wealth and consequently people's attitudes toward wealth redistribution. Results indicated that the wealth of a group described as human (e.g., warm and open-minded) vs. mechanized (e.g., cold and inflexible) was considered as more legitimate, as it was supposed to originate

Table 2. Total, direct, and indirect effects with standard error (*SE*) of the mediation of wealth legitimation (index) on the relationship between (de)humanization and the support for redistribution (index) for studies 1 and 2

		VD: Index of general support for redistribution					
	IE (*SE*)	95% *CI*	*p*		IE (*SE*)	95% *CI*	*p*
Total effect							
Study 1	-.24 *(.10)*	[-.45, -.03]	.02	Study 2	-.22 *(.09)*	[-.41, -.03]	.02
Direct effect of (de)humanization							
Study 1	.02 *(.09)*	[-.17, .20]	.86	Study 2	.03 *(.08)*	[-.14, .19]	.75
Indirect effect of wealth legitimation							
Study 1	-.26 *(.06)*	[-.38, -.15]	< .001	Study 2	-.25 *(.06)*	[-.36, -.14]	< .001

from internal sources (e.g., effort, ambition) instead of external ones (e.g., inheritance, corruption); this led to a lower support for redistributing income policies. In short, dehumanizing high-SES groups seems to promote the motivation for redistribution as a consequence of the perception that cold and rigid groups acquire their wealth from external and unfair sources; by contrast, humanizing high-SES groups seems to show the opposite effect. These results suggest that, in the context of hierarchical upwards comparisons, humanization can have a dark side by legitimating an unequal situation, or by ignoring the possible irregularities/immoral behavior that high-SES groups can engage in. However, one of the limitations of the present study is that the pattern of results may be influenced by the valence of the descriptions that we used to manipulate the humanity of the high-SES groups or by alternative factors such as the competence/warmth ascribed to high-SES groups (Durante, Tablante, & Fiske, 2017). The description of the humanized group may have given a better or more competent impression of it than that of the mechanized group. Considering this, we tried to overcome these potential problems in Study 2 by improving the manipulation and controlling for these possible confounders in order to replicate Study 1.

Study 2

We designed a second study to replicate the findings of Study 1. Additionally, we tried to overcome some of its limitations. The main change made in Study 2 was to include in our manipulation only human traits that differed in the level of HN, controlling for valence and HU. We also included a measure of competence/warmth of high-SES groups to control for these possible confounders. Finally, we used a general population sample instead of a college sample.

Our hypothesis was pre-registered and can be found online (osf.io/m2pqy). We expected to find differences between conditions (i.e., mechanized vs. humanized), with a more legitimate perception of the group wealth for the humanized group compared to the mechanized group (Hypothesis 1). Regarding attitudes toward income redistribution, we expected to find a lower support for income redistribution regarding the humanized group than regarding the mechanized group (Hypothesis 2). Finally, we expected wealth legitimation to mediate the relationship between (de)humanization and attitudes toward redistribution policies (Hypothesis 3).

Pilot Study

We ran a pilot study to improve the descriptions of the mechanized and the humanized groups. Our main goal was to select personality traits that allowed us to create descriptions that only differed in ascribed HN (low or high HN) but not in valence or HU. We recruited 38 participants (26 females, 12 males, M_{age} = 23.24, SD = 5.39) at a bus station in a city of southern Spain. Once participants agreed to participate in a study about word comprehension, they were asked to rate 80 personality traits following the same procedure as that proposed by Ferrari, Paladino, and Jetten (2016). Specifically, participants were asked to indicate to what extent each trait was representative of HN ("To what extent does the following word represent a human nature trait and is not applicable to robots or machines?"), HU ("To what extent does the following word represent a uniquely human trait, which is therefore not present in other animal species?"), and the valence of the traits ("To what extent is the following word positive or negative when applied to a group of people?"). Answers were provided on a 5-point Likert scale with higher scores indicating the words were more representative of HN and HU and more positively evaluated. Finally, we selected 10 high (M = 3.61, SD = 1.04) and 10 low

(M = 2.73, SD = .73) HN traits that differed significantly, $t_{(37)}$ = 3.72, $p \leq$ .001, 95% CI [.40, 1.35], Hedges' g_{av} = .96. No differences were found regarding the valence of the high-HN traits (M = 2.90, SD = .33) when compared to the low-HN traits (M = 2.91, SD = .36), $t_{(37)}$ = -.231, p = .819, 95% CI [-.14, .11] or regarding the ascribed level of HU (M = 3.19, SD = .71; M = 3.08, SD = .72 for high and low HU respectively), $t_{(37)}$ = -1.06, p = .295, 95% CI [-.10, .33]. This selection of traits allowed us to build a fictitious description of a high-SES group that differed only in the ascribed level of HN (high vs. low) while controlling for the valence and ascribed level of HU (see Table 3).

Table 3. Original (in brackets) and translated version of the traits selected in the pilot study for the manipulation of high-SES humanity (low and high-HN traits, both positive and negative) in Study 2

	Low HN (Machine-like)	High HN (Human-like)
Positive Traits	Analytic *(Analítico/a)* Competent *(Competente)* Methodical *(Metódico/a)* Organized *(Organizado/a)* Precise *(Preciso/a)*	Open-minded *(Abierto/a de mente)* Emotional *(Emocional)* Receptive *(Receptivo/a)* Sensitive *(Sensible)* Passionate *(Pasional)*
Negative Traits	Cold *(Frío/a)* Unemotional *(Poco emocional)* Inflexible *(Inflexible)* Insensitive *(Insensible)* Strict *(Estricto/a)*	Jealous *(Celoso/a)* Nervous *(Nervioso/a)* Impatient *(Impaciente/a)* Envious *(Envidioso/a)* Indiscreet *(Indiscreto/a)*

Participants and Procedure of the Main Study

Participants were selected among people who were at the bus station of a city in southern Spain. Sample size was calculated for an independent t-test (α = .05, 80% power, d = .40, minimum n = 200). The final sample was composed of 339 participants (239 women, 100 men, M_{age} = 25.54, SD = 9.47). Once participants had agreed to participate,

they were presented with a paper and pencil questionnaire that contained the following measures in this order:

Manipulation of the humanity of high-SES groups. Following the same procedure as in Study 1, participants read a description of a humanized vs. mechanized fictitious high-SES group using the personality traits selected in the pilot study. After reading the description of the group, participants answered a manipulation check question about the group's SES ("What is the SES of the group described in the text?"; from 1 – Poor – to 3 – Rich), and its perceived HN level (e.g., "To what extent is the group "emotional, flexible and open-minded?"; from 1 –Not at all – to 7 – Completely, two items, α = .76). Additionally, we included one item that measured the perceived competence of the group (e.g., "To what extent is the group 'competent, skillful and intelligent'?") and one item that measured its warmth (e.g., "To what extent is the group 'warm, affectionate and tender'?"). Answers were provided on a Likert-type scale from 1 – Not at all – to 7 – Completely.

Legitimation of high-SES group wealth and attitudes toward wealth redistribution. We included the same measures about perceived wealth source and fairness as in Study 1 (a general index of wealth legitimation was created, r = .53, $p \leq$ .001). Regarding attitudes about redistribution, we slightly modified the previous measures of redistribution by including three items instead of two (from 1 – Totally disagree – to 7 – Completely agree, α = .72) in order to include an additional reverse item. Additionally, participants were asked to estimate the amount of taxes the group should pay and the taxes the group was currently paying using a percentage, from 0% (no taxes at all) to 100% (all their monthly income). These two questions allowed us to create an index of increasing/decreasing taxes (i.e., taxes respondents estimated what the group

should pay compared to the taxes that it was currently paying). As in the previous study, an index of general support for income redistribution was created (r = .41, p ≤ .001). Finally, participants provided some demographic information (age, gender) and were thanked for participating in the study and debriefed.

Results

First, we analyzed the results of the manipulation check questions. Groups in both conditions were perceived as having high SES (M = 2.94, SD = .26, significantly above the mean point of the answer scale, $t_{(338)}$ = 66.68, p ≤ .001). Additionally, we found the expected differences in the attribution of HN to the humanized group (M = 4.80, SD = 1.35) and the mechanized group (M = 2.38, SD = 1.01, $t_{(337)}$ = 81.65, p ≤ .001, 95% CI [2.17, 2.68], Hedges' g_s = 2.02), which confirmed the effectiveness of our manipulation.

Second, we computed the differences between both experimental conditions for the measures separately (see Table 1). Additionally, simple t-test comparisons for the index of wealth legitimation showed that the wealth of the mechanized group was perceived as more illegitimate (M = -.23, SD = .89) than that of the humanized group (M = .24, SD = .79, $t_{(337)}$ = -5.09, p ≤ .001, 95% CI [-.64, -.29], Hedges' g_s = .56). Results regarding the index of redistribution showed that people were more in favor of redistributing wealth when presented with a mechanized group (M = .10, SD = .87) than when presented with a humanized group (M = -.12, SD = .88, $t_{(337)}$ = 2.32, p = .02, 95% CI [.03, .41], Hedges' g_s = .25). These results replicated previous findings, supporting Hypotheses 1 and 2. In short, the humanization of wealthy groups contributes not only to legitimating their wealth, but also to decreasing the perception that their wealth should be redistributed.

Finally, we conducted mediation analyses with humanity (machine = 0, human = 1) as the predictor of the support for redistribution through the mediational effect of wealth

legitimation as in Study 1, using the PROCESS macro (bootstrapping 10.000 interactions, 95% confident intervals) by Hayes (2013). Results indicated that wealth legitimation was a significant mediator of the relationship between humanity and the support for redistribution (see Table 2), supporting our exploratory Hypothesis 3. This indirect effect remained significant while performing the same analysis with separate measures and after controlling for competence and warmth (Appendices S1 and S3).

Discussion

The results of this study provided confirmatory evidence of how humanization vs. mechanization of high-SES groups affects people's perceived source of wealth and their support for economic policies related to redistribution. Humanizing (vs. mechanizing) high-SES groups led people to consider that the wealth of the groups resulted from their hard work and their personal ambition rather than from their corrupt practices or an inheritance, and was therefore perceived as fairly acquired. Lastly, this legitimate perception (i.e., internalized and fair) of the humanized group's wealth led participants to justify income inequality by supporting income redistribution to a lower extent and to consider that humanized high-SES groups fulfill their obligations when paying taxes compared to mechanized high-SES groups. This pattern of results was found even when the descriptions of the humanized and mechanized condition were matched in valence, and also when controlling for competence and warmth, supporting our hypothesis about the importance of humanizing high-SES groups for the justification of inequality, above and beyond other social dimensions of comparison.

General discussion

In the present research we analyzed the consequences of humanizing (vs. mechanizing) high-SES groups on the (il)legitimation of the group's wealth and on the

attitudes people hold about income redistribution policies. Results indicated that humanizing (vs. mechanizing) high-SES groups leads to a more legitimate perception of the group's wealth, and thus to a lower support for redistributing the wealth of the group. In short, in our context of study, humanizing people with an advantaged position contributed to justifying the unequal *statu quo*.

Previous studies have analyzed the perception of different types of wealthy groups (Christopher et al., 2005; Sussman et al., 2014) and the perception of high-status groups (Capozza, Andrighetto, Di Bernardo, & Falvo, 2011) and high-status professions (Iatridis, 2013). Yet, as far as we know, the role and consequences of (de)humanizing high-SES groups on the justification of inequalities has not been studied before. In addition, these results highlight that having a humanized perception of groups with an advantaged position can have negative consequences regarding the maintenance of income inequality. By contrast, mechanizing high-SES groups seems to have the opposite effect, by favoring income redistribution as a consequence of perceiving the wealth of the groups as illegitimate. This dark side of humanization has been identified before, for example in the medical context, where humanizing patients made it more difficult for professionals to cope with the suffering of their patients (Haque & Waytz, 2012), but not in the context of hierarchical differences between groups.

Previous research has shown that the mechanistic dehumanization of groups has a negative impact on how the group is evaluated. For example, Bastian et al. (2010) showed that groups considered as lacking HN traits (i.e., machine-like) are perceived as having less moral values or acting in a less prosocial way, which leads people to be more prone to punish them compared to groups with HN traits. In this context, redistribution policies may be understood as a way to punish groups that have a privileged position rather than

a legitimate means to reduce income inequality. Therefore, people are likely to demand a stricter financial pressure for machine-like high-SES groups because they are considered to break the social norms, for example using corrupt practices for their own benefit. Although mechanizing a group seems to have negative consequences for groups that are dehumanized (Bastian et al., 2010), our results also showed that humanization can have some detrimental consequences for the well-being of the entire society. One of the possible consequences that arise from the two studies presented here is that humanizing high-SES members may act as a blindfold that undermines our tendency to act in favor of a more equal society or against corrupt practices. A humanized perception of wealthy groups may lead people to minimize the importance of standing up against corrupt practices/atrocities committed by political leaders, for example. It may also contribute to the denial of the use of non-ethical strategies (e.g., money laundering, use of tax havens) by the rich to avoid paying taxes and help build a better society. As Bastian et al. (2010) pointed out, humanized groups are positively regarded because of their ascribed morality. However, by humanizing wealthy groups we are likely to assume that they have a high moral standard and divert our attention from the potential unethical behaviors they perform.

Additionally, wealthy groups may be aware of the positive impression they cause when they are considered as being more human. In fact, they may already be using strategies to promote this perception and thus reduce the support of citizens for income redistribution. Based on previous research, we know that people who help others are considered as more human (Delgado, Betancor, Rodríguez-Pérez, & Ariño, 2012). Therefore, personal donations to social causes made by wealthy individuals is likely to promote a human perception of the group, reducing the cold and unemotional perception

that people have of them (Sainz et al., 2018). These results definitely add valuable information about how humanizing groups that enjoy a privileged position in society can be considered as a mechanism that contributes to justifying and maintaining an unequal distribution of wealth in our societies.

Undeniably, this research has some limitations. First, we focused only on the perception of external *vs.* internal sources of wealth without considering other categorizations that include, for instance, the ability of groups to control their sources of wealth (Testé, 2017; Weiner, Osborne, & Rudolph, 2010). By including the control dimension, future studies will be able to compare the extent to which humanized vs. mechanized groups are considered to have reached their wealthy position through internal and controllable means (e.g., personal effort) or external and incontrollable means (e.g., winning the lottery), and finally how this affects attitudes about redistribution. In addition, we only assessed the consequences of (de)humanizing wealthy groups by providing participants with information about the SES of the groups. Attitudes toward redistribution may be modulated not only by the humanity of the groups but also by the source of their resources. As found by previous studies (Christopher et al., 2005), differences may arise between wealthy groups such as entrepreneurs, people who inherited their wealth, or people who won the lottery. Undoubtedly, comparing the humanity ascribed to subtypes of wealthy groups and the respective attitudes about the redistribution of their wealth will provide valuable insight to the study of perceived wealth inequality and system justification.

Future studies could also explore how the present pattern of results is modulated by the subjective perception of the gap between the rich and the poor. Previous studies have found that people show less support for income redistribution when the perceived level

of inequality is high (Heiserman & Simpson, 2017). Hence, our pattern of results may be modulated by the perceived level of inequality. Specifically, in societies with higher income inequality, it is logical to expect people to humanize high-SES groups more and to show less support for redistribution, compared to societies with lower income inequality. This result would be harmful taking into account the rising level of income inequality in many modern societies. Furthermore, it would be also interesting to explore the individual factors that lead participants to hold a human perception of wealthy groups. Beliefs about social mobility or the effects of hierarchy-based ideologies, such as social dominance orientation or anti-egalitarian attitudes (Kteily, Sheehy-Skeffington, & Ho, 2017; Rodríguez-Bailón et al., 2017) may promote this human perception of wealthy groups.

To sum up, in the current context where increasing rates of income inequality are evident, more attention should be devoted to analyzing how wealthy individuals and groups are perceived in terms of their humanity. Wealth may be something that we appreciate and desire, but it can also be the trigger that promotes evil or greedy behaviors that contribute to exploitation of others. Our results add to the scarce previous studies on the importance of humanization on how wealth and wealthy groups are understood and perceived by highlighting the dark side of humanizing advantaged groups.

References

Alesina, A., & La Ferrara, E. (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics, 89*, 897–931. doi:10.1016/j.jpubeco.2004.05.009

Bastian, B., Laham, S. M., Wilson, S., Haslam, N., & Koval, P. (2010). Blaming, praising, and protecting our humanity: the implications of everyday dehumanization for judgments of moral status. *The British Journal of Social Psychology, 50*, 469–83. doi:10.1348/014466610X521383

Bullock, H. E., & Fernald, J. L. (2005). Predicting support for eliminating the dividend tax: The role of framing and attributions for wealth. *Analyses of Social Issues and Public Policy, 5*, 49–66. doi:10.1111/j.1530-2415.2005.00055.x

Bullock, H. E., Williams, W. R., & Limbert, W. M. (2008). Predicting support for welfare policies: The impact of attributions and beliefs about inequality. *Journal of Poverty, 7*, 35-56, doi:10.1300/J134v07n03_03

Capozza, D., Andrighetto, L., Di Bernardo, G. A., & Falvo, R. (2011). Does status affect intergroup perceptions of humanity? *Group Processes & Intergroup Relations, 15*, 363–377. doi: 10.1177/1368430211426733

Christopher, A. N., Morgan, R. D., Marek, P., Troisi, J. D., Jones, J. R., & Reinhart, D. F. (2005). Affluence cues and first impressions: Does it matter how the affluence was acquired? *Journal of Economic Psychology, 26*, 187–200. doi:10.1016/j.joep.2004.02.002

Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues, 57*, 207–227. doi:10.1111/0022-4537.00209

Dawtry, R. J., Sutton, R. M., & Sibley, C. G. (2015). Why wealthier people think people are wealthier, and why it matters: From social sampling to attitudes to redistribution. *Psychological Science, 26*, 1389-1400. doi:0956797615586560

Delgado, N., Betancor, V., Rodríguez-Pérez, A., & Ariño, E. (2012). The impact of helping behavior on outgroup infrahumanization. *The Spanish Journal of Psychology, 15,* 1099–1109. doi:http://www.ncbi.nlm.nih.gov/pubmed/23156918

Durante, F., Tablante, C. B., & Fiske, S. T. (2017). Poor but warm, rich but cold (and competent): Social classes in the Stereotype Content Model. *Journal of Social Issues*, *73*, 138–157. doi:10.1111/josi.12208

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160. doi:10.3758/BRM.41.4.1149

Ferrari, F., Paladino, M. P., & Jetten, J. (2016). Blurring human–machine distinctions: Anthropomorphic appearance in social robots as a threat to human distinctiveness. *International Journal of Social Robotics, 8*, 287-302. doi:10.1007/s12369-016-0338-y

Gross, C., Lorek, K., & Richter, F. (2017). Attitudes towards inheritance taxation – results from a survey experiment. *The Journal of Economic Inequality. 15*, 93–112. doi:10.1007/s10888-016-9344-4

Haque, O. S., & Waytz, A. (2012). Dehumanization in Medicine: Causes, solutions, and functions. *Perspectives on Psychological Science*, *7*, 176–186. doi:10.1177/1745691611429706

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology, 65*, 399-423. doi:10.1146/annurev-psych-010213-115045

Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analysis.* New York: Guilford Press.

Heiserman, N., & Simpson, B. (2017). Higher inequality increases the gap in the perceived merit of the rich and poor. *Social Psychology Quarterly*, *80*, 243-253. doi:0190272517711919

Horwitz, S. R., & Dovidio, J. F. (2017). The rich--love them or hate them? Divergent implicit and explicit attitudes toward the wealthy. *Group Processes & Intergroup Relations, 20*, 3-31. doi:1368430215596075

Iatridis, T. (2013). Occupational status differences in attributions of uniquely human emotions. *The British Journal of Social Psychology*, *52*, 431–49. doi:10.1111/j.2044-8309.2011.02094.x

Kteily, N. S., Sheehy-Skeffington, J., & Ho, A. K. (2017). (Anti-)egalitarianism shapes perceived levels of social inequality. *Journal of Personality and Social Psychology, 112*, 136-159. doi:10.1037/pspp0000097

Loughnan, S., Haslam, N., Sutton, R. M., & Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White Trash", "Chavs", and "Bogans". *Social Psychology, 45*, 54–61. doi:10.1027/1864-9335/a000159

Martínez, R., Rodríguez-Bailón, R., Moya, M., & Vaes, J. (2015). Interacting with dehumanized others? Only if they are objectified. *Group Processes & Intergroup Relations, 10*, 1-18. doi:10.1177/1368430215612219

Rodríguez-Bailón, R., Bratanova, B. A., Willis, G., López-Rodríguez, L., Sturrock, A., & Loughnan, S. (2017). Social class and ideologies of inequality: How they uphold unequal societies. *Journal of Social Issues*, *73*, 99-116. doi:10.1111/josi.12206

Sainz, M., Martínez, R., Moya, M., & Rodríguez-Bailón, R. (2018). Animalizing the disadvantaged, mechanizing the wealthy: The convergence of socioeconomic

status and humanity attributions. *International Journal of Psychology*. doi:10.1002/ijop.12485

Sussman, L., Dubofsky, D., Levitan, A. S., & Swidan, H. (2014). Good rich, bad rich: Perceptions about the extremely wealthy and their sources of wealth. *International Journal of Business and Social Research, 4*, 44–58. Retrieved from http://thejournalofbusiness.org/index.php/site/article/view/585

Tagler, M. J., & Cozzarelli, C. (2013). Feelings toward the poor and beliefs about the causes of poverty: The role of affective-cognitive consistency in help-giving. *The Journal of Psychology, 147*, 517-539. doi:10.1080/00223980.2012.718721

Testé, B. (2017). Control beliefs and dehumanization: Targets with an internal locus of control are perceived as being more human than external targets. *Swiss Journal of Psychology, 76*, 81–86. doi:10.1024/1421-0185/a000194

Transparency International, the global coalition against corruption (2016). Report of the global corruption barometer 2015/2016. Retrieved from https://www.transparency.org/research/gcb/gcb_2015_16

Vaes, J., Leyens, J-Ph., Paladino, M. P., & Pires-Miranda, M. (2012). We are human, they are not: driving forces behind outgroup dehumanisation and the humanisation of the ingroup. *European Review of Social Psychology, 23*, 64-106. doi:10.1080/10463283.2012.665250

Van Doesum, N. J., Tybur, J. M., & Van Lange, P. A. M. (2017). Class impressions: Higher social class elicits lower prosociality. *Journal of Experimental Social Psychology, 68*, 11–20. doi:10.1016/j.jesp.2016.06.001

Weiner, B., Osborne, D., & Rudolph, U. (2010). An attributional analysis of reactions to poverty: The political ideology of the giver and the perceived morality of the receiver. *Personality and Social Psychology Review, 15*, 199-213. doi:1088868310387615

Wilkinson, R. G., & Pickett, K. (2010). *The spirit level: Why greater equality makes societies stronger*. New York: Bloomsbury Press.

Willis, G. B., Rodríguez-Bailón, R., López-Rodríguez, L., & García-Sánchez, E. (2015). Legitimacy moderates the relation between perceived and ideal economic inequalities. *Social Justice Research, 28*, 493–508. doi:11211-015-0253-7

Appendix S1.

We computed the same mediation analysis by using the separate variables included in studies 1 and 2. In each study we conducted two multiple mediation analyses with humanity (machine = 0, human = 1) as the predictor of the support for redistribution (Dependent 1) and taxation (Dependent 2) through the multiple mediational effect of both the index of wealth source (Mediator 1) and fairness perception (Mediator 2) using the PROCESS macro (bootstrapping 10,000 interactions, 95% confidence intervals) by Hayes (2013). Results indicated that both the index of wealth source and fairness perception were significant mediators of the relationship between humanity and preferences for redistribution in most of the possible analyses (see Table 1). In short, we found empirical evidence about how humanizing high-SES groups predicts a more legitimate/fair perception of the group's wealth, which leads to a lower support for redistributing wealth or increasing the taxes that the group should pay, supporting our exploratory Hypothesis 3.

Table 1. Total, direct, and indirect effects with standard error (*SE*) for the multiple mediation of the index of wealth source (mediator 1) and fairness perception (mediator 2) in the relationship between (de)humanization and support for income redistribution (dependent 1) and support for higher taxation (dependent 2), for studies 1 and 2

	VD$_1$: Support for redistribution			VD$_2$: Support for higher taxation		
	IE (*SE*)	95% CI	*p*	IE (*SE*)	95% CI	*p*
Total effect						
Study 1	-.37 *(.20)*	[-.77, .03]	.07	-4.10 *(1.89)*	[-7.82, -.39]	.03
Study 2	-.30 *(.14)*	[-.60, -.01]	.04	-3.79 *(1.86)*	[-7.45, -.12]	.04
Direct effect of dehumanization						
Study 1	.15 *(.18)*	[-.21, .51]	.41	-4.10 *(1.81)*	[-4.01, 3.14]	.81
Study 2	.04 *(.14)*	[-.23, .30]	.79	-.54 *(1.78)*	[-4.04, 2.96,]	.76
Total indirect effects						
Study 1	-.52 *(.12)*	[-.78, -.30]		-2.41 *(1.14)*	[-4.99, -.49]	
Study 2	-.34 *(.08)*	[-.52, -.19]		-3.25 *(.93)*	[-5.22, -1.60]	
Indirect effects of the index of wealth source						
Study 1	-.40 *(.10)*	[-.63, -.21]	< .001	-3.04 *(.86)*	[-5.08, -1.64]	≤ .001
Study 2	-.12 *(.05)*	[-.23, -.05]	.01	-1.68 (.71)	[-3.22, -.51]	.01
Indirect effect of fairness perception						
Study 1	-.12 *(.06)*	[-.27, -.03]	.04	-.63 *(.56)*	[-1.96, .30]	.23
Study 2	-.22 *(.07)*	[-.38, -.10]	< .001	-1.57 *(.66)*	[-3.05, -.45]	.01

Appendix S2.

Due to the differences between the humanized group (M = 5.20, *SD* = 1.03) and the mechanized group (*M* = 4.35, *SD* = 1.42, $t_{(272)}$ = 5.63, *p* ≤ .001, 95% CI [.55, 1.14], Hedges' gs = .68) in ascribed HU, we decided to perform an alternative mediation analysis controlling for the ascribed level of HU between both conditions. Results indicated that, after controlling for HU, the total indirect effect remained significant (see Table 2).

Table 2. Total, direct, and indirect effects with standard error *(SE)* for the multiple mediation of the index of wealth source (mediator 1) and fairness perception (mediator 2) in the relationship between (de)humanization and support for income redistribution (dependent 1) and support for higher taxation (dependent 2), controlling for the ascribed HU to the high-SES group in Study 1

	VD₁: Support for redistribution			VD₂: Support for higher taxation		
	IE *(SE)*	95% CI	*p*	IE *(SE)*	95% CI	*p*
Total effect	-.24 *(.21)*	[-.66, .18]	.25	-2.63 *(1.96)*	[-6.49, .124]	.18
Direct effect	.11 *(.19)*	[-.27, .48]	.57	-.28 *(1.88)*	[-3.96, -3.40]	.88
Total indirect	-.35 *(.11)*	[-.59, -.15]		-2.35 *(.75)*	[-3.94, -.97]	
Indirect effects of the index of wealth source						
	-.27 *(.09)*	[-.48, -.11]	≤ .001	-2.00 *(.71)*	[-3.65, -.81]	.01
Indirect effect of fairness perception						
	-.08 *(.05)*	[-.20, -.01]	.10	-.35 *(.36)*	[-1.36, .14]	.32

Appendix S3.

To isolate the effect of the attribution of HN (low HN/machine and high HN/human) with respect to the well-known dimensions of the stereotype content model (i.e., competence and warmth), we decided to perform an alternative mediation analysis controlling for the competence and warmth ascribed to high-SES groups (see Table 3). Results revealed that, although the total effect was reduced, the indirect effect remained significant even when controlling for the ascribed competence and warmth of the groups described as having high SES.

Table 3. Total, direct, and indirect effects with standard error (SE) of the multiple mediation of the index of wealth source (mediator 1) and fairness perception (Mediator 2) in the relationship between (de)humanization and support for income redistribution (dependent 1) and support for higher taxation (dependent 2), controlling for the competence and warmth of high-SES groups in Study 2

	VD1: Support for redistribution			VD2: Index of taxation		
	IE *(SE)*	95% CI	*p*	IE *(SE)*	95% CI	*p*
Total effect	-.16 *(.16)*	[-.48, .15]	.31	-3.83 *(2.02)*	[-7.81, 16]	.06
Direct effect	.04 *(.14)*	[-.25, .32]	.79	-1.78 *(1.86)*	[-5.45, 1.89]	.34
Total indirect	-.20 *(.08)*	[-.37, -.06]		-2.05 *(.96)*	[-4.10, -.33]	
Indirect effects of the index of wealth source						
	-.06 *(.03)*	[-.15, -.01]	.06	-1.16 *(.62)*	[-.26, -.17]	.04
Indirect effect of fairness perception						
	-.14 *(.06)*	[-.28, -.03]	.02	-.89 *(.59)*	[-2.18, .12]	.12

Chapter 5

General Discussion

Discusión General

En la presente tesis doctoral se ha analizado el impacto de la (des)humanización de los grupos con un estatus socioeconómico (ESE) bajo vs. alto, en el mantenimiento de la desigualdad económica (rechazo a políticas sociales, redistribución de ingresos o a un sistema de impuestos progresivos). Así pues, el objetivo fundamental de la tesis fue generar evidencia empírica que permitiese comprender, de forma global, cómo se mantienen y legitiman las altas tasas de pobreza y la concentración de la riqueza en manos de unos pocos. Para ello, se optó por analizar el papel de la (des)humanización como un factor clave que sesga la percepción e influye en la interpretación que las personas hacen sobre las diferencias socioeconómicas entre los grupos, pudiendo contribuir, en última instancia, a mantener el *statu quo*.

Con la finalidad de abordar este objetivo principal, se analizó la (des)humanización de las clases bajas y altas desde el modelo de las dos dimensiones de humanidad propuesto por Haslam (2006). Según esta perspectiva teórica es importante diferenciar entre los rasgos Únicamente Humanos (UH), como el civismo, la racionalidad o la madurez, cuya negación da lugar a la animalización de una persona o grupo; y los rasgos propios de la Naturaleza Humana (NH), como la expresión emocional, la flexibilidad cognitiva o la calidez interpersonal, cuya negación da lugar a la mecanización de una persona o grupo.

Debido a que existe una tendencia a atribuir de forma ambivalente la humanidad a los grupos (Bain, Park, Kwok y Haslam, 2009) y a que se ha identificado que las características/estereotipos grupales sobre las clases bajas y altas (Durante, Tablante y Fiske, 2017; Kraus, Côté y Keltner, 2010; Piff, Kraus, Côté, Cheng y Keltner, 2010) pueden influir en la atribución de humanidad que se hace de los mismos (Paladino y Vaes, 2009; Vaes y Paladino, 2010), se consideró que la perspectiva de las dos dimensiones de

humanidad proporcionaba una visión más detallada sobre cómo se percibe a las clases bajas y altas. En efecto, a diferencia de estudios previos, la utilización de esta perspectiva ha permitido identificar no solamente la animalización de las clases bajas sino también la mecanización de las clases altas, así como también ha permitido explorar las consecuencias específicas que se derivan de ambas formas de deshumanización en el mantenimiento de la desigualdad de ingresos.

A continuación, se enumeran las preguntas de investigación que han sido abordadas en esta tesis doctoral y se resume la evidencia empírica hallada en los estudios realizados durante este proceso (para un resumen véase la Tabla 1). Posteriormente, se discuten las implicaciones prácticas y se presentan las principales conclusiones extraídas de los resultados obtenidos.

Objetivo 1 y 2 - Identificar la Animalización/Clase Baja – Mecanización/Case Alta y Explorar sus Consecuencias

El primer capítulo con datos empíricos de la tesis doctoral se centró en identificar la existencia de diferencias en la atribución de humanidad entre los grupos de clase baja y alta (Artículo 1). Asimismo, también se exploró la relación entre la humanidad atribuida a dichos grupos y la interpretación que se hace sobre la existencia de dificultades económicas del grupo desaventajado (Artículo 2).

Concretamente, en el primer artículo, se exploró la relación entre el ESE y la atribución de humanidad. En un primer estudio se analizó la atribución de rasgos UH y de la NH a grupos de clase baja y alta. Los resultados mostraron que existió una atribución complementaria de humanidad entre la clase baja y alta, ya que la dimensión que es negada a los grupos de clase baja (bajo UH y alto NH) es atribuida al grupo de clase alta (bajo
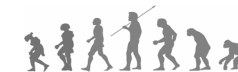
Tabla 1. Resumen de los objetivos, estudios y principales conclusiones que se extraen de los resultados de la presente tesis doctoral

Objetivos y artículos	Estudios			Conclusión principal
Objetivo 1. Identificar la animalización de la clase baja y la mecanización de la clase alta				
Artículo 1	*Estudio 1* Deshumanización de la clase baja y alta	*Estudio 2* Clase social de grupos animalizados y mecanizados	*Estudio 3* IAT clase baja/animales, clase alta/máquinas	Se animaliza a los grupos de clase baja mientras que se mecaniza a los grupos de clase alta, tanto explícita como implícitamente
Objetivo 2. Analizar la relación entre la (des)humanización y la interpretación de un conflicto económico entre grupos desaventajados y aventajados				
Artículo 2	*Estudio 1 y 2* (Des)humanización mutua de griegos y alemanes tras el conflicto económico desencadenado por el Referéndum Griego en 2015 (Estudio Alemania y Grecia)			La humanidad endo-/exogrupal se relaciona con la interpretación del conflicto económico entre Alemania y Grecia
Objetivo 3. Analizar las consecuencias de la animalización (vs. humanización) de las clases bajas en el mantenimiento de la desigualdad económica				
Artículo 3	*Estudio 1* Animalización predice las atribuciones sobre las causas de la pobreza y las actitudes hacia la redistribución	*Estudio 2* Animalización influye en las atribuciones sobre las causas de la pobreza y las actitudes hacia la redistribución		La animalización de las clases bajas reduce el apoyo a la redistribución al culpar (más atribuciones internas que externas) al grupo por su situación
Artículo 4	*Estudio 1-3* La animalización predice el despilfarro percibido y el rechazo de políticas sociales	*Estudio 4* La clase media es más humana y se administra mejor que la clase baja	*Estudio 5-6* La animalización influye en el despilfarro percibido y el rechazo de políticas sociales	La animalización (vs. humanización) de las clases bajas reduce el apoyo a políticas sociales porque se considera que estos grupos despilfarran el dinero de las ayudas sociales
Objetivo 4. Analizar las consecuencias de la humanización (vs. mecanización) de las clases altas en el mantenimiento de la desigualdad económica				
Artículo 5	*Estudio 1* Humanización de los ricos y justificación de la desigualdad (exploratorio)	*Estudio 2* Humanización de los ricos y justificación de la desigualdad (confirmatorio)		La humanización (vs. mecanización) de las clases altas favorece la desigualdad económica al considerar su riqueza como legítima y justa

NH y alto UH) y viceversa. Además, de forma interesante, en un segundo estudio, se evaluó la clase social atribuida a un grupo animalizado y mecanizado. Los resultados indicaron que los grupos descritos como animales son considerados como inferiores en comparación con los grupos descritos como máquinas, a los que se les atribuye una posición social aventajada. Finalmente, es importante destacar que esta asociación entre animales-clase baja y máquinas-clase alta fue identificada no solo a nivel explícito sino también utilizando una metodología implícita (IAT). Así pues, en este primer capítulo de la tesis se aportó evidencia empírica de cómo el ESE (bajo y alto) y la atribución de rasgos de animales y máquinas están íntimamente relacionados. Esta asociación es, sin duda, un indicador de la deshumanización de los grupos situados en los extremos de la jerarquía social, lo cual apoya las hipótesis previas que se plantearon.

Adicionalmente, estos resultados también permitieron confirmar que la atribución de rasgos UH se realiza de forma vertical/ascendente (i.e., a mayor ESE, mayor atribución de rasgos UH). Lo que permite concluir que esta dimensión sirve como un elemento para distribuir a los grupos de forma jerárquica (e.g., grupos con pocos rasgos UH se sitúan en la parte inferior de la jerarquía). Estos datos son congruentes con la literatura previa sobre la negación de los rasgos UH a los grupos desaventajados (Haslam y Loughnan, 2014). Por otra parte, estos resultados también aportan evidencia sobre la posible función organizativa de los rasgos de la NH. Tradicionalmente la negación de la NH se ha entendido como un proceso que permite la desconexión con los "otros" a nivel horizontal en diferentes ámbitos como el sanitario (Vaes y Muratore, 2013). No obstante, la negación de rasgos propios de la NH a los grupos que se encuentran en la parte alta de la jerarquía parece indicar que dicho factor también puede utilizarse como una dimensión de organización jerárquica de los grupos. Esto es, una menor atribución de rasgos propios de

la NH podría relacionarse con un mayor estatus social. En consecuencia, se podría concluir que, si bien ambas dimensiones parecen estar relacionadas con el ESE de un grupo, existe una relación directa entre el ESE y los rasgos UH, así como una relación inversa entre el ESE y la atribución de rasgos de NH.

En definitiva, los resultados permiten confirmar de forma experimental el proceso de animalización de los grupos con bajo-ESE que había sido identificado a nivel correlacional previamente por Loughnan, Haslam, Sutton y Spencer (2014). Así como también permiten identificar la mecanización de los grupos con alto ESE, resaltando que 1) la deshumanización no es un proceso únicamente aplicado a grupos desaventajados, sino que 2) los grupos aventajados pueden ser también deshumanizados cuando se tienen en cuenta otras formas de deshumanización diferentes a la animalización como la mecanización.

Posteriormente, una vez que se identificó la animalización de las clases bajas y la mecanización de las clases altas, se procedió a analizar la posible relación entre la deshumanización y la interpretación de la situación económica de grupos reales (Artículo 2). Para tal fin, se realizaron dos estudios correlacionales teniendo presente las discrepancias en la negociación del rescate económico de Grecia entre las instituciones alemanas (Estudio 1) y griegas (Estudio 2) en 2015. Dichos estudios se realizaron con el objetivo de explorar si la visión deshumanizada de un grupo (i.e., alemanes y griegos) se relaciona con la interpretación que las personas realizaban sobre las causas que habían llevado a dicho grupo a una posición desaventajada, así como con las tendencias comportamentales hacia dicho grupo (e.g., ayuda para reducir el impacto de la crisis económica entre los miembros del grupo). Adicionalmente, a lo largo de este artículo se consideró que tanto la humanización del endogrupo como la deshumanización del

exogrupo por parte de los alemanes (Estudio 1) y de los griegos (Estudio 2) debían tenerse en consideración a la hora de interpretar un mismo evento (e.g., crisis económica). En línea con Vaes, Leyens, Paladino y Miranda (2012), se consideró que la humanización del endogrupo podría asociarse con una minimización de la responsabilidad grupal, mientras que la deshumanización exogrupal podría asociarse con una mayor tendencia a culpar a los otros. Por lo cual se planteó que las causas percibidas, las posibles consecuencias o el tipo de soluciones que podrían implementarse para solventar la crisis griega podrían estar influenciadas tanto por la humanización del endogrupo como por la deshumanización del exogrupo entre los dos agentes principales del conflicto (i.e., alemanes y griegos).

En primer lugar, los resultados de estos estudios mostraron que el grupo desaventajado (i.e., griegos) era animalizado por el grupo aventajado (i.e., alemanes), mientras que los alemanes eran mecanizados por parte de los griegos. Estos datos evidencian cómo la animalización de las clases bajas y la mecanización de las clases altas también ocurre al comparar grupos de diferente nacionalidad y con diferente estatus dentro de la UE. Además, los resultados de estos estudios mostraron que tanto alemanes como griegos se auto-deshumanizaron. Esto es, los alemanes evaluaron al endogrupo como carente de los rasgos propios de la NH (en comparación con los rasgos UH) y los griegos se percibieron a sí mismos como carentes de rasgos UH (en comparación con los rasgos propios de la NH).

En segundo lugar, se encontró que la humanidad endo-/exogrupal era un predictor de la interpretación de los diferentes factores asociados a la crisis y de sus posibles soluciones. En general, la humanización del endogrupo, así como la deshumanización del exogrupo, por parte de alemanes y griegos, predijo la responsabilidad atribuida a cada grupo por la crisis económica, la percepción de las consecuencias negativas derivadas de

las políticas de austeridad y el tipo de soluciones que se apoyaron para solventar el conflicto.

En definitiva, estos resultados permitieron concluir que: 1) existe una asociación entre la atribución de humanidad a un grupo y la interpretación de la situación económica en la que ese grupo se encuentra y, en dicha interpretación, 2) tanto la humanidad que se atribuye al endogrupo como la humanidad atribuida al exogrupos parece jugar un papel importante. No obstante, los resultados apuntan a que la atribución de humanidad no tiene la misma relevancia para el grupo que está experimentando las dificultades económicas (i.e., griegos) como para el grupo que mantienen una posición aventajada a nivel económico (i.e., alemanes). Es decir, en un contexto marcado por disputas económicas la humanidad endo-/exogrupal modula la interpretación del conflicto en mayor media para el grupo que ocupa una posición desaventajada que para el grupo aventajado.

Una vez que los resultados de los Artículos 1 y 2 permitieron identificar la deshumanización de las clases bajas y clases altas, se desarrollaron dos líneas paralelas que se centraron en analizar la influencia de la animalización de las clases bajas y la mecanización de las altas en el mantenimiento de la desigualad económica. En los siguientes apartados se resumen las preguntas de investigaciones que se han abordado con respecto a estas dos líneas de investigación.

Objetivo 3 - Analizar las Consecuencias de la Animalización de las Clases Bajas en el Mantenimiento de la Desigualdad Económica

El objetivo de este capítulo fue analizar cómo la animalización de los grupos con un bajo-ESE influye en la justificación y el mantenimiento de una situación desfavorecida que una gran parte de la población (en diferentes países) padece hoy en día.

Específicamente, este apartado se centró en analizar la influencia de la animalización (vs. la humanización) de estos grupos en el mantenimiento de la desigualdad económica (e.g., no apoyar a políticas redistributivas o el apoyo a los recortes en ayudas sociales). Además, también se han explorado los mecanismos psicológicos que podrían ayudar a explicar la influencia de la deshumanización en el mantenimiento de la desigualdad: atribuciones causales y/o percepción de derroche económico.

En el Artículo 3 se incluyen dos estudios (Estudio 1 correlacional, Estudio 2 experimental) que tuvieron como objetivo analizar cómo el hecho de animalizar a los grupos con bajo-ESE hace que los participantes muestren un menor apoyo a la redistribución de ingresos y, por tanto, a las políticas activas que buscan el reparto equitativo de la riqueza entre la población. Asimismo, un segundo objetivo en este tercer artículo fue explorar cómo las atribuciones sobre las causas (i.e., internas o externas) percibidas de la pobreza explican la relación entre la animalización del grupo y el rechazo a políticas redistributivas. Los resultados del estudio 1 (correlacional) y 2 (experimental) permitieron concluir que la animalización de las clases bajas influye en un menor apoyo a la redistribución de ingresos como consecuencia de culpar a los pobres por su situación desaventajada. En definitiva, la animalización (vs. humanización) de los pobres implica considerar que la pobreza está motivada por su propia falta de esfuerzo (i.e., causas internas) a la vez que se minimiza la influencia de factores como la crisis económica (i.e., causas externas) y, en último término, favorece que no se ayude a dicho grupo.

Además, una vez se identificó que la (des)humanización de las clases bajas influye en el rechazo a políticas redistributivas, se continuó explorando otros factores que explican esta relación. En concreto, el Artículo 4 se centró en analizar cómo la incapacidad atribuida a los grupos con bajo-ESE para administrar su economía familiar mediaba la

relación entre la (des)humanización y el apoyo a políticas sociales encaminadas a la redistribución económica. Esta incapacidad atribuida a los grupos con bajo-ESE para manejar su economía familiar, ha sido considerada como una de las causas del rechazo a políticas sociales en países como Reino Unido (Jones, 2011). Concretamente, se considera que los grupos con bajo-ESE derrochan su dinero en gastos superfluos (e.g., joyas, alcohol/drogas, ropa de marca) en lugar de invertir en gastos más básicos (e.g., pagar el alquiler, comprar productos de alimentación básicos, educación). En base a estas ideas, se propuso que la influencia de la (des)humanización sobre el apoyo a políticas públicas estaría mediada por esta incapacidad percibida de los grupos desfavorecidos.

Se llevaron a cabo seis estudios con la finalidad de analizar cómo la animalización (medida y manipulada) de grupos con bajo-ESE influye en el apoyo a políticas públicas y en la implementación de medidas gubernamentales para controlar cómo estos grupos administran el dinero de las ayudas sociales. Los resultados de los tres primeros estudios correlacionales que se realizaron en diferentes países (Reino Unido, Estados Unidos y España) mostraron que la animalización de los grupos con bajo-ESE predijo una tendencia a considerar que dichos grupos malgastan su presupuesto mensual en actividades lúdicas (e.g., alcohol, fiesta) o en artículos innecesarios (e.g., tecnología, ropa de marca). Por otra parte, se encontró que esta asociación entre la animalización de los grupos desfavorecidos y el derroche percibido de sus ingresos favorecía el rechazo a las ayudas sociales (e.g., ayuda al desempleo, a la vivienda, o los vales de comida) e incrementaba la tendencia a apoyar medidas de control gubernamental a la hora de conceder ayudas sociales. Para complementar esta evidencia correlacional se realizaron una serie de estudios experimentales en los que se analizó el papel del ESE del grupo

(comparando un grupo de clase baja con un grupo de clase media; Estudio 4) y el papel de la animalización vs. la humanización en un grupo de clase baja (Estudios 5 y 6).

Concretamente, en el estudio 4 se manipuló el ESE de un grupo ficticio (clase baja vs. clase media) que se presentaba como víctima de una catástrofe natural que había ocasionado daños en las viviendas de las personas que integraban esos grupos. Esta manipulación experimental permitió comparar la percepción de la utilización de las ayudas económicas que el gobierno daba para paliar los efectos de la catástrofe de un grupo de clase baja vs. media, en un contexto en el que ambos se encuentran en una situación de necesidad. Además, se comparó la humanidad atribuida a los grupos, su capacidad para administrarse después de una crisis y la disposición a ayudarlos y/o a establecer medidas de control gubernamental a la hora de proporcionar ayudas para la reconstrucción de sus viviendas. Los resultados de este estudio mostraron que el grupo de clase baja, en comparación con el grupo de clase media, fue animalizado. Asimismo, el grupo de clase baja se percibió con menor capacidad para administrar sus recursos después del desastre natural. No obstante, a pesar de percibir que administraría peor las ayudas percibidas, los participantes mostraron una mayor intención de ayudar a este grupo que al de clase media, aunque también se consideró que este grupo tenía que ser controlado externamente por el gobierno a la hora de administrar el presupuesto recibido.

Por último, se realizaron dos estudios experimentales (Estudios 5-6) en los que se manipuló la humanidad asociada a dos grupos ficticios de clase baja (grupo humano vs. grupo animal) con la finalidad de evaluar el efecto de la humanidad sobre el despilfarro percibido y el apoyo a políticas sociales/de control gubernamental. Los resultados mostraron que a los grupos animalizados (vs. grupos humanos) se les atribuyo una mayor tendencia a malgastar sus ingresos, eran menos ayudados a través del rechazo a políticas

públicas y más proclives a ser controlados a la hora de administrar el dinero público que recibían. Finalmente, los resultados confirmaron que el rechazo a las ayudas sociales o el gasto público destinados a los grupos de bajo ESE viene determinado por la creencia de que dichos grupos son irracionales, impulsivos e incívicos. De esta forma, las personas que deshumanizan a la clase baja tienden a creer que cualquier tipo de política destinada a ayudarles va a ser ineficaz ya que dichos grupos carecen de las herramientas necesarias para poder administrar eficientemente los recursos públicos que les asignan.

En conjunto, este capítulo sobre las consecuencias de la animalización en el mantenimiento de la desigualdad económica (Artículo 3 y 4) permite concluir que: 1) la animalización de las clases bajas es un factor clave a la hora de justificar el rechazo de políticas que favorecen la igualdad social, 2) la cual sesga la interpretación que las personas hacen sobre los factores llevan a un grupo a estar en la parte inferior de la distribución en la jerarquía social y 3) sirve para "naturalizar" las diferencias en ESE de tal forma que se considera que la posición desfavorecida de los grupos de clase baja se justifica al ser considerados como animales.

Objetivo 4 - Analizar las Consecuencias de la Mecanización de las Clases Altas en el Mantenimiento de la Desigualdad Económica

El último capítulo empírico de la tesis doctoral se centró en analizar la percepción social de las clases altas. La investigación en Psicología Social ha dedicado menos atención a estudiar aquellos grupos que tienen un ESE alto en comparación con el esfuerzo que se ha realizado por comprender la pobreza y los procesos relativos a este fenómeno social (Bullock, Williams y Limbert, 2008). No obstante, el incremento de la brecha de ingresos entre la población más pobre y la más rica no solo viene determinado por el

empobrecimiento de algunos colectivos, sino por la concentración de la riqueza en manos de unos pocos individuos o grupos (Oxfam International, 2016).

Debido a la influencia que podría tener la percepción social de los grupos de clase alta en la justificación de esta creciente concentración de recursos, se consideró de suma importancia generar un conocimiento científico que nos permitiera entender en profundidad las dinámicas sociales detrás de la justificación de la riqueza extrema. En este sentido, la investigación realizada en relación con los grupos de clase alta (Artículo 5) tuvo el objetivo de analizar cómo influye la atribución de rasgos propios de la NH (i.e., humanización) o su negación (i.e., mecanización) en: 1) la interpretación que las personas hacen sobre las causas percibidas de la riqueza, 2) la percepción de (i)legitimidad de la concentración de la riqueza y 3) el tipo de medidas redistributivas o de impuestos progresivos que la gente estaría dispuesta a implementar con el objetivo de favorecer la igualdad social. Con el fin de conseguir este objetivo, se realizaron dos estudios manipulando la humanidad de un grupo ficticio de clase alta (alto en NH vs. bajo en NH). Los resultados mostraron que la riqueza del grupo humanizado (alto en NH) fue considerada como más legítima y proveniente de causas internas (e.g., esfuerzo, ambición), lo que dio lugar a que se apoyara en menor medida la redistribución de la riqueza de este grupo. Por otra parte, la riqueza del grupo mecanizado (bajo en NH) fue considerada como más ilegítima y proveniente de causas externas (e.g., corrupción, influencia política), lo que provocó que se apoyase en mayor medida la redistribución de su riqueza. Estos resultados ponen en evidencia que la humanización (en comparación con la mecanización) de los grupos aventajados influye drásticamente en la postura que las personas mantienen con respecto a las medidas políticas que deberían implementarse para redistribuir la riqueza. Concretamente, los resultados obtenidos muestran cómo la

humanización de los ricos tiene un efecto pernicioso al fomentar el mantenimiento de la desigualdad económica y, por ende, del *statu quo*.

Este último resultado va en la línea de algunos estudios previos sobre las consecuencias negativas de la humanización de un grupo. En estos estudios previos se muestra, por ejemplo, que la humanización de los pacientes en el contexto sanitario puede tener consecuencias negativas en el bienestar de los profesionales de la Sanidad, ya que favorece la aparición el síndrome del desgaste profesional o *burnout* (Vaes y Muratore, 2013). Asimismo, se ha encontrado que la humanización de grupos estigmatizados da lugar a un desbordamiento emocional en las personas que pretenden ayudan a dichos grupos (Cameron, Harris y Payne, 2015). En estos contextos, la humanización de un grupo, ya sean pacientes o personas que necesitan ayuda, parece tener consecuencias negativas en el bienestar de la persona que ayuda. Por lo que se ha considerado que en situaciones muy específicas la deshumanización de estos grupos tendría una función defensiva/protectora para evitar una excesiva implicación emocional de las personas que ejercen su trabajo o ayudan a los demás.

A pesar de que estos estudios previos ayudan a comprender los resultados obtenidos en este capítulo, cabe resaltar que existen diferencias significativas entre ambos conjuntos de estudios. Por un lado, el contexto en el que se produce la humanización (vs. mecanización) de los grupos de clase alta difiere de los contextos profesionales que han sido previamente estudiados. Por otro lado, la consecuencia principal de la humanización de las clases altas no es el impacto en el bienestar subjetivo de la persona que interactúa con esos grupos, sino la contribución de dicha humanización en el mantenimiento de la desigualdad económica. No obstante, los resultados sí parecen indicar que en el ámbito de las diferencias socioeconómicas la humanización de un grupo puede tener

consecuencias negativas, así como que la mecanización de un grupo da lugar a un mayor castigo a dicho grupo (e.g., mayor porcentaje de impuestos, más apoyo a la redistribución).

En general, los resultados de este capítulo nos ayudan a entender cómo en un contexto de creciente desigualdad, con preocupantes tasas de pobreza, la humanización de los grupos con alto ESE puede dar lugar a consecuencias negativas. Al igual que los estudios previos han mostrado que la deshumanización de la pobreza favorece el mantenimiento de *statu quo*, la percepción humanizada de la riqueza también podría explicar por qué parte de la población rechaza una distribución más justa de los recursos.

Implicaciones de la (Des)humanización de las Clases Bajas y Altas en el Mantenimiento de la Desigualdad Económica

Los resultados de la presente tesis doctoral han permitido abordar el estudio de cómo las diferencias en ESE dan lugar a diferencias en la atribución de humanidad y cómo la (des)humanización, en última instancia, sirve de punto de partida para justificar la desigualdad económica. A continuación, se relatan algunas de las reflexiones derivadas de los hallazgos encontrados.

En primer lugar, en relación a la animalización de las clases bajas, que ya fue identificada a nivel correlacional por Loughnan et al. (2014), una de las aportaciones notables de la tesis ha sido complementar los datos ofrecidos por estos autores con evidencia empírica obtenida a través de metodología experimental (Artículo 1). De modo que se ha mostrado que no solo los grupos con bajo estatus (Capozza, Andrighetto, Di Berdano y Falvo, 2011; Iatridis, 2013), las minorías étnicas (Goff, Eberhardt, Williams y Jackson, 2008), los grupos migrantes (Esses, Veenvliet, Hodson y Mihic, 2008) y los no-poderosos (Gwinn, Judd y Park, 2013) son animalizados, sino que también los pobres son vistos como menos humanos y más próximos a los animales. En ese sentido, a pesar de

que cada grupo (e.g., no poderosos, minorías étnicas) debe ser estudiado de forma individual y cada variable (e.g., poder, status) produce dinámicas o efectos únicos, es cierto que la falta de recursos económicos parece mostrar resultados muy semejantes a los hallados en la mayoría de los grupos que son animalizados (Haslam y Loughnan, 2014). En consonancia, la atención que actualmente está recibiendo el estudio del ESE dentro de la Psicología Social ha puesto de relieve que el ESE bajo es un rasgo compartido entre muchos grupos desaventajados socialmente (Sánchez y García, 2012), por lo que existe la posibilidad de que parte de los resultados que se han identificado anteriormente estén motivados por un rechazo a la pobreza en general.

En segundo lugar, los resultados de este trabajo muestran que la (des)humanización es uno de los factores que favorece el mantenimiento de la desigualdad basada en el ESE. A pesar de que en otras muchas investigaciones la deshumanización es considerada como una consecuencia o como un proceso mediador que puede explicar tendencias comportamentales ante un grupo, los resultados de este trabajo muestran que la deshumanización puede ser una de las causas que motivan el mantenimiento de la desigualdad económica. Esto implica que la deshumanización actúa como un sesgo previo que distorsiona la percepción de la sociedad y, a su vez, influye en las actitudes que las personas desarrollan tanto hacia las clases bajas como hacia las altas. Estas actitudes previas hacen que no se perciba adecuadamente la brecha de ingresos, en su lugar, las personas condicionan la interpretación de la realidad de forma que se ajuste a sus motivaciones individuales (Kteily, Sheehy-Skeffington y Ho, 2017). En el caso de los grupos que se han evaluado en este trabajo, por ejemplo, la deshumanización de las clases bajas va a constituir una barrera que filtra y modifica la realidad para ajustarla a las motivaciones individuales (i.e., justificación de la pobreza). De tal forma que una visión

animalizada de estos grupos no solamente da lugar a que las personas consideren que estos grupos merecen su posición desaventajada (e.g., malgastan su dinero, engaña sobre sus necesidades a las instituciones) sino que posiblemente la deshumanización hace que se minimice o no se procese la información contraria que debería refutar dichos argumentos (Kteily, Sheehy-Skeffington y Ho, 2017). Las implicaciones que tiene este proceso pueden ser graves ya que las intervenciones sociales que únicamente presenten datos objetivos para combatir los mitos existentes sobre las ayudas sociales (los pobres abusan del sistema, viven únicamente del sistema sin trabajar, etc.), pueden no ser efectivas debido a que la deshumanización previa minimizaría la credibilidad/importancia de los argumentos contrarios a los mitos sobre estos grupos.

En base a estos argumentos, se considera que posibles intervenciones deberían ir encaminadas a cambiar la percepción deshumanizada de las clases bajas, ya que una visión humanizada de estos grupos podría servir como punto de partida para un cambio en la opinión pública. Sin embargo, conocer el punto de partida sobre el que deberíamos incidir no va a facilitar que podamos realizar un cambio actitudinal en la población. Esto se debe a que, en ocasiones, el intento por parte de un grupo por mostrar su humanidad a otros grupos puede generar un mayor rechazo social hacia dichos colectivos (Vaes, Paladino, Castelli, Leyens y Giovannazi, 2003). Por lo que, si bien humanizar a la clase baja parece ser el camino a seguir, se requiere de un mayor conocimiento científico y un análisis más detallado de cómo reducir dicha deshumanización (sin dar lugar a efectos indeseados como un mayor rechazo social) para poder crear programas de intervención efectivos que complementen las evidencias ya encontradas y ayuden a devolver la humanidad a los grupos a los que les ha sido arrebatada (Albarello y Rubini, 2012; Prati, Vasiljevic, Crisp, y Rubini, 2015).

En tercer lugar, destacamos la influencia de la humanización de las clases altas en el mantenimiento de la desigualdad social. Si bien la literatura sobre deshumanización no ha prestado tanta atención a los grupos que están en lo alto de la jerarquía social, los resultados del presente trabajo ponen de relieve que dichos grupos pueden ser mecanizados. Esto supone una diferencia con respecto a los resultados previos, los cuales encontraron que dichos grupos era humanizados cuando se evaluaba únicamente la dimensión animal-humano (Capozza et al., 2011; Iatridis, 2013). La inclusión de una segunda dimensión (maquina-humano) ha permitido captar cómo los grupos de clase alta son percibidos como carentes de emociones, a los que no les importan los demás y con un comportamiento rígido. La mecanización de las clases altas podría explicar porqué en estudios previos se ha encontrado que las personas se preocupan menos por el bienestar de estos grupos o se desconfía más de ellos (Van Doesum, Tybur y Van Lange, 2017). Asimismo, la deslegitimación percibida de la riqueza y el deseo por redistribuir los ingresos de estos grupos cuando son mecanizados puede estar motivado por la falta de moralidad que se atribuye a los grupos carentes de los rasgos propios de la NH (Bastian, Laham, Wilson, Haslam y Koval, 2010). Según los resultados de estos autores, los colectivos mecanizados son vistos como menos merecedores de un trato digno y son castigados con mayor contundencia cuando cometen actos inmorales, lo que permitiría explicar la tendencia a redistribuir los ingresos y considerar menos legítima la posición de algunos tipos de ricos en comparación con otros (Christopher, Morgan, Marek, Troisi, Jones y Reinhart, 2005; Sussman, Dubofsky, Levitan y Swidan, 2014).

Ahora bien, estos resultados muestran que no es la mecanización sino la percepción de las clases altas como humanas en términos de los rasgos propios de la NH lo que favorece que se mantenga el *statu quo*. Esta influencia de la humanización en la

justificación de las desigualdades sociales es especialmente relevante ya que podría estar relacionada con las teorías sobre la dominancia social u otras formas de justificación del sistema (Sidanius y Pratto, 1999). Al igual que estudios previos han mostrado cómo los estereotipos negativos de los grupos desaventajados sirven para justificar la desigualdad o que las personas con alta dominancia social tienden a deshumanizar a dichos colectivos (Hodson y Costello, 2007; Jost y Banaji, 1994), es posible que la humanización de las clases altas produzca el efecto contrario. Es decir, una visión humanizada de los ricos podría servir para legitimar la jerarquía social al considerar que las clases altas humanizadas merecen su posición, en comparación con las clases bajas deshumanizadas, y, por tanto, se legitimaría la existencia de diferencias jerárquicas entre los grupos. Esta posible relación entre la humanización de los grupos aventajados y la justificación de la jerarquía social ayudaría a comprender algunas problemáticas sociales como la justificación del acaparamiento de la riqueza (Ashok, Kuziemko y Washington, 2015). No obstante, para comprender cómo se percibe la riqueza y qué dinámicas favorecen que la gente legitime la concentración de los recursos en manos de unos pocos se debe realizar un mayor esfuerzo por parte de la Psicología Social. Futuros estudios deben aportar nuevos datos que aporten información sobre esta realidad con el fin de entender qué factores llevan a humanizar (vs. mecanizar) a los ricos y así poder proponer intervenciones eficaces que conciencien a la población sobre las consecuencias negativas de la concentración de la riqueza en el bienestar del resto de la población.

Finalmente, los hallazgos de la tesis muestran que las dinámicas sociales son más complejas de lo que se podría esperar y que, si bien la humanización de la pobreza puede tener consecuencias positivas en las relaciones intergrupales, la humanización de los grupos aventajados puede desencadenar consecuencias negativas a nivel social (ver Figura

1). Sin embargo, en este trabajo se ha analizado de forma aislada la influencia de la animalización (vs. humanización) de las clases bajas y la mecanización (vs. humanización) de las clases altas, sin tomar en cuenta que ambas de forma conjunta pueden influir en el mantenimiento de la desigualdad. A pesar de que los datos muestran que existe una tendencia a deshumanizar tanto a las clases bajas como a las altas, es posible que ese proceso no se manifieste siempre de la misma manera o no se produzca entre el total de la población. En este sentido, cabe la posibilidad de que aquellas personas que animalicen a las clases bajas estén a su vez predispuestas a humanizar a las clases altas y viceversa, esto es, una mecanización de las clases altas puede ir de la mano con la humanización de las clases bajas. En resumen, hace falta más evidencia empírica para poder comprender en su totalidad la influencia de la deshumanización en el mantenimiento de la desigualdad económica y así poder generar un modelo teórico que explique de forma integral el proceso que se ha estudiado en este trabajo.
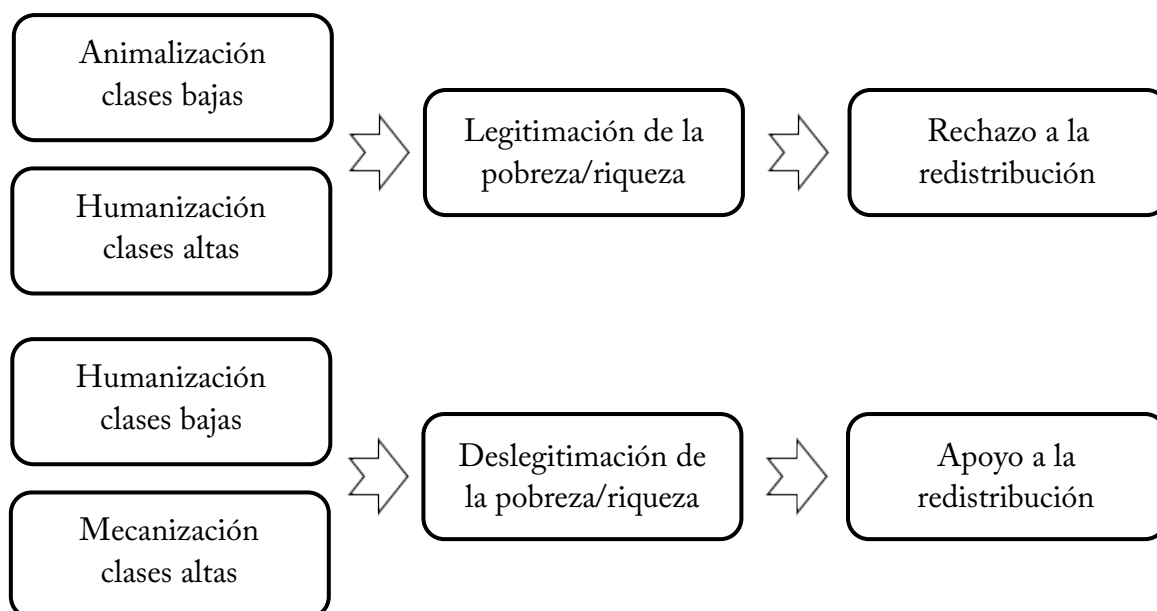

Figura 1. Diagrama de la relación entre la animalización/humanización de los grupos de clase baja y la mecanización/humanización de los grupos de clase alta en el mantenimiento de la desigualdad económica.

Limitaciones

A pesar de que a lo largo de la presente tesis doctoral se ha intentado recoger suficiente evidencia a través de replicaciones y estudios confirmatorios de nuestros resultados, como cualquier trabajo de investigación, éste tampoco se encuentra libre de limitaciones. A continuación, detallamos algunas de las principales limitaciones.

En primer lugar, debemos mencionar que, según la propuesta original de Leyens et al. (2011), la deshumanización es un proceso independiente de la evaluación positiva o negativa de un grupo. Por esta razón, a lo largo de este este trabajo se ha intentado controlar por la valencia de los rasgos (positivos y negativos) que se han utilizado para medir la deshumanización; además, se han realizado estudios pilotos para evitar sesgos en la valencia de las viñetas cuando se manipulaba la humanidad de las clases bajas y altas. Los resultados de los estudios muestran que al controlar por la valencia de rasgos/descripciones o incluso por las actitudes positivas hacia los grupos evaluados el efecto de la deshumanización disminuye, aunque es de destacar que el efecto sigue siendo significativo. Esto nos indica que en el contexto en el que se han realizado los estudios y con los grupos estudiados la valencia parece explicar parte de los resultados obtenidos. No obstante, los resultados muestran que las actitudes o los rasgos negativos no pueden por sí mismos explicar los resultados, sino que la percepción de los otros como menos humanos es la variable clave a la hora de entender el mantenimiento de la desigualdad.

En segundo lugar, a pesar de que la evidencia previa (Loughnan et al., 2014; o los estudios incluidos en el Artículo 5) muestra que las consecuencias de la animalización de las clases bajas y de la mecanización de las clases altas se mantienen aun controlando por las dimensiones de competencia y calidez (Fiske, Cuddy, Glick y Xu, 2002), existe cierto solapamiento entre estas dimensiones y las relativas a la humanidad (Haslam, Loughnan,

Kashima y Bain, 2008). En este trabajo se ha intentado implementar las herramientas necesarias para comprender el papel de la (des)humanización por encima de otras dimensiones evaluativas que pueden enmascarar los resultados. No obstante, futuros trabajos deberán analizar de forma más específica el rol único de la (des)humanización sobre otros procesos relacionados.

En tercer lugar, el objetivo por analizar la asociación entre la (des)humanización y el apoyo (o no) a políticas sociales que está presente en la mayoría de los estudios que se han realizado (tanto focalizados en la clase baja como alta) ha dado lugar a que los diseños experimentales a lo largo de la tesis tengan características similares. La implementación de otras formas de manipular la (des)humanización o la utilización de diseños experimentales que nos permitiesen analizar la posible interacción entre la deshumanización con otras variables hubiera beneficiado al conjunto de la tesis. Igualmente, hubiese sido de interés un análisis pormenorizado de los datos teniendo en cuenta posibles moderadoras de nuestros resultados que respondan a preguntas del tipo, ¿quién humaniza a las clases altas?, ¿qué influencia tienen las variables ideológicas en la deshumanización de las clases bajas? o ¿cuándo/en qué contextos se (des)humaniza a dichos grupos? No obstante, cabe destacar que los resultados presentados en este trabajo son solo el punto de partida de una línea de investigación que permitirá entender mejor el fenómeno en su totalidad a través de futuros estudios.

Finalmente, otros aspectos también hubiesen requerido más atención por nuestra parte. A lo largo del presente trabajo se ha procurado utilizar población no estudiantil en los diferentes estudios realizados, intentando a su vez llegar a un tamaño muestral que nos permitiese obtener suficiente poder estadístico en los estudios. La utilización de plataformas online (e.g., Mturk, Prolific Academic) ha permitido en parte cumplir con

estos criterios, incluso permitiendo la replicación de los resultados en diferentes países. Sin embargo, algunos estudios de la tesis carecen de muestras suficientemente amplias o incluyen a estudiantes como participantes. Futuros estudios podrán implementar otro tipo de procedimientos para la recogida de datos que complementen los utilizados en este trabajo, así como asegurarse de que se obtiene suficiente tamaño muestral en los estudios para alcanzar niveles adecuados de poder estadístico.

Futuros Estudios y Líneas de Investigación

De este trabajo se pueden derivar líneas de investigación complementarias que permitan incrementar el conocimiento de los procesos que se han estudiado. Entre las múltiples alternativas, resaltamos algunas de las líneas y estudios que podrían resultar más interesantes.

En primer lugar, la tesis doctoral se ha centrado en analizar las diferencias en humanidad en base a las diferencias en el ESE. Estas diferencias de ESE se hacen más salientes a medida que la desigualdad en una sociedad se incrementa. Por consiguiente, una futura línea de investigación podría analizar la influencia de la desigualad económica percibida entre ricos y pobres en la deshumanización de dichos grupos. Es posible que se encuentre una relación positiva entre el índice de desigualdad social y la deshumanización de ambos grupos. Es decir, cuánto más grande sea la brecha social percibida entre las clases bajas y altas, más se animalizará a los grupos de clase baja y más se mecanizará a los grupos de clase alta. Asimismo, en contextos más desiguales (vs. más igualitarios) se tiende a realizar más atribuciones internas sobre la situación de un grupo y a rechazar en mayor medida las políticas redistributivas (Heiserman y Simpson, 2017; Schröder, 2017). Por lo que se esperaría que en contextos con más desigualdad percibida (vs. menos desigualdad percibida) los resultados encontrados a lo largo de la tesis se maximizaran: mayor

deshumanización, más atribuciones internas y actitudes más polarizadas sobre la redistribución de los ingresos.

En segundo lugar, otra de las líneas de investigación que pueden explorarse es la posible auto-animalización de los pobres y la auto-mecanización de los ricos. Investigaciones previas han mostrado que algunos grupos asumen que el endogrupo carece de una de las dos dimensiones de humanidad (Bain et al., 2009). Además, nuestros propios resultados (Artículo 2) muestran que griegos y alemanes aceptan en cierta medida la visión externa que tienen de ellos los otros miembros de la UE. Futuros estudios podrían analizar si los grupos con bajo-ESE asumen su inferioridad en términos de los rasgos UH, además de si los grupos con alto-ESE se consideran a sí mismos como carentes de los rasgos asociados a la NH. Esta línea de investigación permitiría además analizar las posibles consecuencias de la auto-deshumanización de los grupos con bajo y alto-ESE en el bienestar subjetivo de dichos grupos. Por un lado, es predecible que ocupar una posición desaventajada y considerar que el endogrupo es inferior en términos de los rasgos UH pueda afectar negativamente a la satisfacción con la vida, el bienestar subjetivo o las propias expectativas futuras. Por otro lado, podría ocurrir que ocupar una posición aventajada actúe como un mecanismo protector haciendo que los grupos aventajados no se auto-deshumanicen y, por tanto, su bienestar subjetivo no se vea perjudicado. Futuras líneas de investigación podrían proporcionar evidencia sobre esta posible interacción entre el ESE, la auto-deshumanización y el bienestar subjetivo.

Finalmente, otra línea de investigación que podría partir de los resultados encontrados en esta tesis está relacionada con los posibles efectos contraproducentes de la humanización de los grupos aventajados. Es posible que la humanización (vs. la mecanización) de estos grupos no solamente afecte a las actitudes sobre la redistribución

de ingresos, sino que sus efectos puedan ampliarse a otros ámbitos y otro tipo de consecuencias. Por ejemplo, ¿podría la humanización de dichos grupos servir como justificación de actos inmorales (e.g., explotación laboral) ?, ¿se minimiza la corrupción de las clases altas cuando se tiene una visión humanizada del grupo?, o ¿puede un grupo de clase alta humanizado abusar de sus subordinados sabiendo que dicho comportamiento no le va a perjudicar de cara a la opinión pública? Responder a estas preguntas permitiría enriquecer el conocimiento empírico sobre las dinámicas que podrían estar haciendo a la población insensible a la actual situación política (e.g., los altos índices de corrupción; Transparency International, 2016) y económica (e.g., el acaparamiento de la riqueza por parte de una minoría; Oxfam International, 2016) en la que están inmersos muchos países.

Conclusión Final

A lo largo de los estudios que se presentan en la tesis doctoral se ha intentado entender cómo la (des)humanización de pobres y ricos influye en el mantenimiento de la desigualdad económica. Así pues, los resultados muestran que tanto la animalización de las clases bajas como la mecanización de las clases altas parecen contribuir a castigar a estos grupos (e.g., recortes ayudas sociales o aumento de los impuestos que debería pasar el grupo), a pesar de que las consecuencias a nivel social son contrarias (mantener la desigualdad en el caso de clase clases bajas y fomentar la redistribución de ingresos en el caso de las clases altas). En definitiva, esta compleja trama apunta a que la (des)humanización de los grupos en los extremos de la jerarquía social es un factor clave a la hora de entender el mantenimiento de la desigualdad económica. Finalmente cabe resaltar que los resultados y conclusiones extraídos de este trabajo son el punto de partida para construir un proyecto que permita comprender en profundidad porqué la sociedad justifica el sufrimiento que se deriva de la desigualdad económica. Esperamos que nuestra

contribución permita, directa o indirectamente, acercarnos a una sociedad más justa e igualitaria que proporcione oportunidades a todos por igual y, en resumen, favorezca el bienestar de todos los ciudadanos independientemente de su condición social.

Referencias

Albarello, F. y Rubini, M. (2012). Reducing dehumanisation outcomes towards Blacks: The role of multiple categorisation and of human identity. *European Journal of Social Psychology, 42,* 875-882. doi:10.1002/ejsp.1902

Ashok, V., Kuziemko, I. y Washington, E. (2015). Support for redistribution in an Age of rising inequality: New stylized facts and some tentative explanations. *Brookings Papers on Economic Activity, 2015*, 367-405. doi:10.3386/w21529

Bain, P. G., Park, J., Kwok, C. y Haslam, N. (2009). Attributing human uniqueness and human nature to cultural groups: Distinct forms of subtle dehumanization. *Group Processes & Intergroup Relations*, *12*, 789-805. doi:1368430209340415

Bastian, B., Laham, S. M., Wilson, S., Haslam, N. y Koval, P. (2010). Blaming, praising, and protecting our humanity: The implications of everyday dehumanization for judgments of moral status. *The British Journal of Social Psychology, 50*, 469–83. doi:10.1348/014466610X521383

Bullock, H. E., Williams, W. R. y Limbert, W. M. (2008). Predicting support for welfare policies: The impact of attributions and beliefs about inequality. *Journal of Poverty, 7*, 35-56, doi:10.1300/J134v07n03_03

Cameron, C. D., Harris, L. T. y Payne, B. K. (2016). The emotional cost of Humanity: Anticipated exhaustion motivates dehumanization of stigmatized targets. *Social Psychological and Personality Science*, *7*, 105-112. doi:10.1177/1948550615604453

Capozza, D., Andrighetto, L., Di Bernardo, G. A. y Falvo, R. (2011). Does status affect intergroup perceptions of humanity? *Group Processes & Intergroup Relations, 15*, 363–377. doi:10.1177/1368430211426733

Durante, F., Tablante, C. B. y Fiske, S. T. (2017). Poor but warm, rich but cold (and competent): Social classes in the Stereotype Content Model. *Journal of Social Issues, 73*, 138–157. doi:10.1111/josi.12208

Esses, V. M., Veenvliet, S., Hodson, G. y Mihic, L. (2008). Justice, morality, and the dehumanisation of refugees. *Social Justice Research, 21*, 4-25. doi:10.1007/s11211-007-0058-4

Goff, P. A., Eberhardt, J. L., Williams, M. J. y Jackson, M. C. (2008). Not yet human: implicit knowledge, historical dehumanization, and contemporary consequences. *Journal of Personality and Social Psychology, 94*, 292–306. doi:10.1037/0022-3514.94.2.292

Gwinn, J. D., Judd C. M. y Park, B. (2013). Less power = less human? Effects of power differentials on dehumanization. *Journal of Experimental Social Psychology, 49*, 464–70. doi:10.1016/j.jesp.2013.01.005

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review, 10*, 252-254. doi:10.1207/s15327957pspr1003_4

Haslam, N. y Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology, 65*, 399-423. doi:10.1146/annurev-psych-010213-115045

Heiserman, N. y Simpson, B. (2017). Higher inequality increases the gap in the perceived merit of the rich and poor. *Social Psychology Quarterly, 80*, 243-253. doi:0190272517711919

Hodson, G. y Costello, K. (2007). Interpersonal disgust, ideological orientations, and dehumanisation as predictors of intergroup attitudes, *Psychological Science, 18*, 691–698. doi:10.1111/j.1467–9280.2007.01962.x

Iatridis, T. (2013). Occupational status differences in attributions of uniquely human emotions. *The British Journal of Social Psychology, 52*, 431–49. doi:10.1111/j.2044-8309.2011.02094.x

Jones, O. (2011). *Chavs: The demonization of the working class.* Londres, Reino Unido: Verso.

Jost, J. T. y Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology, 33*, 1–27. doi:10.1111/j.2044-8309.1994.tb01008.x

Kraus, M. W., Côté, S. y Keltner, D. (2010). Social class, contextualism, and empathic accuracy. *Psychological Science, 21*, 1716-1723. doi:10.1177/0956797610387613

Kteily, N., Sheehy-Skeffington, J. y Ho, A. K. (2017). Hierarchy in the eye of the beholder: (Anti-)Egalitarianism shapes perceived levels of social inequality. *Journal of Personality and Social Psychology, 2*, 136-159. doi:10.1037/pspp0000097

Leyens, J. Ph., Rodríguez, A. P., Rodríguez, R. T., Gaunt, R., Paladino, M. P., Vaes, J. y Demoulin, S. (2001). Psychological essentialism and the differential attribution of uniquely human emotions to ingroups and outgroups. *European Journal of Social Psychology*, *31*, 395–411. doi:10.1002/ejsp.50

Loughnan, S., Haslam, N., Sutton, R. M. y Spencer, B. (2014). Dehumanization and social class: Animality in the stereotypes of "White trash," "Chavs," and "Bogans". *Social Psychology*, *45*, 54–61. doi:10.1027/1864-9335/a000159

Oxfam International (2016). *An economy for the 1%: How privilege and power in the economy drive extreme inequality and how this can be stopped.* Recuperado de https://oxf.am/2t80Crr

Paladino, M. P. y Vaes, J. (2009). Ours is human: On the pervasiveness of infra-humanization in intergroup relations. *British Journal of Social Psychology, 48*, 237–251. doi:10.1348/014466608X322882

Piff, P. K., Kraus M. W., Côté, S., Cheng, B. H. y Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal of Personality and Social Psychology*, 99, 771–784. doi:10.1037/a0020092

Prati, F., Vasiljevic, M., Crisp, R. y Rubini, M. (2015). Some extended psychological benefits of challenging social stereotypes: Decreased dehumanization and a reduced reliance on heuristic thinking. *Group Processes & Intergroup Relations. 18,* 801-816. doi:10.1177/1368430214567762.

Sanchez, D. T. y García, J. A. (2012). Putting race in context: Socioeconomic status predicts racial fluidity. En S. T. Fiske y H. R. Markus (Eds.), *Facing social class: How societal rank influences interaction* (pp. 152-172). Nueva York: Russell Sage.

Schröder, M. (2017). Is income inequality related to tolerance for inequality? *Social Justice Research, 30*, 23-37. doi:10.1007/s11211-016-0276-8

Sidanius, J. y Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression.* Nueva York: Cambridge University Press.

Transparency International (2016). Informe del *global corruption barometer* 2015/2016. Recuperado de https://www.transparency.org/research/gcb/gcb_2015_16

Vaes, J. Paladino, M. P., Castelli, L., Leyens, J. Ph. y Giovanazzi, A. (2003). On the behavioral consequences of infra-humanization: The role of uniquely human emotions on intergroup relations. *Journal of Personality and Social Psychology, 85*, 1016-1034. doi:10.1037/0022-3514.85.6.1016

Vaes, J. y Muratore, M. (2013). Defensive dehumanization in the medical practice: A cross-sectional study from a health care worker's perspective. *British Journal of Social Psychology, 52,* 180-190. doi:10.1111/bjso.1200

Vaes, J. y Paladino, M. P. (2010). The uniquely human content of stereotypes. *Group Processes & Intergroup Relations, 13*, 23-39. doi:10.1177/1368430209347331

Van Doesum, N. J., Tybur, J. M. y Van Lange, P. A. M. (2017). Class impressions: Higher social class elicits lower prosociality. *Journal of Experimental Social Psychology, 68*, 11–20. doi:10.1016/j.jesp.2016.06.001

UNIVERSIDAD
DE GRANADA

Doctorado en Psicología

UNIVERSIDAD
DE GRANADA