

**Tesis Doctoral**

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**La Cultura de la Desigualdad:  
Efectos de la distribución de recursos sobre el  
individualismo**

**Culture of Inequality:  
Effects of resource distribution on individualism**

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*“Economic Inequality is not Inevitable, is a Choice”*

*Joseph Stiglitz*

*“We are our choices”*

*Jean-Paul Sartre*



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## Overview

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Economic inequality has considerably increased around the world (OECD, 2015; Piketty, 2014). Several studies have shown that more unequal societies are more dysfunctional; that is, they show more health and social problems than more egalitarian societies (Wilkinson & Pickett, 2009).

Following an eco-cultural approach, it has been argued that economic inequality creates a specific environment wherein people have to strategically adapt their behaviour. Social strategies based on dominance and competition seem to be more appropriate in a high unequal context, in which improving or not losing one's rank becomes crucial. Conversely, strategies based on friendship, reciprocity, and sharing are more likely to be more successful in a context with lower economic inequality (Wilkinson & Pickett, 2017). In short, economic inequality seems to increase social distance.

We suggest that a greater social distance between individuals might be providing a fertile ground for individualistic features to come to the fore. The present dissertation examines whether economic inequality triggers an individualistic—instead of a collectivistic—culture. In doing so, we have adapted an experimental paradigm that allows to manipulate perceived economic inequality and explore its psychological outcomes. Accordingly, empirical evidence included in this dissertation is (mainly) built on experimental research and show how inequality influences different expressions of individualism-collectivism as a cultural dimension. Particularly, we aim to answer the following questions:

- Does perceived economic inequality affect the perceived normative climate of a given social context?
- Does perceived economic inequality influence the expectations that people have about themselves and how they behave in a new social context?



## Overview

- Does perceived economic inequality condition the image that people have of themselves?

The thesis is structured in seven chapters. The first chapter presents a theoretical review of the most relevant literature about the psychological consequences of economic inequality and the antecedents of individualism-collectivism. The second chapter introduces the motivation and aims of the present doctoral thesis. Chapters from 3 to 6 present empirical research of this dissertation—it should be noted that these chapters were written with the intention of being submitted for publication, and some of them are already accepted, therefore, certain explanations, arguments and theorizing may appear repeatedly in some of them. Specifically, Chapter 3 presents three experiments exploring how economic inequality enhances inferences about the normative climate being individualistic and competitive; Chapter 4 focuses on how economic inequality leads individuals to expect normative and personal individualistic values in a social context; Chapter 5 and 6 address how economic inequality induces an individualistic self-construal. Afterwards we present a general discussion in Chapter 7. Finally, we summarize the main results of this dissertation and include some concluding thoughts.

Additionally, to fulfil the requirements of the International PhD program at University of Granada, all the empirical chapters and the final conclusions are written in English, whereas the theoretical introduction, motivation and the aims of the research, and the general discussion are written in Spanish.

# **CHAPTER 1**

## Introducción Teórica

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En las sociedades modernas la economía es el eje entorno al cual gira la vida humana (Bauman, 2005). Por ello no es de extrañar que dentro de las ciencias sociales haya surgido un interés creciente por analizar cómo los aspectos económicos de nuestra realidad impactan en la vida de las personas. Ciencias como la sociología o la epidemiología se han venido ocupando ampliamente de esta problemática (p.ej. Marx, 1859/1989; Weber, 1930/1991; Wilkinson y Pickett, 2009). Sin embargo, la psicología, aunque con algunas excepciones (p.ej. Adler et al., 1994), se ha ocupado en menor medida del impacto de la economía en la psicología de los individuos (Oishi, Kesebir, y Snyder, 2009).

Concretamente desde la psicología social se ha prestado especialmente atención a la influencia de la situación más cercana a la persona —i.e. contexto proximal—, en los pensamientos, emociones y conductas de los individuos (p. ej. Lewin, 1947; Sherif, 1936). Sin embargo, se ha preocupado menos en estudiar cómo las características del contexto macro-social —i.e. contexto distal— afecta a las personas (Oishi et al., 2009), a pesar de que numerosos teóricos han sugerido que el contexto macro-social también tiene impacto en el comportamiento de los individuos (p.ej. Durkheim, 1897/1951; Fromm, 1942; Greenfield, 2009; Marx, 1859/1989). Por ello, algunos investigadores han propuesto la necesidad de tomar en consideración la influencia de los factores macro-sociales en el estudio de los fenómenos psicológicos y recuperar así la llamada “imaginación sociológica” dentro de la psicología (Durante et al., 2013; Oishi et al., 2009). Por ejemplo, al estudiar las causas de la violencia, un factor proximal tradicionalmente estudiado desde la psicología ha sido cómo las interacciones sociales cotidianas favorecen el aprendizaje social (Bandura, 2001), mientras que usando una “imaginación sociológica” se acentuaría el papel de factores distales como vivir en áreas excluidas y marginadas

socioeconómicamente (López-Santiago, Hernández-Juárez y León-Merino, 2017). Así, algunas perspectivas dentro de la psicología social han surgido con la intención de aglutinar y dotar de un marco teórico aquellas investigaciones que abordan la relación entre los procesos psicológicos y los macro-sociales.

Una de las perspectivas que han intentado aportar un marco teórico a las investigaciones que se guían por esta “imaginación sociológica” es la psicología socioecológica o ecocultural. Este enfoque acentúa el papel del entorno natural y social y su relación con los patrones psicológicos y culturales (Uskul y Oishi 2018; Oishi y Graham, 2010). El concepto de ecología social se refiere a todas las estructuras que condicionan la existencia humana: desde macro-estructuras sociales como el sistema económico, político, educativo y/o religioso, hasta otras de índole natural como el clima o la geografía (Oishi y Graham, 2010). El objetivo principal de este enfoque es, por tanto, explorar cómo estas estructuras socioecológicas y los fenómenos psicológicos y culturales se determinan mutuamente (Oishi, 2014). Una de las diferencias fundamentales que aporta este enfoque con respecto a otros similares —i.e., psicología ecológica (Barker, 1968), psicología ambiental (Craik, 1973; Stokols, 1978), y psicología comunitaria (Kelly, 1971; Reppucci, Woolard y Fried, 1999)— es que junto con la metodología observacional y de encuesta, también utilizado por estos otros enfoques, incorpora el método experimental para tratar de establecer relaciones causales entre las variables (Oishi, 2014). De esta manera, desde este determinismo recíproco entre los factores macro-sociales y psicológicos/culturales se destaca la capacidad de adaptación de los individuos a su ambiente ecológico y social (i.e., cómo los factores macro-sociales afectan a las variables psicológicas), así como la capacidad de modificación o elección del entorno por parte de los individuos (i.e., cómo

las características psicológicas condicionan también los factores macro-sociales, Oishi, 2014).

En el presente capítulo nos centraremos particularmente en describir cómo una variable macro-social, como es la desigualdad económica, podría fomentar dinámicas culturales individualistas o colectivistas. Para ello, en primer lugar delimitaremos primero el concepto de desigualdad económica, su evolución y sus consecuencias y luego el concepto de individualismo-colectivismo. Posteriormente plantaremos brevemente la perspectiva ontológica subyacente a la relación entre los factores económicos y sus posibles consecuencias psicológicas y culturales —i.e. materialismo histórico e interaccionismo simbólico—. Y, finalmente, trataremos los posibles mecanismos explicativos que podrían relacionar las diferentes actividades económicas, centrándonos en concreto en la desigualdad, y las dinámicas culturales individualistas-colectivistas.

### **Desigualdad económica**

Actualmente debemos hacer frente a importantes retos que son cruciales para nuestro futuro, y la creciente desigualdad en la distribución de recursos tiene un papel central en el afrontamiento de estos desafíos. Según el foro económico mundial, la desigualdad de recursos es percibida como el elemento de la realidad social que mayor impacto tendrá en el desarrollo global de los próximos 10 años (World Economic Forum, 2017). De hecho desde el 2012 al 2014 fue considerado el riesgo global más importante a afrontar no solo por los problemas que se pueden derivar de ella (p.ej., pobreza extrema) sino por ser considerado un elemento central a la hora de abordar otros retos globales (p.ej., inestabilidad social, devaluación democrática, World Economic Forum, 2017).

Con *desigualdad económica* nos referimos a la condición por la cual los individuos de una determinada sociedad tienen un acceso desigual a los recursos que dicha sociedad valora (Kerbo, 2011). Esta realidad social se asienta en un concepto más básico, la *diferenciación social*. Ésta se da cuando distintos individuos tienen diferentes cualidades y/o roles sociales. Cuando la diferenciación social se asocia con la evaluación jerarquizada de dichas cualidades o roles, y éstos vienen recompensados con más o menos recursos económicos, es cuando surge la desigualdad económica (Kerbo, 2011). Esta desigualdad económica puede venir determinada por la desigualdad de ingresos —i.e., dinero que se recibe periódicamente a cambio de un trabajo—, o por la desigualdad de riqueza —i.e., bienes acumulados en forma de propiedades, bonos o acciones de los que se puede obtener beneficio económico (Kerbo, 2011). A pesar de tener presente esta distinción entre renta y riqueza, no entraremos en controversias de carácter económico, por lo que utilizaremos el término *desigualdad económica*, o más brevemente *desigualdad*, para referirnos a la distribución desigual de recursos, independientemente de si éstos proceden de las rentas o la riqueza.

### **Evolución de la desigualdad económica**

Durante la mayor parte de la historia de la humanidad las sociedades han sido igualitarias (Flannery y Marcus, 2012). A lo largo de la edad de piedra (2.500.000 a.c. – 3.000 a.c.) el ser humano sobrevivía cazando y recolectando los recursos necesarios para subsistir. A pesar de que existía una distribución desigual de los recursos en función de la diferenciación social, ésta era extremadamente baja dado que se reducía a los recursos perecederos provenientes de la caza y la recolección (Kohler et al., 2017). Sin embargo, dos grandes revoluciones en las formas de producción y

obtención de recursos aumentaron drásticamente los excedentes, lo que fue acompañado de un aumento exponencial de la desigualdad: la aparición de la agricultura y la ganadería a finales de la edad de piedra (i.e. Neolítico, 5.000-3.000 a.c., Kohler et al., 2017); y la revolución industrial junto con la lógica colonial de saqueo masivo de los recursos naturales de América y África en el s.XVI, (Piketty, 2014).

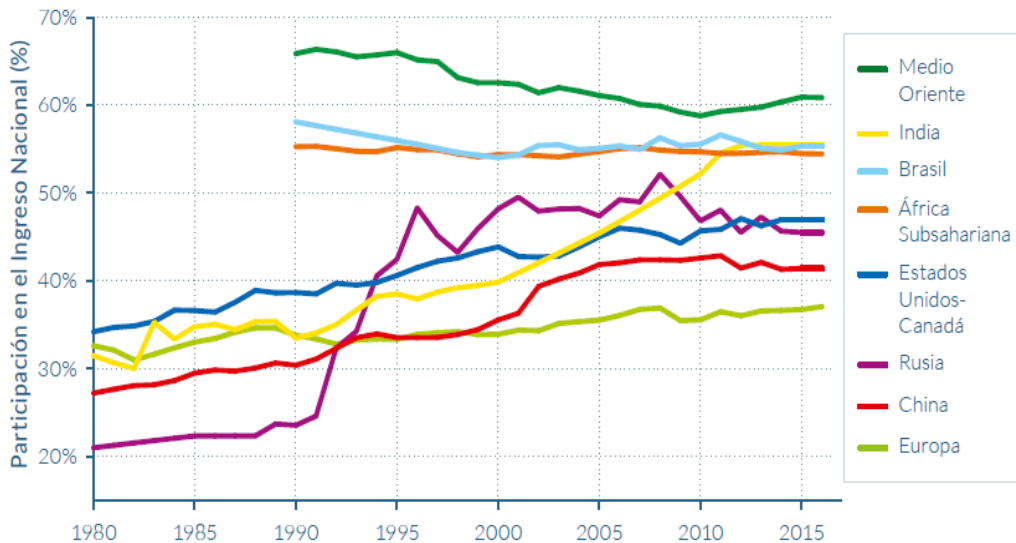
Los niveles extremos de desigualdad económica resultantes de la revolución industrial descendieron drásticamente a principios del s. XX, principalmente como consecuencia de la destrucción masiva de recursos debido a las dos guerras mundiales y de la crisis económica de 1929 (Piketty, 2014). Durante las décadas posteriores estos bajos niveles de desigualdad se mantuvieron más o menos estables debido principalmente a unas políticas fiscales con altas tasas impositivas a los más ricos (Piketty, 2014). No es hasta la década de los ochenta cuando la creciente desregularización de los mercados propiciará un gran aumento de la desigualdad económica hasta llegar a los altos niveles en los que hoy día nos encontramos (Alvaredo, Chancel, Piketty, Saez, y Zucman, 2018; Piketty, 2014).

Una forma de analizar la evolución de la desigualdad es atendiendo a cómo ha ido variando la acumulación de riqueza de los más ricos. Como podemos apreciar en la Figura 1, la cantidad de recursos del 10% más rico se ha incrementado en prácticamente todos los países desde 1980 hasta nuestros días. Las únicas excepciones se observan en Medio Oriente, África Subsahariana y Brasil, donde no ha aumentado, aunque ya contaban con valores iniciales muy altos (i.e., en torno al 60% desde 1990 que es cuando se registraron los primeros datos). Actualmente India y Rusia encabezan los países en los que la desigualdad se ha visto incrementada. En ellos el 10% más rico han aumentado el beneficio que obtienen de los ingresos



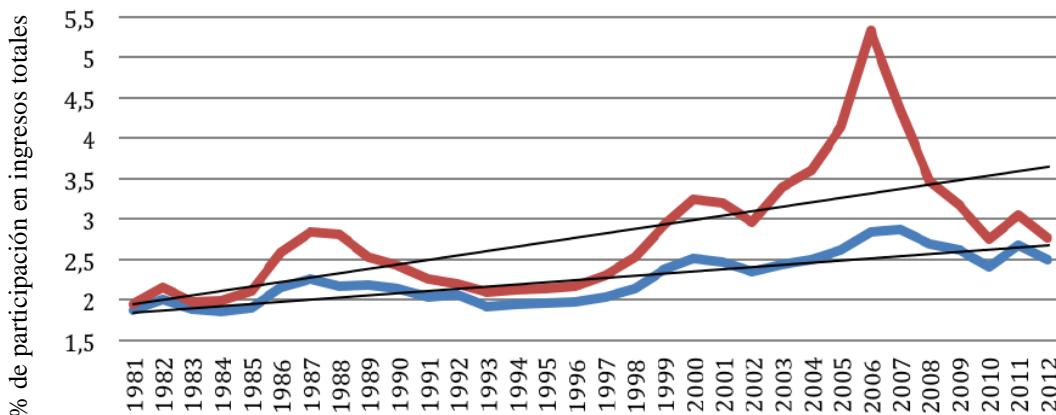
## Chapter 1

nacionales entre 1990 y 2015 en aproximadamente el 25%. Mientras que en Europa, los beneficios del 10% de la población más rica apenas ha aumentado un 5%, siendo la región en la que menos se ha acentuado el crecimiento de la desigualdad.



*Figura 1.* Evolución del porcentaje de recursos del 10% más rico en el ingreso nacional (Alvaredo et al., 2018)

Si nos centramos en el contexto español en las últimas décadas también ha existido una tendencia a la concentración de los ingresos entre los más ricos (ver Figura 2, Luque, 2015).



*Figura 2.* Evolución de la participación de los ingresos del 0,1% más rico en los ingresos totales en España. La línea roja incluye las ganancias del capital, la línea azul la excluye (Luque, 2015).

Actualmente nos encontramos en un momento en el que la desigualdad económica dentro de los países más desarrollados se encuentra en niveles similares a los que se experimentaban a principios del s. XX, el grado máximo de desigualdad alcanzado nunca (Piketty, 2014). Además, los procesos de globalización han llevado a una situación en la que la desigualdad entre las personas alcanzada a nivel mundial es extrema (Milanovic, 2016). Como comentábamos más arriba, esta situación tiene importantes implicaciones para la sociedad que condicionan la vida de las personas. En el siguiente apartado nos centraremos en los modelos que tratan de explicar las consecuencias que tiene para los individuos vivir en sociedades más o menos desiguales.

### **Consecuencias de la desigualdad económica**

La desigualdad económica configura una realidad compleja por lo que sus consecuencias son multidimensionales. Neckerman y Torche (2007) aportan una tipología especialmente útil para distinguir los diferentes tipos de consecuencias de la desigualdad económica. Estos autores

sugieren que la desigualdad tiene cuatro tipos de consecuencias: mecánicas, funcionales, relacionales, y contextuales.

Las *consecuencias mecánicas* se refieren a los efectos relacionados con la cantidad de recursos. Si la posición económica repercute en un resultado, por ejemplo, a más riqueza mejor salud, entonces un aumento de la desigualdad generará como resultado un aumento en las diferencias de salud. Sin embargo, si se diera el caso, como es probable que ocurra, que un ligero aumento en la riqueza de los más pobres repercutiera en un mejoramiento de su salud mucho más acentuado que lo que empeoraría una ligera disminución en la riqueza de los más ricos, estaríamos hablando de una *consecuencia funcional*, ya que la reducción de la desigualdad tendría un mayor efecto sobre los más pobres, esto es, sobre ellos sería más eficaz.

Por otro lado, podría ocurrir que, independientemente de la cantidad de recursos de los que los individuos dispongan, la posición en la parte baja o alta de la jerarquía económica fuera el factor que determinara las consecuencias de la desigualdad económica. Este sería el caso, por ejemplo, de las consecuencias asociadas a la identificación con una determinada clase social, independientemente de la distancia que existiera entre las distintas clases. En este caso sería la posición relativa en la jerarquía, y no el aumento o la disminución de la desigualdad económica, lo que tendría efectos. Este tipo de efectos se conocen como *consecuencias relacionales*.

Finalmente, el grado de desigualdad económica tiene un impacto contextual en la vida de las personas. Vivir en contextos más o menos igualitarios en los que todos tienen más o menos los mismos recursos o recursos marcadamente diferentes condiciona la vida de toda la sociedad. Por tanto, según este tipo de efectos, independientemente de la posición

que ocupan los individuos en la jerarquía en función de sus recursos, el grado de desigualdad les afectará a todos. Este tipo de consecuencias de la desigualdad se conoce como efectos *contextuales* o *de externalidad*.

Desde la psicología y la sociología se ha profundizado principalmente en los efectos mecánicos, funcionales y relacionales de la desigualdad (p.ej., Adler et al., 1994; Kraus, Piff, Mendoza-Denton, Rheinschmidt, y Keltner, 2012). Sin embargo, los efectos contextuales, mayormente abordados desde la epidemiología (Wilkinson y Pickett, 2009), han recibido menos atención. Con la intención de cubrir esta laguna, y caracterizar psicosocialmente los efectos contextuales de la desigualdad, a continuación nos centraremos en ellos.

### ***Consecuencias contextuales de la desigualdad económica.***

El grado de desigualdad económica de una sociedad parece guardar relación con la aparición de una amplia variedad de problemáticas sociales (Wilkinson y Pickett, 2009), siempre y cuando dicha sociedad tenga un nivel mínimo de riqueza que permita cubrir las necesidades básicas de su población. Si estas necesidades básicas están cubiertas, las personas que viven en países más desiguales tienden a tener peor salud: mayores tasas de incidencia de enfermedades físicas —i.e. enfermedades del corazón, afecciones respiratorias y diabetes—, psicológicas —i.e. depresión y ansiedad— y nutricionales —i.e. obesidad (Chiavegatto Filho, Kawachi, Wang, Viana y Andrade, 2013; Lynch et al., 2004; Pickett y Wilkinson, 2015; Pickett, Kelly, Brunner, Lobstein y Wilkinson, 2005).

Los países más desiguales también experimentan una mayor criminalidad. Tienen mayores tasas tanto de crímenes violentos —i.e., homicidios— como de crímenes hacia la propiedad—i.e., robos (Hsieh y Pugh, 1993; Rufrancos, Power, Pickett y Wilkinson, 2013). Asimismo, los países más desiguales presentan un mayor porcentaje de embarazos no

deseados en la adolescencia, así como un peor rendimiento educativo (Wilkinson y Pickett, 2009). Dada la cantidad de problemáticas asociadas a la desigualdad económica, no es de extrañar que las sociedades más desiguales tengan una mayor tasa de mortalidad infantil y una menor esperanza de vida (Wilkinson y Pickett, 2009). Además, tal y como se señaló anteriormente, hay una devaluación democrática asociada a la desigualdad. En los países más desiguales se apoya menos la democracia, hay un menor interés político y se participa menos en las elecciones (Andersen, 2012; Solt, 2008). Finalmente, también existe evidencia de que los países más desiguales tienen un mayor impacto medioambiental manifestado en el número de especies amenazadas, en la pérdida de biodiversidad, y en la generación de desperdicios (Islam, 2015).

Los resultados expuestos anteriormente son de tipo correlacional por lo que no podemos establecer relaciones causales directas. Sin embargo, el conjunto de trabajos llevados a cabo sobre esta temática respaldan los principales criterios epistemológicos para poder establecer una relación causal indirecta: consistencia teórica, falta de explicaciones alternativas, plausibilidad biológica y temporalidad (Gordis, 2013). Así, Pickett y Wilkinson (2015) muestran cómo la asociación entre la desigualdad y las distintas problemáticas sociales (1) se ha replicado en diferentes entornos geográficos, en momentos distintos y empleando múltiples metodologías —i.e. consistencia teórica; (2) utilizando una amplia variedad de variables control en los análisis, lo que sugiere que esta asociación no se debe a efectos confundidos—i.e. falta de explicaciones alternativas; (3) es consistente con la literatura relacionada con la biología del estrés crónico, la neurociencia de la sensibilidad social y la teoría de la evolución—i.e. plausible biológicamente (4) los diseños de series temporales sugieren que la desigualdad precede a las problemáticas sociales mencionadas —i.e.

plausible temporalmente. Por tanto, podemos concluir que contamos con cierta evidencia causal indirecta que sugiere que la desigualdad es la causa y los problemas citados algunas de sus consecuencias (Pickett y Wilkinson, 2015).

Sin embargo, todavía no queda claro por qué la desigualdad puede causar este tipo de problemáticas. En los últimos años se han desarrollado dos marcos teóricos que tratan de explicar las consecuencias contextuales de la desigualdad económica: La perspectiva neo-material y la psicosocial.

Desde la *perspectiva neo-materialista* (o *teoría de los recursos*) las consecuencias indeseables de la desigualdad se deben a las condiciones materiales asociadas a ella (Lynch et al., 2004; Lynch, Smith, Kaplan y House, 2000). Desde este enfoque la desigualdad se asocia con una menor disponibilidad de recursos tanto a nivel social como individual lo que genera los resultados expuestos anteriormente. Bajo esta perspectiva, la desigualdad económica no es más que el conglomerado de las condiciones materiales que se pueden observar en una sociedad como consecuencia de los procesos históricos, políticos y económicos que han tenido lugar en ella. Todos estos procesos configuran una organización social particular que afecta a la disponibilidad de recursos sociales que se manifiesta a su vez en las infraestructuras públicas tales como la salud, la educación, el transporte, las políticas medioambientales y urbanísticas, etc.; mientras que la disponibilidad de recursos individuales se ve condicionada por las políticas laborales, tasas fiscales, políticas redistributivas, etc. Por tanto, la desigualdad económica no es necesariamente la causa, sino simplemente sería una manifestación del conjunto de condiciones materiales de las sociedades contemporáneas. Existe evidencia empírica que sugiere que efectivamente el grado de desigualdad está asociado con múltiples aspectos de la infraestructura de una sociedad que a su vez podrían afectar

a los resultados anteriormente expuestos. Por ejemplo, en Estados Unidos, los estados más desiguales tienden a tener mayores tasas de desempleo y menor gasto médico y educativo (Kaplan, Pamuk, Lynch, Cohen, y Balfour, 1996). En definitiva, desde esta perspectiva, la desigualdad no sería el problema en sí mismo sino las malas condiciones materiales asociadas a ella.

Por otro lado, la *perspectiva psicosocial* defiende que la desigualdad tiene efectos psicosociales y comunitarios reduciendo la cohesión social y aumentando la distancia psicológica entre los individuos, lo que generaría un entorno propicio para el desarrollo de diferentes problemáticas sociales (Van de Werfhorst y Salverda, 2012; Wilkinson y Pickett, 2009, 2017). Algunos estudios sugieren que efectivamente la desigualdad económica se relaciona negativamente con indicadores de cohesión social, y éstos a su vez explican las diferentes problemáticas sociales (p.ej., Elgar y Aitken, 2011; Uslaner y Brown, 2005).

Aunque como se puede entrever la perspectiva neo-materialista y la psicosocial ponen el acento en distintas consecuencias de la desigualdad económica, no son necesariamente contradictorias. En efecto, la desigualdad podría estar relacionada tanto con los recursos disponibles (Lynch et al., 2000) como con los aspectos psicosociales, y ambos efectos permitirían explicar parte de los problemas asociados con la desigualdad (Lancee y Van de Werfhorst, 2012). Sin embargo, la evidencia empírica sugiere que la perspectiva psicosocial tiene una mayor capacidad explicativa que la neo-material. Por ejemplo, Elgar y Aitken, (2011) encontraron que en los países más desiguales la gente confiaba menos en los demás y eso permitía explicar que hubiera mayor número de homicidios; por su parte, el gasto público en salud y educación no se relacionaba ni con el nivel de desigualdad ni con el número de homicidios, como se defendería

desde la perspectiva neo-materialista. Además, como exponíamos más arriba, la relación entre la desigualdad económica y las distintas problemáticas sociales se mantienen al incluir como variables control las condiciones materiales, lo que permitiría desechar explicaciones alternativas (Pickett y Wilkinson, 2015).

Otro elemento importante de la perspectiva psicosocial es que al evidenciar el papel de los elementos psicosociales en la relación entre la desigualdad y las distintas problemáticas aparejadas a ella, no solo señala los posibles mecanismos explicativos, sino que también pone el acento en cómo la desigualdad nos afecta psicológica y socialmente. Por tanto, esta perspectiva se alinea con el marco teórico más general planteado por la perspectiva socioecológica al proponer que el grado de desigualdad condiciona las relaciones sociales y esto a su vez tiene distintas consecuencias psicológicas.

Siguiendo la argumentación de Wilkinson y Pickett (2009, 2017) la desigualdad económica contribuye a definir la estructura social en la que los individuos tendrán que relacionarse. En concreto, las diferentes estructuras sociales derivadas del grado de desigualdad ofrecen un entorno que facilitará el desarrollo de aquellas estrategias sociales y formas de relación más apropiadas para tener éxito en dicho contexto. Así, en las sociedades con una marcada desigualdad económica se fomentará la búsqueda del interés personal y la competitividad, ya que estas estrategias aumentarían las posibilidades de sobrevivir en este entorno. Por el contrario, en sociedades más igualitarias, la cooperación y compartir recursos facilitarían el éxito. En este sentido, las relaciones sociales vendrían marcadas por la reciprocidad y la confianza en los demás.

En los últimos años los resultados de numerosos estudios avalan el marco teórico de la perspectiva psicosocial sugiriendo que en contextos



más desiguales el mantenimiento y la búsqueda de estatus personal se vuelve más importante que en los más igualitarios. En efecto, Côté, House y Willer, (2015) encontraron que en los estados más desiguales de EE.UU. los más ricos se mostraron menos generosos en comparación con los más ricos de los estados más igualitarios. Este resultado sugiere que en los contextos más desiguales los más ricos están más preocupados por mantener su estatus, compartiendo menos sus recursos. Aunque el mantenimiento por el estatus es más propio de las personas con posiciones más altas en la jerarquía económica, la motivación por alcanzar una mejor posición en general puede ser extensible a todos los individuos y, por tanto, siguiendo esta perspectiva, debería verse acentuada en contextos más desiguales. En esta misma línea, Loughnan et al. (2011) encontraron que en los países más desiguales la gente tiende a exagerar sus cualidades más deseables, tratando de quedar por encima de los demás —i.e., *self-enhancement bias*. Asimismo, analizando datos de distintos países europeos, Layte y Whelan (2014) encontraron que las personas que viven en países más desiguales tienden a expresar una mayor preocupación por la posición social que ocupan en la jerarquía económica —i.e. ansiedad por el estatus. Esta exaltación del estatus en los países más desiguales impregna incluso los valores que la mayoría de los miembros de la sociedad considera más importantes. En efecto, Paskov, Gërkhani y Van de Werfhorst (2013) encontraron que las personas que viven en los países más desiguales de Europa tienden a valorar más la obtención de poder y logro en comparación con los que viven en sociedades más igualitarias.

Una consecuencia asociada a las dinámicas sociales generadas por los contextos desiguales es que las sociedades terminan estando menos cohesionadas y la distancia social entre los individuos se incrementa (Pickett y Wilkinson, 2015; Van de Werfhorst y Salverda, 2012; Wilkinson y

Pickett, 2009). Un elemento crucial que mantiene a los grupos cohesionados y facilita la cooperación es la confianza en los demás (Putnam, 1993). Existe evidencia de que las personas que viven en sociedades más desiguales confían menos en las otras personas (Elgar y Aitken, 2011; Kawachi, Kennedy, Lochner y Prothrow-Stith, 1997; Uslaner y Brown, 2005; Wilkinson y Pickett, 2009). Sin embargo, la confianza no es el único indicador que podría explicar por qué la desigualdad reduce la cohesión y aumenta la distancia social. Paskov y Dewilde (2012) analizaron la solidaridad de los europeos en términos de la disposición que mostraban para mejorar las condiciones de vida de otras personas, y encontraron que en los países más desiguales la gente tendía a mostrarse también menos solidaria. Además, Lancee y Van de Werfhorst (2012) encontraron que en los países europeos más desiguales existe una menor participación en asociaciones tales como asociación de vecinos, organizaciones caritativas, partidos políticos, asociaciones de profesionales o grupos en defensa de la paz o el medio ambiente. Dadas las repercusiones que la desigualdad tiene en las condiciones de la vida social de las personas, de Vries, Gosling, y Potter (2011) se preguntaron si estas condiciones de vida podrían consolidarse incluso en patrones de personalidad. Estos autores midieron los cinco grandes rasgos de la personalidad —i.e. extraversión, cordialidad/amabilidad, neuroticismo, responsabilidad y apertura a la experiencia— en EE.UU y analizaron su relación con el grado de desigualdad económica de la sociedad. Sus resultados mostraron que, en efecto, la desigualdad permite predecir cómo de cordiales o agradables son sus habitantes, dado que la población de los estados más desiguales tiende a mostrarse menos agradables y cordiales con los demás.

En definitiva, el enfoque psicosocial de las consecuencias contextuales de la desigualdad económica sugiere, y la evidencia empírica

así lo apoya, que la desigualdad impacta en las relaciones sociales haciendo que la gente se centre más en sí misma y se distancie de los demás (Wilkinson y Pickett, 2009, 2017). *Esto sugiere que la desigualdad económica podría estar ensalzando una cultura individualista.* En este sentido, por cultura nos referiremos a los significados compartidos en forma de creencias, normas, valores, roles y auto-conceptos más o menos estables que una sociedad adquiere y que consolida transmitiéndolos a sus descendientes (Triandis, 1995). A continuación nos centraremos particularmente en delimitar conceptualmente la dimensión cultural del individualismo-colectivismo.

### **Individualismo-colectivismo**

Son numerosos los pensadores clásicos que se han referido a la dimensión social de individualismo-colectivismo (de Tocqueville, 1835/1969; Durkheim, 1887/1984; Tönnies, 1887/1957 *organic and mechanical solidarity* y Weber, 1930, *Gemeinschaft-Gesellschaft*). Sin embargo, es a partir de los trabajos de Hofstede (1980) cuando se establece un punto de inflexión a partir del cual se incrementa considerablemente la investigación en la que se analiza esta dimensión (para más detalles de la evolución de la teoría de la dimensión individualismo-colectivismo, ver Triandis y Gelfand, 2012).

Para Hofstede (1980) las culturas individualistas son aquellas en las que los vínculos entre los individuos son laxos e intercambiables, mientras que en las culturas colectivistas las personas se integran en grupos fuertemente cohesionados desde el nacimiento. De forma parecida, para Schwartz (1990) en las sociedades individualistas las personas establecen relaciones contractuales y negociadas, con obligaciones claramente delimitadas, mientras que en las sociedades colectivistas las relaciones

sociales tienen un carácter comunitario y en ellas se establecen obligaciones recíprocas y difusas. Una definición que complementaría a las dos anteriores es la aportada por Triandis (1995), el cual pone el acento en que en las sociedades individualistas el papel de la persona individual, sus objetivos, su distintividad y su autonomía son centrales, mientras que la realidad social es algo periférico. Por el contrario, en las sociedades colectivistas las personas están fuertemente orientadas a su grupo de pertenencia compartiendo con él un destino común, por lo que los valores y los objetivos comunes se vuelven centrales y, por tanto, el individuo no es más que una pieza dentro del grupo.

Asimismo, en un intento de caracterizar psicológicamente la dimensión individualismo-colectivismo, Markus y Kitayama (1991) utilizaron el término *self-construal* para referirse a la característica del auto-concepto que viene determinada por la distancia psicológica existente entre el sí mismo y los otros, es decir, el grado en el que las personas se ven a sí mismas como independientes o conectadas con los demás. Según su propuesta, podrían desarrollarse dos tipos de *self-construal*: independiente o interdependiente. El *self-construal* independiente se caracterizaría por estar claramente delimitado, ser estable y unitario. Sin embargo el *self-construal* interdependiente no estaría tan claramente delimitado, sus características internas dependerían de la situación y de los roles sociales que la persona tenga que cumplir (Markus y Kitayama, 1991). Cabe señalar, que aunque el individualismo-colectivismo y el *self-construal* son constructos diferentes están íntimamente relacionados, al constituir el *self-construal* la dimensión psicológica de los patrones culturales individualistas-colectivistas (Markus y Kitayama, 1991; Triandis, 1995). Por tanto, en las culturas individualistas tenderían a predominar los individuos con un *self-construal* independiente, mientras que en las sociedades colectivistas sería

más habitual que la mayoría de los individuos desarrollaran un *self-construal* interdependiente (Markus y Kitayama, 1991; Triandis, 1995; ver también Oyserman, Coon y Kemmelmeier, 2002, para una crítica de esta idea). Por tanto, el individualismo-colectivismo es un concepto más amplio que implica, entre otras cosas, al *self-construal*.

Recapitulando las definiciones presentadas por los distintos autores podemos concluir que en función de la distancia predominante que se establezca entre unos individuos y otros se pueden distinguir realidades culturales y psicológicas distintas. Una cultura individualista se caracterizaría por individuos separados psicológicamente de los demás. En este tipo de sociedades, los individuos tendrían una percepción de sí mismos como independientes, mientras que en sociedades con culturas colectivistas los grupos prevalecerían sobre los individuos y estos últimos tendrían una percepción de sí mismos basada en la interdependencia con los otros.

Por tanto, utilizaremos los términos *individualismo* y *colectivismo* para referirnos a la diferencia cultural derivada de la distancia predominante entre los individuos y sus grupos de referencia en una determinada sociedad. Asimismo, emplearemos el término *self-construal independiente* y *self-construal interdependiente* para referirnos a la dimensión psicológica que surge cuando un individuo toma más o menos distancia de su grupo de referencia a la hora de construir su sentido del sí mismo respectivamente.

Una vez introducidos los conceptos de desigualdad económica e individualismo-colectivismo a continuación presentaremos la lógica subyacente que podría relacionar estos dos constructos. Para ello plantearemos brevemente la perspectiva ontológica general subyacente a esta relación —i.e. materialismo histórico e interaccionismo simbólico—, para luego pasar a exponer cómo las diferentes actividades económicas, y

específicamente la desigualdad, podrían afectar al individualismo-colectivismo.

### **Consecuencias culturales y psicológicas del entorno económico**

Karl Marx (1859/1989) fue uno de los primeros en señalar que un sistema económico puede condicionar las formas culturales de la sociedad, y por extensión, a los individuos que viven inmersos en él. Desde su concepción del materialismo histórico señaló que las diferentes formas que adquieren los distintos medios de producción (i.e., cazadores-recolectores, agricultura-ganadería, industria, etc.) determinan los sistemas políticos, religiosos y sociales, que en última instancia terminan configurando a las personas. Uno de los puntos centrales del análisis Marxista se basa en la idea de que el sistema económico de una sociedad determina las relaciones sociales que las personas establecen entre ellas. Así, el sistema económico impone unas lógicas sociales que se concretan en prácticas cotidianas cuando las personas se relacionan entre ellas llevando a consolidar patrones relacionales estables. En el caso del sistema capitalista industrial en el que Marx se centró, existen dos categorías sociales definidas por la posición que las personas ocupan en los medios de producción: trabajadores y capitalistas. Estas categorías, impuestas por el sistema económico, determinarían, según su propuesta, el tipo de interacciones sociales cotidianas que tienen lugar entre las personas.

Este punto es crucial desde un punto de vista psicológico dado que el tipo de relaciones sociales que se establecen entre las personas tienen un impacto en el desarrollo psicológico de éstas, determinando sus patrones de pensamiento, emociones y conductas (i.e. interaccionismo simbólico, Mead, 1934/2010). Esto se debe a que a través de los símbolos que intercambiamos en las interacciones sociales cotidianas las individuos

interiorizamos las actitudes de los otros, organizando así el “Mí”, o la parte del sí mismo (*self*) como objeto de conocimiento. Sin embargo, las personas no solamente somos reflejo de las actitudes sociales que interiorizamos sino que también reaccionamos ante ellas de forma activa e idiosincrática, dando lugar así al “Yo”, la parte del sí mismo (*self*) como sujeto de conocimiento. Ambas formas del *self*, el “Mí” y el “Yo”, interactúan de manera dinámica dando lugar a una constante negociación interna entre cómo los demás configuran a la persona (el “Mí”) y lo que uno mismo decide que es (el “Yo”). Así, el marco conceptual del interaccionismo simbólico sugiere que a partir de las interacciones simbólicas que se dan en el seno de las relaciones sociales se termina constituyendo parte del *self*, el “Mí”. Si bien esto no determina al *self*, dado que existe la parte activa del sí mismo (el “Yo”) que reacciona ante este “Mí”, ciertamente la condiciona. Desde esta perspectiva, la persona no precede a la sociedad sino que es producto de ella, siendo el “Mí” el reflejo psicológico de las actitudes y significados compartidos, y en este sentido, reflejo de la cultura del grupo al que se pertenece.

En resumen, la realidad económica impone unas lógicas sociales que se concretan en prácticas cotidianas, las cuales terminarán definiendo el tipo de relaciones sociales que las personas establecen entre ellas. Dentro de estas relaciones sociales tienen lugar procesos de interacción en los que se intercambian símbolos que las personas terminan interiorizando constituyendo una parte importante de su *self*, el “Mí”, el cual en la medida en la que manifiesta los significados compartidos con los demás, sería reflejo de la cultura del grupo. Llegados a este punto cabe preguntarse cómo, concretamente, las dinámicas económicas afectan al *self* y a la cultura. En el siguiente apartado expondremos cómo las distintas actividades económicas —i.e. producción, distribución y consumo— favorecen un tipo de relaciones sociales que promueven diferentes grados

de individualismo-colectivismo; centrándonos particularmente en la distribución jerárquica de recursos (i.e. la desigualdad económica).

### **Actividad económica y cultura**

Inspirados en la tradición del materialismo histórico y el interaccionismo simbólico, desde la perspectiva de la psicología socioecológica se ha explorado cómo las condiciones de vida materiales se relacionan con la realidad psicológica y cultural de los individuos (para una revisión de algunos de estos trabajos ver Uskul y Oishi, 2018). La lógica subyacente que comparten todos estos trabajos, tal y como venimos viendo, es que la actividad económica determina las relaciones sociales y éstas, a su vez, definen las características psicológicas de los miembros de la sociedad así como la cultura del grupo.

La construcción cultural de la dimensión individualismo-colectivismo es fruto de múltiples factores (p. ej. ecológicos, institucionales, demográficos, Greenfield, 2009; Triandis y Gelfand, 2012). Como principio general, aquellos factores que incentivan el establecimiento de metas comunes e incrementan la necesidad de la gente de depender unos de otros promueven el colectivismo. Por el contrario, aquellos factores que incentivan la autonomía y la separación de los individuos promueve el individualismo (Triandis y Gelfand, 2012).

Centrándonos en la realidad económica ésta puede ser dividida en tres fases diferenciadas: producción, distribución y consumo. En primer lugar, utilizando los recursos del planeta, se desarrolla un producto (producción), luego se distribuye para que el consumidor pueda tener acceso a él (distribución), y finalmente se produce la apropiación de ese producto por parte de un individuo (consumo).



La Teoría del estilo de subsistencia sugiere que el tipo de actividades económicas en la fase productiva que lleven a cabo los miembros de una sociedad para sobrevivir da lugar al establecimiento de unas dinámicas sociales que favorecerán la aparición de culturas más arraigadas en patrones individualistas o colectivistas (Berry, 1976; Nisbett, Choi, Peng, y Norenzayan, 2001). Así, las sociedades agrícolas son sociedades ligadas a la tierra, lo que hace que requieran formar asentamientos y comunidades estables. Además, dado que la tierra requiere ser cultivada en los plazos establecidos por las condiciones meteorológicas, a menudo la actividad agrícola requiere de la colaboración intensa de los distintos miembros de la comunidad. Este estilo de vida propiciaría relaciones estables, haciendo que la pertenencia grupal sea un elemento crucial en ellas. Por tanto, las actividades económicas propias de las sociedades agrícolas deberían favorecer la emergencia de una cultura más colectivista (Berry, 1976; Nisbett et al., 2001). Por el contrario, las sociedades basadas en la ganadería y el pastoreo requieren una actividad mucho más aislada, en solitario, centrada en vigilar y dirigir al ganado. Además, los pastores a menudo necesitan mover al ganado para asegurar su nutrición buscando pastos en función de la época del año en la que se encuentren. Este estilo de vida fomentaría una mayor autonomía e independencia haciendo más difícil vincularse a comunidades estables, lo que promovería el desapego del grupo, favoreciendo la aparición de una cultura más individualista (Berry, 1976; Nisbett et al., 2001). En efecto, son múltiples las investigaciones que muestran que las sociedades cuyo principal medio de subsistencia es la agricultura tienden a presentar patrones más colectivistas en comparación con las sociedades basadas en la ganadería y el pastoreo, quienes presentan tendencias más individualistas (p. ej., Berry, 1967; Edgerton, 1971; Uskul, Kitayama y Nisbett, 2008). Sin embargo, no todas las formas

de cultivo requieren el mismo grado de interdependencia, por lo que cabría pensar que no todos los agricultores desarrollan el mismo grado de colectivismo. En este sentido, Talhelm, et al. (2014) se dieron cuenta de que dos de los alimentos más extensamente cultivados del planeta, como son el arroz y el trigo, requieren diferentes grados de interdependencia debido a sus necesidades de cultivo: el arroz, necesita mucha más cantidad de agua y de trabajo colaborativo para poder ser cultivado en comparación con el trigo. Siguiendo a la hipótesis del estilo de subsistencia, Talhelm, et. al. (2014) encontraron que las personas que vivían en regiones de China en la que había un cultivo generalizado de arroz tendían a mostrar más tendencias colectivistas que quienes vivían en regiones en las provincias donde se cultivaba menos arroz y más trigo, quienes mostraban más tendencias individualistas.

Por otro lado, la fase de consumo también parece influir en las tendencias individualistas-colectivistas. Las posibilidades de consumo que una persona tiene vienen fundamentalmente determinadas por la cantidad de riqueza que posee. La riqueza es un factor económico que influye de forma crucial en el individualismo-colectivismo ya que poseer más riqueza permite a las personas ser más autónomas al no tener que depender de otros miembros para su supervivencia económica, lo que favorece su independencia. Por el contrario, poseer menos riqueza hace que las personas sean más vulnerables y necesiten en mayor medida apoyarse unos a otros para sobrevivir (Kraus, Piff, Mendoza-Denton, Rheinschmidt y Keltner, 2012; Stephens, Markus y Phillips, 2014). En definitiva, la independencia económica tiende a favorecer el individualismo, mientras que la inter-dependencia económica favorece el colectivismo (Triandis, 1994). En efecto, son múltiples las investigaciones que muestran empíricamente que una mayor riqueza incentiva el individualismo a nivel cultural y

promueve el desarrollo de un *self-construal* independiente; mientras que la pobreza fomenta dinámicas colectivistas y el desarrollo de un *self-construal* interdependiente (Kraus, Park y Tan, 2017; Kraus et al., 2012; Manstead, 2018; Ogihara, 2018; Santos, Varnum y Grossmann, 2017; Stephens et al., 2014).

En definitiva, los modos de producción y las posibilidades de consumo fomentan dinámicas sociales que facilitan la aparición de dinámicas individualistas-colectivistas. La evidencia empírica de ambas formas de actividad económica parecen respaldar el principio general que sugiere que los factores socioecológicos, y particularmente los factores económicos que ensalzan la autonomía y la independencia favorecen el individualismo, mientras que aquellos que fomentan la coordinación y las relaciones de interdependencia favorecen el colectivismo. Sin embargo, hasta donde nosotros conocemos, son escasas las investigaciones que han tratado de abordar la pregunta de si la distribución de recursos desigual condiciona las dinámicas individualistas-colectivistas. Este será el tema al que se dedique el siguiente apartado.

### **Efectos de la distribución de recursos sobre el individualismo**

Dado que la forma de distribución vertical en función de la capacidad económica de los individuos y los grupos parece tener una mayor influencia como antecedente del individualismo-colectivismo que la distribución meramente geográfica de los productos, será en ella en la que nos centraremos; refiriéndonos a esta distribución de recursos vertical como *desigualdad económica* o más brevemente *desigualdad* como en apartados anteriores.

Siguiendo el enfoque psicosocial de las consecuencias contextuales de la desigualdad económica sugerido por Wilkinson y Pickett (2009, 2017),

el grado de desigualdad que caracterice a un contexto social facilitará el desarrollo de estrategias sociales y formas de relación más apropiadas para tener éxito en dicho contexto. Así, las sociedades muy desiguales promoverían una estructura social en la que el acceso a los recursos vendría determinado fundamentalmente por la posición que se ocupa en la jerarquía. Esta situación favorecería el desarrollo de dinámicas sociales a través de las cuales los individuos conseguirían mantener e incluso maximizar su posición en la jerarquía. La utilización de patrones de relación competitivos y la búsqueda del interés personal serían más adecuados en estos contextos ya que facilitaría la adaptación de los individuos a este tipo de sociedades en comparación con sociedades más igualitarias. Asimismo, las relaciones sociales vendrían marcadas por las posiciones jerárquicas que los demás tienen con respecto a uno mismo.

Por el contrario, en las sociedades más igualitarias la posición en la jerarquía sería mucho menos relevante. En este tipo de contextos la fuente de recursos no vendría dada por la posición en la jerarquía sino por la calidad de las relaciones sociales que se establezcan dada la interdependencia entre los distintos miembros. Esto promovería un sistema de cuidado de las relaciones sociales que fomentaría la armonía, lo que permitiría a los individuos mantener el grupo cohesionado, ya que de ello dependería la obtención de recursos. Estrategias cooperativas y compartir recursos predeciría una mejor adaptación a este tipo de contextos. En este sentido, las relaciones sociales vendrían marcadas por la reciprocidad y la confianza en los demás.

*Por tanto, la alta desigualdad económica, al promover la búsqueda del interés personal y la distancia entre los individuos, podría estar ensalzando el individualismo; mientras que la baja desigualdad, al promover*

*la calidad de las relaciones sociales y la cohesión del grupo, fomentaría una cultura más colectivista.*

En efecto, la desigualdad económica parece relacionarse positivamente con patrones sociales y psicológicos relativamente estables, como la importancia atribuida a los valores de poder y logro (Paskov et al., 2013), una personalidad menos agradable (de Vries et al., 2011) o una mayor tendencia al auto-ensalzamiento (Loughnan et al., 2011) observadas en los países más desiguales. Estas características asociadas al grado de desigualdad son a su vez compartidas por las sociedades individualistas. En concreto, el sesgo de auto-ensalzamiento se da de forma más acentuada en sociedades individualistas como Estados Unidos, mientras que no es tan predominante en países más colectivistas como Japón (Heine, Lehman, Markus y Kitayama, 1999). De forma similar, el poder y el logro, junto con el hedonismo, la auto-dirección y la estimulación suelen ser más valorados en sociedades individualistas; mientras que en las sociedades más colectivistas se tiende a valorar más la seguridad, la tradición, la conformidad y la prosocialidad (Schwartz, 1990).

Asimismo, es interesante hacer notar que la historia del individualismo-colectivismo sigue una evolución parecida a la de la desigualdad. A lo largo de la historia de la humanidad los seres humanos hemos estado integrados en nuestros grupos de referencia (Foucault, 1968; Fromm, 1942; Greenfield, 2009), siendo por tanto fundamentalmente colectivistas. Si bien es cierto que algunas formas de subsistencia como el pastoreo pueden haber ensalzado el individualismo a lo largo de la historia, las formas de vida colectivistas han sido predominantes para la humanidad. La aparición del individuo como entidad emancipada del grupo y su ensalzamiento (i.e., el individualismo) es un acontecimiento bastante reciente en la historia de la humanidad (Foucault, 1968; Fromm, 1942;

Greenfield, 2009). Probablemente el desarrollo del individualismo se debió a múltiples factores. El aumento de la riqueza y el cambio en las formas de producción, junto con el desarrollo tecnológico y la proliferación de las ciudades parecen haber contribuido a su desarrollo (Greenfield, 2009). Pero también el aumento de la desigualdad podría haber fomentado el individualismo. Si bien es cierto que la evidencia es limitada, algunos ejemplos históricos e investigaciones desarrolladas con modelos matemáticos sugieren que un aumento de la desigualdad económica favorece la aparición de dinámicas individualistas (Ahuja, Schaar, Zame, van der Schaar y Zame, 2015; Ahuja, Zhang y Van Der Schaar, 2014). Si nos centramos en la historia reciente parece que de forma paralela al aumento de la desigualdad económica de las últimas décadas (Alvaredo et al., 2018) se ha venido dando un aumento paulatino de las prácticas y los valores individualistas a lo largo del planeta (Santos et al., 2017).

Por tanto, siguiendo el enfoque psicosocial de las consecuencias contextuales de la desigualdad económica, la evidencia empírica que sugiere que la desigualdad se relaciona con características asociadas a patrones culturales individualistas, y el desarrollo paralelo que se ha venido dando entre la desigualdad y el individualismo, todo apunta a que la desigualdad económica podría estar fomentando el individualismo. Sin embargo, la evidencia empírica que ha abordado directamente esta cuestión no ha sido del todo consistente con esta predicción mostrando que los países más desiguales tienden a ser más colectivistas. El propio Hofstede (1980), al analizar en sus investigaciones los datos que obtuvo de los trabajadores de IBM de las distintos países encontró que los países más desiguales tendían a puntuar más bajo en individualismo. Análisis similares utilizando otros índices de individualismo-colectivismo como la escala de valores de Schwartz (1992) y de Smith, Dugan y Trompenaars, (1996) han

encontrado resultados similares (Basabe y Ros, 2005). En la presente tesis doctoral abordaremos esta cuestión tratando de aportar evidencia empírica que ayude a aclarar la relación que puede existir entre la desigualdad económica y el individualismo-colectivismo.

### **Conclusión**

A lo largo de esta introducción hemos querido plantear el marco general del enfoque de la psicología socioecológica, el cual acentúa la necesidad de explorar las posibles relaciones entre los factores macro-sociales y psicológicos/culturales. Nos hemos centrado particularmente en los factores económicos trayendo a colación los planteamientos del materialismo histórico y del interaccionismo simbólico cuya combinación nos permite plantear cómo a través de la forma que adquieren las relaciones sociales condicionadas por la realidad económica se caracteriza la psicología de las personas y la cultura de los grupos. En particular nos hemos centrado en la realidad de la desigualdad económica por ser uno de los principales problemas a abordar en nuestra sociedad y nos preguntamos cómo los altos niveles de desigualdad podrían estar fomentando una cultura individualista. Esta relación parece estar en sintonía con la lógica subyacente de cómo otras realidades económicas como son la producción y el consumo afectan a la dimensión del individualismo-colectivismo. Sin embargo, la evidencia empírica parece contradecir esta idea. Con este trabajo de tesis pretendemos aportar cierta claridad en la relación que pudiera existir entre la desigualdad económica y las dinámicas individualistas-colectivistas.

## **CHAPTER 2**

### Motivación y Objetivos de la Investigación

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La presente tesis doctoral tiene como objetivo principal responder a la pregunta: ¿La desigualdad económica fomenta dinámicas culturales individualistas-colectivistas? Existen argumentos para hipotetizar que estos dos constructos están relacionados, sin embargo la evidencia apunta a que la desigualdad económica podría relacionarse tanto con el individualismo como con el colectivismo.

En primer lugar, históricamente la desigualdad económica ha evolucionado de forma paralela al individualismo: a medida que ha ido aumentando la desigualdad se han incrementado las dinámicas individualistas en la sociedad y existe evidencia de que estas dos tendencias están relacionadas (Ahuja, Schaar y Zame, 2016; Piketty, 2014; Santos, Varnum y Grossmann, 2017). En segundo lugar, investigaciones previas sugieren que la desigualdad económica condiciona las relaciones sociales haciendo que las personas se distancien más unos de otros (Wilkinson y Pickett, 2009; 2017). Este aumento de la distancia social podría estar reflejando un patrón individualista. Estos dos argumentos sugieren que la desigualdad económica estaría promoviendo dinámicas individualistas. Sin embargo, cuando se han tratado de relacionar los índices de desigualdad con los de individualismo-colectivismo la evidencia empírica sugiere que los países más desiguales son más colectivistas (Basabe y Ros, 2005; Hofstede, 1980). La presente tesis trata de arrojar luz ante esta aparente contradicción.

Para ello, nos gustaría señalar algunas consideraciones a tener en cuenta sobre los resultados empíricos que sugieren que la desigualdad económica se relaciona con el colectivismo. En las próximas líneas intentaremos delimitarlos más claramente.

(1) El enfoque psicosocial de las consecuencias de la desigualdad sugiere que dada la drástica diferencia entre las estrategias más

adaptativas en los contextos con mayor y menor desigualdad los individuos necesitan adecuar sus estrategias sociales al grado de desigualdad en el que vivan (Wilkinson y Pickett, 2017). Por lo que es crucial para su supervivencia que sean capaces de percibir adecuadamente el grado de desigualdad que existe en su entorno ya que si emplean estrategias cooperativas y se muestran generosos en contextos altamente desiguales es probable que los demás tiendan a aprovecharse de ellos explotándolos. Por el contrario, si emplean estrategias competitivas y egoístas en contextos igualitarios es probable que el resto de la comunidad acabe excluyéndolos. Mientras que si ajustan sus estrategias sociales al grado de desigualdad éstas probablemente se vean recompensadas (Wilkinson y Pickett, 2017). En efecto, la percepción de la desigualdad parece ser más importante que la desigualdad en sí misma como predictora del comportamiento de las personas. En esta línea, Nishi, Shirado, Rand y Christakis (2015) llevaron a cabo un experimento en el que los participantes se les asignaba una cantidad determinada de recursos y estos tenían que decidir cuántos de estos recursos darían a un fondo común. Previamente se les explicaba que la suma de la contribución de todos los participantes a este fondo común se multiplicaría por dos y se volvería a dividir entre todos ellos a partes iguales—i.e. juego de los bienes comunes. Por tanto, la mejor manera de duplicar sus ingresos personales sería que todos los participantes contribuyeran con todos sus recursos. La dificultad de la decisión se encuentra en que los participantes no sabían qué harían los demás. Si ellos contribuyen con todos sus recursos y los demás no contribuyen con nada solo recuperarían una pequeña parte de lo invertido. Los resultados mostraron que las personas asignadas a un contexto de mayor desigualdad tendían a contribuir menos a ese fondo común, pero sólo si percibían la desigualdad del contexto al que habían sido asignadas. Si la desigualdad

era invisible para los participantes, esta no afectaba a sus decisiones. Por tanto, a pesar de la importancia que parece tener la percepción de la desigualdad a nivel evolutivo, en el contexto de las sociedades actuales las personas no parecen ser capaces de estimar correctamente el grado de desigualdad de la sociedad, siendo este condicionado por múltiples factores tales como la ideología o la clase social a la que pertenecen (Castillo, 2011; Norton y Ariely, 2011; Rodríguez-Bailon, Bratanova, Willis, Lopez-Rodríguez, Sturrock y Loughnan, 2017). Por tanto, las discrepancias que pueden existir entre la desigualdad objetiva y la percibida podrían ayudar a explicar estos resultados aparentemente contradictorios (para un argumento similar en relación a las consecuencias de la desigualdad sobre el bienestar ver Buttrick et al., 2017). Este es uno de los motivos por el que algunos autores recomiendan centrar la investigación sobre las consecuencias psicológicas de la desigualdad económica percibida en lugar de la objetiva (Gimpelson y Treisman, 2018).

(2) Un aspecto metodológico a tener en cuenta de los estudios que han explorado empíricamente la relación entre la desigualdad y el individualismo-colectivismo es que consideran esta última variable a nivel nacional— i.e. el promedio de los valores individuales de todos los que residen en un mismo país (Basabe y Ros, 2005; Hofstede, 1980). Estos análisis son particularmente útiles para explorar cómo los países más desiguales tienden a puntuar, en promedio, más alto en colectivismo. Sin embargo, el no tener en cuenta la estructura multinivel de los datos (i.e. el grado de desigualdad es una característica de la sociedad, mientras que las puntuaciones en individualismo-colectivismo son respuestas de personas) podría estar oscureciendo la relación entre la desigualdad y las puntuaciones del individualismo-colectivismo a nivel individual. Esto además tiene una implicación añadida y es que no se está teniendo en cuenta

algunos elementos coexistentes a la desigualdad como pueden ser los niveles de pobreza. Esto es importante porque diversas investigaciones han mostrado que la pobreza incentiva el colectivismo (Kraus, Piff, Mendoza-Denton, Rheinschmidt y Keltner, 2012; Ogihara, 2018; Stephens, Markus y Townsend, 2007). Una característica intrínseca de los países más desiguales es que suele haber una mayor cantidad de personas que viven en condiciones de pobreza (World Economic Forum, 2017). Dado que la pobreza incentiva el colectivismo es esperable que haya más personas que sigan patrones colectivistas en las sociedades más desiguales. Sin embargo, esto sería una consecuencia de la pobreza, no de la desigualdad tal y como la estamos entendido en sus efectos contextuales. Si bien es cierto que las consecuencias de la pobreza pueden ser consideradas como consecuencias particulares de la desigualdad, estas deben ser consideradas como *consecuencias mecánicas* (siguiendo la terminología de Neckerman y Torche, 2007), pero no *contextuales*, que es en el tipo de consecuencias en las que se basa el enfoque psicosocial de la desigualdad. Por tanto, la evidencia empírica que sugiere que una mayor desigualdad se relaciona con un mayor colectivismo no nos permite discernir si esta es una relación mecánica y/o contextual al no tener en cuenta la estructura multinivel de los datos.

Con el objetivo de solventar la primera dificultad en la presente tesis vamos a considerar la percepción de desigualdad, en lugar de la desigualdad objetiva, como nuestra variable independiente principal. En cuanto al segundo punto, la estrategia de los diseños que emplearemos en el presente trabajo se ha planteado para obtener datos exclusivamente a nivel individual. Esto nos permitirá aislar los efectos individuales de los grupales y tener controladas posibles variables confundidas como el nivel de pobreza. En concreto, plantearemos una serie de diseños

experimentales que serán complementados con diversos diseños correlacionales con el objetivo de ampliar nuestra validez ecológica. Para poder manipular la desigualdad contextualmente, hemos adaptado el paradigma experimental de Bimboola que originalmente emplearon Jetten, Mols y Postmes (2015) para manipular la posición de los participantes en la jerarquía social. Este paradigma experimental consiste en pedir a los participantes que se imaginen viviendo en una nueva sociedad. Dado que desde el enfoque socioecológico (Uskul y Oishi, 2018) y la perspectiva psicosocial de la desigualdad (Wilkinson y Pickett, 2017) se sugiere que la desigualdad económica afectará a las personas porque éstas activamente tratarán de adaptarse a esa desigualdad, poner a los participantes en un contexto controlado de laboratorio en el que deben imaginarse viviendo en una nueva sociedad y cómo se adaptarían a ella, nos permitirá explorar cuáles podrían ser los procesos involucrados en dichas dinámicas de adaptación. En concreto, nos preguntamos:

- ¿Afecta el grado de desigualdad económica a la percepción del clima normativo de un determinado contexto social?
- ¿Influye el grado de desigualdad económica percibida sobre las expectativas que las personas tienen sobre sí mismas de cómo serían y se comportarían en un nuevo contexto social?
- ¿Condiciona la desigualdad económica percibida la imagen que las personas tienen de sí mismas?

Dado que el individualismo-colectivismo puede tomar distintas manifestaciones tales como normas, valores y *self-construal* (Triandis, 1995) los capítulos empíricos de la presente tesis tratarán de explorar diferenciadamente cómo la desigualdad económica afecta a las normas (Capítulo 3), los valores (Capítulo 4) y el *self-construal* (Capítulos 5 y 6).

Además, teniendo en cuenta que existen distintos tipos de normas (Triandis, 1995), valores (Schwartz, 1990) y características del *self-construal* (Vignoles et al., 2016) que pueden diferenciarse dentro de la dimensión individualista-colectivista, exploraremos cómo la desigualdad económica afecta a cada una de ellas por separado.

Por tanto, aplicando las tres preguntas anteriormente señaladas a nuestra pregunta general de investigación sobre la relación entre la desigualdad económica y el individualismo-colectivismo, las preguntas principales a tratar de responder en la presente tesis son:

1. ¿Afecta el grado de desigualdad económica a la percepción del clima normativo individualista-colectivista?
2. ¿Influye el grado de desigualdad económica percibida sobre las expectativas que las personas tienen sobre sus valores, *self-construal* y conductas individualistas-colectivistas?
3. ¿Condiciona la desigualdad económica el *self-construal* de las personas?

Con el objetivo de responder a estas tres preguntas llevamos a cabo cuatro series de estudios.

En el Capítulo 3, en la primera serie de experimentos, exploramos si los contextos de alta (vs. baja) desigualdad llevan a la gente a inferir normas sociales más individualistas. En concreto exploramos si cuando existe más (vs. menos) desigualdad los participantes tienden a inferir si la mayoría de la gente en dicho contexto es independiente (vs. interdependiente), guía su conducta por sus necesidades (vs. normas del grupo), establecen principalmente relaciones de intercambio (vs. comunitarias) y buscan conseguir sus objetivos personales (vs. grupales). Además exploramos si a partir del grado de desigualdad económica podrían ser inferidas otras

características sociales como el clima competitivo y cooperativo de dicho contexto. Finalmente, tratamos de dar un paso más indagando si el grado de desigualdad podría afectar incluso a nivel conductual las tendencias individualista o colectivistas de los participantes en una tarea de reparto de recursos.

En el capítulo 4, en la segunda serie de experimentos, exploramos si los contextos de alta (vs. baja) desigualdad llevan a la gente a inferir que los valores individualistas (vs. colectivistas) son más normativos, así como a esperar guiar su comportamiento por dichos valores. En concreto nos centramos en los valores de auto-ensalzamiento (poder y logro), característicos de las sociedades individualistas, y en los valores de auto-transcendencia (universalismo y benevolencia), característicos de las sociedades colectivistas (Schwartz, 1990).

En la tercera y cuarta serie de experimentos incluidos en los capítulos 5 y 6, indagamos la relación entre el grado de desigualdad económica percibida y el *self-construal*. Por un lado, exploramos si las personas que tienden a percibir más desigualdad económica a su alrededor también tienden a auto-definirse como más independientes y menos interdependientes. Asimismo, sondeamos cómo se auto-definirían si fuesen a vivir a una sociedad más (vs. menos) desigual. En estas series de experimentos también investigamos si la desigualdad percibida podría afectar a los patrones cognitivos de la memoria selectiva. En concreto, indagamos si un contexto de mayor (vs. menor) desigualdad podría facilitar que se recordara mejor eventos individuales (vs. relacionales y grupales). Además, dado que recientemente se ha desglosado el concepto de *self-construal* en distintas dimensiones (Vignoles et al., 2016) en el capítulo 6 exploramos sobre qué dimensiones concretamente estaría incidiendo la desigualdad económica. Para ello, investigamos cómo se relaciona la



imagen que tienen de sí mismas las personas a lo largo de las distintas dimensiones con la percepción de la desigualdad económica. Finalmente, examinamos cómo las personas esperarían que se verían modificadas dichas dimensiones si fuesen a vivir a un contexto de más (vs. menos) desigualdad económica.

Hemos organizado los distintos capítulos como artículos separados con su introducción y discusión general por lo que el lector puede encontrar algunas redundancias en los argumentos presentados. Esto es debido a que, o bien ya han sido publicados o están siendo preparados para ser enviados a diferentes revistas científicas. Por tanto, los experimentos, las tablas y las figuras han sido numerados de acuerdo al capítulo al que pertenecen. Sin embargo, dado que la literatura previa y parte del material empleado en los estudios es compartido por varios capítulos hemos unificado la lista de referencias y el material utilizado en los distintos estudios y lo hemos incluido al final del documento. Asimismo, los diseños de los estudios llevados a cabo, las bases de datos y algunos materiales complementarios adicionales se encuentran disponibles online en la plataforma Open Science Framework (OSF); sus correspondientes enlaces irán siendo referenciados a lo largo de los distintos capítulos.

Por último, al finalizar los capítulos empíricos hemos incluido un resumen extenso de los resultados encontrados, así como una discusión general en la que integramos estos hallazgos. En ella discutiremos las respuestas obtenidas a nuestras preguntas de investigación analizando cómo estas pueden integrarse en la literatura previa bajo la perspectiva ecocultural.

## **CHAPTER 3**

Economic Inequality Enhances  
Inferences that the Normative Climate  
is Individualistic and Competitive

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Economic Inequality Enhances Inferences that the Normative Climate is  
Individualistic and Competitive

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The reported studies were approved by the ethical committee of the University of Granada (Experiment 1, Ethics Clearance ID: 170/CEIH/2016) and the University of Queensland (Experiments 2 and 3, Ethics Clearance ID: 16-PSYCH-S-03-JS). All participants provided informed consent.

## **Abstract**

In addition to the negative effects of economic inequality on a range of health and social outcomes, inequality should also affect how people perceive a normative climate. We predicted that people living in a more unequal (versus equal) society are more likely to appraise the social context as one where individualism determines people's behaviour. We tested this idea in three experiments by manipulating the degree of economic inequality in a fictional society. We show that, compared to the low inequality condition, participants in the high inequality condition projected more individualistic norms onto society. Furthermore, Experiments 2 and 3 showed that in the high (compared to the low) economic inequality condition, participants inferred more competition and less cooperation between people. Our results are discussed in light of the importance of the perception of a broader normative climate in a particular societal context to explain the consequences of economic inequality.

*Keywords:* economic inequality, individualism-collectivism, social norms, competition-cooperation.



## **Economic Inequality Enhances Inferences that the Normative Climate is Individualistic and Competitive**

Societies differ in the magnitude of the gap between those with the lowest and the highest incomes and wealth (Kerbo, 2011). Although this observation is not new, what is relatively novel is the evidence that this feature in a society's economic structure affects multiple outcomes for those who live in that society (Wilkinson & Pickett, 2010, 2017). Specifically, societies with higher levels of economic inequality tend to have higher crime rates (Hsieh & Pugh, 1993; Ruffalo, Power, Pickett & Wilkinson, 2013), poorer physical and mental health and nutrition (Chiavegatto Filho, Kawachi, Wang, Viana, & Andrade, 2013; Lynch et al., 2004; Pickett, Kelly, Brunner, Lobstein, & Wilkinson, 2005; Pickett & Wilkinson, 2015), a lower level of political and democratic participation (Andersen, 2012; Solt, 2008), and lower levels of well-being and happiness (Alesina, Di Tella, & MacCulloch, 2004; Delhey & Dragolov, 2013; Oishi, Kesebir, & Diener, 2011; but see also Kelley & Evans, 2017).

Even though the negative effect of economic inequality on a range of outcomes has already been established, why inequality has such negative effects remains unclear. Some have argued that the answer to this question relates, at least in part, to the notion that economic inequality triggers a competitive normative climate (Loughnan et al., 2011; Nishi, Shirado, Rand, & Christakis, 2015) and social distance between individuals (Pickett & Wilkinson, 2015). Put differently, economic inequality is predicted to promote a normative climate whereby individuals give priority to themselves over relationships with others and groups. Although this reasoning is intuitively compelling, empirical evidence for these processes is limited. In this paper, we consider this preference of individuals over groups might reflect an



individualist normative climate triggered by high economic inequality. Therefore, we aim to test empirically the extent to which economic inequality (a) enhances the extent to which individualism in society is seen to be rife and (b) creates a competitive normative climate.

### **Economic inequality, competition, and individualism**

There is evidence showing that, in unequal societies, individuals are more competitive and less cooperative. For instance, higher inequality has been found to predict outcomes that are indicative of lower cooperation. Citizens in societies with higher levels of economic inequality—compared to those living in more egalitarian societies—tended to self-enhance more (Loughnan et al., 2011), were found to be less pleasant to others (de Vries, Gosling, & Potter, 2011), were less willing to help others (Paskov & Dewilde, 2012), and were more distrusting of others (Fiske, Moya, Russell, & Bearns, 2012; Wilkinson, 2005). Experimental evidence also supports the relationship between inequality and cooperation: in high-economic-inequality contexts, participants tended to cooperate less with others than in more equal contexts (Côté, House, & Willer, 2015; Nishi et al., 2015).

Although some research has been conducted on the relationship between inequality and competition versus cooperation, the question of whether economic inequality affects the dimension of individualism versus collectivism has received far less attention in research. Here, we adopt Hofstede's definitions (1980):

“Individualism stands for a society in which the ties between individuals are loose: Everyone is expected to look after him/herself and her/his immediate family only. Whereas, collectivism stands for a society in which people from birth onwards are integrated into strong,

cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (p. 225).

When we consider the extant research, it is clear that the relationship between inequality and individualism versus collectivism is not straightforward. Ahuja, Zhang, and Van Der Schaar (2014), using a mathematical model, showed that individualism is higher in high- than in low-economic-inequality contexts. However, when the relationship between objective economic inequality and individualism at the societal level is empirically tested (Basabe & Ros, 2005; Hofstede, 1980), economic inequality is positively related to collectivism. In spite of the empirical link between objective economic inequality and collectivism at cultural level (i.e., using country as the unit of analysis, Basabe & Ros, 2005; Hofstede, 1980), its effects on the individual level may not be so straightforward. In fact, it has been argued that economic inequality may increase social distance between individuals (Pickett & Wilkinson, 2015). From this perspective, we suggest that when people perceive a great social distance between individuals—as caused by economic inequality—they may infer individualistic norms in that context. To address this issue we explored the relationship between economic inequality and the perceived normative climate as individualistic-collectivistic at an individual level.

Moreover, previous studies have showed that analysing perceived economic inequality seems crucial when examining the psychological consequences of objective economic inequality (Nishi et al., 2015). Therefore, instead of measuring objective economic inequality, we manipulated the individuals' subjective perceptions of economic inequality and measured their consequences on their perceived individualistic-collectivist normative climate. In doing so, we manipulate economic inequality in a fictional society in a way that allows us to control for other

features that might affect individualism–collectivism (e.g., socioeconomic status; Stephens, Markus, & Townsend, 2007).

It remains unknown how competition, individualism, and inequality intersect. We predict that competition and individualism flow independently from contexts with high economic inequality. First, evidence shows that inequality promotes a competitive environment in which people are highly motivated to enhance their social positions and statuses (Delhey, Schneickert, & Steckermeier, 2017; Krupp & Cook, 2018). Second, inequality might promote a context in which individuals give priority to individual over group goals. Consistent with this reasoning, it has been suggested that economic inequality reduces social cohesion (Lancee & Van de Werfhorst, 2012) and increases social distance (Pickett & Wilkinson, 2015), both of which provide a fertile ground for individualistic features to come to the fore. For example, Sánchez-Rodríguez, Willis, and Rodríguez-Bailón (in press) found that when people perceived high (as compared to low) economic inequality, they tended to describe themselves as less interdependent.

### **Economic inequality and the perceived normative climate**

The extant research has been focused on linking a macrosocial variable (i.e., economic inequality) to a range of psychological and cultural outcomes at the individual level (e.g., Hofstede, 1980; Loughnan et al., 2011; Wilkinson, & Pickett, 2010). This matter is important, but how this type of macrolevel factor affects these individual-level outcomes is not as well-understood. To elucidate this, it is worth turning our attention to the way economic inequality affects individual perceptions. We explore these processes by focusing on the consequences of economic inequality on intersubjective perceptions, which we define as perceptions about shared

beliefs and values in a particular context (Chiu et al., 2010). Knowing how inequality shapes these perceptions of a normative climate is important because people use them as a guide for their own behaviours (Chiu et al., 2010). Therefore, understanding the perceptions of the broader normative climate in contexts with various degrees of economic inequality might help to bridge the gap between macrolevel reality and individual-level behaviour. Some initial evidence shows that economic inequality affects the perceptions of the broader normative climate. For instance, Heiserman and Simpson (2017) found that people's perceptions of the degree of economic inequality predicted how large they judged the differences in the perceived merit of wealthy versus poor people (i.e., the merit gap).

In this paper, we extend Heiserman and Simpson's (2017) research by examining whether the mere knowledge that society is more or less unequal triggers individuals' particular normative expectations about the behaviour that its citizens engage in and value. In line with reasoning put forward by the intersubjectivity approach, we propose that society's socioeconomic conditions, and specifically how economic resources are distributed among people, provide an important clue on what is collectively normative. People should infer a society's normative climate from the degree of economic inequality and it is in this way collectives appraise the world in which they live.

Finally, we explore whether economic inequality can influence individuals' behaviour. Given that people tend to use norms as a guide for their behaviours (Chiu et al., 2010) and that economic inequality affects norms perceptions, we are open to the possibility that these factors in turn might affect behaviour by means of informational social influence (Deutsch & Gerard, 1955). Previous research has shown that economic inequality leads people to behave more competitively and less cooperatively (Côté et al.,

2015; Nishi et al., 2015). However, other resource allocation strategies—relating to, for example, individualistic, aggressive, and altruistic ways to distribute goods—remain largely unexplored (see also Van Lange, Cremer, Van Dijk, & Van Vugt, 2007). Because unequal contexts trigger an individualist normative climate (in which people mostly pay attention to their own benefits), we explored whether people would allocate more individualistically in high-inequality conditions than in low-inequality conditions. On the other hand, building on evidence that unequal contexts might trigger inequality aversion (Fehr & Schmidt, 1999), we were open to the finding that high (compared to low) inequality would lead people to sacrifice their benefits to create greater equality (i.e., altruistic or aggressive allocation behaviour).

### **The present research**

In the present paper, we aimed to explore the relationship between economic inequality, individualism–collectivism, and competition–cooperation experimentally. Instead of focusing on the extent to which inequality affects participants' levels of individualism and competition, we aimed to explore whether inequality affects their perceptions of the broader normative climate and whether it can be appraised as individualistic and competitive.

We predicted that when people perceive higher (versus lower) levels of economic inequality—that is, more economic distance between the wealthiest and poorest in the context in which they live—they will infer that this given context is governed more by individualist (versus collectivist) social norms. We examined support for this prediction across three experiments using samples from three countries (Spain, Australia, and the United States).

Using Triandis's (1995) proposed classification system, we focused on the effects of inequality on four aspects of individualism versus collectivism. Specifically, we examined the normative perception of individualism by assessing the extent to which participants perceived that most individuals in a given context (a) endorse individualistic self-construal (i.e., independent versus interdependent self-construal; Markus & Kitayama, 1991); (b) give priority to personal needs over group rules, norms, and obligations (e.g., Davidson, Jaccard, Triandis, Morales, & Diaz-Guerrero, 1976); (c) prefer exchange relationships over communal relationships (Clark & Mills, 1993); and (d) give priority to individual over collective goal pursuit (Triandis, 1995). Moreover, in Studies 2 and 3, we scrutinised the perception of a normative climate as competitive or cooperative and explored whether economic inequality affects resource allocation strategies and whether inequality affects participants' choices among a range of competitive, cooperative, individualist, aggressive, and altruistic options. The data set of the present experiments can be found online at [osf.io/ud4vp](https://osf.io/ud4vp).

## Experiment 1

### Method

**Participants and design.** Experiment 1 used a single-factor (high versus low economic inequality) between-subject design. Data were collected at two time points with 3 months between the two measurements.<sup>1</sup> An initial analysis revealed that the two samples did not differ on key variables, and the data were therefore pooled. In total, 211 undergraduate students at the University of Granada took part in the experiment and

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<sup>1</sup> 1. Data was collected at two points because data collection could not be completed before the end of the semester. Moreover, because we had reasons to believe that participants did not understand the public goods game, we dropped this task used during the first data collection point and included a resource allocation task for the second data collection point.

received course credits for their participation. Five participants were excluded from the data analyses because they were not native Spanish speakers. The final sample consisted of 206 participants (170 women, 36 men) between the ages of 18 and 37 ( $M = 19.99$ ,  $SD = 2.81$ ), with 104 participants assigned to the high-economic-inequality condition and 102 to the low-economic-inequality condition. We conducted a sensitivity power analysis to determine the effect size the current experiment could detect. Given the sample size ( $N = 206$ ), with alpha at .05 and power at .80, for a MANOVA with four dependent variables and two groups, this experiment was powerful enough to find a medium-low effect size ( $f^2 = .06$ ).

**Procedure and measurement.** Participants were seated at computers in individual cubicles and asked to read and sign the informed-consent form. The experiment was run using E-prime 2.0 software (Psychology Software Tools, Pittsburgh, PA 2012), and participants completed a section asking about their age, gender, and Spanish-language proficiency.

Participants were then asked to imagine that they were going to live in a fictitious society called Bimboola (Jetten, Mols, & Postmes, 2015). Participants learned that Bimboola consisted of three income groups, and all participants were assigned to the middle-income group, which earned 7,000 Bimbolean Coins (BC) per month. Participants were then randomly assigned to the high- or low-inequality condition. In the high-inequality condition, the wealthiest group was presented as very wealthy (13,500 BC) and the poor group as very poor (500 BC). In the low-inequality condition, the income differences between the three income groups in Bimbolean society were less pronounced (i.e., the wealthy group earned 8,000 BC, and the poor group earned 6,000 BC). To improve the procedure's realism, participants were asked to imagine that they lived in Bimboola and, to get their life

started, were invited to pursue essentials in life, such as a house, mode of transport, and holiday. Participants could only choose items that the middle-income group could afford; the houses, cars, and holidays that they could choose from were identical in the low- and high-inequality conditions. However, the items that the poorest and the wealthiest groups in Bimboola could pursue differed in the two conditions. The houses, cars, and holidays open to the wealthiest group in Bimboola were only slightly more luxurious than those of the middle-group in the low-inequality condition, but the items that the wealthiest group could purchase in the high-inequality condition were much more luxurious and extravagant (e.g., large mansions, top-of-the-range sports cars, and expensive holidays). Likewise, the items that people from the poorest group could purchase in the low-inequality condition were only slightly less luxurious than those of the middle group, but the poorest group was presented with substandard houses and old and damaged motorbikes to choose from in the high-inequality condition. In the latter condition, the poorest group did not have the means to go on a holiday (see Sánchez-Rodríguez et al., in press).

To determine whether participants perceived the economic-inequality manipulation as intended, they were asked to respond to the question “To what extent is Bimboola’s economic distribution unequal?” (1 = *Somewhat unequal*, 9 = *Very unequal*). An additional manipulation-check item asked participants to which group they were assigned.

After this, participants were asked to think about the people who live in Bimboola and, with these people in mind, complete the measure of individualism–collectivism social norms ( $\alpha = .878$ ; Fischer et al., 2009). This scale is composed of four subscales, and participants responded on a 7-point semantic differential scale ranging from 1 (*individualist*) to 7 (*collectivist*). The four subscales were (a) independent versus



interdependent self (e.g., “Most people see themselves as independent from others” and “Most people see themselves as interdependent with others”; five items;  $\alpha = .643$ ), (b) attitudes versus norms as guides for behaviour (e.g., “Most people do what is enjoyable to them personally” and “Most people carry out their group obligations”; six items;  $\alpha = .803$ ), (c) exchange versus communal relationships (e.g., “Most people carefully calculate costs and benefits of their relationships with other people” and “Most people focus on their relationship with other people without caring about associated costs and benefits”; six items;  $\alpha = .710$ ), and (d) individual versus group goals (e.g., “Most people are mainly concerned with their own personal goals” and “Most people are mainly concerned with the goals of their groups”; five items;  $\alpha = .723$ ). After completing this measure, participants completed a resource allocation task. This task was not an incentive-compatible task; it was presented as a hypothetical task. Unfortunately, only 109 participants<sup>2</sup> were able to complete it after exclusions.<sup>1</sup> In this matrices task (adopted from Van Lange, Otten, De Bruin, & Joireman, 1997), using nine decision matrices, participants were asked to distribute resources between themselves and an alleged inhabitant of Bimboola. Each matrix had three options, reflecting competitive (i.e., higher differences between themselves and others), cooperative (i.e., the same resources for both), and individualist (i.e., the highest personal benefit) allocation strategies. After completing the experiment, participants were debriefed and thanked for their participation.<sup>2</sup>

## Results

**Manipulation check.** All participants answered correctly that they were assigned to the middle-income group. In addition, in order to examine

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<sup>2</sup> We also included other measures that are not directly relevant to address the current research question. In particular, we measured the group’s wealth perceptions and identification with Bimboola, and we included a public goods game. Please see supplemental material for more details on these measures and results ([osf.io/ud4vp](https://osf.io/ud4vp)).

whether the manipulation worked as intended, an ANOVA was conducted on the economic-inequality check. As expected, those assigned to the high-economic-inequality condition perceived more economic inequality ( $M = 8.18$ ,  $SD = 1.22$ ) than those in the low-economic-inequality condition, ( $M = 4.58$ ,  $SD = 1.86$ ),  $F(1, 204) = 270.55$ ,  $p < .001$ ,  $\eta^2 = .570$ .

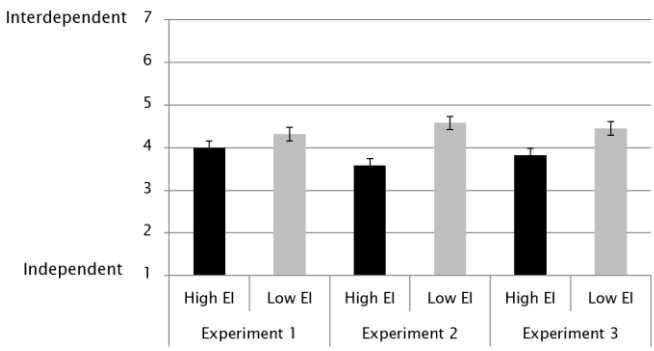
**Normative climate: individualism–collectivism.** A MANOVA, including the four individualism–collectivism subscales as dependent variables and economic inequality as an independent variable, was conducted (see Figure 1). Results showed a significant multivariate effect,  $F(4, 201) = 3.01$ ,  $p = .019$ ,  $\eta^2 = .057$ . Considering the subscales independently, there were significant effects for independent versus interdependent self,  $F(1, 204) = 5.13$ ,  $p = .025$ ,  $\eta^2 = .025$ , whereby participants in the low-economic-inequality condition inferred that people were generally more interdependent ( $M = 4.32$ ,  $SD = 0.94$ ) than in the high-economic-inequality condition ( $M = 4.00$ ,  $SD = 1.09$ ).

Furthermore, participants assigned to the high-economic-inequality condition tended to infer that people would engage in more exchange relationships ( $M = 3.59$ ,  $SD = 0.99$ ) than those in the low-economic-inequality condition ( $M = 3.96$ ,  $SD = 0.90$ ),  $F(1, 204) = 7.59$ ,  $p = .006$ ,  $\eta^2 = .036$ . However, although the means show that those in the high-economic-inequality condition ( $M = 3.68$ ,  $SD = 1.03$ ) inferred that people in Bimboola pursue more individual goals than those in the low-economic-inequality condition ( $M = 3.93$ ,  $SD = 0.93$ ), the differences were not significant,  $F(1, 204) = 3.07$ ,  $p = .081$ ,  $\eta^2 = .015$ . Finally, the univariate effect for the subscale on attitudes versus norms as a guide to behaviour was not significant,  $F(1, 204) = 0.06$ ,  $p = .805$ .<sup>3</sup>

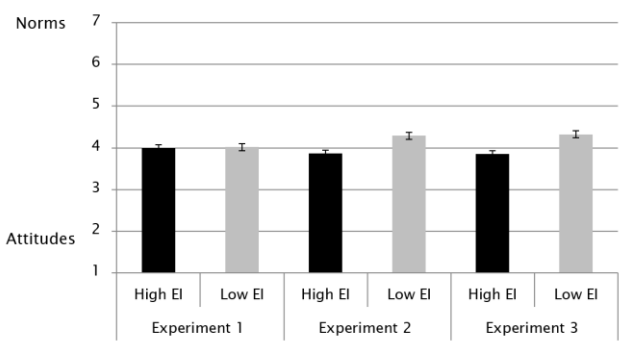
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<sup>3</sup> Results are similar when non-native speakers are included in the analyses compared to when they are not.

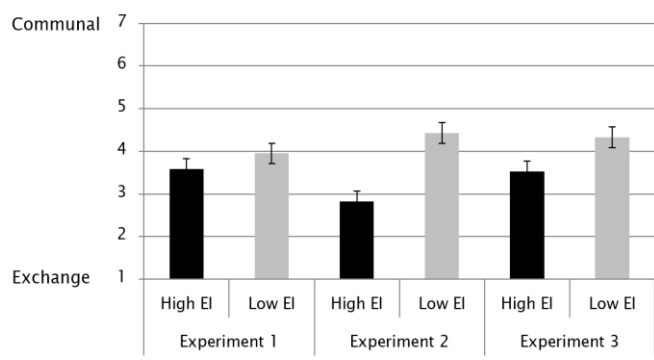
Independent vs. Interdependent  
Self-construal



Attitudes vs. Norms as  
guides for behaviour



Exchange vs. Communal relationships



Individual vs. Group goals

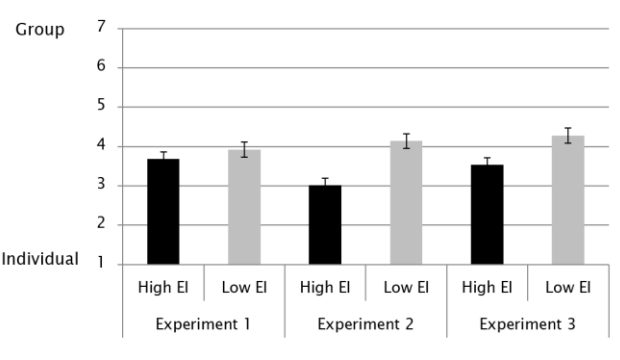


Figure 1. Perceived normative climate as a function of the economic inequality condition. Bars represent the standard error of the mean. EI: economic inequality.

**Allocation strategies.** To determine whether the manipulation affected matrices allocations, a MANOVA was conducted, including as dependent variables the possible allocation strategies (competitive, cooperative, and individualistic). Results showed no significant multivariate effect on how participants distributed the resources,  $F(2, 106) = 2.02$ ,  $p = .138$ ,  $\eta^2 = .037$ .

## **Discussion**

These results provide initial evidence that economic inequality leads people to infer that others' behaviours tend to be governed by individualistic tendencies. Specifically, when inequality was high, participants inferred others have more independent (and less interdependent) self-construal and thought that others give more priority to exchange (and less to communal) relationships. However, no differences between experimental conditions were found to the extent that participants prioritise individual (instead of group) goals and felt others in their society would be guided by personal needs versus group rules. Even though we can only speculate why the manipulation did not affect the responses on these subscales, it is clear that focusing on rules may not characterise the key construct of individualism as indexed by social distance from others to the same extent as the other subscales. However, prioritising individual versus group goals should be closer to individualism as indexed by social distance to others. Therefore, additional evidence is needed to draw firm conclusions. Accordingly, we conducted a second experiment.

Moreover, on the resource allocation task, we found no differences between the experimental conditions. One reason for this result may be that we did not specify to which group (i.e., poor, in-group, or the richest) the

person with whom participants had to interact with belonged and that this led to a disconnect between the manipulation and the allocation task. In the next experiment, we address this issue.

The aim of the second experiment was threefold. First, we aimed to replicate the first experiment's results by showing that manipulated inequality affects perceptions to the extent that behaviour is guided by individualism versus collectivism. Second, building on evidence from previous research suggesting that economic inequality fosters competition (Nishi et al., 2015), we examined whether inequality affects the extent to which a normative climate is perceived as competitive versus cooperative. In particular, we predicted that high economic inequality should promote a more competitive and less cooperative normative climate. Finally, we explored whether the perception of economic inequality affects allocation preferences in a context where participants were asked to allocate resources to an anonymous person who belonged to the same income group (interpersonal bias), the wealthiest group (wealthiest bias) and to the poorest group (poorest bias).

## Experiment 2

### Method

**Participants.** The participants were 60 students from the University of Queensland (37 women, 22 men, and 1 missing) whose ages ranged from 16 to 23 years ( $M = 18.45$ ,  $SD = 1.25$ ). Thirty-four participants were assigned to the high-economic-inequality condition and 26 to the low-economic-inequality condition. Given the sample size ( $N = 60$ ), alpha at .05, and power at .80, for a MANOVA with four dependent variables and two groups, this experiment was powerful enough to find a large effect size ( $f^2 = .21$ ). They received course credits for their participation.

**Procedure and measures.** This experiment was conducted in a laboratory, and participants were invited to take part in an online experiment using Qualtrics software (Qualtrics, Provo, UT 2005). Economic inequality was manipulated in the same way as in Experiment 1, but some changes were made to make stimuli more fitting to the Australian context (e.g., choice of houses, cars, and holidays). Furthermore, instructions were translated from Spanish to English.

**Manipulation check.** After the inequality manipulation, participants were asked about the income level to which they were assigned. In addition, they were asked to indicate how they perceived the distribution of the resources in Bimboolean society. Specifically, two questions were asked about the wealthiest group in Bimboola (Group 1, “How wealthy is this group?” (1 = *Not at all wealthy*, 9 = *Very wealthy*) and “How poor is this group?” —reversed—(1 = *Not at all poor*, 9 = *Very poor*;  $\rho = .559$ ; Eisinga, Grotenhuis, & Pelzer, 2013). Similarly, the same two questions were included asking about the poorest group in Bimboola (Group 3,  $\rho = .808$ ). The final two questions were asked about the perception of inequality: “To what extent is Bimboola unequal?” and “To what extent is Bimboola equal?” (reversed, 1 = *Not at all*, 9 = *Very much*,  $\rho = .888$ ).

**Normative climate: cooperation–competition.** One item measured the perception of competition in Bimboola: “To what extent do you think there is a lot of competition in Bimboola?” Another single item measured the perception of cooperation in Bimboola: “To what extent do you think there is a lot of cooperation in Bimboola?” Responses were recorded on a scale ranging from 1 (*not at all*) to 7 (*very much*). The two items were treated as single items because, even though competition and cooperation perceptions are related, they are conceptually different and not just the endpoints of one underlying dimension (Van Lange et al., 2007).

**Normative climate: individualism–collectivism.** The same scale as used in Experiment 1 was included to measure collectivism versus individualism ( $\alpha = .937$ ). The four subscales showed good reliability: a) independent versus interdependent self (five items,  $\alpha = .790$ ), (b) attitudes versus norms as guides for behaviour (six items,  $\alpha = .883$ ), (c) exchange versus communal relationships (six items,  $\alpha = .868$ ), and (d) individual versus group goals (five items,  $\alpha = .868$ ).

**Allocation strategies.** Participants were asked to complete a resource allocation matrix adapted from Van Lange et al. (1997). This task was not an incentive-compatible task; it was presented hypothetically. In this task, participants were invited to choose the combination of resources to be distributed between two parties. The participant was one party in the matrix, and the other was an anonymous person who belonged to the same income group as the participant (interpersonal bias). Nine combinations were presented with three options in each combination representing three social orientations (competitive, cooperative, and individualist). In the present experiment, to allow for the measurement of a wider range of allocation strategies, we added two additional options: altruistic and aggressive (Van Lange et al., 2007; see Figure 2).

1	A	B	C	D	E
You get	280	480	480	540	280
Other member of group 2 gets	-80	80	480	280	540

*Figure 2.* Example of the matrices used in Experiment 2 and 3. In this example, allocations reflect the distribution of resources between oneself and another member of the ingroup. A: Aggressive choice; B: Competitive choice; C: Cooperative choice; D: Individualistic choice; E: Altruistic choice

Afterward, the same nine combinations were presented again, but this time, the anonymous person belonged to the wealthiest group (wealthiest bias). Finally, the nine combinations were presented again, but the anonymous person belonged to the poorest group (poorest bias).

**Sociodemographic characteristics.** At the end of the experiment, participants were asked about their subjective social class using a subjective socioeconomic status scale (Adler, Epel, Castellazzo, & Ickovics, 2000), level of education, employment status, annual income, ethnicity, age, gender, political orientation (ranging from 1 [*I am far left*] to 7 [*I am far right*]), religious belief (ranging from 1 [*I am not religious*] to 7 [*I am very religious*]), language, and country of residence.<sup>4</sup>

## Results

**Manipulation check.** To check the success of our manipulation, we ran separate ANOVAs on the various manipulation checks. In line with the manipulation, the wealthiest group's perception of wealth was significantly higher in the high-economic-inequality condition ( $M = 8.12$ ,  $SD = 1.54$ ) than in the low-economic-inequality condition ( $M = 7.27$ ,  $SD = 1.35$ ),  $F(1, 58) = 4.96$ ,  $p = .030$ ,  $\eta^2 = .079$ . Similarly, the poorest group's perceptions of wealth were significantly lower in the high-economic-inequality condition ( $M = 1.62$ ,  $SD = 1.49$ ) than in the low-economic-inequality condition ( $M = 4.13$ ,  $SD = 1.66$ ),  $F(1, 58) = 37.91$ ,  $p < .001$ ,  $\eta^2 = .395$ . Furthermore, significant differences emerged in the perception of inequality in Bimboola,  $F(1, 58) = 92.35$ ,  $p < .001$ ,  $\eta^2 = .614$ . Specifically,

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<sup>4</sup> We again included other measures in this experiment that are not further reported because they are not directly relevant to the research question. We measured the group's wealth perceptions, identification with Bimboola, perceived importance of income groups, identification with the income group, and identification with and wish to belong to the poorest and the wealthiest income groups. Please see Supplemental Materials for more details on these measures and results ([osf.io/ud4vp](https://osf.io/ud4vp))



participants in the high-economic-inequality condition perceived more inequality ( $M = 7.76$ ,  $SD = 1.21$ ) than those in the low-economic-inequality condition ( $M = 4.62$ ,  $SD = 1.31$ ).

**Normative climate: competition–cooperation.** We ran separate ANOVAs using economic inequality as an independent variable and the perceptions of cooperation and competition as dependent variables, respectively. As expected, participants in the high-economic-inequality condition perceived more competition in Bimboola ( $M = 5.15$ ,  $SD = 1.28$ ) than participants in the low-economic-inequality condition ( $M = 4.00$ ,  $SD = 1.20$ ),  $F(1, 58) = 12.46$ ,  $p = .001$ ,  $\eta^2 = .179$ . Furthermore, participants in the high-economic-inequality condition perceived less cooperation ( $M = 2.65$ ,  $SD = 1.13$ ) than participants in the low-economic-inequality condition ( $M = 4.46$ ,  $SD = 1.17$ ),  $F(1, 58) = 36.91$ ,  $p < .001$ ,  $\eta^2 = .389$ .

**Normative climate: individualism–collectivism.** A MANOVA was conducted using the scores on the four subscales of the individualistic-collectivistic scale as dependent variables (see Figure 1). Results showed a significant multivariate effect,  $F(4, 55) = 8.98$ ,  $p < .001$ ,  $\eta^2 = .395$ . Furthermore, there were significant univariate effects for independent versus interdependent self, exchange versus communal relationships, and individual versus group goals. Specifically, for the self-construal subscale, in the high-economic-inequality condition, participants inferred that most people tended to be more independent ( $M = 3.59$ ,  $SD = 1.22$ ) than in the low-economic-inequality condition, where participants inferred that others were more interdependent ( $M = 4.58$ ,  $SD = 1.18$ ),  $F(1, 58) = 10.19$ ,  $p = .002$ ,  $\eta^2 = .149$ ). The effect of inequality on relationship type showed that in the high-economic-inequality condition, participants inferred that most people tended to be involved more in exchange relationships ( $M = 2.83$ ,  $SD = 1.05$ ) whereas participants in the low-economic-inequality condition inferred others

were more involved in communal relationships ( $M = 4.44$ ,  $SD = 1.08$ ),  $F(1, 58) = 33.82$ ,  $p < .001$ ,  $\eta^2 = .368$ ). In a similar vein, the effect of the manipulation on the goal type showed that in the high-economic-inequality condition, participants inferred that most people tend to pursue individual goals ( $M = 3.02$ ,  $SD = 1.27$ ) than in the low-economic-inequality condition, where others were perceived to pursue more group goals ( $M = 4.15$ ,  $SD = 1.12$ ),  $F(1, 58) = 12.75$ ,  $p = .001$ ,  $\eta^2 = .180$ . Finally, no differences emerged between conditions on attitudes versus norms as guides for behaviour,  $F(1, 58) = 1.45$ ,  $p = .234$ ,  $\eta^2 = .024$ .

**Allocation strategy.** To analyse the interpersonal, wealthiest, and poorest biases respectively, three separate MANOVAs were conducted using the five categories of choices (i.e. competitive, cooperative, individualist, altruistic, and aggressive) as dependent variables. No differences between condition were found in terms of interpersonal bias,  $F(5, 54) = 0.93$ ,  $p = .455$ ,  $\eta^2 = .063$ ; wealthiest bias,  $F(5, 54) = 1.45$ ,  $p = .223$ ,  $\eta^2 = .118$ ; or poorest bias,  $F(5, 54) = 0.94$ ,  $p = .463$ ,  $\eta^2 = .080$ .

## Discussion

The results of Experiment 2 provided further evidence that economic inequality triggers individualistic social norms. Specifically and more strongly than in Experiment 1, the results of this experiment showed that high economic inequality enhances the perception that people in society are individualistic (i.e., more independent, more involved in exchange relationships, and more likely to prioritise their personal goals). In contrast, low economic inequality triggered the perception that social norms encompass interdependence, involvement in communal relationships, and the prioritization of group goals. However, as in Experiment 1, inequality did

not affect the inference that people's behaviours would be more under the control of personal needs versus group rules.

In addition, we found that, compared to the low-economic-inequality condition, high economic inequality led participants to perceive a normative climate as more competitive and less cooperative. However, even though inequality affected the perceptions of a normative climate, these perceptions did not translate to more competitive choices in the division of resources between the self and another in-group member, a member of the wealthiest group, or a member of the poorest group.

One limitation of this experiment was that the sample was relatively small due to recruitment problems at the time in the academic year that the data were collected. This fact may explain why we did not find any effects on the resource allocation task. We therefore conducted a third experiment. The aim of this experiment was twofold. First, we aimed to replicate the results of Experiments 1 and 2 regarding the effects of economic inequality on normative climate in a different sample. Second, using a larger sample, we again aimed to test whether economic inequality affects the allocation of resources.

### **Experiment 3**

#### **Method**

**Participants.** A total of 209 individuals from the United States participated in the experiment via Amazon Mechanical Turk (Buhrmester, Kwang, & Gosling, 2011) using Qualtrics software (Qualtrics, Provo, UT 2005). Eleven participants were excluded from the data analysis (six did not finish the experiment, three had a mother tongue other than English, and two failed the check where they had to indicate which income group they had been assigned to). The final sample was composed of 198 participants (88

women, 109 men, and 1 unknown) ranging from 18 to 67 years of age ( $M = 33.6$ ,  $SD = 10.10$ ). Of the participants, 101 were assigned to the high-economic-inequality condition and 97 to the low-economic-inequality condition. Given the sample size ( $N = 198$ ), with alpha at .05 and power at .80, for a MANOVA with four dependent variables and two groups, this experiment was powerful enough to find a medium-to-low effect size ( $f^2 = .06$ ). Participants received \$1 for their participation.

**Procedure and measures.** The manipulation of inequality was identical to Experiment 2. The manipulation checks were also identical; participant were asked questions about the wealthiest group ( $\rho = .658$ ), the poorest group ( $\rho = .828$ ), and economic inequality ( $\rho = .913$ ) in Bimboola.

A normative climate in terms of individualism–collectivism was measured with the same scale as used in Experiment 2 ( $\alpha = .951$ ). The reliability of the four subscales was again high: independent versus interdependent self (five items,  $\alpha = .816$ ), attitudes versus norms as guides for behaviour (six items,  $\alpha = .894$ ), exchange versus communal relationships (six items,  $\alpha = .863$ ), and individual versus group goals (five items,  $\alpha = .886$ ). A normative climate relating to competition versus cooperation, as well as the allocated strategies were measured using the same tasks as used in Experiment 2.<sup>5</sup>

## Results

**Manipulation checks.** To verify the success of our manipulation, we ran three separate ANOVAs on the three manipulation check measures. Our manipulation worked as intended. First, in the high economic inequality

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<sup>5</sup> We again included other measures in this experiment that are not further reported because they are not directly relevant to the research question. We measured the group's wealth perceptions, identification with Bimboola, perceived importance of income groups, identification with the income group, and identification with and wish to belong to the poorest and the wealthiest income groups. Please see Supplemental Materials for more details on these measures and results ([osf.io/ud4vp](https://osf.io/ud4vp)).

condition, the wealthiest group was perceived as richer ( $M = 7.58$ ,  $SD = 1.89$ ) than the wealthiest group in the low economic inequality condition ( $M = 6.80$ ,  $SD = 1.52$ ),  $F(1,196) = 10.20$ ,  $p = .002$ ,  $\eta^2 = .049$ . Furthermore, the wealth of the poorest was perceived as lower in the high economic inequality condition ( $M = 2.47$ ,  $SD = 2.54$ ) than in the low economic inequality condition ( $M = 4.68$ ,  $SD = 1.76$ ),  $F(1,196) = 49.74$ ,  $p < .001$ ,  $\eta^2 = .202$ ). Finally, participants in the high-economic-inequality condition perceived more economic inequality ( $M = 7.97$ ,  $SD = 1.37$ ) than participants in the low-economic-inequality condition ( $M = 3.97$ ,  $SD = 1.77$ ),  $F(1,196) = 317.06$ ,  $p < .001$ ,  $\eta^2 = .618$ .

**Normative climate: competition–cooperation.** In line with the results from Experiment 2, participants in the high-economic-inequality condition perceived more competition in Bimboola ( $M = 4.82$ ,  $SD = 1.52$ ) than participants in the low economic inequality condition ( $M = 3.79$ ,  $SD = 1.43$ ),  $F(1,196) = 24.02$ ,  $p < .001$ ,  $\eta^2 = .109$ . Furthermore, participants in the high economic inequality condition perceived less cooperation ( $M = 2.81$ ,  $SD = 1.16$ ) than participants in the low economic inequality condition ( $M = 4.88$ ,  $SD = 1.24$ ),  $F(1,196) = 147.64$ ,  $p < .001$ ,  $\eta^2 = .430$ .

**Normative climate: individualism–collectivism.** A MANOVA was conducted using the four subscales of the individualism–collectivism scale as dependent variables (see Figure 1). The analysis showed a significant multivariate effect,  $F(4,193) = 5.83$ ,  $p < .001$ ,  $\eta^2 = .108$ . This time, the univariate effect for all four subscales was significant. Specifically, for independent vs. interdependent self, participants in the high economic inequality condition perceived that most people tend to be more independent ( $M = 3.83$ ,  $SD = 1.29$ ) than those in the low economic inequality condition, who inferred that others are more interdependent ( $M = 4.45$ ,  $SD = 1.19$ ),  $F(1,196) = 12.57$ ,  $p < .001$ ,  $\eta^2 = .060$ . Also, in the high-economic-inequality

condition, participants perceived that others guide their behaviour more by their own attitudes ( $M = 3.85$ ,  $SD = 1.45$ ) than those in the low-economic-inequality condition, who inferred that people are guided more by social norms ( $M = 4.32$ ,  $SD = 1.15$ ),  $F(1,196) = 6.34$ ,  $p = .013$ ,  $\eta^2 = .031$ . Participants in the high-economic-inequality condition perceived that others are more involved in exchange relationships ( $M = 3.54$ ,  $SD = 1.23$ ) than those in the low economic inequality condition, where they were assumed to be more involved in communal relationships ( $M = 4.34$ ,  $SD = 1.18$ ),  $F(1,196) = 21.65$ ,  $p < .001$ ,  $\eta^2 = .099$ . Finally, participants in the high-economic-inequality condition perceived that people tend to give more priority to individual goals ( $M = 3.54$ ,  $SD = 1.35$ ) than those in the low-economic-inequality condition, who inferred that others are more driven by the pursuit of group goals ( $M = 4.28$ ,  $SD = 1.32$ ),  $F(1,196) = 15.43$ ,  $p < .001$ ,  $\eta^2 = .073$ .<sup>6</sup>

**Allocation strategies.** Three separate MANOVAs were conducted, including the five resource allocation strategies—aggressive, competitive, individualist, cooperative and altruistic allocations—as dependent variables. Similar to Experiment 2, no effect of inequality on interpersonal bias emerged,  $F(5,192) = 0.66$ ,  $p = .656$ ,  $\eta^2 = .017$ . However, a significant multivariate effect of inequality on wealthiest bias emerged,  $F(5,192) = 4.46$ ,  $p = .001$ ,  $\eta^2 = .104$ . In the high-economic-inequality condition, participants were more aggressive ( $M = 0.74$ ,  $SD = 2.13$ ) and more individualistic ( $M = 4.76$ ,  $SD = 4.04$ ) than in the low-economic-inequality condition ( $M_{aggressive} = 0.20$ ,  $SD = 0.65$ ),  $F(1,196) = 5.84$ ,  $p = .017$ ,  $\eta^2 = .029$ ; ( $M_{individualist} = 3.51$ ,  $SD = 3.79$ ),  $F(1,196) = 5.09$ ,  $p = .025$ ,  $\eta^2 = .025$ . In contrast, participants were more cooperative in the low-economic-inequality condition ( $M = 4.09$ ,  $SD = 4.00$ ) than in the high-economic-inequality condition ( $M = 2.17$ ,  $SD = 3.64$ ),  $F(1,196) = 12.54$ ,  $p < .001$ ,  $\eta^2 = .060$ ). Although the means pointed out that

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<sup>6</sup> Results are similar when non-native speakers are included in the analyses compared to when they are not.

those in the high-economic-inequality condition were more competitive ( $M = 1.12$ ,  $SD = 2.39$ ) than in the low-economic-inequality condition ( $M = 0.63$ ,  $SD = 1.42$ ), differences were not significant,  $F(1,196) = 3.05$ ,  $p = .082$ ,  $\eta^2 = .015$ . Finally, no differences emerged between conditions in altruistic behaviour,  $F(1,196) = 2.44$ ,  $p = .120$ ,  $\eta^2 = .012$ .

Results also showed a multivariate effect on poorest bias,  $F(5,192) = 6.47$ ,  $p < .001$ ,  $\eta^2 = .144$ . Participants in the low-economic-inequality condition cooperated more ( $M = 5.39$ ,  $SD = 3.93$ ) and were less altruistic ( $M = 1.29$ ,  $SD = 2.72$ ) than those in the high-economic-inequality condition ( $M_{cooperation} = 3.52$ ,  $SD = 3.88$ ),  $F(1,196) = 11.30$ ,  $p = .001$ ,  $\eta^2 = .054$ ; ( $M_{Altruism} = 3.86$ ,  $SD = 3.97$ ),  $F(1,196) = 28.06$ ,  $p < .001$ ,  $\eta^2 = .125$ . No differences were found for aggressive,  $F(1,196) < 0.01$ ,  $p = .960$ ,  $\eta^2 < .001$ , competitive,  $F(1,196) = 2.07$ ,  $p = .152$ ,  $\eta^2 = .010$ , or individualist,  $F(1,196) = 1.09$ ,  $p = .298$ ,  $\eta^2 = .006$  allocation strategies.

## Discussion

Again, we showed that high economic inequality affected perceptions of the normative climate. Specifically, participants assumed that people living in a society with low economic inequality were more interdependent, more influenced by their group's rules, more involved in communal relationships, and more likely to prioritize group goals. In contrast, they assumed that people living in a society with high economic inequality were more likely to be independent, more influenced by their own attitudes, more involved in exchange relationships, and more likely to prioritize personal goals. Additionally, high economic inequality triggered the perception of a more competitive and less cooperative normative climate whereas the opposite was true in a context with lower level of economic inequality.

Finally, in this experiment, we found an effect of economic inequality on resource allocation strategies. In the low-economic-inequality condition, participants were more likely to allocate resources according to cooperation principles than in the higher economic inequality condition. In contrast, in the high-economic-inequality condition, people were more aggressive and individualistic in their allocations to the wealthiest income group but more altruistic with the poorest group.

### **Overall effect of social norms**

To estimate the overall effect sizes of perceived social norms as a function of the economic inequality condition, we conducted a meta-analysis across the three studies using ESCI (Cumming, 2012). We report the results of the random effects models. First, the confidence interval of effect size of economic inequality on the overall individualism–collectivism scale did not include zero,  $d = 0.60$ ,  $CI_{95\%} [0.17, 1.03]$ . Regarding the separate subscales, we found an effect on independent vs. interdependent self-construal,  $d = 0.57$ ,  $CI_{95\%} [0.23, 0.92]$ ; exchange–communal relationship,  $d = 0.88$ ,  $CI_{95\%} [0.26, 1.50]$ ; and individual–group goals,  $d = 0.65$ ,  $CI_{95\%} [0.16, 1.15]$ . However, the confidence interval of the effect for attitudes vs. norms as a guide for behaviour did include zero,  $d = 0.27$ ,  $CI_{95\%} [-0.05, 0.58]$ . In sum, across the three studies, we found an effect of inequality on three of the four components of the individualism–collectivism dimension.

### **General discussion**

Across three experiments with samples from three countries—Spain, Australia and the United States—we showed that perceived economic inequality was used to infer a particular intersubjective reality or normative climate. We found that when the wealth gap between the poorest and wealthiest people was larger, participants expected that others would feel



more independent, be more expectant of something in return in their social relationships, look out more for their own goals without considering group goals, and in general perceived more competition and less cooperation. On the contrary, when a small difference arose between the wealthiest and the poorest groups in society, participants expected that people would feel more connected to others, invest more in relationships even if they would not get any benefits from them, and be more likely to look out for group goals. In those contexts, participants also expected the normative climate to be more cooperative and less competitive.

We also found evidence in Experiment 3 that economic inequality affected the allocation strategies that people used when they were asked to allocate resources between themselves and others. When economic inequality was low, participants tended to share resources, and they were more likely to prefer cooperative allocation strategies. However, when a large gap emerged between the wealthiest and poorest people in their society (i.e., more unequal context), participants' allocation strategies changed when they were asked to choose how to allocate resources between themselves and another wealthy or poor individual. In relation to the allocation strategy vis-à-vis a wealthier individual, participants became more individualistic and even aggressive in a high- compared to a low-inequality context.

On the contrary, in the high- (compared to the low-) economic-inequality condition, people tended to allocate resources in a more altruistic way between themselves and an anonymous member of the poorest group, suggesting they were more willing to help them. It is interesting that in the high-economic-inequality condition, participants were willing to sacrifice their own benefits to achieve a more egalitarian distribution of resources, giving resources to the poorest and taking them away from the richest. Rather than

providing an opportunity for cooperation or competition, in the high- (compared to the low-) inequality-condition, it is likely that participants might have interpreted the allocation of resources task as an opportunity to redistribute resources. Fairness consideration about inequality might have led participants to be willing to give up material payoff in the allocation task to get a more egalitarian distribution (i.e., inequality aversion; Fehr & Schmidt, 1999). Additionally, it is worth noting that participants seemed to show a paternalistic attitude towards the poor by behaving in more altruistic and less cooperative ways toward them in the high-economic-inequality condition compared to the low one. Although inequality aversion might explain this result, it could be the case that participants attributed less competence to the poor in the high (vs. low) economic inequality condition (Heiserman & Simpson, 2017) suggesting that they want to help them but not work closely with them cooperatively.

However, we have to be careful when interpreting these results. A particular limitation of these experiments regarding this effect is the confounding effect between the economic inequality manipulation and the wealth of the poorest and wealthiest groups given that in the high inequality condition, the wealthiest are wealthier and the poorest have less than in the low inequality condition. It could be the case that participants in the high inequality condition perceived the low-income group as needier and were therefore more willing to help them than in the low inequality condition. Even though this is a natural confounded effect of the inequality manipulation (i.e., poor people are typically poorer in more unequal than in more equal societies), it is important to be cautious when interpreting this finding.

### **Implications and future research**

In three experiments, we aimed to shed light on the effects of structural factors such as economic inequality on perceptions of the normative climate as individualistic versus collectivistic. The role of socioeconomic factors in the explanation of cultural differences has been widely acknowledged (e.g., Hofstede, 1980; Kitayama & Uskul, 2011; Oyserman & Lee, 2008; Triandis & Gelfand, 2015). However, although most of these studies have shown how individuals' behaviours, cognitions, and feelings are affected by socioeconomic factors such as economic inequality, they do not speak about whether inequality also affects our perceptions of the normative climate. Although it has been suggested that economic inequality leads people to feel more social distance and see societies to be less social cohesive (Pickett & Wilkinson, 2015; Van de Werfhorst, & Salverda, 2012), so far, these relationships were not explored experimentally. For the first time, we show that inequality can causally affect the perceptions of the normative climate by showing that economic inequality leads people to see greater social distance (i.e., people are more independent) and that it enhances the perception that society is less cohesive (i.e., people look out for their own benefits when interacting with others, and they give priority to pursuing their own goals over group goals). These findings are consistent with other work that has shown that inequality in and of itself triggers normative expectations (e.g., Heiserman & Simpson, 2017).

It is noteworthy that our results contrast with previous work that found that higher economic inequality is associated with collectivism at a cultural level, that is, when countries or culture are used as the unit of analysis (Basabe & Ros, 2005; Hofstede, 1980). We can only speculate why these results do not support these previous findings. One possibility could be that

we explore perceptions of individualism-collectivism as descriptions of society (i.e., perceived normative climate), whereas previous research analysed how structural economic inequality affects the endorsement of individualistic-collectivistic at the country or cultural level. Results may be different given that, when the correlation between inequality and individualism/collectivism is measured at the cultural or country level, they may be important to take into account third variables that could explain its association. For instance, at the country level economic inequality tends to be positively correlated with the percentage of poor people within the country (Karagiannaki, 2017) and it has been found that low social class individuals tend to be more collectivist than high class individuals (Stephens, et al., 2007). Thus, one possibility is that the positive correlation between inequality and collectivism at the country level may be driven by this or other third variables. Further studies may study the differences between the effects of inequality on individualism/collectivism at the individual and cultural levels.

Initial evidence suggests that the perceived normative climate should affect and determine individual-level behaviour because the perceived normative climate provides the framework that helps individuals decide which social behaviour is appropriate, desired, and rewarded (Chiu et al., 2010). For instance, Postmes and Smith (2009) showed that a discriminatory normative climate enhanced individual-level support for anti-immigration policies. Although all three experiments provided strong evidence that macrolevel economic inequality affected perceptions of the broader normative climate in terms of independent vs. interdependent self-construal, exchange vs. communal relationships, and individual vs. group goals, we did not measure how the perceived normative climate might affect participants' perceptions. Although previous research showed that low (compared to high) economic inequality context leads participants to endorse an

interdependent self-construal (Sánchez-Rodríguez, et al., in press), it is unclear if it is because interdependent self-construal was perceived as normative. It would be worthwhile to explore in future experiments whether a normative climate mediates the effect of economic inequality on self-construal. Furthermore, recent studies have shown that multiple components underlie individual differences between independence and interdependence (e.g., self-reliance vs. dependence on others; Vignoles et al., 2016). Then it would be worth determining which particular aspects of the self-construal are affected by economic inequality.

An alternative question that arises from the previous one is whether people who always tend to adapt to the normative environment provide for economic inequality or try to change the degree of economic inequality with a nonnormative behaviour. As we discussed above, participants might have interpreted task allocation as a redistribution task. That might be why participants in the high-inequality society behave in opposite ways towards the richest (aggressive and individualist) and the poorest (altruistic). This contrast might indicate an attempt to change the distribution of resources. It would be interesting in future research to explore whether people tend to adapt to the degree of economic inequality or try to change the society and under which circumstances they use one or another strategy.

Our results suggest that economic inequality triggers a competitive and individualistic normative climate. One question that remains is how competitive and individualistic climate relate to each other. Previous scholars have suggested that competitiveness and individualism might be positively related (Chen & West, 2008; Green, Deschamps & Paez, 2005; Leibbrandt, Gneezy, & List, 2013). Our results support this possibility (see Supplemental Material, Section 1), and we propose that the relationship between these two processes may well be bi-directional whereby normative climates that

promote individualism also fuel competitiveness and vice versa. Future research should explore this prediction.

Even though the paradigm that we used allowed us to manipulate inequality and infer causality, it is important to acknowledge that the paradigm lacks ecological validity. Despite the fact that our findings are generally aligned with other work that has examined the relationship between inequality and individualism (Ahuja et al., 2014), it would be important to consider other ways to manipulate inequality and to replicate the findings we obtained.

Our results also have important implications for work on the way social norms are built. Although the way social norms affect individual-level behaviour is well theorised (e.g., Chung & Rimal, 2016), less is known about the origins of specific social norms. Our results show that inequality shapes normative perceptions of what sort of people live in a society and the kind of relationships that prevail among them. Hence, the perception that material resources at the macro-level are distributed unequally or more equally informs the type of descriptive social norms that individuals infer, triggering particular intersubjective perceptions (Chiu et al., 2010). Future research should explore other types of social norms that one can infer from mere knowledge about wealth distributions. For instance, does economic inequality also determine normative perceptions relating to power distance or masculinity vs. femininity? Furthermore, does the emergence of a particular descriptive normative climate also trigger specific prescriptive norms? These questions are worthy of future research.

It is worth mentioning that economic inequality enhanced the perceptions of a more individualist normative climate only on three out of the four measures used to assess this dependent variable. We did not find evidence that economic inequality affected perceptions of the normative

climate when it comes to whether people expect to be guided by their own attitudes versus general rules. As mentioned before, we expect that this measure of individualism versus collectivism was less or not affected by the economic inequality manipulation across the experiments because it does not tap the concept of social cohesion and social distance as closely as the other three features. However, it would be worthwhile to examine this effect further in future studies using other manipulations of economic inequality.

Finally, although we focused on the consequences of economic inequality on the perceived normative climate, it may well be the case that a competitive and individualistic normative climate amplifies existing inequalities. This possibility would suggest that economic inequality might also be the result of a particular normative climate. Future research should explore this option.

### **Concluding thoughts**

In this paper, we present evidence that economic inequality affects the perceived broader normative climate and thereby builds a particular intersubjective reality. When inequality is high, the normative climate is characterized by individualism and competition, and when inequality is low, the normative climate is interpreted as one where collectivism and cooperation thrive. By showing that macrolevel economic inequality causally affects the normative climate, we provide important evidence for the way that social norms are shaped by economic inequality.

## **CHAPTER 4**

Economic Inequality and Values:

Economic Inequality Defines Expected

Normative and Personal Values

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Economic Inequality and Values:

Economic Inequality Defines Expected Normative and Personal Values

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The reported studies were approved by the ethical committee of the University of Granada (Ethics Clearance ID: 170/CEIH/2016). All participants provided informed consent.

## **Abstract**

It has been suggested that the degree of economic inequality leads to different selective environments where people develop the human social characteristics that give them greater chances of survival. In this research we explored how economic inequality may influence the values people decide to embrace to adapt to society. We examined the expected normative (Experiment 1) and personal values (Experiment 2) of unequal (vs. more egalitarian) societies. The results of Experiment 1 suggest that, in more unequal societies, participants infer that members of that society embrace more self-enhancement than self-transcendence values; the opposite is likely to be true in a more egalitarian society. Moreover, results of Experiment 2 showed that, in the high (vs. low) economic inequality condition, participants expected to uphold more with self-enhancement and less with self-transcendence values. These results are discussed in terms of how people construct their social reality based on their perceived economic inequality.

*Keywords:* economic inequality, values, self-enhancement, self-transcendence



## **Economic Inequality and Values: Economic Inequality Defines Expected Normative and Personal Values**

Values are guiding principles in people's lives (Rokeach, 1973; Schwartz, 1992) but how do people choose and establish them? It has been found that structural factors such as demographic or economic changes can influence the values people decide to endorse (Greenfield, 2009; Uskul & Oishi, 2018;). In this paper we examined whether one of the strongest changes in the economic structure of the last few decades—the increase of economic inequality (OECD, 2015; Piketty, 2014)—may influence human values.

On the one hand, we built on the assumption that social domination strategies are more important in unequal contexts, whereas social reciprocity and sharing strategies are more prominent in more equal societies (Wilkinson & Pickett, 2017). On the other hand, we drew on Schwartz's structure of relationships between values (1992, 2012), which suggests that there is an inherent conflict between self-enhancement values, which emphasize dominance and the pursuit of one's own interests, and self-transcendence values, which emphasize concern for the welfare and interests of others. In this paper we aimed to integrate these areas of research and suggested that in more unequal societies people tend to perceive and uphold more self-enhancement values, whereas in more equal societies people tend to perceive and uphold more self-transcendence values.

Previous studies have already suggested that self-enhancement values prevail in societies with higher economic inequality (Loughnan et al., 2011; Paskov, Gërkhani, & van de Werfhorst, 2013). Yet, this evidence has been obtained from correlational designs, which does not make it possible to

infer the causal relationship between the variables. Additionally, as far as we know no studies have explored the values that prevail in more egalitarian societies. In this paper we intended to fill these gaps by using an experimental design to examine the values that prevail in societies with high and low inequality. In short, we aimed to empirically test (a) which values perceived as normative in a society with high (vs. low) economic inequality and (b) what are people's expectations of their own values when they imagine living in that society.

### **Economic inequality**

Over the last few decades, economic inequality has considerably increased in most societies (OECD, 2015; Piketty, 2014). Numerous studies have shown that people living in more unequal societies have more health and social problems than do those living in more egalitarian societies (Wilkinson & Pickett, 2009). In addition, economic inequality is related to several psychosocial variables. For example, it is positively associated with risk taking (Payne, Brown-iannuzzi, & Hannay, 2017) and ambivalent attitudes towards minority groups (Durante et al., 2013), and negatively associated with well-being (Oishi, Kesebir, & Diener, 2011; see also Kelley & Evans, 2017, for alternative results). The effects of economic inequality on psychosocial variables could be understood using socio-ecological psychology, which examines how human cognition, emotion and behaviour adapt to distal macro environmental factors such as economic inequality (Uskul & Oishi, 2018).

Following a socioecological approach, we argue that economic inequality creates a specific environment wherein people have to strategically adapt their behaviour. In particular, social strategies based on dominance and competition seem to be more appropriate in a context with

higher economic inequality, in which improving or not losing one's rank becomes very important. Conversely, strategies based on friendship, reciprocity and sharing are more likely to be more successful in a context with lower economic inequality (Wilkinson & Pickett, 2017). Consistent with these predictions, Nishi, Shirado, Rand and Christakis (2015) showed that participants in groups with higher levels of economic inequality tend to cooperate less with one another. Moreover, some studies have shown that people living in more unequal societies are less willing to trust others (Elgar & Aitken, 2011; Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997). Higher economic inequality is also related to lower willingness to promote the welfare of others as well as of the wider community (Paskov & Dewilde, 2012). These effects of economic inequality are even reflected in how individuals define themselves in relation to others (i.e., self-construal): Sánchez-Rodríguez et al. (in press) showed that low economic inequality triggers a more interdependent self-construal.

There is empirical evidence supporting the idea that human beings adapt to the degree of societal economic inequality (Wilkinson & Pickett, 2017). However, it remains unclear how these processes may take place. We argue that perceiving high or low societal economic inequality leads individuals to make inferences about the members of that society: how they tend to behave, think and feel. In other words, they use economic inequality as a proxy to infer the normative climate of such a society. Using the information drawn from these inferences, they adapt and choose the best social strategy available. Building on this idea, this article specifically explores the influence of economic inequality on values.



## Values

Values are guiding principles in people's lives (i.e., "concepts or beliefs about desirable end states or behaviours that transcend specific situations, guide selection or evaluation of behavior and events, and are ordered by relative importance", Schwartz & Bilsky 1990, p. 879). Thus, values transcend specific situations and are relatively stable (Inglehart, 1985; Rokeach & Rokeach, 1989). However, given that values express basic human needs (Schwartz, 1992), when the economic environment changes the relative relevance of human needs, people should adjust their values.

Based on the approach of Wilkinson and Pickett (2017), contexts with higher levels of economic inequality should highlight the importance of values that exalt power and achievement because they increase the possibility of successfully adapting to an unequal context. From this perspective, using data from European Social Survey (ESS), Paskov et al. (2013) found support for the idea that within-country changes in economic inequality are positively associated with changes in power and achievement values. This empirical evidence suggests that values change over time and that such changes are, at least in part, related to economic inequality. According to Schwartz's theory of values (Schwartz, 1992), both power and achievement are self-enhancement values. Loughnan et al. (2011) have consistently found that countries with higher levels of economic inequality also tend to show higher levels of self-enhancement. However, an important question about the possible causality of this relation remains unanswered. It may well be that an increase of the importance that people give to power and achievement generates behaviours that increase economic inequality.

Another open research question in this respect is that, although previous research has shown that self-enhancement values are less important in less unequal societies (e.g., Paskov et al., 2013), these results

do not provide information about the type of values that are more important in this environment. As explained above, lower levels of economic inequality provide an environment that benefits social strategies based on reciprocity and sharing because such behaviours lead to more opportunities to be successful (Wilkinson & Pickett, 2017). Following Schwartz's theory of values (1992, 2012), reciprocity and sharing behaviours are related to self-transcendence values—caring for the welfare of others (i.e., benevolence) and societal concerns (i.e., universalism). Hence, equal environments are likely to highlight the importance of values that exalt self-transcendence. Indeed, Schwartz's structure of relationships between values suggests that pursuing self-enhancement values clashes with pursuing self-transcendence values (Schwartz, 1992, 2012). Both types of values reflect the conflict between emphasizing the importance of self-interest and relative success and dominance over others (i.e., self-enhancement) versus emphasizing the importance of the welfare and interest of others (i.e., self-transcendence). This suggests that self-enhancement values prevail in unequal societies, whereas self-transcendence values prevail in more egalitarian societies.

Because of the huge contrast between the strategies that are appropriate in societies with high and low economic inequality, people need to match their own social strategies to the social strategies that are appropriate in a given society (Wilkinson & Pickett, 2017). Thus, the members of a society should infer the normative social strategies from the degree of economic inequality. In terms of values, it is logical to expect people to perceive that self-enhancement values are normative in an unequal society, whereas self-transcendence values are normative in an equal society. If so, they should try to match their own values with the normative values in order to improve their chances of survival in that society.

In this paper, we tested these hypotheses using two preregistered experiments, which allowed us to establish a causal direction. We manipulated economic inequality and measured its consequences on self-enhancement and self-transcendence values. In Experiment 1 we examined the influence of economic inequality on normative values (i.e., the perceived values of other people). We predicted that people living in an environment with high economic inequality would perceive a higher prevalence of self-enhancement values around them. By contrast, we expected people involved in an environment with low economic inequality to perceive a higher prevalence of self-transcendence values. In Experiment 2 we examined whether economic inequality affects anticipated personal values (i.e., the values that people would uphold). Accordingly, we hypothesized that participants would expect themselves to endorse more self-enhancement values when they imagined living in a society with high economic inequality; conversely, we predicted that they would expect to endorse with more self-transcendence values if they imagined living in a society with low economic inequality.

## Experiment 1

### Method

**Preregistered design and hypotheses.** The design included one independent variable with two between-subject conditions—high (50 participants) vs. low (48 participants) economic inequality. We also measured type of values—self-enhancement and self-transcendence—as a within-participant variable. In the current experiment, we tested the following preregistered hypotheses ([osf.io/p6rfm](https://osf.io/p6rfm)):

- Hypothesis 1: There will be a significant interaction effect between the level of economic inequality (High vs. Low) and the type of values

(Self-enhancement vs. Self-transcendence) that people infer in a given society.

- Hypothesis 1a: When economic inequality is high, participants will infer more self-enhancement than self-transcendence values.
- Hypothesis 1b: When economic inequality is low, participants will infer more self-transcendence than self-enhancement values.

**Sample size calculation.** We conducted an a priori sample size analysis using G\*Power (Faul, Erdfelder, Buchner & Lang, 2009) for a repeated measures within-between interaction ANOVA. Given that there is no previous evidence about the effect size, we estimated a medium effect size ( $f = .23$ ) to obtain an a priori power of 80% and an alpha error probability of 5%. The optimal sample size was 114 participants.<sup>7</sup> As we indicated in the preregistered information (see [osf.io/p6rfm](https://osf.io/p6rfm)), we planned to finish the experiment when we had collected data from 120 participants or on December 22, 2016 (whichever came first). We planned to exclude participants who were not native Spanish speakers and/or who were older than 40 years from the data analyses.

**Participants.** One hundred and one students participated in this experiment in exchange for course credit. Three participants were excluded because they were not native Spanish speakers. The final sample included 98 participants (82 women) aged between 18 and 29 years old ( $M = 20.20$ ;  $SD = 1.42$ ). Given the sample size ( $n = 98$ ), alpha at .05, power at .80, for a repeated measures within-between interaction ANOVA, this experiment was powerful enough to detect an effect size of  $f = 0.25$ .

**Procedure and measurement.** Participants were seated in individual cubicles and asked to read and sign the informed consent form. All material

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<sup>7</sup> There is a slight difference between this sample size and that one we preregistered due to we recalculate it after freeze our preregister

and data set can be found online ([osf.io/unk74](https://osf.io/unk74)). We report all measures, manipulations, and exclusions in this study.

Participants were randomly assigned to the experimental conditions (High vs. Low economic inequality). We manipulated economic inequality using the Bimboola Paradigm (Jetten, Mols, & Postmes, 2015). In this paradigm participants were asked to imagine that they were going to live in a fictitious society. In this society, there are three different groups according to their income: the richest, the middle class and the poorest. In the high inequality condition, the gap between the richest and the poorest is presented as very large: the richest earn 13,500 bimboolean coins per month (BC/m), and the poorest earn only 500BC/m. By contrast, in the low inequality condition, the gap between the richest and poorest is small: The richest earn 8,000BC/m and the poorest earn 6,000BC/m (Sánchez-Rodríguez et al., in press). Regardless of the condition, all participants were assigned to the middle income group, which earned 7,000 BC/m. To reinforce the manipulation, participants were shown the houses, cars and holidays of the different income groups. They were invited to imagine their life in this new society and to choose a house, a car and a holiday that they could afford to start living in Bimboola (i.e., those belonging to the middle or poorest income group). After the manipulation, we asked participants, “To what extent is Bimboola’s economic distribution unequal/equal?” (reversed item); 1 = *somewhat unequal/equal*, 9 = *very unequal/equal* ( $\rho = .938$ , Eisinga, Grotenhuis, & Pelzer, 2013) as a manipulation check. As an additional manipulation check, we asked the participants which group they had been assigned to.<sup>8</sup>

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<sup>8</sup> We also included other two items that are not directly relevant to address the current research question. In particular, we measured wealth and poor perceptions of the own group (i.e. “How wealthy/poor is your group?” (1= *not at all*, 9 = *very much*).

Finally, we presented a list of values and participants were asked to think how important each of these values were as a guiding principle in life to the most people who live in Bimboola (Schwartz, 1992). Self-enhancement values ( $\alpha = .889$ ) were measured asking about Power (i.e., social power, wealth, social recognition, authority and preserving public image,  $\alpha = .888$ ) and Achievement values (i.e., ambitious, influential, capable, intelligent, and successful,  $\alpha = .761$ ). Self-transcendence values ( $\alpha = .951$ ) were measured asking about Universalism (i.e., equality, inner harmony, a spiritual life, meaning in life, a world at peace, unity with nature, wisdom, a world of beauty, social justice, broad-minded, and protecting the environment,  $\alpha = .918$ ) and Benevolence values (mature love, true friendship, loyal, honest, helpful, trustworthy, and forgiving,  $\alpha = .904$ ). To measure all these values, we used a nine-point scale including *of supreme importance* (7), *very important* (6), (unlabelled; 5, 4), *important* (3), (unlabelled; 2, 1), *not important* (0), and *opposed to my values* (-1).

## Results

**Manipulation check.** We conducted an ANOVA on the economic inequality manipulation check. Participants assigned to the high economic inequality condition perceived more economic inequality ( $M = 8.35$ ,  $SD = 0.88$ ) than those in the low economic inequality condition ( $M = 3.09$ ,  $SD = 1.42$ )  $F(1, 96) = 486.72$ ;  $p < .001$ ,  $\eta^2 = .835$ . Additionally, all participants answered correctly that they were assigned to middle income group.

**Main results.** Following our plan of preregistered analyses and to corroborate Hypothesis 1, we conducted a 2 (Value type: Self-enhancement vs. Self-transcendence, as a within-participant factor) x 2 (Economic inequality: High vs. Low, as a between-group factor) repeated measures

ANCOVA, using the mean on all values as a covariate in all the analyses (see Schwartz, 1992).

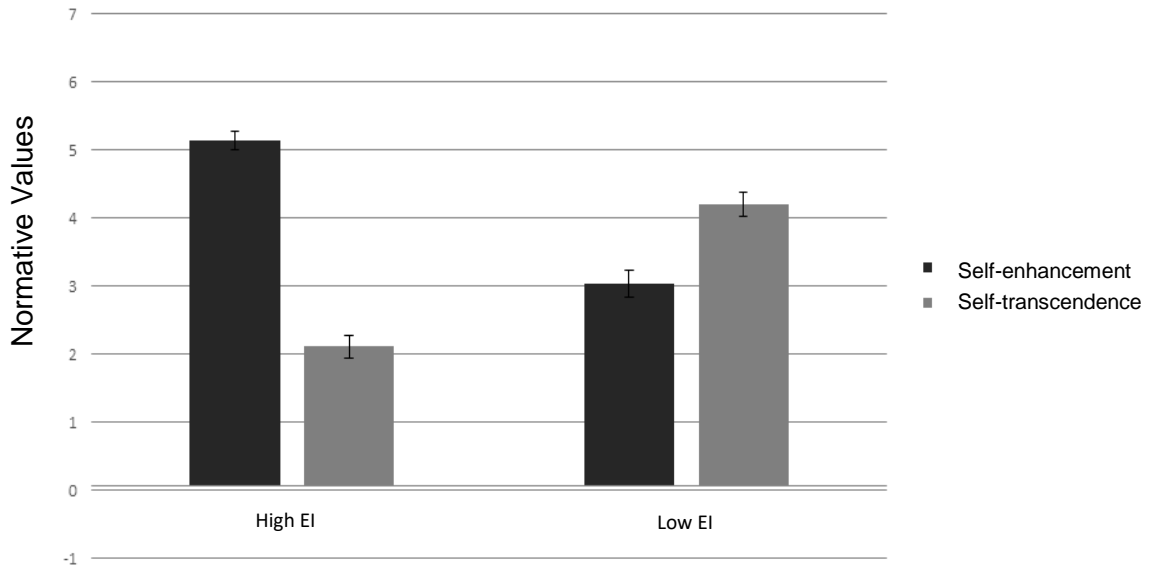
Results showed a significant interaction effect between value type and economic inequality,  $F(1, 95) = 120.91, p < .001, \eta^2 = .560$ <sup>9</sup> (see Figure 1). We conducted some follow-up analyses to explore the meaning of this interaction. First, to corroborate Hypothesis 1a, we conducted an ANCOVA with value type as a repeated measure in the high economic inequality condition. Results showed that participants in the high economic inequality condition considered that most people embrace more self-enhancement values ( $M = 5.12, SD = 0.96$ ) than self-transcendence values ( $M = 2.10, SD = 1.23, F(1, 48) = 15.53, p < .001, \eta^2 = .244$ )<sup>10</sup>. To test Hypothesis 1b, we conducted a similar ANCOVA with value type as a repeated measures in the low economic inequality condition. Results showed that participants in this condition considered that most people embrace more self-transcendence values ( $M = 4.18, SD = 1.21$ ) than self-enhancement values ( $M = 3.03, SD = 1.42, F(1, 46) = 4.23, p = .045, \eta^2 = .084$ ).<sup>11</sup>

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<sup>9</sup> The effect without the covariate is:  $F(1, 96) = 122.15, p < .001, \eta^2 = .560$

<sup>10</sup> The effect without the covariate is:  $F(1, 49) = 139.12, p < .001, \eta^2 = .740$

<sup>11</sup> The effect without the covariate is:  $F(1, 47) = 17.26, p < .001, \eta^2 = .269$



*Figure 1.* Effects of economic inequality on the type of normative values expected. Bars represent standard error.

## Discussion

In line with our hypotheses, Experiment 1 showed that the degree of economic inequality influenced the type of values that participants inferred in society (Hypothesis 1). Specifically, in a context with high economic inequality, participants inferred that others endorsed more self-enhancement than self-transcendence values (Hypothesis 1a). By contrast, in a context with low economic inequality, participants inferred that others endorsed more self-transcendence than self-enhancement values (Hypothesis 1b). These results provide initial evidence about the effects of economic inequality on perceived normative values. However, it remains unanswered whether this effect may influence participants' own values. In Experiment 2 we took a step further to explore whether economic inequality also affects participants' expectations about their own values.



## Experiment 2

### Method

**Design and preregistered hypotheses.** We used an experimental design with one independent variable, one between-participant factor—high (46 participants) vs. low (44 participants) economic inequality— and one within-participant factor —self-enhancement and self-transcendence values. In the current experiment, we tested the following preregistered hypotheses ([osf.io/mtbhv](https://osf.io/mtbhv)):

- Hypothesis 2: There will be a significant interaction effect between the extent of economic inequality (High vs. Low) and the type of values (Self-enhancement vs. Self-transcendence) that people anticipate in a given society.
- Hypothesis 2a: When economic inequality is high, participants will anticipate more self-enhancement values than self-transcendence values.
- Hypothesis 2b: When economic inequality is low, participants will anticipate more self-transcendence values than self-enhancement values.

**Sample size calculation.** As in Experiment 1, according to the power analysis we needed 114<sup>1</sup> participants to obtain an a priori power of 80% with an alpha error probability of .05. We planned to finish the experiment when we had collected data from 130 participants or on June 15th, 2017 (whichever came first). We planned to exclude participants who were not native Spanish speakers and/or who were older than 40 years from the data analyses.

**Participants.** Ninety-five students participated in this experiment in exchange for course credit. Four participants were excluded because they

were not native speakers and one was excluded because he was more than 40 years old. The final sample included 90 participants (77 women) between 18 and 30 years old ( $M = 20.14$ ;  $SD = 2.52$ ). Given the sample size ( $n = 90$ ), alpha at .05, power at .80, for a repeated measures within-between interaction ANOVA, this experiment was powerful enough to detect an effect size of  $f = 0.26$ .

**Procedure and measurement.** We used the same manipulation of economic inequality as in Experiment 1. However, in this study we were interested in values that participants anticipated to guide their own lives. Because of this, at the end of the manipulation and to strengthen it, we asked participants to devote 5 minutes to imagining how a normal day would be for them in Bimboola and write down about it. All material and data set can be found online ([osf.io/unk74](https://osf.io/unk74)). We report all measures, manipulations, and exclusions in this study.

Finally, we presented the same manipulations checks and list of values as in Experiment 1. However, on this occasion participants were asked to think how important each value would be as a guiding principle in their life in Bimboola. Self-enhancement values ( $\alpha = .880$ ) were measured asking about Power ( $\alpha = .823$ ) and Achievement values ( $\alpha = .804$ ); and Self-transcendence values ( $\alpha = .916$ ) were measured by asking about Universalism ( $\alpha = .869$ ) and Benevolence values ( $\alpha = .834$ ).

## Results

**Manipulation checks.** As in Experiment 1, we conducted an ANOVA to check our manipulation. As we expected, participants assigned to the high economic inequality condition perceived greater economic inequality in Bimboola ( $M = 8.54$ ,  $SD = 0.63$ ) than did those assigned to the low economic inequality condition ( $M = 3.73$ ,  $SD = 1.82$ ),  $F(1, 88) = 286.17$ ,  $p < .001$ ,  $\eta^2 =$

.765. Additionally, all participants answered the memory manipulation check correctly (i.e., they remembered the group they were assigned to).

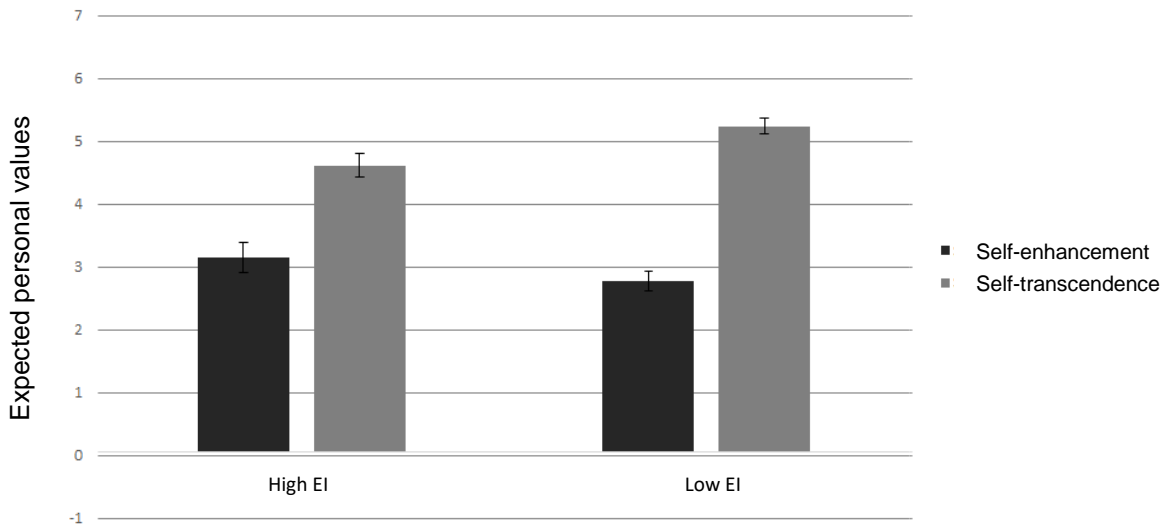
**Main results.** To test our Hypothesis 2 we conducted a 2 (Economic inequality: High vs. Low, a between-group factor) x 2 (Value type: Self-enhancement vs. Self-transcendence, a within-participant factor) repeated measures ANCOVA. Again, mean on all values was used as a covariate in all the analyses (see Schwartz, 1992). Results showed a main effect of values type,  $F(1, 86) = 19.19, p < .001, \eta^2 = .182$ , suggesting that participants anticipated more self-transcendence ( $M = 4.92, SD = 1.12$ ) than self-enhancement ( $M = 2.96, SD = 1.34$ ) values independently of the degree of economic inequality. According to our Hypothesis 2, this analysis also revealed a significant interaction effect,  $F(1, 86) = 9.36, p = .003, \eta^2 = .098$  (see Figure 2)<sup>12</sup>. We conducted several follow-up analyses to explore the meaning of this interaction.

First, to corroborate Hypotheses 2a and 2b, we conducted an ANCOVA with value type as repeated measure in each economic inequality condition. Contrary to our Hypothesis 2a, results showed that participants in the high economic inequality condition considered that they would embrace more self-transcendence values ( $M = 4.61, SD = 1.25$ ) than self-enhancement values ( $M = 3.15, SD = 1.58; F(1,43) = 7.22, p = .010, \eta^2 = .144$ ). To corroborate Hypothesis 2b we conducted a similar ANCOVA with value type as a repeated measure, this time exploring the low economic inequality condition. In line with Hypothesis 2b, we found that participants considered that they would embrace more self-transcendence ( $M = 5.24, SD = 0.87$ ) than self-enhancement values ( $M = 2.77, SD = 1.03; F(1,42) = 13.24, p = .001, \eta^2 = .240$ )

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<sup>12</sup> The effect without the covariate is:  $F(1, 87) = 8.26, p = .005, \eta^2 = .087$

**Exploratory analysis.** Given that our Hypothesis 2a was not supported by our analyses, we explored the meaning of the interaction looking at the differences between conditions in self-enhancement and self-transcendence separately. First, we conducted an ANCOVA with self-enhancement values as the dependent variable and economic inequality as the between-participant factor. Results showed that participants in the high economic inequality condition anticipated following more self-enhancement values ( $M = 3.15$ ,  $SD = 1.58$ ) than did participants in the low economic inequality condition ( $M = 2.77$ ,  $SD = 1.03$ ,  $F(1, 86) = 9.36$ ,  $p = .003$ ,  $\eta^2 = .098$ ).<sup>13</sup> A similar ANCOVA with self-transcendence values revealed that participants in the low economic inequality condition anticipated following more self-transcendence values ( $M = 5.24$ ,  $SD = 0.87$ ) than did those in the high economic inequality condition ( $M = 4.61$ ,  $SD = 1.25$ ,  $F(1, 86) = 9.36$ ,  $p = .003$ ,  $\eta^2 = .098$ ).<sup>14</sup>



*Figure 2.* Economic inequality effects on the type of anticipated personal values. Bars represent standard error.

<sup>13</sup> The effect without the covariate is:  $F(1, 87) = 1.81$ ,  $p = .182$ ,  $\eta^2 = .020$

<sup>14</sup> The effect without the covariate is:  $F(1, 87) = 7.71$ ,  $p = .007$ ,  $\eta^2 = .081$ .

## **Discussion**

The results of Experiment 2 provided evidence that economic inequality also affects the expectation of individuals' own values as guiding principles. According to our hypotheses, the level of economic inequality perceived in a given context affects the expectations of one's values (Hypothesis 2). Participants in the low economic inequality condition anticipated to follow more self-transcendence values as guiding principles than self-enhancement values (Hypothesis 2b). However, our results did not show that participants expect to be guided more by self-enhancement than self-transcendence values in a context of high economic inequality (Hypothesis 2a). However, economic inequality influenced the degree of importance of those values to participants. Specifically, participants who imagined living in a society with high economic inequality anticipated to follow more self-enhancement values than did participants who imagined living in a society with low economic inequality. Conversely, participants who imagined living in a society with low economic inequality anticipated to follow more self-transcendence values than did participants who imagined living in a society with high economic inequality.

### **General discussion**

The present research provides evidence that economic inequality perceived influences human values. Results from two experiments showed that normative values and even expectations about one's own values as guiding principles changed according to the degree of economic inequality perceived in a given context: individuals perceive that self-enhancement values prevailed in an unequal context, whereas self-transcendence values did when the context was more egalitarian; even they expect to endorse

more self-enhancement and less self-transcendent values if they live in a more unequal society compare with a more equal society.

Wilkinson and Pickett's hypothesis (2017) suggests that the degree of economic inequality provides different environments where people can implement different social strategies. An environment with high economic inequality is likely to lead its citizens to put greater emphasis on status seeking and competition, whereas an environment with low economic inequality is likely to lead them to give more importance to reciprocity and sharing. The present research supported this assumption by providing evidence suggesting that the degree of economic inequality is a hint that people use to infer the values that prevail in that community. Accordingly, the search for power and achievement (i.e., self-enhancement) was considered more normative in a context with high economic inequality, and participants thought that they would give more importance to these values if they lived in that context (vs. in a more egalitarian society). These results are in line with previous studies that have shown that economic inequality is positively associated with self-enhancement (Loughnan et al., 2011; Paskov et al., 2013). However, this research broadens the literature by showing that the search for universalism and benevolence (i.e., self-transcendence) is considered more normative in a context with low economic inequality; in fact, participants thought that they would give more importance to these values if they lived in that context (vs. in a more unequal society). Given that self-transcendence values tend to be more prevalent in collectivist cultures (Schwartz, 1992), where people tend to be more interdependent (Markus & Kitayama, 1991), these results are also congruent with previous studies showing that low levels of economic inequality trigger a more interdependent self-construal (Sánchez-Rodríguez et al., 2017).

Interestingly, the main effect on the type of anticipated personal values in Experiment 2 (i.e., participants anticipated that they would give more importance to self-transcendence values regardless of economic inequality) seems to highlight the relative stability of values (Schwartz & Bilsky, 1990). A plausible explanation to this result is that, given that students tend to uphold more strongly with self-transcendence values than with self-enhancement values in their daily lives (Ros & Grad, 1991), their expectations are difficult to change as a consequence of a situational manipulation. Even though the manipulation of economic inequality affected their expectations over their own values, the change was not strong enough to invert their preference. This would suggest, as others have pointed out earlier (Inglehart, 1985; Rokeach & Ball-Rokeach, 1989), that values are mainly stable although they may change slightly according to the context.

A limitation of this research is that we explored changes in values indirectly through changes in the perception of normative and anticipated personal values. However, whether participants actually used these values as principles guiding their lives or just expected to follow them is a remaining question. Future research could explore whether economic inequality affects personal values beyond anticipated and normative values. In fact, it is interesting to highlight the possibility that changes in personal values may happen as a result of changes in normative values by means of informational social influence (Deutsch & Gerard, 1955). Research about how values change over time might broaden its scope by analyzing and exploring this possibility in future research.

These findings shed new light on how economic inequality affects values. Previous evidence has suggested that economic inequality and values are related to one another (e.g., Paskov et al., 2013). Our results complement previous literature from an experimental approach and

suggest that there is a causal effect of economic inequality on values. Nonetheless, we wish to highlight that the relationship between economic inequality and values could be bidirectional, that is, changes in values may lead to changes in economic inequality. Inglehart (1985) and Rokeach and Rokeach (1989) found an interesting exception in the relatively stable pattern of values regarding the question about the importance given to equality. According to their analyses, the importance given to equality decreased over time from 1971 to 1981. Interestingly, economic inequality increased in the United States (OECD, 2015; Piketty, 2014) at the same time as the importance of egalitarian values decreased since the 1980s. Although this is an anecdotal evidence, these results might suggest that changes in values can also lead to changes in economic inequality. On the one hand, economic inequality leads to more self-enhancement; on the other hand, a greater prevalence of self-enhancement may lead to higher economic inequality, creating a dangerous dynamic. Future research should explore this possibility.

In conclusion, in this paper we show that structural factors, such as those related to economic inequality, affect the values individuals anticipated endorse and perceive in others. The degree of economic inequality seems to reveal a lot about a society and how we should behave and successfully adapt to survive in it.





## **CHAPTER 5**

Economic and Social Distance:

Perceived Income Inequality

Negatively Predicts an

Interdependent Self-Construal

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Economic and Social Distance:  
Perceived Income Inequality Negatively Predicts an Interdependent Self-  
Construal

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The reported studies were approved by the ethical committee of the University of Granada (Ethics Clearance ID: 170/CEIH/2016). All participants provided informed consent.

## **Abstract**

Previous research has shown that economic inequality influences how people are related with others. In this paper we suggest that perceived economic inequality influences self-construal. Specifically, we propose that higher economic inequality leads to an independent self-construal, whereas lower economic inequality leads to an interdependent self-construal. Correlational data from Studies 1a and 1b revealed that people who perceive lower levels of economic inequality tend to show higher levels of interdependent self-construal, even after controlling for social class. In Study 2, using an experimental design, we found that perceived high economic inequality leads to a more independent and less interdependent self-construal compared to the low economic inequality condition. These results expand the literature bridging the gap between a macro-social factor, such as economic inequality, and a micro-social factor, such as self-construal.

*Keywords:* economic inequality, independent, interdependent, self-construal, social class.



## **Economic and Social Distance: Perceived Income Inequality Negatively Predicts an Interdependent Self-Construal**

Economic differences are commonplace in today's society. In fact, financial indicators reveal that economic inequality is extremely high: Intermon Oxfam (2016) recently reported that 1% of the population controls 99% of the total global resources. Given this situation, during the last years research has focused on the consequences of economic inequality. Past research has shown that economic inequality is associated with less social cohesion and more social problems (Pickett & Wilkinson, 2015; Van de Werfhorst & Salverda, 2012). However, most research about the consequences of economic inequality has focused on macro-social variables (e.g. Pickett & Wilkinson, 2015).

In this paper we attempted to contribute to the growing literature about the consequences of economic inequality from a psychological perspective. We aimed to expand these results by suggesting that economic inequality also affects individuals' self-construal. More specifically, we tested the hypotheses that people tend to perceive themselves as being more separate from others when economic inequality is perceived to be relatively higher; conversely, when economic inequality is perceived to be relatively lower, they tend more to perceive themselves as part of a group. Exploring how economic inequality affects self-construal is important for bridging the gap between the study of macro-social and micro-social factors.



### **Consequences of economic inequality**

Societies with higher rates of economic inequality (i.e. the degree of wealth disparities between groups; Kerbo, 2011) exhibit a larger number of social problems. Economic inequality is associated with more physical and mental health problems, lower life expectancy, higher numbers of homicides (Pickett & Wilkinson, 2015), lower levels of well-being (Buttrick & Oishi, 2017; see Kelley & Evans, 2017 for alternative results), and less social cohesion (Van de Werfhorst & Salverda, 2012).

Economic inequality has also been found to undermine social relations. Pickett and Wilkinson (2015) suggested that an unequal economic context leads to social division, which translates into more distant interpersonal relationships. Researches have shown that economic inequality is negatively correlated with individuals' willingness to take action for improving the living conditions of their fellow countrymen (Paskov & Dewilde, 2012) and with general trust (Buttrick & Oishi, 2017). It is also negatively related with generosity and cooperative behavior (Nishi, Shirado, Rand, & Christakis, 2015).

Moreover, on an individual level, friendliness is also negatively correlated with state-level income inequality in the United States (measured by the GINI; de Vries, Gosling, & Potter, 2011). Additionally, as Loughnan et al. (2011) proved at the country level, income inequality is a positive predictor of self-enhancement, that is, the tendency to see oneself as being better than the average person.

Overall, these studies suggest that people tend to be more socially distant, that is, to feel more independent from others when economic inequality is high. By contrast, when people share resources more equally they tend to be less socially distant (i.e., they feel closer to others), building an interdependent relationship between themselves and others (also see

Aron, Aron, & Smollan, 1992). In the next section we will argue that the social distance created by economic inequality could end up being embedded in how individuals define themselves; that is, it will influence their self-construal (Markus & Kitayama, 1991).

### **Self-construal**

Self-construal has been defined as the way in which people see themselves according to the distance between themselves and others (Markus & Kitayama, 1991); and is one of the features which define individualism-collectivism (Triandis & Gelfand, 2012).

An independent self-construal arises from the belief that the self is inherently separate from others; an interdependent self-construal arises from the belief that the self is embedded in the group (Markus & Kitayama, 1991). Interdependent and independent self-construal have been considered as two different constructs (e.g. Singelis, 1994). Hence, they may each have a different origin. From this approach, Triandis and Gelfand (2012) proposed that an interdependent self-construal is promoted by “factors that increase the need for people to rely on others and which activate common fate” (p. 17), whereas an independent self-construal is promoted by “factors that allow individuals to separate from others” (p. 17).

However, some factors can affect both types of self-construal in opposite directions. In this regard, Hofstede (1980) found that wealthier countries tend to be more individualistic and less collectivist. This could be because when people have more resources, they need other people less. As Triandis and Gelfand (2012) explained, “financial independence leads to social independence” (p. 18). Similarly, the rich develop an independent self-construal, whereas the poor develop an interdependent self-construal (Markus & Conner, 2013). This last research highlights the effects of

socioeconomic status (i.e. having access to more or less economic and educational resources, SES) on self-construal.

However, individuals' self-construal may be affected not only by individuals' SES but also by the economic inequality. It has been suggested that higher economic inequality leads people to feel more social distance between them (Pickett & Wilkinson, 2015), since they tend to see themselves as more separate from others when they do not share resources (Aron et al., 1992). In turn, social distance fosters an independent self-construal (Markus & Kitayama, 1991). Considering all this, we predicted that higher levels of economic inequality would lead to an independent self-construal. By contrast, low economic inequality leads people to feel less social distance between themselves and others (Pickett & Wilkinson, 2015), as they tend to feel closer when they share resources more equally (Aron et al., 1992). People who live in a context where there is little social distance from others develop an interdependent self-construal (Markus & Kitayama, 1991). Therefore, we also predicted that lower levels of economic inequality would lead to an interdependent self-construal.

Furthermore, previous research has suggested that the psychosocial effects of economic inequality are caused by perceived economic inequality rather than by objective economic inequality *per se* (Nishi et al., 2015). As Dahl (1971) stated, "Between a condition of objective inequality and the response of a disadvantaged person lie the perceptions, evaluations, expectations—in short, the psyche—of the individual" (p. 95). Therefore, we highlight the importance of perceived economic inequality instead of focusing on objective economic inequality. In addition, individuals misrepresent the actual level of economic inequality (Norton & Ariely, 2011). For those reasons, along these lines we used perceived economic inequality as a predictor of individuals' self-construal in the current studies. Moreover,

given that it has been shown that the manipulation of perceived economic inequality has effect on several psychosocial variables (e.g., Côté, House, & Willer, 2015) we adapted the Bimboola paradigm (Jetten, Mols, & Postmes, 2015) to conduct an experimental manipulation; this allow us to establish the causal effects of economic inequality.

Consequently, we hypothesized that perceived high economic inequality leads to an independent self-construal, whereas perceived low economic inequality leads to an interdependent self-construal. We explored these ideas in three studies. In Studies 1a and 1b we tested whether perceived economic inequality was associated with self-construal. In Study 2, we experimentally examined this effect.

### **Studies 1a and 1b**

We conducted two correlational studies using Spanish (1a) and American (1b) samples and we hypothesized that perceived economic inequality, independently from social class, would predict negatively an interdependent self-construal and positively an independent self-construal.

### **Method**

**Procedure.** The American sample was collected online via Amazon's Mechanical Turk. The Spanish sample was collected in various public places of a Spanish city.

**Participants.** The American sample consisted of 306 participants. Thirteen participants were excluded from the data analyses because they did not answer the control question correctly. The final sample included 293 participants (150 women, 143 men) between 20 and 74 years old ( $M = 39.30$ ;  $SD = 12.87$ ).

The Spanish sample consisted of 362 participants. Three participants were excluded from the data analyses because they were under age. A

quota sampling was conducted setting age ranges. The percentages of participants in each age group are presented below. The population percentages for each age group are presented between brackets using data from the Spanish official statistical body (Instituto Nacional de Estadística, INE, 2012). The quotas were: 32% people between 18–24 years old (32%), 21% people between 25–39 years old (21%), 21% people between 40–50 years old (15%), and 26% people over 50 years old (32%). The disparities in the last two ratings may be due to the fact that 47 out of the 359 participants did not answer the age question even though they were preselected according to their estimated age. The final sample included 359 participants (163 women, 158 men, and 38 unknown) between 18 and 80 years old ( $M = 38.28$ ;  $SD = 15.92$ ).

**Measurements.** The participants answered a questionnaire in which the following measures were included<sup>15</sup>:

**Self-construal.** In the American Sample we used the Singelis scale (1994) to measure independent self-construal (12 items,  $\alpha = .793$ ) and interdependent self-construal (18 items,  $\alpha = .780$ ). In the Spanish sample we used an adaptation of the Singelis scale (1994) to measure independent self-construal (8 items,  $\alpha = .575$ ) and the scales developed by Cross, Bacon, and Morris (2000) and Gabriel and Gardner (1999) to measure interdependent self-construal (18 items,  $\alpha = .892$ ; see <https://osf.io/4x3qz/>).

**Perceived economic inequality.** Participants had to choose one graphic figure out of seven that they believed most accurately represented the economic structure of contemporary society (see Figure 1).

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<sup>15</sup> Other measures were collected (see <https://osf.io/4x3qz/>).

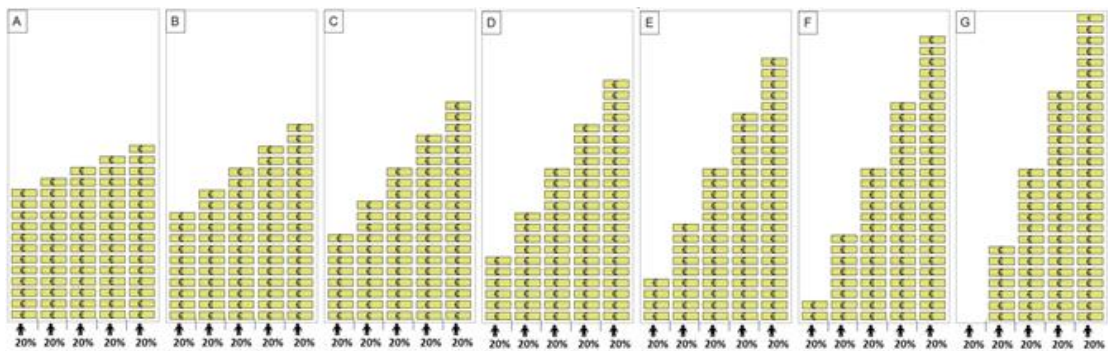


Figure 1. The Graphic Notes Inequality Measure [GNIM]; (Rodríguez-Bailón et al. 2017)

**Subjective social class.** The MacArthur Scale of Subjective SES was used (Adler, Epel, Castellazzo, & Ickovics, 2000). Participants were presented a ladder with 10 rungs. Higher rungs indicated a higher placement in society in terms of income, education, and status. They had to indicate the rung where they think they stand on the ladder.

## Results

Although the data in Spain (1a) and United State (1b) were collected in different times and with different methods, in both studies we measured the same constructs. Given that we expect our hypothesis to be independent of the country in which the study was conducted, we decided to pool both samples examining whether country of origin could moderate the results. We first standardized the variables separately and then created a database using both samples (means, standard deviations and Pearson's correlations of the two separate samples can be found in <https://osf.io/4x3qz/>).

To test our hypotheses, we first conducted a stepwise hierarchical regression analysis, using interdependent self-construal as a dependent variable. Next, we tested the relationship between subjective SES and

interdependent self-construal controlling for sample (-1 = Spanish, 1 = USA), gender (men = - 1, women = 1), and age (see Table 1, Model 1). Results showed that this model was not significant,  $F(4, 525) = 1.01, p = .400$ . Subsequently, we included perceived economic inequality in Step 2 (see Table 1, Model 2). Model 2 significantly predicted interdependent self-construal,  $F(5, 524) = 2.62, p = .024$ . Perceived economic inequality was negatively correlated with interdependent self-construal ( $\beta = -.130, p = .003$ ). Adding this variable to the model explained an additional 1.7% of variance of interdependent self-construal; this change had statistical significance,  $F(1, 524) = 8.98, p = .003$ . Additionally, we verified that the predictive power of perceived economic inequality was independent of the origin of the sample. Hence, in the third step we included the interaction between the origin of the sample and perceived economic inequality (see Table 1, Model 3). Although Model 3 was significant,  $F(6, 523) = 2.51, p = .021$ , the inclusion of the interaction term did not explain additional variance,  $F(1, 523) = 1.93, p = .166$ . Moreover, the effect of the interaction was not significant,  $\beta = -.060, p = .166$ .

Second, we conducted another stepwise hierarchical regression analysis with independent self-construal as a dependent variable. Similarly, we included subjective SES, sample, gender, and age in Step 1 (see Table 2, Model 1). Results showed that this model was not statistically significant,  $F(4, 525) = 2.04, p = .088$ . We included perceived economic inequality in Step 2 (see Table 2, Model 2), and results showed that Model 2 was not significant,  $F(5, 524) = 1.63, p = .151$ . Following the same data analysis strategy used for interdependent self-construal, in the third step we included the interaction between the origin of the sample and perceived economic inequality (see Table 2, Model 3). However, Model 3 was not statistically significant either,  $F(6, 523) = 2.02, p = .062$ .

Table 1

*Hierarchical regression analysis of interdependent self-construal in Z-scores*

Predictor	Model 1		Model 2		Model 3	
	$\beta$	95% CI for B	$\beta$	95% CI for B	$\beta$	95% CI for B
Step 1						
Subjective SES	.082	[-.004, .165]	.072	[-.013, .156]	.072	[-.012, .156]
Age	-.020	[-.105, .065]	-.016	[-.100, .069]	-.009	[-.094, .075]
Gender	.025	[-.059, .109]	.025	[-.058, .108]	.024	[-.60, .106]
Sample	-.002	[-.086, .082]	<.001	[-.084, .084]	.001	[-.082, .085]
Step 2						
PEI			-.130**	[-.216, -.045]	-.125**	[-.212, -.040]
Step 3						
Interaction					-.060	[-.147, .025]
Sample*PEI						
R <sup>2</sup>	.008		.024		.028	
F	1.01		2.62*		2.51*	
$\Delta R^2$			.017		.004	
$\Delta F$			8.98**		1.93	

Note. CI = Confidence interval; PEI = Perceived economic inequality; \*p < .05, \*\*p < .01



## Chapter 5

Table 2

*Hierarchical regression analysis of independent self-construal in Z-scores*

Predictor	Model 1		Model 2		Model 3	
	$\beta$	95% CI for B	$\beta$	95% CI for B	$\beta$	95% CI for B
Step 1						
Subjective SES	.108*	[.023, .193]	.108*	[.023, .193]	.108*	[.023, .193]
Age	-.020	[-.105, .066]	-.020	[-.105, .066]	-.011	[-.096, .075]
Gender	.058	[-.054, .283]	.058	[-.054, .283]	.056	[-.058, .278]
Sample	.014	[-.070, .099]	.014	[-.070, .099]	.016	[-.068, .101]
Step 2						
PEI			<.001	[-.087, .087]	.006	[-.081, -.093]
Step 3						
Interaction					-.086*	[-.175, -.001]
Sample*PEI						
R <sup>2</sup>	.015		.015		.023	
F	2.04		1.63		2.02	
$\Delta R^2$			<.001		.007	
$\Delta F$			<0.01		3.92*	

Note. CI = Confidence interval; PEI = Perceived economic inequality; \*p < .05

## Discussion

In this study we found that the less economic inequality individuals perceive, the more they define themselves as being part of their group, that is, they have an interdependent self-construal. We found that this relationship persisted even after taking into account participants' subjective SES. Additionally, we did not find an interaction effect between perceived economic inequality and the country of origin of the sample on interdependent self-construal. This suggests that the relationship between perceived economic inequality and interdependent self-construal is similar in both countries. However, these results did not support the hypothesis that perceived economic inequality positively predicts independent self-construal.

Previous research has shown that explicit measures of self-construal are not as consistent as it could be expected (Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009). This could be one of the reasons why we did not find support for our hypothesis about the influence of economic inequality on independent self-construal. To overcome this limitation, it is necessary to consider the distinction between cultural tasks (i.e. the scripts used to achieve independent or interdependent mandates, such as being a unique vs. a common person) from psychological tendencies (i.e. specific ways of thinking, feeling, and behaving when completing cultural tasks, Kitayama et al., 2009). Whereas in Study 1a and 1b we used explicit beliefs that referred to cultural tasks, in Study 2 we used an implicit measure of self-construal, which refers to independent or interdependent psychological tendencies. This allowed us to control for superfluous factors such as self-representational concerns and response sets (see Kitayama et al., 2009).

In addition, we used a correlational design in Studies 1a and 1b. Because of this, the results of these studies cannot be used to establish a

causal relationship between perceived economic inequality and an interdependent self-construal. It may be that individuals' interdependent self-construal influences how they perceive their social and economic reality. To rule out this alternative explanation, we conducted an experimental study to analyze the causal effects of perceived economic inequality on self-construal.

### **Study 2**

According to the culture-as-situated cognition approach, the nature of self-construal is active and dynamic. Thus, individuals tend to use independent or interdependent self-construal mindsets as a function of contextual and situational differences (e.g. Oyserman & Lee, 2008). Building on this approach, we suggested that economic inequality may influence individuals' self-construal mindsets.

In this study, we developed a new way to manipulate economic inequality by adapting the Bimboola paradigm to depict an imaginary society in which the economic structure can be manipulated (Jetten et al., 2015). In fact, we experimentally manipulated economic inequality to test its causal effect on self-construal. Manipulating economic inequality in the laboratory also allowed us to control for other important variables that are associated with self-construal such as SES (Markus, & Conner, 2013).

Additionally, in Study 2 we used an implicit measure of self-construal. Past research has demonstrated that self-guided information processing results in a better recall of relevant information (see Gardner, Pickett, & Brewer, 2000). Consequently, we used a memory paradigm to measure the psychological tendency to recall more individual events, which would be a sign of an independent self-construal, or relational and group events, which would reflect an interdependent self-construal. We predicted that, in the high

economic inequality condition, participants would recall more independent events and fewer interdependent events than participants in the low economic inequality condition, for whom the contrary would be true.

## Method

**Participants.** Ninety-seven students of a Spanish University participated in this study in exchange for course credit. Three participants were excluded from the data analyses because their native language was not Spanish. The final sample consisted of 94 participants (72 women) aged between 19 and 47 years ( $M = 21.55$ ,  $SD = 3.89$ ). Forty-eight participants were assigned to the high economic inequality condition whereas 46 were assigned to the low economic inequality condition. Post-hoc power analyses conducted with this sample size showed that the study had a power of 56% to detect a medium effect size ( $\eta^2 = .046$ ).

**Procedure.** Participants were seated at computers in individual cubicles and were told that this study is about adaptation to new environments.

**Manipulation.** Economic inequality (high vs. low) was manipulated. Participants were randomly assigned to one of the two experimental conditions. In order to manipulate inequality, we used an adaptation of the Bimboola paradigm (Jetten et al., 2015). Participants were told they were going to start a new life in a new society called Bimboola. In this society, there are differences in the incomes of the people who live there; specifically, there are three main income groups according to the amount of Bimbolean dollars that the citizens in Bimboola earn. Then, participants were shown the distribution of the three income groups (see Figure 2). The distribution of wealth in the high-economic-inequality condition had a larger gap between the richest and poorest, whereas the low-economic-inequality

condition showed a smaller gap between the richest and poorest. After the distribution of resources in Bimboola had been displayed, all participants were assigned to the medium-wealth position (Income level 2).

High Economic Inequality Condition

<b>1</b>	<b>13.500</b> BD/month
<b>2</b>	<b>7.000</b> BD/month
<b>3</b>	<b>500</b> BD/month

Low Economic Inequality Condition

<b>1</b>	<b>8.000</b> BD/month
<b>2</b>	<b>7.000</b> BD/month
<b>3</b>	<b>6.000</b> BD/month

Figure 2. Economic structure of Bimboola. BD = Bimbolean dollars. (Note that the three income groups add up to the same amount of money in both distributions).

Finally, in order to achieve a greater manipulation, participants were told that to start off their new life in Bimboola, they had to buy the house where they would live, a car, and a place to go on holidays. Next, they viewed the different houses, cars, and holidays available in Bimboola (three options for each in each income level). Although they could see all the houses, cars, and holiday places, participants were only allowed to choose among the goods that they could afford (i.e., the ones at their income level or lower). The types of goods at the second income level were the same in the two inequality conditions, but the goods in the first and third income levels were different depending on the experimental condition. Previously, a pilot study was conducted in order to verify the stimuli (see Pilot Study 1 at <https://osf.io/4x3qz/>).

After being exposed to the manipulation, participants completed two items in order to check the effectiveness of the manipulation: “What income

level were you assigned to? (1, 2, or 3)”; “To what extent is the economic distribution in Bimboola unequal?” Responses ranged from 1 = *a little unequal* to 9 = *highly unequal*”.

Additionally, participants were asked about the perceived wealth of their assigned group: “How wealthy is your group?” Responses ranged from 1 = *very poor* to 9 = *very rich*. They also completed two items to measure their Bimboola identification (e.g., “To what extent do you identify as a member of Bimboola society?” 1 = *very little* to 7 = *strongly*; and The inclusion of Other in the Self scale (IOS), Aron et al., 1992;  $\alpha = .765$ ).

**Memory task.** To measure self-construal in an implicit way, we used the diary paradigm adapted from Gardner et al. (2000). After the manipulation, participants were asked to read the diary of another individual who belonged to their income group in order to imagine how their daily life would be in Bimboola. The diary included different events that happened in four days of the life of a man or woman (each participant read the diary of a same-sex individual). Two pilot studies were run to select the events that best matched important features—frequency, informativeness of self-construal, and neutrality with respect to social class and gender (see Pilot Studies 2 and 3 in the additional material section at <https://osf.io/4x3qz/>). The diary included 16 events (eight independent and eight interdependent events; available at <https://osf.io/4x3qz/>). As a distractor task, after reading the diary, participants were asked to perform several mathematical calculations for two minutes. Afterwards, the memory task was displayed unexpectedly.

Finally, participants were asked to complete two items in order to measure their identification with the author of the diary (“To what extent do you feel identified with the author of the diary?” 1 = *a little*, 7 = *strongly*; and

IOS, Aron et al., 1992;  $\alpha = .824$ ). Finally, participants were debriefed and thanked for their participation.

## Results

**Manipulation check.** Perceived economic inequality and perceived group wealth were included in a MANOVA as dependent variables, and the economic inequality manipulation was included as a between-group factor. Results showed that the manipulation of economic inequality was successful: participants in the high economic inequality condition perceived more economic inequality ( $M = 8.40$ ,  $SD = 0.89$ ) than participants assigned to the low economic inequality condition ( $M = 3.76$ ,  $SD = 1.85$ ),  $F(1, 92) = 504.61$ ,  $p < .001$ ,  $\eta^2 = .725$ .

We also found a marginal effect on perceived group wealth,  $F(1, 92) = 2.75$ ,  $p = .059$ ,  $\eta^2 = .038$ . Participants in the high economic inequality condition tended to perceive their group's wealth as being lower ( $M = 5.88$ ,  $SD = 0.84$ ) than participants in the low economic inequality condition ( $M = 6.22$ ,  $SD = 0.89$ ). Although participants in the same income group had exactly the same resources in both conditions (i.e., high and low inequality), it seems that economic inequality tended to influence participants' perceived group wealth. Given that a requirement of the study was to keep group wealth constant, we statistically controlled for it in the following analyses.

We did not find any effects of identification with Bimboola society ( $t(92) = 1.37$ ,  $p = .175$ ) or the author of the diary ( $t(92) = -.41$ ,  $p = .683$ ) as a function of the experimental condition.

**Memory task.** The decision about the correct recalled events was submitted to the consideration of two blinded encoders. The degree of agreement between the encoders was high (848 out of 903 events,  $Kappa = .954$ ,  $p < .001$ ). The following analyses were performed including only the

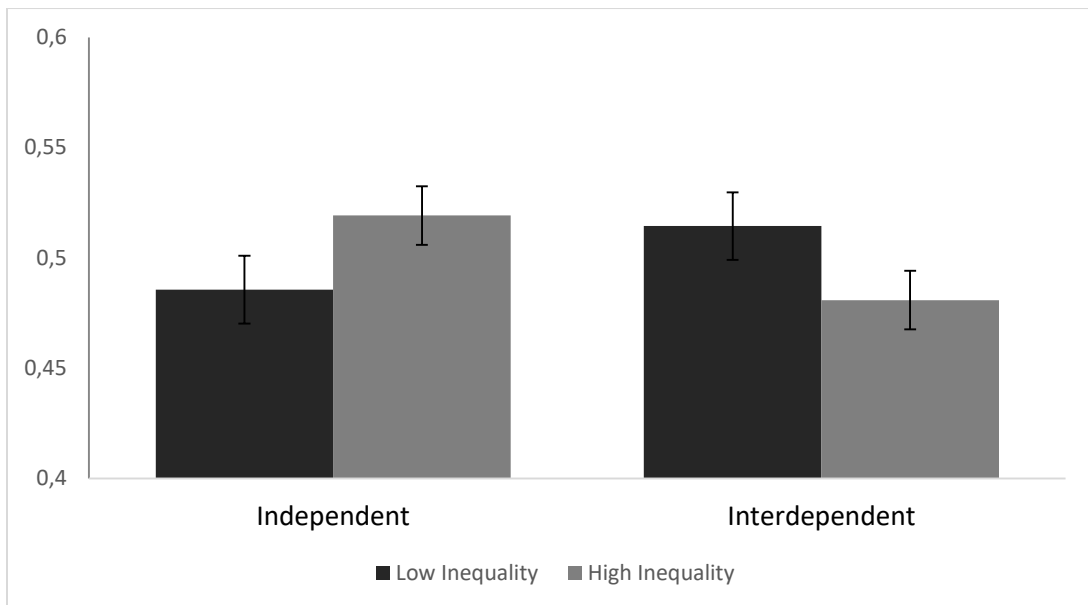
events on which the encoders agreed. We controlled for individual differences in memory ability (correctly recalled events ranged from 5 to 13 out of a maximum of 16 events) as follows: the proportion of correctly recalled independent and interdependent events was computed by dividing the correct events recalled in each category by the total number of correctly recalled events for each participant (see Gardner et al., 2000, for a similar procedure).

In order to test our main prediction, an ANCOVA was conducted with the proportion of independent events recalled as the dependent variable and economic inequality as a between-group factor. Perceived group wealth was included as a covariate. The analyses showed that participants recalled a higher proportion of independent events in the high economic inequality condition ( $M = .519$ ,  $SD = .092$ ) than in the low economic-inequality condition ( $M = .486$ ,  $SD = .103$ );  $F(91, 1) = 4.36$ ,  $p = .039$ ,  $\eta^2 = .046$ . Similarly, the same effect but in the opposite direction was found in the ANCOVA with the interdependent event recalled as the dependent variable. Those assigned to the low economic inequality condition recalled a higher proportion of interdependent events ( $M = .514$ ,  $SD = .103$ ) than those assigned to the high economic inequality condition ( $M = .481$ ,  $SD = .092$ );  $F(91, 1) = 4.36$ ,  $p = .039$ ,  $\eta^2 = .046$  (see Figure 3).<sup>16</sup>

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<sup>16</sup> The effect without the covariate:  $F(92, 1) = 2.75$ ,  $p = .100$ ,  $\eta^2 = .029$ .





*Figure 3.* Proportion of events recalled in Study 2 as a function of the inequality condition . Bars represent standard error.

## Dicussion

The results of this study show that when people are involved in a context where economic inequality is lower, they tend to recall more interdependent events. This suggests that low economic inequality leads to an interdependent self-construal. Conversely, when people are in a context where economic inequality is high, they tend to recall more individualistic events, which suggest that high economic inequality leads to an independent self-construal. It is important to highlight that participants' social class was held constant across the experimental conditions (i.e., all participants were assigned to the middle class). This limitation should be noted given that past research has shown that social class moderates the effects of economic inequality (e.g., Côté et al., 2015). Future studies should explore whether the effects of perceived economic inequality on the self-construal vary when participants are assigned to a high or low social class.

### **General discussion**

Overall, our findings add to the growing literature showing that economic inequality has important consequences that affect the entire society regardless of the social standing of individuals in it. Going beyond previous research about the psychosocial effects of perceived economic inequality (e.g. Nishi et al., 2015), we provide evidence about how it can also affect self-construal. In the studies described above we found that low economic inequality leads to an interdependent self-construal. Results of the correlational studies revealed that people who perceive low economic inequality also show an interdependent self-construal, regardless of their subjective SES. Furthermore, results of the experimental study revealed the causality of this relationship: it is perceived low economic inequality that led to an interdependent self-construal. However, our results did not confirm the hypothesis that higher perceived economic inequality leads to an independent self-construal. Correlational data from Studies 1a and 1b did not show a correlation between perceived economic inequality and independent self-construal. By contrast, the results of Study 2 provided evidence to support our hypothesis. However, the complementarity of the memory task measure between independent and interdependent events does not allow us to conclude that there is a direct effect of economic inequality on the independent events recalled. This could be an indirect effect of the number of interdependent events recalled. Therefore, it remains for future studies to overcome this limitation and use a better measure able to capture the possible effect of the perception of inequality on both the independent and interdependent self-construal.

In the present research, we tried to respond, at least partly, to the recent question asked by Voyer and Franks (2014) about which are the bases of self-construal. Some researchers have shown that social class

(Markus & Conner, 2013) and social power (Voyer & Franks, 2014) are important bases. This suggests that individuals who are powerful or from a high social class tend to be more independent, whereas those who are powerless or from a low social class tend to be more interdependent. We showed that the control of resources that a person or a group has are not the only possible bases of self-construal; in addition, the relative material difference perceived in the distribution of resources in a context can also affect self-construal.

Additionally, our results provide additional support for the situated cognition model (Oyserman & Lee, 2008). We showed that self-construal is context-sensitive. Oyserman and Lee (2008) suggest that societies differ in the extent to which independent or collective (i.e., interdependent) mindsets are salient. Our results show that when economic inequality is salient, it could act as a cue that fires the activation of a specific self-construal. This suggests that perceived economic distance leads people to distance themselves socially from others.

A question that remains open is whether economic inequality influences other cultural variables. In this regard, we could hypothesize that if economic inequality leads to a less interdependent self-construal, it may also be associated with other processes related to self-construal, such as self-enhancement (Markus & Kitayama, 1991). This is consistent with the positive relationship between economic inequality and self-enhancement bias found by Loughnan et al. (2011). Future research could explore whether other cultural features such as social norms or values are affected by economic inequality.

Over the last few years, an increasing number of researchers in various disciplines have looked into the issue of economic inequality and its consequences. This task is by no means straightforward due to the complex

interplay of macro-social and psychosocial variables. The studies we conducted in the present research enrich and complete the results obtained by previous studies and disciplines, bridging a gap between a macro-social factor such as economic inequality and a psychosocial factor such as self-construal. Some scholars have proposed that the relationship between economic inequality and social issues may be mediated by psychosocial processes such as trust, status anxiety (Buttrick & Oishi, 2017), or hope (Kelley & Evans, 2017). Taking into account the effects found in our studies regarding how an unequal economic context affect self-construal, we consider that future research could explore the possible mediator role of self-construal—and the psychological tendency associated with it such as selective memory—when considering the effects of economic inequality.

In summary, the results presented in this paper provide initial support for a previously untested prediction of the hypothesis by Pickett & Wilkinson (2015), suggesting that the socioeconomic situation in which we live, regardless of our position in the distribution of resources, may affect the way that we perceive ourselves in relation to others.



## **CHAPTER 6**

Economic Inequality Makes us Feel

Different and Self-Reliant

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Economic Inequality Makes us Feel  
Different and Self-Reliant

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The reported studies were approved by the ethical committee of the University of Kent (Study 1, Ethics Clearance ID: 201715059194974550) and the University of Granada (Study 2: Ethics Clearance ID 170/CEIH/2016). All participants provided informed consent.

## **Abstract**

One of the most parsimonious explanations of economic inequality's psychological effects is that it increases social distance. In accordance with the idea that social distance play a large role in defines an individual's self-construal, previous works have shown that economic inequality affects self-construal. However, it remains unclear which dimensions of self-construal are affected by economic inequality. We addressed this question, using correlational data from natural settings (Study 1) and experimental data from a fictional society (Study 2). Results from both studies suggest that a higher level of perceived economic inequality engenders a more independent (vs. interdependent) self-construal, but only on two dimensions: Differences (vs. Similarity) and Self-Reliance (vs. Dependence on Others). We employed a sociological approach to analyse the results.

*Keywords:* economic inequality, multidimensional self-construal, independence, interdependence.



## **Economic Inequality Makes us Feel Different and Self-Reliant**

Economic inequality is at the root of numerous economic (e.g., Stiglitz, 2012), political (e.g., Andersen, 2012), and health-related (e.g., Wilkinson & Pickett, 2006) problems that societies face. As such, it has become a focal topic within the social sciences, which aim to understand, explain, and prevent its influence. One commonly studied aspect of economic inequality is its impact on social distance (Van de Werfhorst & Salverda, 2012; Wilkinson & Pickett, 2009). In fact, social distance has been posited as the mechanism that enables us to account for the causal link between social inequality and social problems (Pickett & Wilkinson, 2015). In the current research, we focus on this under-researched mechanism and examine whether economic inequality increases social distance by means of modifying any of the various dimensions of self-construal.

Previous researchers have operationalized social distance in multiple ways, including class polarization, lack of solidarity, and independent self-construal (Andersen & Curtis, 2012; Paskov & Dewilde, 2012; Sánchez-Rodríguez, Willis, & Rodríguez-Bailón, in press). Researchers operationalizing social distance in terms of an independent self-construal (i.e., individuals regard themselves as separate from others; Markus & Kitayama, 1991) have suggested that a high economic inequality fosters an independent self-construal, whereas a low economic inequality promotes an interdependent self-construal (Sánchez-Rodríguez, et al. in press). However, recent researches have revealed the multidimensional nature of the self-construct (Vignoles et al., 2016). Here, we advance this research by exploring the extent to which economic inequality may be associated only with certain aspects of self-construal, but not all of them.

### **Economic inequality and self-construal**

A growing body of research has indicated that economic inequality influences how members of various societies feel, think, and behave. For example, researchers have shown that heightened economic inequality is associated with higher levels of status anxiety and relative deprivation, as well as lower levels of interpersonal trust (e.g., Delhey & Dragolov, 2013; Oishi, Kesebir, & Diener, 2011; Osborne, Sibley, & Sengupta, 2015). Moreover, when a society is more unequal, its members are more likely to self-enhance their desirable qualities, relative to others (Loughnan et al., 2011). Economic inequality also shapes behaviour. For example, members of more unequal societies are relatively less willing to help others (Paskov & Dewilde, 2012) and less pleasant to others (de Vries, Gosling, & Potter, 2011). Similar findings have been observed in experimental settings, where circumstances of economic inequality were simulated. For example, when individuals think of themselves within contexts that could be described as economically unequal, they are more likely to engage in risk-taking behaviours (Payne, Brown-Iannuzzi, & Hannay, 2017) and less likely to cooperate with others (Côté, House, & Willer, 2015; Nishi, Shirado, Rand, & Christakis, 2015).

Pursuant to a socioecological perspective, economic inequality is among the core features of the specific context in which people exist, and to succeed in that context, they must adapt their thoughts, feelings, and behaviour to the circumstances. Socioecological psychology focuses on the role of objective environmental features; in this case, on the objective existence of economic inequality (Oishi, 2014). However, the psychological effects of economic inequality on such social practices, like cooperative behaviour, have mainly been observed via individual perceptions (Nishi et al., 2015). This issue have led some researches to suggest that further

investigation should focus on effects of perceived economic inequality instead of on issues related to objective inequality (Gimpelson & Treisman, 2018). Accordingly, we focus on the degree of perceived economic inequality, based on the assumption that such perceptions engender a context that constrains some psychological tendencies and promotes others (Wilkinson & Pickett, 2017).

Pickett and Wilkinson (2015) claimed that one of the most parsimonious explanations of the psychological effects of economic inequality is that it increase social distance. This occurs because heightened economic inequality imposes more notable distinctions between individuals' living conditions, which reduces social interactions, thereby increasing social distance. To explore the extent to which economic inequality impacts social distance, researchers have operationalized the latter as either intergroup distance (e.g., polarization in terms of class identification; Andersen & Curtis, 2012) or interpersonal distance (e.g. solidarity or the lack thereof; Paskov & Dewilde, 2012). In accordance with claims advanced by Magee and Smith (2013), we define social distance, here, as 'a subjective perception or experience of distance from another person or other persons' (p. 2). Pursuant to this definition, we argue that a higher degree of economic inequality could lead to the subjective experience or perception of oneself as not connected with others. The experience of social distance is important because it is, among other consequences, a core social aspect of construing the self. Further, social distance meaningfully impacts an individual's self-construal, which in turn organizes his or her thoughts, feelings, and behaviours (Markus & Kitayama, 1991). Linking economic inequality and self-construal in their theorizing, Sánchez-Rodríguez, et al. (in press) contended that low economic inequality produces an interdependent self-

construal that squares with the idea that relatively lower levels of economic inequality reduce social distance.

In another thread of related research authors have explored the relationship between economic inequality and individualism-collectivism. Collectivist cultures are characterized by the foundational conception of groups as strongly connected to the individual or self (Hofstede, 1980; Oyserman, Coon, & Kemmelmeier, 2002). By contrast, individualist cultures are characterized by relatively loose ties between individuals (Hofstede, 1980; Oyserman et al., 2002). Although individualism-collectivism is a multifaceted cultural dimension that cannot be reduced to self-construal (Triandis, 1995), and probing the relationship between economic inequality and individualism-collectivism can help to clarify the link between economic inequality and social distance (i.e. social distance hypothesis). Empirical evidence revealed that countries with higher levels of economic inequality tend to demonstrate similarly heightened collectivist leanings (Basabe & Ros, 2005; Hofstede, 1980). These findings defy the presumption that economic inequality increases social distance. As such, pursuant to the social distance hypothesis, conditions of economic inequality should foster individualism instead of collectivism. Indeed, models derived from mathematical simulations demonstrate that societies characterized by greater economic inequality tend to be more individualist than collectivist (Ahuja, Zhang, & Van Der Schaar, 2014).

A possible way to reconcile these inconsistencies in the literature involves taking into account the multidimensional nature of individualism-collectivism and self-construal constructs (i.e., measured at different analytical levels; Triandis, 1995; Vignoles et al., 2016). For example, in addition to self-construal, the individualism-collectivism dichotomy is characterized by the types of relationship that people tend to build (i.e., as

reflections of communal or exchange-related values), the relative privilege accorded to individual goals versus group goals, and the reliance on personal attitudes versus group norms as behavioural guides (Triandis, 1995). Similarly, self-construal also involves multiple features (Vignoles et al., 2016). Vignoles et al. (2016) propose that a variety of possible ways of being independent versus interdependent. These researchers identified eight discrete dimensions embedded within the independence-interdependence construct (Owe et al., 2013; Vignoles et al., 2016), and these dimensions will serve as variables in our study, as follows: Difference (vs. Similarity), Self-Direction (vs. Receptiveness to Influence), Self-Expression (vs. Harmony), Self-Containment (vs. Connectedness to Others), Self-Interest (vs. Commitment to Others), Consistency (vs. Variability), and Self-Reliance (vs. Dependence on Others). The question therefore is the extent to which economic inequality can be demonstrably associated with certain dimensions of this construct but not to others. To our knowledge, there has been no research aimed at determining which of these eight dimensions of self-construal are, in fact, meaningfully associated with economic inequality.

Previous researchers have explored the modes by which economic inequality can affect perceptions of the normative climate, in terms of the different dimensions of individualism-collectivism (Sánchez-Rodríguez., Willis., Jetten, & Rodríguez-Bailón, under revision). Their results showed that economic inequality affects some dimensions of the normative climate individualist-collectivist (i.e. self-construal, exchange vs. communal relationships, and the pursuit of individual or group goals), but do not affects other dimension (i.e. personal attitudes or group norms guide behaviour). A plausible interpretation of these results might hinge on the claim that that the various dimensions of individualism-collectivism exhibit distinctive kinds of



correspondence with the concept of social distance. Similarly, some dimensions of self-construal might dovetail more closely with the construct of social distance than others do. Therefore, some dimensions of self-construal might be more affected than others, by the extent of perceived economic inequality.

In the current research, we examine how perceived economic inequality might be associated with social distance, as measured by the eight dimensions of self-construal. First, in Study 1, we advance the general hypothesis that a higher degree of perceived economic inequality may be associated with a stronger endorsement of independent self-construal across all its dimensions, as measured by Vignoles et al. (2016). Next, building on the premise that economic inequality imposes a social context to which people must adapt, in Study 2, we asked participants to imagine how they would describe themselves if they were living in a society with a high (vs. low) level of economic inequality. In this second study, based on the results of Study 1 and on certain theoretical reasons, we focused on only four of the eight self-construal dimensions, as follows: Difference (vs. Similarity), Self-Direction (vs. Receptiveness to Influence), Self-Interest (vs. Commitment to Others), and Self-Reliance (vs. Dependence on Others). All material and data sets, used in both studies, can be found online ([osf.io/d49ta](https://osf.io/d49ta)).

## Study 1

### Method

**Pre-registered hypothesis.** People who perceive higher levels of economic inequality will score higher in the independent pole of selfhood (see preregistration, [osf.io/ygd73](https://osf.io/ygd73)).

**Sample size calculation.** We conducted an a priori two-tailed correlation power analysis, using G\*Power (Faul, Erdfelder, Buchner, & Lang, 2009), to calculate our sample size; on the basis of previous research, we estimated a medium-low effect size ( $r = 0.20$ ; Sánchez-Rodríguez, et al., in press). This analysis revealed that 319 participants were required to have a power of .95%, and the corresponding 5% probability of an alpha error. We therefore sought study participants until we attained our desired sample size of 319 participants, and we planned to include only native English speakers in the data for analysis, to ensure that we had participants capable of properly understanding the instructions.

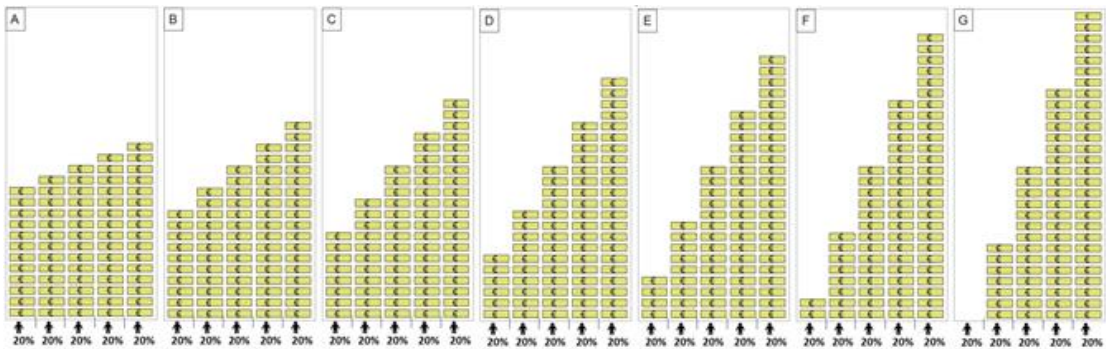
**Participants and procedure.** Undergraduate students attending a British University participated in an online study (bearing the title of a 'Survey about Social Reality') in exchange for course credit. Only 289 participants completed the measures representing our main dependent variables. Twenty-five participants were excluded because they did not report English as their native language. The final sample consisted of 264 participants (220 women, 6 of unclear gender) aged 17 to 55 years ( $M = 19.64$ ;  $SD = 4.25$ ). Given the sample size ( $N = 264$ ), with alpha at .05 and power at .80, for a correlation, this study was powerful enough to find a medium-low effect size ( $r = .17$ ).

**Measures.** We used the following measures to generate data representing our variables:

*Perceived economic inequality.* We employed the Graphic Notes Inequality Measure (GNIM) to measure perceived economic inequality (Rodriguez-Bailon, Bratanova, Willis, Lopez-Rodriguez, Sturrock, & Loughnan, 2017). Participants indicated which graphic, selecting one of seven options, they regarded as most representative of the economic

structure of the United Kingdom (UK). Higher scores corresponded to higher levels of perceived economic inequality (see Figure 1).

*Multidimensional self-construal.* We used the Culture and Identity Research Network Self Construal Scale Version 3 (CIRN-SCS-3; Vignoles et al., 2016) to measure the multidimensionality of self-construal. Specifically, the CIRN-SCS-3 measured the eight dimensions of self-construal, using a 9-point Likert scale, on which



*Figure 1.* The Graphic Notes Inequality Measure [GNIM]; (Rodríguez-Bailón et al. 2017)

ratings ranged from 1 (*doesn't describe me at all*) to 5 (*describes me exactly*), with number in between (1½, 2½, 3½, 4½): Difference vs. Similarity (e.g., 'You like being similar to other people', 6 items,  $\alpha = .795$ ); Self-Containment vs. Connectedness to Others (e.g., 'If someone in your family achieves something, you feel proud as if you had achieved something yourself', 6 items,  $\alpha = .672$ ); Self-Direction vs. Receptiveness to Influence (e.g., 'You usually ask your family for approval before making a decision', 6 items,  $\alpha = .672$ ); Self-Reliance vs. Dependence on Others (e.g., 'In difficult situations, you tend to seek help from others rather than relying only on

yourself', 6 items,  $\alpha = .848$ ); Self-Expression vs. Harmony (e.g., 'You prefer to preserve harmony in your relationships, even if this means not expressing your true feelings', 6 items,  $\alpha = .770$ ); Self-Interest vs. Commitment to Others (e.g., 'You value good relations with the people close to you more than your personal achievements', 6 items,  $\alpha = .657$ ); Consistency vs. Variability (e.g., 'You act very differently at home compared to how you act in public', 6 items,  $\alpha = .876$ ); and De-contextualized vs. Contextualized Self (e.g., 'If someone wants to understand who you are, they would need to know about the place where you live', 6 items,  $\alpha = .810$ ).<sup>17</sup>

*Sociodemographic variables.* Finally, participants provided subjective information concerning individual and familial socioeconomic status (SES) , on a scale ranging from 1 ('*The worst off*') to 10 ('*The best off*'); Adler, Epel, Castellazzo, & Ickovics, 2000), education level, employment status, individual and household income, ethnicity, age, gender, political orientation, native language, and nationality.

## Results

The means, standard deviations, and correlations between study variables are reported in Table 1. To minimize the likelihood of alpha errors, we applied the Bonferroni correction to adjust for the multiple tests conducted to analyse the study predictions. Accordingly, we only regarded  $p < .006$  as statistically significant. As shown in Table 1, perceived economic inequality was found to be negatively and significantly correlated with only two dimensions of the self-construal: Difference vs. Similarity and Self-Reliance vs. Dependence on Others. These results demonstrate that participants who perceived higher levels of economic inequality in society were also more likely to define themselves as being more different from (i.e.,

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<sup>17</sup> Additionally, we included 18 items aimed at measuring Cognitive Styles, to determine its significance, relative to other variables

less similar to) others,  $r = -.177$ ,  $p = .004$ , and more self-reliant (i.e., less dependent on others),  $r = -.205$ ,  $p = .001$ . Moreover, a closer inspection of the results revealed a tendency negative between perceived economic inequality and Self-Direction (vs. Receptiveness to Influence),  $r = -.151$ ,  $p = .014$ ; this relationship, however, did not turn out to be significant.

Pursuant to our pre-registration plan, we also tested the predictive power of perceived economic inequality, above and beyond the demographic variables measured in this study, for the two dimensions of self-construal that showed significant associations with perceived economic inequality. To that end, we conducted two hierarchical regression analyses, using Difference vs. Similarity and Self-Reliance vs. Dependence on Others as the criterion variables. In both analyses, individual and familial SES, education level, individual and household income, age and gender (0 = woman, 1 = man) were entered as predictors in Step 1, and perceived economic inequality was entered in Step 2.

As shown in Table 2, the regression analysis for Difference vs. Similarity did not find the demographic variables to be significant predictors of this dimension: Model 1,  $F(7, 239) = 1.54$ ,  $p = .155$ . Perceived economic inequality, however, was a significant predictor of this self-construal dimension ( $\beta = -.181$ ,  $p = .005$ ) that accounted for an additional 3.1% of variance,  $F(1, 238) = 8.00$ ,  $p = .005$ .

Finally, as shown in Table 3, the regression analysis that used Self-reliance vs. Dependence on Others as a criterion variable indicated that the demographic variables, collectively, significantly predicted this dimension: Model 1,  $F(7, 239) = 2.21$ ,  $p = .034$ . Perceived economic inequality was also a significant predictor ( $\beta = -.201$ ,  $p = .002$ ) of this self-construal dimension that explained an additional 3.8% of variance over them,  $F(1, 238) = 10.06$ ,  $p = .002$ .

Table 1

*Means, Standard Deviations, and Correlations Between the Variables Measured in Study 1*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Perceived Economic Inequality.	5.24	1.44	-							
2. Difference vs. Similarity.	4.32	1.40	-.177***	-						
3. Self-Containment vs. Connectedness to Others.	6.40	1.32	.091	-.103 <sup>†</sup>	-					
4. Self-Direction vs. Receptiveness to Influence.	4.47	1.22	-.151 <sup>*</sup>	.581***	.017	-				
5. Self-Reliance vs. Dependence on Others.	4.39	1.59	-.205***	.390***	-.014	.469***	-			
6. Self-Expression vs. Harmony.	5.01	1.49	-.047	.317***	.068	.407***	.034	-		
7. Self-Interest vs. Commitment to Others.	5.44	1.25	.021	.158 <sup>*</sup>	.274***	.207**	.183**	.180**	-	
8. Consistency vs. Variability.	4.76	1.82	-.030	.403***	-.164**	.313***	.153 <sup>*</sup>	.472***	.095	-
9. De-contextualized vs. Contextualized Self.	3.79	1.51	-.072	.032	-.031	.147 <sup>*</sup>	-.064	.122 <sup>*</sup>	-.185**	.216***

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .006$

## **Discussion**

These results suggest that people who perceive more economic inequality in society tend to self-define as more independent, but only in the sense that they regard themselves as different from others and self-reliant. To wit, lower levels of perceived societal inequality can be associated with more individuals self-defining as similar to and dependent on others. These effects held above and beyond several social class indicators, as well as gender and age. Moreover, these findings are consistent with previous research that demonstrated an association between lower levels of perceived economic inequality and more individuals endorsing interdependence, measured as a homogeneous construct (Sánchez-Rodríguez et al., in press). These results actually go a step further, suggesting that perceived economic inequality is particularly related with the Difference vs. Similarity and Self-Reliance vs. Dependence dimensions of self-construal.

Table 2

*Hierarchical Regression Analysis on Difference vs. Similarity in Study 1*

Predictor	Model 1		Model 2	
	$\beta$	95% CI for B	$\beta$	95% CI for B
Step 1				
Individual SES	.017	[-.167, .200]	-.018	[-.119, .165]
Familial SES	.067	[-.111, .225]	.079	[-.098, .232]
Education Level	-.033	[-.257, .150]	-.037	[-.261, .141]
Individual Income	-.049	[-.318, .141]	-.054	[-.324, .129]
Household Income	.073	[-.040, .124]	.090	[-.029, .133]
Age	.021	[-.034, .048]	.041	[-.027, .054]
Gender	-.161*	[-1.120, -0.142]	-.140*	[-1.032, -0.060]
Step 2				
Perceived Economic Inequality			-.181**	[-.298, -.053]
$R^2$	.043		.074	
$F$	1.54		2.34*	
$\Delta R^2$			.031	
$\Delta F$			8.00**	

Note. CI = Confidence interval; SES = Socioeconomic Status

\*  $p < .05$ , \*\*  $p < .01$



Table 3

*Hierarchical Regression Analysis on Self-reliance vs. Dependence on Others in Study 1*

Predictor	Model 1		Model 2	
	$\beta$	95% CI for B	$\beta$	95% CI for B
Step 1				
Individual SES	.087	[-.112, .297]	.048	[-.152, .253]
Familial SES	.140	[-.053, .322]	.153	[-.037, .332]
Education Level	-.082	[-.377, .078]	-.087	[-.382, .065]
Individual Income	.058	[-.138, .375]	.052	[-.144, .360]
Household Income	.030	[-.072, .111]	.049	[-.058, .122]
Age	.028	[-.036, .056]	.050	[-.027, .064]
Gender	-.047	[-.753, .341]	-.023	[-.641, .441]
Step 2				
Perceived Economic Inequality			-.220**	[-.356, -.083]
$R^2$	.061		.099	
$F$	2.21*		3.26**	
$\Delta R^2$			.038	
$\Delta F$			10.06**	

Note. CI = Confidence interval; SES = Socioeconomic Status

\*\*  $p < .01$

## Study 2

In Study 2, we examined the causal link between economic inequality and the Difference vs. Similarity and Self-Reliance vs. Dependence on Others dimensions of self-construal. Given that economic inequality provide an important feature to the context to which individuals actively adapt (Wilkinson & Pickett, 2017), we hypothesized that, participants who imagine living in a new society, characterised by a given level of economic inequality may adjust their self-definitions to suit that new environment. Specifically (and in accordance with Study 1's findings), in circumstances characterized by high (vs. low) economic inequality, an individual may experience a greater sense of Difference (vs. Similarity) from others and increased Self-Reliance (vs. Dependence on Others). Moreover, as the results of Study 1 revealed a tenuous relationship between economic inequality and Self-Direction (vs. Receptiveness to Influence), we decided to include that dimension in the next study to confirm that insufficiently significant result was not due to a smaller effect size, relative to the effect size on Difference (vs. Similarity) and Self-Reliance (vs. Dependence on Others). Finally, we decided to include the dimension of Self-Interest (vs. Commitment to Others), because, although Study 1 revealed no significant relationship between that dimension and perceived economic inequality, previous researchers have identified an effect of economic inequality on behaviour in pursuit self-interest (e.g. Nishi et al., 2015; Paskov & Dewilde, 2012).

## Method

**Pre-registered hypothesis.** In the low (vs. high) economic inequality condition, participants will exhibit higher scores in the collectivist pole of the four measured dimensions of self-construal. Specifically, in the low (vs. high) economic inequality condition participants, will score higher in Similarity

(Hypothesis 1a), Receptiveness to Influence (Hypothesis 1b), Dependence on Others (Hypothesis 1c), and Commitment to Others (Hypothesis 1d; see pre-registration hypotheses at [osf.io/qe2u7](https://osf.io/qe2u7)).

**Sample size calculation.** We conducted an a priori power analyses for a MANOVA: Global effect using G\*Power (Faul et al., 2009) to calculate our sample size. Given the data we assembled in our previous study, about the effect size between economic inequality and multidimensional self-construal (ranging from  $r = -.171$  to  $r = -.205$ ), we estimated a medium-low effect size,  $f^2 = 0.0323$  (equivalent to  $r = .171$ ), to obtain an a priori power of .95% and a 5% alpha error probability rate. Upon determining the optimal sample size to be 580 participants, we planned to assemble a total of 580, after making exclusions.

**Participants.** We recruited adult participants from the United States via Amazon's Mechanical Turk (MTurk; Buhrmester, Kwang, & Gosling, 2011), and invited them to participate in an online study titled 'New Society'. Six-hundred-and-thirty-six participants completed the study. Based on our pre-registered criteria, we excluded a total of 95 participants for the following reasons: 61 failed to pass the attention check; 26 failed the manipulation check; 9 failed to answer the open-question in line with the content question;<sup>18</sup> and 8 did not identify English as their native language. The final sample included 532 participants-(272 women, 2 of unclear gender) aged 20 to 100 years ( $M = 38.63$ ;  $SD = 12.61$ ). Given the sample size ( $N = 532$ ), with alpha at .05 and power at .80, for a correlation, this study was powerful enough to find a medium-low effect size ( $f^2 = 0.0352$ ).

**Procedure.** We randomly assigned participants to one of two economic inequality conditions: high ( $n = 257$ ) vs. low ( $n = 275$ ). We use the

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<sup>18</sup> Without taking this exclusionary criterion into account, results are similar to those reported here (see [osf.io/d49ta](https://osf.io/d49ta)).

Bimboola Paradigm (Jetten, Mols, & Postmes, 2015) to manipulate economic inequality as a variable (see also Sánchez-Rodríguez, et al., in press). We asked participants to imagine themselves becoming citizens of a new society, which we described as rather unequal (vs. equal), characterised by a large (vs. small) wealth gap between the poorest and wealthiest members of society. Regardless of which of the two conditions participants were assigned, they were asked to imagine themselves as members of the middle class, thereby rendering their positions consistent within the economic hierarchy. They were then shown the distribution of resources among the wealthiest, middle, and poorest classes which differed, as a function of each condition. In the condition characterised by high economic inequality, members of the wealthiest class appeared to be earning 13,500 Bimboolean coins per month (BC/m), members of the middle class 7,000 BC/m, and members of the poorest class 500 BC/m. In the condition characterised by low economic inequality, we cited the members of the wealthiest class were cited as earning 8,000 BC/m, members of the middle class 7,000 BC/m and members of the poorest class 6,000 BC/m. To amplify the manipulation effects, we presented participants with the living conditions of all groups. First, we showed them the houses; they were subsequently asked to choose one house from among those they could afford (i.e., they were not allowed to choose from those houses belonging to members of the wealthiest class). Subsequently, we employed a similar procedure for cars and holidays. Finally, we asked participants to imagine what an average day would look like if they were in a society as (un)equal as Bimboola; participants devoted 5 min to writing down their thoughts on the subject.

Following the manipulation, participants completed a manipulation check, by answering questions related to the group to which they were

assigned and the extent of economic inequality they perceived in Bimboola (e.g., 'To what extent is Bimboola's economic distribution unequal/equal (reversed)?'), and they scored them from 1 (*not at all*) to 9 (*very much*),  $\rho = .857$ ; Eisinga, Grotenhuis, & Pelzer, 2013).

Next, we asked participants how well the next sentences would describe them, if they were living in Bimboola. We included four dimensions of self-construal, using the same 9-point Likert scale as employed in Study 1 (CIRN-SCS-3, Vignoles et al., 2016): Difference vs. Similarity (e.g., 'You would see yourself as similar to others', 6 items,  $\alpha = .624$ ); Self-Direction vs. Receptiveness to Influence (e.g., 'You would usually ask your family for approval before making a decision', 6 items,  $\alpha = .730$ ); Self-Reliance vs. Dependence on Others (e.g., 'In difficult situations, you would tend to seek help from others rather than relying only on yourself', 6 items,  $\alpha = .771$ ); Self-Interest vs. Commitment to Others (e.g., 'You would value good relations with the people close to you more than your personal achievements', 6 items,  $\alpha = .582$ ).

Finally, participants provided information on their subjective individual and familial SES, ranging from 1 (*The worst off*) to 10 (*The best off*), (Adler et al., 2000), education level, employment status, individual and household income, ethnicity, age, gender, political orientation, native language, and nationality.

## Results

**Manipulation check.** An ANOVA with economic inequality (high vs. low) as the between-subject variable and perceived economic inequality as the dependent variable revealed, as expected, that those assigned to the condition characterised by high economic inequality perceived more economic inequality ( $M = 7.72$ ,  $SD = 1.68$ ) than those assigned to the

condition characterized by low economic inequality ( $M = 4.10$ ,  $SD = 1.91$ ),  $F(1, 530) = 537.35$ ,  $p < .001$ ,  $\eta^2 = .503$ .

**Multidimensional self-construal.** As we pre-registered, we performed a MANOVA, using the four indexes of self-construal dimensions as the dependent variables, and economic inequality (high vs. low) as the independent variable. Results showed a significant multivariate effect,  $F(4, 427) = 4.06$ ,  $p = .003$ ,  $\eta^2 = .030$ . An inspection of the subscales separately revealed a significant effect for Difference versus Similarity,  $F(1, 530) = 4.45$ ,  $p = .035$ ,  $\eta^2 = .008$ , with participants in the low economic inequality condition describing themselves as more similar to others—or less different from others ( $M = 2.97$ ,  $SD = 0.62$ ) than participants in the high economic inequality condition ( $M = 2.86$ ,  $SD = 0.59$ , see Figure 2). Further, participants in the low economic inequality condition described themselves as more dependent on others—or less self-reliant—( $M = 2.70$ ,  $SD = 0.70$ ) than those in the high economic inequality condition ( $M = 2.56$ ,  $SD = 0.70$ ),  $F(1, 530) = 5.22$ ,  $p = .023$ ,  $\eta^2 = .010$  (see Figure 3). However, the univariate effects on Self-Direction vs. Receptiveness to Influence  $F(1, 530) = 0.04$ ,  $p = .848$ ,  $\eta^2 < .001$ , and Self-Interest vs. Commitment to Others  $F(1, 530) = 0.35$ ,  $p = .555$ ,  $\eta^2 = .001$ , were not significant.

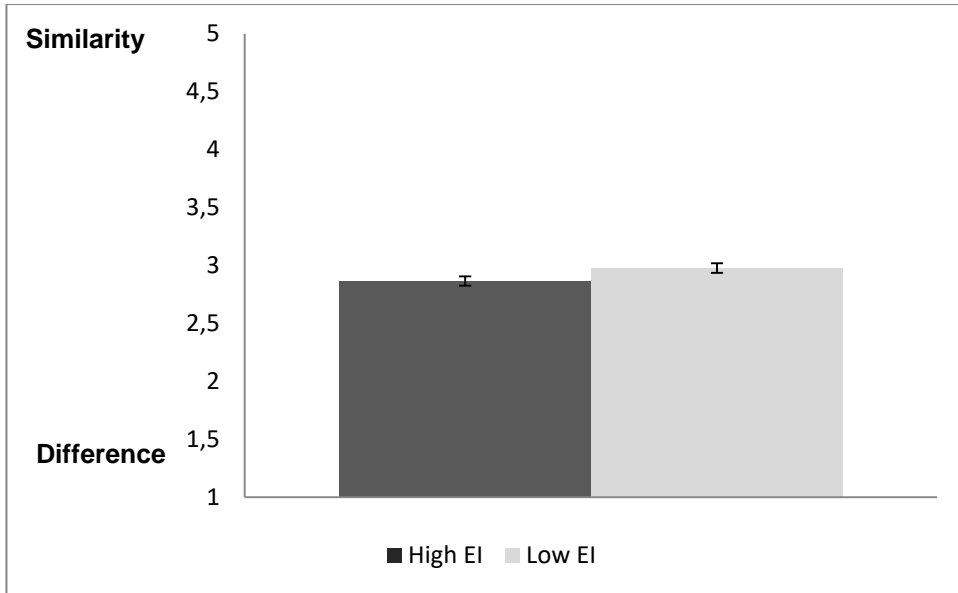


Figure 2. Difference vs. Similarity as a function of the EI condition. Bars represent standard error. EI: economic inequality.

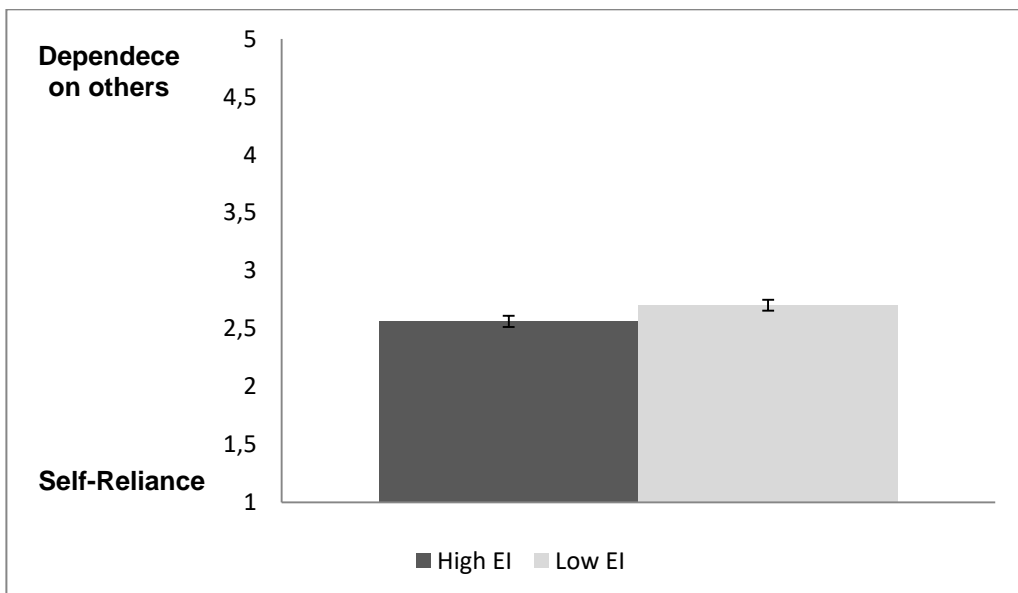


Figure 3. Self-reliance vs. dependence on others as a function of the EI condition. Bars represent standard error. EI: economic inequality.

## **Discussion**

As expected, when participants believe that they will be living in an unequal society, they regard themselves as more dissimilar to others and more self-reliant, relative to those who think they will be living in an equal society. However, we found no evidence to suggest that economic inequality impacts how they think about themselves, in terms of Self-Direction (vs. Receptiveness to Influence) and Self-Interest (vs. Commitment to Others), although we feel appropriately cautious about interpreting the results related to Self-Interest, as this index was found to have low reliability.

These results are consistent with those of Study 1. It was found in both studies that higher levels of perceived economic inequality trigger a more independent self-construal, whereas lower levels of perceived economic inequality foster a more interdependent self-construal. However, economic inequality seems to affect only two of the dimensions of self-construal: Differences (vs. Similarity) and Self-Reliance (vs. Dependence on Others).

## **General discussion**

In the current two studies, we address the question of whether the perception of economic inequality affects social distance between people, in terms of self-construal. The results of these two studies have indicated that higher levels of perceived economic inequality are associated with a more independent and less interdependent self-construal. In particular, the higher levels of perceived economic inequality amplify the self-construal dimensions of Difference (thereby minimizing Similarity) and Self-Reliance (thereby minimizing Dependence on Others). These findings are supported by correlational data assembled in natural settings (Study 1), as well as experimental data collected in the context of a fictional society (Study 2).



The multidimensional model of self-construal (Vignoles et al., 2016) allowed us to clarify the particular features of self-construal that are most significantly associated with economic inequality. Although previous evidence has indicated that lower levels of economic inequality trigger a more interdependent self-construal (Sánchez-Rodríguez et al., in press) the current research prompts us to be more attentive to and precise about the particular features of interdependence that are related to economic inequality.

Further, our approach, which relied on the multidimensional model of self-construal may shed light on the paradox whereby economic inequality is associated with collectivism, at a cultural level, and independence, at an individual level. Our findings suggest that higher economic inequality is associated with increased Self-Reliance and reduced Dependence on Others. However, Self-Reliance (vs. Dependence on Others) is not related to individualism-collectivism, at a cultural level (Vignoles et al., 2016). This is not the case regarding the association between economic inequality and Difference vs. Similarity. Indeed, although our results suggest that economic inequality is associated with Difference, at an individual level, in turn, Difference is associated with individualism and this is inconsistent with the relationship between economic inequality and collectivism at cultural level. Hence, using this multidimensional model of self-construal facilitates a partial resolution to this paradox. Future research should investigate the role of the Difference vs. Similarity dimension of self-construal, as it bears on the association between economic inequality and individualism-collectivism. As such, a question that remains unanswered concerns the relationship between the dimensions of self-construal and objective measures of economic inequality (e.g., Gini index) at cultural level.

Moreover, our findings are consistent with the social distance hypothesis (Pickett & Wilkinson, 2015). Economic inequality increases social distance, and this relationship is reflected, for example, by manifestly lower levels of solidarity (Paskov & Dewilde, 2012), and a more polarized sense of class identification (Andersen & Curtis, 2012); the same applies to the increased sense of Difference and Self-Reliance. Indeed, economic inequality causes people to live in diverse economic conditions, a situation that is reflected in an analogous diversity in their lifestyles. Economic inequality can thereby function as a source of differentiation among individuals. Moreover, economic inequality erodes trust and social capital, and thereby results in a fragmented society (Wilkinson & Pickett, 2009, 2017). In such circumstances, people should only rely on themselves to improve their chances of survive.

These results contribute to the growing body of literature indicating that individuals actively adapt to context, taking particular note of the degree of economic inequality. Indeed, the degree of economic inequality appears to result in modifications of these individuals' self-construal, presumable to improve their chances of survive. Previous researchers have shown that when people think they will be going to live in an unknown society, advance knowledge concerning the degree of economic inequality enables them to anticipate which types of values they will privilege: high (vs. low) economic inequality promotes a greater emphasis on values concerning self-enhancement; by contrast low (vs. high) economic inequality promotes a greater emphasis on values concerning self-transcendence (Sánchez-Rodríguez, Rodríguez-Bailón and Willis, under revision). How distinct levels of economic inequality respectively impact the modes by which people adapt to new social contexts may have important implications for immigration. This

engenders a fertile ground for future research, to explore the relationship between economic inequality and processes of acculturation.

In sum, these studies contribute to the burgeoning literature related to the consequences of economic inequality, from a socioecological perspective, using a combination of correlational and experimental methodology. Consistent with the hypothesis advanced by Pickett and Wilkinson (2015) which posits that more inequality results in increased social distance, our results indicate that inequality causes people to feel an increased sense of Difference and Self-Reliance.

# **CHAPTER 7**

## Discusión General

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En la presente tesis doctoral hemos encontrado evidencia que sugiere que altos niveles de desigualdad económica percibida fomentan dinámicas más individualistas, mientras que bajos niveles de desigualdad fomentan dinámicas más colectivistas. Nuestros resultados sugieren que el grado de desigualdad económica afecta al individualismo-colectivismo cuando éste se operacionaliza a través de las normas sociales, los valores y el *self-construal*. No obstante, también hemos encontrado que la desigualdad económica no parece afectar a todas las dimensiones de estas manifestaciones del individualismo-colectivismo. Siguiendo la lógica de la perspectiva psicosocial de las consecuencias de la desigualdad (Wilkinson y Pickett, 2009; 2017) parece que la desigualdad tiene efectos en aquellas normas, valores y dimensiones del *self-construal* que más directamente podrían estar reflejando la distancia social (p.ej., perseguir objetivos individuales o sentirse diferente a los demás).

La presente tesis doctoral también presenta una importante contribución metodológica a la psicología social de la desigualdad: la adaptación del paradigma de Bimboola al estudio de las consecuencias contextuales de la desigualdad económica. Dicho paradigma nos ha permitido utilizar diseños experimentales, contribuyendo así a esclarecer la relación causal entre la desigualdad y su relación con el individualismo-colectivismo.

A continuación trataremos de responder a las tres principales preguntas abordadas en la presente tesis doctoral, tras lo cual presentaremos un esquema que trata de sintetizar las distintas evidencias aportadas empíricamente (ver Figuras 1 y 2). Finalmente discutiremos los puntos fuertes y las limitaciones de la investigación llevada a cabo, así como las implicaciones de nuestros resultados y posibles futuras direcciones.

### **¿Afecta el grado de desigualdad económica a la percepción del clima normativo individualista-colectivista?**

En el Capítulo 3 y en el estudio 1 del capítulo 4 encontramos que el grado de desigualdad económica fue utilizado para inferir el clima normativo individualista-colectivista. En concreto, los resultados sugieren que cuando existe un alto grado de desigualdad económica las personas infieren que la mayoría de la gente que vivía en ese contexto son más independientes, establecen relaciones sociales basadas en la obtención de algún tipo de beneficio y se preocupan más por sus objetivos individuales sin tener en cuenta los grupales. Por el contrario, cuando el grado de desigualdad es bajo las personas infieren que la mayoría de la gente es más interdependiente, sus relaciones sociales no se basan en los costes y beneficios asociados a las relaciones y se preocupan principalmente por perseguir los objetivos del grupo. Los resultados también sugieren que los entornos más desiguales son percibidos como más competitivos, mientras que los más igualitarios se perciben como más cooperativos. Así mismo, en el primer estudio de la segunda serie de experimentos extendimos los resultados anteriores sobre la percepción normativa a los valores sociales. En concreto, encontramos que las personas infieren que en los contextos de más desigualdad los valores de poder y logro (i.e., auto-ensalzamiento) predominan sobre los de universalismo y benevolencia (i.e., auto-transcendencia). Por el contrario, en los contextos de baja desigualdad se infiere que son los valores de auto-transcendencia (vs. auto-ensalzamiento) los que predominan.

**¿Influye el grado de desigualdad económica percibida sobre las expectativas que las personas tienen sobre sus valores, *self-construal* y conductas individualistas-colectivistas?**

En el Estudio 2 del Capítulo 4, siguiendo la lógica del enfoque ecocultural (Uskul y Oishi, 2018), nos preguntamos si las personas se adaptarían a un contexto de más o menos desigualdad adecuando las expectativas que tienen sobre sus propios valores sociales. Los resultados sugieren que, en efecto, la gente espera seguir más valores de auto-ensalzamiento cuando viven en un contexto de alta desigualdad en comparación a si ésta fuese baja. Por el contrario, las personas tienen la expectativa de involucrarse más fuertemente con valores de auto-transcendencia en contextos de baja desigualdad económica en comparación con los de alta desigualdad. Estos resultados sugieren que la desigualdad económica no solo condiciona la percepción de los valores sociales normativos, sino que también condiciona las expectativas de los propios valores.

En la misma línea, los resultados del Estudio 2 del Capítulo 6 sugieren que las expectativas de vivir en un contexto más o menos desigual también afecta a algunas dimensiones del *self-construal*. En concreto, nuestros resultados sugieren que cuando las personas se imaginan que tenían que ir a vivir a una sociedad más (vs. menos) desigual esperarían percibirse a sí mismos más diferentes y autónomos (vs. similares y dependientes de los demás).

Sin embargo, los resultados del tercer estudio del capítulo 3 sugieren que la percepción normativa individualista y competitiva de los entornos desiguales (vs. la colectivista y cooperativa de los menos desiguales) no se traslada a la conducta de la gente en una tarea de reparto de recursos. En efecto, las personas parecen preferir sacrificar sus propios recursos para



que los pobres tengan más y los ricos menos en los contextos más (vs. menos) desiguales. Esto podría estarse debiendo a que las personas, en lugar de conformarse con la percepción normativa individualista y competitiva, buscan, a través del reparto de recursos, reducir el grado de desigualdad económica cuando ésta es muy alta.

### **¿Condiciona la desigualdad económica el *self-construal* de las personas?**

En el Estudio 1 del Capítulo 5 encontramos que los individuos que menos desigualdad económica perciben en la vida real más tienden a auto-definirse como interdependientes. Sin embargo, no encontramos efectos sobre el *self-construal* independiente. No obstante, en el Estudio 2 de esta misma serie de experimentos encontramos que cuando se situó a los participantes en una situación de alta (vs. baja) desigualdad dentro de un contexto de laboratorio, estos recordaron más eventos individuales que sociales y relacionales sugiriendo una mayor activación del *self-construal* independiente.

En el Capítulo 6 quisimos indagar más detenidamente sobre cómo la desigualdad podría estar afectando al *self-construal* explorando exactamente en qué dimensiones de éste podría estar incidiendo el grado de desigualdad económica (Vignoles et al., 2016). Nuestros resultados sugieren que la desigualdad económica percibida solo afecta a dos dimensiones del *self-construal*: Diferencia vs. Similitud y Autonomía vs. Dependencia de los demás. En concreto las personas que perciben más desigualdad económica en su sociedad tienden a describirse a sí mismas como más diferentes de los demás y como más autónomos; por su parte, los que perciben menos desigualdad tienden a describirse como más parecidos a los demás y dependientes de ellos.

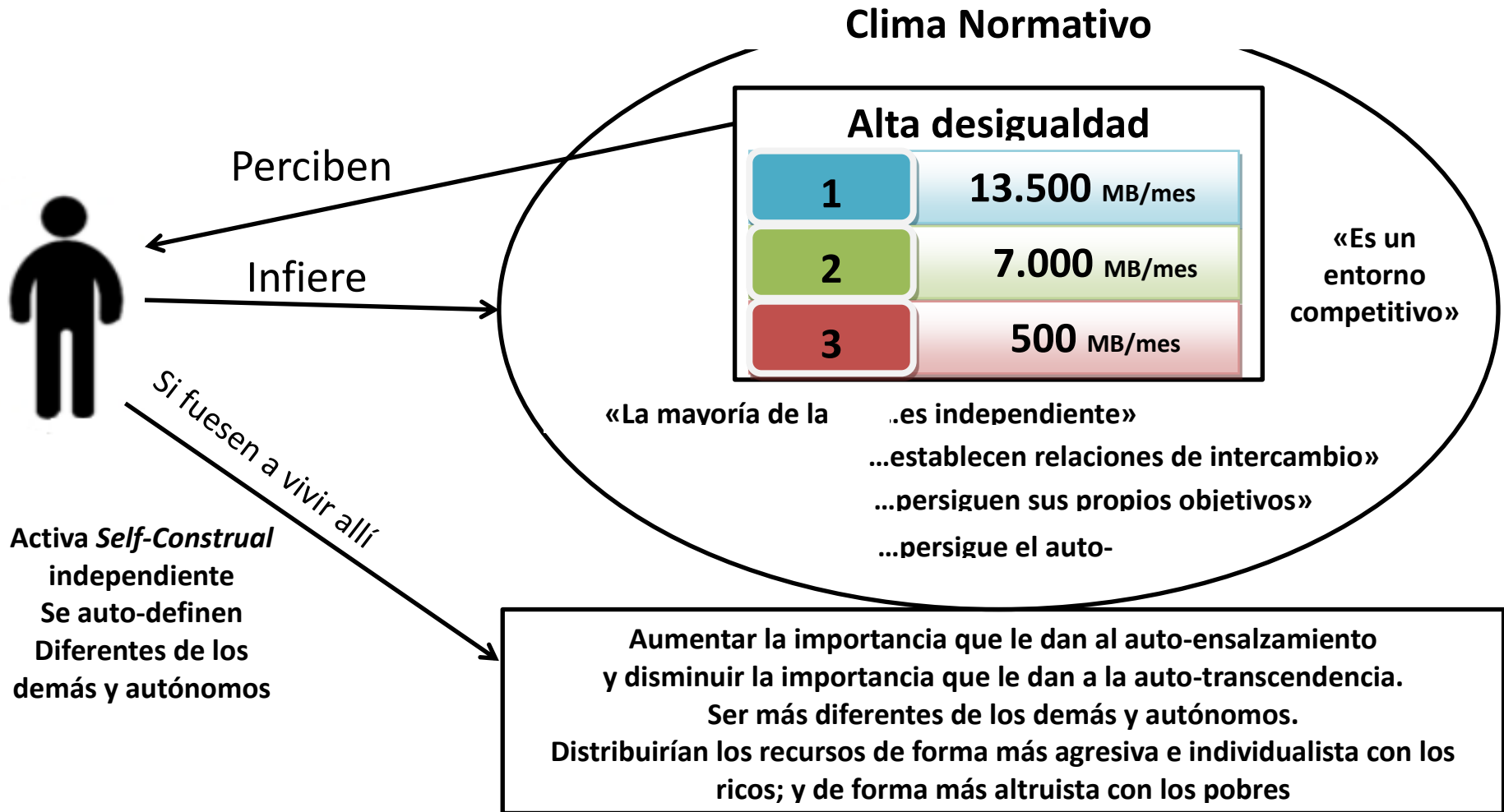


Figura 1. Resumen de los principales resultados. Contexto de alta desigualdad económica. (MB: Moneda Bimboleana)

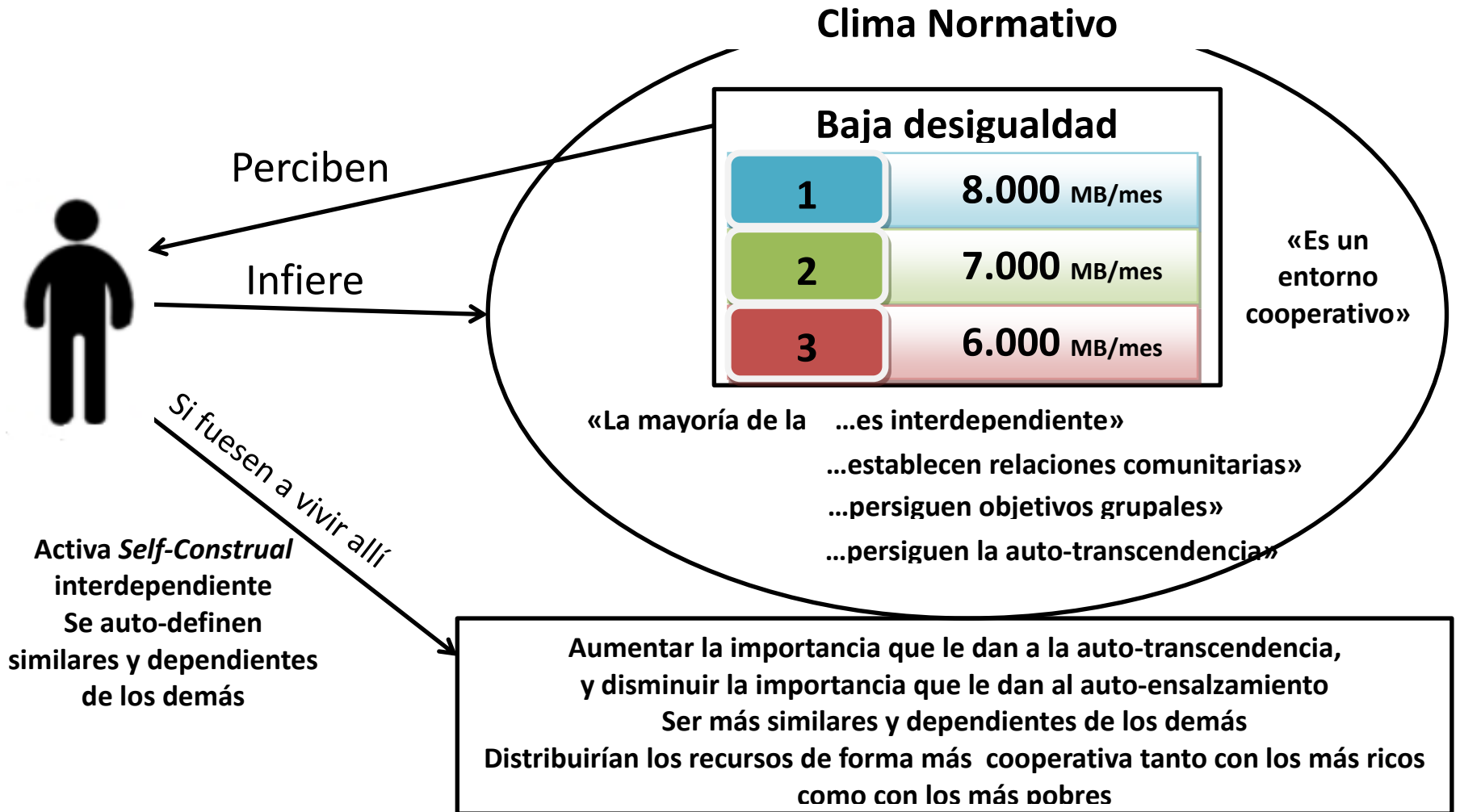


Figura 2. Resumen de los principales resultados. Contexto de baja desigualdad económica (MB: Moneda Bimboleana)

### **Puntos fuertes y limitaciones**

La metodología empleada en la mayoría de los estudios empíricos de la presente tesis se basan en que las personas deben imaginar cómo sería una sociedad más o menos desigual y cómo se imaginarían viviendo allí. Esta estrategia metodológica nos ha permitido manipular experimentalmente la desigualdad económica y por extensión establecer relaciones causales directas que nos permitan abordar las consecuencias de la desigualdad.

Dado que la mayoría de las investigaciones que exploran las consecuencias de la desigualdad económica se basan fundamentalmente en establecer relaciones entre variables, lo que sólo permite establecer relaciones causales de manera indirecta (Pickett y Wilkinson, 2015), consideramos que la metodología aquí empleada— que sí permite aportar una evidencia causal directa— sirve para expandir el conocimiento de las consecuencias contextuales de la desigualdad. Además, esta metodología también nos ha permitido controlar otras variables que a menudo se confunden con los efectos contextuales de la desigualdad económica, como la posición social asignada a los participantes (i.e., toda la muestra fue asignada a la clase media), la riqueza asignada (i.e., toda la muestra tenía el mismo sueldo y optaban al mismo nivel de vida) y la riqueza de la sociedad en su conjunto (i.e. en ambas sociedades ficticias la suma de los ingresos de todas las clases sociales era la misma). Finalmente, nos ha permitido poder diseccionar algunos de los procesos que podrían subyacer a las dinámicas que las personas llevan a cabo para adaptarse a nuevos contextos sociales, como puede ser la percepción del clima normativo o las expectativas que tienen de cómo serían si fuesen a vivir a un nuevo contexto social.

Sin embargo, este trabajo también adolece de ciertas limitaciones. Quizá la más importante sea la falta de validez ecológica (i.e., el paradigma de Bimboola se basa en una sociedad ficticia). Esta limitación podría ser abordada en futuras investigaciones explorando si los resultados presentados con este paradigma podrían ser generalizados a sociedades reales. Los resultados correlacionales presentados en los Capítulos 5 y 6 sugieren que la percepción de desigualdad en la sociedad real permite predecir un *self-construal* interdependiente (Estudios 1a y 1b del Capítulo 5), específicamente en términos de percibirse más similar y dependientes de los demás (Estudio 1 del Capítulo 6). Estos resultados están en línea con lo encontrado experimentalmente utilizando el paradigma de Bimboola, por lo que sugieren que los resultados experimentales podrían ser generalizados a contextos más ecológicos. Pero aún no tenemos evidencia empírica de que esto sea extensible al efecto encontrado de la desigualdad sobre la percepción de las normas y valores, por lo que futuras investigaciones podrían abordar esta cuestión utilizando una perspectiva más ecológica.

Asimismo, sería importante replicar los resultados encontrados usando otras manipulaciones de la desigualdad económica. Sería, además, particularmente interesante no sólo utilizar otros paradigmas para manipular la desigualdad económica operacionalizada como la hemos hecho en la presente tesis sino manipularla utilizando otras formas de operacionalizarla. Mientras que en el presente trabajo nos hemos centrado en definirla como la distancia entre el grupo de pobres y ricos (a excepción de los Estudios 1a y 1b del Capítulo 5 y el Estudio 1 del Capítulo 6); la desigualdad económica también viene reflejada por otras dimensiones, como la cantidad de personas que integran cada estrato social. En efecto, algunas investigaciones previas miden la percepción de desigualdad económica

atendiendo a la estructura de la sociedad en función de la cantidad de personas que integran cada nivel económico (p.ej., Castillo, Miranda, y Carrasco, 2012). Complementar las formas de operacionalizar la desigualdad económica atendiendo a sus múltiples dimensiones y de forma más ecológica permitirían extender los resultados del presente trabajo.

Finalmente, algunos aspectos metodológicos como las dificultades procedimentales en el Estudio 1 del Capítulo 3 y la utilización de escalas traducidas al español sin contar con evidencias previas de validez y fiabilidad en este idioma, suponen también ciertas limitaciones añadidas al presente trabajo.

A continuación integraremos los resultados encontrados en la presente tesis con la literatura previa. Para ello nos centraremos, en primer lugar, en la relación entre la desigualdad económica y el individualismo-colectivismo y, en segundo lugar, en plantear una explicación tentativa de por qué podría estarse dando esta relación.

### **Desigualdad económica e individualismo-colectivismo: Distancia social.**

Los hallazgos recogidos en esta tesis se alinean con la perspectiva psicosocial que sugiere que la desigualdad que rodea a las personas condiciona su realidad psicológica y social (Wilkinson y Pickett, 2017). En efecto, nuestros resultados sugieren que la desigualdad condiciona realidades psicosociales tales como las normas, los valores y el *self-construal*, uniéndose así a la creciente línea de investigaciones que han mostrado cómo la desigualdad afecta a otras variables psicosociales (p.e., la confianza en los demás, Oishi, Kesebir, y Diener, 2011). Además, las formas que adquieren estas normas, valores y *self-construal* condicionadas por la desigualdad están en sintonía con la explicación más parsimoniosa

sobre los efectos de la desigualdad: éstos se deben a que en las sociedades más desiguales aumenta la distancia social (Pickett y Wilkinson, 2015). Efectivamente, los resultados presentados en la presente tesis muestran que cuando la gente percibe más desigualdad a su alrededor también se perciben más distanciados de los demás (i.e., muestran un *self-construal* independiente). Además, también infieren que la mayoría de las personas de ese contexto se perciben a sí mismos como distanciados de los demás y persiguen objetivos y valores que fomentan ese distanciamiento. Estos resultados están en línea con otras investigaciones que han operacionalizado la distancia social de otras formas (p.ej., la solidaridad, Paskov y Dewilde, 2012), encontrando que a mayor desigualdad más distancia social se da entre los miembros de la sociedad (Andersen y Curtis, 2012; Paskov y Dewilde, 2012). Pero los resultados aquí presentados van más allá al sugerir que las consecuencias de la desigualdad económica no solo podrían promover la distancia social explicitada en conductas particulares (p.ej., mostrarse solidarios), sino que podría estar fomentando ciertas dinámicas sociales que buscan situar al individuo por encima del grupo y que a la postre podrían terminar cristalizando en la exaltación de dinámicas culturales individualistas. Esto es importante porque una característica económica de carácter coyuntural, como es el grado de desigualdad económica, podría estar fomentando un cultura cada vez más individualista, la cual al ser transmitida por los procesos de enculturación y aculturación (Berry, 2018), podrían terminar tomando formas más o menos estables en la sociedad. Esto sugeriría que los problemas sociales derivados de los altos niveles de desigualdad podrían persistir incluso después de que se tomen medidas políticas, sociales y/o económicas para paliarla. Sería interesante que futuras investigaciones explorasen si, y de qué manera, las dinámicas culturales

individualistas fomentadas por la desigualdad económica son perpetuadas a través de su transmisión a las nuevas generaciones (i.e., enculturación) y a los inmigrantes (i.e., aculturación).

Nuestros resultados contrastan con la evidencia empírica previa que sugiere que las sociedades más desiguales tienden a ser más colectivistas (Basabe y Ros, 2005; Hofstede, 1980). Sin embargo, debemos ser precavidos a la hora de comparar ambos resultados dado que se encuentran en distintos niveles de análisis. Mientras que nuestros datos han sido recogidos exclusivamente a nivel individual, las investigaciones previas sobre la relación desigualdad e individualismo-colectivismo se han establecido a nivel grupal, relacionando la desigualdad económica objetiva con la puntuación promedio de individualismo-colectivismo del país. Futuras investigaciones podrían tratar de arrojar luz a esta aparente contradicción que sugiere que a nivel individual la desigualdad podría estar fomentando el individualismo mientras que a nivel grupal estaría más relacionada con el colectivismo. Teniendo en cuenta que las investigaciones previas que han relacionado la desigualdad con el individualismo-colectivismo a nivel grupal no tuvieron en cuenta la estructura jerárquica de los datos (i.e. tratando estadísticamente variables individuales y sociales al mismo nivel), una aproximación interesante al problema podría ser abordar el análisis de estos datos con estrategias de análisis multinivel para desglosar así posibles efectos a nivel individual y grupal. Esta aproximación nos permitiría además poder controlar otras posibles variables tanto a nivel individual y grupal que la literatura previa ha mostrado relacionadas con el individualismo-colectivismo tales como el estatus socioeconómico o el nivel de riqueza del país (p.ej. Kraus, Piff, Mendoza-Denton, Rheinschmidt y Keltner, 2012; Santos, Varnum y Grossmann, 2017).



Por otro lado, teniendo en cuenta la complejidad del constructo individualismo-colectivismo y las múltiples dimensiones que tienen sus distintas manifestaciones (Schwartz, 2012; Triandis, 1995; Vignoles et al., 2016), otra dirección interesante de esta línea sería considerar la multidimensionalidad de dicho constructo. Acorde a nuestros resultados, la desigualdad parece incitar ciertas normas sociales individualistas (p.ej., perseguir objetivos individuales) y dimensiones del *self-construal* (p. ej., sentirse diferente y autónomo), pero no otras. Por lo que desglosar las distintas dimensiones de las normas y valores individualistas-colectivistas así como las del *self-construal* podrían aportar información más precisa sobre la relación entre ambos conceptos.

Por último, una diferencia adicional entre algunos de los resultados aquí aportados, y la literatura previa que ha abordado esta cuestión, es que mientras que nosotros nos hemos basado en la percepción inter-subjetiva, la literatura previa se centra en las actitudes personales individualistas-colectivistas. Sería interesante para futuras investigaciones explorar también el papel que tiene la percepción inter-subjetiva del individualismo-colectivismo y su relación con la desigualdad, especialmente porque algunos autores han sugerido que es especialmente útil dado el papel mediador que tiene entre distintas variables ecológicas y las respuestas adaptativas que llevan a cabo los individuos (Chiu, Gelfand, Yamagishi, Shteynberg, y Wan, 2010). Desarrollaremos más esta idea en el siguiente apartado.

### **La desigualdad económica como contexto al que adaptarse**

Más allá de la evidencia empírica encontrada sobre las consecuencias de la desigualdad económica sobre el individualismo-colectivismo, los resultados aquí presentados podrían tener también

implicaciones teóricas que ayuden a entender los procesos psicosociales generados por la desigualdad. A pesar del incremento de los trabajos que muestran cuales son las consecuencias psicosociales de la desigualdad económica, existen todavía pocos trabajos teóricos que ayuden a esclarecer cuáles son los mecanismos subyacentes que permitan explicar no sólo qué consecuencias tiene, sino **por qué**.

En este sentido debemos mencionar dos interesantes integraciones teóricas que han tratado de responder a la cuestión de por qué la desigualdad afecta a la realidad social. La primera es la aportada por Jetten y colaboradores (2017), enmarcándose en el enfoque de la Identidad Social (Teoría de la identidad social y de la auto-categorización, Tajfel, 1970; Turner, 1985). Este grupo explica los efectos de la desigualdad económica a través de los procesos grupales e intergrupales. En particular, sugieren que cuanto más alta es la desigualdad más importancia se atribuye a la riqueza que poseen las personas. Esto convertiría a la riqueza en una categoría saliente particularmente adecuada para entender el mundo social exaltando la comparación inter-grupal basada en la riqueza poseída.

El segundo acercamiento teórico es el establecido por Delhey, Schneickert, Delhey, y Schneickert (2017) desde la perspectiva del interaccionismo simbólico. Este grupo sugiere que la desigualdad económica provee un contexto que condiciona los procesos interpersonales. Altos niveles de desigualdad harían más saliente la comparación social y fomentaría interacciones sociales cotidianas que ensalzarían sentimientos de inferioridad y superioridad.

Ambos marcos teóricos pueden entenderse como complementarios al focalizarse en distintas dimensiones de la realidad social. Mientras que Jetten y colaboradores explican cómo la desigualdad económica afecta a las personas a través de los procesos grupales e inter-grupales derivados

de que las personas se auto-categoricen como ricos y pobres; Delhey y colaboradores se focalizan en cómo la desigualdad condiciona los procesos interpersonales haciendo que estos se basen en relaciones jerárquicas. Los resultados aquí presentados, a partir de la perspectiva ecocultural, aportarían hallazgos interesantes para ambos marcos teóricos al poner de relieve los procesos adaptativos que las personas podrían estar llevando a cabo a la hora de ajustarse a un nuevo contexto social.

En primer lugar, se ha planteado que la percepción del grado de desigualdad económica, más que la desigualdad objetiva, es crucial para entender las consecuencias psicosociales de la desigualdad (Gimpelson y Treisman, 2018; Nishi, Shirado, Rand, y Christakis, 2015). Se ha sugerido que tener una adecuada percepción del grado de desigualdad que existe en tu entorno es crucial para poder sobrevivir en distintos contextos sociales debido a que existe una gran diferencia entre las estrategias más adaptativas en los contextos de más y menos desigualdad. Mientras que en sociedades con una alta desigualdad económica la competición por los recursos hace que se fomente la búsqueda por el interés personal, en las sociedades más igualitarias la calidad de las relaciones sociales se vuelve fundamental, por lo que solidaridad y compartir recursos se vuelve crucial para adaptarse (Wilkinson y Pickett, 2017). Se ha propuesto que esto es debido a (1) que las personas interactúan basándose en su identidad social construida en función de la riqueza que poseen (Jetten et al., 2017); y a (2) que la exaltación de la comparación social fomentaría las relaciones jerárquicas (Delhey et al., 2017). Sin embargo, nuestros datos sugieren que también podría estar implicando un tercer mecanismo: los procesos de influencia social.

En efecto, nuestros resultados sugieren que el grado de desigualdad económica que las personas perciben es una característica social

importante que sirve como pista clave para inferir el clima normativo de dicha sociedad (ver Figuras 1 y 2). Estos resultados van en la línea de los de otras investigaciones que muestran cómo del grado de desigualdad económica de una sociedad se infiere distintas características de las personas que viven allí. Por ejemplo, Heiserman y Simpson, (2017) mostraron que del grado de desigualdad económica percibido se infiere el grado de méritos atribuido a los pobres. De tal manera que cuando se percibe una sociedad más (vs. menos) desigual se espera que los pobres sean menos competentes. En la misma línea, Moreno-Bella, Willis y Moya (en preparación) encontraron que se espera que las personas que viven en una sociedad más desigual tengan características más masculinas (p.ej., agresividad, egoísmo), en comparación con quienes viven en una sociedad más igualitaria, de las que se esperaría características más femeninas (p.ej., comprensión, sensibilidad a las necesidades de los demás, compasión). Por su parte, Sommet, Elliot, Jamieson y Butera (2018) analizaron la competitividad percibida en Estados Unidos, encontrando que cuanto más desigualdad económica había en el estado mayor competitividad se percibía. Finalmente, los resultados de Melita, Willis y Rodríguez-Bailón (en preparación) sugieren que un alto (vs. bajo) grado de desigualdad lleva a la gente a inferir que la mayoría de personas que viven en esa sociedad están más preocupados por el estatus que tienen (i.e., presentan más ansiedad por el estatus). Estos resultados indican que el grado de desigualdad económica es una característica de la sociedad particularmente informativa que lleva a las personas a inferir cómo es la gente que vive en ese contexto. Si el objetivo es adaptarse a un determinado contexto social la percepción normativa va a jugar un papel clave en dicho proceso.

Efectivamente, numerosas investigaciones dentro de la psicología social han mostrado que las normas sociales tienen un peso importante en la conducta de las personas (p.ej., Chiu et al., 2010; Cialdini, Reno, y Kallgren, 1990; Deutsch y Gerard, 1955; Sherif, 1936). En efecto, las normas sociales descriptivas —i.e., lo que se percibe que hace la mayoría de la gente— sirve de guía de comportamiento de las personas, especialmente cuando la realidad es ambigua. A este proceso de influencia se le ha denominado tradicionalmente como influencia informativa (Deutsch y Gerard, 1955). Aunque los resultados de la presente tesis no nos permiten confirmarlo, algunas de las piezas que se presentan nos sugieren que los procesos de influencia informativa podrían estar subyaciendo al impacto que la desigualdad económica tiene sobre los individuos. Por ejemplo, los resultados del Capítulo 3 muestran que las participantes percibieron que en contextos de baja desigualdad económica se infiere que la mayoría de la gente es interdependiente, mientras que en el Capítulo 5 los resultados apuntan a que la desigualdad económica también lleva a que los propios participantes se vean como más interdependientes. De forma similar, el Estudio 1 del Capítulo 4 muestra que los participantes perciben que en contextos de más desigualdad los valores de auto-ensalzamiento son normativos, y en el estudio 2 mostramos que ellos mismos esperarían darle más importancia a estos valores en ese contexto de más (vs. menos) desigualdad. Por tanto, nuestros resultados muestran que la gente se auto-percibe y respalda valores similares a los que percibe como normativos. Sin embargo, no tenemos evidencia de si ambos hechos están relacionados. Sería particularmente interesante explorar si la percepción normativa inferida a partir del grado de desigualdad económica influye en los valores y en el *self-construal* de los individuos. Además el mecanismo de la influencia informativa podría ser extensible a otros resultados encontrados en la

presente tesis. Por ejemplo, en el capítulo 3 se muestra que las relaciones de intercambio se perciben como normativas en los contextos de más desigualdad. En este sentido sería interesante explorar si los propios individuos tienden a involucrarse más en este tipo de relaciones y si esto es debido a que las perciben como normativas. Por otro lado, también sería interesante indagar si algunos de los efectos psicosociales de la desigualdad que la literatura ha encontrado podrían ser explicados por este mecanismo. Por ejemplo, las personas de los estados norteamericanos más desiguales tienden a ser menos agradables con los demás (de Vries, Gosling, y Potter, 2011); esto podría deberse, al menos en parte, a que la gente percibe que los demás son menos agradables y a la hora de interactuar con ellos también se muestran poco agradables. Otras investigaciones han mostrado que los países más desiguales presentan más índices de violencia (p.ej. Wilkinson y Pickett, 2009). Creemos que sería plausible pensar que esto podría deberse, al menos en parte, a que en contextos desiguales las personas perciben que los demás son violentos y eso podría llevarles a estar más predispuestos a usar la violencia.

Una alternativa a la influencia social informativa sería la influencia social normativa —i.e. la conformidad a la norma para ser aceptado por el grupo (Deutsch y Gerard, 1955). Dado que la necesidad de pertenencia grupal es una necesidad básica del ser humano (Baumeister y Leary 1995), sería plausible pensar que la influencia normativa también podría estar influyendo en el proceso de cómo la desigualdad económica percibida y las normas sociales que de ella se derivan podría estar afectando a la conducta de las personas. Futuras investigaciones podrían abordar esta cuestión y explorar (1) si se están dando procesos de influencia social y (2) qué tipo de influencia.

La idea de que los procesos influencia social —informativa y normativa— podría ayudar a explicar algunos de los efectos de la desigualdad económica encontrados en la literatura estaría en línea con el enfoque ecocultural que sugiere que las personas buscan adaptarse activamente al entorno social (Uskul y Oishi, 2018). En este sentido, las personas parecen tratar de adaptarse a la sociedad en función del grado de desigualdad económica que ésta presente y la percepción normativa que infieren de él. Sin embargo, podría haber circunstancias en las que las personas más que adaptarse buscaran modificar el grado de desigualdad económica. En efecto, los resultados del Estudio 3 del Capítulo 1 sugieren que los participantes, cuando tuvieron la posibilidad de redistribuir recursos en contexto de más (vs. menos) desigualdad optaron por quitar recursos a los ricos y ofrecérselos a los pobres incluso aunque eso supusiera sacrificar sus propios recursos. Esto ocurrió a pesar de que percibían como normativo que la mayoría de la gente era independiente, perseguía sus propios objetivos y tendía a establecer relaciones de intercambio, lo que sugiere que no se conformaron con la norma descriptiva inferida. Los procesos de discrepancia y desviación de las normas sociales también han sido ampliamente estudiados en psicología social, siendo considerado como parte de la dinámica natural de los grupos (Jetten y Hornsey, 2014). Uno de los motivos para desviarse o discrepar del grupo son las convicciones morales (Hornsey y Jetten, 2003; Monin, Sawyer, y Marquez, 2008). Como ya argumentamos en el capítulo tres, una explicación plausible de por qué los participantes no se ajustaron al clima normativo que percibieron pudo haber sido la aversión a la desigualdad, la cual tiene raíces morales (Fehr y Schmidt, 1999). Sin embargo, las convicciones morales no son el único motivo por el que una persona podría no conformarse con las normas sociales. Otros motivos señalan o bien a la desvinculación con el grupo, lo

que haría que la gente no se acomodara a las normas del mismo; o bien todo lo contrario, a una fuerte vinculación al grupo cuando la persona percibe que las normas sociales ponen en riesgo la supervivencia del mismo o no le permiten mejorar (Packer, 2008). Finalmente, las personas podrían no conformarse con las normas sociales porque deseen expresar que son individuos únicos y distintos y/o porque ganen algún tipo de recompensa con ello (Jetten y Hornsey, 2014).

Desde nuestro punto de vista el mecanismo de influencia social que podría estar subyaciendo a los efectos que la desigualdad tiene en algunas variables psicosociales podría extender los marcos teóricos de Jetten y col., y el de Delwey y col. Los procesos de influencia social subrayaría que la desigualdad económica no solo aumenta los conflictos inter-grupales basados en la identidad social derivada de la riqueza poseída, sino que también podría favorecer procesos endogrupales en los que la gente se conforme con las normas inferidas de la sociedad en función del grado de desigualdad que perciba. En este sentido, el grado de identificación con una sociedad que sea más o menos desigualdad podría ser un elemento clave a tener en cuenta en los procesos de conformidad con las normas sociales inferidas, incluso aunque estas tengan un carácter individualista. En efecto, Jetten, Postmet y Mcauliffe, (2002) mostraron que la gente muestra actitudes más individualistas cuanto más se identifica con un grupo que defiende valores individualistas. Sería interesante que futuras investigaciones exploraran el papel que juega la identidad social con respecto a la sociedad que presenta un determinado grado de desigualdad y explorar sus efectos en procesos de influencia informativa. Por otro lado, investigaciones previas han sugerido que la percepción de desigualdad económica en sociedades cuya identidad se vea amenazada puede predecir una desidentificación con dicha sociedad. Por ejemplo, Petkanopoulou,



Sánchez-rodríguez, Willis, Chrysochoou, y Rodríguez-Bailón, (2018) mostraron que una mayor percepción de desigualdad económica entre los países europeos predecía una mayor desidentificación como europeo entre ciudadanos españoles y griegos. Por tanto, habría que tener en cuenta que la identidad social no solo podría estar moderando la relación entre la desigualdad percibida y la conformidad con las normas sociales del grupo, sino que podría verse afectada en sí misma. Futuras investigaciones podrían explorar en qué casos y bajo qué circunstancias el grado de desigualdad económica de una sociedad podría afectar al grado en el que las personas se identifican con dicha sociedad.

Por otro lado, Delwey y col. sugieren que la desigualdad condiciona los procesos de comparación inter-personal. Una interesante aportación de este enfoque es que estos procesos de comparación no necesariamente se producen entre personas concretas, sino que pueden darse con el llamado “otro generalizado”, es decir, la percepción que tiene la gente de cómo son la mayoría de las personas en ese contexto, esto es, la percepción normativa. Teniendo en cuenta los resultados aportados en los capítulos 3 y 4 junto con los comentados anteriormente que sugieren que del grado de desigualdad económica se infiere una determinada percepción normativa, se estaría poniendo de manifiesto que la desigualdad económica no solo favorece los procesos de comparación social sino que también contribuye a construir ese “otro generalizado” con el que compararse. Los resultados de la presente tesis sugieren que en contextos de más desigualdad económica ese otro generalizado es individualista, busca el poder y el logro, solo se relaciona con los demás si obtiene algún tipo de beneficio de ello y busca sus propios objetivos. Otras investigaciones añaden además que tiene características masculinas y ansiedad por el estatus (Moreno-Bella, et al, en preparación; Melita y col., en preparación). Futuras investigaciones podrían

tratar de extender las características que presenta ese “otro generalizado” en contextos de más o menos desigualdad dibujando así la constelación de características derivadas de la desigualdad.

En definitiva, los resultados presentados en la presente tesis proporcionan algunas piezas de un puzle que, junto con la evidencia que presenta la literatura previa, nos permiten realizar una propuesta integradora sobre algunas de las razones por las que los procesos de influencia social podrían estar complementando a otros mecanismos subyacentes planteados previamente—i.e. conflictos inter-grupales ricos vs. pobres y relaciones interpersonales jerarquizadas—para explicar los efectos de la desigualdad económica sobre distintas variables psicológicas y problemáticas sociales. Pensamos que este ejercicio teórico, si bien es fundamentalmente tentativo, podría resultar particularmente útil para plantear futuras líneas de investigación sobre las consecuencias contextuales de la desigualdad económica (ver figura 3).

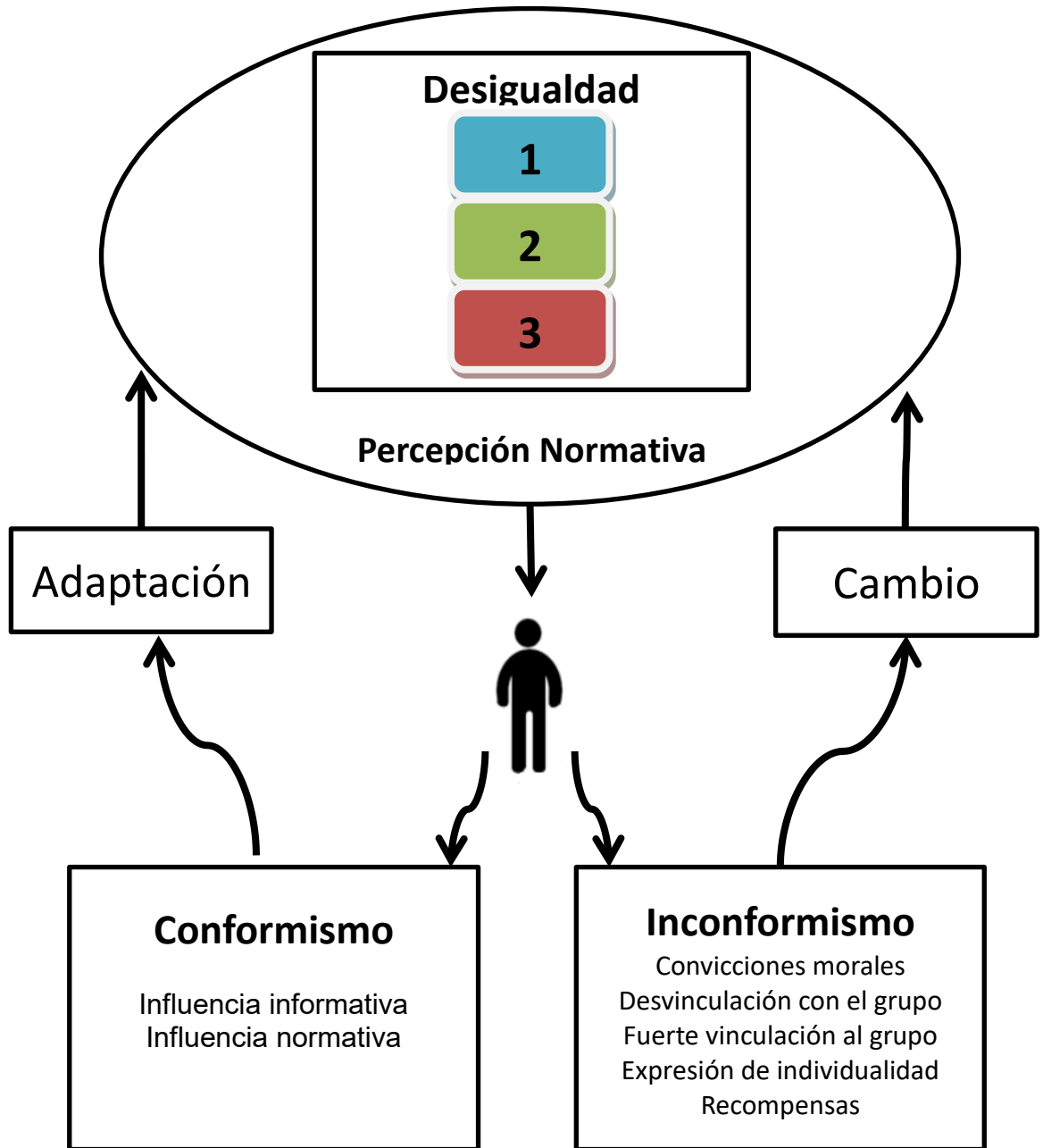


Figura 3. Resumen de cómo los procesos de influencia podrían explicar los efectos de la desigualdad económica

# **Final Conclusions**

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In the present thesis we have conducted an adaptation of an experimental paradigm used in previous studies that allowed us to manipulate perceived economic inequality in a lab setting. We therefore have been able to explore the causal relationship between perceived economic inequality and individualistic/collectivistic social norms, values, and self-construal. Our results suggest that the societal level of economic inequality informs us about important features of that society and the individuals who live in there. Particularly, when the economic gap between the poorest and wealthiest people was larger, participants expected that others will feel more independent, will tend to expect something in return in their social relationships, will look out more for their own goals (without considering group goals), and will embrace more self-enhancement than self-transcendence values; moreover, they will also perceive more competition and less cooperation. Conversely, when a small difference arose between the wealthiest and the poorest groups in society, participants expected that people will feel more connected to others, will invest more in relationships (even if they do not get any benefits from them), will be more likely to look out for group goals, and will embrace more self-transcendence than self-enhancement values.

Furthermore, economic inequality also conditions individuals' expectations about their values and self-construal. Particularly, in high (vs. low) economic inequality contexts, participants expected to uphold more self-enhancement and less self-transcendence values, and seem to be more different from (i.e., less similar to) others and more self-reliant (i.e., less dependent on others). Finally, low economic inequality seems to trigger an interdependent self-construal.

The findings of this dissertation are in line with previous literature showing that economic inequality increases social distance. Therefore,

## Chapter 8

economic inequality is not just an economic issue: Economic inequality is also a social issue, which has to be addressed considering the socio-psychological processes that it may trigger.

# **Material Suplementario**

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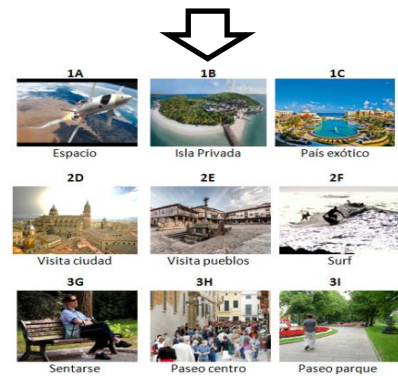
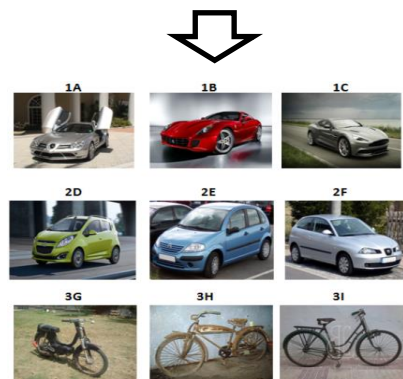
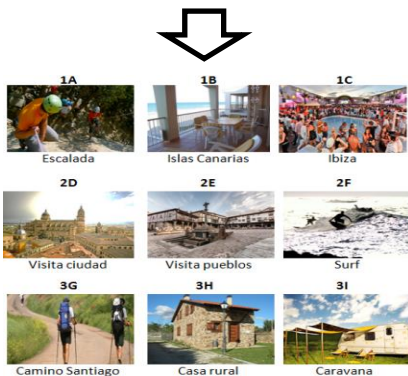
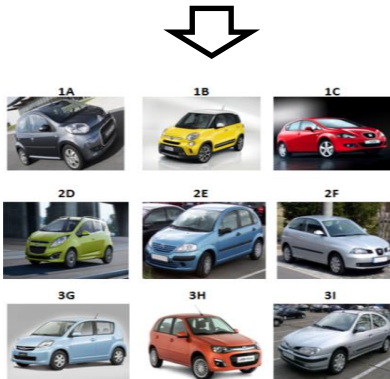




Appendix1

Summary Bimboola Paradigm (adapted from Jetten et al., 2015)

Low Economic Inequality		High Economic Inequality
8,000 MB/month	1	13,500 MB/month
7,000 MB/month	2	7,000 MB/month
6,000 MB/month	3	500 MB/month



**Appendix 2**

**Measure of individualism–collectivism social norms (Fischer et al., 2009)**

Independent Self-construal	Interdependent Self-construal
Most people see themselves as independent from others.	Most people see themselves as part of their group.
Most people enjoy being different from others.	Most people enjoy being similar to others.
Most people stress their personal accomplishments and achievements when meeting new people.	Most people stress accomplishments and achievements of their group when meeting new people.
It is important for most people to act as an independent person.	It is important for most people to act as member of their group.
When people have a need, they rely on themselves.	When people have a need, they turn to others for help.

Attitudes as guides for behaviour	Norms as guides for behaviour
If there is a conflict between personal values and the values of a group, most people follow their personal values.	If there is a conflict between personal values and the values of a group, most people follow the values of their group.
Most people do what is enjoyable to them personally.	Most people carry out their group obligations.
Most people pay attention to their personal contracts.	Most people pay attention to their group duties.
Most people obey their personal contracts rather than their group norms and duties.	Most people obey their group norms and duties rather than personal contracts.
Most people act in line with their rights.	Most people act in line with their group norms and rules.
Most people follow their personal attitudes.	Most people follow their group norms and rules.

Exchange relationships		Communal relationships
Most people do their duties only if they think they will benefit from it.		Most people do their duties, even when they think they will not benefit.
When making decisions, most people are not especially sensitive to feelings of people around them.		Most people take feelings of people around them into account when making decisions.
Most people only consider needs of others in their group, if they expect something from them in return.		Most people consider needs of others in their group, even if they do not expect something from them in return.
Most people carefully calculate costs and benefits of their relationship with other people.		Most people focus on the relationship with other people without caring about associated costs and benefits.
Before helping other people, most people consider the costs of helping.		Most people generally help other people without considering costs.
Most people do not hesitate to change established relationships if the relationship is not in their best interest anymore.		Most people maintain established relationships, even if this is not in their best interest.

Individual goals	Group goals
Most people are mainly concerned with their own personal goals.	Most people are mainly concerned with the goals of their group.
In situations of conflicts between the goals of one's group and personal goals, people pursue their own goals.	In situations of conflict between the goals of one's group and personal goals, people sacrifice their own goals to achieve the goals of the group.
In cases of conflict, individuals just ignore the goals of their group and they attempt to reach their personal goals.	In cases of conflict, individuals do what the group expects and demands without opposing the will of the larger group.
The goals of individuals within a group and the goals of the group are often not compatible.	The goals of the group and the goals of individuals within groups are often compatible.
It feels natural for most people to pursue their personal goal without considering the goals of their group.	It feels natural for most people to pursue personal goals only if they do not conflict with goals of their group.

**Appendix 3****Measure of allocation strategies (adapted from Van Lange et al. 1997)**

(X refer to group 1, 2 or 3 depending on task)

1	A	B	C	D	E
You get	280	480	480	540	280
Other member of group X gets	-80	80	480	280	540

2	A	B	C	D	E
You get	560	300	500	300	500
Other member of group X gets	300	560	100	-120	500

3	A	B	C	D	E
You get	520	520	320	580	320
Other member of group X gets	520	120	-70	320	580

4	A	B	C	D	E
You get	350	490	560	490	350
Other member of group X gets	560	110	350	490	-50

5	A	B	C	D	E
You get	560	300	510	300	510
Other member of group X gets	300	-100	510	560	110

6	A	B	C	D	E
You get	500	500	320	320	570
Other member of group X gets	500	200	570	-80	320

7	A	B	C	D	E
You get	290	510	540	510	290
Other member of group X gets	530	510	290	110	-100

8	A	B	C	D	E
You get	300	300	550	500	500
Other member of group X gets	550	-90	300	100	500

9	A	B	C	D	E
You get	480	280	480	570	280
Other member of group X gets	100	-100	480	280	570

**Appendix 4**  
**Measure of self-construal (Singelis scale 1994)**

*Independent self-construal*

1. I enjoy being unique and different from others in many respects.
2. I can talk openly with a person who I meet for the first time, even when this person is much older than I am.
3. I'd rather say "No" directly, than risk being misunderstood.
4. Having a lively imagination is important to me.
5. I prefer to be direct and forthright when dealing with people I've just met.
6. I am comfortable with being singled out for praise or rewards.
7. Speaking up during a class (or a meeting) is not a problem for me.
8. I act the same way no matter who I am with.
9. I value being in good health above everything.
10. Being able to take care of myself is a primary concern for me.
11. My personal identity, independent of others, is very important to me.
12. I act the same way at home that I do at school (or work).



*Interdependent self-construal*

1. Even when I strongly disagree with group members, I avoid an argument.
2. I have respect for the authority figures with whom I interact.
3. I do my own thing, regardless of what others think.
4. I respect people who are modest about themselves.
5. I feel it is important for me to act as an independent person.
6. I will sacrifice my self-interest for the benefit of the group I am in.
7. I should take into consideration my parents' advice when making education/career plans.
8. I feel my fate is intertwined with the fate of those around me.
9. I feel good when I cooperate with others.
10. If my brother or sister fails, I feel responsible.
11. I often have the feeling that my relationships with others are more important than my own accomplishments.
12. I would offer my seat in a bus to my professor (or my boss).
13. My happiness depends on the happiness of those around me.
14. I will stay in a group if they need me, even when I am not happy with the group.
15. I try to do what is best for me, regardless of how that might affect others.
16. It is important to me to respect decisions made by the group.
17. It is important for me to maintain harmony within my group.
18. I usually go along with what others want to do, even when I would rather do something different.

## Appendix 5

### Spanish version of self-construal measure

Independent self-construal (based on Singelis scale, 1994)

1. Ser capaz de valerme por mí mismo/a es una cuestión esencial para mí.
2. Prefiero ser directo/a y sincero/a cuando hablo con alguien que acabo de conocer
3. Me siento cómodo/a si destaco al recibir un elogio/alabanza o un premio
4. Soy la misma persona tanto en casa como en la Universidad o el trabajo.
5. Defender mi punto de vista en una clase o en el trabajo no es un problema para mí
6. Mi identidad personal, independiente de los demás, es muy importante para mí
7. Disfruto siendo único/a y diferente de los demás en muchos aspectos.
8. Siempre actúo de la misma forma independientemente de con quién esté

Interdependent self-construal (based on Cross, Bacon, and Morris, 2000; and Gabriel and Gardner, 1999).

1. Los grupos a los que pertenezco son un reflejo importante de lo que soy
2. Cuando pienso en mí, a menudo pienso al mismo tiempo en los grupos a los que pertenezco.
3. Cuando entro a formar parte de un grupo, a menudo me identifico fuertemente con ese grupo.
4. Si una persona insulta a un grupo al que pertenezco me siento insultado/a personalmente.
5. Pienso que una de las partes más importantes de quien soy puede apreciarse conociendo y comprendiendo a los grupos a los que pertenezco.

## Material suplementario

6. En general, los grupos a los que pertenezco son una parte importante de mi propia imagen.
7. Cuando estoy en un grupo, suelo sentir que el grupo es una parte importante de quién soy.
8. Me suelo enorgullecer cuando alguien cercano a mí consigue algún logro importante.
9. Si alguien le hace daño a una persona cercana, a mí también me duele.
10. En general, mis relaciones personales son una parte importante de mi propia imagen
11. Mis relaciones cercanas son un reflejo importante de quién soy.
12. Me siento orgulloso/a de los grupos a los que pertenezco.
13. Todo aquello de lo que puedo enorgullecerme proviene de mis mejores amigos/as.
14. Cuando me pongo a pensar sobre mí mismo/a, a menudo también pienso en mis mejores amigos/as y en mi familia.
15. A menudo me siento muy orgulloso/a cuando un grupo al que pertenezco alcanza un logro importante.
16. Cuando me siento muy unido a alguien, a menudo siento que es una parte importante de quién soy.
17. Cuando entablo una fuerte amistad con alguien, suelo acabar identificándome mucho con esa persona.
18. Creo que una de las partes más importantes de lo que soy puede verse reflejada en mis mejores amigos/as y en su manera de ser.

## Appendix 6

### Events used in the memory task (based on Gardner et al. 2000)

We randomized the order of presentation of the days and the events included in each day.

#### *First day*

- Esta tarde fui con mi familia a ver una película al cine. La verdad es que ha sido una tarde muy agradable (Interdependent).
- Aunque viva en Bimboola me siento muy orgullosa de mi herencia española. Hoy fui a la asociación de españoles en Bimboola por primera vez y sentí como si los conociera de toda la vida (Interdependent).
- Cuando hoy llegué a casa decidí dedicarme lo que quedaba del día a mí mimá, así que me puse a escuchar a mi grupo preferido de música y preparé mi comida favorita. (Independent).
- He recibido la nota más alta de la clase en un examen de una de las asignaturas de la carrera. (Independent).

#### *Second day*

- Esta mañana me estaba cepillando los dientes y cuando me he mirado en el espejo me he quedado pensando que era una persona única y especial (Independent).
- Hoy he empezado un trabajo a media jornada y, por tanto, a ganar mi propio dinero. Me gusta la sensación de sentirme auto-suficiente porque me da más libertad (Independent).
- Esta tarde varias amigas de toda la vida han celebrado su cumpleaños juntas. Tengo un grupo de amigas increíble; es genial sentir que formas parte de un grupo así (Interdependent).
- Esta noche cuando volvía a casa había un grupo de andaluces cantando y dando palmas en el parque por donde pasaba y pensé en qué bonita es la alegría de los andaluces (Interdependent).

## Material suplementario

### *Third day*

- Esta mañana por fin he podido entregar el trabajo anual de la asignatura más importante del año. Siento como si me hubiera quitado un gran peso de encima (Independent).
- Hoy he asistido a un pequeño encuentro aquí en Bimboola de futuros psicólogos y la verdad es que ha sido muy interesante (Interdependent).
- Hoy me he dado un largo y agradable paseo yo sola. Es genial darse cuenta de que solo necesitas un poco de tiempo contigo misma para sentirte bien (Independent).
- Esta tarde he quedado con mis compañeras de clase para ir a ver una película y luego hemos ido a tomar unas tapas (Interdependent).

### *Fourth day*

- Hoy he quedado para tomar café con un grupo de amigas que hacía mucho que no veía por lo que hemos estado hablando toda la tarde (Interdependent).
- El equipo de baloncesto del que soy fan ganó el último partido de clasificación. Así que nos fuimos todos los aficionados a celebrar que habíamos pasado a la final (Interdependent).
- Esta tarde me he propuesto dejar de fumar definitivamente. Estoy segura de que soy capaz de hacerlo, solo necesito confiar en mí misma (Independent).
- Esta mañana en clase de inglés la profesora me ha felicitado por la buena redacción que he hecho de una carta que escribimos la semana pasada (Independent).

## Appendix 7

### Culture and Identity Research Network Self Construal Scale Version 3

(CIRN-SCS-3; Owe et al., 2013, Vignoles et al., 2016)

#### Difference versus similarity

1. You like being different from other people.
2. You try to avoid being the same as others.
3. You see yourself as unique and different from others.
4. *You like being similar to other people.*
5. *You see yourself as similar to others.*
6. *You would rather be the same as others than be different.*

#### Self-containment versus connectedness to others

1. You would not feel personally insulted if someone insulted a member of your family.
2. Your happiness is independent from the happiness of your family.
3. *If someone in your family achieves something, you feel proud as if you had achieved something yourself.*
4. *If someone insults a member of your family, you feel as if you have been insulted personally.*
5. *If a close friend or family member is happy, you feel the happiness as if it were your own.*
6. *If a close friend or family member is sad, you feel the sadness as if it were your own.*

#### Self-direction versus reception to influence

1. You always make your own decisions about important matters, even if others might not approve of what you decide.
2. You usually decide on your own actions, rather than follow others' expectations.
3. You decide for yourself what goals to pursue even if they are very different from what your family would expect.

## Material suplementario

4. *You usually follow others' advice when making important choices.*
5. *You usually do what people expect of you, rather than decide for yourself what to do.*
6. *You usually ask your family for approval before making a decision.*

### Self-reliance versus dependence on others

1. You prefer to rely completely on yourself rather than depend on others.
2. You try to avoid being reliant on others.
3. You tend to rely on yourself rather than seeking help from others.
4. *In difficult situations, you tend to seek help from others rather than relying only on yourself.*
5. *You prefer to ask other people for help rather than rely only on yourself.*
6. *Being able to depend on others is very important to you.*

### Self-expression versus harmony

1. You prefer to express your thoughts and feelings openly, even if it may sometimes cause conflict.
2. You like to discuss your own ideas, even if it might sometimes upset the people around you.
3. You show your true feelings even if it disturbs the harmony in your family relationships.
4. *You prefer to preserve harmony in your relationships, even if this means not expressing your true feelings.*
5. *You try to adapt to people around you, even if it means hiding your feelings.*
6. *You try not to express disagreement with members of your family.*

### Self-interest versus commitment to others

1. You protect your own interests, even if it might sometimes disrupt your family relationships.
2. You usually give priority to your personal goals, before thinking about the goals of others.

3. Your own success is very important to you, even if it disrupts your friendships.
4. *You usually give priority to others, before yourself.*
5. *You would sacrifice your personal interests for the benefit of your family.*
6. *You value good relations with the people close to you more than your personal achievements.*

Consistency versus variability

1. You behave in a similar way at home and in public.
2. You behave in the same way even when you are with different people.
3. You see yourself the same way even in different social environments.
4. *You act very differently at home compared to how you act in public.*
5. *You behave differently when you are with different people.*
6. *You see yourself differently when you are with different people.*

De-contextualized versus contextualized self

1. Someone could understand who you are without needing to know which social groups you belong to.
2. Someone could understand who you are without needing to know about your place of origin.
3. Someone could understand who you are without needing to know about your social standing.
4. *If someone wants to understand who you are, they would need to know about the place where you live.*
5. *If someone wants to understand who you are, they would need to know which social groups you belong to.*
6. *If someone wants to understand who you are, they would need to know about your place of origin.*





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