

University of Groningen

Controlled Motivational Orientation and Prejudice

Fousiani, Kyriaki; Dimitropoulou, Panagiota; Michaelides, Michalis

Published in:
Swiss Journal of Psychology

DOI:
[10.1024/1421-0185/a000171](https://doi.org/10.1024/1421-0185/a000171)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Fousiani, K., Dimitropoulou, P., & Michaelides, M. (2016). Controlled Motivational Orientation and Prejudice: The Mediating Role of Dehumanization. *Swiss Journal of Psychology*, 75(2), 97-107. <https://doi.org/10.1024/1421-0185/a000171>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Controlled Motivational Orientation and Prejudice

The Mediating Role of Dehumanization

Kyriaki Fousiani^{1,2}, Panayiota Dimitropoulou³, and Michalis Michaelides³

¹Faculty of Psychology and Educational Sciences, Catholic University of Louvain La Neuve, Belgium

²Faculty of Behavioural and Social Sciences, University of Groningen, The Netherlands

³Department of Psychology, University of Cyprus

Abstract. This research investigates the effect of controlled versus autonomous motivation on intergroup relations. Two studies were conducted: Study 1 ($N = 152$ Greek Cypriot undergraduate students) showed that controlled motivational orientation, measured as a personality variable, was related to more prejudicial beliefs toward outgroups, lower intrinsic motives for contact, less desire for contact, and less actual contact with outgroups. Study 2 ($N = 93$ Greek Cypriot undergraduate students) experimentally replicated the findings of Study 1, revealing that controlled motivation, manipulated as a social/situational variable, was related to a higher level of prejudice toward outgroups, less intrinsic motives for contact with outgroups, and less desire for contact with outgroups. Most importantly, these relationships were mediated by dehumanization (i.e., denial of uniquely human traits) of the outgroup. The findings highlight the role of interpersonal control as an important factor determining the quality of intergroup relations.

Keywords: intergroup relations, controlled motivation, prejudice, dehumanization

Auschwitz begins wherever someone looks at a slaughterhouse and thinks: They're only animals.

Theodor Adorno

The investigation of social factors responsible for prejudice and discriminative intergroup relations has attracted the interest of many researchers during the last few decades (Allport, 1954; Brown, Condor, Mathews, Wade, & Williams, 1986; Brown & Hewstone, 2005; Dovidio, Eller, & Hewstone, 2011). Interestingly, great emphasis has been placed on the role of personality factors in intergroup relations. The authoritarian personality (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950), right-wing authoritarianism (Altemeyer, 1998; Cohrs & Asbrock, 2009), and social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) all constitute major personality factors that significantly relate to antioutgroup attitudes and discrimination. Researchers recently explored the relationship between motivational personality orientation (the tendency to act according to extrinsic vs. intrinsic motivation) and intergroup relations and showed that extrinsic motivational personality is associated with increased prejudice (Duriez, 2011; Legault, Gutsell, & Inzlicht, 2011; Moller & Deci, 2010; Van Hiel, Roets, & Cornelis, 2010). However, the literature on the association between this personality dimension and prejudice is still limited, while the role of other variables that may mediate and further explain this association has not been sufficiently considered to date.

The present research explores the effect of controlled vs. au-

tonomous motivation on intergroup relations in Cyprus (Deci & Ryan, 1985), either measured as a personality variable or manipulated as a situational variable (a variable of the social context). After years of intercommunal conflict and a military intervention by Turkey with major population displacement in 1974, Greek Cypriots and Turkish Cypriots today reside in separate geographic areas of the island. Contact between the two groups has been difficult, although in 2003 the travel restrictions between the two areas were lifted (see Tausch et al., 2010). This study explores the relationship between the aforementioned variables in this specific intergroup context, while also taking into account the mediating role of a further variable – dehumanization of the outgroups. Dehumanization involves the reduction of others to the category of animals or objects and is often linked to poor intergroup relations (see Haslam, 2006).

Self-Determination and Intergroup Relations

Anchored by self-determination theory (SDT; Deci & Ryan, 1985, 2000), i.e., a theory of human motivation, an increasing body of research has revealed that individual motivational orientation plays a significant role in intergroup relations. Causality orientation theory, a subtheory of SDT, distinguishes peo-

ple's behavior into three motivational orientations, depending on the degree of personal choice they experience while acting: *Autonomously oriented* individuals experience a high degree of choice with respect to the initiation of their behavior, have sufficiently integrated social norms and values, and are described as having intrinsic motivation toward their own actions (Deci & Ryan, 2008). *Control-oriented* people's behavior is organized with respect to controls either in the social environment or inside themselves. Individuals of this motivational category are extrinsically motivated, focus on what they think they should do, and experience pressure to think, feel, or behave in particular ways. *Impersonally oriented individuals* are characterized by a generalized amotivation and absence of self-determination while acting and feel unable to behave intentionally (Deci & Ryan, 1985).

Recent studies demonstrated the negative effects of controlled orientation on negotiation and elimination of prejudice. Specifically, contrary to autonomously oriented individuals, those with controlled orientation display higher prejudice and racial bias toward outgroups (Amodio, Harmon-Jones, & Devine, 2003; Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Duriez, 2011; Legault, Green-Demers, & Eadie, 2009; Legault Green-Demers, Grant, & Chung, 2007; Plant, Devine, & Peruche, 2010). In a similar vein, Jonas and Fritsche (2013) found that people tend to act in terms of group membership and indicate increased ingroup-serving reactions such as ingroup bias and outgroup derogation when their sense of personal control is threatened. According to the same researchers, ingroup favoritism tactics are linked to individual need to restore or maintain a sense of control, which is associated with a control motivational orientation. Furthermore, control-oriented people display high levels of defensiveness toward their social partners and increased need to maintain and protect their ego-invested perceptions. Moreover, Neyrinck, Vansteenkiste, Lens Duriez, and Hutsebaut (2006) showed both in cross-sectional and longitudinal studies that, contrary to autonomous orientation, controlled orientation is related to more defensive social practices, such as SDO. SDO constitutes a strong socioideological indicator of dogmatism, sense of own-group superiority, nationalism, cultural elitism, and prejudice (e.g., Duriez, Van Hiel, & Kossowska, 2005; Pratto et al., 1994). The increased defensiveness of control-oriented people was explained by the absence of psychological freedom they experience and the need to protect their fragile self-esteem, thus enhancing tendencies to draw firm distinctions between their ingroup and outgroups. It is interesting to note that control-oriented people tend to seek social desirability, which involves the creation of an illusive, invulnerable, and socially acceptable image of the self, and is positively related to generalized prejudice directly and indirectly through reduced empathy toward others (Bäckström, Björklund, Hansson, Bern, & Westerlund, 2005). Finally, control-oriented individuals experience things as threatening and are more likely than autonomy-oriented individuals to divide groups between *us* and *them*, thus

displaying increased stereotyping and anti-outgroup attitudes (Hodgins, 2010).

What is crucial in order for one to acquire an autonomous, controlled, or impersonal orientation is the extent to which one internalizes the external norms and regulations. For example, in order to achieve a high sense of self-determination and autonomy, one needs to gradually internalize external regulations by transforming them into personally endorsed self-regulations and motives (Ryan & Connell, 1989; Ryan & Deci, 2000). According to the level of internalization achieved, SDT distinguishes (1) intrinsic motivation, which is related to the satisfaction inherent in the activity (Deci & Ryan, 1985); (2) extrinsic motivation, which is associated with experiences of internal pressure to act in a particular way (Assor, Vansteenkiste, & Kaplan, 2009); and (3) amotivation, which is the absolute absence of motivation to act.

Although motivational orientation (i.e., autonomy, control, impersonal) constitutes a personality variable, type of motivation toward certain activities (i.e., intrinsic, extrinsic, amotivation) may be a social/situational parameter that affects intrapersonal and interpersonal but also intergroup relations. According to cognitive evaluation theory (CET), a subtheory of SDT (Deci & Ryan 1985), two functional aspects of social/situational events can be detected: control-supportive and autonomy-supportive aspects. On the one hand, control-supportive aspects refer to factors in the social environment that exert pressure on a person to think, feel, or behave in a particular way, or to achieve particular behavioral outcomes, thus producing a shift toward a highly extrinsic motivation. On the other hand, autonomy-supportive aspects refer to events and communication in the environment that reflect personal choice, volition, and therefore intrinsic motivation. Duriez, Vansteenkiste, Soenens, and De Witte (2007) showed that extrinsic motivation is positively associated with prejudice, and that SDO partially mediates this association. Likewise, in an experimental investigation Legault et al. (2011) found that individuals who were induced by intrinsic rather than extrinsic motivation to regulate prejudice displayed less explicit and implicit prejudice.

Dehumanization of the Others and Intergroup Relations

Dehumanization is a widely known concept that represents human beings as nonhuman objects or animals and hence denies them human-related capacities such as cognition and emotion (Waytz, Epley, & Cacioppo, 2010). Dehumanization theory has been used to explain prejudicial attitudes between groups. Ethnic outgroups are often described as barbarians who lack traits such as cognitive capacity, intelligence, self-control, culture, or morality (Haslam, 2006). Dehumanization involves delegitimizing beliefs (Bar-Tal, 2000) toward outgroups, moral exclu-

sion (Opatow, 1990), and moral disengagement (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), which may lead to justifying the ingroup's aggression and prejudice toward certain outgroups (Haslam, 2006).

To date, only a limited number of studies have investigated the effects of intergroup contact on dehumanization decrease (Brown, Eller, Leeds, & Stace, 2007; Capozza, Trifiletti, Vezzali, & Favara, 2013; Vezzali, Capozza, Stathi, & Giovannini, 2012). Capozza et al. (2013) found that intergroup contact leads to a recategorization of groups and the inclusion of the outgroup members in the ingroup, that is, groups are no longer divided into *us* and *them*, but are viewed as members of a superordinate and more inclusive *us* category. This kind of recategorization, in turn, leads to less intergroup anxiety (Stephan & Stephan, 1985) and more empathy (Batson et al., 1997). Interestingly, according to the same research, both reduced anxiety and increased empathy allow for higher outgroup humanization. Similarly, Vezzali et al. (2012) showed that imagined intergroup contact (Crisp & Turner, 2009) had an indirect effect on both behavioral intentions and attributions of humanness to outgroups through an increase in outgroup trust. Finally, Brown et al. (2007) demonstrated that quantity of contact with outgroup members representative of their group is related to more positive attitudes toward that outgroup as a whole, including increased humanness attributions. It is noteworthy that the researchers of this last study found that contact predicts attitude – including humanness attributions – but that the reverse causal path was not significant.

The association between type of motivation and use of dehumanizing tactics still remains largely unexplored in the context of intergroup relations. Only one study to date has examined the link between controlled orientation and dehumanization in interpersonal relations showing that dehumanization partially mediates the relationship between controlled orientation and interpersonal violence (Moller & Deci, 2010). Furthermore, Vansteenkiste, Mouratidis, and Lens (2010) found a relationship between controlling reasons for performance-approach goals and viewing others as objects. To date no study has examined the mediating role dehumanization might have in the relationship between motivational orientation and intergroup relations.

Aims and Research Hypotheses

The present research investigates the association between motivation, both measured as a personality trait (i.e., autonomous, controlled, or impersonal orientation) and manipulated as a social/situational factor, as well as (1) prejudicial beliefs toward outgroups, (2) motives for contact, (3) desire for contact, and (4) degree of actual contact with outgroups considering the mediating role of the dehumanization of the outgroup.

It is expected that control-oriented people will maintain more prejudicial beliefs toward outgroups and display less intrinsic motives for contact with outgroups. However, we propose that this relationship will be mediated by outgroup dehumanizing tactics. The literature reveals that control-oriented people maintain several characteristics that allow for a perception of others as inferior individuals/subhumans equal to animals. We hypothesized that having a controlled orientation should allow for more prejudicial and discriminative tactics against outgroup members through outgroup dehumanization processes. That is, stripping outgroups of their human characteristics, such as civility, refinement, moral sensibility, self-restraint, rationality, and maturity (see Haslam, 2006), mediates and hence better explains the association between controlled orientation, prejudicial beliefs, and decreased motivation for contact with outgroups.

It is noteworthy that prior research already tested the effects of intergroup contact on dehumanizing attitudes toward outgroup members, while the reverse path – the effects of dehumanization on intention for intergroup contact – was either not tested at all or failed to be significant (Brown et al., 2007; Capozza et al., 2013; Vezzali et al., 2012). In this study, we argue that the dehumanization of outgroup members has a mediating role in the relationship between individuals' general motivational orientation and contact with the outgroup. We argue that dehumanizing beliefs toward outgroups influence the intention for contact and actual contact with outgroups rather than vice versa.

Two studies were conducted in the present research. The first was a correlational study that investigated the mediating role of the dehumanization of outgroups in the relationship between motivation – as a personality factor (autonomous, controlled, impersonal orientation) – and intergroup relations. The second study experimentally tested the mediating role of dehumanization between motivation – as a social/situational variable (autonomous versus controlled) – and intergroup relations. Based on the theoretical framework described above, we hypothesized the following:

1. Controlled orientation, either as a personality or a social/situational variable, positively predicts (1) more prejudice toward outgroups, (2) less identified motives for contact with outgroups, (3) decreased desire for contact, and (4) lower degree of actual contact with outgroups.
2. Outgroup dehumanization mediates all of the above-mentioned relationships.

Study 1

Study 1 tested whether controlled orientation as a personality variable has an indirect effect on intergroup relations via outgroup dehumanization.

Method

Participants

A group of 152 Greek Cypriot undergraduate students ($M_{\text{age}} = 20.24$, $SD = 2.51$) from various departments of a university in Cyprus constituted the sample of the study. Consistent with the sample distribution of the particular departments of the university, there were 127 females and 23 males. Two participants did not provide information on their sex. The parents of 60 participants were refugees, while 21 participants had at least one missing relative (not in the close familial context) stemming from the invasion and occupation of the northern part of Cyprus by Turkey since 1974.

Measures

Causality Orientation

Participants completed the 17-vignette General Causality Orientation Scale (Deci & Ryan, 1985), which had been translated into Greek. The scale had already been used in Greek in a prior study (see Sakalaki & Fousiani, 2011). It consists of 17 hypothetical vignettes with three ways of response to each (i.e., autonomous, controlled, or impersonal). A sample vignette is:

You have been offered a new position in a company in which you have worked for some time. The first question that is likely to come to mind is: (1) What if I can't live up to the new responsibility? (indicating impersonal orientation), (2) Will I make more at this position? (indicating controlled orientation), and (3) I wonder if the new work will be interesting (indicating autonomous orientation).

Participants rated their likelihood of responding in each of the three ways on a 7-point scale (1 = *very unlikely*, 7 = *very likely*). Cronbach's α s were .86, .87, and .82 for impersonal, controlled, and autonomous orientations, respectively.

Dehumanization of the Outgroup

To assess the dehumanization of the outgroup, namely, Turkish Cypriots (TC), respondents were administered a dehumanization scale including 10 personality items proposed by Haslam (2006). Specifically, participants were asked to indicate their perceptions of TC on the basis of a list of characteristics. This scale was also used in Lammers and Stapel (2011), who particularly aimed to measure participants' tendency to ascribe to others characteristics that imply human uniqueness, such as lack of self-control, childishness, irrationality, unmanneredness, self-control (reverse-scored), decency (reverse-scored), politeness (reverse-scored), civility (reverse-scored), rationality (reverse-scored), and maturity (reverse-scored). Items were rat-

ed on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach's α was .95.

Prejudice Toward the Outgroup

A 14-item version of the Symbolic Racism Scale 2000 (Henry & Sears, 2002) was used to measure prejudicial attitudes toward TC. The scale was adjusted to the needs of the study so that all of the items referred to TC and Greek Cypriots rather than to Blacks and Whites. For instance, the item "It's really a matter of some people not trying hard enough; if Blacks would only try harder they could be just as well off as Whites" was modified to "It's really a matter of some people not trying hard enough; if Turkish Cypriots would only try harder they could be just as well off as Greek Cypriots." Two items ("Irish, Italian, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same" and "Generations of slavery and discrimination have created conditions that make it difficult for Blacks to work their way out of the lower class") were removed from the scale as they do not suit to the Cypriot context. Items were rated on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach's α was .79.

Desire for Contact with the Outgroup

Participants indicated the extent to which they desire contact with TC on a 7-point scale ranging from 1 (*not at all*) to 7 (*a lot*).

Actual Contact with the Outgroup

Participants were asked to indicate the extent to which they have contact with TC on a 7-point scale ranging from 1 (*never*) to 7 (*very often*).

Motives for Contact with the Outgroup

A 9-item scale was developed to assess intrinsic motives, extrinsic motives, and amotivation for contact with TC. The intrinsic contact subscale included the items: "I have contact with Turkish Cypriots because I really like them," "I have contact with Turkish Cypriots because I have fun whenever I am with them," "I have contact with Turkish Cypriots because they are remarkable people." The extrinsic contact subscale included the following items: "I have contact with Turkish Cypriots because I feel that this is what I should do," "I often feel I have to have contact with Turkish Cypriots because others will view me as closed-minded and unsophisticated if I don't," "I have contact with Turkish Cypriots because I want the others to like me and view me as open-minded." Finally, the following items were included in the amotivation for contact subscale: "I have contact with Turkish Cypriots as I run into them in places where I go (my work,

Table 1. Descriptive statistics of and correlation coefficients among variables of Study 1

Variables	M	SD	2	3	4	5	6	7	8	9	10	11
1. Controlled orientation	4.08	0.97	-.086	.56**	.87**	.37**	.50**	-.07	.18*	.16	-.11	-.08
2. Autonomy orientation	5.71	0.69		-.12	-.52**	-.35**	-.31**	.28**	.07	.06	.25**	.11
3. Impersonal orientation	3.12	0.89			.54**	.26**	.29**	.10	.19*	.07	.09	-.01
4. Composite Interpersonal Control	3.17	0.64				.47**	.55**	-.24**	.09	.10	-.24**	-.14
5. Dehumanization of the outgroup	3.61	1.33					.73**	-.69**	-.28**	.12	-.63**	-.36**
6. Symbolic racism toward the outgroup	3.96	0.87						-.59**	-.17*	.34**	-.57**	-.29**
7. Intrinsic motives for contact with the outgroup	2.65	1.53							.46**	-.01	.84**	.52**
8. Extrinsic motives for contact with the outgroup	1.83	1.09								.23**	.45**	.30**
9. Amotivation for contact with the outgroup	2.33	1.51									-.05	.20*
10. Actual contact with the outgroup	3.06	1.68										.56**
11. Desire for contact with the outgroup	1.73	1.12										

Note. All scales are 7-point scales. * $p < .05$, ** $p < .01$.

university, gym), “Conditions make me have contact with Turkish Cypriots, although I do not want to,” and “The only reason for which I have contact with Turkish Cypriots is that I cannot avoid it.” All items were rated on a 7-point scale ranging from 1 (*completely untrue*) to 7 (*completely true*). Cronbach’s α s were .95, .84, and .85 for intrinsic motives, extrinsic motives, and amotivation subscales, respectively. The validation of this scale was tested by exploring the relationship between each subscale and the identified motives, external motives, and amotivation for nonprejudice subscales of the motivation to be nonprejudiced scale (Legault et al., 2007). The results revealed a strong positive correlation between (1) intrinsic motives for contact and identified motives¹ to be nonprejudiced ($r = .68$, $p < .001$) and (2) extrinsic motives for contact and extrinsic motives to be nonprejudiced ($r = .53$, $p < .001$), while no significant correlation occurred between (3) amotivation for contact and the amotivation to be nonprejudiced subscale ($r = .07$, $p > .05$).

Results

Interpersonal control was operationalized in two ways: controlled orientation and autonomy orientation. A composite measure (Composite Interpersonal Control; CIC) of these two scales was created after reversing when necessary², such that higher scores represented controlled orientation and lower scores autonomy orientation. The impersonal orientation subscale was not considered in this composite measure as it is mostly associated with amotivation (absence of motivation) rather than a particular type of motivation (Deci & Ryan, 1985).

¹ According to Deci and Ryan (1985), identified motives involve behaving because of the importance one ascribes to the behavior and are very close to intrinsic motivation toward acts.

² Moller and Deci (2010) have also created a composite score in a similar manner for interpersonal control.

Preliminary Analyses

The means and standard deviations of all of the variables can be seen on Table 1. The correlations between the measures of interpersonal control, including the composite one, and symbolic racism, dehumanization of outgroup, motives for contact, and actual and desired contact with outgroup are also presented.

The results showed that interpersonal control is positively correlated with the dehumanization of the outgroup, as well as with symbolic racism toward the outgroup. Moreover, interpersonal control was negatively related to intrinsic motives for contact with the outgroup as well as with actual contact with the outgroup.

The findings showed that the dehumanization of the outgroup has strong, negative correlations with intrinsic motives for contact and with actual contact with the outgroup and strong, positive correlations with symbolic racism toward the outgroup. Moreover, symbolic racism was positively associated with amotivation for contact with the outgroup and negatively associated with intrinsic and extrinsic motives as well as desire for and actual contact.

Mediation Analyses

Mediation analyses were carried out using the PROCESS procedure for SPSS 21 (Hayes, 2013). The total effect of the predictor interpersonal control (CIC) on each of the outcome variables is reported, followed by the direct and indirect – mediated by the dehumanization variable – effects. Figure 1 depicts the mediation model fitted to the data. The mediational procedure is based on 5,000 bootstrap samples. A measure of effect size for the indirect effect, κ^2 , is provided (Preacher & Kelley, 2011).

The results of the mediation analyses can be seen in Table

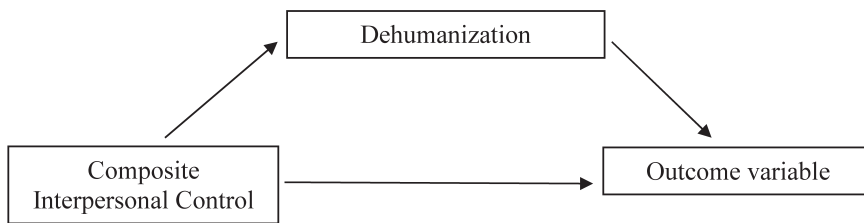


Figure 1. Diagram of the mediation model for Study 1.

Table 2. Mediation results for Study 1 (and Study 2, in italics) with dehumanization as the mediator

Effects of CIC on	Total effect			Direct effect			Indirect effect			κ^2 [BCA CI]
	Estimate	SE	<i>p</i>	Estimate	SE	<i>p</i>	Estimate	Bootstrap SE	BCA CI	
Symbolic racism toward the outgroup	0.75	0.09	<.001	0.36	0.08	<.001	0.39	0.06	[0.27, 0.52]	.31 [.21, .40]
	<i>0.77</i>	<i>0.24</i>	<i>.002</i>	<i>0.32</i>	<i>0.18</i>	<i>.072</i>	<i>0.45</i>	<i>0.18</i>	<i>[0.13, 0.86]</i>	<i>.22</i> [.06, .36]
Degree of contact with the outgroup	-0.93	0.31	.003	-0.40	0.25	.122	-0.54	0.20	[-0.91, -0.12]	.16 [.04, .27]
Desire for contact with the outgroup	-0.41	0.20	.045	-0.21	0.20	.277	-0.19	0.10	[-0.42, -0.04]	.08 [.02, .17]
	<i>-1.27</i>	<i>0.56</i>	<i>.026</i>	<i>-0.08</i>	<i>0.36</i>	<i>.827</i>	<i>-1.19</i>	<i>0.41</i>	<i>[-1.99, -0.38]</i>	<i>.28</i> [.10, .42]
Extrinsic motives for contact	0.21	0.21	.317	0.38	0.20	.064	-0.17	0.09	[-0.40, -0.04]	.07 [.02, .18]
	<i>-0.48</i>	<i>0.34</i>	<i>.166</i>	<i>0.49</i>	<i>0.36</i>	<i>.180</i>	<i>0.01</i>	<i>0.09</i>	<i>[-0.17, 0.19]</i>	<i>.00</i> [.00, .01]
Intrinsic motives for contact	-0.81	0.29	.006	-0.28	0.22	.199	-0.52	0.20	[-0.88, -0.09]	.18 [.03, .29]
	<i>-1.66</i>	<i>0.49</i>	<i>.001</i>	<i>-0.63</i>	<i>0.33</i>	<i>.060</i>	<i>-1.03</i>	<i>0.35</i>	<i>[-1.72, -0.36]</i>	<i>.25</i> [.09, .39]
Amotivation for contact	0.28	0.29	.330	0.20	0.29	.490	0.08	0.08	[-0.04, 0.31]	.02 [.00, .09]
	<i>-1.11</i>	<i>0.48</i>	<i>.023</i>	<i>0.08</i>	<i>0.20</i>	<i>.696</i>	<i>-1.19</i>	<i>0.43</i>	<i>[-2.02, -0.35]</i>	<i>.42</i> [.16, .58]

Note. SE = standard error; BCA CI = bias-corrected and accelerated bootstrap confidence interval; κ^2 = Preacher and Kelley (2011) kappa squared effect size.

2. The total effect, as well as the direct and indirect effects of CIC on symbolic racism, are positive and significant, indicating that dehumanization partially mediates the relationship between CIC and symbolic racism. The effect size of the indirect effect is relatively large, $\kappa^2 = .31$. The negative effect of CIC on the variable degree of contact with the outgroup is fully mediated by dehumanization with a medium effect of the indirect path $\kappa^2 = .16$. Similarly, dehumanization fully mediated the negative relationship between CIC and desire for contact with the outgroup; the indirect effect had a small effect size, $\kappa^2 = .08$.

The total effect of CIC on the extrinsic motives for contact is nonsignificant, but the indirect effect is negative and significant with a small effect size $\kappa^2 = .07$. On the contrary, the effect on intrinsic motives for contact is negative and significant, fully mediated by dehumanization with a medium effect size $\kappa^2 = .18$. The total effect of CIC on amotivation for contact, as well as the direct and indirect effects, are nonsignificant.

Study 2

Study 1 showed that dehumanization mediated the relationship of controlled motivation on all outcome variables, except amotivation for contact with the outgroup. Study 2 served to exper-

imentally replicate the findings of Study 1 by manipulating autonomy versus control in an intergroup context.

Method

Participants

A group of 93 Greek Cypriot undergraduate students ($M_{age} = 22.06$, $SD = 4.03$) from various departments of two different universities in Cyprus comprised the sample of the study. There were 64 females and 27 males. Two participants did not provide information about their sex. The parents of 36 participants were refugees, while 68 participants had at least one relative who was a refugee (not in the close familial context) due to the invasion and occupation of the northern part of Cyprus by Turkey.

Experimental Procedure

All participants received a booklet that included (1) an experimental vignette in which the independent variable was manipulated and (2) the measures of the study. The participants were requested to first read the vignette and then complete a series

of scales. A simple (Type of Motivation [autonomy, control]) between-subjects experimental design was implemented. Autonomous versus controlled motivation were manipulated according to the cognitive evaluation theory of the self-determination literature (Deci, Eghrari, Patrick, & Leone, 1994; Reeve, Jang, Carrell, Jeon, & Barch, 2004; Sheldon & Filak, 2008). Specifically, autonomy involves feeling internal assent and an increased sense of choice regarding one's behavior, whereas control refers to feelings of coercion, pressure to perform (Pittman, Davey, Alafat, Wetherill, & Kramer, 1980), absence of choice while behaving, and highlighting of what one should do (Ryan, 1982). Participants were randomly assigned to one of the two experimental conditions with equal probabilities. The vignette is given below, with its two alternative versions.

You are a university student. The professor of the course "Introduction to Psychology" has asked all of the students who attend this course to complete an assignment on the topic, "The role of media on body image and self-esteem." This assignment must be written in English, not Greek. All students who have been enrolled in this course are on an advanced level in the use of English so that they can cope with this assignment.

- *Autonomy condition:* The professor informed the students that they should work on this assignment in pairs. More specifically, each student can collaborate with another student on the condition that they have never collaborated together in the past. For the present assignment, they could choose between a Greek Cypriot and a Turkish Cypriot student as partner who satisfies their own criteria and preferences. They could freely choose any Greek Cypriot or Turkish Cypriot fellow student they thought was the most adequate in order to collaborate with him/her.
- *Control condition:* The professor informed the students that they should work in assigned pairs. The student with whom they have to collaborate is a Turkish Cypriot student. They could not refuse to collaborate with the Turkish Cypriot fellow student. If they refused to collaborate, the assignment would not be accepted by the professor and they failed the course.

After reading the vignette, the participants in the autonomous motivation condition replied to the following two questions, which aimed to emphasize the free choice they were given to choose between a Turkish Cypriot and a Greek Cypriot student: "How satisfactory do you find the opportunity to collaborate with a Turkish Cypriot student for this assignment?" and "How satisfactory do you find the opportunity to collaborate with a Greek Cypriot student for this assignment?" (1 = *not at all*, 9 = *very*³). Participants of the controlled motivation condition

were only asked to rate the extent to which they found satisfactory the opportunity to collaborate with a Turkish Cypriot student. The particular question aimed to emphasize that there were no alternative choices and collaborating with the Turkish Cypriot student designated by the professor was the only choice. Then participants completed the following measures.

Measures

Dehumanization of the outgroup

For the assessment of the dehumanization of TC, participants rated eight human uniqueness traits including the related forms of humanness denial (Bastian & Haslam, 2010; Haslam, 2006). High human uniqueness items included were "TC are refined and cultured," "TC are mature individuals," "TC have self-restraint," "TC are rational and logical," "TC are intelligent." Low human uniqueness items included were "TC are less than human," "TC are uncivilized," and "TC behave like animals." Responses ranged from 1 (*strongly disagree*) to 9 (*strongly agree*). Indices of dehumanization were constructed by reverse scoring the high items and adding them to the low items. Cronbach's α was .98. Though this scale of the dehumanization of the outgroup is similar to the one used in Study 1, the present one was preferred for this study as its psychometric properties have been investigated (Bastian & Haslam, 2010; Haslam, 2006).

Prejudice Toward the Outgroup

The prejudice toward TC scale was identical to the one used in Study 1. Cronbach's α was .78.

Motives for Contact with the Outgroup

The same 9-item motives for contact with TC scale used in Study 1 was administered in Study 2. Internal consistency was .95 for intrinsic motives, .72 for extrinsic motives, and .76 for amotivation.

Desire for Contact with the Outgroup

The participants completed the same desire for contact with TC item as the one used in Study 1, on a 9-point scale.

Results

The means and standard deviations of the study variables for the two experimental conditions appear on Table 3. As anti-

³ All of the items in Study 2 required ratings on a 9-point scale in order to achieve a higher sensitivity of the measures and a more accurate assessment of the dependent variables in the experimental conditions.

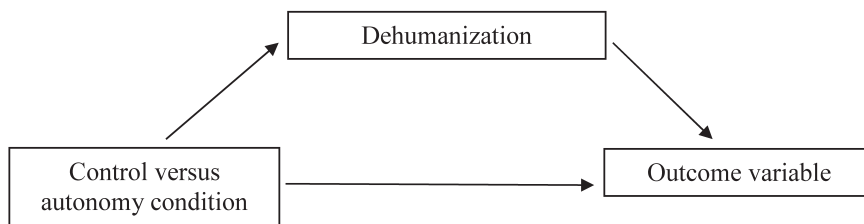


Figure 2. Diagram of the mediation model for Study 2.

Table 3. Descriptive statistics of the main variables of Study 2 by condition

Variables	Control condition (n = 46)		Autonomy condition (n = 47)		t	df	p
	M	SD	M	SD			
Dehumanization of the outgroup	4.19	2.50	3.01	1.63	2.70	91	.008
Symbolic racism toward the outgroup	5.38	1.26	4.60	1.03	3.25	91	.002
Intrinsic motives for contact with the outgroup	3.99	2.40	5.65	2.28	-3.41	90	.001
Extrinsic motives for contact with the outgroup	2.67	1.44	3.15	1.83	-1.40	90	.166
Amotivation for contact with the outgroup	5.28	2.60	6.38	1.99	-2.31	91	.023
Desire for contact with the outgroup	4.41	2.82	5.68	2.58	-2.26	91	.026

Note. All scales are 9-point scales.

pated, the participants in the control condition reported higher ratings on dehumanization and symbolic racism, and lower ratings on motives and desire for contact. In a pairwise comparison of means, after applying a Bonferroni correction for multiple testing, individuals in the control condition were significantly higher on the symbolic racism toward the outgroup scale, marginally higher on the dehumanization scale, and significantly lower on intrinsic motives for contact with the outgroup as compared to their counterparts in the autonomy condition.

Mediation Analyses

Mediation analyses for Study 2 were carried out using the PROCESS procedure for SPSS 21 (Hayes, 2013) with the same specifications as in Study 1 (Figure 2). The total effect of the experimental condition as a predictor on each of the outcome variables is reported, followed by the direct and indirect mediation by the dehumanization variable effects (Table 2, in italics). The effect size for the indirect effect is also provided.

The total effect of the experimental treatment of control (vs. autonomy) on symbolic racism is positive and significant and fully mediated by dehumanization (medium effect size $\kappa^2 = .22$). Unlike the other outcomes that involve attitudes or intentions, in the experimental condition, in Study 2 it was not possible to assess a behavioral activity such as degree of contact. When we examined desire for contact, the effect of the motivation condition was fully mediated by dehumanization with a large effect size $\kappa^2 = .28$.

The total, direct, and indirect effects of the control versus autonomy condition on the extrinsic motives for contact are nonsignificant. A significant negative relationship between the motivation condition and intrinsic motives for contact with the

outgroup is fully mediated by dehumanization with a large effect size $\kappa^2 = .25$ for the indirect effect. Similarly, dehumanization fully mediated the negative effect of the motivation condition on amotivation for contact with a large effect size $\kappa^2 = .42$.

Discussion

The present research tested the effect of controlled versus autonomous motivation on intergroup relations, including prejudicial beliefs toward outgroups, motives for contact, desire for contact, and actual contact with outgroups. In addition, the exploration of the mediating role of dehumanization, a new area of research, constituted a primary goal of the research. Study 1 was a correlational study that aimed to test the association between controlled motivation, measured as a personality variable (according to the general causality orientation theory; Deci & Ryan, 1985) and intergroup relations. Study 2 experimentally tested the effects of controlled motivation, manipulated as a social/situational variable (according to the cognitive evaluation theory; Deci & Ryan, 1985), on intergroup relations. In both studies, outgroup dehumanization was the mediator of these relationships. The results of Study 1, confirming our hypotheses, revealed that controlled motivation is related to (1) more prejudicial beliefs toward an outgroup, (2) less intrinsic motives for contact, (3) less actual contact with an outgroup, and (4) less desire for contact. These relationships were mediated by the dehumanization of the outgroup. A similar pattern of results was found in the experimental design of Study 2, thus replicating and strengthening our findings. More specifically, Study 1 revealed a partial mediation of the dehumanization

of the outgroup between control-oriented personality and prejudice toward outgroup members, on the one hand, and full mediation between controlled personality and intrinsic motives for contact, desire for contact, and actual contact with the outgroup on the other. Moreover, we created a composite interpersonal control score that included scores of both autonomous and controlled orientation to have a more holistic score for this measure. The idea of a composite measure of control was based on Moller and Deci's (2010) recent work on the mediating role of dehumanization between interpersonal control and violence. The findings revealed a negative indirect effect of the Composite Interpersonal Control scale (CIC) on extrinsic motives for contact with the outgroup through dehumanization. However, this effect was small and in the experimental study this effect was nonsignificant. Likewise, Study 2 showed that dehumanization of the outgroup fully mediates the relationship between controlled motivation, when manipulated as a conditional variable, and prejudice toward the outgroup, desire for contact, as well as intrinsic motives for contact with the outgroup.

The present study showed that, apart from the ideologically oriented personality variables that apparently affect intergroup relations (Adorno et al., 1950; Altemeyer, 1998; Pratto et al., 1994), further types of personality characteristics that concern the quality of interpersonal relations rather than the political-ideological context, seem to play a significant role in intergroup relations. Controlled motivation, reflecting a personality structure that focuses on extrinsic motives such as power, status, and fame, may largely affect intergroup relations and particularly prejudicial beliefs, motives for contact, and degree of contact with outgroups. Moreover, the present study is the first to show that dehumanization partially mediates controlled motivation (i.e., experience of interpersonal control) with prejudicial beliefs, and fully mediates controlled motivation with motives for contact, desire, and degree of contact. In other words, control-oriented people who act upon external motives and pressures and do not view themselves as capable of acting volitionally in a context of psychological freedom tend to view outgroup members as a threat and therefore strip them of their humanness, perceiving them as inferior beings. This reduction and treatment of human species as subhuman may lead to a delegitimization (Bar-Tal, 2000) of people, a moral disengagement (Bandura et al., 1996) and moral exclusion (Opatow, 1990), which facilitate the emergence of prejudicial beliefs, less identified contact, and less actual contact with outgroup members. Interestingly, according to the findings of Study 2, not only controlled personality but also a controlling context may lead to similar phenomena. In a controlling context, people feel forced by their social environment to interact with outgroup members, a fact that causes increased intergroup threat and makes them delegitimize and dehumanize outgroups.

The findings of this study could contribute to efforts con-

cerning the negotiations of intergroup conflicts and the restoration of harmony and peace. For instance, the existing literature on intergroup and bicomunal relations view contact (Allport, 1954) as a satisfactory condition that leads to a reduction of prejudice and the restoration of trust (Tausch et al., 2010). Although contact has been found to reduce prejudice, its actual and long-term effectiveness are still questionable (Ford, 1986; Janney, Snell, Beers, & Raynes, 1995), as conflicts are not always resolved by such a strategy. The present findings imply that, beyond contact per se, motives for contact could be important. Researchers should therefore focus on the practices required to foster intrinsic motivation while interacting with outgroups.

One major limitation of this study is the omission of manipulation checks in Study 2. The experimental design was conducted (1) by taking into account the major elements that render a context autonomous or controlling according to the self-determination theorists, such as promotion of sense of choice versus promotion of coercion and highlighting what one should do (Pittman et al., 1980; Ryan, 1982) and (2) by imitating the experimental manipulations of prior, well-established studies on autonomy versus control as situational variables. We therefore consider our manipulations to be largely valid. The inclusion of manipulation checks, however, is deemed necessary in future research as it may detect any intervening variables that may decrease the internal validity of the experiment. A further limitation is that the amotivation subscale of the motives for contact with the outgroup scale, which we developed, did not meet the validation criteria that the other subscales – intrinsic and extrinsic motives for contact – met. Although findings regarding this subscale were included in this research, they should be interpreted with caution because of the poor psychometric properties of the subscale. A new, well-established amotivation subscale should be developed for the investigation of the association between absence of motives for contact with outgroups and the remaining variables. In any case, more research is required in order to better understand the effect of motivation in the intergroup sphere and the role of humanness denial to the outgroups in explanation of the above effect.

References

- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Perseus.
- Altemeyer, B. (1998). The other "authoritarian personality." In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 47–92). San Diego, CA: Academic Press.
- Amodio, D. M., Harmon-Jones, E., & Devine, P. G. (2003). Individual differences in the activation and control of affective race bias as assessed by startle eyeblink responses and self-report. *Journal of Personality and Social Psychology*, 84, 738–753. doi 10.1037/0022-3514.84.4.738
- Assor, A., Vansteenkiste, M., & Kaplan, A. (2009). Identified versus

- introjected approach and introjected avoidance motivations in school and in sports: The limited benefits of self-worth strivings. *Journal of Educational Psychology*, *101*, 482–497. doi 10.1037/a0014236
- Bäckström, M., Björklund, F., Hansson, S.B., Bern, D., & Westerlund, B. (2005). *What makes some persons more prejudiced than others? Modeling the role of social dominance, empathy, social desirability, and gender* (Lund Psychological Reports No. 833614). Retrieved from <http://lup.lub.lu.se/record/833614>
- Bandura, A., Barbaranelli, C., Caprara, G.V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, *71*, 364–374. doi 10.1037/0022-3514.71.2.364
- Bar-Tal, D. (2000). *Shared beliefs in a society: Social psychological analysis*. Thousand Oaks, CA: Sage.
- Bastian, B., & Haslam, N. (2010) Excluded from humanity: The dehumanising effects of social ostracism. *Journal of Experimental Social Psychology*, *46*, 107–113. doi 10.1016/j.jesp.2009.06.022
- Batson, C. D., Sager, K., Garst, E., Kang, M., Rubchinsky, K., & Dawson, K. (1997). Is empathy-induced helping due to self-other merging? *Journal of Personality and Social Psychology*, *73*, 495–509. doi 10.1037/0022-3514.73.3.495
- Brown, R., Condor, S., Mathews, A., Wade, G., & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology*, *59*, 279–304. doi 10.1111/j.2044-8325.1986.tb00230.x
- Brown, R., Eller, A., Leeds, S., & Stace, K. (2007). Intergroup contact and intergroup attitudes: A longitudinal study. *European Journal of Social Psychology*, *3*, 692–703. doi 10.1002/ejsp.384
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 255–343). San Diego, CA: Elsevier.
- Capozza, D., Trifiletti, E., Vezzali, L., & Favara, I. (2013). Can contact improve humanity attributions? *International Journal of Psychology*, *4*, 527–554. doi 10.1080/00207594.2012.688132
- Cohrs, J. C., & Asbrock, F. (2009). Right-wing authoritarianism, social dominance orientation and prejudice against threatening and competitive ethnic groups. *European Journal of Social Psychology*, *39*, 270–289. doi 10.1002/ejsp.545
- Crisp, R. J., & Turner, R. N. (2009). Can imagined interactions produce positive perceptions? Reducing prejudice through simulated social contact. *American Psychologist*, *64*, 231–240. doi 10.1037/a0014718
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, *62*, 119–142. doi 10.1111/j.1467-6494.1994.tb00797.x
- Deci, E. L., & Ryan, R. M. (1985). The General Causality Orientations Scale: Self-determination in personality. *Journal of Research in Personality*, *19*, 109–134. doi 10.1016/0092-6566(85)90023-6
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227–268. doi 10.1207/S15327965PLI1104_01
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology*, *49*, 14–23. doi 10.1037/0708-5591.49.1.14
- Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L. (2002). The regulation of explicit and implicit race bias: The role of motivations to respond without prejudice. *Journal of Personality and Social Psychology*, *82*, 835–848. doi 10.1037//0022-3514.82.5.835
- Dovidio, J. F., Eller, A., & Hewstone, M. (2011). Improving intergroup relations through direct, extended and other forms of indirect contact. *Group Processes & Intergroup Relations*, *14*, 147–160. doi 10.1177/1368430210390555
- Duriez, B. (2011). Understanding the effects of parental extrinsic versus intrinsic goal promotion on adolescent ethnic prejudice. *Journal of Social Psychology*, *151*, 441–454. doi 10.1080/00224545.2010.490571
- Duriez, B., Van Hiel, A., & Kossowska, M. (2005). Authoritarianism and social dominance in Western and Eastern Europe: The importance of the sociopolitical context and of political interest and involvement. *Political Psychology*, *26*, 299–320. doi 10.1111/j.1467-9221.2005.00419.x
- Duriez, B., Vansteenkiste, M., Soenens, B., & De Witte, H. (2007). The social costs of extrinsic relative to intrinsic goal pursuits: Their relation with social dominance and racial and ethnic prejudice. *Journal of Personality*, *75*, 757–782. doi 10.1111/j.1467-6494.2007.00456.x
- Ford, W. S. (1986). Favorable intergroup contact may not reduce prejudice: Inconclusive journal evidence 1960–1984. *Sociology and Social Research*, *70*, 256–258.
- Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, *10*, 252–264. doi 10.1207/s15327957pspr1003_4
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford.
- Henry, P. J., & Sears, D. O. (2002). The Symbolic Racism 2000 Scale. *Political Psychology*, *23*, 253–283. doi 10.1111/0162-895X.00281
- Hodgins, H. S. (2010, May). *Dividing the social world into “us” and “them”: An implicit cognitive process related to motivation and threat*. Invited talk presented at the Fourth International Self-Determination Theory conference, Ghent, Belgium.
- Janney, R., Snell, M., Beers, M., & Raynes, M. (1995). Integrating students with moderate and severe disabilities: Classroom teachers' beliefs and attitudes about implementing an educational change. *Educational Administration Quarterly*, *31*, 86–114. doi 10.1177/0013161X95031001006
- Jonas, E., & Fritzsche, I. (2013). Destined to die but not to wage war: How existential threat can contribute to escalation or de-escalation of violent intergroup conflict. *American Psychologist*, *68*, 543–558. doi 10.1037/a0033052.
- Lammers, J., & Stapel, D. A. (2011). Power increases dehumanization. *Group Processes & Intergroup Relations*, *14*, 113–126. doi 10.1177/1368430210370042
- Legault, L., Green-Demers, I., & Eadie, A. L. (2009). When internalization leads to automatization: The role of self-determination in automatic stereotype suppression and implicit prejudice regulation. *Motivation and Emotion*, *33*, 10–24. doi 10.1007/s11031-008-9110-4
- Legault, L., Green-Demers, I., Grant, P., & Chung, J. (2007). On the self-regulation of implicit and explicit prejudice: A self-determination perspective. *Personality and Social Psychology Bulletin*, *33*, 732–749. doi 10.1177/0146167206298564
- Legault, L., Gutsell, J. N., & Inzlicht, M. (2011). Ironic effects of anti-prejudice messages: How motivational intervention reduces (but also increases) prejudice. *Psychological Science*, *22*, 1472–1477. doi 10.1177/0956797611427918
- Moller, A. C., & Deci, E. L. (2010). Interpersonal control, dehumanization, and violence: A self-determination theory perspective. *Group Processes and Intergroup Relations*, *13*, 41–53.
- Neyrinck, B., Vansteenkiste, M., Lens, W., Duriez, B., & Hutsebaut, D. (2006). Cognitive, affective and behavioral correlates of internalization of regulations for religious activities. *Motivation and Emotion*, *30*, 321–332. doi 10.1007/s11031-006-9048-3
- Opatow, S. (1990). Moral exclusion and injustice: An overview. *Journal of Social Issues*, *46*, 1–20. doi 10.1111/j.1540-4560.1990.tb00268.x
- Pittman, R. S., Davey, M. E., Alafat, K. A., Wetherill, K. V., & Kramer, N. A. (1980). Informational versus controlling verbal rewards. *Personality and Social Psychology Bulletin*, *39*, 228–233. doi 10.1177/014616728062007
- Plant, E. A., Devine, P. G., & Peruche, M. B. (2010). Routes to positive interracial interactions: Approaching egalitarianism or avoiding

- prejudice. *Personality and Social Psychology Bulletin*, 36, 1135–1147. doi 10.1177/0146167210378018
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741–763. doi 10.1037/0022-3514.67.4.741
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16, 93–115. doi 10.1037/a0022658
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing high school students' engagement by increasing their teachers' autonomy support. *Motivation and Emotion*, 28, 147–169. doi 10.1023/B:MOEM.0000032312.95499.6f
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450–461. doi 10.1037/0022-3514.43.3.450
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749–761.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. doi 10.1037/0003-066X.55.1.68
- Sakalaki M., & Fousiani, K. (2012). About some personality misfortunes of opportunists: The negative correlation of economic deflection with autonomy, agreeableness and well-being. *Journal of Applied Social Psychology*, 42, 471–487. doi 10.1111/j.1559-1816.2011.00780.x
- Sheldon, K. M., & Filak, V. (2008). Manipulating autonomy, competence, and relatedness in a game-learning context: New evidence that all three needs matter. *British Journal of Social Psychology*, 47, 267–283. doi 10.1348/014466607X238797
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41, 157–175.
- Tausch, N., Hewstone, M., Kenworthy, J., Psaltis, C., Schmid, K., Popan, J., ... Hughes, J. (2010). Secondary transfer effects of intergroup contact: Alternative accounts and underlying processes. *Journal of Personality & Social Psychology*, 99, 282–302. doi 10.1037/a0018553
- Van Hiel, A., Roets, A., & Cornelis, I. (2010). To have or to be? A comparison of materialism-based theories and self determination theory as explanatory frameworks of prejudice. *Journal of Personality*, 78, 1037–1070. doi 10.1111/j.1467-6494.2010.00642.x
- Vansteenkiste, M., Mouratidis, A., & Lens, W. (2010). Detaching reasons from aims: Fair play and well-being in soccer as a function of pursuing performance-approach goals for autonomous or controlling reasons. *Journal of Sport & Exercise Psychology*, 32, 217–242.
- Vezzali, L., Capozza, D., Stathi, S., & Giovannini, D. (2012). Increasing outgroup trust, reducing inhumanization, and enhancing future contact intentions via imagined intergroup contact. *Journal of Experimental Social Psychology*, 48, 437–440. doi 10.1016/j.jesp.2011.09.008
- Waytz, A., Epley, N., & Cacioppo, J. T. (2010). Social cognition unbound: Insights into anthropomorphism and dehumanization. *Current Directions in Psychological Science*, 19, 58–62. doi 10.1177/096372140935930

Kyriaki Fousiani

Department of Psychology
Neapolis University Pafos
Danais 2 Ave.
Pafos
Cyprus
k.fousiani@nup.ac.cy