

# Influence of the Social Context on Use of Surgical-Lengthening and Group-Empowering Coping Strategies Among People With Dwarfism

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**Objective:** To assess the role that social contextual factors exert on the way people with disproportionate short stature (dwarfism) cope with the negative consequences of discrimination. **Method:** Using multi-group structural equation modeling, we compare the coping process of people with dwarfism from Spain ( $N = 63$ ) and the USA ( $N = 145$ ), two countries that differ in the role played by organizations offering support to people with dwarfism. **Results:** In Spain, where organizational support is recent, a coping approach aimed at achieving integration with the majority group through limb-lengthening surgery prevails; in the USA, where the long-standing organization of people with dwarfism encourages pride in being a “little person” and positive intragroup contact, a coping strategy based on empowering the minority group dominates. **Conclusions:** Both strategies, each in its own context, are effective at protecting psychological well-being from the negative consequences of stigmatization; however, they exert their positive effects through different processes.

**Keywords:** social stigmatization, coping strategies, disability organizations, disproportionate short stature, Little People

## Impact and Implications

- This is the first study that compares the effectiveness of two alternative coping strategies used by people with dwarfism in two different national contexts (Spain and the USA) to deal with the negative psychological consequences of discrimination. The impact of each coping strategy is compared using multigroup structural equation modeling (SEM).
- This study highlights the influence of support organizations on the coping strategies employed by individuals with a severely stigmatized condition. In the USA, where there is a long-standing organization of affected individuals aimed at empowering the group “people with dwarfism,” contact with other ingroup members buffers the negative consequences that discrimination has for psychological well-being. In contrast, in Spain, where support organizations are recent, contact with others who have the condition does not affect well-being and people with dwarfism

tend to cope through an arduous surgical process aimed at concealing the stigmatized condition.

- Results suggest that rehabilitation psychologists need to be cognizant of the role that organizations can play in coping with stigma, and that there are different coping strategies that people with dwarfism can employ. One strategy, focused on the individual’s integration with the mainstream, is based on limb lengthening surgery, and the other, focused on the collective, is based on empowering members of the stigmatized group. Although both strategies can effectively protect the individual’s well-being, they do so through processes that have different implications for the group as a whole.

## Introduction

Being a member of a socially stigmatized group can have important negative consequences for the individual (Crocker, Major, & Steele, 1998; Schmitt & Branscombe, 2002; Smart Richman & Leary, 2009). People who are socially stigmatized often experience pervasive discrimination in critical life domains such as employment, housing, education, and social interactions (see Branscombe, Schmitt, & Harvey, 1999; Gouvier, Sytsma-Jordan, & Mayville, 2003). Far from assuming that social devaluation inevitably harms the victims’ well-being, psychologists have emphasized the resilience of human nature and people’s capacities to cope with negative outcomes, including discrimination based on a stigmatized condition (Suedfeld, 1997; Tajfel & Turner, 1979; Wright, 1983).

Nonetheless, coping with a stigmatized condition is a complex challenge that can be dealt with using different strategies. One important aspect that differentiates between coping strategies is the role that the group (understood as people who share the stigmatized characteristic) can play in protecting the psychological well-

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This research was supported in part by the ALPE-Achondroplasia Foundation, “la Caixa” Foundation, and the Regional Ministry of Social Welfare and Equality of the Principality of Asturias, Spain. We wish to extend our gratitude to Carmen Alonso-Álvarez, Joanna Campbell, and Dr. William MacKenzie for their many forms of assistance with this project.

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being of its members (Branscombe, Fernández, Gómez, & Cronin, 2012). When the group is highly stigmatized, people may try to distance themselves from it and try to assimilate within the majority group. Such assimilation can be facilitated by concealing the stigmatized characteristic with the hope of “passing” as a member of the majority (Tajfel, 1978). In these cases, the stigmatized individual is not so concerned with improving the comparative position of the group in society, but instead seeks to improve the treatment the self receives from the majority group. With this strategy, the group is abandoned to its fate; however, if the “passing” is successful, it can decrease the discrimination that would otherwise be directed at the self. Alternatively, coping efforts can focus on enhancing the stigmatized group’s position within the society. In his theoretical analysis of *The Social Psychology of Minorities*, Tajfel (1978) pointed out that “when the expectation or the hope that there is a chance to integrate *as individuals* and on the basis of individual actions alone has more or less vanished, [then] the remaining alternative, both for changing the present ‘objective’ social situation of the group and for preserving or regaining its self-respect, is in acting in certain directions not as individuals but as members of a separate and distinct group” (p. 16). By moving toward the stigmatized group, which is often reflected in seeking greater contact with other members of the stigmatized minority and encouraging pride in being a member of that group, the group itself has the potential of being empowered to change the nature of the existing intergroup relations.

In the present article we compare the use and effectiveness of these two alternative strategies within a highly stigmatized social group: people with disproportionate short stature (dwarfism). Within the community of people with dwarfism, the “passing” strategy takes the form of a desire to conceal the stigmatized characteristic through limb-lengthening surgery (LLS), an arduous surgical process to enlarge the body that usually lasts around 4 or 5 years and involves several operations with long postoperative periods (Correll & Held, 2000; Peretti, Memeo, Paronzini, & Marzorati, 1995). LLS provides up to 30 cm of extra height and up to 14 cm of extra length in the arms, which can conceal two of the most salient stigmatized characteristics of this minority (i.e., short stature and disproportional limb length). The group-empowering coping strategy, on the other hand, entails reinforcing positive intragroup contact among similarly stigmatized group members and implies heightened collective pride in being a “little person.” Both these strategies have the same goal (protecting the psychological well-being from the negative consequences of social stigmatization), but they may achieve it through very different processes.

Our goal with this research is to assess the effectiveness of both of these strategies in protecting the psychological well-being of people with dwarfism in two national samples. We propose that factors in the social context in which affected individuals are embedded determine whether the surgical-lengthening or group-empowering strategy is more prevalent among people with dwarfism. Specifically, we focus on whether the presence of organizational structures that support the minority group—organizations of people with dwarfism—affect the coping strategy used and its consequences for psychological well-being. To achieve these goals, we compare two groups of people with dwarfism—those from the USA and Spain. These two nations differ in the extent to which organizations for people with dwarfism have been present

over the last several decades and whether they are aimed at empowering the minority group. While in the USA there has been an active organization of people with dwarfism since 1957, Little People of America (LPA), the presence of this kind of organization in Spain is quite recent. In both national contexts we examine the use of each type of coping strategy and assess its effectiveness in protecting the psychological well-being of this highly stigmatized group.

### The Protective Properties of the Group

Aligning the self with one’s ingroup can be an important mechanism for coping with discrimination, as evidenced by research with a variety of stigmatized groups (Jetten, Branscombe, & Spears, 2006; Schmitt & Branscombe, 2002). Research stemming from the rejection-identification model (Branscombe et al., 1999; Schmitt, Branscombe, Kobrynowicz, & Owen, 2002) has especially emphasized the formation of a positive minority identity as critical for psychological well-being in stigmatized group members who face pervasive discrimination and who cannot leave the group (Garstka, Schmitt, Branscombe, & Hummert, 2004). Members of such minorities who increasingly align themselves with their socially devalued ingroup as a consequence of experiencing discrimination exhibit, in turn, more positive well-being than those who do not (Garstka et al., 2004; Haslam, O’Brien, Jetten, Vormedal, & Penna, 2005; Schmitt, Spears, & Branscombe, 2003).

According to the rejection-identification model, the stigmatized ingroup can provide the necessary strength to challenge the devaluation of the stigmatized group by the majority group (Outten, Schmitt, Garcia, & Branscombe, 2009). When the discrimination experienced is perceived to be pervasive and illegitimate, stigmatized individuals who identify with their group may be well prepared to engage in collective action to fight the devaluation of their group (Miller, Cronin, Garcia, & Branscombe, 2009; Reynolds, Oakes, Haslam, Nolan, & Dolnik, 2000). Thus, moving toward the group “people with dwarfism” has the potential to buffer the negative consequences that discrimination has for psychological well-being.

### Challenges to Developing a Positive Social Identity in Highly Devalued Groups

While a host of studies have provided support for the process described by the rejection-identification model in a variety of stigmatized groups, research has also made clear that not all stigmatized group members align themselves with the group and, in fact, some disidentify and/or leave the group as a means of coping with stigma (Ellemers, 1993; Garstka et al., 2004; Tajfel & Turner, 1979). For example, Crabtree, Haslam, Postmes, and Haslam (2010) found that perceived discrimination leads people facing social stigmatization stemming from mental illness to distance themselves from the stigmatized minority.

A particularly good example illustrating the complexity surrounding the dynamics of identification with a stigmatized minority is the case of deaf people (Humphries & Humphries, 2011). Studies of deaf people typically reveal a positive relationship between group identification and well-being (Bat-Chava, 1993). Yet, some deaf people choose to align themselves primarily with the hearing community, while still others develop a dual identity

(e.g., identify with both the deaf and hearing communities). Among deaf people, which identity is favored has implications for academic achievement, social adjustment, and perceived acceptance by others (Weinberg & Sterritt, 1986). Although dwarfism and hearing impairment are different forms of social stigmatization, there are interesting similarities in terms of identity-related processes. Specifically, deaf people can, through surgery (via cochlear implants), minimize their difference from the majority group, which resembles the possibility given to people with dwarfism to gain height and proportion through LLS (Zaidman-Zait, 2008). The fact that with both these disabilities an arduous surgical process needs to be undertaken when the affected individual is young can give rise to similar challenges for parents and the affected individuals. In both cases, the decision to attempt to minimize the condition (or leave the stigmatized group) can have identity and coping implications.

Research based on social identity and self-categorization theories (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) has identified factors that influence the likelihood of an individualistic or collective response to stigmatization. For instance, stigmatized group members are more likely to challenge the discrimination they experience when the boundaries between the stigmatized and nonstigmatized are perceived to be impermeable; in contrast, when stigmatized group members perceive the boundaries to be permeable, then individual mobility strategies are more likely to be preferred and the chances of identification with the stigmatized ingroup decrease (Ellemers, Van Knippenberg, & Wilke, 1990). The work of Garstka, Schmitt, Branscombe, and Hummert (2004) also illustrates this point nicely by showing that, although both elderly and young people experience discrimination based on their age, only the elderly increasingly identify with their age group as a means of protecting their psychological well-being in response to perceiving themselves as targets of discrimination. In contrast, the young, who anticipate leaving their stigmatized group—indeed, they will do so inevitably without any effort on their part—do not identify with their group in response to perceived discrimination.

Another factor that influences the likelihood that turning toward the stigmatized group as a protective response will emerge or not is the *pervasiveness* of discrimination, or the extent to which a given minority is devalued across different social contexts (Schmitt, Branscombe, & Postmes, 2003). Research based on the rejection-identification model has found that the emergence of ingroup identification as a protective response to social stigmatization is particularly likely when the stigmatized minority confronts pervasive discrimination (Branscombe et al., 1999; Schmitt & Branscombe, 2002). Thus far, no research has investigated whether the strategy used for coping with stigmatization—either moving toward or away from the stigmatized minority—is contingent on the social context in which the individuals are embedded.

### **Role of Social Contextual Factors in Encouraging Movement Toward the Ingroup**

We argue that the extent to which people with dwarfism protect their well-being by aligning themselves with the group “people with dwarfism” will be contingent on the orientation or norm created by organizations representing affected individu-

als. The potential role of support organizations in defining the appropriate response is particularly important when, as is the case with dwarfism, there are few affected persons and they are geographically dispersed. People with dwarfism are frequently the only affected individual in their families, neighborhoods, schools, and so forth. As a result, they are likely to experience their stigmatized condition as “black sheep” surrounded by others who lack the stigma (Jetten et al., 2006). In these cases, the availability of organizations that facilitate contact and encourage a sense of community among its members may be crucial for the collective approach to coping to develop. Because dwarfism involves important medical and social challenges (Trotter & Hall, 2005), when parents learn that their child has dwarfism, they find themselves with a need for support and coping information. In seeking out such information, the first (and usually only) source available is the organizations representing affected individuals. These organizations also provide critical resources to adults with dwarfism, and are crucial platforms around which the community of affected individuals articulates how the condition can best be managed. We propose that these organizations exert an important normative influence on the way people with dwarfism cope with stigma.

Jetten, Postmes, and McAuliffe (2002) showed that whether people act in an individualistic or collective fashion can be shaped by the norm supported by their group. Jetten et al. (2002, Experiment 2) asked participants to think of themselves as employees of a company, whose culture was presented as either individualistic or collective. In the individualistic condition, the dominant culture was described as emphasizing personal goals, personal well-being, and the independence among the members. In the collective condition, the dominant culture at the company was said to emphasize group goals, collective well-being, and cooperation among members. This manipulation affected how participants who identified as members of that company defined themselves: those in the individualistic condition defined themselves in more individualistic terms, while those in the collective condition defined themselves in more group terms. Jetten et al. (2002, Experiment 3) showed that these group norms most strongly guided social behavior when group members experienced a threat to their identity based on membership in that particular group. These studies indicate that individual and collective group norms may be especially influential for groups experiencing the threat of social devaluation. In the context of coping with dwarfism, these studies imply that if the dominant organization of affected individuals promotes the idea that dwarfism is a problem that needs a *cure* and encourages means of concealing the condition via LLS, a group-empowering approach to coping is unlikely to be adopted. On the other hand, when the dominant organization of affected individuals encourages a sense of pride in being a person with dwarfism and promotes pride in the group “Little People,” then people with dwarfism will be likely to adopt a more group-empowering approach to coping. In this case, the ingroup should provide protection for the psychological well-being of its members who face discrimination, but when the organization sets a norm of surgical-lengthening the ingroup will not provide such protection.

## The Current Study

The effectiveness of different coping strategies in protecting psychological well-being among people with dwarfism is examined in two different contexts: the USA and Spain. These two countries differ in the extent to which organizations for people with dwarfism have been active and also in the general approach to coping with stigmatization that the organizations of affected individuals in each country tend to promote. While in the USA the organization Little People of America (LPA) has been in existence since 1957, in Spain the first steps toward the development of this kind of organization were taken in 1985 and the most active and successful organization of people with dwarfism (the ALPE-Achondroplasia Foundation, ALPE) has only been in existence since 2000.

These two organizations differ not only in how long they have been active, but also in the priorities and organizational goals they espouse. While the American organization is focused on facilitating the development of a common identity of which all members can be proud, in Spain ALPE is oriented toward ensuring that members have access to technical and health-related advice, with greater support for limb-lengthening surgery compared to the American organization. These differences are to some extent subtle, but a comparative examination of the Web sites of each organization immediately illustrates this difference. For example, the mission statement of LPA in the USA is concise but clear:

LPA is dedicated to improving the quality of life for people with dwarfism throughout their lives while celebrating with great pride Little People's contribution to social diversity. (Retrieved March 15, 2010, from <http://www.lpaonline.org>)

In Spain, on the other hand, ALPE provides no mission statement, but describes the organization's goals as promoting biomedical and social scientific research, supporting the adaptation of people with dwarfism to the educational system, and helping achieve optimal health assistance for people with dwarfism. Of particular interest is how ALPE's scientific research goal is described: ALPE collaborates and supports research projects "to find a medical solution to achondroplasia" (Retrieved April 15, 2009, from <http://www.fundacionalpe.org>). Achondroplasia is the main medical cause for disproportionate dwarfism, and ALPE supports research directed at identifying the biological mechanisms that cause dwarfism with the goal of *healing* it, or finding a treatment that helps bones develop as *normal* as possible. In this sense, one of ALPE's goals is to ensure that dwarfism will disappear in the future, which is very much in contrast with LPA's mission statement of "celebrating with great pride Little People's contribution to social diversity." Moreover, the Web sites of both organizations present different images to illustrate their aims. LPA's site is illustrated with lively pictures of nonsurgically lengthened people with dwarfism who appear to be happy. These pictures transmit precisely the celebration of diversity idea about which they write in their mission statement. None of the 27 persons with short stature on the LPA Web page has been enlarged. The ALPE Web site, in contrast, is illustrated with neutral landscape pictures. Finally, LPA organizes a large annual conference with the aim of increasing contact among individuals with dwarfism, while ALPE organizes more technical conferences with medical experts to assist affected individuals and their families.

In the current study, multigroup structural equation modeling (SEM) was used to compare samples of people with dwarfism from both nations. We tested the extent to which a group-empowering approach to coping that emphasizes positive intra-group contact versus a surgical-lengthening one are effective in buffering the negative well-being consequences of discrimination among people with dwarfism in the USA and Spain.

We expected to find evidence of a group-empowering approach to coping in the American sample, but not in the Spanish one. In contrast, we expected that increasing height via LLS would be more prevalent in Spain, and less frequent in the USA. Moreover, we expected that low height would predict discrimination in both countries, which, in turn, would decrease the well-being of people with dwarfism. We expected that positive intragroup contact (a group-based coping approach) would be an effective buffer against the negative effects of discrimination on well-being in the USA, but not in Spain. In contrast, in Spain, we expected people with dwarfism to cope through an artificial increase in height with LLS.

## Method

### Participants

People with dwarfism from the USA ( $N = 145$ , 104 women, mean age 38.6,  $SD = 15.0$ ) and Spain ( $N = 63$ , 35 women, mean age 30.9,  $SD = 11.0$ ) participated in this study. In the Spanish group, 20 participants (31.7%) had undergone limb-lengthening surgery. In contrast, only three participants (2.1%) had been lengthened by surgery in the American group. Surgical lengthening is generally infrequent in the USA (Trotter & Hall, 2005), while in Spain almost all children with a skeletal dysplasia that causes dwarfism currently undergo LLS (Alonso-Álvarez, 2007). As a consequence, both the average and the variance of respondent height differed across samples: the average height, measured on a scale from 1 to 7 (explained below in the measures section), was significantly higher in the Spanish sample ( $M = 3.7$ ) than in the American sample ( $M = 2.3$ ),  $t(206) = 5.9$ ,  $p < .001$ . The Levene test for equality of variance also indicated that there was more variability in the height of the Spanish sample ( $SD = 2.0$ ) than the American one ( $SD = 1.3$ ),  $F(1, 207) = 40.0$ ,  $p < .001$ .

### Sample Recruitment

A Web site containing the instructions and the online questionnaire for self-administration was developed in English and translated into Spanish. The two largest organizations of people with dwarfism in both countries, the Achondroplasia Foundation in Spain (ALPE) and Little People of America (LPA) in the USA, provided support in advertising the study and calling for participation among affected people in each country. We also publicized the study on internet forums such as the "The Dwarfism List" in the USA, an independent interactive forum for discussions related to dwarfism. In Spain, we similarly publicized the study widely on relevant forums with the help of members of the community of people with dwarfism. The research was approved by the Human Subjects Committee at the University of Kansas, the ALPE-Achondroplasia Foundation in Spain, and the Medical Advisory Board of the Little People of America.



## Measures

The questionnaire included the following measures: height, pervasiveness of discrimination, psychological well-being as assessed by the Psychological General Well-Being Schedule (PGWB; Dupuy, 1984), frequency of positive intragroup contact, and limb-lengthening surgery (LLS). The PGWB was selected to assess psychological well-being because it was originally developed in English for the American population and was then translated and validated for use in Spain by Badia, Gutiérrez, Wiklund, and Alonso (1996). The remaining measures were first developed in English and then translated and back-translated independently by three bilingual researchers.

**Height.** We requested that participants select the interval containing their height from seven choices: less than 1.20 m, 1.21–1.25 m, 1.26–1.30 m, 1.31–1.35 m, 1.36–1.40 m, 1.41–1.45 m, and 1.46–1.50 m. The American version included equivalent intervals using feet and inches. These intervals were transformed into a 1 to 7 scale for the data analysis.

**Well-being.** We used three dimensions of the PGWB Schedule (Dupuy, 1984): depression (three items, e.g., “Did you feel depressed during the past week?”), positive mood (four items, e.g., “How happy, satisfied, or pleased have you been with your personal life during the past week?”), and vitality (four items, e.g., “How much energy, pep, or vitality did you have or feel during the past week?”). Responses were made on Likert-type scales that ranged from 1 (*not at all*) to 6 (*extremely*). Factor analysis of the measures from both countries indicated that the items from these three dimensions of well-being loaded on a single factor with factor loadings greater than .62. Cronbach’s alpha for the overall measure was .92 in both the USA and Spain.

**Pervasive discrimination.** To assess the extent to which participants suffer pervasive discrimination, participants were asked to answer the following six items: “To what extent have you felt unfairly treated: (a) at school; (b) at college, university or similar; (c) in the labor market, when searching for a job; (d) in the work place, once you already had a job; (e) within your close family (parents, brothers and sisters, children); (f) within your extended family (uncles, grandparents, and cousins).” Responses were made on Likert-type scales that ranged from 0 (*not at all*) to 6 (*extremely*). In both samples, the six items loaded on a single factor with loadings greater than .55. Cronbach’s alpha for this measure was .80 and .76 in the USA and Spain, respectively.

**Positive intragroup contact.** The following four items assessed the extent to which participants appreciate being with other people with dwarfism: (a) “I usually enjoy being with other people with dwarfism”; (b) “Being in contact with people with dwarfism is beneficial for myself”; (c) “I feel especially comfortable when I am with other people with dwarfism”; (d) “I usually prefer NOT to attend the events that are set up by the organizations of people with dwarfism” (Reverse-scored). Responses were indicated on Likert-type scales that ranged from 0 (*strongly disagree*) to 6 (*strongly agree*). In both samples, the four items loaded on a single factor with loadings greater than .65. Cronbach’s alpha was .86 in both samples.

**Limb lengthening surgery (LLS).** A single dichotomous item asked participants whether they had undergone limb-lengthening surgery (coded as 1) or not (coded as 0).

## Analytic Plan

In order to test our hypotheses, a multi-Group SEM using Lisrel 8.7 was conducted. Multi-Group SEM is appropriate because it allows for the comparison of the latent variable means and the relationships among the variables across different groups (Kline, 2005), which is particularly appropriate for cross-cultural data (Little, 1997). Maximum likelihood estimation was used for all analyses. To evaluate overall model fit, we used the chi-squared test of model fit ( $\chi^2$ ), the comparative fit index (CFI), the non-normed fit index (NNFI), and the root mean square error of approximation (RMSEA). Following Brown’s (2006) guidelines for interpreting goodness-of-fit indices, we interpreted CFI and NNFI values greater than .95, and RMSEA values of .06 or below as indicative of good fit. When N was small (as it was the case of the measurement model in the Spanish sample), RMSEA values of .08 or below were interpreted as indicative of good fit, especially if other indices were in a range suggesting good model fit (Brown, 2006). To test for between-groups differences in the direct paths in our multiple-group model, we constrained each coefficient, one at a time, to be equal across groups. The difference between the chi-square statistics for the constrained and unconstrained model was calculated and compared to a chi-square distribution with one degree of freedom.

**Specification of the measurement model.** We first specified and tested with Confirmatory Factor Analysis (CFA) the measurement model in the American and Spanish groups separately. The measurement model reflects the correspondence among observed variables (indicators) and the latent constructs, which are the hypothesized unobserved causes of the measured indicators (Kline, 2005; Little, 1997). The measurement model included four latent constructs: height, discrimination, positive intragroup contact, and well-being. Height was treated as a latent construct with a single indicator with its measurement error fixed at zero (see Brown, 2006). For the remaining three latent constructs, the observed indicators (the questionnaire items) were grouped into three parcels for each construct. Parceling offers several advantages over item-level modeling including greater parsimony, less chance of correlated residuals, and a reduction in sampling error (Little, Cunningham, Shahar, & Widaman, 2002). Because factor analysis yielded only one factor underlying the items of the scales used for each of these three latent constructs, we randomly assigned the items of each scale to the parcels. In order to set the scale of the latent constructs we fixed the latent variance to equal 1.0. All factor loadings for the indicators of each latent construct were freely estimated; indicator cross-loadings were fixed to 0. All factor covariances were freely estimated and all errors were independent.

**Establishing metric invariance.** Next, *strong factorial invariance* across the American and the Spanish groups was established. In multi-group SEM, comparisons of latent constructs across groups are meaningful only if the factor loadings and indicator intercepts in both samples are invariant (Brown, 2006). Strong factorial invariance confirms that the measurement instruments, which were intended to be identical in both countries, were in fact equivalent. In order to establish strong factorial invariance it is first necessary to confirm two conditions—*configural invariance* and *weak factorial invariance* (Brown, 2006; Little, 1997). Configural invariance or equal forms of the measures across

groups can be established when the number of factors and pattern of indicator-factor loadings do not differ across groups. Weak factorial invariance can be established when the factor loadings are equal across groups.

**Comparison of latent means and correlations across groups.** Once the previous steps were completed, differences in the latent constructs of the two groups were tested. In particular, we tested for differences in the means of the latent constructs and the pattern of correlations.

**Structural models.** Finally, we tested our hypotheses by comparing the structural model that defined the causal relationships between the variables in the American and Spanish samples. We considered height, discrimination, well-being, and positive intragroup contact as endogenous variables and tested the causal relationships among them; LLS was introduced as an exogenous variable in the model (i.e., as a covariate) to assess whether this crucial choice affected the structural relationships among the other variables as hypothesized. Because the gender distribution differed between the two samples (55.6% female in the Spanish sample, 71.7% female in the American sample), we also included gender as a covariate in the model (code: 0 = *female*, 1 = *male*). We expected that the best fitting model would be one in which discrimination negatively predicts well-being in both countries. However, height, which was increased via LLS particularly in Spain, and intragroup contact, should play very different roles in both countries. In the USA, we expected that intragroup contact would have a direct positive effect on well-being, but this effect should not be significant in Spain. In Spain, we predicted that increased height via LLS would have an indirect positive effect on well-being, through a reduction in discrimination, but this effect would not be present in the USA.

**Results**

**Measurement Models and Metric Invariance Across Groups**

Table 1 presents the results of the CFA in both groups and the tests establishing metric invariance. The CFA conducted for each group separately showed a good fit of the measurement model for the American ( $\chi^2(30) = 40.7; p = .09; RMSEA = .044; NNFI = .981; CFI = 0.987$ ) and the Spanish ( $\chi^2(30) = 41.0; p = .09; RMSEA = .071; NNFI = .953; CFI = 0.969$ ) samples. The two-group freely estimated model also showed a good fit ( $\chi^2(60) =$

81.7,  $p = .03, RMSEA = .054, NNFI = 0.972, CFI = 0.982$ ); the number of factors and pattern of indicator-factor loadings did not differ across the American and Spanish groups (i.e., configural invariance held across groups). We then set the loadings across the two groups to be equal in order to test for weak factorial invariance. The nested comparison change in  $\chi^2$  between the model with equal loadings and the freely estimated two-group model was not significant ( $\Delta\chi^2(6) = 5.7, p = .45$ , see Table 1), indicating that the constraint of equal loadings held. Therefore, weak factorial invariance was established. The next step was to equate the intercepts to test for strong factorial invariance. The nested comparison change in  $\chi^2$  was also not significant ( $\Delta\chi^2(6) = 8.2, p = .22$ ), indicating that the constraint of equality of intercepts held across the groups so that strong factorial invariance was established. These tests confirmed that the measurement of the constructs included in the model was invariant across the American and Spanish samples; thus, the same constructs were measured in people with dwarfism from USA and Spain.

**Latent Means and Correlations**

Table 2 presents the latent means in both groups as well as the results of the nested comparison test of equivalence of means across the two countries. Because of the more extensive use of lengthening surgery in Spain, the Spanish respondents with dwarfism were significantly taller than the Americans ( $\Delta\chi^2(1) = 21.6, p < .001$ ). Consequently, the variance of height was also higher in the Spanish group ( $SD = 2.1$ ) than in the American one ( $SD = 1.3$ ). The nested test for the equivalence of the variance of height across groups resulted in a  $\chi^2$  difference of 27.2 (1 *df*,  $p < .001$ ), which was significant. The differences across groups in positive intragroup contact and discrimination were marginal ( $\Delta\chi^2(1) = 3.0, p = .08$  in both cases), with a tendency toward higher values in the American group on both constructs. Finally, there was no significant difference between the groups in well-being ( $\Delta\chi^2(1) = .7, p = .39$ ). The variance of the three latent constructs were equivalent across groups ( $\chi^2$  differences lower than 2.2,  $p > .14$  for the nested comparison tests of equivalence for the variance of the three latent constructs). These results confirmed that, although the use of LLS differently affected the height of people with dwarfism in each country, there were no significant differences in the psychological well-being of people with dwarfism in the USA and Spain.

Table 1  
*Fit Indices for the Nested Sequence in the Multiple Group Confirmatory Factor Analysis*

	$\chi^2$	<i>df</i>	<i>P</i>	$\Delta\chi^2$	$\Delta df$	<i>p</i>	RMSEA	RMSEA 90% CI	NNFI	CFI	Constraint tenable
Single Group Solutions											
USA (145)	40.69	30	.092	—	—	—	.044	.000–.081	0.981	0.987	—
Spain (63)	41.05	30	.086	—	—	—	.071	.000–.127	0.953	0.969	—
Measurement Invariance											
Equal form (configural)	81.74	60	.032	—	—	—	.054	.000–.085	0.972	0.982	—
Equal factor loadings (weak)	87.49	66	.039	5.75	6	.452	.049	.000–.080	0.975	0.982	Yes
Equal indicator intercepts (strong)	95.70	72	.033	8.21	6	.223	.049	.000–.079	0.975	0.980	Yes

Note. Each nested model contains its constraints, plus the constraints of all previous, tenable models. RMSEA = root mean square error of approximation; CFI = comparative fit index; NNFI = non-normed fit index.

Table 2  
Results of Nested Chi-Square Tests for Latent Mean Level Differences

Baseline model/Constructs	Latent mean USA	Latent mean Spain	$\chi^2$	<i>df</i>	<i>p</i>	$\Delta\chi^2$	$\Delta df$	<i>p</i>	Equivalent across groups
Strong factorial invariance (Baseline model)	—	—	95.70	72	.033	—	—	—	—
Height	2.3	3.7	117.34	73	<.001	21.64	1	<.001	NO
Discrimination	1.6	1.3	98.72	73	.024	3.02	1	.08	Marginal
Psychological well-being	4.9	4.8	96.43	73	.035	0.73	1	.39	YES
Positive intragroup contact	4.4	4.1	98.70	73	.024	3.00	1	.08	Marginal

Table 3 presents the correlations among the latent variables in each group as well as the results of the nested comparison tests for the equivalence of correlations. In Spain, there was a significant negative correlation between height and discrimination ( $r = -.47$ ,  $p < .001$ ) and a significant positive correlation between height and well-being ( $r = .30$ ,  $p < .05$ ). In the USA, neither of these correlations was significant. The equivalence of correlations across groups for these two pairs of constructs did not hold ( $\Delta\chi^2(1) = 6.9$ ,  $p < .01$  and  $\Delta\chi^2(1) = 5.7$ ,  $p < .05$  for the first and second pair of constructs, respectively). In both countries there was a significant negative correlation between discrimination and well-being ( $r = -.44$  and  $-.51$  in the USA and Spain, respectively;  $p < .001$ ). This correlation was equivalent across groups ( $\Delta\chi^2(1) = 0.25$ ,  $p = .62$ ). Finally, in the USA, but not in Spain, there was a significant positive correlation between having intragroup contact and positive well-being ( $r = .26$ ,  $p < .01$ ). Equivalence of correlations across groups for this pair of constructs did not hold ( $\Delta\chi^2(1) = 4.2$ ,  $p < .05$ ). The rest of the pairs of constructs (i.e., height-positive intragroup contact and discrimination-positive ingroup contact) were not significant in either of the samples. This pattern of correlations is the basis for the structural model that is described in the following section.

### Structural Model Testing

We used as baseline a model including all possible paths. This baseline model had therefore the same degrees of freedom and identical fit as the measurement model ( $\chi^2(66) = 87.5$ ,  $p = .04$ , RMSEA = .049, NNFI = 0.975, CFI = 0.982). We then sequentially eliminated the paths that were nonsignificant in both samples (i.e., height  $\rightarrow$  well-being, height  $\rightarrow$  positive intragroup contact, and discrimination  $\rightarrow$  positive intragroup contact), reaching our final structural model with the following fit:  $\chi^2(72) = 90.8$ ,  $p = .07$ , RMSEA = .043, NNFI = .980, CFI = .984. The nested

chi-square comparison between the final model and the baseline model ( $\Delta\chi^2(6) = 3.3$ ,  $p = .77$ ) was nonsignificant, confirming that the more parsimonious mediated model was preferable. Finally, we introduced surgery and gender as covariates in this final model. Figure 1 shows the final model including the surgery and gender covariates, which resulted in excellent fit:  $\chi^2(104) = 122.2$ ,  $p = .10$ , RMSEA = .030, NNFI = .981, CFI = .985.

The pattern of relationships in the final model confirmed our hypotheses. First, in both the USA ( $\beta = -.43$ ,  $p < .01$ ) and Spain ( $\beta = -.40$ ,  $p < .01$ ), discrimination negatively predicted well-being. As expected, this path was equivalent across groups ( $\Delta\chi^2(1) = 0.11$ ,  $p = .74$ ), indicating that the negative effect of discrimination on well-being was equivalent across countries. In Spain, shorter stature significantly predicted discrimination ( $\beta = -.41$ ,  $p < .01$ ); this path was, however, not significant in the USA ( $\beta = .01$ ,  $p = .88$ ). This relationship was not equivalent across groups ( $\Delta\chi^2(1) = 7.3$ ,  $p < .01$ ). Indeed, the low variance in height, caused by having few lengthened individuals in the American sample, practically ensured a nonsignificant path from height to any other variable in that sample. More important for our hypothesis was the fact that in Spain (where there was sufficient variance in height) the indirect effect of height on well-being via discrimination was significant (IE  $\beta = .17$ ,  $p < .01$ ). This indirect effect confirmed that having dwarfism decreases well-being via higher levels of discrimination. As predicted, having contact with ingroup members attenuated the negative consequences of discrimination in the USA by directly increasing well-being ( $\beta = .26$ ,  $p < .01$ ); intragroup contact did not have a significant effect in Spain ( $\beta = -.08$ ,  $p = .49$ ). The test for the equivalence of this relationship across groups did not hold ( $\Delta\chi^2(1) = 5.02$ ,  $p < .05$ ), indicating that, as expected, this relationship differed between the two countries. Finally, when the covariate LLS was introduced, its only effect was on height in Spain ( $\beta = .43$ ,  $p < .01$ ), but this

Table 3  
Results of Nested Chi-Square Tests for Latent Correlations Differences

Baseline model/Correlated pair of constructs	Latent <i>r</i> USA	Latent <i>r</i> Spain	$\chi^2$	<i>df</i>	<i>p</i>	$\Delta\chi^2$	$\Delta df$	<i>p</i>	Equivalent across groups
Weak factorial invariance (Baseline model)	—	—	87.49	66	.039	—	—	—	—
Height—Discrimination	-.06 <sup>d</sup>	-.47 <sup>a</sup>	94.40	67	.015	1	6.91	<.01	NO
Height—Well-being	-.07 <sup>d</sup>	.30 <sup>c</sup>	93.19	67	.019	1	5.70	<.05	NO
Height—Positive intragroup contact	-.12 <sup>d</sup>	-.07 <sup>d</sup>	87.59	67	.046	1	0.10	.75	YES
Discrimination—Well-being	-.44 <sup>a</sup>	-.51 <sup>a</sup>	87.74	67	.045	1	0.25	.62	YES
Discrimination—Positive intragroup contact	-.01 <sup>d</sup>	.07 <sup>d</sup>	87.67	67	.046	1	0.18	.67	YES
Positive intragroup contact—Well-being	.26 <sup>b</sup>	-.09 <sup>d</sup>	91.74	67	.024	1	4.25	<.05	NO

<sup>a</sup> =  $p < .001$ . <sup>b</sup> =  $p < .01$ . <sup>c</sup> =  $p < .05$ . <sup>d</sup> = Nonsignificant,  $p > .10$ .

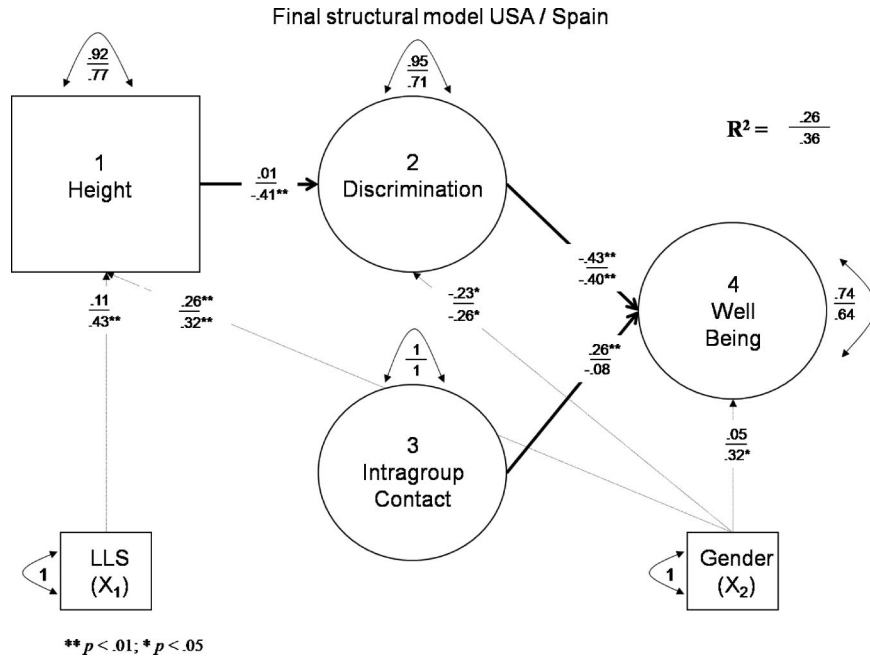


Figure 1. Coefficients above the line correspond to the American sample; coefficients below the line correspond to the Spanish sample. The numbers inside the curved arrow on each latent construct indicate the error variance of the construct. Effects of the covariates on the latent constructs are only included if significant in at least one of the countries. In Spain, where the more extended use of LLS allows variability in height, low stature predicts discrimination; discrimination negatively predicts well-being in both countries. In the USA, having positive intragroup contact positively affects psychological well-being, buffering the negative impact that discrimination has on well-being.

did not eliminate the direct effect of height on discrimination in Spain, or the indirect effect of height on well-being. The covariate LLS did not affect any other construct in either group ( $\beta_s < 1.111$ ,  $p > .18$ ).

The introduction of the gender covariate did not significantly alter any of the structural relationships described above. Gender affected height similarly in both samples, with males being taller than females ( $\beta = .26$  and  $.32$ , in the USA and Spain, respectively,  $ps < .01$ ;  $\Delta\chi^2(1) = .16$ ,  $p = .70$ ). This effect corresponds well with growth curves for achondroplasia, which show that males are on average 4 cm taller than females (del Pino, Fano, & Lejarraga, 2011). Males with dwarfism in both samples perceived less discrimination than females irrespective of the country ( $\beta = -.23$  and  $-.26$  in the USA and Spain, respectively,  $ps < .05$ ;  $\Delta\chi^2(1) = .04$ ,  $p = .84$ ). The effect of gender on well-being was significant in Spain ( $\beta = .32$ ,  $p < .05$ ), indicating that males tended to report higher well-being than females. In the USA, this effect was non-significant ( $\beta = .05$ ,  $p = .56$ ). The final structural model accounted for 26% and 36% of the variance in well-being in the American and Spanish sample, respectively. Together, these results indicate that, as predicted, people with dwarfism in the USA tend to cope using a group-empowering strategy based on having positive intragroup contact, while a limb-lengthening strategy aimed at *passing* as a majority group member prevails in Spain. Both strategies, when used, were effective at buffering the negative effects of discrimination on psychological well-being.

## Discussion

The present research compared how people with dwarfism from the USA and Spain cope with stigmatization. While in the USA a group-empowering strategy promoting pride in being a “Little Person” has been predominant, in Spain a surgical-lengthening strategy aimed at concealing the stigmatized condition prevails. In accordance with this difference, the structural model representing the coping process in each country captured important divergences in the extent to which the ingroup (i.e., the community of people with dwarfism) plays a protective role against discrimination. While in the USA there was a direct positive relationship between having intragroup contact and psychological well-being, in Spain this relationship was not significant. On the other hand, in Spain, the covariate limb-lengthening surgery (LLS) had a significant positive effect on height. The central role that surgical lengthening plays in Spain, together with the existence of a significant indirect effect in that country between height and psychological well-being through decreased discrimination, supports the hypothesis that in Spain coping is based on attempting to pass as a majority group member.

Consistent with the low popularity of LLS in the USA (Trotter & Hall, 2005), only 2% of American participants were lengthened. Due to the small number of lengthened participants in the USA sample, we could not adequately test whether LLS would provide protection for these respondents. That is, we cannot know whether LLS, were it performed in America, would also lower discrimina-



tion as it does in Spain. However, the low number of lengthened participants in the American sample per se, together with the positive effect that ingroup contact has on well-being, indicates that a group-empowering coping approach prevails among the American respondents with dwarfism. Moreover, the fact that this coping strategy resulted in well-being protection in the national context in which the surgical-lengthening strategy was not popular (i.e., the USA), implies that moving toward the stigmatized group and concealing the stigmatized characteristic may be incompatible responses. Indeed, we believe there are important psychological reasons that make it difficult to employ both strategies. We return to this issue below, when we consider the implications that the two coping strategies have for affected individuals as well as the group as a whole.

The results obtained indicate that in both countries discrimination due to participants' physical condition harms psychological well-being. The fact that the path between discrimination and psychological well-being was equally strong and negative in both countries is noteworthy. Furthermore, the indirect effect in Spain between height and psychological well-being via discrimination helps to clarify the causal direction of this relationship. Neither of these central structural relationships was affected when gender was introduced as a covariate in the model, which suggests the effectiveness of the two coping strategies is equivalent for both males and females. However, males in both countries tended to perceive less discrimination than females, which accords well with previous research that has found that women perceive more discrimination than do men (Schmitt et al., 2002). At least in the American sample this effect cannot be explained by gender differences in height (males were on average slightly taller than females in both countries), as the effect of height on discrimination in the American sample is essentially zero. Potentially the observed gender difference in perceived discrimination was due to a double-discrimination effect (i.e., women with dwarfism feeling discriminated against based on their gender *and* their dwarfing condition). This interpretation is consistent with the effect of gender on well-being in the Spanish sample—where males had higher levels of well-being than females—potentially because they experience less discrimination.

### Role of Collective Efforts to Empower the Group and Its Consequences for Coping

In line with research that postulates protective properties of the group for buffering the negative consequences of social stigmatization on health (see Jetten, Haslam, & Haslam, 2012), our results show that having positive intragroup contact can buffer the negative effects of discrimination on psychological well-being. This is what we found among Americans with dwarfism. Among Spanish people with dwarfism, on the other hand, we found no evidence that intragroup contact protected well-being. In Spain, the only effective coping mechanism that seemed to buffer the negative consequences of discrimination was LLS, a procedure that was noticeably absent in the American sample. These differences across countries correspond to the different role that the organizations of affected individuals have played in each cultural context. While in America LPA aims to build a feeling of pride in being a "Little Person," in Spain the main organization (ALPE) has a medical orientation with the goal of eliminating dwarfism.

In Spain, where efforts to encourage intragroup contact have not been as extensive as in the USA, people with dwarfism are likely to experience rejection as *deviant* individuals, while Americans experience it more as members of a *classic minority*. According to Jetten et al. (2006), *deviants* are those who suffer stable discrimination and are isolated from others who share their fate, whereas *classic minorities* are not typically isolated from other ingroup members and they perceive discrimination as shared by the ingroup as a whole. While *classic minorities* are more likely to engage in collective action to fight against discrimination, *deviants* are more inclined to hide their stigma—if it is concealable—and attempt to pass as a means of gaining acceptance by the nonstigmatized. Limb-lengthening surgery may be seen by many people with dwarfism who feel like deviants within their communities as a means of joining the nonstigmatized category, which is a coping strategy based on individual social mobility (Branscombe & Ellemers, 1998; Jetten et al., 2006).

Our results accord well with the findings of Jetten et al. (2002) concerning the influence of norms prevailing within a *local* organizational context and their role in the adoption of individualistic or collective responses. Particularly in cases of low-prevalence conditions such as dwarfism, organizations of affected individuals constitute an important source of information. Therefore, people with dwarfism will often turn to these organizations when support and advice relevant to their condition would otherwise be difficult to find. The results of our study suggest that the general approach toward the dwarfing condition portrayed by the organizations representing affected individuals does affect the extent to which each coping strategy prevails and is effective for its members in that social context.

Finally, it must be emphasized that the mean of the outcome variable (i.e., psychological well-being) did not differ across countries, indicating that, independent of the coping strategy that predominates in each context, psychological well-being among people with dwarfism from both countries is equivalent. Therefore, either moving toward or away from a severely stigmatized identity can effectively protect well-being in contexts that afford one strategy over another, but it does so through different processes.

### Implications of Using Each Strategy for Coping With Discrimination

The two strategies for coping with discrimination based on dwarfism have important implications for how the stigma is conceptualized among group members in the USA and Spain. While the group-empowering strategy is based on considering dwarfism a "difference" to be proud of, the surgical-lengthening strategy entails perceiving dwarfism as an abnormal condition that needs to be corrected. Preference for these two different approaches can be observed on the Web sites of the two most active organizations of people with dwarfism in the USA and in Spain. While the LPA Web site projects the idea stated in their mission of "celebrating with great pride Little People's contribution to social diversity," ALPE's Web site, on the other hand, describes their support for research that is aimed at finding "a medical solution to achondroplasia," which implies an ideal world without the condition. Moreover, the extensive use of LLS in Spain compared to the USA can, by itself, be interpreted as a higher tendency among Spanish individuals with dwarfism to disengage from the stigmatized con-

dition (trying to conceal or “heal” it). In this regard it is interesting how some families of affected individuals see LLS as a “solution” to the problem of having dwarfism. For affected people who pursue a more group-empowering approach to coping, LLS is a matter of considerable controversy. The *Los Angeles Times* journalist Paul Payne described well the identity issues surrounding limb-lengthening among people with skeletal dysplasias:

The [limb-lengthening] operation isn’t just about the physical, though. Those who make the hard choice to undergo the procedure say dwarfs can face a life of limitations and abuse—from finger-pointing by children to humiliating pranks such as so-called ‘dwarf tossing.’ They consider surgery a way to change how others see them, to cast off self-doubt and to join the mainstream in the quest for jobs, mates and money. But decisions by some dwarfs to alter their bodies put them at odds with others and with the largest organization representing those with achondroplasia. The 7,400-member Little People of America says the risk of nerve and vascular damage in the years after the surgery is great. Besides, they say, a short stature makes them unique, and limb lengthening implies there’s something wrong with being ‘a little person.’” (Retrieved March 15, 2010, from <http://articles.latimes.com/2001/jul/29/news/mn-27763>)

These two different approaches to dealing with dwarfism reflect alternative ways of experiencing a highly stigmatized condition. On the one hand, people in the USA seem to consider it a natural variation in persons that, despite the discrimination suffered, one should be proud of. On the other hand, in Spain, dwarfism is considered more like a medical illness that needs to be corrected. As we showed, these different ways of conceptualizing the condition can have important implications for the way people with dwarfism cope with stigmatization. In the USA, the psychological well-being of people with dwarfism is improved with positive intragroup contact. Moreover, Americans with dwarfism do not undergo the very arduous and costly process of surgical lengthening, which is, per se, an advantage to be taken into account.

The use of group-empowering and limb-lengthening surgery as strategies for coping with discrimination has important implications that go beyond the individual’s well-being. As noted by *Tajfel (1978)*, collective approaches link the future of the stigmatized individual with the future of the group as a whole. As a consequence, the actions that stigmatized members undertake to cope with discrimination are not only aimed at protecting their personal well-being, but also at empowering the group to strive to reverse the negative value connotations of the minority’s characteristic. In the case of dwarfism, the implications at the group level are clear. If in a given context the dominant coping strategy is to conceal or eliminate the stigmatized characteristic via LLS, the efforts undertaken by the community of affected individuals to condemn the devaluation of the dwarfing condition by the majority group may be discredited, as affected individuals themselves are admitting that the stigmatized condition is undesirable.

In contrast, if coping efforts involve moving toward the group by facilitating intragroup contact and enhancing pride in being a member of this minority, the group, as a social entity, can be empowered. This can facilitate a change among affected individuals from an attitude of victimization, based on perceiving themselves as deviants who have a condition that needs to be “corrected,” to a more competitive perspective in which respect and acceptance in society is demanded without modifying the stigma-

tized characteristic to assimilate to the majority group. At the individual level, such change in perceptions of the nature of the intergroup relationship can have important psychological consequences in terms of facilitating the development of a positive self-concept as a person with dwarfism. When the option of concealing the dwarfing condition prevails, it may be rather difficult for the affected young person to develop a positive self-concept as a person with dwarfism, especially if he or she knows that most of the people like him/her conceal the stigmatized characteristic through a long and arduous surgical process. Moreover, because LLS does not totally conceal the stigmatized condition, total acceptance by the majority group may be unlikely. Therefore, lengthened individuals may find themselves lacking a positive social identity “as a dwarf,” while continuing to suffer discrimination on the basis of their physical stigma.

### Limitations and Future Research

One limitation of the present research is that, although one of the most evident differences between Spain and the USA with regard to dwarfism is the different approach that the main organizations in each context advocate, there could be other differences not considered that might also affect the coping strategies used. For example, the different role that organizations of affected individuals play in both countries could be explained by higher order cultural differences existing between the two societies. Indeed, *Curtis, Baer, and Grabb (2001)* noted that the level of voluntary membership in organizations that imply cooperative interaction was more than four times higher in the USA than in Spain. This difference was explained according to cultural factors such as Protestantism and the degree of democratic and economic development. However, such national differences in voluntary memberships have also been related to psychological variables, including “relational mobility” which is defined “as the general number of opportunities there are for individuals to select new relationship partners, when necessary, in a given society or social context” (*Schug, Yuki, Horikawa, & Takemura, 2009*, p. 96). Higher relational mobility is characteristic of individualistic cultures that favor independent self-concepts relative to collective cultures that encourage interdependent self-concepts (*Heine, 2010*). In this regard, the results we have obtained are consistent with the idea that people with dwarfism in the USA move toward the ingroup in search of new relationships that are conducive to psychological well-being, while people with dwarfism in Spain concentrate their coping efforts on gaining full inclusion in the groups into which they were born (e.g., family, friends in their neighborhood), for which concealing the stigmatized characteristic could be very useful. It would be interesting to investigate the extent to which the differences in coping among people with dwarfism from Spain and the USA that we observed might be explained by differences in relational mobility in these two countries. In this regard, it is possible that the Spanish organization of people with dwarfism is more prone to an individualistic coping strategy based on LLS than is the American organization because Spanish culture is lower in relational mobility than is American culture.

It could also be argued that differences in the health care systems in Spain and the USA (public in Spain, private in the USA) could be important in determining the differential rates of LLS. However, most families in Spain are not facing a very

different situation when it comes to LLS compared to those in the USA. According to ALPE, around 90% of children with dwarfism who undergo LLS in Spain do it at one specific private hospital. Because of the low prevalence of the condition, public hospitals have little or no experience with LLS for people with dwarfism, which encourages families to go to the one private hospital in Spain that specializes in the procedure. This means that Spanish parents have to pay for the medical costs associated with LLS, as is likely to be the case for American parents.

Two methodological limitations should be pointed out. First, although we made an effort to publicize the study widely among community members, which resulted in obtaining a reasonable sample size in each national context, we cannot be certain how representative our samples are of the overall population of people with dwarfism. Furthermore, because we obtained our samples primarily via links to the main organizations representing the group in each nation, we cannot know how many people with dwarfism who do not have any contact with these organizations were not reached by our efforts to advertise the study. Yet, the fact that dwarfism is a serious medical condition makes it reasonable to think that a high percentage of affected individuals do make contact with and follow the activities of those with expertise about it, which is basically found in the organizations representing affected individuals in each country. Second, it is possible that the unequal sample sizes obtained in the two national contexts might have inflated the Type II error rate, especially in the smaller Spanish sample. This implies that, although significant findings can be trusted, nonsignificant findings should be interpreted more cautiously—because those could stem from a lack of power to detect a genuine difference. Despite this need for caution in interpreting nonsignificant effects, this does not qualify our main conclusions which are based on the significant differences that we obtained in the two national contexts and in the structural relationships observed between the latent variables.

Finally, it is worth mentioning that in the present research we have measured perceived pervasive discrimination by asking participants the extent to which they have felt unfairly treated in different social contexts, which is only one of many forms that stigmatization can emerge. Future research should address how people with dwarfism cope with other more subtle forms of stigmatization, including being ignored or feeling socially excluded. Similarly, we have focused on the role that having contact with other ingroup members contributes to protecting the psychological well-being of people with dwarfism. It would be valuable if future investigations were to assess whether people with dwarfism internalize their group membership as a valuable self-aspect or not to determine the implications of such subjective evaluations for psychological well-being.

### Conclusion

The results of this research indicate that the way a stigmatized minority—in this case, people with dwarfism—perceives itself may have crucial implications for how its members cope with discrimination. Efforts directed toward empowering the minority “people with dwarfism” based on pride in being a “Little Person” have positive implications for the psychological well-being of those minority group members living in a social context in which those efforts are supported. On the other hand, coping through

surgical lengthening can also have positive effects on psychological well-being, but only to the extent that members succeed in “leaving” the group (through increased height) and the discrimination experienced is reduced. We have illustrated the important role that minority organizations can play in the strategies employed by stigmatized group members to protect their psychological well-being in response to discrimination. When the organization representing one’s ingroup advocates “leaving the group,” well-being is unlikely to be protected by investing in and finding value in the stigmatized identity; but when the organization representing one’s group advocates “taking pride in one’s difference as a little person,” then identifying with that group is likely to protect well-being when discrimination is experienced.

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Received September 22, 2011

Revision received May 21, 2012

Accepted June 7, 2012 ■