

**Submitted: September 2, 2013**

**First Revision: December 31, 2013**

**Second Revision: January 26, 2014**

**Accepted: April 1, 2014**

## **ATTRIBUTIONS TO LOW GROUP EFFORT CAN MAKE YOU FEEL BETTER: THE DISTINCT ROLES OF IN-GROUP IDENTIFICATION, LEGITIMACY OF INTERGROUP STATUS, AND CONTROLLABILITY PERCEPTIONS**

Sandro Costarelli

*Department of Psychology and Cognitive Sciences,  
University of Trento, Italy*

Justyna Gerłowska

*Department of Neurology,  
Medical University of Lublin, Poland*

### **ABSTRACT**

*One experiment investigates the process whereby attributing to low group effort the social status of an in-group that is perceived as being illegitimately low can spare group members the unpleasant affective consequences of a threat to one's social identity. Specifically, this is the case because such attributions increase the perception that in-group failings can be controlled and, thus, are unlikely to recur. In turn, this ameliorates individuals' subsequent affect. However, this only occurs to strongly but not weakly group-identified individuals. These findings point to a fairness-based account of coping with social identity threat through biased effort attributions: perceived low effort on the part of the in-group may suggest factors potentially within group control in the future (as opposed to the less controllable low ability), which may in turn suggest that the in-group does not deserve the self-threatening low-status.*

### **INTRODUCTION**

*Outcome controllability* is the perception to be in control of one's own achievements. According to causal attribution theory (Weiner, 1985), controllability perceptions are an important determinant of beliefs regarding one's future efficacy as a single individual as well as a group member (Bandura, 1997). This may be the case because attributing negative outcomes to a modifiable (i.e. 'controllable') aspect of one's behavior after failures may lead individuals to see a way in which they can positively influence their future performance, and thus feel better.

Intrapersonal research (e.g., Janoff-Bulman, 1979) has provided support to this argument. However, no prior work has examined whether the instrumental value of controllability extends to the intergroup level. In order to fill in this gap, the present research focused on group members under ‘intergroup threat’. Following negative group outcomes, individuals have been found to show temporary decreases in mood that may depend on (un)controllability attributions (e.g., Bernhardt, Dabbs, Fielden, & Lutter, 1998). However, consistent with social identity theory (Tajfel & Turner, 1979, 1986), this holds for strongly identified but not weakly identified group members (e.g., Hirt, Zilman, Erickson, & Kennedy, 1992). Conceivably, for threatening comparison outcomes to have psychological consequences, a sufficiently high degree of in-group identification is needed to develop a sense of group rather than individual responsibility (Ellemers & Barreto, 2001). In line with this prior work, intergroup threat has been found to elicit coping strategies only among strongly identified group members (e.g., Ouwerkerk, Ellemers, & De Gilder, 1999). By contrast, among weakly identified group members, poor group performance does not jeopardize social identity. As a consequence, they do not experience any threat to their social identity (Wann, 2006). For this reason, weakly identified group members have little need to enact coping strategies (Snyder, 1999).

### ***Low-effort Attributions As a Mediator***

Investigating the role of controllability among highly identified group members would warrant some insights into its driving mechanism. To this end, a second aim of the present work is to test the mediating role of *low-effort attributions* for in-group unfavorable outcomes of intergroup comparisons.

Consistent with social identity theory, because of the positive reflections on the self, group members may favor the in-group by making various types of biased causal attributions (Intergroup attribution bias: Hewstone, 1990). Among others, people have been found to attribute poor in-group outcomes to a lack of effort rather than ability (e.g., Feick & Rhodewalt, 1997). Existing evidence in the intrapersonal domain helps to make sense of the underlying attributional processes in this respect. On the one hand, people attribute in general human failure to relatively stable causes (e.g., Nicholls, 1975). On the other hand, individuals perceive ability as being a more stable cause over time as compared to effort (e.g., Martinko & Moss, 2004). This suggests that attributing one’s own failure to a lack of ability is associated with a relatively likely failure over time and, hence, perceived as being uncontrollable. By the same token, attributing one’s own failure to a lack of effort is associated with a relatively unlikely failure over time and, hence, perceived as being controllable. Prior intrapersonal research indirectly supports this notion by showing that own failure following low effort leads to inferences of high ability, thereby protecting from experiencing a threat to self-esteem (e.g., Covington & Omelich, 1981).

However, research shows that high identifiers tend to be in general the most biased ones in favor of the in-group in general (e.g., Jetten, Spears, & Postmes, 2004) as well as in pro-in-group biased attributions for group failures (e.g., Sherman, Kinias, Major, Kim, & Prenovost, 2007). Thus, we reasoned that high identifiers are motivated to attribute group failure to low effort rather than ability, but are actually limited by reality constraints in their ability to do so. These group members can only do so, and thus ameliorate their positive affect, when they perceive group failings as being illegitimate. This makes it unlikely for them that the group low-status is due to the group’s low ability (a negative group characteristic that “is there to stay” given its high stability over time). Rather, they should be inclined to believe that the low-status is due to the

group's low effort (a negative group characteristic that "is not there to stay" given its low stability over time). Only under these conditions, individuals are prone to view the group's poor performance in the aforementioned biased way as to account for the group disadvantage. Specifically, first, this should be the case because such attributions increase the perception that in-group failings can be controlled and, thus, are unlikely to recur. In turn, this should ameliorate individuals' subsequent affect. However, finally, this should only occur to strongly but not weakly group-identified individuals.

## **Hypotheses**

The present study examined the role of perceived legitimacy of intergroup status and in-group identification in moderating the self-protecting properties of biased low-effort attributions as a mediator of the controllability-positive affect relationship, when intergroup boundaries are perceived as being impermeable. Specifically, we tested whether people with strong but not weak group identification facing group unfavorable outcomes of intergroup comparisons that they perceive as being illegitimate are more prone to attribute such unfavorable outcomes to low group effort than low group ability because they view it as controllable by the group, and thus feel better, relative to people facing group unfavorable outcomes of intergroup comparisons that they perceive as being legitimate (*Hypothesis 1*). Further, for high identifiers facing illegitimate group unfavorable outcomes, we also tested whether these more pronounced low-effort attributions heighten their perceptions regarding group controllability on future outcomes of intergroup comparison (*Hypothesis 2*).

## **METHOD**

### **Participants and Experimental Design**

Eighty-four Italian high-school students participated in the study (males = 41; mean age = 19.36) with the consent of the representatives of the school.

Using bogus information, two experimental conditions manipulated the perceived legitimacy of an in-group unfavorable intergroup status differential. Specifically, its content concerned the poor performance of (representatives of) Italian high-school students (the in-group) in the yearly European sports competition relative to the performance of (representatives of) French high-school students (the out-group). Conceivably, participants viewed intergroup boundaries as impermeable. In the questionnaire, half of the participants (assigned to the high-legitimacy condition) read that the in-group unfavorable status differential resulted from statistical analyses conducted on the results obtained by the in-group and the out-group over the past 15 years in 10 individual and 10 team sports. The rest of the participants (assigned to the low-legitimacy condition) read in the questionnaire that the in-group unfavorable status differential resulted from statistical analyses conducted on the results obtained by the in-group and the out-group over the past 3 years in 2 individual and 2 team sports.

The research design was a Legitimacy (low[er] vs. high[er]) x continuous measures of In-group Identification, Ability/Effort, and Outcome Controllability attributions.

## **Procedure**

Before the start of a school conference, an experimenter invited students to take part voluntarily and fill in a questionnaire. Participants were then presented with a questionnaire in which, at the outset, they were asked to express their identification with the in-group (Italian high-school students). Then, depending on experimental conditions, participants were provided with bogus information instantiating a weaker or stronger perception of legitimacy regarding a group unfavorable intergroup status differential. Subsequently, all participants were asked to express their perceptions concerning the cause of the group unfavorable outcome of the intergroup comparison provided in the cover-story as being controllable by the group in future performance. Next, participants were asked to indicate whether they attributed the group unfavorable status differential more to low in-group effort or low in-group ability. Subsequently, dependent measures were taken. To this end, in the next page of the questionnaire, participants expressed their positive emotions. Finally, in the next page of the questionnaire, participants completed the manipulation check and provided demographic data. After all participants had completed the questionnaire, they were debriefed and thanked.

## **Measures**

Unless otherwise mentioned, all ratings described in this study were made on 6-point Likert-type scales ranging from 1 = *Not at all* to 6 = *Very much*.

### ***Ingroup Identification Scale.***

Doosje, Ellemers, and Spears' (1995) four-item in-group identification measure was adapted for the current in-group (i.e. Italian high-school students). The scale had satisfactory internal consistency (Cronbach's Alpha = .83). Consistent with that, a composite scale score was created by averaging ratings across items.

### ***Group Effort Scale.***

By adapting Iatridis and Fousiani's (2009) one-item measure of attributions to ability vs. effort on a bipolar scale for the current unit of analysis (the in-group), three questions were developed. Specifically, they addressed attributions to low group ability vs. low group effort, forcing participants to choose between them: *In your opinion, are the facts emerging from the data reported above due to Italian high-school student's ability / skills / capability, or to their effort / to how hard they tried / to how intensely they tried?* (1 = 'They are due to Italian high-school student's ability / skills / capability'; to 6 = 'They ... their effort / to how hard they tried / to how intensely they tried'). The scale showed satisfactory internal consistency (Alpha = .83). Consistent with that, a composite scale score was created by averaging ratings across items.

### ***Outcome Controllability Scale.***

By adapting relevant items drawn from McAuley, Duncan, and Russel's (1992) causal dimension scale for the current unit of analysis (the in-group), two 3-item scales were developed to measure outcome controllability perceptions underlying participants' biased attributions to low group

effort. Participants were presented with one bipolar 6-point scale (as adapted from the three item of the corresponding subscale in McAuley et al.'s measure) anchored in their extremes by opposing possible causes of the group unfavorable outcome establishing the intergroup status differential. This bipolar scale measured perceived outcome controllability by the group (*Is the cause . . . 'uncontrollable' [ = 1] vs. 'controllable' [ = 6]*).

### ***Positive affect.***

Self-reported positive affect was assessed with an affect adjective list. Participants were asked to indicate the extent to which each of five positive emotion adjectives (*happy, proud, calm, cheerful, satisfied*) applied to how they were feeling. Finally, a positive affect index was constructed by averaging each participant's score for the items ( $M = 4.49, SD = 1.23$ ). The scale had satisfactory internal consistency ( $\text{Alpha} = .80$ ).

### ***Manipulation Check.***

Perceived legitimacy of the intergroup status differential was assessed. To this end, participants were asked to answer three items (*I think it is justified / ...right... / ...legitimate that Italian high-school students are considered worse in their past sports performance than French ones*;  $\text{Alpha} = .86$ ).

## **RESULTS AND DISCUSSION**

### **Preliminary Analyses**

First, a one-way Analysis of variance (ANOVA) ascertained that the level of in-group identification did not differ across the different experimental conditions (Low-legitimacy:  $M = 4.50, SD = 1.00$ , High-legitimacy:  $M = 4.27, SD = 0.86$ );  $F[1, 83] = 0.68, ns$ ). Preliminary analyses including participant sex in the design revealed no statistically significant main effects or interactions involving this factor (all  $F_s < 2.79, ns$ ). Thus, participant sex was omitted from later analyses.

An ANOVA (effect coding for the legitimacy manipulation: 'low' = -1, 'high' = +1; in-group identification: continuous regressor) on the legitimacy manipulation check scores revealed parameter estimates showing a significant main effect of legitimacy ( $F[1, 83] = 12.27, p = .002$ ), and no other effects ( $F_s[1, 83] < 0.50, p_s > .48$ ). As intended, participants in the high-legitimacy condition ( $M = 3.80, SD = 0.94$ ) perceived the group unfavorable intergroup status differential as being more legitimate than participants in the low-legitimacy condition ( $M = 2.84, SD = 1.24$ ).

### **Outcome Controllability Attributions**

First, positive affect scores were regressed on the effect-coded legitimacy (low = -1, high = +1) manipulation and the standardized continuous measure of in-group identification in Step 1, and the interaction involving these variables in Step 2. Statistical significance of main and interaction effects was evaluated at the respective step of their entrance in the model. Results revealed significant main effects for legitimacy ( $t[84] = -2.18, p = .03$ ) and the significant interaction of

identification and legitimacy also emerged ( $B = -1.00$ ,  $SE = .38$ ,  $t[84] = -2.96$ ,  $p = .004$ ). To better understand the nature of this interaction, simple-slopes analyses were conducted at 1 standard deviation below and above the mean of in-group identification (cf. Aiken & West, 1991). Replicating prior research (e.g., Costarelli, 2012), at a lower level of in-group identification there was no evidence that legitimacy influenced positive affect ( $B = 0.88$ ,  $SE = .84$ ,  $t[41] = 1.04$ ,  $p = .31$ ). By contrast, at a higher level of in-group identification there was evidence that legitimacy influenced positive affect ( $B = 0.57$ ,  $SE = .28$ ,  $t[43] = 2.01$ ,  $p = .04$ ). Specifically, strongly identified participants experienced more positive affect to the extent that they perceived the group-unfavorable outcome of intergroup comparisons as being less legitimate. The simple-regression (or correlation) coefficients in the two legitimacy conditions were statistically different from each other (Fisher's  $Z = -2.61$ ,  $p = .005$ , one-tailed).

Next, we tested our hypothesis that the above effects observed among high-identification participants under conditions of social identity threat are driven by perceived controllability of the group-unfavorable outcome of intergroup comparisons. To this end, we conducted a first mediation analysis (Baron & Kenny, 1986). The first analysis revealed that legitimacy influenced high identifiers' positive affect (*see above*). The second regression showed that high identifiers perceived the social identity-threatening outcome of intergroup comparisons as being more controllable in future group performance when they also viewed it as being less legitimate ( $B = -0.32$ ,  $SE = .15$ ,  $t[43] = -2.09$ ,  $p = .04$ ). The third analysis revealed that, among high identifiers, when legitimacy and controllability (the mediator) were simultaneously entered in a regression model predicting positive affect, the path from controllability to positive affect was significant ( $B = 0.38$ ,  $SE = .16$ ,  $t[43] = 2.36$ ,  $p = .02$ ). However, the direct path from legitimacy to positive affect was no longer reliable ( $B = 0.41$ ,  $SE = .27$ ,  $t[43] = 1.50$ ,  $p = .14$ ).

### **Low Effort Attributions**

Once ascertained that the effect of legitimacy on positive affect among high identifiers was mediated by perceived controllability of the threatening outcome of intergroup comparisons, we tested our hypothesis that low-effort attributions for the outcome mediates the effects of controllability. To this end, a second mediation analysis was conducted among high identifiers. The first analysis revealed that legitimacy was a negative predictor of controllability (*see above, Regression 2*). The second regression showed that the social identity-threatening outcome of intergroup comparisons was perceived as being more controllable in future group performance to the extent that it was attributed more to low group effort than ability ( $B = .35$ ,  $SE = .16$ ,  $t[43] = 2.12$ ,  $p = .04$ ). The third analysis revealed that, when legitimacy and low-effort attributions (the mediator) were simultaneously entered in a regression model predicting controllability, the path from low-effort attributions to controllability was significant ( $B = 0.30$ ,  $SE = .08$ ,  $t[43] = 3.52$ ,  $p = .001$ ). However, the direct path from legitimacy to controllability was no longer reliable ( $B = 0.25$ ,  $SE = .16$ ,  $t[43] = 1.60$ ,  $p = .11$ ). Consistent with these results, when the third analysis of the first mediation analysis above was repeated and legitimacy, controllability (the first-order mediator), and low-effort attributions (the second-order mediator) were simultaneously entered in a regression model predicting positive affect, the path from low-effort attributions to positive affect was significant ( $B = 0.28$ ,  $SE = .11$ ,  $t[84] = 2.02$ ,  $p = .05$ ). However, the direct path from controllability to positive affect was no longer reliable ( $B = 0.15$ ,  $SE = .12$ ,  $t[84] = 1.24$ ,  $p = .21$ ).

The findings in the current research add in several ways to the literature on the self-protective function of causal attributions to effort rather than ability. First, the present work provides novel evidence with reference to biased attributions to low group effort (rather than ability) as a mediator of perceived outcome controllability by the in-group. As such, this sheds new light on the role played by perceived illegitimacy of intergroup status differentials for those attributional processes that take place in contexts where people who are highly identified with their group perceive the value of their social identity as being questioned (see Barreto & Ellemers, 2003). For example, these findings may be relevant to future research on ‘stereotype threat’ (Steele, 1997).

Additionally, the current finding that participants’ level of identity-protecting low-effort attributions increased to the extent that the threatening outcome was perceived as being controllable by the group in the future is also of note. Specifically, this suggests that the key attributional characteristic ascribed to identity-threatening outcomes of personal and group action, namely, low controllability, is essentially invariant.

## REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and interpreting interactions*. Newsbury park, CA: Sage.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W. H. Freeman.
- Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Barreto, E., and Ellemers, N. (2003). The effects of being categorized: The interplay of internal and external social identities. *European Review of Social Psychology*, *14*, 139-170.
- Bernhardt, P. C., Dabbs, J. M., Jr., Fielden, J. A., and Lutter, C. D. (1998). Testosterone changes during vicarious experiences of winning and losing among fans at sporting events. *Physiology and Behavior*, *65*, 59-62.
- Costarelli, S. (2012). Coping with intergroup threat via biased attributions to low group effort. *Social Psychology*, *43*(1), 47-59.
- Covington, M. V., and Omelich, C. (1981). As failures mount: Affective and cognitive consequences of ability demotivation in the classroom. *Journal of Educational Psychology*, *73*, 796-808.
- Doosje, B., Ellemers, N., and Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology*, *31*(5), 410-436.

Ellemers, N., and Barreto, E. (2001). The impact of relative group status: Affective, perceptual, and behavioral consequences. In R. Brown and S. Gaertner, (Eds.), *The Blackwell Handbook of Social Psychology*. (Vol. 4, pp. 324-343). Oxford: Blackwell.

Feick, D., and Rhodewalt, F. (1997). The double-edged sword of self-handicapping: Discounting, augmentation, and the protection and enhancement of self-esteem. *Motivation and Emotion*, 21, 147-163.

Hewstone, M. (1990). The 'ultimate attribution error'? A review of the literature on intergroup causal attribution. *European Journal of Social Psychology*, 20, 311-335.

Hirt, E., Zillman, D., Erickson, G., and Kennedy, C. (1992). The Costs and Benefits of Allegiance: Changes in Fans Self-ascribed Competencies after Team Victory versus Team Defeat. *Journal of Personality and Social Psychology*, 63, 724-738.

Iatridis, T., and Fousiani, K. (2009). Effects of status and outcome on attributions and just-world beliefs: How the social distribution of success and failure may be rationalized. *Journal of Experimental Social Psychology*, 45(2), 415-420.

Jetten, J., Spears, R.; and Postmes, Tom. (2004). Intergroup Distinctiveness and Differentiation: A Meta-Analytic Integration. *Journal of Personality and Social Psychology*, 86(6), 862-879.

Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: Inquiries into depression and rape. *Journal of Personality and Social Psychology*, 37(10), 1798-1809.

Martinko, M., and Moss, S. (2004). An exploratory study of workplace aggression. In M. Martinko (Ed.), *Attribution theory in the organizational sciences* (pp. 133-150). Greenwich, Connecticut: Information Age Publishing.

McAuley, E., Duncan, T. E., and Russell, D. (1992). Measuring causal attributions: The Revised Causal Dimension Scale (CDSII). *Personality and Social Psychology Bulletin*, 18, 566-573.

Nicholls, J. G. (1975). Causal attributions and other achievement-related cognitions: Effects of task outcome attainment value and sex. *Journal of Personality and Social Psychology*, 31, 379-389.

Ouwerkerk, J. W., Ellemers, N., and de Gilder, D. (1999). In: N. Ellemers, R. Spears, and B. Doosje, Bertjan (Eds.), *Social identity: Context, commitment, content*. Oxford, England: Blackwell, pp. 184-204.

Sherman, D. K., Kinias, Z., Major, B., Kim, H. S., and Prenovost, M. (2007). The group as a resource: Reducing biased attributions for group success and failure via group affirmation. *Personality and Social Psychology Bulletin*, 33(8), 1100-1112.

Snyder, C.R. (1999). *Coping: the psychology of what works*, Oxford University Press: New York



- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance of African Americans . *Group Dynamics*, 10, 272-296.
- Tajfel, H., and Turner, J. C. (1979). An integrative theory of intergroup conflict. In W.G. Austin and S. Worchel (Eds.), *The social psychology of intergroup relations*. Monterey, CA: Brooks/Cole.
- Tajfel, H., and Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Austin and W. G. Austin (Eds.), *Psychology of inter-group relations* (pp. 7-24). Chicago: Nelson-Hall.
- Wann, D. L. (2006). Understanding the positive social psychological benefits of sport team identification: The Team Identification – Social Psychological Health Model. *Group Dynamics*, 10, 272-296.
- Weiner, B. (1985). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.

## APPENDIX A

TABLE 1.

*Descriptive Statistics and Intercorrelations Among the Variables*

Variable	1	2	3
1. Legitimacy Manipulation (Low = '-1', High = '+1')	-		
2. Ingroup Identification	0.12	-	
3. Controllability	0.24	0.01	-
<i>M</i>		4.39	5.06
<i>SD</i>		0.43	0.86

NOTE:  $N = 84$

\* =  $p < 0.05$

## AUTHOR BIOGRAPHIES

Sandro Costarelli is a Lecturer of Social Psychology at the University of Trento, Italy. He has researched many aspects of intergroup relations. E-mail: [sandro.costarelli@unitn.it](mailto:sandro.costarelli@unitn.it).

Justyna Gerłowska is a counseling psychologist and a graduate student in the Biological Sciences PhD program at the Department of Neurology, Medical University of Lublin, Poland. Her research interests are in the relationships between emotion recognition and dementia. E-mail: [youstus@poczta.onet.pl](mailto:youstus@poczta.onet.pl).