



LUND UNIVERSITY

A measure of internal and external motivation to control in-group bias

Jørgensen, Öyvind; Bäckström, Martin; Björklund, Fredrik

2012

[Link to publication](#)

Citation for published version (APA):

Jørgensen, Ö., Bäckström, M., & Björklund, F. (2012). *A measure of internal and external motivation to control in-group bias*. (Lund Psychological Reports; Vol. 12 (2)). Department of Psychology, Lund University. <http://www.psychology.lu.se/upload/psykologi/fu/pdf/PRVol12No2.pdf>

Total number of authors:

3

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

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

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Lund

Psychological Reports

Volume 12, No. 2, 2012

A measure of internal and external motivation to control in-group bias

Øyvind Jørgensen, Martin Bäckström and Fredrik Björklund

Department of Psychology, Lund University, Sweden



LUND UNIVERSITY

Lund Psychological Reports

Editor: Magnus Lindgren

ISSN 1404-8035

Abstract

A measure of individual differences in the motivation to control in-group bias (favouritism) was created. As in Plant and Devine's (1998) measure of out-group bias, one subscale referred to an internal motivational source and the other to an external motivational source. The psychometric properties of the measure were tested across four samples. The results indicate that the measure reliably captures individual differences in the motivation to control in-group bias, and that a distinction between internal and external motivational sources of control can be made. However, the convergent and discriminant validity of both subscales needs to be examined further before the measure can be considered launchable. Implications for research on intergroup bias are discussed.

Keywords: in-group vs. out-group, control, in-group bias

A measure of internal and external motivation to control in-group bias

Øyvind Jørgensen, Martin Bäckström and Fredrik Björklund

Department of Psychology, Lund University, Sweden

Consider the following example: A father coaches his son's local football team. Before an important game he has to decide who will start on the field and who will be left on the bench. His son's skills are slightly below those of another child on the team who is playing in the same position. How will the father reason and act in this case? Will he worry that others (e.g. the other children in the team or their parents) might think he is favouring his son over the other players? Will he perhaps ponder over whether or not he does indeed give his son preferential treatment; and/or will he consider it to be unacceptable to favour his son in this situation, and thus attempt to avoid giving any benefits to his son?

The above example is intended to highlight the idea of a motivation to avoid boasting or show positive bias towards a member of one's own group (in this case a family member). In-group bias is a widespread phenomenon and has been demonstrated within both natural (Aboud, 2003; Beaupré & Hess, 2003) and minimal groups (Hertel & Kerr, 2001; Mullen, Brown, & Smith, 1992). It can be defined as a relatively positive attitude towards in-groups in comparison with out-groups (Brewer, 2007) and is, of course, dissonant with the ideal of equal treatment. The term 'bias' can imply that an evaluation is illegitimate, in that an assessment is more favourable (or unfavourable) than what the objective evidence infers. We suggest that people may be concerned about being and/or appearing unjustly positive towards their in-group, and call this motivation to control in-group bias. According to this view, people may be motivated to avoid unrealistically positive views of their own group, even in the absence of any thoughts of a contrasting group. In other words, intergroup bias and discrimination could theoretically be caused solely by in-group preferences in the absence of any negative affect against the out-group. Empirical findings support this claim (Singh, Choo & Poh, 1998). Studies on prejudice have demonstrated that many people are motivated to avoid a negative out-group evaluation due to the fear of being, or appearing to be, biased (Fazio, Jackson, Dunton & Williams, 1995). In the present article we develop and test a measure of individual differences in motivation to control in-group bias. We expect some

people to be more concerned about the prospect of being in-group biased than others and that some will be more focused on attempts to control any such bias. In addition, the measure will contain items that refer to either internal or external sources of motivation to control bias.

In-group bias

In-group bias can be observed at an early age (Aboud, 2003) and is expressed in a variety of ways. For instance, people may evaluate in-group members more favourably than out-group members, invest more time in helping family members compared to other people, or hire someone because he/she favours the same sports team or was born in the same town. It has been shown that people tend to allocate more resources to members of the newly formed in-group based on arbitrary criteria (Tajfel, Billig, Bundy, & Flament, 1971; Brewer, 1979), that in-group favouritism may be captured with implicit attitude measures (Dasgupta, 2004), and that priming with words related to in-group status (e.g. *we*) facilitates reaction times to positive person description (whereas priming with words related to out-group status does not facilitate reaction times to negative person descriptions; Perdue, Dovidio, Gurtman, & Tyler, 1990). Some forms of in-group favouritism (e. g. more concern for close family members) may be considered almost inevitable, whereas others (e. g. more concern for people of the same ethnic origin) are considered immoral. Thus, the acceptability of in-group bias may vary across social groups and contexts.

Social norms

One social norm that has been pointed out as being of particular importance with regard to prejudice and favouritism is that of equality (Crandall, Eshleman, & O'Brien, 2002; Messick & Schell, 1992). It prescribes against both in-group bias and out-group bias; subscribing to this norm implies controlling both in-group positivity and out-group negativity. Other norms may advocate in-group bias. For example, participants primed with words related to loyalty show more implicit intergroup bias (Zogmaister, Arcuri, Castelli, & Smith, 2008) and more intergroup bias on a minimal group allocation task as compared to those primed with words related to equality (Hertel & Kerr, 2001). Conversely, Social Dominance Orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994), which can be seen as group based anti-egalitarianism (Sidanius, Levin, Liu, & Pratto, 2000) is related to out-group negativity (Duckitt, 2006).

Norms regarding in-group and out-group biases may differ in potency, such that in-group bias may generally be more common and accepted (Blanz, Mummendey, & Otten,

1997; Rutland, Cameron, Milne, & McGeorge, 2005). To the extent that norms regarding in-group positivity are weaker, more complex and contradictory, the study of control of in-group positivity is likely to be more complicated. While the situation can make a certain norm salient (e.g. respond without prejudice), it is also evident that people differ regarding which norms they embrace, and to what extent they have internalized the norm (Plant & Devine, 1998).

Out-group bias

Research on intergroup bias has focused more on negative attitudes towards out-groups than on positive attitudes towards in-groups (Brewer, 1999). A number of studies have documented that people at times hold negative attitudes towards other groups (Dovidio, Gaertner, Kawakami, & Hodson, 2002) but some of them have been criticized for using measures that confound in-group and out-group attitudes (e.g. by forcing participants to select one of the groups for each positive or negative evaluation; Aboud, 2003). In her influential article, Devine (1989) concluded that most people seem to automatically activate (often negative) stereotypes of out-groups, but that they differ in the motivation to deliberately control these stereotypes. Other results support the idea that people differ both in their level of automatically activated stereotypes and in their level of motivation to control prejudiced responses (Fazio, Jackson, Dunton, & Williams, 1995). In fact, there has been an increased focus in psychology on individual differences in motivation to control prejudiced responses. One widespread measure is the Motivation to Control Prejudiced Responses (MCPR; Dunton & Fazio, 1997). Another is the Internal and External Motivation to Respond without Prejudice (Plant & Devine, 1998). Both of these concern the motivation to control out-group bias. We believe that a measure of motivation to control in-group bias could provide an important addition to the understanding of intergroup attitudes and discrimination, and, as far as we are aware, no such measure exists.

In a recent study on how people may alter their in-group attitudes depending on contextual factors (Björklund, Bäckström & Jørgensen, 2011), ethnic Swedes tended to give less favourable ratings of Swedes (their national in-group) when presenting their ratings to a non-ethnic Swedish, as compared to an ethnic Swedish, experimenter. Compared to responses made in a more private setting (low accountability condition) the ratings seemed to be influenced both by the in-group representative (more favourable) and the out-group representative (less favourable). These results indicate that motivation to control intergroup bias may be influenced by context effects. There is also evidence that people vary in their

sensitivity to intergroup biases, and in their willingness to devote time and energy to avoid such biases (Plant & Devine, 1998). In other words, person-situation interaction effects may be evident, for example in that the overall level of intergroup bias may be influenced by the situation, while those who are most biased in one situation will also tend to be among the most biased in another situation (the rank order is similar) (Funder, 2006; Akrami, Ekehammar, Bergh, Dahlstrand & Malmsten, 2009).

Internal and external sources of motivation

Plant and Devine (1998) made a distinction between external motivation, where the driving force is a concern over how one might appear to be in the eyes of others, and internal motivation, where the driving force is that of personal concerns. They received support for their claim that both internal and external motivation independently affect people's prejudiced reactions, and that the two sources vary in strength for different people; they have also demonstrated the predictive validity of the two scales (see Butz & Plant, 2009 for a review). Given that there are two distinct motivational sources of out-group bias control, it seems reasonable to investigate whether the same is true for in-group bias control. As a first step, we strived to construct scales with items that clearly separated internal and external motivation. Then the psychometric properties of the scales were analysed.

Study 1a

It has been pointed out that some items on the MCPRS are ambiguous concerning their source of motivation (e.g. "It's never acceptable to express one's prejudices"; Dunton & Fazio, 1997). Plant and Devine (1998) made an effort to better separate the underlying motivations in their scale, and items either referred to being motivated to avoid being prejudiced for internal reasons (e.g. "I respond without prejudice because it is important to my self-concept"), or for external reasons (e.g. "I attempt to appear nonprejudiced towards Black people in order to avoid disapproval from others"). Our aim was to construct items of in-group bias control, with a clear reference to either an internal or external source of motivation. We chose to study the motivation of Swedes to control bias towards Swedes. The decision was based on two aspects; 1) that Swedes may alter their ratings of Swedes depending on whether they are held accountable to an ethnic Swedish or a non-ethnic Swedish person (Björklund, Bäckström & Jørgensen, 2011), and 2) previous research on in-group bias has often focused on national identification (i.e. Kosterman & Feshbach, 1989), which should make the results relevant to earlier findings in the field.

Method

Sample 1. A sample of 151 participants (43 men, 85 women and 23 who did not state their sex, with a mean age of 33.84, $SD = 10.36$) volunteered to complete the new scale items via an internet testing page (www.pimahb.se). They rated how well each of the 37 items described them on a 0-4 Likert scale. Items appeared in random order and were mixed with items from other scales used at a later point to assess the convergent and discriminant validity of the scales (study 2).

Scale development

Items were generated so that half of them referred to an internal source of motivation (e.g. “I try to live in accordance with my conviction that one should not react in a milder way to mistakes made by Swedes”), whereas the other half contained a reference to an external motivational source (e.g. “I strive to avoid favouring Swedes in order to steer clear of the negative reactions of others”). In each of the items we attempted to describe a controlling component referring to an effort to change or somehow restrict thoughts or behaviour. A total of 37 items were tested in the internet sample.

Results

The responses to the items were analysed in a principal component analysis with a promax rotation. This oblique rotation was used since the factors were expected to correlate with each other. The aim of the analysis was to see if the items loaded on separate and interpretable factors. A two-factor solution was identified based on a scree test, and items which loaded at least .40 on one factor were retained. Based on this criterion 9 items were removed. An additional 4 items were deemed somewhat vague regarding their underlying motivational source (low face validity), perhaps confounding internal and external motivation, and were removed. Twenty-four items showed satisfactory factor loadings and a clear reference to either an external or an internal source of motivation to control in-group bias, and were kept for testing on a new sample.

Study 1b

Method

The aim of study 1b was to further explore the factor structure of the constructed items. A new sample was collected in order to assess whether items loaded on two different factors in the predicted fashion, such that the items referring to an external source of

motivation loaded on one factor while items referring to an internal source loaded on another factor.

Sample 2. 106 students (57 men, 46 women and 3 unknown of mean age 24.35, $SD = 3.65$) completed a 24-item paper-and-pencil version of the scale. Students were approached at lectures and asked to complete the questionnaire during class.

Results

Following the procedure in study 1a, a principal component analysis for the 24 items was computed with a promax rotation. The pattern of factor loadings was generally similar to the one found in study 1a. A two-factor structure was identified in a scree test, again linked to the internal and external motivational sources. A cut-off point was chosen whereby items that loaded at least .50 on one of the two factors were retained. Six items were excluded based on this criterion, and the remaining 18 were included in the final version of the scale. Factor 1 consisted of 10 items related to the internal motivational source, whereas the 8 items that loaded on factor 2 referred to an external motivational source. To put the two-factor structure to a stronger test, a confirmatory factor analysis was computed in study 1c.

Study 1c

Method

As a final test of the factor structure of the scale, a new data-set was gathered and a confirmatory factor analysis performed based on data from the new sample and the internet sample from study 1a. The aim was to compare directly how well a one-factor model and a two-factor model fit to the empirical data. A two-factor model of internal and external motivation to control in-group bias was hypothesized to provide the best account.

Sample 3. 198 students responded to the final 18-item version of the scale. This was followed by several other scales which will be reported on in study 2a. Nineteen participants had two non-Swedish parents and their data were excluded from the analysis. Five participants failed to complete the scale and were also excluded from the analysis. The remaining 174 participants included 63 men, 107 women (and 4 with unstated sex) with a mean age of 24.07 ($SD = 6.63$). Data from the internet sample ($N = 151$) used in study 1a were also included in the confirmatory factor analysis.

Preliminary analysis

In sample 1, a 0-4 Likert scale was used and in sample 3, a 1-7 Likert scale, and data were transformed to standardized z-scores so as to enable the analysis. Both the internal and the external motivation scales showed good internal consistency in both samples (see table 1 for descriptives). The mean scores were below the mid-point of the rating scales, especially on the external scale in sample 3. After participants with missing data were excluded from the analysis, data from the remaining 311 participants were used. Some variables were transformed to meet the normality assumption¹. A confirmatory factor analysis (AMOS version 20.0) was applied on the data set. With 54 estimated parameters this gave roughly a ratio of 6:1 of cases to estimated parameters. According to Tabachnick & Fidell (2007), the sample size is adequate for these analyses.

Table 1. Chronbach's alpha and descriptives.

Scale	Sample 1 ($N = 151$)			Sample 3 ($N = 174$)		
	α	Mean	SD	α	Mean	SD
Internal MCIB (10 items)	.90	1.87	0.81	.89	3.79	1.46
External MCIB (8 items)	.89	1.57	0.68	.81	2.64	1.06

Internal MCIB = internal motivation to control in-group bias scale; External MCIB = external motivation to control in-group bias scale. Sample 1 used a 0-4 Likert scale and sample 3 used a 1-7 Likert scale.

Fit indices in confirmatory factor analysis

There are a number of different measures that indicate how well a model fits to the data. The chi-square index is sensitive to sample size and is insufficient as a parameter of model fit. Following the recommendations of, for example, Hu and Bentler (1999), additional fit indices were used to evaluate the fit of the different models. The Root Mean Square Error of Approximation (RMSEA) is an index of the lack of fit in the model compared to a perfect model, and it includes a penalty for the number of parameters used. A smaller value indicates better fit, with values ≤ 0.06 often considered to indicate good fit (Hu & Bentler, 1999), while a value above .10 suggests poor fit (Browne & Cudeck, 1993, cited in Tabachnick & Fidell, 2007). Values above .95 on the Comparative Fit Index (CFI) are considered to be a good fit (Hu & Bentler, 1999). The Akaike Information Criterion (AIC) takes into account the

¹ A CFA with Bollen-Stine bootstrapping was also performed, which is an alternative method to deal with nonnormal data. The results from this test were highly similar to those obtained with transformed data. Model 2 provided the best fit.

goodness of fit and also includes a penalty for the number of parameters used. Smaller values indicate better fit, but the indices are not normed to a 0-1 scale (Tabachnick & Fidell, 2007).

Results

The factor structure of three different models was assessed. A two-factor model was expected to show the best fit. In model 1 all the measured variables loaded on one factor. This model had a poor fit to the data according to the criteria listed above (the fit indices are presented in table 2). In model 2, a two-factor model was tested where items loaded either on an internal or an external motivation factor. The two latent factors were set to covary. When model 1 and model 2 were compared, model 2 showed much better fit, $\Delta\chi^2(1) = 489.66, p < .001$. Model 3 also tested a two-factor model, but here the two factors were set as independent to each other. In a direct comparison between model 3 and model 2, model 2 showed substantially better fit, $\Delta\chi^2(1) = 179.09, p < .001$.

Model 2 provided the best fit of the three models across all of the chosen fit indices. However, according to Hu and Bentler's (1999) recommendations, model 3 did not quite fit the data well enough to acclaim good fit. The two latent factors correlated highly with each other, $r = .72$. This may suggest a second-order factor (a general motivation to control in-group bias). An alternative model, introducing a second-order factor, would not have any implications for the scale development and will not be tested. The factor loading for each item in model 2 is presented in table 3.

Table 2. CFA goodness of fit indexes for the three models.

Model	χ^2 (df)	RMSEA	CFI	AIC
Model 1 Single factor	854.70(135)	.13	.80	926.66
Model 2 Two correlated factors	365.04(134)	.07	.93	439.04
Model 3 Two uncorrelated factors	544.13(135)	.09	.88	616.13

RMSEA = Root Mean Square Error of Approximation; *CFI* = Comparative Fit Index; *AIC* = Akaike Information Criterion.

Table 3. CFA factor loadings for the internal and external motivation items

	Factor loadings Sample 1 and 3 ($N = 311$)
Internal motivation items (to internal factor)	
1. Att undvika en överdrivet positiv syn på svenskar är i linje med mina personliga värderingar.	.73
2. Det är viktigt för mig att inte ha en orealistiskt positiv bild av svenskar.	.80
3. På grund av mina personliga övertygelser försöker jag undvika en bild av svenskar som är orealistiskt positiv.	.87
4. Jag aktar mig för att överskatta svenskars prestationer eftersom det skulle strida mot min personliga övertygelse.	.81
5. Jag försöker leva upp till principen att man inte skall ta lättare på just svenskars dåliga egenskaper.	.65
6. Eftersom det är helt mot mina principer passar jag mig för att vara mer överseende i bedömningen av en persons misstag bara för att denna är svensk.	.73
7. Jag anstränger mig för att svenskar inte skall komma lindrigare undan när de felat, eftersom det är viktig för min självbild.	.79
8. Jag försöker undvika att gynna svenskar eftersom det är viktigt för mig.	.60
9. Jag är en person som försöker att låta bli att bagatellisera försyndelser bara för att de begåtts av svenskar.	.79
10. Jag försöker leva efter min övertygelse att man ska göra sitt bästa för att inte ta lättare på svenskars felsteg.	.80
External motivation items (to external factor)	
11. För att slippa andra människors negativa reaktioner försöker jag undvika att vara överdrivet positiv mot svenskar.	.77
12. Jag försöker låta bli att favorisera svenskar för att undvika andras negativa reaktioner.	.78
13. Eftersom det inte skulle ses med blida ögon av människor i min omgivning försöker jag låta bli att gynna svenskar.	.77
14. Jag försöker låta bli att premiera svenskar eftersom det skulle ogillas av andra.	.75
15. Jag försöker undvika att överdriva svenska tävlingsprestationer då det kanske inte gillas av alla.	.69
16. Jag försöker undvika att överdriva hur imponerande svenska framgångar är då vissa kanske retar sig på detta.	.80
17. Eftersom det finns en risk att andra ser snett på mig om jag stoltserar med svenskars goda tävlingsprestationer försöker jag undvika detta.	.76
18. Andra skulle ogilla om jag såg mellan fingrarna när en svensk gjorde en förseelse och därför försöker jag undvika det.	.72

Factor loadings for model 2, with two separable factors.

Discussion

A new measure with the aim of capturing internal and external motivation to control in-group bias was constructed and its psychometric properties were tested on three samples. In study 1a, a number of items were prepared and tested, and two interpretable factors emerged in an exploratory factor analysis. A set of items that referred to external pressures to control in-group bias loaded on one factor while a set of items that referred to internal standards loaded on another factor. This procedure was repeated on a new sample in study 1b, where items that failed to load strongly on either of the two factors were removed. In study 1c, the final 18-item version was tested in a confirmatory factor analysis. The results from the analysis supported a two-factor model compared to a one-factor model. This shows that the items that refer to external or internal motivational sources are distinct from each other, although the two factors are correlated, and indicates that internal and external forms of motivation to control in-group bias are distinct, but related constructs.

It is important to emphasize that the final model was one way of showing good fit to the empirical data, according to common recommendations regarding model fit (e.g. Hu & Bentler, 1999). However, it is evident that a two-factor model had a better fit than a one-factor model. In conclusion, study 1 gave some support to a two-factor model that distinguishes between items that refer to internal and external sources of motivation to control in-group bias. The next step was to test the convergent and discriminant validity of the two scales. For this purpose, two different test packages were put together and tested on two independent samples.

Study 2a

The aim of study 2a was to examine whether variability in responses on the two scales reflect meaningful individual differences. If they tap different constructs the scales should correlate with other theoretically related concepts. A number of self-report measures considered relevant to either internal motivation to control in-group bias (Internal MCIB) or external motivation to control in-group bias (External MCIB) were chosen for the validation of the scales. Some measures were included, even though no clear prediction regarding their correlation with the two scales could be made, and were used in a more exploratory fashion. The Right-Wing Authoritarianism scale (RWA; Altemeyer, 1981) and the Social Dominance Orientation scale (SDO; Pratto et al., 1994) were included in the test package. RWA taps individual differences in submission to authority, as well as conservatism and hostility, whereas SDO taps individual differences in preferences for hierarchical intergroup relations

where strong groups dominate weaker groups. Both scales correlate with out-group bias (Ekehammar, Akrami, Gylje & Zakrisson, 2004; Bäckström & Björklund, 2007). The test package also contained a measure of modern racism (McConahay, 1986) and a measure of empathy (Davis, 1983). And finally, a scale intended to measure social desirability concerns (Crowne & Marlowe, 1960), was included.

Method

Participants

Data from the internet sample used in study 1a (sample 1 ($N = 151$)) was used in the validation of the two scales.

Materials

Right-wing authoritarianism ($\alpha = .77$; Altemeyer, 1981) and social dominance orientation ($\alpha = .89$; Pratto et al., 1994): We expect people who hold either of these worldviews to consider it to be more acceptable to give preferential treatment to their groups. We therefore expect RWA and SDO to correlate negatively with Internal MCIB.

The Marlow-Crowne Social Desirability Scale ($\alpha = .80$) (MCSDS; Crowne & Marlowe, 1960). We expect social desirability to be positively related to Internal MCIB.

The Modern Racism Scale ($\alpha = .86$) (MRS; McConahay, 1986): This is a commonly used measure of prejudice towards immigrants (out-group). The Interpersonal Reactivity Index (Davis, 1983) measures four different constructs related to empathy: Perspective Taking (PT; $\alpha = .84$), Emphatic Concern (EC; $\alpha = .75$), Personal Distress (PD; $\alpha = .78$) and a Fantasy Scale (FS; $\alpha = .71$). No predictions regarding how empathy or MRS can be related to Internal MCIB and External MCIB are stated; this will be studied in a more exploratory approach.

Procedure

Participants rated the items on a computer via a web-based test page (see study 1a for details). They completed 37 items from the motivation to control in-group bias scales and the other scales. Items appeared in a random order. All the items had a 0-4 Likert scale response format. Only data from the final 18-item version of the motivation to control in-group bias scale were used to study its relations to the other measures.

Results

The correlations between the internal and the external motivational scales and the other measures are presented in table 4. The Internal MCIB scale correlated in a predicted fashion with a number of the other self-report measures. It correlated significantly with the Modern Racism Scale, Social Dominance Orientation, Right-Wing Authoritarianism, Social Desirability, as well as with the Perspective Taking scale (empathy subscale). The External MCIB scale did not correlate significantly with any of these measures. The External MCIB scale only correlated negatively with Empathic Concern. The internal and external scales correlated moderately with each other, according to Cohen's (1988) criterion. The correlation patterns for the internal scale are generally close to the predictions. It is interesting to note that the internal scale correlated with the Modern Racism Scale, so that those internally motivated to avoid positive bias towards Swedes tend to report less prejudice against immigrants. The External MCIB scale was not related to any other scales except for a negative correlation with one of the empathy subscales. Overall, these results give some support to the convergent validity of the Internal MCIB scale. However, the External MCIB scale, in particular, needs further testing in order to determine its validity.

Study 2b

The aim in study 2b was to include additional, theoretically relevant, measures in order to further test the convergent and discriminant validity of the two scales. Measures appropriate for investigating the convergent validity of the External MCIB were of particular interest. Measures related to a general concern over the evaluation by others of oneself were included to assess this aspect. Another objective was to explore the relation of the scales to a slightly revised version of Plant and Devine's scales of internal motivation to respond without prejudice (IMS) and external motivation to respond without prejudice (EMS).

We expected that people who endorse egalitarian ideals would have a personal standard to avoid in-group bias. We also wanted to explore whether those who consider it wrong to see themselves as being superior to other people were also more motivated to control positive in-group bias. A new scale was constructed, influenced by the so-called "Jante law", based on a novel by Axel Sandemose (1933). We expect that those who consider it wrong to see themselves as superior to others might also be more internally motivated to control in-group bias. Finally, a measure of in-group identification was added as a linkage between in-group identification and in-group bias, a link that has been proposed by proponents of the social identity theory (Brown, 2000).

Method

Participants

The sample from study 1c (sample 3) completed the test package.

Materials

Two measures were included to assess concerns and consciousness about how one is perceived by others: 1) A brief, 12-item version (Leary, 1983) of the Fear of Negative Evaluation Scale ($\alpha = .89$) (FNES; Watson & Friend, 1969, in a Swedish version by Mörtberg, Clark, Sundin, & Wistedt, 2007). This scale measures people's concern with being evaluated in a negative fashion by others and is expected to be positively related to External MCIB (and not related to Internal MCIB). 2) A Swedish version (Nystedt & Smari, 1989) of the self-consciousness scale (Fenigstein, Scheier & Buss, 1975) was also included. It contains three subscales: private self-consciousness ($\alpha = .73$), public self-consciousness ($\alpha = .74$) and social anxiety ($\alpha = .80$). The public subscale measures the awareness of the self as a social object that has an effect on others (Fenigstein, Scheier & Buss, 1975). This awareness may be positively correlated with External MCIB. The private subscale measures how much people attend to inner thoughts and feelings while the social anxiety subscale measures the experience of discomfort in the presence of others. We had no predictions regarding these two subscales but chose to include them in the analysis.

The International Personality Item Pool (IPIP; Goldberg et al., 2006) version of the social desirability scale, which is inspired by the Balanced Inventory of Desirable Responding (BIDR; Paulhus & Reid, 1991; Swedish version from Bäckström, 2007), was included. The scale consists of two subscales: Impression Management (IM; $\alpha = .70$) and Self-Deceptive Enhancement (SDE; $\alpha = .78$). The former refers to a mainly deliberate attempt to alter responses in order to make a good impression on others. The latter scale taps a tendency to give a more honest, but unrealistic positive self-description. The IM scale and the SDE scale are both expected to be related to the internal motivational scale.

A Swedish version of the Humanitarianism/Egalitarianism scale (Katz & Hass, 1988) was included. This scale measures people's orientation towards ideals of equality, social justice and concern for the well-being of others. The ten items ($\alpha = .85$) were first translated into Swedish before another person translated the items back into English. A third person compared the two English versions and some minor changes were made to the Swedish translation on the basis of this.

The Jante scale attempts to tap whether it is considered unacceptable to believe that you are better and more important than others (e.g. more knowledgeable, more accomplished than others). The scale included ten items ($\alpha = .95$).

We included Plant and Devine's scale (1998) on internal and external motivation to control out-group bias. In order to fit the scale to a Swedish context, immigrants rather than Blacks were used as the target group.

In-group identification (identification with the national group of Swedes) was measured via a slightly revised version of an identification scale from Akrami (2005). The task was to rate "which group (Swedes vs. non-Swedes) in the Swedish society that you feel the closest to" with regard to eight items ($\alpha = .89$) (e. g. attitudes, hobbies and life experiences).

Procedure

Participants completed the scales in classrooms after lectures. They first completed the Internal MCIB and the External MCIB scales before they responded to the rest of the scales. The session lasted for approximately 30 minutes.

Results

The correlations between the internal and the external scale and the other scales in the test package are presented in table 4 (sample 3). The Internal MCIB scale correlated with the Humanitarianism-Egalitarianism scale. It also correlated with the measure of internal motivation to control prejudiced responses towards immigrants. In addition, the internal scale showed a weak negative correlation with in-group identification. Those who reported a stronger identification with Swedes tended to be somewhat less internally motivated to control in-group bias. The External MCIB scale correlated in the predictable manner with the Fear of Negative Evaluation Scale, and it also correlated negatively with self-deceptive enhancement, although the correlations were weak. Finally, the External MCIB correlated with the EMS. Neither of the two scales was related to the self-consciousness scales or the Jante scale. Mirroring the results from study 2a, the two scales correlated moderately with each other.

It is interesting to see how Plant & Devine's scales for internal ($M = 6.66$, $SD = 1.72$, $\alpha = .83$) and external ($M = 3.91$, $SD = 1.73$, $\alpha = .76$) motivation to control prejudiced responses were related to the other measures presented in study 2b. Table 5 presents these correlations. In general, both the scale for internal and the external motivation to control prejudiced response showed good convergent and discriminant validity. When comparing the

results from their scales against the in-group scale it is evident that the correlations were generally somewhat higher, although they tended to correlate in a similar direction with the same measures. Their internal scale was positively linked to both Impression Management and Social Desirability Enhancement, while the internal in-group scale was not related to any of these. Their external scale correlated negatively with the impression management and social desirability, while the external in-group scale only correlated with social desirability. Also worth noting is that identification with Swedes was linked to less internal motivation to control prejudiced responses towards immigrants.

Discussion

The results from study 2 give some support to the convergent and discriminant validity of the Internal MCIB and the External MCIB scales. The Internal MCIB scale was related to several measures in a theoretically meaningful way. It was related to humanitarianism-egalitarianism, social dominance orientation, right-wing authoritarianism, social desirability concerns (study 2a), modern racism, in-group identification and IMS. The support for the validity of the External MCIB scale was weak, demonstrating only a predicted relationship to the Fear of Negative Evaluation and to EMS. We found a correlation between the Internal MCIB and the External MCIB scales in both samples. It seems then, that the two sources of motivation overlap to some extent. This result does not resemble the findings of Plant & Devine's IMS and EMS concerning motivation to control out-group bias, where these two scales showed a weak negative correlation.

So far the psychometric evaluation of our instrument has provided mixed support for it. We decided to investigate yet another test of its validity, namely test-retest reliability, on a new sample. Because the scales are intended as individual difference measures, the levels of internal and external motivation to control in-group bias are expected to be quite stable over time.

Table 4. *Correlations between the internal motivation to control in-group bias scale, the external motivation to control in-group bias scale and related measures*

Sample 3
(*N* = 174)

	Internal MCIB	External MCIB
Internal MCIB	-	.52**
External MCIB	.52**	-
IMS	.43**	.13
EMS	-.07	.31**
Humanitarianism – Egalitarianism	.20**	.14
Fear of negative evaluation scale	.00	.15*
Impression management	.12	-.05
Self-deceptive enhancement	.03	-.15*
Self-consciousness private	.11	.11
Self-consciousness public	.06	.14
Self-consciousness anxiety	-.04	.13
Jante law scale	.12	.09
In-group identification	-.16*	-.11

Sample 1
(*N* = 151)

	Internal MCIB	External MCIB
Internal MCIB	-	.50**
External MCIB	.50**	-
Modern racism scale	-.43**	-.06
Social dominance orientation	-.32**	.08
Right-wing authoritarianism	-.34**	.14
Marlowe-Crowne social desirability	.23**	.12
Empathic concern	.14	-.16*
Perspective taking	.18*	-.08
Personal distress	-.05	.08
Fantasy	-.02	-.04

Internal MCIB = Internal motivation to control in-group bias; External MCIB = External motivation to control in-group bias; IMS = Internal motivation to respond without prejudice against immigrants; EMS = External motivation to respond without prejudice against immigrants.

**p* < .05

***p* < .01

Table 5. Correlations between internal and external motivation to respond without prejudice towards immigrants and related scales

Sample 3		
	IMS	EMS
IMS	-	-.19*
EMS	-.19*	-
Internal MCIB	.43**	.13
External MCIB	-.07	.31**
Humanitarianism – Egalitarianism	.51**	.03
Fear of Negative Evaluation Scale	-.18*	.23**
Impression management	.28**	-.17*
Self-deception	.31**	-.20**
Self-consciousness private	.10	.06
Self-consciousness public	-.01	.27**
Self-consciousness anxiety	-.15*	.19*
Jante law scale	.21**	-.03
In-group identification	-.42**	.11

Internal MCIB = Internal motivation to control in-group bias; External MCIB = External motivation to control in-group bias; IMS = Internal motivation to respond without prejudice against immigrants; EMS = External motivation to respond without prejudice against immigrants.

*p < .05

**p < .01

Study 3

In order to test the temporal stability of individual differences in the motivation to control for in-group favouritism a test-retest procedure was used. A new student sample completed the scale with an 11-12 week interval between the testing sessions.

Sample 4. A total of 125 students completed the 18 items in test session 1, and 50 of these also completed the scale again at the retest session (9 men and 41 women with a mean age of 21.68, $SD = 3.00$).

Results

The scales showed good internal reliability; both the Internal MCIB scale ($\alpha = .88$ in test session 1 and $\alpha = .90$ in the retest session) and the External MCIB scale ($\alpha = .86$ in test session 1 and $\alpha = .87$ in the retest session). The test-retest correlation, however, was rather low for both the internal scale $r = .46$, and the external scale; $r = .59$. These results indicate that participants' reported levels of internal and external motivation to control in-group bias vary from test time one to test time two. Generally speaking, the participants tended to report a higher level of motivation to in-group bias at the retest session (both internal and external).

Discussion

The test of the temporal stability of the two scales yielded quite weak test-retest reliability. From a theoretical perspective, we expected individual differences in motivation to control in-group bias to be quite stable, meaning that subjects would not generally be expected to show a great deal of variation in their scores when tested on different occasions. It may be useful to compare our test-retest correlations with those that Plant and Devine (1998) obtained for their scales (with a 9 week interval). Their results concerning the IMS indicated more temporal stability ($r = .77$) compared to the Internal MCIB scale. Their test-retest reliability ($r = .60$) for the EMS mirrors our result regarding the External MCIB scale. The low test-retest correlation raises the question as to whether people have a stable motivation to control in-group bias, and whether or not our measure is sensitive enough to capture existing and stable individual differences.

General discussion

The present study examined individual variations in motivation to control in-group bias. Moreover, we tested whether different sources of motivation could be identified. The results give some support to the notion of two distinct but related factors; internal and external motivation to control in-group bias. In study 1, a two-factor solution was identified across three samples. In study 1a and 1b, exploratory factor analysis indicated a two-factor structure. In study 1c, the two-factor models' fit to the data was tested in a confirmatory factor analysis, and a two-factor solution provided better fit than a one-factor model (although the model did not quite fit the data well enough to claim good fit according to common recommendations regarding fit indices). Both the Internal MCIB scale and the External MCIB scale showed acceptable internal consistency. On the whole, the results give some support to the claim that the items tap into two separable constructs.

In study 2 the convergent and discriminant validity of the scales was assessed. All in all the results indicated some support for the validity of the internal motivation to control in-group bias scale, as it was related to several measures in a theoretically meaningful way. The Internal MCIB was correlated with social dominance, right-wing authoritarianism, social desirability and Humanitarianism-Egalitarianism. However, based on the results here, as well as on findings from other studies (e.g. Plant & Devine, 1998), it could be argued that the Internal MCIB failed to demonstrate discriminant validity to internal motivation to control prejudiced responses (IMS), in that both scales tend to be related to the same measures. Furthermore, the results provided limited support for the validity of the external motivation to

control in-group bias scale. The scale was only weakly related, or not related, to the other measures included in the test package. We expected the external motivation to control in-group bias scale to be related to a fear of negative evaluation and to public self-consciousness, but found only a weak correlation with these measures. Since much of the research on intergroup attitudes and discrimination has focused on out-group bias and out-group bias control, it is difficult to determine which of the measures are likely to be related to motivation to control in-group bias. We did attempt to find theoretically relevant measures in study 2, but many of them were included in a more exploratory way. This exploratory approach makes the reliability of the results somewhat questionable. To sum up, study 2 did provide some support for the validity of the Internal MCIB, but failed to provide support for the convergent validity of the External MCIB. Possible explanations for the weak support are that there may not exist any stable individual differences in in-group bias control, or that the scale failed to efficiently capture them. It should also be noted that our test items are relatively complex. Each item contains both a reference to motivation to control a pattern of thought or behaviour, and to either an internal standard or to external pressures. Some participants pointed out that the items were hard to understand, making it difficult to give a meaningful response. This may also weaken the reliability of the scales. It may be beneficial to make an extra effort to reduce the complexity of the items in future attempts to assess this phenomenon.

In study 3 the temporal stability of the scales was assessed in a test-retest session. The results indicate that the two scales are less reliable than would be expected if they tapped more stable individual tendency differences. This highlights the possibility that at least some cases of in-group bias control may be due to a more automatic correction process. If in-group bias control is mainly automatic, then self-reported motivation to control in-group bias is a less useful path to take in order to measure this behaviour. It is too early to decide whether motivation to control in-group bias is due to more automatic or to more deliberate processes. In sum, further testing is needed in order to establish a reliable scale of motivation to control in-group bias, if a fairer investigation of its validity is to be made. The next step in the validation process of the scales would have been to assess its predictive validity but, given the problems concerning the reliability of the scales this step is premature.

Do people really worry about being or appearing to be in-group biased?

In-group bias is common and may often be considered to be acceptable, as well as even encouraged (e.g. Blanz, Mummendey & Otten, 1997). For example, it is generally regarded to be more acceptable (and more common) to give preferential treatment to a close

family member compared to giving special favours to a person based on their belonging to the same ethnic group. We chose to study Swedish participants and their motivation to control a positive bias towards other Swedes. Partly based on the findings of Björklund, Bäckström & Jörgensen (2011), we expected many Swedes to be reluctant to show themselves as being positively biased towards Swedes on the basis of a shared national group-membership. Indeed, the mean values of both the Internal MCIB and the External MCIB scales were below the mid-point on the Likert scale. Also, the Internal MCIB appears to have lower mean scores than the IMS, perhaps reflecting that Swedish people are more internally motivated to control negative bias against immigrants than internally motivated to control positive bias towards Swedes (see Klonis, Plant & Devine (2005) for a similar discussion regarding lower scores on motivation to control sexism in relation to scores on motivation to control prejudice against Blacks). It is important to note, however, that the items of the in-group bias scales and the out-group bias scales differ in their wording, making it impossible to display a direct comparison regarding absolute scores. However, the main object of the present study was to create a measure that taps individual variability in motivation to control positive bias towards Swedes, rather than to compare how motivated people are to control in-group bias in relation to controlling out-group bias.

While the measure of internal motivation to control in-group bias is based on the individual's personal standards, the measure of external motivation to control in-group bias refers to a motivation to control that is based on concerns about possible negative reactions from others. Who these "others" are is not specified in the items. Results from other studies suggest that people may alter both reported in-group attitudes (Björklund, Bäckström & Jörgensen, 2011) and reported out-group attitudes (Fazio, Jackson, Dunton & Williams, 1995) depending on whether another in-group member or an out-group member is present. Since no information as to whether "others" referred to other in-group members or to out-group members in our scales, it is impossible to determine how each participant experienced this reference group. Perhaps people experience different external pressures depending on which reference group they have in mind. If these "others" refer to in-group members, a loyalty norm may be activated and could potentially result in reduced motivation to control in-group bias.

Despite the argument that in-group bias may generally be met with less disapproval than many forms of direct out-group negativity, we believe that many people do, at times, have some concern about being or appearing to be in-group biased. Many people seem to place a strong emphasis on egalitarian values, and this goal seems to come into

conflict with the idea of giving someone extra benefits solely based on a shared group-membership. Whether people actually experience any conflict in their daily lives is something that may be worth studying further.

Is there a “generalized” motivation to control in-group bias?

Allport (1954) coined the term generalized prejudice to describe the finding that people who respond with prejudice towards one out-group often tend to be prejudiced towards other out-groups. It is worth posing the question of whether people who are motivated to control positive bias towards Swedes also tend to be more motivated to control bias towards other in-groups. Klonis and her colleagues (2005) found a strong correlation between motivation to control sexism and motivation to control prejudice against Blacks. Perhaps those who are motivated to control positive bias towards Swedes also tend to be motivated to control positive bias towards other in-groups (e.g. members of the same age-group). This is another question that needs to be tested empirically². In addition, variations in patterns of internal and external motivation to control bias across different groups may also be explored.

Conclusions

We sought to assess individual differences in the motivation to control in-group bias, and to identify different sources of motivation behind this control. The results give some support to the notion of two separable factors, but their convergent and discriminant validity needs to be addressed again in order to determine whether or not they truly capture separable constructs. If this is the case, the ultimate test will be to demonstrate the criterion-related validity of the scales by testing whether they can predict aspects of intergroup judgment and behaviour (particularly towards in-group members) that existing scales of motivation to control out-group bias fail to account for. We believe that such scales would fill a void in the social psychologist’s repertoire.

² Results from a pilot study (Jørgensen, Bäckström & Björklund, unpublished data) indicate that people tend to show a “generalized” motivation to control bias against several in-groups, i.e. their level of motivation correlated strongly for the different in-groups (family, persons of the same sex, persons in the same age-group, national group (mainly Swedes) and ethnic group (mainly Caucasians)).

References

- About, F. E. (2003). The formation of in-group favoritism and out-group prejudice in young children: Are they distinct attitudes? *Developmental Psychology, 39*, 48-60.
- Akrami, N. (2000). *Prejudice: The interplay of personality, cognition, and social psychology*: Uppsala, Sweden: Acta Universitatis Upsaliensis.
- Akrami, N., Ekehammar, B., Bergh, R., Dahlstrand, E., & Malmsten, S. (2009). Prejudice: The person in the situation. *Journal of Research in Personality, 43*, 890-897.
- Allport, G. W. (1954). *The nature of prejudice*: Oxford, England: Addison-Wesley.
- Altemeyer, B. (1981). *Right wing authoritarianism*. Winnipeg, Canada: University of Manitoba Press.
- Beaupré, M. G., & Hess, U. (2003). In my mind, we all smile: A case of in-group favoritism. *Journal of Experimental Social Psychology, 39*, 371-377.
- Bettencourt, B. A., Charlton, K., Dorr, N., & Hume, D. L. (2001). Status differences and in-group bias: A meta-analytic examination of the effects of status stability, status legitimacy, and group permeability. *Psychological Bulletin, 127*, 520-542.
- Björklund, F., Bäckström, M., & Jørgensen, Ø. (2011). In-group ratings are affected by who asks and how: Interactive effects of experimenter group-membership and response format. *The Journal of Social Psychology, 151*, 625-634.
- Blanz, M., Mummendey, A. I., & Otten, S. (1997). Normative evaluations and frequency expectations regarding positive versus negative outcome allocations between groups. *European Journal of Social Psychology, 27*, 165-176.
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin, 86*, 307-324.
- Brewer, M., B. (1999). The psychology of prejudice: Ingroup love and outgroup hate? *Journal of Social Issues, 55*, 429-444.
- Brewer, M. B. (2007). The importance of being we: Human nature and intergroup relations. *American Psychologist, 62*, 728-738.
- Brown, R. (2000). Social Identity Theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology, 30*, 745-778.
- Butz, D. A., & Plant, E. A. (2009). Prejudice Control and Interracial Relations: The Role of Motivation to Respond Without Prejudice. *Journal of Personality, 77*, 1311-1342.
- Bäckström, M. (2007). Higher-order factors in a five-factor personality inventory and its relation to social desirability. *European Journal of Psychological Assessment, 23*, 63-70.

- Bäckström, M., & Björklund, F. (2007). Structural modeling of generalized prejudice: The role of social dominance, authoritarianism, and empathy. *Journal of Individual Differences, 28*, 10-17.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum.
- Crandall, C. S., Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology, 82*, 359-378.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349-354.
- Dasgupta, N. (2004). Implicit ingroup favoritism, outgroup favoritism, and their behavioral manifestations. *Social Justice Research, 17*, 143-169.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*, 113-126.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*, 5-18.
- Dovidio, J. F., Gaertner, S. E., Kawakami, K., & Hodson, G. (2002). Why can't we just get along? Interpersonal biases and interracial distrust. *Cultural Diversity and Ethnic Minority Psychology, 8*, 88-102.
- Duckitt, J. (2006). Differential effects of right wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups. *Personality and Social Psychology Bulletin, 32*, 684-696.
- Dunton, B. C., & Fazio, R. H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin, 23*, 316-326.
- Ekehammar, B., Akrami, N., Gylje, M., & Zakrisson, I. (2004). What Matters Most to Prejudice: Big Five Personality, Social Dominance Orientation, or Right-Wing Authoritarianism? *European Journal of Personality, 18*, 463-482.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology, 69*, 1013-1027.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology, 43*, 522-527.

- Funder, D. C. (2006). Towards a resolution of the personality triad: Persons, situations, and behaviors. *Journal of Research in Personality, 40*, 21-34.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., et al. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*, 1464-1480.
- Hertel, G., & Kerr, N. L. (2001). Priming in-group favoritism: The impact of normative scripts in the minimal group paradigm. *Journal of Experimental Social Psychology, 37*, 316-324.
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55. doi: 10.1080/10705519909540118
- Jost, J. T. (2001). Outgroup favoritism and the theory of system justification: A paradigm for investigating the effects of socioeconomic success on stereotype content. In *Moskowitz, Gordon B* (pp. (2001). *Cognitive social psychology: The Princeton Symposium on the Legacy and Future of Social Cognition*. (pp. 2089-2102). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers. viii, 2503).
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology, 55*, 893-905.
- Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology, 10*, 257-274.
- Klonis, S. C., Plant, E. A., & Devine, P. G. (2005). Internal and external motivation to respond without sexism. *Personality and Social Psychology Bulletin, 31*, 1237-1249.
- Levin, S., & Sidanius, J. (1999). Social dominance and social identity in the United States and Israel: Ingroup favoritism or outgroup derogation? *Political Psychology, 20*, 99-126.
- McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism*. (pp. 91-126). San Diego, CA: Academic Press.
- Messick, D. M., & Schell, T. (1992). Evidence for an equality heuristic in social decision making. *Acta Psychologica, 80*, 311-323.

- Mullen, B., Brown, R., & Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: An integration. *European Journal of Social Psychology*, *22*, 103-122.
- Mörtberg, E., Clark, D. M., Sundin, Å., & Wistedt, A. Å. b. (2007). Intensive group cognitive treatment and individual cognitive therapy vs. treatment as usual in social phobia: A randomized controlled trial. *Acta Psychiatrica Scandinavica*, *115*, 142-154.
- Nystedt, L., & Smari, J. (1989). Assessment of the Fenigstein, Scheier, and Buss self-consciousness scale: A Swedish translation. *Journal of Personality Assessment*, *53*, 342-352.
- Paulhus, D. L., & Reid, D. B. (1991). Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology*, *60*, 307-317.
- Perdue, C. W., Dovidio, J. F., Gurtman, M. B., & Tyler, R. B. (1990). Us and them: Social categorization and the process of intergroup bias. *Journal of Personality and Social Psychology*, *59*, 475-486.
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, *75*, 811-832.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, *67*, 741-763.
- Rutland, A., Cameron, L., Milne, A., & McGeorge, P. (2005). Social norms and self-presentation: Children's implicit and explicit intergroup attitudes. *Child Development*, *76*, 451-466.
- Sidanius, J., Levin, S., Liu, J., & Pratto, F. (2000). Social dominance orientation, anti-egalitarianism and the political psychology of gender: an extension and cross-cultural replication. *European Journal of Social Psychology*, *30*, 41-67.
- Singh, R., Choo, W. M., & Poh, L. L. (1998). In-group bias and fair-mindedness as strategies of self-presentation in intergroup perception. *Personality and Social Psychology Bulletin*, *24*, 147-162.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics (5th ed.)*: Boston, MA: Allyn & Bacon/Pearson Education.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*, 149-178.
- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, *33*, 448-457.

Zogmaister, C., Arcuri, L., Castelli, L., & Smith, E., R. (2008). The impact of loyalty and equality on implicit ingroup favoritism. *Group Processes & Intergroup Relations, 11*, 493-512.