

Evaluating Group Member Behaviour Under Individualist and Collectivist Norms:  
A Cross-Cultural Comparison

Martin S. Hagger<sup>1</sup>, Panagiotis Rentzelas<sup>2</sup> & Severine Koch<sup>1</sup>

<sup>1</sup> Curtin University

<sup>2</sup> University of Essex

Author Note

Martin S. Hagger and Severine Koch, Health Psychology and Behavioural Medicine Research Group, School of Psychology and Speech Pathology, Faculty of Health Sciences, Curtin University; Panagiotis Rentzelas, Department of Psychology, University of Essex.

Correspondence concerning this article should be addressed to Martin S. Hagger, Health Psychology and Behavioural Medicine Research Group, School of Psychology and Speech Pathology, Faculty of Health Sciences, Curtin University, GPO Box U1987, Perth 6845, WA, Australia. email: martin.hagger@curtin.edu.au, tel +61 8 92662215

## Abstract

Research has shown that people in group contexts prefer group members who display collectivist as opposed to individualist behaviour, but that preference is attenuated when the prevailing group norm prescribes individualism. The present study investigated this effect in people from a predominantly individualist or collectivist cultural background. Due to their greater sensitivity to contextual social cues, individuals from a collectivist background were expected to give more polarised evaluations of group members than individuals from an individualist background. Group member evaluations were gathered in samples from a collectivist and an individualist background, manipulating the prevailing group norm (individualist or collectivist) and the behaviour of a hypothetical group member (individualist or collectivist). The previously observed attenuation effect in which people provided more positive evaluations of individualist behaviour under an individualist, as opposed to a collectivist, group norm was found only in participants from a collectivist cultural background. Implications of our findings and the absence of an attenuation effect in the individualist sample are discussed.

**Keywords:** Group norm, culture, individualism, collectivism, group member evaluations

## Going Your Own Way in Different Cultures:

## Cross-Cultural Comparisons of Individualist and Collectivist Group Norms

A substantial part of most peoples' daily life takes place in group contexts, including groups of colleagues, friends and family members, community groups, political parties, sports clubs and other recreational groups. Individuals tend to identify with the groups to which they belong and internalize the social norms that the groups prescribe in order to achieve a positive sense of identity (Tajfel & Turner, 1986). Identification with a group tends to blur the boundaries between the self and other members of one's group, resulting in a collective sense of self, with shared norms and beliefs among group members (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Critically, those group members who show deviant behaviour in the form of differing norms and beliefs tend to be derogated by the group (Marques, Yzerbyt, & Leyens, 1988).

Traditionally, the welfare and goals of a group are prioritized over personal goals of its members in collectivist cultures, whereas individualist cultures place greater emphasis on personal goals rather than goals of the group (Hofstede, 1980; Triandis, 1999). In line with this general notion, research has shown that people tend to prefer fellow group members who display collectivist as opposed to individualist behaviour (McAuliffe, Jetten, Hornsey, & Hogg, 2003) as collectivist behaviour usually serves the welfare of the group more than behaviour directed at the realization of personal goals. Importantly, this preference for collectivist behaviour in fellow group members has been observed in societies where the overall cultural orientation is individualist rather than collectivist (McAuliffe et al., 2003). If individuals find themselves within a group context (e.g., groups of employees), the norm of putting one's actions in the service of the group's goals and welfare becomes temporarily more salient and can even override the broader cultural orientation that encourages the realization of personal goals.

McAuliffe and colleagues (2003) advanced the understanding of individualist and collectivist group behaviour and the boundary conditions for the observed preference for

collectivist behaviour by manipulating the prevailing group norm (see also Hornsey, Jetten, McAuliffe, & Hogg, 2006; Jetten, McAuliffe, Hornsey, & Hogg, 2006). Their findings indicated that the preference for collectivist group member behaviour tends to be attenuated when the group advocates an individualist group norm. Manipulating group norms to produce an individualist norm resulted in people's preference for collectivist behaviour in group members being less pronounced such that they evaluated group members that displayed individualist behaviours more positively than under a collectivist group norm. In other words, focusing on one's own goals, as opposed to group goals, tends to be tolerated to a greater extent by other group members if the prevailing norm in the group endorses individualism.

In the present research, we aim to investigate this attenuation effect in a cross-cultural context, by examining the effects of experimentally-induced group norms (individualist and collectivist) and the behaviour of a hypothetical fellow group member (individualist and collectivist) on the evaluations of the group member among people from individualist (British) and collectivist (Chinese) cultural backgrounds. In keeping with McAuliffe et al.'s findings and hypotheses derived from the social identity perspective (Tajfel & Turner, 1986; Turner et al., 1987), we expected that people from both cultural backgrounds would evaluate collectivist behaviours positively because such actions tend to serve group goals.

However, cross-cultural theorists and researchers have suggested that individuals from a collectivist cultural background may be more sensitive to contextual social information than those from an individualist background (Oyserman, Coon, & Kemmelmeier, 2002; Triandis, 1999), which could give rise to more extreme evaluations of behaviours that are consistent or inconsistent with group norms. In line with this basic notion, previous research has consistently shown that collectivist individuals tend to display a heightened distinction between in-group and out-group members, relative to individuals with an individualist background (Triandis, 1995; see also Forbes, Collinsworth, Zhao, Kohlman, & LeClaire, 2011; Triandis, 1993).<sup>1</sup> For instance, Triandis (1995)

observed that in collectivist cultures, people tend to be cooperative towards in-group members and uncooperative towards out-group members. The same distinction occurs in individualist cultures, but it tends to be much more attenuated.

Applying these previously found asymmetries to the present research, we predict that cues regarding the *appropriateness of behaviour within a certain context* may be more evident to participants from a collectivist background, which may lead to more positive evaluations of individuals displaying behaviour that is congruent with the group norm and more negative evaluations of behaviour that is incongruent with the group norm, relative to participants from an individualist background. This polarised set of evaluations would further underpin the notion that cultural norm is a bias that increases sensitivity to salient information about group membership and behaviour among participants from a collectivist background (Triandis, 1999).

### *Method*

#### *Participants*

Eighty Chinese (36 males;  $M$  age = 22.16,  $SD$  = 2.07) and eighty-one British (37 males;  $M$  age = 21.44,  $SD$  = 3.49) undergraduate students from a university in the United Kingdom volunteered to participate in the study. Chinese volunteers were eligible for the study if they 1) reported being nationals of the People's Republic of China, 2) considered China to be their normal place of residence, 3) had lived in China for most of their life, 4) had spent less than three years studying in the UK, and 5) considered Chinese their first language. Analogous criteria were used to select British volunteers. On recruitment to the study, participants from each nationality were randomly assigned to the experimental conditions using a computerized randomizing tool.

#### *Design and Procedure*

The present study adopted a 2 (group norm: collectivist vs. individualist) x 2 (behaviour: collectivist vs. individualist) x 2 (nationality: Chinese vs. British) between-participants design based on the methods developed by McAuliffe et al. (2003). In an ostensible "organizational role-

play study”, participants were assigned to a hypothetical company as employees. Participants were informed that they would be assigned to one of two companies: *Tech Industries* or *Renovatech*. In actuality, all participants were assigned to *Tech Industries*. In accordance with principles of the minimal group paradigm (Tajfel, Billig, Bundy, & Flament, 1971), the purpose of the procedure of assigning participants to two ostensible companies was to make the presence of an out-group salient to participants in the first instance as is standard practice in intergroup research (see McAuliffe et al., 2003). They were also told that employees of *Tech Industries* were occasionally required to provide peer evaluations of fellow employees. Next, they were asked to watch a short video introducing them to the work philosophy of Tech Industries.

### *Experimental Conditions*

*Group Norm Manipulation.* Group norms were manipulated by presenting participants with one of two pilot-tested videos<sup>2</sup> about the work philosophy in their company. Both videos showed a 2-minute segment of three actors ostensibly working on a new logo for the company. One video aimed to evoke an individualist group norm and depicted the actors interacting at a minimum level and with little verbal and non-verbal communication. A second video aimed to induce a collectivist group norm and presented the actors interacting both verbally and non-verbally throughout. Prior to watching the video, participants were told: “Please watch this video of employees of *Tech Industries* designing a new logo for the company. The way they work and interact in this video reflects the general work philosophy of the company. As a member of *Tech Industries* you will, from time to time, be asked to evaluate other company employees”. After watching the video, participants were presented with a single item asking them to rate the general group dynamic in the video as individualist (1) or collectivist (9). This scale was used as a manipulation check for group norm (McAuliffe et al., 2003).

*Group Member Behaviour Manipulation.* After watching one of the two videos, participants were presented with a profile of a hypothetical fellow employee of *Tech Industries*

along with three statements that the employee ostensibly made during a selection interview.

Participants in the individualist group member behaviour condition were presented with statements reflecting individualist behaviours (i.e., “I concentrate on achieving my personal goals”; “I think it is important to give priority to personal interests as much as possible”; “When making a decision, I tend to trust my own judgement”). Participants in the collectivist group member behaviour condition were presented with statements reflecting collectivist actions (i.e. “I concentrate on achieving my group’s goals”; “I think it is important to give priority to group interests as much as possible”; “When making a decision, I take the advice of others into consideration”). A single item asking participants to rate the employee’s behaviour as individualist (1) or collectivist (9) was used as a manipulation check.

### *Measures*

*Group member evaluation.* The main dependent variable, evaluation of the hypothetical fellow employee, was assessed by means of five statements about the employee (‘I have a positive attitude towards this *Tech Industries* employee’, ‘This *Tech Industries* employee’s behaviour is acceptable’, ‘This employee is a good member of *Tech Industries*’, ‘This *Tech Industries* employee seems likeable’, and ‘My global impression of this *Tech Industries* employee is positive’) that had to be rated on 9-point scales ranging from *strongly disagree* (1) to *strongly agree* (9). The reliability of this scale was satisfactory for the British (Cronbach’s  $\alpha = .86$ ) and Chinese ( $\alpha = .92$ ) samples (full sample,  $\alpha = .91$ ). The group member evaluation measure was identical to that used in previous research employing the organizational role-play method (e.g., Hornsey et al., 2006; McAuliffe et al., 2003).

*Cultural Orientation.* In order to confirm that nationality was a good proxy for cultural orientation, Triandis and Gelfand’s (1998) abbreviated individualism-collectivism (I-C) scales were administered after completion of an unrelated filler task at the end of the study. Participants

were asked to indicate their degree of agreement with statements reflecting individualism and collectivism on seven-point scales ranging from *not at all* (1) to *very much* (7). The reliability of the I-C scales was adequate for the British (Individualism,  $\alpha = .72$ ; Collectivism,  $\alpha = .85$ ) and Chinese (Individualism,  $\alpha = .77$ ; Collectivism,  $\alpha = .85$ ) samples (full sample Individualism,  $\alpha = .81$ ; full sample Collectivism,  $\alpha = .87$ ). The I-C scales have been used in a variety of cultural groups in previous research (Kimmelmeier et al., 2003) including samples of Chinese nationals (e.g., Tjosvold, Law, & Sun, 2003), and measurement equivalence of these scales across different individualist and collectivist cultural groups has been demonstrated (e.g., Györkös et al., 2013; Li & Aksoy, 2007).

### *Results*

#### *Manipulation Checks*

Multiple regression analyses with nationality, group norm, and group member behaviour as independent variables and the manipulation check measures as dependent variables were conducted to test whether our experimental manipulations and national group characterisation were successful. Results revealed a significant effect for group norm on the group norm manipulation check ( $\beta = .92$ ,  $t(159) = 28.62$ ,  $p < .01$ ,  $d = 4.52$ ). As expected, participants in the collectivist group norm condition rated the group as more collectivist ( $M = 7.51$ ,  $SD = 0.91$ ) than participants in the individualist group norm condition ( $M = 2.77$ ,  $SD = 0.91$ ). A significant effect for the group member behaviour manipulation on group member behaviour manipulation check was found ( $\beta = .93$ ,  $t(159) = 32.47$ ,  $p < .01$ ,  $d = 5.13$ ). Individualist group member behaviour was rated significantly more individualist ( $M = 2.51$ ,  $SD = 1.09$ ) than collectivist group member behaviour ( $M = 7.50$ ,  $SD = 0.95$ ). Finally, there was a significant effect of nationality on the individualism-collectivism scales (Triandis & Gelfand, 1998). British participants scored higher on the individualist component ( $M = 4.84$ ,  $SD = 1.01$ ) than Chinese participants ( $M = 3.53$ ,  $SD = 1.25$ ;

$\beta = .50, t(159) = 7.19, p < .01, d = 1.14$ ). Analogously, Chinese participants scored higher on the collectivist component ( $M = 5.07, SD = 1.25$ ) than the British participants ( $M = 3.24, SD = 0.66; \beta = -.68, t(159) = -11.67, p < .01, d = 1.84$ ).

### *Group Member Evaluation*

The three-way interaction of the effect of group norm, group member behaviour, and nationality on group member evaluation was investigated using multiple regression analysis. Group member evaluation was regressed on dichotomous group norm, group member behaviour, and nationality variables, all two-way interaction terms, and the three-way interaction term. There was a significant main effect of group member behaviour ( $\beta = .27, t(154) = 5.08, p < .001, d = 0.82$ ) suggesting that there was an overall tendency for participants to favour collectivist ( $M = 4.93, SD = 1.78$ ) rather than individualist ( $M = 3.98, SD = 1.55$ ) behaviour. In addition, the data revealed a significant main effect for nationality ( $\beta = -.31, t(154) = -5.73, p < .001, d = 0.92$ ), with Chinese ( $M = 5.00, SD = 1.97$ ) participants rating group member behaviour more positively than British ( $M = 3.94, SD = 1.26$ ) participants. However, this effect was qualified by a significant three-way interaction between group norm, group member behaviour, and nationality ( $\beta = -.31, t(154) = -5.80, p < .001, d = 0.93$ ).

Separate regression analyses for group norm and group member behaviour on group member evaluation in each national group were conducted to probe the three-way interaction. The analyses yielded a significant two-way interaction for the Chinese sample ( $\beta = .61, t(75) = 9.55, p < .001$ ). Simple slope tests revealed that Chinese participants under a collectivist group norm evaluated collectivist group member behaviour more positively ( $M = 7.20, SD = 0.83$ ) than individualist group member behaviour ( $M = 2.62, SD = 0.81; \beta = .94, t(76) = 12.86, p < .001, d = 2.88$ ). Under an individualist group norm, however, there was no significant difference in Chinese participants' evaluation of collectivist ( $M = 4.97, SD = 0.81$ ) and individualist ( $M = 5.20, SD =$

1.11) group member behaviour ( $\beta = -.09$ ,  $t(76) = -0.75$ ,  $p = .520$ ,  $d = 0.17$ ). In addition, the Chinese sample rated individualist behaviour more positively when the group norm was individualist ( $M = 5.20$ ,  $SD = 1.11$ ) as opposed to collectivist ( $M = 2.62$ ,  $SD = 0.81$ ;  $\beta = -.81$ ,  $t(76) = -7.24$ ,  $p < .001$ ,  $d = 1.62$ ), and collectivist behaviour more positively when the group norm was collectivist ( $M = 7.20$ ,  $SD = 0.83$ ) as opposed to individualist ( $M = 4.97$ ,  $SD = 1.58$ ;  $\beta = .67$ ,  $t(76) = 6.26$ ,  $p < .001$ ,  $d = 1.40$ ).

Identical analyses for the British sample revealed a significant main effect for group norm ( $\beta = -.25$ ,  $t(76) = 2.26$ ,  $p = .027$ ,  $d = 0.50$ ), indicating that the British participants tended to evaluate group member behaviour more positively when the group norm was individualist ( $M = 4.24$ ,  $SD = 1.51$ ) as opposed to collectivist ( $M = 3.62$ ,  $SD = 0.86$ ). There was no main effect for group member behaviour or group norm x group member behaviour interaction effect.

### Discussion

In the present study, we examined the influence of cultural background on the previously observed phenomenon that the preference for collectivist behaviour in group members is attenuated when the group norm prescribes individualism (McAuliffe et al., 2003). We hypothesised that the attenuation effect would be moderated by cultural background, such that evaluations of hypothetical group members would be more polarised among individuals from a collectivist as opposed to individualist culture. This prediction was based on the notion that individuals from a collectivist background tend to show a greater sensitivity to contextual social cues (Oyserman et al., 2002). The appropriateness of behaviour within a certain context may be more salient, resulting in more positive evaluations of behaviour that is congruent and more negative evaluations of behaviour that is incongruent, with the group norm. In a similar vein, collectivist groups have been shown to distinguish more strongly between in-groups and out-groups than individualist groups (Triandis, 1995).

In keeping with prior findings, overall collectivist behaviour of a group member was evaluated more positively than individualist behaviour (McAuliffe et al., 2003). More importantly, however, only Chinese individuals showed the previously observed attenuation effect. The Chinese participants were influenced by the group norm when evaluating group members displaying behaviour consistent or inconsistent with group norms, while British participants were not. British participants may have been less sensitive to group norms which made them more accepting of norm-inconsistent behaviour, and led to a general preference for behaviour that subscribes to a group norm that is compatible with their broader cultural orientation (i.e. individualism).

Although a preference for a group norm that is concordant with their broader cultural norm may account for the absence of the attenuation effect in the British sample, it is unclear why this sample showed a different pattern of evaluations than McAuliffe et al.'s Australian sample. No information is given on the nationalities or cultural origins of their sample, but considering that Australia is a highly cultural-diverse nation, the sample possibly included participants from diverse cultural backgrounds, including those with a predominantly collectivist orientation, that may have influenced their findings. Hence, it may not be relevant to make direct comparisons between McAuliffe et al.'s sample and the British sample in the present study.

The present study opted to test British and Chinese students currently studying at a university in the UK, rather than testing two groups of students in their respective native countries. Both approaches have their limitations as well as advantages, and future research is needed to ensure that a complete picture of the relations in question is obtained, including groups of people who have no direct experience with other cultural backgrounds than their own. However, choosing Chinese students in the UK ensured that the two groups of participants were identical in terms of environmental factors and day-to-day events that impact on their lives. At the same time strict selection criteria were imposed for both groups, in order to establish groups with clear and distinct

cultural orientations. The obtained differences on the individualism-collectivism scale confirmed that the groups were statistically significantly different in terms of cultural orientation, which was the main variable of interest in the present research. Moreover, as societies become increasingly multicultural, exposure to, and experience with, diverse cultural backgrounds may become the norm rather than an exception, which means that studying cultural backgrounds in isolation may become increasingly difficult and may not reflect the actual diversity that people encounter in their daily lives. Additional measures such as the individualism-collectivism scale administered in the present study are therefore useful to verify cultural orientations that may be less clear-cut than in the past.

The present research has practical implications for various domains of human interaction in which cultural backgrounds differ across group members. Mixed cultural background groups are becoming increasingly common as societies become more diverse and globalized through migrant workforces and multinational companies setting up businesses in multiple countries. Therefore, it is important to be able to understand, predict and influence behaviour that arises from cultural differences. For instance, 'Western' companies in collectivist countries might be evaluated more favorably by local employees if the company management displayed collectivist behaviour. However, if circumstances do not allow for this, establishing an individualist group norm within the company might be the second best option to avoid less favorable evaluations by the employees from the collectivist culture. Similarly, in sport or educational contexts the present findings may help to tailor instructions and interpersonal leadership styles according to athletes' or students' cultural background.

In summary, our results suggest that individuals from a collectivist background are more sensitive to contextual information regarding the appropriateness of behaviour under a certain group norm, whereas individuals from an individualist background tend to show a preference for behaviour originating from a context in which the group norm corresponds with the cultural norm.

## References

- Forbes, G. B., Collinsworth, L. L., Zhao, P., Kohlman, S. & LeClaire, J. (2011). Relationships among individualism–collectivism, gender, and ingroup/outgroup status, and responses to conflict: A study in China and the United States. *Aggressive Behavior*, *37*, 302-314. doi:10.1002/ab.20395
- Györkös, C., Becker, J., Massoudi, K., Antonietti, J., Pocnet, C., de Bruin, G. P., & Rossier, J. (2013). Comparing the horizontal and vertical individualism and collectivism scale and the Auckland individualism and collectivism scale in two cultures: Switzerland and South Africa. *Cross-Cultural Research*, *47*, 310-331. doi: 10.1177/1069397112470371
- Hofstede, G. (1980). *Culture's Consequences*. Sage: Beverly Hills, CA.
- Hornsey, M. J., Jetten, J., McAuliffe, B. J., & Hogg, M. A. (2006). The impact of individualist and collectivist group norms on evaluations of dissenting group members. *Journal of Experimental Social Psychology*, *42*, 57-68. doi:10.1016/j.jesp.2005.01.006
- Jetten, J., McAuliffe, B. J., Hornsey, M. J., & Hogg, M. A. (2006). Differentiation between and within groups: The influence of individualist and collectivist group norms. *European Journal of Social Psychology*, *36*, 825-843. doi: 10.1002/ejsp.322
- Kimmelmeier, M., Burnstein, E., Krumov, K., Genkova, P., Kanagawa, C., Hirshberg, M. S., ... Noels, K. A. (2003). Individualism, collectivism, and authoritarianism in seven societies. *Journal of Cross-Cultural Psychology*, *34*, 304-322. doi: 10.1177/0022022103253183
- Li, F., & Aksoy, L. (2007). Dimensionality of individualism-collectivism and measurement equivalence of Triandis and Gelfand's scale. *Journal of Business and Psychology*, *21*, 313-329. doi: 10.1007/s10869-006-9031-8
- Marques, J. M., Yzerbyt, V., & Leyens, J. P. (1988). The "Black Sheep Effect": Extremity of judgments towards ingroup members as a function of group identification. *European Journal of Social Psychology*, *18*, 1-16. doi:10.1002/ejsp.2420180102

- McAuliffe, B. J., Jetten, J., Hornsey, M. J., & Hogg, M. A. (2003). Individualist and collectivist norms: When it's ok to go your own way. *European Journal of Social Psychology, 33*, 57-70. doi: 10.1002/ejsp.129
- Oyserman, D., Coon, H. M., & Kimmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3-72. doi: 10.1037//0033-2909.128.1.3
- Tajfel, H., Billig, M., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology, 1*, 149-177.  
doi:10.1002/ejsp.2420010202
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In W. G. Austin, & S. Worchel (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall Publishers.
- Tjosvold, D., Law, K. S., & Sun, H. F. (2003). Collectivistic and individualistic values: Their effects on group dynamics and productivity in China. *Group Decision and Negotiation, 12*, 243-263. doi:10.1023/A:1023383200180
- Triandis H. C. 1993. Collectivism and individualism as cultural syndromes. *Cross-Cultural Research, 27*, 155–180. doi:10.1177/106939719302700301
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C. (1999). Cross-cultural psychology. *Asian Journal of Social Psychology, 2*, 127-143.  
doi:10.1111/1467-839X.00029
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology, 74*, 118-128.  
doi:10.1037/0022-3514.74.1.118
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.

## Footnotes

<sup>1</sup> We thank an anonymous reviewer for this suggestion.

<sup>2</sup> In the pilot study, five Chinese and British participants rated the general group dynamic operating among the actors in the videos. Participants were asked to indicate on 9-point scales whether the group norm is individualist (item 1) or collectivist (item 2). Ratings were completely polarised toward the group norm being depicted in the video, such that participants rated the video depicting an individualist group norm as significantly higher in individualism than collectivism, and the collectivist group norm video significantly higher in collectivism than individualism.

Martin S. Hagger, PhD, is John Curtin Distinguished Professor and Professor of Psychology in the School of Psychology and Speech Pathology at Curtin University, Perth, Australia. He is director of the Health Psychology and Behavioural Medicine Research Group and editor-in-chief of *Health Psychology Review* and *Stress and Health* journals.

Panagiotis Rentzelas, PhD, received his undergraduate and doctoral degrees from the Universities of Essex and Nottingham, respectively. His most recent academic position was as postdoctoral researcher in the School of Psychology, University of Essex. This article reports research completed as part of his doctorate under the supervision of Martin Hagger.

Severine Koch, PhD, received her doctoral degree in social psychology from Radboud University Nijmegen, The Netherlands. She currently works as a postdoctoral research associate in the School of Psychology and Speech Pathology at Curtin University, Perth, Australia.