



# The mediating role of negative affect on the relationship between emotional intelligence abilities and aggressive behaviour levels

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## Introduction

- ❖ The present research aimed to study the mechanisms underlying the relationship between aggressive behaviour and individual levels of emotional intelligence (EI).
- ❖ The influence of emotion on aggression is a well-known phenomenon (Anderson and Bushman, 2002). Particularly, EI has been previously linked with the management and control of aggressive behaviours (García-Sancho et al., 2014).
- ❖ Emotional intelligence is a construct that links emotion and cognition, and it is defined as the ability to perceive, use, understand, and manage emotions (Mayer et al., 2016).
- ❖ In this study we focused on the mediator role of negative affect explaining the aggression-emotional intelligence relationship. In addition, to carry out a more detailed study of this issue, we investigate the effect of each one of the MSCEIT branches (EI abilities) on different dimensions of aggression (physical, verbal, anger, and hostility).

## Method

- ❖ Three hundred and ninety-five participants took part in the study. Participants were assessed on ability emotional intelligence (EI), negative affect (NA), and aggression by the Mayer-Salovey-Caruso Emotional Intelligence Test, the Positive and Negative Affect Schedule, and the Buss-Perry Aggression questionnaires, respectively
- ❖ Two path analyses were used to explore the EI branches directly related to aggression and indirectly related via negative affect (PANAS NA). The first path analysis study the relationship between the EI branches and total aggression score (BPAQ total). The second path analysis was performed to evaluate the relationship between the EI branches and the four aggression dimensions of BPAQ (physical aggression, verbal aggression, anger and hostility).

## Results

### First Path Analysis (with BPAQ as total score)

- ❖ The resulting revised model<sup>1</sup> consisted of the following significant direct relationships (see Figure 1 and Table 1): MSCEIT perceiving branch with PANAS NA, MSCEIT managing branch with BPAQ total, and PANAS NA with BPAQ total.
- ❖ In addition, MSCEIT perceiving was indirectly associated with BPAQ total through PANAS NA.
- ❖ The fit of this revised model was adequate, GFI = .99, CFI = .99, and RMSEA = .012.

Note<sup>1</sup> In the revised model, paths found to be non-significant were progressively excluded from the original model in order to provide a more adequate and parsimonious model.

Figure 1. Final revised model of the first path analysis with standardized path coefficients and explained variance for variables included in the model.

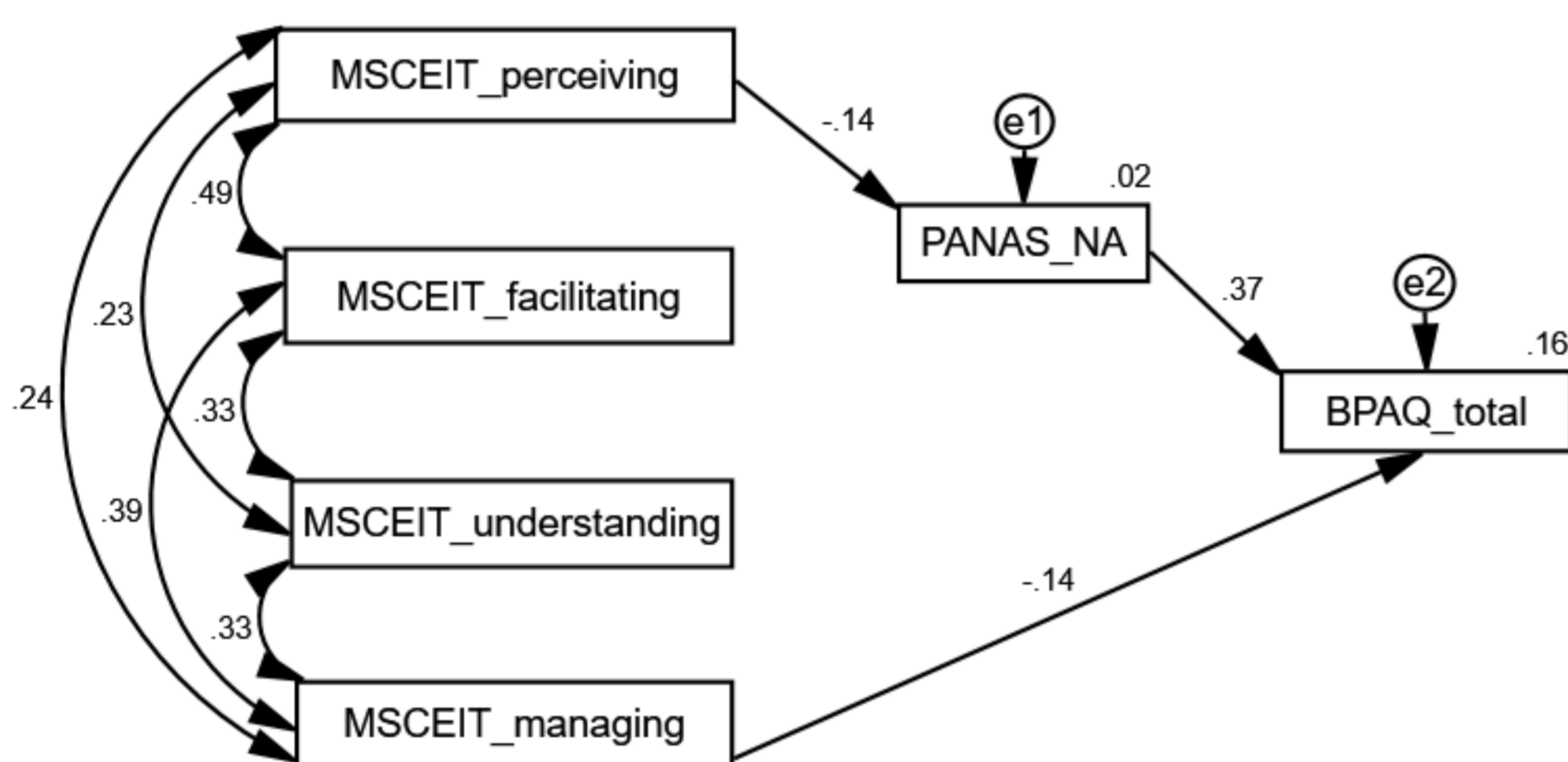


Table 1. Standardized  $\beta$  coefficients and  $p$  values (in parentheses) for the significant direct and indirect effects of the first path analysis for the revised model.

| Direct Effects      | BPAQ total   | PANAS NA     | Indirect Effects through PANAS NA | BPAQ total   |
|---------------------|--------------|--------------|-----------------------------------|--------------|
| MSCEIT perceiving   | —            | -.138 (.011) | MSCEIT perceiving                 | -.051 (.007) |
| MSCEIT facilitating | —            | —            | MSCEIT facilitating               | —            |
| MSCEIT underst.     | —            | —            | MSCEIT underst.                   | —            |
| MSCEIT managing     | .370 (.005)  | —            | MSCEIT managing                   | —            |
| PANAS NA            | -.137 (.009) | —            |                                   |              |

### Second Path Analysis (including all the BPAQ dimensions)

- ❖ The resulting revised model<sup>1</sup> consisted of the following significant direct relationships (see Figure 2 and Table 2): the perceiving branch of the MSCEIT showed a significant direct relationship with PANAS NA. MSCEIT managing was directly associated with BPAQ physical, verbal and hostility. PANAS NA revealed direct associations with the dimensions physical, verbal, hostility, and anger.
- ❖ With respect to indirect effects, through PANAS NA, MSCEIT perceiving was indirectly related to the four dimensions of the BPAQ.
- ❖ The revised model presented a good fit to the data, GFI = .99, CFI = 1.00, and RMSEA < .001.

Figure 2. Final revised model of the second path analysis with standardized path coefficients and explained variance for variables included in the model.

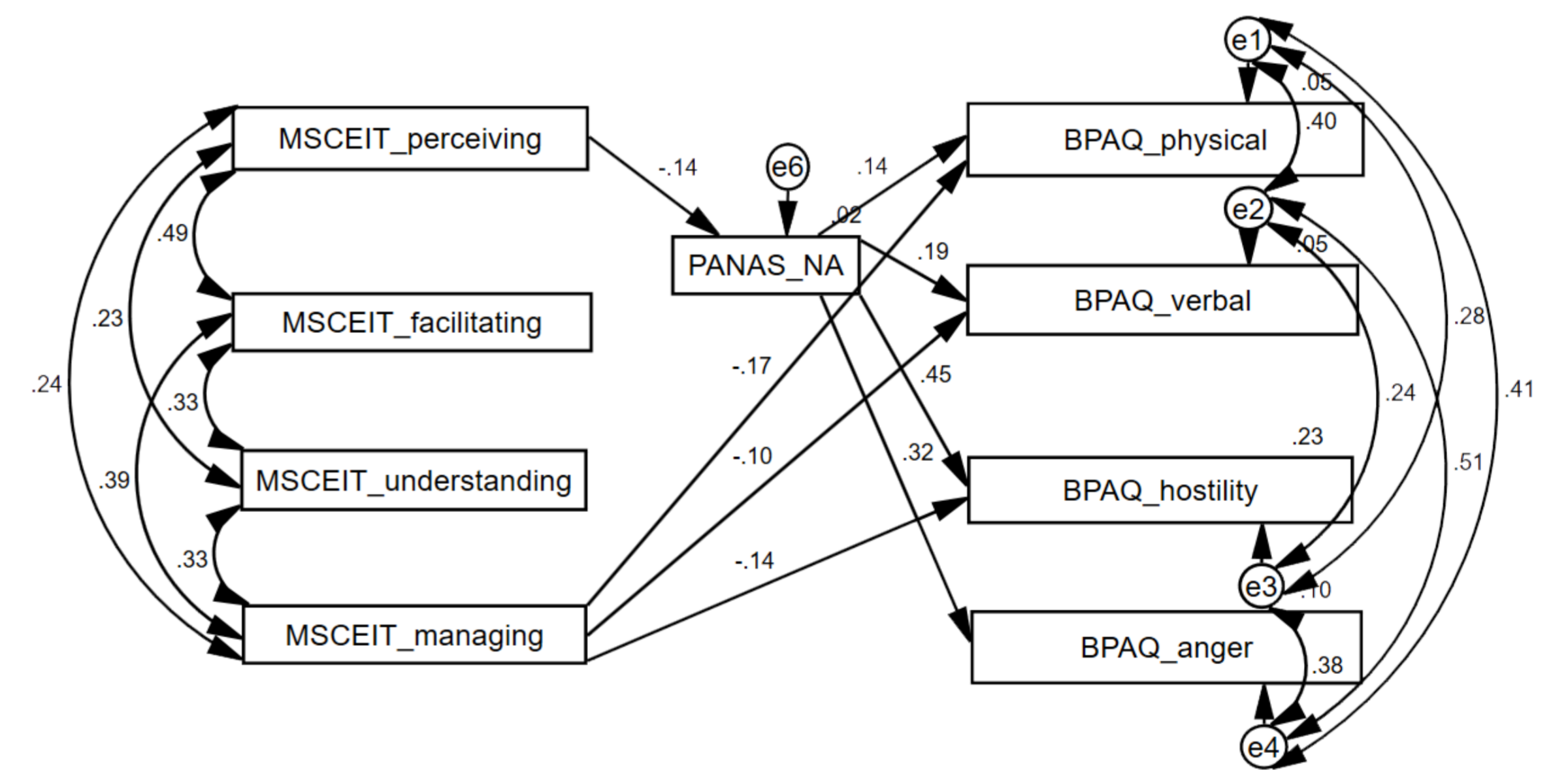


Table 2. Standardized  $\beta$  coefficients and  $p$  values (in parentheses) for the significant direct and indirect effects of the second path analysis for the revised model.

| Direct Effects              | BPAQ physical | BPAQ verbal  | BPAQ hostility | BPAQ anger   | PANAS NA     |
|-----------------------------|---------------|--------------|----------------|--------------|--------------|
| MSCEIT perceiving           | —             | —            | —              | —            | -.138 (.011) |
| MSCEIT facilitating         | —             | —            | —              | —            | —            |
| MSCEIT underst.             | —             | —            | —              | —            | —            |
| MSCEIT managing             | -.173 (.020)  | -.101 (.012) | -.144 (.005)   | —            | —            |
| PANAS NA                    | .138 (.016)   | .193 (.009)  | .448 (.009)    | .319 (.012)  | —            |
| Indirect Effects through NA | BPAQ physical | BPAQ verbal  | BPAQ hostility | BPAQ anger   |              |
| MSCEIT perceiving           | -.019 (.007)  | -.027 (.009) | -.062 (.008)   | -.044 (.006) |              |

## Discussion

- ❖ The results revealed a negative relationship between aggression and EI, but this relationship depended on the type of EI branches, aggression dimensions, and the influence of NA.
- ❖ Emotional management ability showed a direct relationship with aggression, while emotional perception ability presented an indirect relationship with aggression through the effect of NA. These EI abilities were related to different aggression dimensions, highlighting the direct relationship with physical aggression.
- ❖ This research offers a better understanding of the psychological processes explaining aggression. The inclusion of our findings in the design of prevention and treatment programs could be of great help in the controlling of aggressive behaviour.

Anderson, C. A. & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, 53.

García-Sancho, E., Salguero, J.M., & Fernández-Berrocal, P. (2015). Deficits in facial affect recognition and aggression: a systematic review. *Ansiedad y Estrés*, 21, 1-20.

Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, 8(4), 290-300.

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