

RISK FACTORS RELATED TO THE DEVELOPMENT AND PERSISTENCE OF PAIN IN ADOLESCENTS: A DELPHI STUDY

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Background and Aim

Musculoskeletal pain affects between 4 and 40% of adolescents, is more present in girls and with increasing age¹. Data from the WHO transnational collaborative Health Behaviour in School-aged Children study, based on representative samples of adolescents aged 11, 13 and 15 years in 42 countries, revealed that 44% of adolescents report chronic weekly pain in the previous six months².

Despite paediatric pain has gained attention in recent decades and a multitude of studies are being conducted on this phenomenon, a consensus on the primary risk factors (RFs) for the development and persistence of pain in adolescents has not been reached yet. This study aims to establish a consensus among experts on the most significant RFs for the onset and persistence of pain in adolescents.

Materials and Methods

A modified international e-Delphi study consisting of 4 rounds was conducted. A panel of experts in paediatric pain and/or pain risk factors was recruited. The experts were provided with two lists of potential RFs (one for the onset, one for the persistence of pain) and were asked to rate the importance of each RF on a 5-point Likert scale: "not important", "low importance", "neutral", "important", "very important". After the first round, the experts had the opportunity to suggest further items to be added to the list.

In each subsequent round, experts were asked to reconsider their answers in light of other experts' evaluations and comments. It was defined a priori that the study would have been terminated after four rounds and that each item would have reached consensus when at least 70% (\geq) of the experts would have provided the same rating. Furthermore, each item that did reach the minimum level of consensus was excluded from the list for the next round.

Results

The process of this international modified e-Delphi study is summarised in Figure 1.

Forty-six RFs (out of 74) reached consensus for pain onset: four were considered very important, twenty-nine important and thirteen neutral. Regarding the persistence of pain, consensus was reached on 56 out of 88 RFs. Eleven of these were found to be very important, thirty important and twelve neutral.

Figure 2 and Figure 3 show the evolution of agreement for the items that reached consensus for onset and persistence of pain, respectively.

Conclusions

This study led to a consensus among experts on the importance of several risk factors for the development and persistence of pain in adolescents.

This consensus will be valuable in informing the design of future longitudinal studies and preventive interventions.

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- Gobina I, Villberg J, Välimaa R, et al. Prevalence of self-reported chronic pain among adolescents: Evidence from 42 countries and regions. *Eur J Pain*. 2019;23(2):316-326. doi:10.1002/ejp.1306

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Figure 1

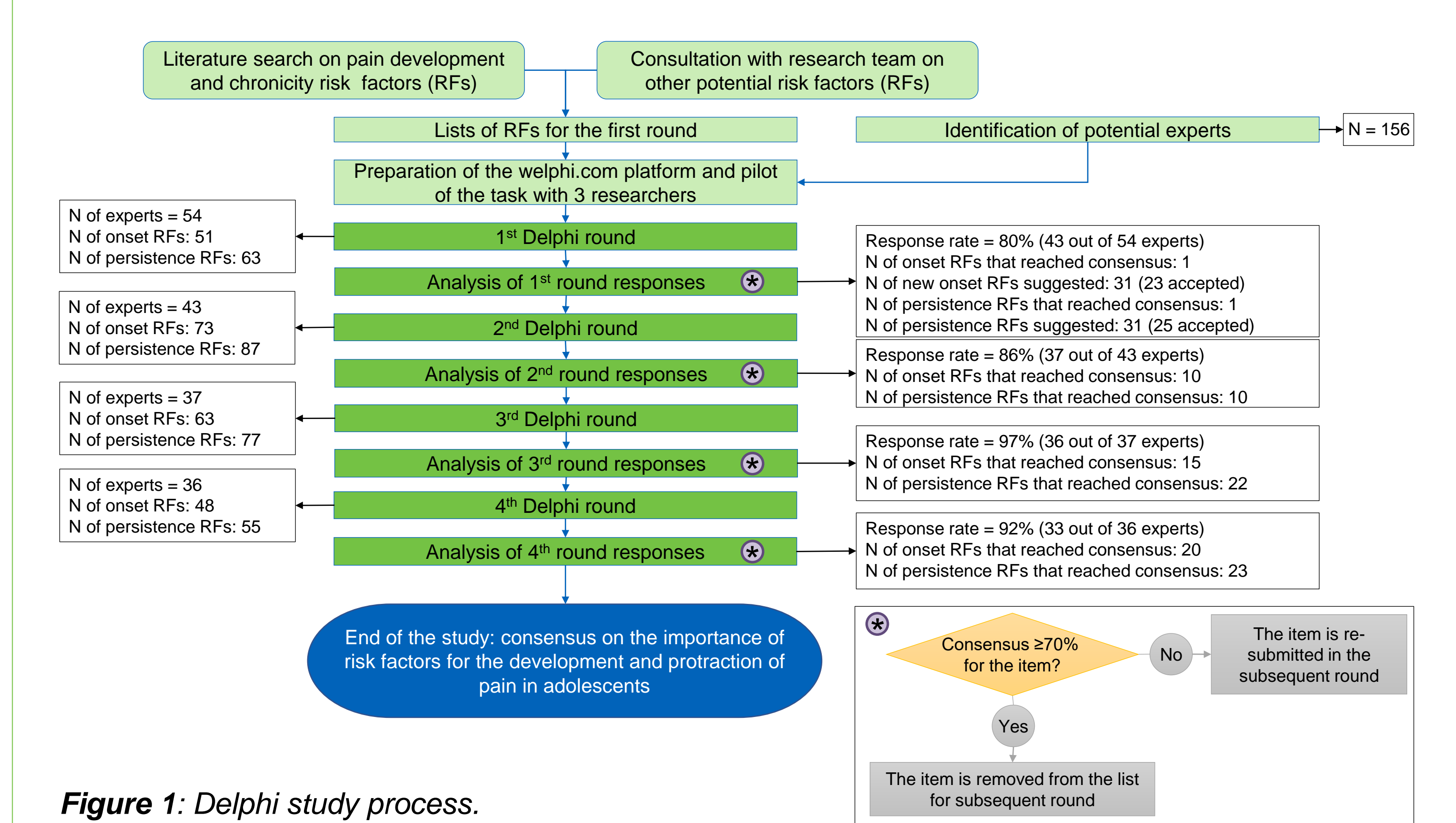


Figure 1: Delphi study process.

Figure 2

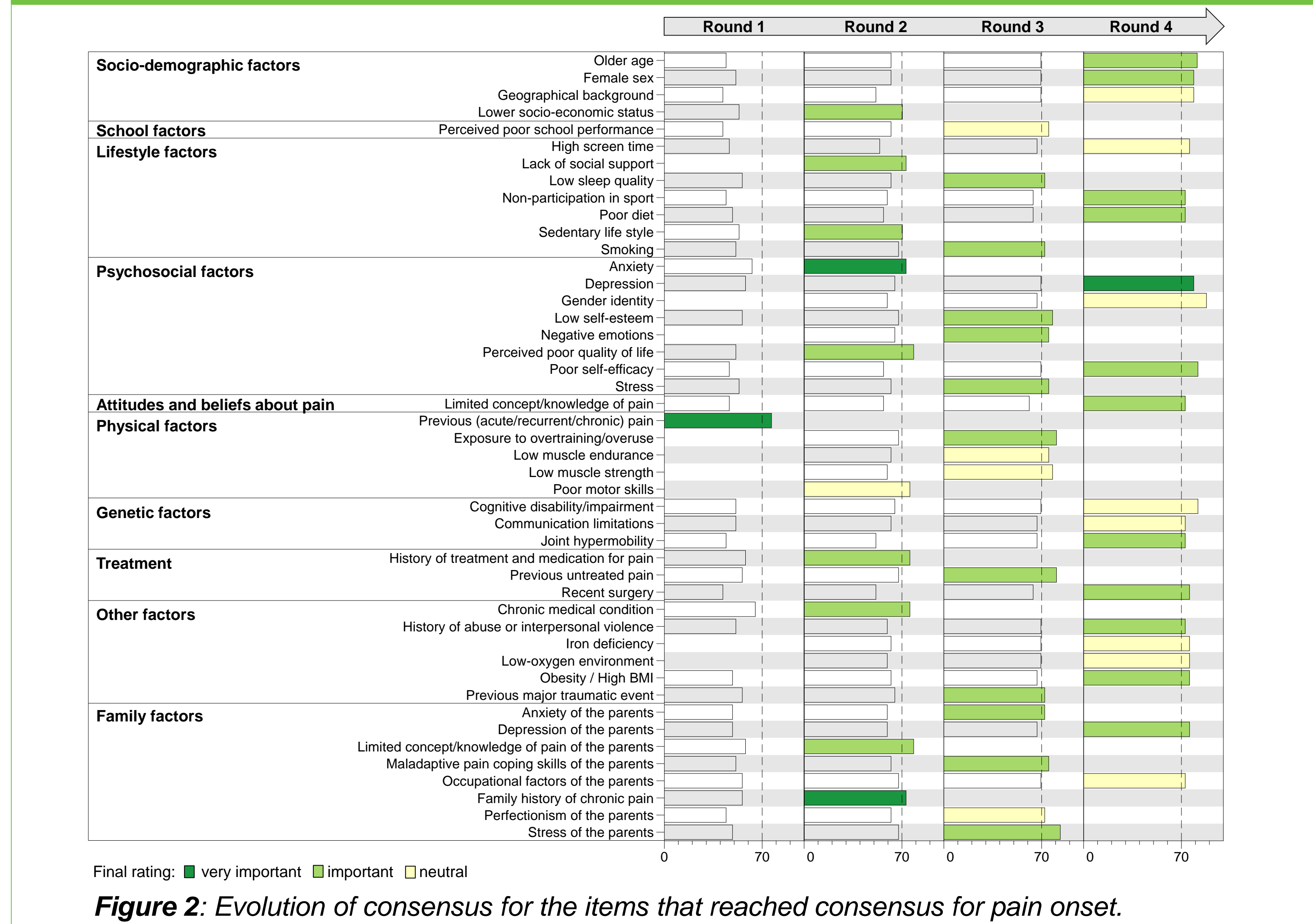


Figure 2: Evolution of consensus for the items that reached consensus for pain onset.

Figure 3

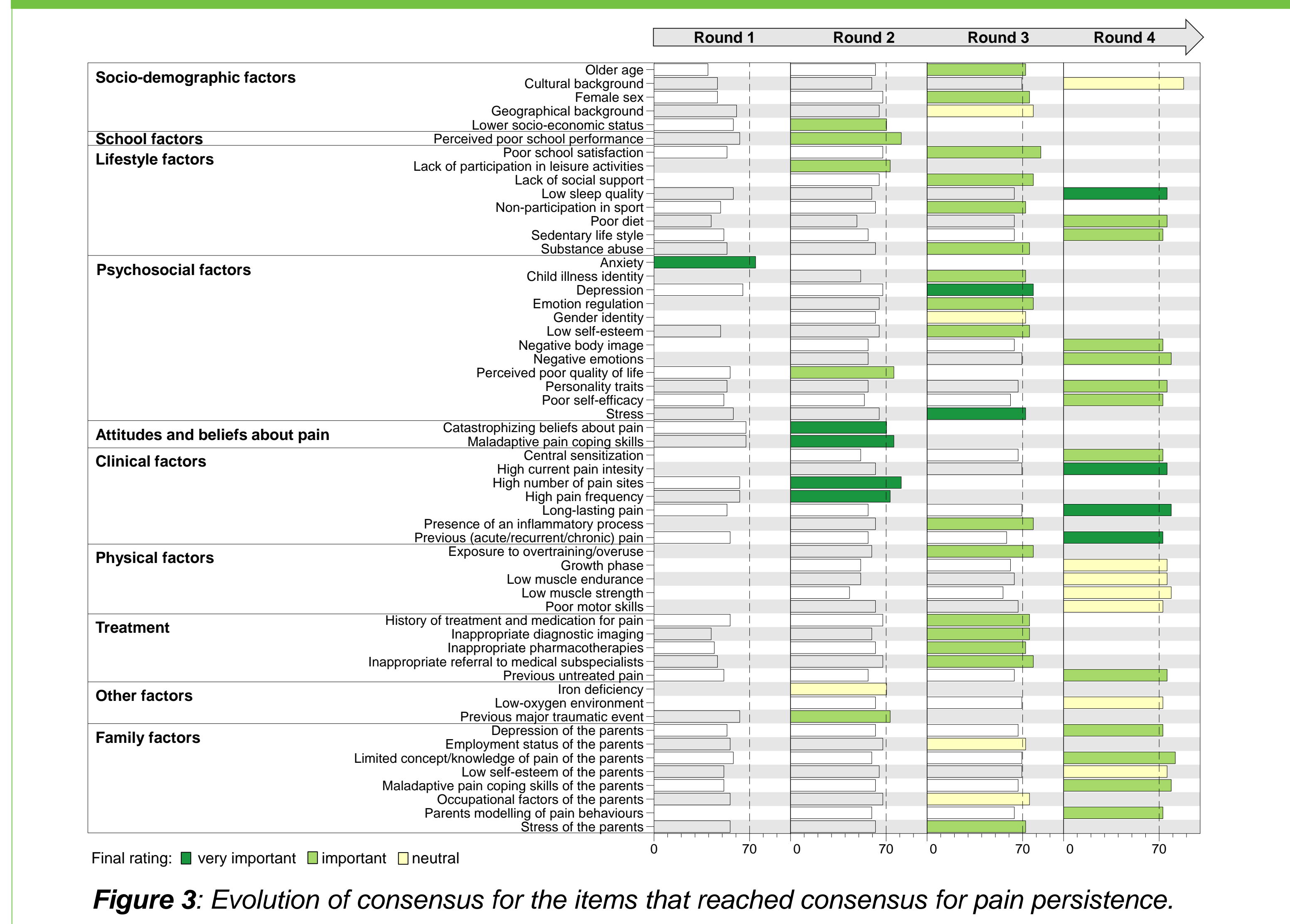


Figure 3: Evolution of consensus for the items that reached consensus for pain persistence.