

### Additional file 3: Quality Assessment of the studies using Hawker's tool

| Author                      | Abstract and title | Introduction and aims | Method and data | Sampling | Data analysis | Ethics and bias | Results | Transferability/ Generalizability | Implications and usefulness | Total score |
|-----------------------------|--------------------|-----------------------|-----------------|----------|---------------|-----------------|---------|-----------------------------------|-----------------------------|-------------|
| Hvdit et al. (2016)         | 4                  | 4                     | 3               | 2        | 4             | 2               | 3       | 2                                 | 3                           | <b>27</b>   |
| Barcley et al. (2003)       | 3                  | 3                     | 3               | 3        | 2             | 1               | 4       | 2                                 | 1                           | <b>22</b>   |
| Becker et al. (2010)        | 3                  | 4                     | 3               | 3        | 3             | 1               | 4       | 3                                 | 2                           | <b>26</b>   |
| Wakefield et al. (1993)     | 2                  | 3                     | 2               | 2        | 2             | 1               | 3       | 3                                 | 2                           | <b>20</b>   |
| Taubert et al. (2011)       | 4                  | 4                     | 4               | 2        | 2             | 1               | 4       | 3                                 | 1                           | <b>25</b>   |
| Straatman and Miller (2013) | 4                  | 4                     | 3               | 2        | 2             | 1               | 3       | 3                                 | 2                           | <b>24</b>   |
| Slort et al. (2011)         | 4                  | 4                     | 3               | 2        | 3             | 1               | 2       | 2                                 | 4                           | <b>25</b>   |
| Shipman et al. (2002)       | 3                  | 2                     | 2               | 3        | 3             | 1               | 3       | 2                                 | 1                           | <b>20</b>   |
| Shipman et al. (2001)       | 3                  | 3                     | 3               | 2        | 4             | 1               | 3       | 2                                 | 2                           | <b>23</b>   |
| Selman et al. (2017)        | 4                  | 4                     | 4               | 4        | 4             | 2               | 4       | 4                                 | 2                           | <b>32</b>   |

|                                      |   |   |   |   |   |   |   |   |   |           |
|--------------------------------------|---|---|---|---|---|---|---|---|---|-----------|
| <b>Samaroo (1993)</b>                | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 2 | <b>19</b> |
| <b>Rhee et al. (2008)</b>            | 4 | 4 | 3 | 3 | 4 | 2 | 2 | 2 | 4 | <b>28</b> |
| <b>Rhee et al. (2018)</b>            | 4 | 4 | 2 | 3 | 3 | 1 | 2 | 2 | 4 | <b>25</b> |
| <b>Pype at al. (2014)</b>            | 4 | 3 | 4 | 3 | 4 | 1 | 4 | 4 | 3 | <b>30</b> |
| <b>Pype at al. (2014)</b>            | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 3 | 3 | <b>31</b> |
| <b>O'Connor and Breen (2014)</b>     | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | <b>30</b> |
| <b>O'Connor and Le-Steere (2006)</b> | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 3 | <b>30</b> |
| <b>Meijler et al. (2005)</b>         | 4 | 3 | 3 | 2 | 2 | 1 | 3 | 3 | 4 | <b>25</b> |
| <b>Lloyd-Williams et al. (2006)</b>  | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 3 | 2 | <b>20</b> |
| <b>Jhonston et al. (2001)</b>        | 3 | 3 | 3 | 2 | 1 | 1 | 3 | 4 | 2 | <b>23</b> |
| <b>Hermann et al. (2019)</b>         | 4 | 4 | 4 | 2 | 4 | 4 | 3 | 3 | 2 | <b>30</b> |
| <b>Junger et al. (2010)</b>          | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 2 | <b>27</b> |

|                                  |   |   |   |   |   |   |   |   |   |           |
|----------------------------------|---|---|---|---|---|---|---|---|---|-----------|
| <b>Maggie and Koffman (2015)</b> | 4 | 4 | 3 | 2 | 4 | 2 | 3 | 3 | 3 | <b>28</b> |
|----------------------------------|---|---|---|---|---|---|---|---|---|-----------|