Trust me, this isn’t scary! How trust affects social emotional influence in threatening situations

Eleanor Lawrence-Wood
B. BSc. (Hons)

School of Psychology
Faculty of Social and Behavioural Sciences
Flinders University

A thesis submitted to Flinders University in fulfilment of the requirements for the degree of Doctor of Philosophy

March 2011
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>i</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>THESIS SUMMARY</td>
<td>viii</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>x</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>xi</td>
</tr>
<tr>
<td>CHAPTER 1. LITERATURE REVIEW</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Overview</td>
<td>2</td>
</tr>
<tr>
<td>1.2 Fear, threat, and affiliation</td>
<td>2</td>
</tr>
<tr>
<td>1.3 Social emotional influence</td>
<td>7</td>
</tr>
<tr>
<td>1.3.1 Emotion contagion</td>
<td>7</td>
</tr>
<tr>
<td>1.3.2 Social referencing</td>
<td>9</td>
</tr>
<tr>
<td>1.3.3 Conformity influence</td>
<td>11</td>
</tr>
<tr>
<td>1.3.4 Social appraisal</td>
<td>12</td>
</tr>
<tr>
<td>1.3.5 Social comparison</td>
<td>16</td>
</tr>
<tr>
<td>1.4 Identity as a possible moderator of social emotional influence</td>
<td>19</td>
</tr>
<tr>
<td>1.4.1 Expertise</td>
<td>19</td>
</tr>
<tr>
<td>1.4.2 Relationship with the other</td>
<td>21</td>
</tr>
<tr>
<td>1.4.3 Social Identity</td>
<td>22</td>
</tr>
<tr>
<td>1.5 The EASI model</td>
<td>24</td>
</tr>
<tr>
<td>1.6 The importance of appraisal</td>
<td>25</td>
</tr>
<tr>
<td>1.7 Summary and thesis structure</td>
<td>26</td>
</tr>
<tr>
<td>CHAPTER 2. SOCIAL APPRAISAL IN AN EVALUATIVE THREAT</td>
<td>28</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>28</td>
</tr>
</tbody>
</table>
3.2.3 Results and Discussion ........................................................................................................60
  3.2.3.1 Manipulation checks .........................................................................................................60
  3.2.3.2 Main analyses ..................................................................................................................61
    3.2.3.2.1 Social emotional influence .......................................................................................61
    3.2.3.2.2 Moderating effects of trust ......................................................................................64
3.3 Study 2b ..................................................................................................................................72
  3.3.1 Hypotheses ........................................................................................................................73
  3.3.2 Method ................................................................................................................................74
    3.3.2.1 Participants .................................................................................................................74
    3.3.2.2 Design .........................................................................................................................74
    3.3.2.3 Materials ....................................................................................................................74
    3.3.2.4 Procedure ...................................................................................................................75
  3.3.3 Results and Discussion ........................................................................................................75
    3.3.3.1 Manipulation checks ....................................................................................................75
    3.3.3.2 Main analyses ..............................................................................................................76
      3.3.3.2.1 Social emotional influence ....................................................................................78
      3.3.3.2.2 Trust in friend response .........................................................................................80
      3.3.3.2.3 Moderating effects of trust ....................................................................................80
3.4 General discussion ..................................................................................................................87

CHAPTER 4. THE EFFECTS OF TRUST ON SOCIAL APPRAISAL IN A
REALISTIC THREAT SITUATION ..................................................................................................92
  4.1 Introduction ............................................................................................................................92
  4.2 Study 3a ..................................................................................................................................95
    4.2.1 Hypotheses .......................................................................................................................97
    4.2.2 Method .............................................................................................................................98
      4.2.2.1 Participants ...............................................................................................................98
4.2.2.2 Design ............................................................................................................. 99
4.2.2.3 Materials ...................................................................................................... 99
4.2.2.4 Procedure .................................................................................................. 100
4.2.3 Results and discussion .................................................................................. 101
  4.2.3.1 Manipulation checks ............................................................................... 101
  4.2.3.2 Main analyses ......................................................................................... 101
    4.2.3.2.1 Social appraisal model ..................................................................... 103
    4.2.3.2.2 Control group comparisons .............................................................. 104
  4.2.4 Emotion contrast (compared to assimilation) ............................................ 108
4.3 Study 3b ............................................................................................................. 109
  4.3.1 Hypotheses .................................................................................................. 110
  4.3.2 Method ....................................................................................................... 111
    4.3.2.1 Participants .......................................................................................... 111
    4.3.2.2 Materials .............................................................................................. 111
    4.3.2.3 Procedure ............................................................................................ 111
  4.3.3 Quantitative Results and Discussion .......................................................... 112
    4.3.3.1 Manipulation checks .......................................................................... 112
    4.3.3.2 Main analyses ...................................................................................... 113
    4.3.3.3 Perceived similarity ............................................................................ 115
  4.3.4 Qualitative Data .......................................................................................... 116
    4.3.4.1 Coding protocol .................................................................................. 116
    4.3.4.2 Hypotheses .......................................................................................... 118
    4.3.4.3 Results and Discussion ....................................................................... 119
      4.3.4.3.1 Differentiation comparison ............................................................... 119
      4.3.4.3.2 Evaluation of friend response ......................................................... 120
  4.4 General discussion ........................................................................................... 124
CHAPTER 5. GENERAL DISCUSSION

5.1 Summary of research findings ................................................................. 127
5.2 Social appraisal under threat ................................................................. 132
5.3 Theoretical implications ........................................................................... 135
5.3 Practical applications ............................................................................... 139
5.4 Methodological limitations ..................................................................... 141
5.5 Future directions ..................................................................................... 143
5.6 Conclusion ............................................................................................... 144

REFERENCES ................................................................................................. 147

APPENDIX A ................................................................................................. 160

Materials – Study 1 ..................................................................................... 160

APPENDIX B ................................................................................................. 177

Materials – Studies 2a and 2b ...................................................................... 177

APPENDIX C ................................................................................................. 190

Materials – Studies 3a and 3b ...................................................................... 190

APPENDIX d ................................................................................................. 202

Narrative coding protocol and response examples – Study 3b ................. 202
Table 2.1. Means (and standard deviations) for perceived threat and reported fear as a function of confederates response and time .......................................................... 39

Table 2.2. Tests of mediation and associated $\beta$ values for the social appraisal and the emotion contagion models of social emotional influence ........................................ 41

Table 3.1. Means (and standard deviations) for perceived threat and reported fear as a function of time and friend’s response ............................................................... 62

Table 3.2. Summary of results from hierarchical regression analyses of the moderating effects of trust on each path of the mediated relationship between friend response and fear change ........................................................................ 66

Table 3.3. Means (and standard deviations) for perceived threat, reported fear and positive emotion as a function of time and friend’s response ........................................ 77

Table 3.4 Tests of mediation (and associated $\beta$ values) of the relationship between friend response and participant’s change in emotion by perceived threat .......... 79

Table 3.5. Summary of results from hierarchical regression analyses of the moderating effects of trust on each path of the mediated relationship between friend response and emotion change ........................................................................ 82

Table 4.1. Means (and standard deviations) for perceived threat and reported fear as a function of trust condition and friend’s response ........................................ 103

Table 4.2. Means (and standard deviations) for perceived threat and reported fear as a function of trust condition and friend’s response ........................................ 114

Table 4.3. Inter-rater reliability coefficients for narrative coding .......................... 118

Table 4.4. Frequencies of questioning and acceptance responses for each condition .......................................................................................................................... 122
Figure 3.1. Mediating effects of perceived threat on the relationship between friend response and fear change ..............................................................65

Figure 3.2. Regression slopes for the moderating effects of trust on the relationship between friend response and fear decrease ........................................67

Figure 3.3. Regression slopes for moderating effects of trust on the relationship between threat reduction and fear reduction ........................................69

Figure 3.4. Mediating effects of threat perception on the relationship between friend response and emotion change .............................................................81

Figure 3.5. Regression slopes for the moderating effects of trust on Path A for fear change .........................................................................................83

Figure 3.6. Regression slopes for the moderating effects of trust on Path B ..........................................................84

Figure 3.7. Regression slopes for the moderating effects of trust on Path B for positive emotion change ........................................................................85

Figure 4.1. Mean perceived threat (with standard errors) for each condition ..........105

Figure 4.2. Mean fear response (with standard errors) for each condition ..........106

Figure 5.1. Model of the process of social appraisal in a threatening situation for less trusted and highly trusted friends ........................................133
THESIS SUMMARY

The aim of this thesis was to investigate social emotional influence in threatening situations. It examined how trust in a friend’s response that varied in level of fear, influenced people’s experiences of fear.

Study 1 established the occurrence, outcome and process of social emotional influence in an evaluative threat situation, through an experiment and interviews. Participants were exposed to a real evaluative threat situation, with a confederate who acted anxious or calm. Results showed an emotion contrast effect whereby participant anxiety decreased in the presence of an anxious confederate. This effect was mediated by a change in threat appraisals, providing evidence for a social appraisal explanation. Interview data suggested that wanting to be alone versus wanting to affiliate was determined by factors reflecting interpersonal trust, and level of trust in the response of another person could impact on that other’s influence.

On the basis of the qualitative findings from study 1, studies 2a and 2b explored the possible role of trust on social appraisal, this time in relation to a physical threat (an objective threat in study 2a and an ambiguous threat in study 2b), using a scenario methodology. Emotion assimilation, rather than contrast as seen in study 1, was the key outcome in both experiments. The presence of a less fearful friend was associated with a decrease in participant fear, while fear remained high in the presence of a highly fearful friend. The difference in the direction of effects observed in these studies compared with study 1 can be attributed to differences in the identity of the other- a friend rather than a stranger. Importantly, the effects of the friend were moderated by the extent to which their fear response was trusted, such that as trust increased so too did emotion assimilation.
As trust was found to moderate the effects of social appraisal in 2 experiments, this variable was manipulated in studies 3a and 3b. A scenario describing a realistic threat was used, and trust in a friend was manipulated through information about their ‘usual’ behaviour. Results showed an interaction between the level of fear exhibited by the friend and the extent to which they were trusted. Under conditions of high trust emotion confirmation or assimilation was observed whereas under conditions of low trust emotion contrast or no influence occurred. These findings were replicated in a follow-up study using a think-aloud approach, which also examined the process underlying the effects of trust.

Results suggested that people were motivated to reduce their fear where possible, and social appraisal involved different thought processes dependent on level of trust in the friend. When trust was high, social emotional influence occurred via a process of questioning and acceptance of the friend’s response as valid, resulting in emotion assimilation or confirmation. When trust was low, there was an absence of acceptance. The presence of questioning and differentiation led to emotion contrast, and where there was just questioning there was reduced influence. On the basis of these findings a model of social appraisal regarding fear in threatening situations was developed.
DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Eleanor Lawrence-Wood, B. BSc. (Hons)
AKNOWLEDGEMENTS

One engagement, wedding, honeymoon, house demolition, house construction, and a baby later …

To my supervisor, Mariëtte Berndsen, my sincere thanks and gratitude for all your guidance and support in getting my thesis completed- especially in the face of all the other things going on in my life!

Nova…our viridius horribilus discussions kept me sane at the times I needed it most. Thankyou for laughing LOUDLY with me in the corridor…you’re the best quasi-bridesmaid a girl could ask for. Anna Mc and Sarah –my own personal ‘in-office’ (and Danielle and Anna M- my ‘out of office’) therapy team … I couldn’t imagine going through this with a better group of people.

The wonderful Karen S, Karen Y and Sarah at Flinders- you guys rock- thanks for just being wonderful, ladies. To the fab people who helped me with data entry, transcribing and coding interviews, and running experiments- Anna J, Suzana, and Liz- Thankyou!

My wonderful mum for talking me down so many times- and for helping with all of life’s little practicalities. My dad for telling me to ‘nurture myself”…even though I didn’t necessarily follow his advice, it was good for the soul to hear it. …And to all the rest of my family and friends- I couldn’t have done any of this without your love and support….and endless ‘how’s that PhD coming along’ enquiries!

Finally, this is for my husband Roland and my baby boy Jack- the two loves of my life. Thankyou for loving and supporting me unconditionally…and for helping me achieve this- I can quite safely say ‘Never Again’!