

# Anxiety and fear

## Psychological aspects of blood donation

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## Anxiety and fear

- Fear of needles
  - Fear of blood
  - Fear of pain
  - Fear of fainting
  - Fear of deferral
  - Fear of medical environments
- 
- Nervousness
  - Tension



## Why is it important to study anxiety in blood donors?

We want our donors to feel as comfortable as possible



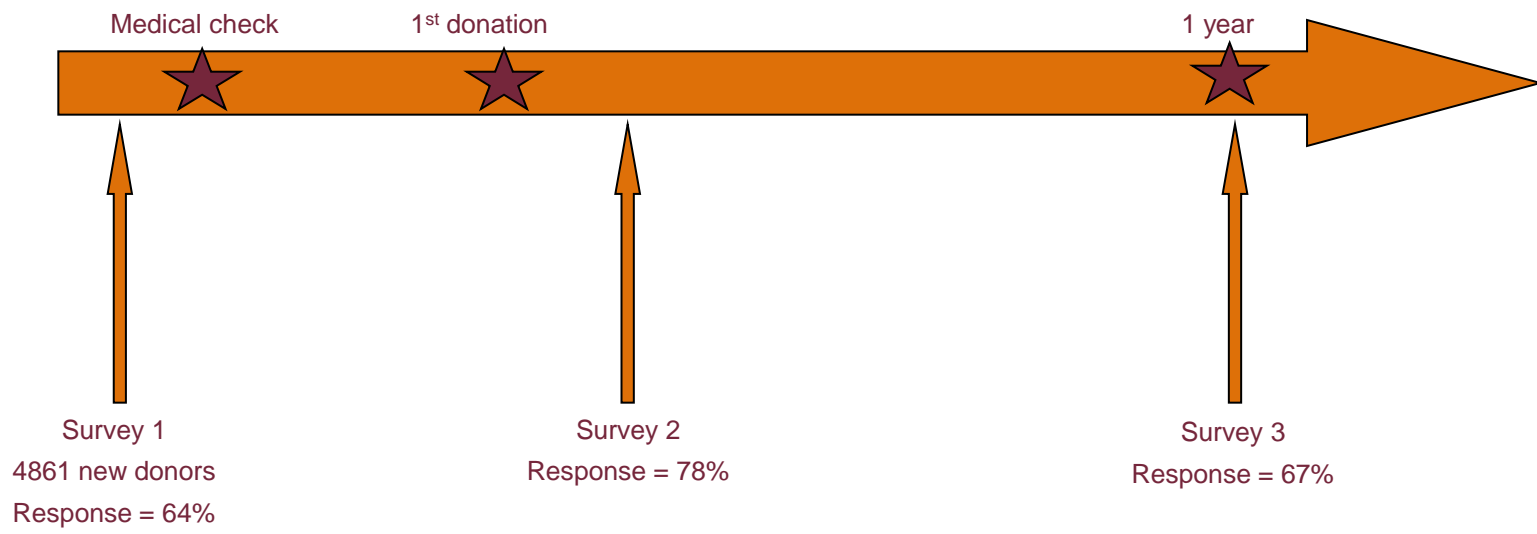
Fear and anxiety are related to the occurrence of vasovagal reactions

- Meade MA, France CR, Peterson LM. Predicting vasovagal reactions in volunteer blood donors. *Journal of Psychosomatic Research* 1996; 40: 495-501.
- Labus JS, France CR, Taylor BK. Vasovagal reactions in Volunteer Blood Donors: Analyzing the Predictive Power of the Medical Fears Survey. *International Journal of Behavioral Medicine* 2000; 7: 62-72.
- Ditto B, France CR. Vasovagal symptoms mediate the relationship between predonation anxiety and subsequent blood donation in female volunteers. *Transfusion* 2006; 46: 1006-1010.
- Viar MA, Etzel EN, Ciesielski BG, Olatunji BO. Disgust, anxiety, and vasovagal syncope sensations: A comparison of injection-fearful and nonfearful blood donors. *Journal of Anxiety Disorders* 2010; 24: 941 - 945.

## Our study

We know that anxiety and fear are related to vasovagal reactions

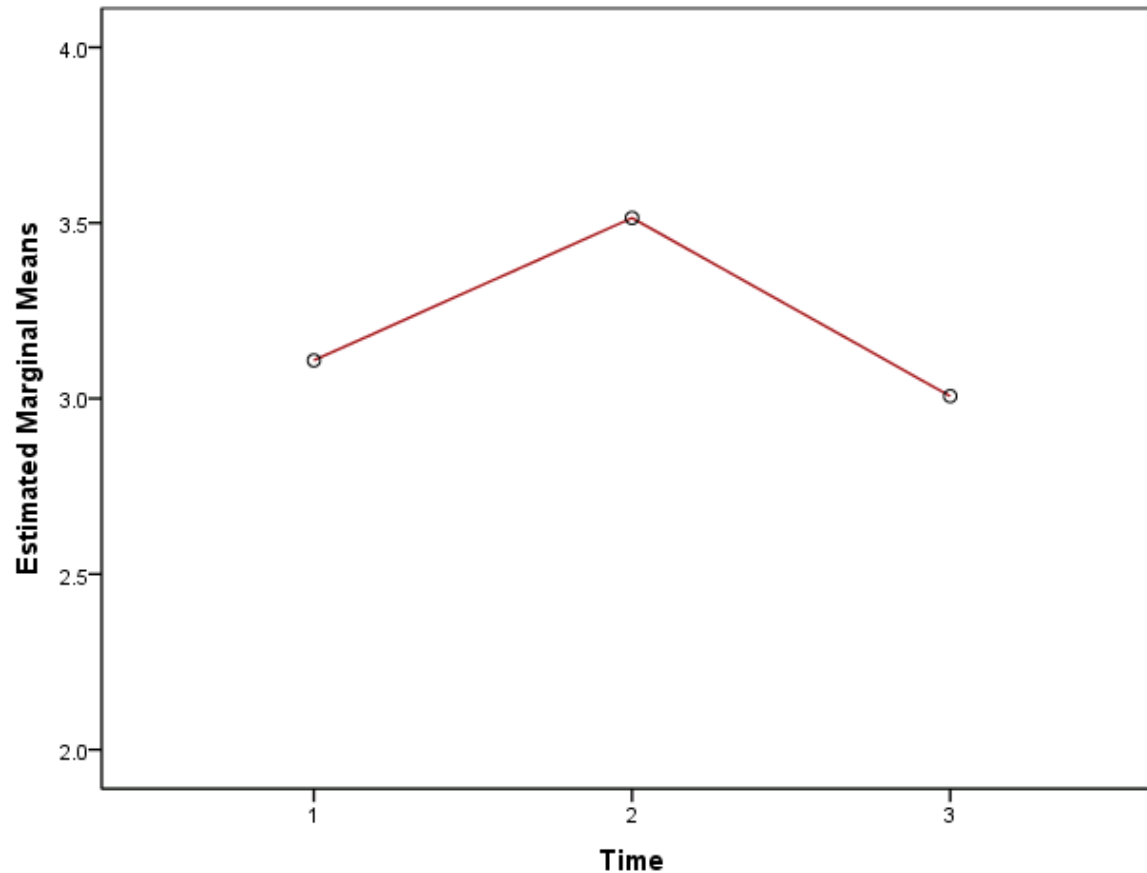
We do not know the relation of anxiety and fear to other adverse events and to behaviour



Items:

- 1) Nervous/tense
- 2) Fear of needles
- 3) Fear of fainting

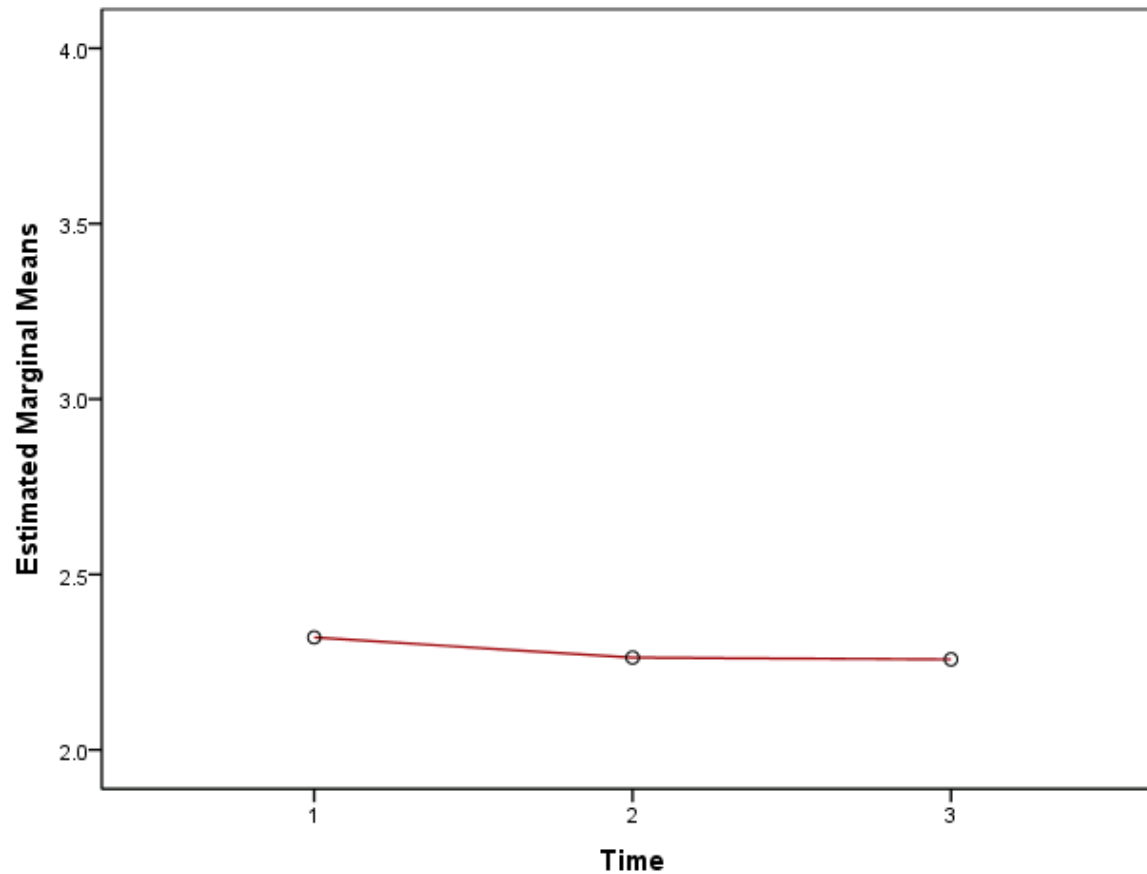
- 1) I feel nervous or tense about the donation
- 2) Before the first donation, I was nervous or tense
- 3) Before a donation I feel nervous or tense



Covariates appearing in the model are evaluated at the following values: Age = 36.25

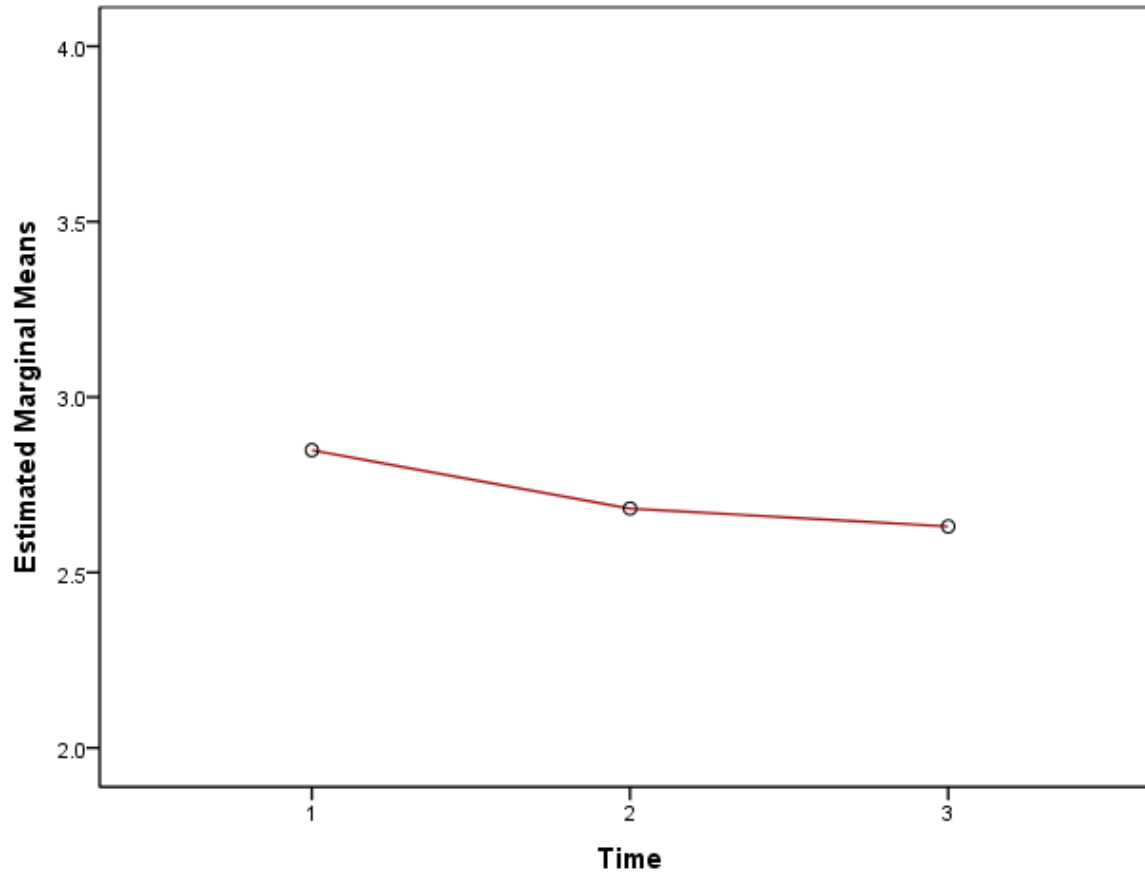


- 1) I am afraid of needles
- 2) I am afraid of needles
- 3) I am afraid of needles



Covariates appearing in the model are evaluated at the following values: Age = 36.26

- 1) Sometimes I am afraid to feel faint at a donation
- 2) Before the donation I was afraid to feel faint
- 3) Sometimes I have been afraid to feel faint at a donation



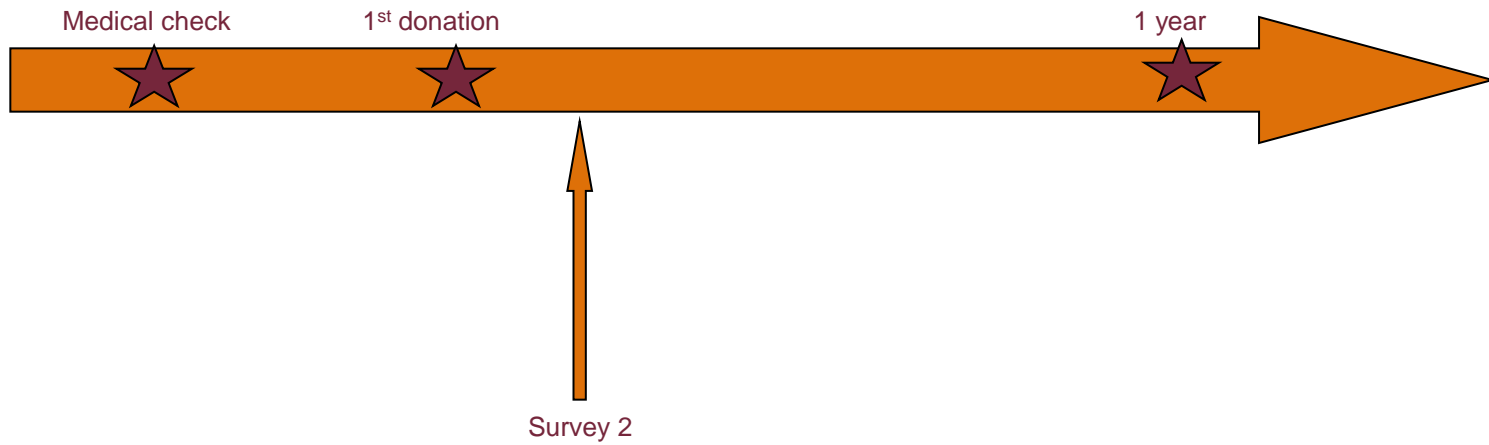
Covariates appearing in the model are evaluated at the following values: Age = 36.36

## Conclusion

Many donors are nervous or tense, mainly before their first donation

Fear of needles is generally low, and stays low

Fear of fainting is highest in anticipation of first appointment, then decreases

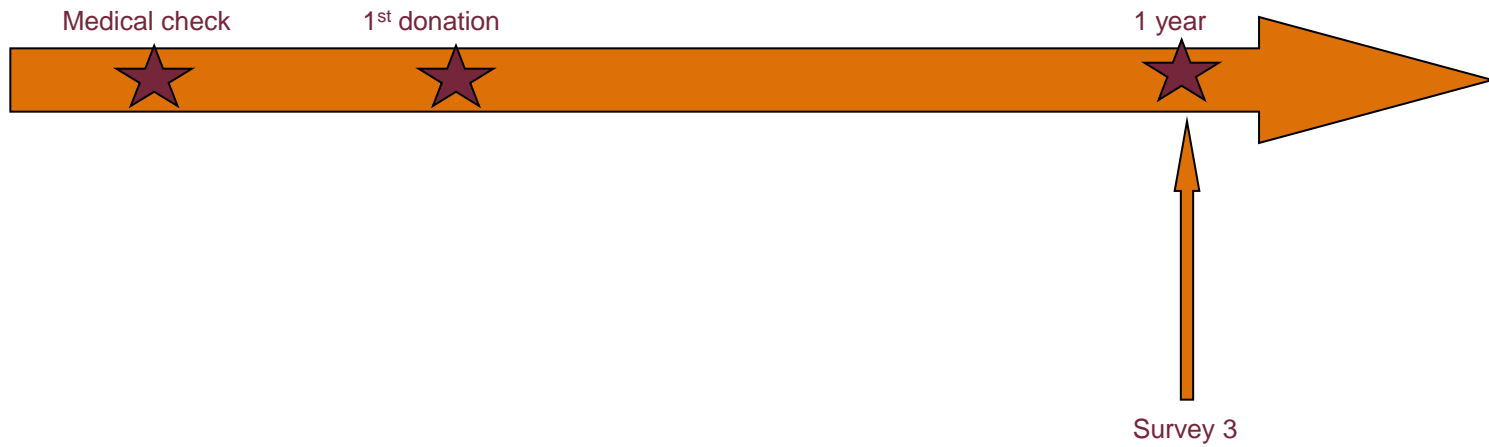


## Multivariate logistic regression

	<i>OR 2<sup>nd</sup> donation</i>	<i>CI(95%)</i>
Nervousness 1 <sup>st</sup> donation	1.06	.96 - 1.18
Fear of needles 1 <sup>st</sup> donation	.88	.80 - .96
Fear of fainting 1 <sup>st</sup> donation	.87	.79 - .95

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## Multivariate logistic regression

	<i>OR Next donation</i>	<i>CI(95%)</i>
Nervousness 1 year	.93	.83 - 1.04
Fear of needles 1 year	1.02	.92 - 1.13
Fear of fainting 1 year	.80	.72 - .88



## Multivariate logistic regression

	<i>OR Next donation</i>	<i>CI(95%)</i>
Nervousness 1 year	.93	.83 - 1.04
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Fear of fainting 1 year	.80	.72 - .88

## Conclusion

First time donors: Fear of needles & fear of fainting

Regular donors: Fear of fainting

## Subjective distress

How unpleasant did you find the occurrence of the physical reaction(s)?

### Univariate logistic regression

	OR 2 <sup>nd</sup> donation	CI(95%)
Subjective distress men	.62	.47 - .80
Subjective distress women	.73	.63 - .85

Van Dongen A, Abraham C, Ruiters RAC, Veldhuizen IJT. The influence of adverse reactions, subjective distress, and anxiety on retention of first-time blood donors. *Transfusion* 2013; 53: 337–343.

## Coping with fear and distress



Assess level of fear:

How afraid are you of having blood drawn from your arm?

France CR, France JL, Carlson BW, Himawan LK, Stephens KY, Frame-Brown TA, Venable GA, Menitove JE. Fear of blood draws, vasovagal reactions, and retention among high school donors. *Transfusion* 2013.

## Distraction



Webb TL, Miles E, Sheeran P. Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin* 2012; 138: 775 – 808.

## ***Distract yourself***

The sight of needles or blood can make some people uncomfortable. For others, waiting to donate can seem boring. If you plan ahead, you can prevent both boredom and discomfort by bringing something to distract yourself.

- LISTEN TO MUSIC
- READ
- TEXT or TALK . . . . .
- DRAW or PLAY PUZZLES
- PLAY HANDHELD GAMES



France, C. R., France, J. L., Kowalsky, J. M. and Cornett, T. L. (2010), Education in donation coping strategies encourages individuals to give blood: further evaluation of a donor recruitment brochure. *Transfusion*, 50: 85–91.

## Reappraising negative emotional stimulus



Webb TL, Miles E, Sheeran P. Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin* 2012; 138: 775 – 808.



## Pain

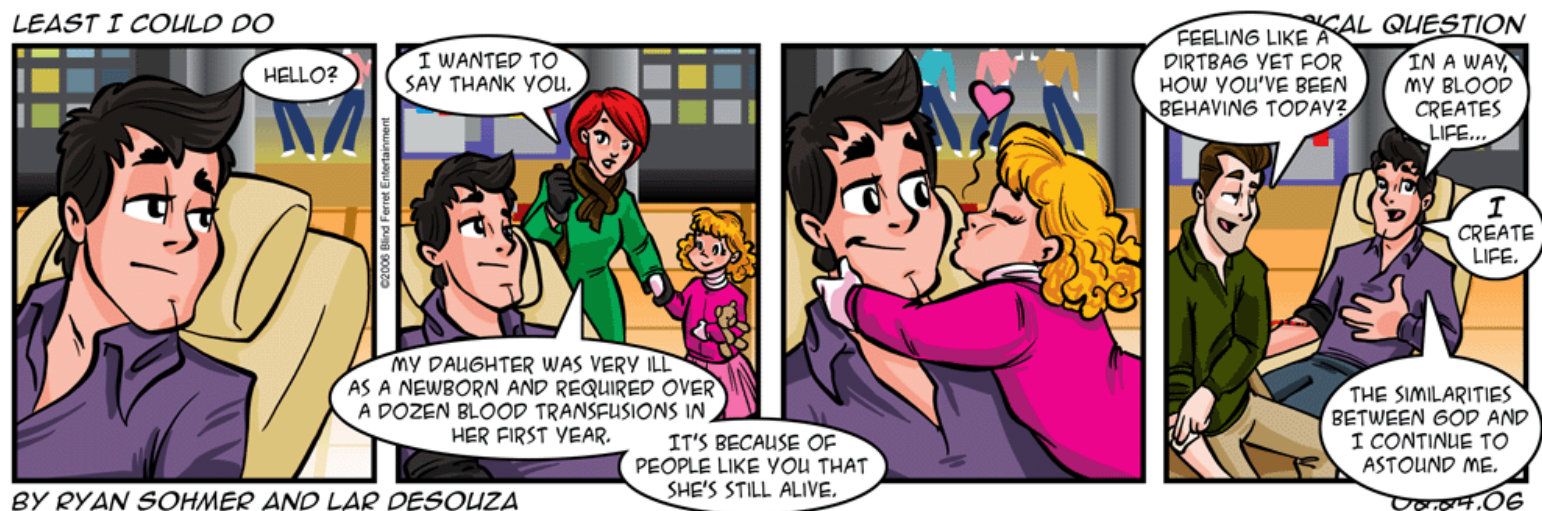
There's no way around it - there is a momentary discomfort when the sterile lancet is used to take your blood sample, and most people report a brief stinging sensation when the donation needle is inserted. But don't let this stop you. Keep in mind, your discomfort will last only a few seconds, but ***your donation will provide benefits that last someone else a lifetime.***



"someone in the  
U.S. needs blood  
every two  
seconds."

France, C. R., France, J. L., Kowalsky, J. M. and Cornett, T. L. (2010), Education in donation coping strategies encourages individuals to give blood: further evaluation of a donor recruitment brochure. *Transfusion*, 50: 85–91.

## Reappraisal by focusing on warm glow



Ferguson E, Atsma F, de Kort W, Veldhuizen I. Exploring the pattern of blood donor beliefs in first-time, novice, and experienced donors: differentiating reluctant altruism, pure altruism, impure altruism, and warm glow. *Transfusion* 2012; 52: 343–355.

Ferguson E, Taylor M, Keatley D, Flynn N, Lawrence C. Blood donors' helping behavior is driven by warm glow: more evidence for the blood donor benevolence hypothesis. *Transfusion* 2012; 52: 2189–2200.



## DOMAINE

1st European Conference  
on Donor Health  
& Management

-  Donor Base Management
-  Donor Recruitment
-  Donor Retention
-  Donor Collection
-  Donor Health



