

donors

PERSONAL CHARACTERISTICS OF BLOOD DONORS INFLUENCE THEIR VOLUNTARY NON-MEDICAL INACTIVATION



ULUSLARARASI
KAN
GÜVENLİLİĞİ
VE HEMOVİJİLANS
Kongressi

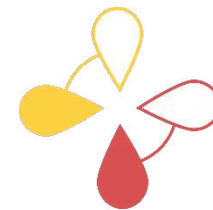


DR. EVA-MARIA MERZ

SANQUIN RESEARCH & VRIJE UNIVERSITEIT AMSTERDAM, THE NETHERLANDS

ANTALYA 3 NOVEMBER 2019





“Final donation for man whose blood saved 2.4M babies”

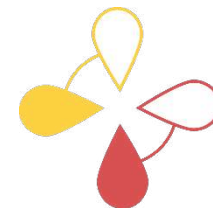


The Sydney Morning Herald

May 11th, 2018

Deutsches Rotes Kreuz
DRK-Blutspendedienst
Baden-Württemberg | Hessen
gemeinnützige GmbH





Research on (Blood) Donor Behaviour

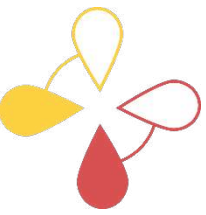
- Identify determinants of onset, continuation and cessation of donating
- Influence donor behaviour via targeted marketing, recruitment and retention strategies

Deutsches Rotes Kreuz 
DRK-Blutspendedienst
Baden-Württemberg | Hessen
gemeinnützige GmbH


EuBIS
European Blood Inspection System
Initiated under the Public Health Programme of the EC
Directorate General SANCO - GA No. 2006202

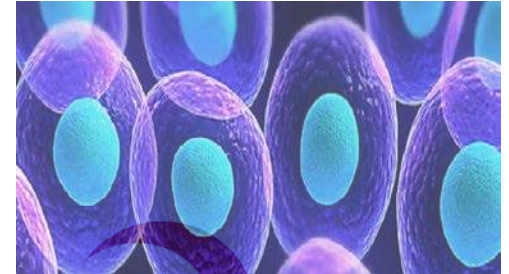
 **Sanquin**

 **IHN** | International
Haemovigilance
Network



Donors of Substances of Human Origin

- Help strangers repeatedly
- Personal costs
- Different motivations
- High degree of free-riding
- (Anonymous)



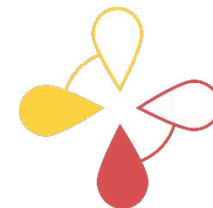
Deutsches Rotes Kreuz 
DRK-Blutspendedienst
Baden-Württemberg | Hessen
gemeinnützige GmbH

 **EuBIS**
European Blood Inspection System
Initiated under the Public Health Programme of the EC
Directorate General SANCO - GA No. 2006202

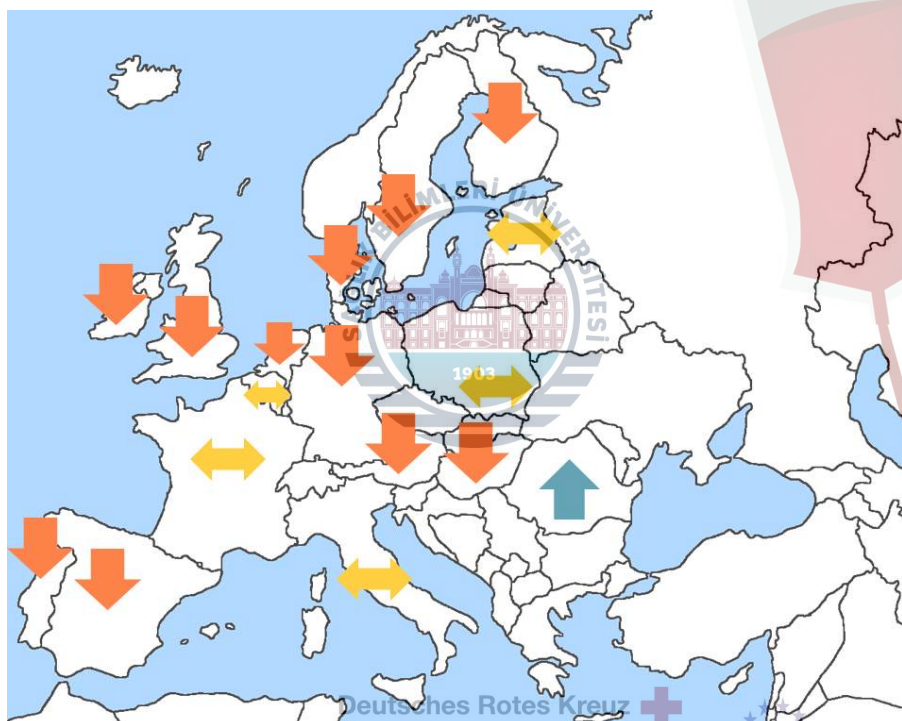
 **Sanquin**



International
Haemovigilance
Network



Donors in Europe and The Netherlands



- ~330.000 VNRD (2018)
- ~3.5% age eligible Dutch population
- 80% whole blood donors
- Every year about 10% of the donors stop donating (~30,000)

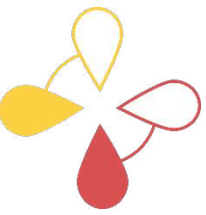
Deutsches Rotes Kreuz
DRK-Blutspendedienst
Baden-Württemberg | Hessen

EuBIS
European Blood Inspection System
Established under the Public Health Programme of the EC
General SANCO - GA No. 2006202

 Sanquin

 IHN
International Haemovigilance Network

Huis in 't Veld, De Kort, Merz (2019), Transfusion

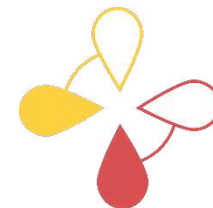


Reasons for Withdrawal

- Medical (e.g. repeated low Hemoglobin levels)
- Reaching the upper age limit
- Inactivation donor's own request (personal reasons, without reasons)
- Lapse due to non-response to repeated invitations

Social cognitions and personality have been linked to a wide variety of illness behaviours including voluntary non-compliance.

Hence, we investigated whether social cognitions and personality traits would similarly predict voluntary non-medical withdrawal of blood donors.



Method

- Donor Motivation: Dutch first time WB donor cohort study
- N = 2,964 (response rate 61%)
- Donor data base (eProgesa) for stop/continue data



Demographics

Blood donation intentions

Norms and attitudes

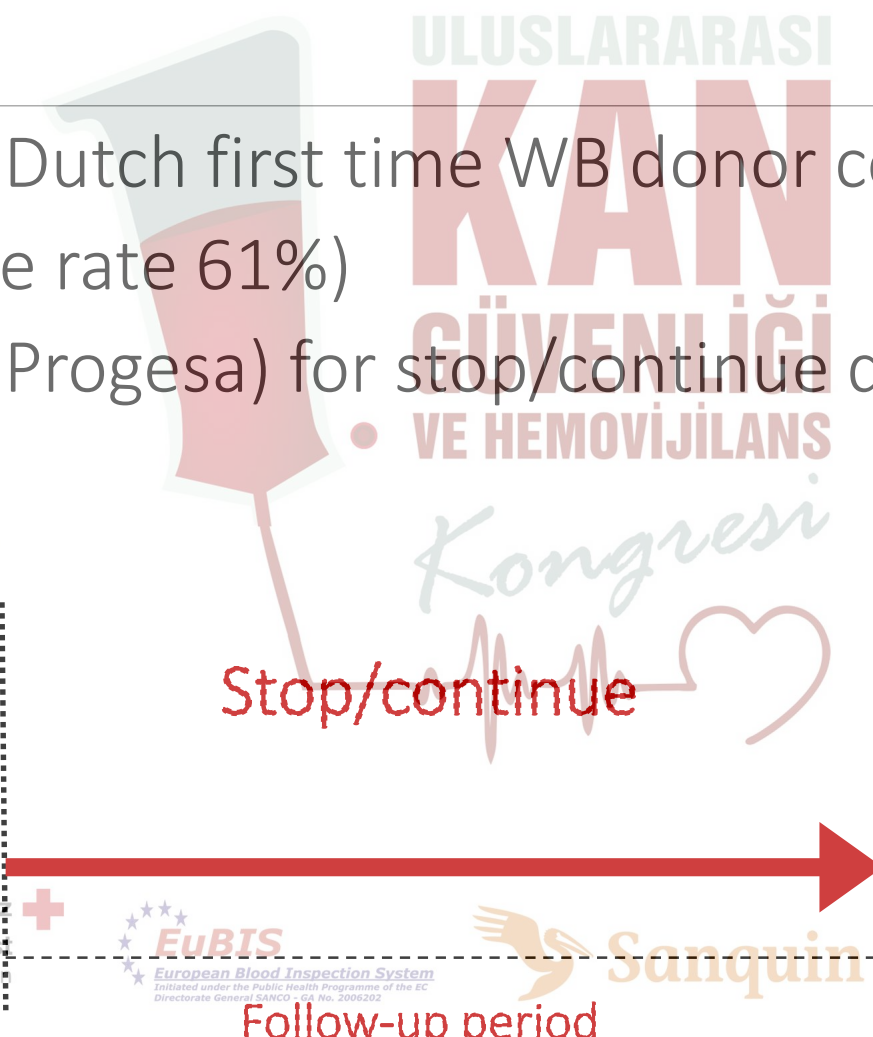
Donation anxiety

Personality traits

Information need

Deutsches Rotes Kreuz
Blutspendedienst
Baden-Württemberg | Hesse
gemeinnützige GmbH

2008-2009 +

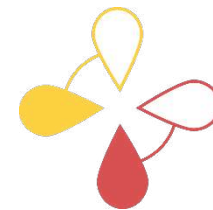


Follow-up period



+ Measurement before first medical check

^ Censoring date: 31-12-2016



Method

Cox regression analysis

ULUSLARARASI
KAN
GÜVENLİĞİ
• VE HEMOVİJİLANS

SAĞLIK BİLİMLERİ ÜNİVERSİTESİ
1903

Kongresi

TÜRK KIZIL AY

Reached age limit

Deutsches Rotes Kreuz +
DRK-Blutspendedienst
Bayer, Wittenberg, Hassen
gemeinnützige GmbH

EuBIS
European Blood Inspection System
for the Public Health Programme of the
European Commission - GA No. 2006202

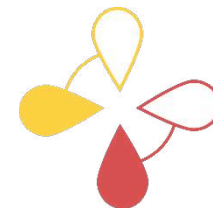
Sanguin

THN
International Hemovigilance

Donor Motivation 2008-2009

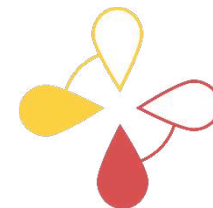
Follow-up period

^ Censoring date: 31-12-2016



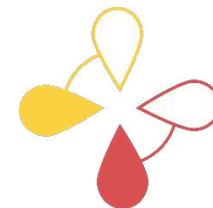
Donor Characteristics (N = 2,964)

	Total sample %	Men	Women
Stopped for medical reasons	16.0	13.2	17.2
Stopped for non-medical reasons	36.5	34.3	37.5
Continued	47.5	52.6	45.3

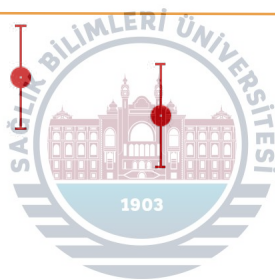
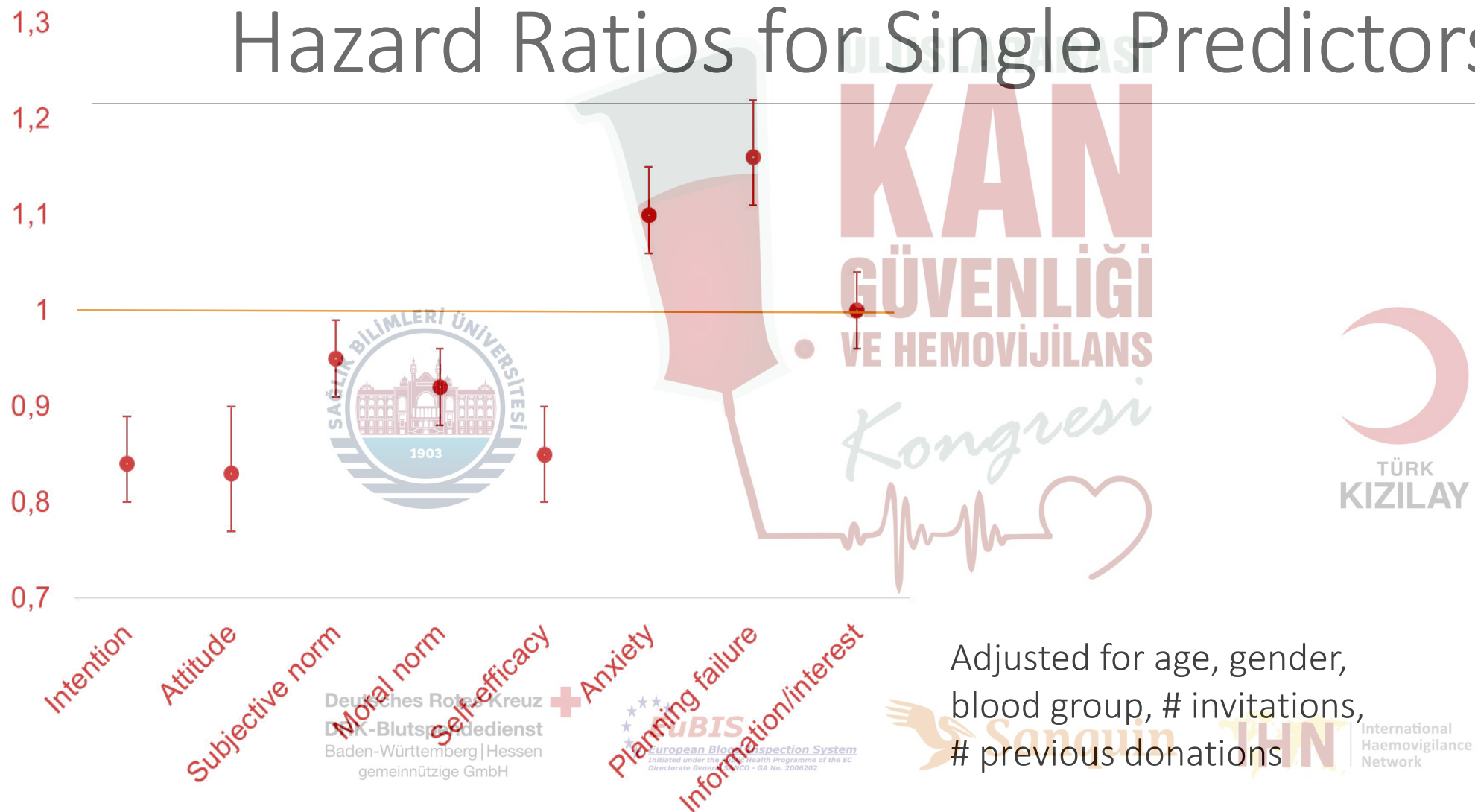


Donor Characteristics (N = 1,081)

	Total sample %	Men	Women
Stopped for non-medical reasons			
Personal reasons	28.0	26.4	28.7
Without reason	2.9	2.9	2.8
Donor not reached (repeatedly)	66.8	67.4	66.5
No show after invitation	2.5	3.3	1.9



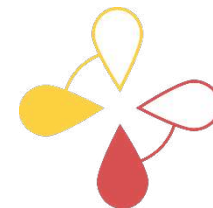
Hazard Ratios for Single Predictors



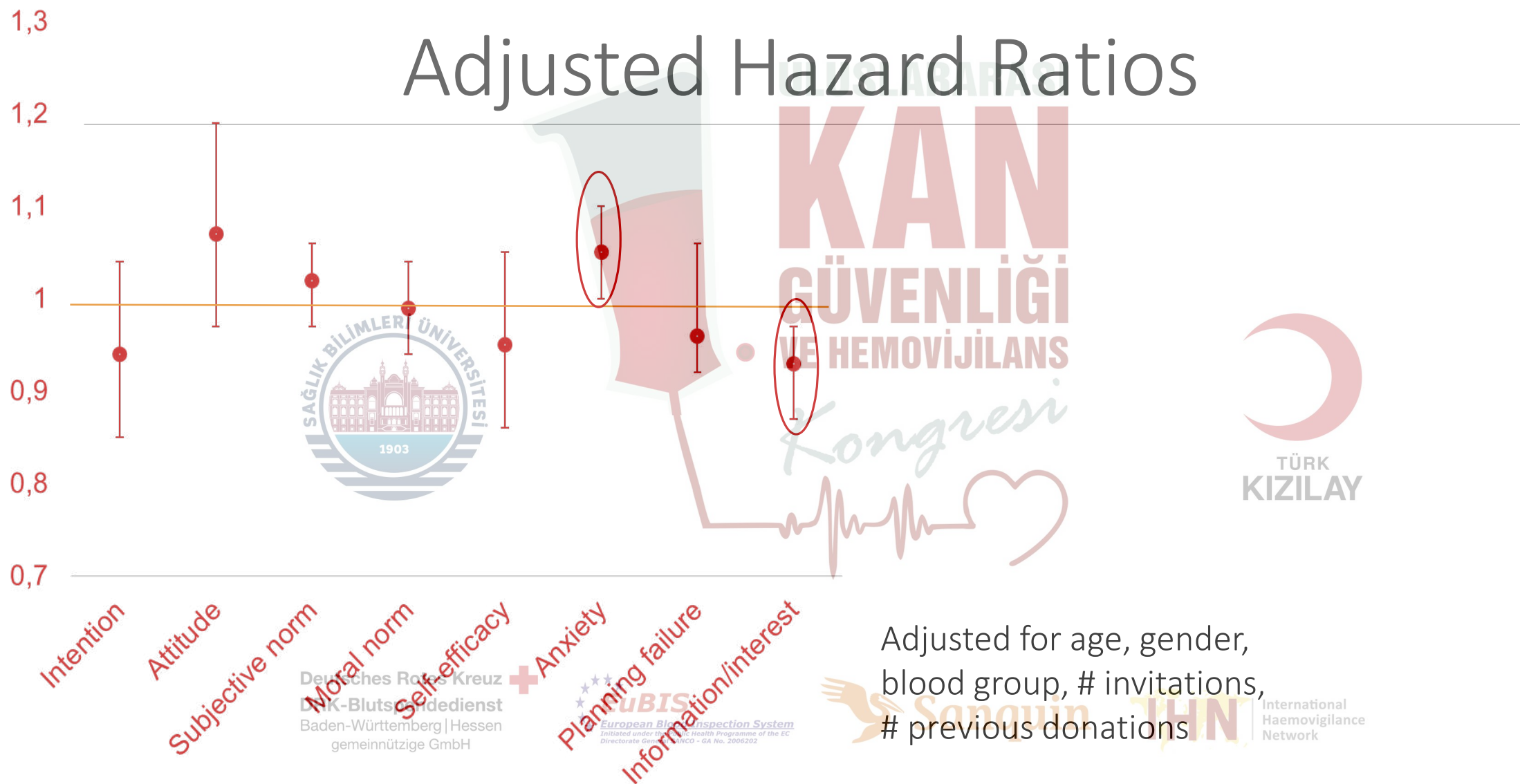
Deutsches Rotes Kreuz
DKV-Blutspendedienst
Baden-Württemberg | Hessen
gemeinnützige GmbH

European Blood Inspection System
Initiated under the EU Health Programme of the EC
Directorate General ECHO - GA No. 2006202





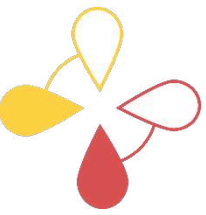
Adjusted Hazard Ratios



Deutsches Rotes Kreuz
DK-Blutspendedienst
Baden-Württemberg | Hessen
gemeinnützige GmbH

European Blood Inspection System
Initiated under the EC Health Programme of the EC
Directorate General SANCO - GA No. 2006202





Conclusions

- Certain social cognitions → more likely to stop donating on own request (before medical check and 1st donation)
- Lapse is not the opposite of return!
- Especially **wish/interest for information** is high predictor → intervention?
- **Anxiety** is repeatedly shown to associate with donor behaviour (i.e. no show and withdrawal)
- Personalize recruitment, intervention and retention

Deutsches Rotes Kreuz
DRK-Blutspendedienst
Baden-Württemberg | Hessen
gemeinnützige GmbH


EuBIS
European Blood and Plasma
Donors into the Public Health
System

 **Sanguin**  International
Transfusion
Surveillance
Network

Acknowledgement

Thank you for your attention - teşekkür ederim!

Wim de Kort

Anne van Dongen

Eamonn Ferguson



European Research Council



donors

