



## UvA-DARE (Digital Academic Repository)

### The next best friend?

*How children perceive and relate to a social robot*

van Straten, C.L.

### Publication date

2021

[Link to publication](#)

### Citation for published version (APA):

van Straten, C. L. (2021). *The next best friend? How children perceive and relate to a social robot*. [Thesis, fully internal, Universiteit van Amsterdam].

### General rights

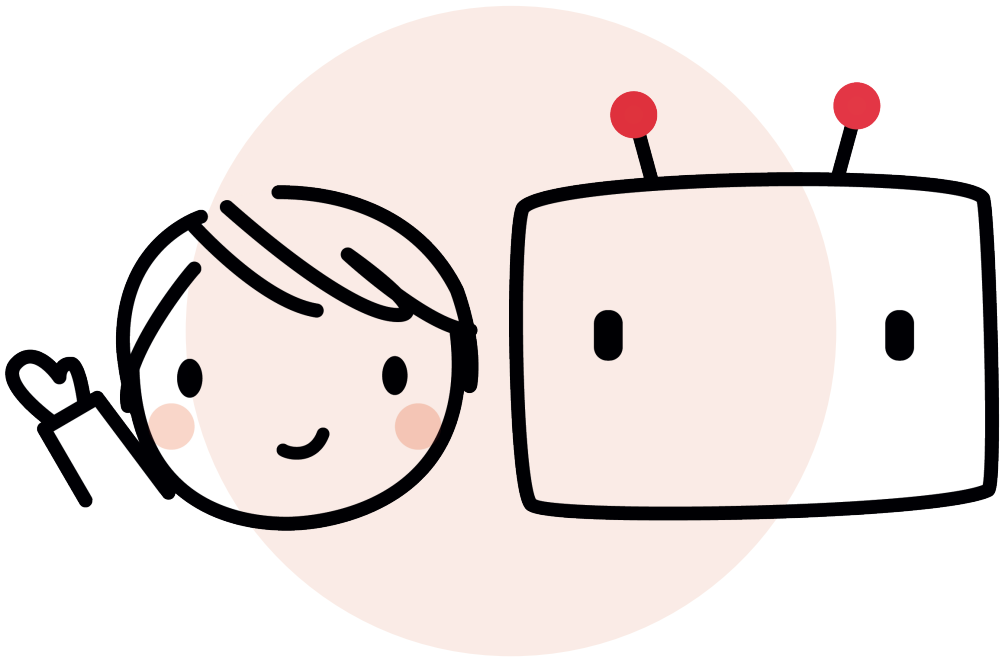
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

### Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# The next best friend?

How children perceive and relate to a social robot



Caroline L. van Straten

# **The next best friend?**

How children perceive and relate to a social robot

Caroline Lianne van Straten

The next best friend? How children perceive and relate to a social robot  
ISBN: 978-94-93270-02-2

© Caroline Lianne van Straten  
Amsterdam, 2021

Cover illustration by Maria Koutamanis ([www.littlevanilla.com](http://www.littlevanilla.com))  
Design by Guus Gijben ([www.proefschrift-aio.nl](http://www.proefschrift-aio.nl))  
Printed by [www.proefschrift-aio.nl](http://www.proefschrift-aio.nl)

The research reported in this dissertation has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program, under grant agreement number 682733 to Prof. Dr. Jochen Peter, and was conducted at the Amsterdam School of Communication Research (ASCoR), University of Amsterdam, The Netherlands.

All rights reserved. No part of this dissertation may be reprinted, reproduced, or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording on any information storage or retrieval system, without prior written permission from the author.

# **The next best friend?**

How children perceive and relate to a social robot

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor  
aan de Universiteit van Amsterdam  
op gezag van de Rector Magnificus  
prof. dr. ir. K.I.J. Maex  
ten overstaan van een door het College voor Promoties ingestelde commissie,  
in het openbaar te verdedigen in de Agnietenkapel  
op vrijdag 12 november 2021, te 16.00 uur

door Caroline Lianne van Straten  
geboren te Voorburg

### *Promotiecommissie*

<i>Promotor:</i>	prof. dr. J. Peter	Universiteit van Amsterdam
<i>Copromotores:</i>	dr. R.J. Kühne	Universiteit van Amsterdam
	dr. A. Barco Martelo	Universiteit van Amsterdam
<i>Overige leden:</i>	prof. dr. J.C.M. van Weert	Universiteit van Amsterdam
	prof. dr. E.S.H. Tan	Universiteit van Amsterdam
	dr. T.B. Araujo	Universiteit van Amsterdam
	prof. dr. E.J. Kraemer	Tilburg University
	prof. dr. T. Belpaeme	Universiteit Gent

Faculteit der Maatschappij- en Gedragwetenschappen

## Table of Contents

<b>Chapter 1</b>	General Introduction	7
<b>Chapter 2</b>	Child-Robot Relationship Formation: A Narrative Review of Empirical Research	25
<b>Chapter 3</b>	Closeness, Trust, and Perceived Social Support: Development and Validation of Three Self-Report Scales	65
<b>Chapter 4</b>	Transparency about a Robot's Lack of Human Psychological Capacities: Effects on Child-Robot Perception and Relationship Formation	99
<b>Chapter 5</b>	The Wizard and I: How Transparent Teleoperation and Self-Description (Do Not) Affect Children's Robot Perceptions and Child-Robot Relationship Formation	133
<b>Chapter 6</b>	On Sharing and Caring: Investigating the Effects of a Robot's Self-Disclosure and Question-Asking on Children's Robot Perceptions and Child-Robot Relationship Formation	169
<b>Chapter 7</b>	General Discussion	197
	Summary	217
	Nederlandse Samenvatting (Dutch Summary)	221
	Authorship Contributions	225
	Dankwoord (Acknowledgements)	227
	About the Author	230