

1. Record Nr.	UNINA9910483169503321
Titolo	From beliefs to dynamic affect systems in mathematics education [[electronic resource]] : Exploring a mosaic of relationships and interactions // edited by Birgit Pepin, Bettina Roesken-Winter
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-06808-3
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (415 p.)
Collana	Advances in Mathematics Education, , 1869-4918
Disciplina	510.71
Soggetti	Mathematics—Study and teaching Cognitive psychology Mathematics Social sciences Mathematics Education Cognitive Psychology Mathematics in the Humanities and Social Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Gilah Leder: Preface: From 'hidden variable' to 'dynamic systems' in affect research: reviewing the developments in belief and affect research -- Introduction: the editors -- Section 1: Theoretical lenses in affect research -- Jeppe Skott: Towards a participatory approach to affect in mathematics education -- Luis Radford: Of Love, Frustration, and Mathematics: A Cultural-Historical Approach to Emotions in Mathematics Teaching and Learning -- Pietro Di Martino & Rosetta Zan: The construct of attitude in mathematics education -- Bettina Roesken-Winter & Katrin Rolka: Beliefs and their crucial role in mathematics education -- George N. Philippou & Marilena Pantziara: Developments in mathematics teachers' efficacy beliefs -- Reaction to section 1: David Clarke -- Section 2: Relevance in the field - affective systems of individuals and 'collectives' -- Fien Depaepe, Erik De Corte & Lieven Verschaffel: Students' non-realistic mathematical modeling as a drawback of teachers' beliefs about and approaches to word problem

solving -- Liping Ding, Birgit Pepin & Keith Jones: Students' attitudes towards mathematics across different lower secondary schools in Shanghai -- Andreas Eichler & Ralf Erens : Domain-specific belief systems of (secondary) mathematics teachers -- Inés M. Gómez-Chacón: Meta-emotion and mathematical modelling processes in computerized environments -- Sigrid Blömeke & Gabriele Kaiser: Effects of motivation on the belief systems of future mathematics teachers from a comparative perspective -- H. Forgasz, G. Leder, D. Mittelberg, H. Tan & A. Murimo): Affect and gender -- Reaction to section 2: Markku S. Hannula -- Section 3: Methodological issues in affect research -- Qien Chen & Frederick K.S. Leung: Analyzing Data and Drawing Conclusion on Teachers' Beliefs -- Sebastian Kuntz & Anika Dreher: PCK and the awareness of affective aspects reflected in teachers' views about learning opportunities – a conflict?-Pessia Tsamir, Dina Tirosh, Esther Levenson, Michal Tabach & Ruthi Barkai: Pre-school teachers' knowledge and self-efficacy needed for teaching mathematics: Are they related?- Chiara Andra: Title: A specific language towards a new conceptual framework for networking methodologies in the field of affect -- Emmanuel Adu-tutu Bofah & Markku S. Hannula: Title: Studying the factorial structure of Ghanaian twelfth-grade students' views on mathematics -- Reaction to section 3: Kenneth Ruthven -- Conclusions/closing reaction: A. H. Schoenfeld.

Sommario/riassunto

This book connects seminal work in affect research and moves forward to provide a developing perspective on affect as the “decisive variable” of the mathematics classroom. In particular, the book contributes and investigates new conceptual frameworks and new methodological ‘tools’ in affect research, and introduces the new field of ‘collectives’ to explore affect systems in diverse settings. Investigated by internationally renowned scholars, the book is build up in three dimensions. The first part of the book provides an overview of selected theoretical frames - theoretical lenses - to study the mosaic of relationships and interactions in the field of affect. In the second part the theory is enriched by empirical research studies and provides relevant findings in terms of developing deeper understandings of individuals' and collectives' affective systems in mathematics education. Here pupil and teacher beliefs and affect systems are examined more closely. The final part investigates the methodological tools used and needed in affect research. How can the different methodological designs contribute data which help us to develop better understandings of teachers' and pupils' affect systems for teaching and learning mathematics, and in which ways are knowledge and affect related?
